Investigating the Links to Improved Student Learning

EXECUTIVE SUMMARY OF RESEARCH FINDINGS

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Introduction

Educational leadership can have strong, positive, although indirect, effects on student learning. The full report of our study—Learning from Leadership: Investigating the Links to Improved Student Learning—provides evidence and analyses to substantiate this claim. As well, our study also unpacks how such leadership has these strong positive effects.

Contextual variables matter greatly, we know, as do worthwhile academic programs and instructional practices. But educators must decide how to respond to the contexts in which they work, and they must select, shape, and implement academic programs and instructional practices. In these efforts, another factor comes into play—leadership. Leaders in education—including state-level officials, superintendents and district staff, principals, school board members, teachers and community members enacting various leadership roles—provide direction for, and exercise influence over, policy and practice. Their contributions are crucial, our evidence shows, to initiatives aimed at improving student learning.

It is obviously important, therefore, to better understand the links between leadership and learning. We need to know what successful leaders do, and we need to know how they do it. About these questions, there is still much to be learned. Since the late 1990s, however, the Wallace Foundation has engaged in multiple ways to examine, understand, and improve leadership in educational settings across the United States. Our study grows out of this national effort. With support from the Wallace Foundation, we have conducted extensive research over a five-year period throughout the U.S. in an effort to describe successful educational leadership and to explain how such leadership can foster changes in professional practice, yielding improvements in student learning.

About the Study

The conceptual framework

The framework for our study (see Figure 1) represents our assumptions about aspects of the larger school system, including leadership at several levels, which interact to influence student learning. The effects of school leadership directly influence school and classroom conditions, as well as teachers themselves, and indirectly influence student learning. Other influences on school leaders arise from stakeholder groups—including the media, unions, professional associations, and community leaders—and from leaders’ personal and professional experiences.

According to this framework, the factors directly responsible for student learning are school and classroom conditions, teachers’ instruction and their professional community, and student/family background conditions. Leadership is viewed as central in addressing and facilitating the work of teaching and learning, as well as managing the influences related to the work outside of the school.
As we began our work five years ago, we argued that leadership is second only to classroom instruction among all school-related factors that contribute to what students learn at school. Five years later, we are even more confident about this claim.

Sample and data collection

To study the relationships and conditions represented in our framework, we worked with a national sample, drawing from nine states, thus ensuring variation in geography, state governance systems, curriculum standards, leadership policies, and accountability systems. Within the nine states, we sampled 43 school districts to ensure variation in size and location. Within the districts we sampled approximately 180 schools to ensure variation in size, school level, and student demographics. Using surveys and interviews, we obtained data from teachers, principals, other staff members, district office personnel, school board members, community leaders, and state-level leaders. We also conducted classroom observations and analyzed student achievement data. To carry out these activities we conducted site visits to two districts per state, collecting data at least twice in each location, with visits separated in time by two years. Our study is the largest study of its kind conducted to date in the United States.

Our Perspective on Leadership

Our perspective on leadership rests on four core beliefs:

First, we believe an adequate analysis of leadership must identify all relevant sources of education leadership, examine actual leadership practices, and distinguish among the effects of school-, district-, and state-level leadership on student learning.

Second, as we began our work five years ago, we argued that leadership is second only to classroom instruction among all school-related factors that contribute to what students learn at school, after controlling for student intake factors. Five years later, we are even more confident about this claim. Significant effects on student
learning depend on creating synergy across a range of human and institutional resources, so that the overall impact adds up to something worthwhile. Among the many people who work hard to improve student learning, leaders are uniquely well positioned to ensure these synergistic effects.

Third, a critical understanding of leadership recognizes two core functions. One function is to provide direction; the other is to exercise influence. This is not an oversimplification. These two functions can be carried out in different ways, and the modes of practice linked to the functions characterize many models of leadership. Each of them is central to initiatives aimed at improving student learning.

Finally, leaders who strike a proper balance between stability and change emphasize two priorities in the direction they provide and the influence they exercise: they work to develop and support people to do their best, and they work to redesign their organizations to improve effectiveness.

The Broader Landscape of Leadership

Research on educational leadership has to date focused largely on the work of teachers and principals. Many other people, however—including parents, students, and other members of the community—have the potential to influence education policy and practice.

Our study extends the list of those providing influence beyond the school setting to include participants at the district level as well. We examined evidence of leadership and its effects by looking through three lenses:

- **Collective leadership** refers to goal-directed mutual influence that exists within a system. In other words, it is unrelated to formal job titles, but reflects the degree to which behaviors and opinions within larger groups of stakeholders shape the ultimate decisions that are reached. As we have defined and measured it, it is the total amount of influence attributable to all the participants in a given educational system: teachers, parents, principals, district office staff, and community members.

- **Shared leadership** refers to a group- or team-level mode of leadership in which staff members of a specific school share responsibility for leading—contingent upon the task, the time required, and the expertise needed. We stipulate a narrower conception of shared leadership for the research reported here, as leadership exercised by those most directly responsible for student learning—principals and teachers.

- **Distributed leadership**, as we use it, refers to particular leadership practices, not job titles or formal roles. In examining distributed leadership we ask which people enact which practices, how different patterns of leadership enactment emerge, and whether variation in such patterns makes a difference for certain kinds of schools and students.
Collective leadership is linked to student achievement through teacher motivation (strongest) and characteristics of work settings, such as school and district size, or the age of the students taught.

Collective leadership

In examining collective leadership we assumed that leadership has indirect effects on student learning. We defined “collective leadership” as the sum of influence exercised on school decisions by those educators, parents and students associated with the school. The proportion of students in schools reaching or exceeding the respective states’ proficiency level on state achievement tests was our performance measure. The rationale for this choice was Robert Linn’s (2000) argument that the most stable measures of a school’s achievement are combined scores across different disciplines over several years. The size of these effects is comparable to what has been reported from other studies of school leader effects on student learning and other student outcomes.

We proposed, as a set of mediators, factors that are known to affect teachers’ efficacy in the classroom, including motivation, capacity, and characteristics of the work setting. We found that collective leadership is linked to student achievement through teacher motivation (strongest) and characteristics of work settings, such as school and district size, or the age of the students taught. See Figure 2 below.

Here are some specific additional findings that are not visible in the simplified picture presented in Figure 2:

- Collective leadership has a stronger influence on student learning than any individual source of leadership.
- Almost all people associated with high-performing schools have greater influence on school decisions than is the case with people in low-performing schools. High-performing schools have “fatter” or “thicker” decision-making structures, not simply “flatter” ones, and leadership in these schools is more “intense.”
- Compared to all teacher respondents, teachers from high-performing schools attribute greater influence to teacher teams, parents, and students.
- In all schools, principals and district leaders exercise the most influence on decisions. However, they do not lose influence as others gain it. In other words, influence in schools is not a fixed sum or a zero-sum game. Collective leadership occurs, in part, because effective principals encourage others to join in.
- Teacher motivation had the strongest relationship with student achievement.

Figure 2 Links between collective leadership and student achievement.
Parents as a part of collective leadership

A good deal of evidence supports the popular view that parental involvement has a strong bearing on student achievement—accounting, in part, for variation in levels of student achievement across schools (Lee & Bowen, 2006; Epstein & Dauber, 1991; Jeynes, 2003 and 2007). Exactly what parental involvement means, however, is still unclear. While some argue that parental involvement is the responsibility of the school, others conclude that “subtle aspects” such as parenting style and parental expectations, which are not easily influenced by schools, have a greater impact on student outcomes than more explicit forms of involvement such as helping with homework. Using data from principal and teacher surveys, along with interview data from district personnel, we found that district support for more involvement by parents in schools is positively related to the diversity of membership on site councils. But district leadership did not have a strong impact on how open principals were to community and parental involvement outside of the traditional site-council structures. Even though we found that diverse site councils are more likely to exist in high-poverty schools, diversity of site councils does not equal a culture of shared leadership. It is up to individual school leaders to go beyond simple district support in order to develop meaningful parent involvement.

Collective parent-teacher influence is higher in schools serving more affluent children. Schools with higher levels of collective parent-teacher influence were also those that created a culture of collective leadership and responsibility, among school staff and within the wider community. Even where districts emphasize the importance of public engagement, however, district policies tend to “trickle down” to schools only in the form of mandates for representation on school councils—a weak strategy for distributing leadership. Without better models and support, principals will tend to focus on the daily pressures of running the school, not on creating a more democratic or inclusive leadership culture.

The link between district support for parental involvement and student achievement is very indirect. Our results show that where teachers’ perceive greater involvement by parents, and where teachers indicate that they practice shared leadership in their schools, student achievement is higher. Because parental involvement is linked to student achievement, we assert that teachers and principals can play a role in increasing student learning by creating a culture of shared leadership and responsibility—not merely among school staff members, but collectively within the wider community.
Teachers’ engagement in professional community fosters the use of instructional practices that are associated with student achievement.

**Shared leadership.** Our examination of shared leadership turns a spotlight on how principals and teachers change classroom practice in efforts to improve student learning. Together, principals and teachers are uniquely positioned to affect students’ classroom experience.

We define *shared leadership* as teachers’ influence over, and participation in, school-wide decisions with principals. This view reflects an emerging consensus about the formal and informal enactment of leadership roles, and it distinguishes our approach from that of scholars who conflate shared leadership with instructional leadership (e.g., Marks & Printy, 2003).

We analyzed principal-teacher relations, trust, teacher-to-teacher relations in professional communities, and teachers’ sense of personal efficacy. Teacher-to-teacher relationships are important as a foundation for work undertaken to improve instruction (Louis, 2006). Professional community is related to improved instruction and to student achievement. Supportive interactions among teachers in school-wide professional communities enable them to assume various roles with one another as mentor, coach, specialist, advisor, facilitator, and so on.

In other words, strong professional relationships—constituting professional community—encourage teachers to become leaders. Professional community amounts to more than support and more than team discussion or data analysis. It is based on shared instructional values, a common focus on student learning (including assessment), collaboration in the development of curriculum and instruction, and the purposeful sharing of practices.

Our findings about shared leadership are based on regression and path analysis of both the 2005 and 2008 teacher surveys (See Figure 3 below). We used state achievement test scores as the measure of student learning, and we assumed the effects of both principals and teachers in classroom work. The main findings include the following:

1. Leadership practices targeted directly at teachers’ instruction (i.e., instructional leadership) have significant, although indirect, effects on student achievement.

2. When principals and teachers share leadership, teachers’ working relationships are stronger and student achievement is higher.

3. Leadership effects on student learning occur largely because leadership strengthens professional community; teachers’ engagement in professional community, in turn, fosters the use of instructional practices that are associated with student achievement.

4. The professional community effect may reflect the creation of a supportive school climate that encourages student effort above and beyond that provided in individual classrooms.

5. The variable of principal-teacher trust is less significant than instructional leadership and shared leadership; still, it is part of a shared leadership culture that is associated with high-achieving schools.
These findings provide the strongest empirical evidence to date about the potential effects of shared leadership, instructional leadership, and trust in the principal. Some effects are strong and positive, but the findings are complex and suggest a need for further analysis.

**Distributed leadership.** We used data from surveys and interviews to identify specific practices and patterns of distributed leadership. Our analysis focused on the role that principals play in patterns of leadership distribution, as examined from various vantage points (school leadership overall, school goals) and core leadership practices: setting directions, developing people, structuring the workplace, and managing the instructional program (Leithwood and Riehl, 2005).

School personnel rarely attributed leadership behaviors and influence to a single person. The array of individuals or groups identified as providing leadership included a mix of principals, assistant principals, teachers in formal leadership roles, teachers informally recognized by peers as influential, parents, district administrators and professional staff, and external consultants linked to curriculum, program, and teacher development initiatives at the school level. Overall, principals stood out because they were more likely than any other group to be simultaneously involved in multiple leadership responsibilities.

Three patterns of leadership distribution emerged from the interview data:

1. **Pattern 1:** Principals in these schools actively collaborate with influential teacher leaders and outside experts to address particular improvement initiatives. At the same time, teachers collaborate with one another, and teachers in instructional leadership roles work across curriculum and grade-level boundaries. These schools had high collective leadership ratings on the teacher survey measures.

2. **Pattern 2:** Principals in these schools work on multiple initiatives, but relatively independently of teacher leaders and external change agents. Teacher leadership is limited to traditional grade-level or discipline structures, and there is less active teacher collaboration overall.

3. **Pattern 3:** Principals in these schools maintain administrative oversight of school improvement activities, but make little effort to influence their implementation. Key teachers or external actors are responsible for various improvement initiatives, but teachers attribute little influence to the enactment of those roles. Teachers do not report a culture of teacher collaboration within and across school organizational structures.
Distributing leadership more widely in schools cannot be viewed as a means of reducing principals’ workload. In our sample, principals in schools with high levels of collective and shared leadership were involved in many efforts to improve teaching and learning in addition to their management responsibilities, and they rarely assigned purely administrative work to other professionals. Their work differed however, from teacher leaders, district support personnel, and key consultants, whose influence was more likely to be goal- or initiative-specific. Principals perform important “helicopter” and boundary-spanning roles not typically performed by others, nor taken on by others in schools with more passive principals.

More specifically, in examining role distribution, we found the following:

1. The bureaucratic allocation of responsibility does not necessarily result in the transfer or development of influence. Less formal patterns of leadership distribution can be enacted through bureaucratic structures that appear, on paper, remarkably similar. For example, the case-study schools in our sample all had multi-stakeholder school-leadership committees, and they all had similar teacher-leader positions; however, the actual distribution of leadership influence varied.

1. While there are many sources of leadership in schools, principals remain the central source. Principals are involved in many leadership activities; others who act as leaders in the school ordinarily do so in respect to one or a few initiatives.

1. How leadership is distributed in schools depends on what is to be accomplished, on the availability of professional expertise, and on the principals’ preferences regarding the use of professional expertise. Different initiatives within the same school may exhibit distinct patterns of leadership distribution.

1. Leadership is more distributed for practices aimed at “developing people” and “managing instruction” than it is for “setting directions” and “structuring the workplace.”

1. No single pattern of leadership distribution is consistently linked to the quality of student learning.
**Instructional Leadership**

We conducted two separate investigations into instructional leadership in our study. The first looked at the actions that principals are taking, by analyzing the quantitative data from the teacher survey. A number of survey items provided us with descriptive actions associated with leadership around instruction. We examined differences by level, such as between elementary versus secondary schools, and whether or not there is an effect on student achievement. The findings give us a picture of differences on several dimensions. The actions that principals take fell into two unique categories. The first we call *Instructional Climate*, which are the steps that principals take to set a tone or culture in the building that supports continual professional learning. This is separate from the second category, which are the explicit steps that principals take to engage with individual teachers about their own growth, and which we term *Instructional Actions*. Our results show these two categories of principal behavior to be related and yet distinctly different.

We found:

- Teachers in high-performing (high student achievement) schools of all grade levels, K-12, report high levels of Instructional Climate.
- Principals whose teachers rate them high on Instructional Climate emphasize the value of research-based strategies and are able to apply them in their own school setting.
- Elementary school teachers working with highly rated principals report high levels of both Instructional Climate and Instructional Actions.
- Secondary school teachers, however, rarely report that school-level leaders engage in Instructional Action; this is the case for their principals, department heads, and other teacher leaders in their building. Teachers described a clear difference in principal behavior between those who “popped in” or were “visible,” as compared with principals who were very intentional about each classroom visit and conversation, with the explicit purpose of engaging with teachers about well-defined instructional ideas and issues.

When we examined the data for possible relationships between Instructional Climate and Instructional Actions and student performance, we found that secondary schools dominate the lowest achievement cell in our matrix of high- and low-scoring principals. Of the 31 schools in the bottom 20% in the ranking for all principals on Instructional Actions, 20 schools were middle schools and high schools. Put differently, out of a total of 127 schools returning Round 2 surveys, with 67 of those being secondary and 60 elementary, nearly 66% of all schools with principals scoring in the lowest 20% for taking direct action to support teachers’ instructional practices were middle and high schools. In additional analyses, we found that secondary school teachers also report much lower levels of professional community.
The second investigation began with prior evidence from district, school, and non-education organizations about the value of four broad categories of core leadership practices that appear to be effective across contexts. These categories are:

**Setting Directions:** This category comprises four specific practices, all of which are aimed at bringing a focus to the individual and collective work of staff members in the school or district.

**Developing People:** The primary aim of the three practices in this category is capacity building, understood to include not only the knowledge and skills staff members need to accomplish organizational goals but also the disposition staff members need to persist in applying those knowledge and skills.

**Redesigning the Organization:** The four practices comprised in this category are intended to establish workplace conditions that will allow staff members to make the most of their motivations and capacities. The organizational setting in which people work shapes much of what they do. There is little to be gained by increasing peoples’ motivation and capacity if working conditions will not allow their effective application.

**Managing the Instructional Program:** This category includes four practices that focus on teaching and learning. They are concerned with staffing, monitoring progress of students’ and teachers’ work, buffering staff from distractions to their work, and providing and aligning resources.

This second investigation of instructional leadership used classroom observation and interview data to identify specific practices both principals and teachers believed made significant contributions to the improvement of teachers’ classroom practices. A large proportion of both principals (92%-100%) and teachers (67%-84%) agreed on the importance of three specific practices:

- **Focusing the school on goals and expectations for student achievement**
- **Keeping track of teachers’ professional development needs**
- **Creating structures and opportunities for teachers to collaborate**

Furthermore, teacher respondents (38%) in schools that scored low on a measure of effective instruction attributed notably more importance to the leadership practice of providing backup for teachers for student discipline and with parents than did teacher respondents (18%) in schools that scored high on the measure we used to assess effective instruction. In short, it appears from this sub-sample investigation that teachers in schools where our observation measures indicated less ambitious instructional practices were more likely to externalize their needs for instructional support (e.g., resources, backup for classroom management decisions) than to value support focused more directly on developing their instructional expertise.
The Affective Side of Leadership: Efficacy and Support

Not only do teachers need support to feel successful and efficacious in their work, the same is true for principals. We found that school districts are able to influence teaching and learning, in part, through the contributions they make to positive feelings of efficacy on the part of school principals. As the concept has been developed by Bandura and others, efficacy is a belief about one’s own ability (self efficacy) or the ability of one’s colleagues (collective efficacy) to perform a task or achieve a goal. Efficacy beliefs are central to people’s ability to get things done (Bandura, 1982). They affect the choices people make about which activities to engage in, and they affect coping efforts once activities are begun (Bandura, 1997a,b) —determining, for example, how much effort people will expend and how long they will persist in the face of failure or difficulty—with the stronger the feelings of efficacy, the greater the persistence.

It follows that principals possessed of strong efficacy beliefs will be more likely than others to undertake and persist in school-improvement projects. Research also points to two kinds of efficacy: Individual efficacy refers to a sense that “I have the capacity to do this,” while collective efficacy refers to “Together we have the capacity to do this.” Our findings emphasize principals’ sense of collective efficacy as a key to leadership influence on teaching and learning.

We drew upon principal survey and principal interview data for our analysis of principals’ individual and collective efficacy as it relates to leadership behaviors and effects, and of district level factors and other conditions (e.g., personal characteristics, school characteristics) potentially associated with principal efficacy. Consistent with past research, our analysis of survey and achievement data yielded small but significant effects of principal efficacy on student test results.
We gained new insight into how districts shape principals’ collective sense of efficacy. District efforts had the greatest impact when they focused on developing the professional capacity of principals and teachers, and on creating supportive organizational conditions. Analyses of interviews provide details about what districts do to develop the sense of collective efficacy among principals. More than half of the principals identified seven behaviors as positive influences on their sense of efficacy:

- district provision of human and financial resources;
- encouragement by districts of relationships with parents and the community;
- allowing schools sufficient flexibility in pursuit of district goals;
- insisting on data-based decision making in schools;
- assisting schools in the interpretation and use of data;
- district policies that enable principals to staff their schools with the people they need; and
- provision of clear direction to schools through the establishment of achievement standards and the development of district-wide curricula.

Districts that emphasize only one or two of these actions may, however, create systemic tension. For example,

- Investing in the professional development of school leaders had limited effects on efficacy and student achievement unless districts also developed and communicated clear goals for improvement.
- Setting student learning targets did not pay off unless those initiatives were accompanied by leadership development activities focused on instructional leadership roles.
- District-sponsored professional development had a negative effect when it failed to acknowledge different needs among schools.

In other words, the very conditions that create efficacy can, when poorly managed or implemented, become double-edged swords. Simple formulas for leadership action without clarifying what they mean in practice are ineffective at best and more likely will have null or even negative consequences.
District Leadership: Policies and Agendas for Improvement

District practices affect how principals view their work, and here we provide more detail from interview and case study data. According to prior research, school districts vary widely in their approach to the task of improving teaching and learning (Fuhrman & Elmore, 1990; Little, 1989; Meyer, Scott, & Strang, 1987). Much of this research, however, was undertaken before the era of standards and accountability-driven reform activity that began to take shape in the 1990s and that culminated in the United States under the federal No Child Left Behind Act of 2002.

The growth of state and federal policies in the last 15-20 years has led to increased district-level approaches to the improvement of teaching. However, uniformity of expectations at either the state or the federal level cannot erase the differences among districts in size, history, and leadership capacities that condition how these policies are carried out. Consequently, districts in our random sample were even more varied in their response to current policy expectations than we expected them to be. Developing an understanding of these differences, and how they affect the work of principals and teachers became a major focus of our investigation.

Recent research on the district role often identifies district-level policies, actions, and conditions that are intended to address teacher and student performance. Research has converged on a common set of actions and policy conditions associated with district-wide improvement and effectiveness (Togneri & Anderson, 2003; Waters & Marzano, 2006).

There is a widespread expectation, accordingly, that districts will provide support to schools based on this research base, and that they will differentiate support based on test score results, with particular attention paid to schools where large numbers of students are not meeting state proficiency standards. Whether and how this is occurring in school districts has not, up until now, been systematically studied in a large sample of districts from across the U.S.

To investigate this question, we relied on both survey and interview evidence from the districts in our sample, focusing on two strands of analysis:

- District improvement efforts and state policy influence
- District-wide goals and support systems for school improvement.
We find that higher performing districts have, first and foremost, led the development of district curriculum and learning standards that are explicitly portrayed to be aligned with, but exceed, those of the state. Proactive district leaders targeted schools and students for early intervention, rather than waiting until the “AYP problem” actually materialized. The district trend everywhere is to reduce school/classroom level flexibility and to increase standardization.

For the analysis of how district administrators differentiate support for improvement to schools, we focused on interviews in medium to large districts with multiple schools at all levels. For a further examination of how state policies and support might affect the decisions of district administrators, we focused on the small- to medium-sized districts, under the assumption that smaller districts might have more limited capacity to develop differentiated support.

Across the cases we find that higher performing districts have, first and foremost, led the development of district curriculum and learning standards that are explicitly portrayed to be aligned with, but exceed, those of the state. This includes defining district intervention and improvement strategies that go beyond state mandates. The core feature of this pattern was the district leadership reframing of external standards to meet local priorities and needs. District leaders who emphasized reaching beyond minimum expectations for student and school performance tended to be in districts serving larger numbers of middle- and high-income families, where fewer schools were in danger of performing below state standards. In these settings, district leaders often looked beyond last year’s performance in order to identify schools potentially at risk of not meeting district goals in the future. Proactive district leaders targeted schools and students for early intervention, rather than waiting until the “AYP problem” actually materialized. However, district administrators also consistently reported difficulties in providing effective support for schools and students who were required to have legislatively stipulated special interventions.

School districts varied in the range and specificity of district-mandated expectations for professional practice in schools—in particular, for curriculum and instruction. Still, the district trend everywhere is to reduce school/classroom level flexibility and to increase standardization. As this trend develops, efforts to align and coordinate other strands of district support (e.g., teacher development, school leadership development, school improvement planning and performance monitoring, etc.) are evolving rapidly. This was most apparent in settings where continuity in district leadership, both administrators and professional staff, was evident.

As seen in Figure 4 below, data from the principals’ survey suggest that they moderately to strongly agree that their district leaders play an instrumental role in instructional improvement.

Overall, the principal interviews also suggest that they appreciated strong guidance about curricular and instructional improvements, and used district guidelines to help shape and support motivation for change within their own schools.
Teacher interviews revealed that rather than complaining about loss of autonomy following from districts’ efforts to standardize curriculum, testing, and instructional practices, many teachers appeared to appreciate the greater clarity of expectations and access to instructional tools (e.g., course scope/sequence, lesson plans, materials, assessments) that often accompany district-wide curriculum development and support for implementation. Their receptivity was conditional, however, on the quality of district support for implementation (staff development, materials, and supervision), the perceived “fit” with state/district curriculum requirements, evidence of student impact, and opportunities for teacher discretion within the parameters and boundaries established by the district.

In addition, the principal survey data indicate that those who rate their districts as providing more support and focus on instructional improvement are also regarded by their teachers as better instructional leaders. This finding holds true in both more and less affluent settings and in schools with greater and smaller numbers of minority students. In sum, both our qualitative and quantitative evidence indicate that district priorities and actions have a measureable effect on all professionals at the school level.
We saw little evidence that most districts have a coherent professional development system for principals. Principals tended to agree.

District Support for Principal Development

While central office administrators often spoke about unevenness in the leadership strengths of their principals, leaders in higher-performing districts expressed greater confidence in their ability to improve the quality of school leadership through hiring practices, school placement, and supervision.

Although district leaders spoke of leadership development programs, we saw little evidence that most districts have a coherent professional development system for principals. Principals tended to agree, and gave their districts lower ratings for supporting their professional development than, for example, their support for instructional improvement, as is shown in the four graphs in Figure 5.

Figure 5 Principals’ Views of District Support for Their Professional Development

D2. District leaders take a personal interest in my professional development.

D15. How frequently do your district leaders provide quality staff development focused on high priority areas of instruction?

D16. How frequently do your district leaders provide opportunities for you to work productively with your administrative colleagues from other schools?

D27. District leaders deepen my understanding of instructional leadership.
In some districts, principal effectiveness was still attributed to innate personal traits rather than to learned capacities—in other words, improving leadership meant having better personnel selection methods. District leaders in lower-performing settings also had a greater tendency to attribute the poor performance of struggling schools to external factors (state policies, school community characteristics) than to their principals’ leadership behaviors. These district leaders were also less likely to provide strategic help or professional development for principals in struggling schools.

In contrast, in higher-performing districts, central office leaders believed in their capacity to develop more effective principals, and they set expectations for implementation of specific sets of leadership practices. This meant a focus on specific areas of leadership practice (e.g., methods of clinical supervision, school-improvement planning, classroom walk-throughs, and use of student performance data).

Leaders in higher-performing districts communicated explicit expectations for principal leadership and provided learning experiences in line with these expectations; they also monitored principal follow-through and intervened with further support where needed. This kind of supervision was not limited to formal principal appraisal procedures. Instead, gaps in principals’ leadership expertise were identified through ongoing monitoring and discussion with principals about school performance and improvement plans, and through informal advising and coaching interventions.

Over 50% of the principals in our second survey reported that they met once a month or less frequently with a regular contact in the district office; and the first principal survey indicated that less than half of the principal respondents agreed with the statement that “my district’s leaders in the central office visit my school several times a year.” It is equally important to note that principals are not being provided this support by others: The use of outside experts to help with principal development was relatively rare—reflecting perhaps, either district leaders’ confidence in their own capacity to help principals master the desired practices or not knowing where to find those kinds of resources.
Rapid principal turnover has significant negative effects on student achievement, largely through its effects on school culture.

Shared leadership distribution can moderate the negative consequences of rapid principal turnover, but only where existing school cultures are strong and supportive of teacher leadership.

Principal Turnover: Policies and Support

While principal turnover is inevitable in every school, turnover that occurs too frequently is widely thought to present significant challenges for improvement agendas. In fact, leadership turnover does not have to occur every year or two to be problematic.

Our study focused on the degree to which principal turnover occurs and the ways in which it affects school culture, working conditions, and curriculum and classroom instruction. We established this focus because leaders’ capacity to influence students depends substantially on their success in improving teachers’ abilities, motivations, and working conditions. We used survey and interview data to discover the frequency and effects of principal succession in the schools included in this analysis. We found the following:

- On average, schools experience fairly rapid principal turnover—about one new principal every three to four years.
- Rapid principal turnover has significant negative effects on school culture.
- Rapid principal turnover has significant negative effects on student achievement, largely through its effects on school culture.
- Rapid principal turnover has less effect on teachers’ reports about what they do in their classrooms.

It is reasonable to ask whether more shared leadership would moderate the effects of rapid principal turnover (Harris, 2008). To examine this question, we selected four schools that had experienced high rates of principal turnover in recent years and had also been involved in efforts to distribute leadership differently. The schools varied in the amount and rapidity of turnover each had experienced, and each school had a distinctive approach to leadership distribution. While the four schools seem to have little in common beyond rapid principal turnover, two seemed to have found ways to deal productively with changing leadership, while two had not.

One school took a deliberate approach to the distribution of leadership, driven by a principal (who was there for two years) committed to collaborative work and deliberately aligned leadership distribution. A second school built a strong professional community among teachers that created a leadership cadre capable of surviving annual changes in leadership. In both of these cases, leadership became distributed and shared among a number of teachers. Despite frequent changes in principals, the supportive cultures that developed in these schools continued to thrive. In contrast, in a third school, frequent teacher turnover prevented the development of a strong professional culture; thus principal turnover merely added to the school’s difficulties. The fourth school was characterized by a strong culture of individual teacher autonomy that served to work against efforts by any principal to develop shared leadership among teachers.

These cases suggest that, under some circumstances, shared leadership distribution can moderate the negative consequences of rapid principal turnover, but only where existing school cultures are strong and supportive of teacher leadership. Where school cultures work against shared leadership, or where there is rapid turnover among teachers, there is no real substitute for principal leadership. Principal turnover is a problem districts help to create, and they must help to resolve it.
Data-Based Decision Making for Student Learning

Districts have many approaches to providing pressure and support for improved leadership at the school level, but one of the most common is by championing data-based decision making. Teachers and administrators have been making “evidenced-based” decisions since teaching became professionalized. But the evidence typically available to teachers and school leaders has often been anecdotal, based on impressions they acquire in their workplace, grounded in collective but tacit assumptions about the professional expertise and judgments of school personnel. The current emphasis on the use of student-performance data to guide improvement efforts also calls for greater attention to measurable patterns of student performance at the school level. Accountability-driven reform efforts assume that greater attention to systematically collected data can be a lever for improving student performance. However, evidence supporting this assumption is thin.

To investigate data use at the school and the district levels, we undertook complementary sub-studies of our qualitative (site-visit interviews) and quantitative (surveys, student-achievement measures) data at the district and/or school levels. We examined the following questions:

- How do principals and teachers use data?
- What is the relationship between school data use and variability in student achievement?
- How does the district influence data-informed decision making by principals?

How do principals and teachers use data?

Principals in our study confirmed the priority given to data use, usually tying it to state and district mandates. In general, few looked beyond test scores as a data source. Not one principal talked about aggregating information about individual teacher performance from either formal or informal supervision processes for purposes of collective decisions about improvement goals and progress. Principals and teachers collected little formal evidence about the organizational conditions in the school that also might need to change if student performance was to improve. Data-informed decision making about teachers’ individual and group professional development plans was similarly limited.

The incorporation of student performance data into instructional decisions was more evident in settings where district and school leaders linked data use with specific improvement goals. Principals and teachers reported increasing efforts to develop the capacity of teachers to engage collectively in data analysis for instructional decision making, often associated with professional learning community initiatives and assisted by district training. Principals played a key leadership role in establishing the purposes and expectations for data use, in providing structured opportunities (collegial groups and time) for data-use training and assistance, and in providing access to expertise and follow-up actions. In short, we saw no evidence that teachers do this on their own. And although there were a few examples of principals providing the primary leadership for data use, the overall scope and complexity of data use in schools mirrored the orientations, practices, expectations, and support enacted by district office leaders. In other words, if the district wasn’t using data to make educational decisions for educational improvement actions, it was unlikely to be happening at the school level.

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Principals played a key leadership role in establishing the purposes and expectations for data use, in providing structured opportunities for data-use training and assistance.

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What is the relationship between data use and student achievement?

We addressed the question of the relationship between data use and student achievement quantitatively and qualitatively. The quantitative analysis suggests that data use does not have a positive direct relationship to student achievement, even when we control for student demographic characteristics, school level, and school size. A positive link between district data use initiatives and student achievement occurs only when data use is linked with higher collective efficacy—in other words, when principals believe that they have the capacities for meeting district improvement goals. Where data use pressures do not increase capacity, our analysis implies that data use initiatives can backfire and have a negative effect. This finding supports previous research suggesting that the district’s role must be to provide both pressure and support. See Figure 6 below.

The interview data provided us with two additional insights:

- The potential for data-driven improvement plans to make a difference in teaching and learning depends on aligning local curriculum, teaching, and assessment practices with the external accountability measures.

- Improved effectiveness depends upon the appropriateness and implementation of actions taken based on data-informed decisions; much “data use” in schools does not currently lead to the kind of changes that increase student learning.

These findings led us to speculate that increased or improved use of data by school and/or district personnel may be a limited tool for improving teaching and learning in some settings. For example, one of the large, high poverty urban districts in our sample was classified under AYP regulations as in need of district-level intervention by the state, because so many of its schools were not meeting AYP targets. In this situation, it seems likely that there are fundamental social, resource, and leadership issues affecting student engagement and performance in schools that need to be addressed prior to expending a lot of time and effort on increased and improved data use for decision-making. On the other end of the spectrum, our sample included districts and schools that were performing at high levels relative to state performance standards. In these situations the real imperative for improvement may have more to do with rethinking and redefining the goals for student learning than with increasingly complicated data use.
Does the Context for Leadership Matter?

Leadership success depends on the skill with which leaders adapt their practices to the circumstances in which they find themselves, their understanding of the underlying causes of the problems they encounter, and how they respond to those problems.

Research on educational leadership has been relatively inattentive to the relationship between context and effective leadership behavior. Over the last 15 years, for example, relatively few articles about school leadership have included serious attention to student demographics or community characteristics. In most cases, student and community characteristics are included as control variables in equations that also include attention to leadership effects on teachers or students. Other studies that look more closely at student and community characteristics are often conducted in samples where there is limited demographic variation (for example, a single urban school system). However, given our research design with a stratified random sample of districts across the U.S., leadership contexts can be understood as factors that influence leadership practices, as well as impact the effects of leadership on organizational outcomes.

Our investigation of contexts for leadership was motivated in part by the issue of social justice. Policy makers increasingly ask whether qualified and talented teachers are available to all students, largely because there is evidence that poor and minority students are less likely than others to experience high-quality instruction. We sought to identify leadership practices that might yield increasingly equitable outcomes for students (although it was beyond the boundaries of this study to look for leadership effects that were actually “closing the gap”). We also asked whether leadership itself was equitably distributed among schools, districts, and regions. Is the sort of leadership that matters for student learning—namely shared leadership and instructional leadership—well distributed, so that all teachers and students have access to their benefits? In particular, does leadership that matters vary:

- Between schools, depending on the types of students who attend? In other words, are poorer and wealthier schools served by similar levels of leadership, focused on improving teaching and learning?
- By the size and location of the district? We know from other studies that larger and urban districts tend to be less effective, particularly for lower-income students; but we do not know how leadership might be part of the explanation for that difference.
- Between elementary and secondary schools? Might variability in leadership account for some of the differences that we observed in student performance on state benchmarks, where secondary schools were more likely to score less well than elementary schools?

To answer these questions we examined data from the second teacher survey, which contained our best measures of shared and instructional leadership and which we have shown to be related to student achievement. Here we emphasized our investigation of leadership variables that pertain to the distribution of leadership within a school, which includes teachers’ perceptions of the principal’s efforts to involve others, and descriptions of their own leadership for improvement (as measured by sense of collective responsibility and the development of shared professional norms and values).
Both principal and teacher leadership that is focused on improving student learning decreases as poverty and diversity increase.

Teachers in schools located in larger metropolitan areas are less likely to develop strong shared leadership with parents.

Elementary schools experience higher levels of the forms of leadership that are associated with student learning.

High schools have a greater “leadership deficit” than middle schools.

Poverty and diversity

As student poverty and diversity increase, teachers’ experience of shared and instructional leadership from the principal decreases. In addition, teachers in lower-income and higher-diversity schools report that they are less likely to share professional norms for teaching and instruction and that they experience less teacher leadership for shared responsibility for student learning. In other words, both principal and teacher leadership that is focused on improving student learning decreases as poverty and diversity increase.

Location and urbanicity

Teachers in schools located in larger metropolitan areas and districts report significantly less leadership, both from principals and fellow teachers. In addition, these schools are less likely to develop strong shared leadership with parents.

Poverty and district size

Student poverty and district size constitute a double disadvantage. What is most apparent from our analysis is that larger districts with high-poverty student populations are most likely to experience limited leadership—even when we control for school level, size, and urban location.

School level

Elementary schools experience higher levels of the forms of leadership that are associated with student learning. Teachers in middle and high schools are less likely to trust their principal, less likely to report that he or she actively involves parents and teachers in decisions, and report that he or she is less active as an instructional leader in the building. High schools have a greater “leadership deficit” than middle schools.

In sum, we find that context matters because it determines, in part, whether teachers experience leadership behaviors that support instructional improvement and student achievement. The task of increasing leadership capacity appears to be one that will require additional attention from states and districts as they assume increasing responsibility for improving educational outcomes.
State Leadership: Relationships with Districts

At the state level, leadership necessarily entails practices that may seem far removed from those with a direct stake in schools—individual students and parents, for example. State leadership must focus on creating policies that will frame the work to be done in districts and schools, and it must provide incentives and sanctions for the local implementation of those policies.

States as Leaders

All of the states in our sample take their legislative leadership role for improving student learning seriously. All had had at least some significant legislation related to setting standards and defining improvement strategies well before NCLB. In addition, with only one exception, states indicated they believed that they, and not the federal government, were driving leadership for student learning. Respondents in almost all states argued they were able to incorporate NCLB into initiatives which they had already put into place. Moreover, the state’s activity and support of leadership and accountability appear to reflect elements of the state’s enduring political culture, which resists simple calls for uniformity.

One major conclusion from our interview evidence is that few states have comprehensive approaches to educational reform, and that the non-specific direction provided by states offers limited guidance to districts and schools about how to improve student achievement. Thus it is unlikely, even with greater federal efforts to coordinate or set standards, that state legislative leadership will become more attuned to linking state policies to local district actions.

We find that states have deeply embedded approaches to educational policy making. They are likely to continue defying efforts to create consistency because they respond to long-standing historical preferences for how important decisions get made. State policy can have, at best, an indirect effect on student learning: It is effective only to the extent that it motivates change in policies and behaviors closer to the classroom.
The Changing Leadership Role of State Education Agencies

State leadership is not confined to legislative action. State departments of education or State Education Agencies (SEAs) play an important role in interpreting policy and providing additional support and guidance to schools. In the current context of state-level curricular standards and assessment programs, SEAs are called upon increasingly to provide oversight and support for schools and districts striving to meet goals for increasing student achievement. Here we focus on SEAs as the states’ main agencies for translating policy into action and support for districts.

Prior to NCLB, the work of SEAs focused on regulatory functions such as teacher licensure, accreditation processes, and the provision of special education services. SEAs also emphasized oversight and evaluation of district and school personnel and processes, and monitoring of students’ academic achievement. Given these responsibilities, educators at the district level sometimes viewed SEAs as adversaries.

SEAs continue to hold responsibility for the oversight of educational quality and monitoring spending. In addition, our respondents report, SEAs now emphasize assistance for capacity-building, leadership training, and technology use. However, respondents also report that their efforts in these areas are limited by fiscal constraints. Given recent state-level budget problems, they have been obliged to work with diminished resources and fewer people. In response, many SEAs have begun new efforts to improve efficiency through inter-agency collaboration.

District and School Responses to State Leadership

For state policy to affect student learning, it must first pass through the filter of school and district leadership and its embodiment of local values, beliefs, policies, and behaviors (Firestone, 2009). State effects on student learning will always be indirect, therefore, and difficult to trace. Local processes might enhance those effects or blunt them. However, even as schools are busy developing their own policies and initiatives, they pay attention to demands from outside the system when those demands are consistent with the directions in which their organizations are already moving (Honig & Hatch, 2004).

In examining the effects of state leadership at the local level, we looked more closely at three topics:

- How principals react to state policies
- How districts interpret their relationship with state policy makers and agencies
- Whether differences among states account for variability at the local level.

In addition to examining overall principal survey responses to these items, we examined whether principals’ assessments of state policy were associated with their own behavior. What we found was that principals’ positive perceptions of state policy are significantly associated with teachers’ ratings of principals’ instructional leadership behavior. In other words, state policy is felt at the school level. We also found, however, that principals’ responses are moderated by the degree to which their districts create proactive local initiatives to increase educational quality.
The 2005 and 2008 principal surveys asked them to rate their states on a number of dimensions. Figure 7 below suggests that most principals agreed that state policies and actions have had a positive influence on their school.

**Figure 7** Principals' Views of State Leadership for Educational Improvement

**F1.** State standards stimulate additional professional learning in our school.

**F2.** State policies help us accomplish our school's learning objectives.

**F3.** The state gives schools freedom and flexibility to do their work.

**F5.** The state communicates clearly with our district about educational policies.
When we look at the larger districts, leaders generally view state policies as vehicles for achieving local goals. State standards stimulate reform, but have limited direct impact.

We therefore turned to an examination of how districts responded to state initiatives using the interview data. We focused on the seven smaller and medium-sized districts in our sample, under the assumption that the responses of large districts have already been well studied, and research suggests that, in many cases, have more capacity to develop school improvement initiatives than the states (Darling-Hammond, 2004).

Senior district staff in both small and medium-sized districts view their work as loosely coupled with the state. Others saw themselves as collaborative partners with the state, and believed that individuals in their SEA would assist them in getting needed resources for improvement. In other words, we conclude that district actors share many of the same assumptions about how educational policy and improvement get done here, and that they adapt their own responses to the state’s traditional ways of developing and implementing policy.

When we look also at the larger districts, we conclude that, with the exception of the very low performing/high poverty districts in our sample, district leaders generally view state policies as vehicles for achieving local goals. Smaller districts are more likely to regard the SEA as a source of support; medium-sized and larger districts have other sources, often internal to the district, that are more important to them. However, in most cases, local district and school initiatives are viewed as having greater impact for improvement and are also regarded as generally exceeding state standards. In other words, state standards stimulate reform, but have limited direct impact.

Integrating the Elements of Effective Leadership

Here we conclude by introducing three concepts to serve as shorthand representations of the main themes implicit across all of our findings. Effective leadership depends, we have found, on expectations, efficacy, and engagement. The three concepts do not denote isolated dimensions of leadership. Rather, they imply complementary relationships that sustain effective leadership at all levels (See Figure 8).

Expectations and Accountability.

Expectations are effective only when they are paired with accountability measures enabling observers to determine whether expected outcomes are reasonable and whether they are being attained. In districts where levels of student learning are high, for example, district leaders are more likely to emphasize goals and initiatives that reach beyond minimum state expectations for student performance—while they continue to use state policy as a platform from which to challenge others to reach higher ground. School-improvement plans, which describe local expectations and proposed actions, were only as good as the accountability measures that were built into a clear and comprehensive plan which the district actively monitored. Expectations and Accountability represents a key element of effective leadership enacted at all levels—the state, district, school and classroom.
Efficacy and Support.

The second concept, efficacy, refers to beliefs people hold about their own ability, or the ability of a group, to succeed in doing something. To feel a strong sense of efficacy is to believe that you, or you and your colleagues, can act effectively and deal with difficulties as they arise. In this sense, efficacy is fundamental to moving from the desire for change to actual changes in behavior. Even those who feel a strong sense of efficacy, however, benefit from supportive conditions in which to act. Principals who see themselves as working collaboratively towards clear, common goals with district personnel, other principals, and teachers are more confident in their leadership. They are experiencing greater efficacy. Thus Efficacy and Support emerges as a descriptor for a second key element of effective leadership.

Engagement and Stakeholder Influences.

Finally, the concept of engagement appears as a key component of effective leadership because it implies more than superficial connections. Engagement and Stakeholder Influences is the broader descriptor; it acknowledges that, in their efforts to improve student learning, successful leaders make real connections with people inside and outside their professional world. We found that higher-performing schools generally solicit more input and engagement from a wider variety of stakeholders and provide for greater influence from teacher teams, parents, and students. Also, leadership in higher-performing schools is more intense because there are more interests being considered.

Leaders at all levels play a major role in modeling and supporting actions described by these three concepts. District efforts are particularly important insofar as they help to pull the efforts of others together, blending activity and the messages they imply into a coherent narrative and plan for change. Schools may be where the action finally occurs, but the tone and the concrete policies that support effective leadership derive from the central office. Similarly, teachers and parents can assume leadership roles to promote practices that will improve student learning, but their efforts are unlikely to come together in a focused, sustained program without district support.

Linking district leadership to student learning is like trying to grasp a cloud: you can see it before you, but in trying to grasp it you may settle finally for describing the conditions in which it emerges. Our summary is not the cloud itself, but a description of the conditions needed for effective leadership to emerge. The description will continue to inform our inquiries. We hope it also will stimulate others to look at the phenomenon of school, district, and state educational leadership differently.
Districts have the power and specific responsibility to support effective educational leadership. The issue facing them is how to use their positions of authority to develop and support practices that improve student learning.

Final Thoughts

Everyone has a stake in the education of our children. That said, the findings of this study have implications as far and deep as one might choose to take action towards school improvement. Furthermore, people who work in schools and people who study schools know that leadership makes a difference. The challenge, then, is to discover useful interpretations of that general point—what kinds of leadership in schools and districts are needed to improve student learning? Results from our effort to take up this challenge have been summarized here and are presented in greater detail in our full report.

Leadership has broad social significance. Leaders often get blamed when their organizations get in trouble. In the corporate world, stock prices are sensitive to rumors about changes in leadership; in sports, the owners of losing teams look for new coaches. Similarly, when a school board becomes dissatisfied with the direction or performance of the district, the superintendent may be the first to go, and the new superintendent will be expected to make important changes. When a school is deemed to be failing, districts often replace one or more principals or supplement leadership ranks by bringing in people from outside the district to step into special positions. Even successful principals are at risk of being moved within a district to assume the challenge of turning failing schools around. Such efforts to rotate a popular principal out of a school are often met with resistance from parents and the community at large. The lay public also believes, with evidence of its own, that leadership is vital to an organization’s effectiveness.

These examples imply that leadership is provided by individual people acting in official roles that confer power to them. They also imply that leaders at their best behave in ways that (while not well understood) stand out as exceptional, even heroic. These assumptions are not entirely false; some individual leaders are exceptional. Taken together, however, they are assumptions that bolster the outdated but popular view that leaders are born, not made.

Districts have the power and specific responsibility to support effective educational leadership. The issue facing them is how to use their positions of authority to develop and support practices that improve student learning. Individual principals cannot go it alone. District policies and structures cannot ensure that all students will have an excellent teacher every year. The effect of district policies and structures on classrooms and students will be largely indirect. But districts can formulate strategies and support practices that enable principals, teachers, and students to thrive. Our research confirms leaders’ potential influence, as well as the limits on their ability, to be the central figure and catalyst for authentic and lasting systemic educational reform.
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