

# Leading and Managing Instruction: Adopting a Diagnostic and Design Mindset

James P. Spillane

---

*The key role for school leaders in improving instruction is to diagnose problems and design solutions, rather than to implement externally developed designs.*

*This paper is based on work undertaken as part of the Distributed Leadership Studies ([www.distributedleadership.org](http://www.distributedleadership.org)) with funding from the National Science Foundation (RETA Grant # EHR – 0412510), the Spencer Foundation, the Carnegie Foundation, and the Institute for Education Sciences (Grant # R305E040085). All opinions and conclusions expressed in this paper are those of the author and do not necessarily reflect the views of any funding agency.*

*James P. Spillane is the Spencer T. and Ann W. Olin Professor in Learning and Organizational Change at Northwestern University's School of Education and Social Policy.*

There is no shortage of talk and text about school administration, especially about school leadership. Recipes, prescriptions, and approaches for “effective” school administration are plentiful. Ideas come and go at a fast pace and some occasionally cling, at least for a bit. Still, many commentators, for good reason, wonder about the connections between school-administration research and development work and administrative practice in schools.

While a managerial imperative dominates school principals’ work (Cuban 1988), a leadership imperative appears to dominate writing on school administration. Management is about efficiently and effectively maintaining current organizational arrangements and ways of working. Leadership involves influencing organizational members to achieve new, hopefully desirable, goals; more often than not, this involves initiating change. In day-to-day life in the schoolhouse, leading and managing work in tandem and are often wrapped up in the same organizational routines (Spillane & Diamond 2007). Hence, research and development work on school adminis-

tration has to be about both leadership and management. More important, it has to be about leading and managing *instruction* – the technical core of schooling. This facet was overshadowed by leader and principal development research, especially by work on developing formally designated leaders such as principals, until about a decade ago. However, it remains the leader’s critical responsibility to diagnose and design for effective instructional advancement in a school, a condition not met by simply implementing external designs for improvement.

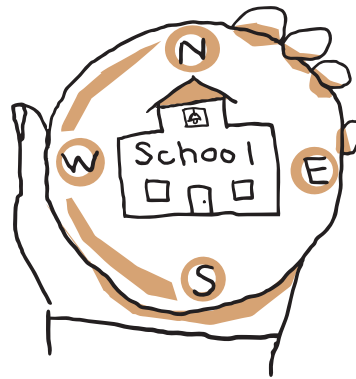
## **School Administration Matters**

There is reason for the attention given to school administration by policy-makers, practitioners, and scholars: the available research evidence suggests that school administration is critical to school improvement. Though the empirical evidence has limitations, it has consistently pointed to the critical role of administrative support in school reform and policy implementation (Berman & McLaughlin 1977; Fullan 2001; Leithwood et al. 2004; Liberman, Falk & Alexander 1994; Purkey & Smith 1985; Rosenholtz 1989; Seashore Louis & Kruse 1995; Sergiovanni 1996). School administration is especially criti-

cal in schools that serve impoverished students (Leithwood et al. 2004).

The literature on school administration also offers insights on *what* matters. For schools to run effectively and efficiently, three sets of macro-organizational functions must be addressed: compass setting, human development, and organizational development. Studies have consistently identified both setting and maintaining a direction as critical for school success. This involves developing an instructional vision that is shared by school staff (Bryk & Driscoll 1985; Newman & Wehlage 1995). In many urban schools, a key component of direction setting entails raising school-staff expectations for students' academic capabilities. At Kelly School in Chicago, for example, the principal and her leadership team designed and implemented organizational routines intended to raise teachers' expectations of students' academic abilities and their sense of responsibility for student learning (Diamond 2007).<sup>1</sup>

Developing the school's human capital is another critical function. Teacher hiring, summative and formative monitoring of instruction and efforts to improve it, support for staff development and growth, and recognition of individual successes are all aspects of developing the school's human capital. Another macro-organizational function is building and maintaining a school culture in which norms of trust, collaboration, and collective responsibility for student learning support ongoing conversations about instruction and its improvement. Further, maintaining an orderly and safe work environment and procuring the necessary resources for the organization to run effectively are also essential.



Appropriately attending to these macro functions takes time and a vast range of knowledge and skill. Equating school leadership and management solely with the school principal's work fails to acknowledge that one person cannot sufficiently master the essential knowledge. Moreover, the available empirical evidence suggests that others, in addition to the school principal, are involved to varying degrees in the duties of leading and managing (Camburn, Rowan & Taylor 2003; Spillane, Hunt & Healy, forthcoming; Spillane, Camburn & Pareja 2007; Spillane et al. 2009).

### ***Diagnosis and Design: The Core Challenge***

An implementation mindset dominates much of the work in school leadership and management research and development. While implementation has its place, we also need to cultivate a *diagnostic and design* mindset among school leaders and those who work on leadership development. Even the "best" designs by agents and agencies outside the schoolhouse will necessitate diagnostic and design work on the part of school leaders.

Diagnosis and design work in harmony. We diagnose the cause or

<sup>1</sup> All names are pseudonyms.

nature of a thing, usually prompted by something unusual in our environment. Diagnostic work is not about *discovering* problems, but rather about *constructing* them. Data, after all, do not speak for themselves. Instead, by marshaling the available data and information, sometimes gathering new data, we *construct* evidence of a problem and advance a particular prognosis. *Diagnostic framing* centers on defining problems, identifying their source, and assigning blame, whereas *prognostic framing* centers on articulating a solution and the strategies for carrying it out (Benford & Snow 2000; Coburn 2006; Snow & Benford 1992).

At Baxter School on Chicago's Northwest Side, school leaders re-analyzed student achievement data to look at actual growth in achievement over time. When compared with other district schools, Baxter was one of the better performing. But when school leaders crunched the numbers longitudinally, they identified some surprising grade- and cohort-level trends: compared with the twelve top-performing schools in the district, students at Baxter were at the bottom of the list when it came to actual growth. Acknowledging a problem, school staff at Baxter set out to gather data using staff surveys and classroom observations in order to define the causes of stagnant student achievement at their school (Burch 2007; Spillane 2006). Student achievement data on its own could not explain *why* student growth was flat at Baxter.

Diagnostic work is not an end in itself; it is, some times more than others, the basis for design and redesign work. Of course, people sometimes

design without diagnosis or their designs are based on weak diagnoses. We typically think of design as a grandiose activity, confined to the world of high fashion, architecture, or engineering. But design is an everyday activity in schools as leaders attempt to shape aspects of their organizational infrastructure to meet new ends (Spillane & Coldren, in preparation). At Adams School on Chicago's South Side, Principal Williams and her leadership team designed routines including Breakfast Club, grade-level meetings, Teacher Talk, Teacher Leaders, Five-Week Assessment, Literacy Committee, and Mathematics Committee to address various problems tied to classroom instruction (Halverson 2007; Zoltners Sherer 2007).

Coming to Adams, Principal Williams sought to establish curricular coherence within and across grades, raise teachers' expectations for student academic ability, and get staff to talk with one another about instruction. Williams remembered, "I had to create the structures for the teachers to come together and talk" (Spillane et al. 2007). The Breakfast Club, a monthly meeting of staff, for example, was designed to tailor professional development to staff needs and build norms of collaboration among staff around instruction (Halverson 2007). It was intended to address the macro function of human development.

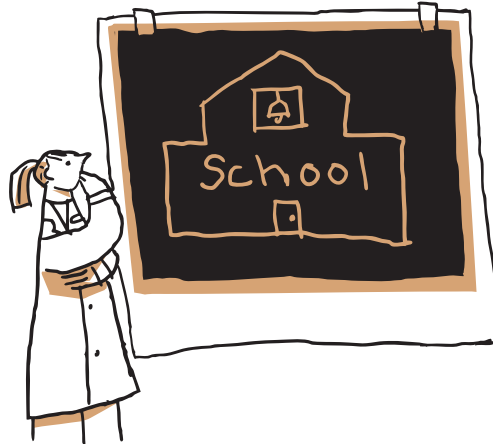
A diagnosis and design mindset sees school leaders as the key agents in improving school leadership and management. School leaders can still beg, borrow, and buy from the school administration bazaar, but the success and/or failure of their purchases will ultimately depend on their own diagnostic and design efforts. Outside

designs can help, to the extent that they address the school's particular problems and circumstances. But these external designs cannot substitute entirely for local diagnostic and design work. Hence, developing a diagnostic and design mindset among school leaders is critical to improvement.

### ***A Framework: A Distributed Perspective***

An analytical framework focuses and guides our diagnosis and design work, influencing which features of a social phenomenon, such as school leadership and management, we see or do not see. We often use these frames without ever clearly acknowledging them, which can be problematic. For example, much of the thinking about leadership is still, either implicitly or explicitly, framed by a “heroics of leadership paradigm” (Yukl 1999, p. 292). However, a “heroics of leadership” frame tends to equate leadership with the work of the school principal or some other formally designated leader. It focuses our attention on individual *actions*, rather than the *interactions* among staff. Further, this frame tends to focus on the *formal* organization, with limited attention to the *informal* organization – the organization as experienced by school staff and students.

Becoming aware of the frameworks we use is important, especially when working in teams on diagnostic and design work. School leaders must settle on an analytical framework and, equally important, develop a taken-as-shared understanding of that framework. This ensures that school staffers are roughly on the same page when it comes to improving school leadership and management and prevents unnecessary confusion about meanings, intentions, and goals.



---

School leaders can still beg, borrow, and buy from the school administration bazaar, but the success and/or failure of their purchases will ultimately depend on their own diagnostic and design efforts.

---

New frames, such as a distributed framework, can offer fresh insights into familiar phenomena such as school leadership and management. It is not a blueprint for leading and managing, a stepped program, or a how-to script for doing that work. Rather, researchers and practitioners may use a distributed framework in diagnosing leadership and management practice and designing for its improvement. This framework has two central aspects – a leader-plus aspect and a practice aspect (Spillane 2006).

The leader-plus (or principal-plus) aspect recognizes that the work of leading and managing may involve multiple leaders. Moreover, some of these leaders may have neither a formal leadership designation nor responsibilities in the formal account of the schoolhouse. Thus, the distributed frame forces us to recognize and record



that the arrangement of leadership and management responsibilities emerge – through design or default – in the lived organization.

Another facet of the distributed frame is the practice aspect. Understanding leadership and management using a distributed frame means attending to the *practice* of leading and managing – not simply behaviors, styles, or approaches. Attention is drawn to what happens on the ground from one day to the next, as a distributed frame sees this practice as taking shape in the interactions among school leaders and followers as mediated by aspects of their situation (Gronn 2000; Spillane, Halverson & Diamond 2001, 2004; Spillane 2006).

Aspects of the situation such as organizational routines and tools of various sorts do not simply allow us to practice more or less effectively or efficiently; rather, they contribute to defining the practice of leading and managing. To understand the practice, then, we have to move beyond an exclusive focus on the actions of individual leaders and attend to the *interactions* among school staff. These interactions, as mediated by the situation, should be our primary concern as we engage with diagnosing leadership and management practice and designing for its improvement.

### **Leading and Managing Instruction**

Instruction has not figured prominently into research and development work on school administration in the U.S. Though visible on the radar screen in recent decades, instruction is still something of a fringe interest. Student achievement and teachers' working conditions are typically the dependent variable of interest, rather than instruc-

---

The leader-plus (or principal-plus) aspect recognizes that the work of leading and managing may involve multiple leaders. Moreover, some of these leaders may have neither a formal leadership designation nor responsibilities in the formal account of the schoolhouse.

---

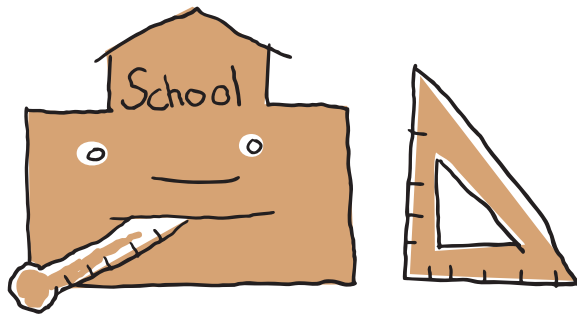
tion. More important, instruction is rarely used as an exploratory variable in research on school leadership and management.

Just as instructors specialize in fields of teaching (reading, mathematics, etc.), so, too, do school leaders specialize in particular school subjects within their leadership and management of instruction. This highlights the problematic nature of the inattention paid to instruction and legitimizes the demand that research and development work on leading and managing instruction must be anchored in the school subject because the subject matters. Specifically, how school leaders think about the work of leading and managing, the arrangement of formally designated leaders, and the patterns of interaction among school staff differ by subject (Burch & Spillane 2003; Burch 2007; Hayton & Spillane 2008; Zoltners Sherer 2007; Spillane 2005, 2006).

School leaders do not treat all school subjects the same and occasionally design organizational routines that target some subjects but not others. At Adams School on Chicago's South Side, for example, the Real Men Read routine focused exclusively on reading. Concerned that their African American male students perceived reading as something that was not masculine, they designed and implemented the

Real Men Read routine, where prominent African American males from the community read to students. The routine was intended to challenge popular perceptions of reading among male students in an effort to motivate their involvement in reading instruction. For practitioners and researchers, diagnostic and design work has to take serious account of instruction – both the curricular domain and the aspect of instruction (e.g., teaching approach, content coverage).

The Real Men Read organizational routine at Adams School also foregrounds two additional issues about leading and managing. First, by focusing only on the interactions among school staff, interactions involving students – which may be critical occasions for leading and managing instruction – are overlooked. In the performance of the Real Men Read routine, students are key. A study employing Experience Sampling Methods logs of forty-two school principals in one mid-sized urban school district in the southeastern U.S. is informative with respect to the role of students. Overall, school principals in the study reported co-performing almost half (47 percent) of the administration and the instruction- and curriculum-related activities that they led, though among principals there was tremendous variation. Principals reported co-leading 14.3



percent of these activities with students (Spillane, Camburn & Pareja 2007).

Second, individuals outside the school, such as the community members in the case of the Real Men Read routine, are also important in thinking about leading and managing in schools. In the study mentioned above, principals identified non-school members including parents, community members, and district staff as either leading or co-leading some of the activities in which they participated, though they identified them much less frequently than school staff (Spillane, Camburn & Pareja 2007). Other recent studies also underscore the need to extend investigations of leading and managing beyond the schoolhouse walls to school districts (Mayrowetz & Smylie 2004; Firestone & Martinez 2007; Leithwood et al. 2007). Diagnostic work on leading and managing instruction in schools must take into account those individuals who, though not a member of the school organization, still take responsibility for the work of leading and managing in that school.

## **Getting to Design**

Viewed from a distributed perspective, the practice of leading and managing is emergent. One cannot design practice but can diagnose practice and design for its improvement. One way of doing this is through attention to the infrastructure that enables and constrains leadership and management practice in schools. Leaders can focus their design work on multiple facets of the school infrastructure from the protocols they use to do their work (e.g., teacher-evaluation protocols) to organizational routines (e.g., grade-level meetings, school improvement planning).

Organizational routines are one aspect of the infrastructure that enables and constrains leadership and management practice. Organizational routines involve “a repetitive, recognizable pattern of interdependent actions, involving multiple actors” (Feldman & Pentland 2003, p. 311). To count as an organizational routine, something must be repeated over time, be recognizable to school staff, and involve two or more staff members. Organizational routines are staples in schools, as they are in all organizations.

The design and redesign of organizational routines figured prominently in school leaders’ efforts to transform the practice of leading and managing in order to reform instruction in the Chicago schools we studied (Spillane 2006). Indeed, organizational routines were one of the primary mechanisms used by school leaders in an effort to build stronger connections between school leadership and management, on the one hand, and classroom instruction, on the other (Spillane et al. 2007). At Kelly School in Chicago, Assistant

Principal Brown, collaborating with teachers, developed a “skill chart” that teachers were to use in tracking student progress, as well as to align their lesson plans to standardized tests, district standards, and students’ skill mastery. Teachers were expected to use the skill charts, described by Ms. Brown as “a tool to keep you focused and on track,” to plan instruction (Diamond 2007). When Principal Koh took over at Kosten School, she redesigned existing organizational routines and designed new ones, including Report Card Review, Grade Book Review, and Lesson Plan Review, in an effort to improve student achievement (Hallett 2007). At Baxter school, Mr. Stern worked with his staff to design and implement organizational routines that would involve teachers in decision making about instruction. Central to his efforts were the Faculty Leadership Group and Grade-Level Cycle routines. The Faculty Leadership Group met monthly and included the chairs from each grade-level cycle, along with key school administrators. Grade-Level Cycles (K–2, 3–5, and 6–8) met twice a month and were designed to allow teachers to plan curriculum together (Burch 2007).

Organizational routines are often taken for granted by school staff. As staff members come and go, the theory of action and design principles behind routines can be lost. Moreover, school leaders often inherit organizational routines from prior administrations, and some routines are mandated by external authorities. Considering the time and effort most schools put into implementing routines, it is important to conduct periodic inventories of organizational routines to explore their theories of action and their effectiveness.

## ***Getting to the Practice of Leading and Managing***

The practice of leading and managing must be central in school leaders’ diagnosis and design work. Getting to practice is difficult, especially given that roles, positions, and styles dominate the conversation about improving school leadership and management. But *practice* is where the rubber of leadership and management meets the road of instructional improvement, through direction setting, human capital development, and developing the organizational infrastructure. Practice is about interactions. Hence, diagnosing it and designing for its improvement is all the more challenging.

It is time for school leaders to embrace their role as key agents in improving the practice of leading and

---

**One cannot design practice but can diagnose practice and design for its improvement. One way of doing this is through attention to the infrastructure that enables and constrains leadership and management practice in schools.**

---

managing. It is also time for those who work with school leaders on developing that practice to recognize that an implementation mindset only goes so far. Even the best-laid designs will ultimately depend on the savvy and skill of school leaders on the ground. Hence, cultivating a diagnosis and design mindset among school leaders and honing the skills needed to adequately do this work should be central in efforts to develop school leadership and management.

---

#### References

- Benford, R. D., and D. A. Snow. 2000. "Framing Processes and Social Movements: An Overview and Assessment," *Annual Review of Sociology* 26:611–639.
- Berman, P., and M. McLaughlin. 1977. *Federal Programs Supporting Educational Change*. Vol. 7, *Factors Affecting Implementation and Continuation*. Santa Monica, CA: RAND.
- Bryk, A. S., and M. E. Driscoll. 1985. *An Empirical Investigation of the School as Community*. Chicago, IL: University of Chicago, School of Education.
- Burch, P. 2007. "Educational Policy and Practice and Institutional Theory: Crafting a Wider Lens," *Educational Researcher* 36, no. 2:84–95.
- Burch, P., and J. P. Spillane. 2003. "Subject Matter and Elementary School Leadership: How Leaders' Views of Mathematics and Literacy Shape and Are Shaped by Work on Reform," *Elementary Schools Journal* 103, no. 5:356–398.
- Camburn, E., B. Rowan, and J. Taylor. 2003. "Distributed Leadership in Schools: The Case of Elementary Schools Adopting Comprehensive School Reform Models," *Educational Evaluation and Policy Analysis* 25, no. 4:347–373.
- Coburn, C. E. 2006. "Framing the Problem of Reading Instruction: Using Frame Analysis to Uncover the Microprocesses of Policy Implementation in Schools," *American Educational Research Journal* 43, no. 3:343–379.
- Cuban, L. 1988. *The Managerial Imperative and the Practice of Leadership in Schools*. Albany, NY: State University of New York Press.
- Diamond, J. B. 2007. "Where the Rubber Meets the Road: Rethinking the Connection between High-Stakes Testing Policy and Classroom Instruction," *Sociology of Education* 80, no. 29:285–313.
- Feldman, M. S., and B. T. Pentland. 2003. "Reconceptualizing Organizational Routines as a Source of Flexibility and Change," *Administrative Science Quarterly* 48, no. 1:94–118.
- Firestone, W. A., and C. Martinez. 2007. "Districts, Teacher Leaders, and Distributed Leadership: Changing Instructional Practice," *Leadership and Policy in Schools* 6:3–35.
- Fullan, M. 2001. *The New Meaning of Educational Change*. New York: Teachers College Press.
- Gronn, P. 2000. "Distributed Properties: A New Architecture for Leadership," *Educational Management and Administration* 28, no. 3:317–338.
- Hallett, T. 2007. "Between Deference and Distinction: Interaction Ritual through Symbolic Power in an Educational Institution," *Social Psychology Quarterly* 70, no. 2:148–171.
- Halverson, R. 2007. "How Leaders Use Artifacts to Structure Professional Community in Schools." In *Professional Learning Communities: Divergence, Depth, and Dilemmas*, edited by L. Stoll & K. Seashore Louis, pp. 93–105. Berkshire, UK: Open University Press.
- Hayton, P., and J. Spillane. 2008. "Professional Community or Communities? School Subject Matter and Elementary School Teachers' Work Environments." In *Leadership for Learning: International Perspectives*, edited by J. MacBeath and Y. C. Chen, pp. 59–71. Rotterdam, Netherlands: SENSE Publishers.
- Leithwood, K., B. Mascal, T. Strauss, R. Sacks, N. Memon, and A. Yashkina. 2007. "Distributing Leadership to Make Schools Smarter: Taking the Ego Out of the System," *Leadership and Policy in Schools* 6, no. 1 (February):37–67.
- Leithwood, K., K. Seashore Louis, S. Anderson, and K. Wahlstrom. 2004. *How Leadership Influences Student Learning*. Minneapolis, MN; Toronto, Ontario, Canada; and New York: University of Minnesota, Center for Applied Research and Educational Improvement; Ontario Institute for Studies in Education at the University of Toronto; and Wallace Foundation.
- Lieberman, A., B. Falk, and L. Alexander. 1994. *A Culture in the Making: Leadership in Learner-Centered Schools*. New York: Columbia University, Teachers College, National Center for Restructuring Education, Schools, and Teaching.
- Mayrowetz, D., and M. Smylie. 2004. "Work Redesign That Works for Teachers," *Yearbook of the National Society for the Study of Education* 103, no. 1:274–93.
- Newmann, F., and G. G. Wehlage. 1995. *Successful School Restructuring*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Purkey, S. C., and M. S. Smith. 1985. "School Reform: The District Policy Implications for the Effective Schools Literature," *Elementary School Journal* 85, no. 3:353–389.
- Rosenholtz, S. J. 1989. *Teachers' Workplace: The Social Organization of Schools*. New York: Longman.

- Seashore Louis, K., and S. D. Kruse. 1995. *Professionalism and Community: Perspectives on Reforming Urban Schools*. Thousand Oaks, CA: Corwin.
- Sergiovanni, T. 1996. "Leadership Basics for Principals and Their Staff." *Educational Forum* 60, no. 3:853–858.
- Snow, D. A., and R. D. Benford. 1992. "Master Frames and Cycles of Protest." In *Frontiers in Social Movement Theory*, edited by A. D. Morris and C. M. Mueller, pp. 133–155. New Haven, CT: Yale University Press.
- Spillane, J. P. 2006. *Distributed Leadership*. San Francisco: Jossey-Bass.
- Spillane, J. 2005. "Primary School Leadership Practice: How the Subject Matters." *School Leadership and Management* 25, no. 4:383–397.
- Spillane, J., E. M. Camburn, and A. Pareja. 2007. "Taking a Distributed Perspective to the School Principal's Work Day." *Leadership and Policy in Schools* 6, no. 1:103–125.
- Spillane, J., E. M. Camburn, J. Pustejovsky, A. Stitzel Pareja, and G. Lewis. 2009. "Taking a Distributed Perspective: Epistemological and Methodological Tradeoffs in Operationalizing the Leader Plus Aspect." *Journal of Educational Administration* 46, no. 2:189–213.
- Spillane, J., and A. Coldren. In preparation. "Leadership Practice: Taking a Distributed Perspective in Practice."
- Spillane, J. P., and J. Diamond. (Eds.). 2007. *Distributed Leadership in Practice*. New York: Teachers College Press.
- Spillane, J. P., R. Halverson, and J. B. Diamond. 2004. "Towards a Theory of Leadership Practice: A Distributed Perspective." *Journal of Curriculum Studies* 36, no. 1:3–34.
- Spillane, J. P., R. Halverson, and J. B. Diamond. 2001. "Investigating School Leadership Practice: A Distributed Perspective." *Educational Researcher* 30, no. 3:23–28.
- Spillane, J. P., B. Hunt, and K. Healy. Forthcoming. "Managing and Leading Elementary Schools: Attending to the Formal and Informal Organization." *International Studies in Educational Administration*.
- Spillane, J., L. Mesler, C. Croegaert, and J. Z. Sherer. 2007. "Organizational Routines and School-Level Efforts to Establish Tight Coupling: Changing Policy, Changing Work Practice?" Working paper. Northwestern University.
- Yukl, G. 1999. "An Evaluation of Conceptual Weaknesses in Transformational and Charismatic Leadership Theories." *Leadership Quarterly* 10, no. 2:285–305.
- Zoltners Sherer, J. 2007. "The Practice of Leadership in Mathematics and Language Arts: The Adams Case." In *Distributed Leadership in Practice*, edited by J. Spillane and J. Diamond, pp. 106–128. New York: Teachers College Press.

# Developing Instructional Leaders

Andrew Lachman,  
Richard W. Lemons, Margaret Terry Orr,  
and Mónica Byrne-Jiménez

---

*An effort in Connecticut is aimed at developing cadres of school leaders for urban districts who are prepared to lead instructional improvement.*

Leadership is not about control. It is about guiding people to think and act differently.

— A participant in the Urban School Leaders Fellowship

School leadership matters. Recent research demonstrates that second only to the quality of teachers, effective principals are the most important schoolhouse variable linked to the improvement of student learning, achievement, and attainment (Leithwood et al. 2004). School leadership matters even more in the persistently low-performing schools that Education Secretary Arne Duncan has targeted for improvement. In their review of the research on leadership effects on student learning, Kenneth Leithwood and his colleagues found that “there are virtually no instances of troubled schools being turned around without intervention by a powerful leader” (p. 3).

For urban districts, the principal leadership crisis is more than just a human resources issue; it is a vexing systemic problem impeding large-scale improvement. Given the essential role of effective leaders in urban school improvement, districts must put in place

a comprehensive leadership development strategy. They need to figure out how to identify and develop a viable pool of aspirants; make sure that as these aspirants become applicants for leadership positions they are prepared for the context-specific realities of urban schools; and foster the organizational conditions that can support and retain these leaders once hired. This multi-dimensional problem requires a systemic solution.

## ***A Need for Strategic Partnerships***

Traditionally, districts have relied upon universities to produce and certify – in conjunction with state departments of education – principal candidates. More recently, several districts have created their own leadership academies and principal induction and mentoring programs in order to ensure a pipeline of quality applicants. In addition, organizations such as New Leaders for New Schools and charter management companies have challenged the university cartels and entered the marketplace with

*Andrew Lachman is executive director of the Connecticut Center for School Change. Richard Lemons, formerly assistant professor at the University of Connecticut, was recently appointed vice president for program and policy at The Education Trust. Margaret Terry Orr is director of the Future School Leaders Academy at Bank Street College. Mónica Byrne-Jiménez is assistant professor in Foundations, Leadership, and Policy Studies at Hofstra University.*