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How Leaders Invest Staffing Resources for Learning Improvement



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The Study of Leadership for Learning Improvement

With support from The Wallace Foundation, a team of researchers from the Center for the Study of Teaching and Policy at the University of Washington has undertaken an investigation of leadership in urban schools and districts that are seeking to improve both learning and leadership. The study explored the following overarching question: What does it take for leaders to promote and support powerful, equitable learning in a school and in the district and state system that serves the school? The study pursued this question through a set of coordinated investigations, each with an intensive qualitative or mixed-methods strategy and with overlapping samples, designed to offer images of what is possible in schools and districts that take learning improvement seriously. Study sites were chosen to reflect a focus on learning and leadership improvement and varying degrees of progress toward improvement goals.

- School Leadership investigation: The reconfiguration and exercise of leadership within elementary, middle, and high schools to enable more focused support for learning improvement
- Resource Investment investigation: The investment of staffing and other resources at multiple levels of the system, in alignment with learning improvement goals, to enhance equity and leadership capacity
- Central Office Transformation investigation: The reinvention of central office work practices and relationships with the schools to better support districtwide improvement of teaching and learning

Separate reports detail the findings of each investigation, and a synthesis report identifies themes connecting the three study strands.

Learning-focused Leadership and Leadership Support: Meanings and Practice in Urban Systems

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Leadership for Learning Improvement in Urban Schools

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How Leaders Invest Staffing Resources for Learning Improvement

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Central Office Transformation for District-wide Teaching and Learning Improvement

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This document and the others within the series can be downloaded free of charge from the Center's Web site, www.ctpweb.org, and also from The Wallace Foundation's Knowledge Center site, www.wallacefoundation.org.

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Executive Summary

Based on a 2-year investigation of how leaders invest staffing resources in four urban districts¹ and 14 schools, this report provides analyses about (1) what staffing challenges prompt or guide district and school leaders to consider investing staffing resources differently than their prior practice—and what frameworks they construct to guide their resource decisions, in relation to a learning improvement agenda; (2) what strategies leaders pursue to bring staffing resources to bear more directly on improved, equitable learning outcomes for all students; and (3) how leaders establish and sustain support for differential investment of staffing resources in pursuit of greater equity in learning improvement.

This study focused on what it means to *invest* staffing resources to improve learning in urban schools and districts. By *investment* we are referring to a comprehensive and dynamic approach that includes considerations that go beyond the acute and immediate needs of a classroom, school, or district. Rather than relying on the traditional pattern of isolating a funding need and allocating resources for that specific need, leaders need to consider the types of approaches and strategies for investing resources in coherent, effective, equitable, and sustainable ways. This approach assumes that calculated risks must be taken at times and that strategies should be monitored and adjusted on a regular cycle, in light of changing conditions and accumulated evidence over time regarding the effectiveness and equity of particular investment strategies.

Challenges and Conditions

The districts we studied, like many, if not most, urban school districts, face four interrelated challenges regarding the quality of their teacher and administrator workforce: maximizing the quality and longevity of teaching staff in high-needs schools, which are typically hard to staff; deploying and supporting the generally high proportions of novice teachers; managing and minimizing the often high rates of teacher mobility and attrition; and matching the ethnic, racial, and linguistic diversity of the student population with corresponding diversity in the teacher ranks. The districts were clear examples of these challenges at work. Besides the investment frameworks that district leaders create in approaching urban staffing challenges, several other conditions have an important role in shaping decisions

Our study districts are Atlanta Public Schools, Atlanta, GA; New York City Department of Education/Empowerment Schools, New York, NY; Portland Public Schools, Portland, OR; and Lane County District Number 4J in Eugene, OR.

about staffing resources: fiscal conditions, sources of staffing supply, collective bargaining agreements, the district's human resource system, and the district's accountability system. These matters are a partial result of district policy or organizational decisions, and in part a reflection of events or contingencies in their environments.

The ebb and flow of fiscal resources provides the basic capacity for allocating, distributing, repurposing, and supporting staff. Collective bargaining agreements, or even the absence of them, create operational freedoms and constraints that can serve to support or detract from effective instructional operations that meaningfully benefit students. The current and potential sources of staff supply, residing in a local labor market and whatever talent pools the district is able to set up, provide personnel for positions in schools and within the central office. The arrangement of the district's human resource function, including various rules and processes established by the district, handles the hiring or ongoing work of staff. Finally, the district's accountability system (subsuming that of the state and federal government) directly or indirectly frames and assesses staff performance. While these conditions are not the main focus of our analysis in this report, their presence, as a part of the staffing investment equation, must be acknowledged.

District Investment Frameworks and Targets

The districts created an overarching set of investment frameworks that influenced how school principals and central office officials approach specific staffing decisions. These frameworks significantly alter who assumes the initiative and responsibility for staffing decisions, among other things, and could have important implications for leaders with respect to their decision-making authority, ability to imagine creative possibilities, and motivation to address staffing matters. In particular, the following four frameworks, often present in particular combinations, set the stage for how staffing resources were invested in study sites.

- A mandated investment framework imposed on district and school leaders a requirement to stipulate the ways in which a particular staffing resource might be used.
- *A negotiated investment framework*, unlike mandates, offered the recipients varying degrees of latitude to choose among options. Negotiated investments sometimes resulted from an external partnership, grant, or other discretion-

ary source, and within parameters set up by this source allowed leaders greater latitude in defining how staffing resources might be used.

- An incentive-based framework featured rewards or sanctions for staff performance in response to particular school-level outcomes (or occasionally unit-level outcomes, in the central office). Typically, these actions affected individuals in leadership positions (e.g., school principals) who might be commended, compensated, or even terminated based on the results they obtained.
- A market-based or market-like investment framework encouraged staffing resource decisions that responded to the demand for particular services, generally through choice arrangements (e.g., parents choosing schools or programs, schools choosing support services). This type of framework was sometimes accompanied by allocating discretionary resources to the units (e.g., schools) that were participating in the market.

These four frameworks do not exhaust the logical possibilities, but they capture a dominant set of conditions that districts can create to guide the use of staffing resources.

Taking action within these frameworks, the districts targeted three main investment areas:

- Investing in instructional leadership within and across schools. This strategy (re)directed staffing resources to positions, team structures, and other arrangements that increase instructional leadership activity inside or across schools. As such, it concentrated on both the supply of people able to exercise instructional leadership and their capacity to do so.
- Investing in data-based practice. This strategy aimed more at staff performance, and also capacity building, by focusing resources on the development of useful data sources and the systems that facilitate the use of these data for addressing problems of practice in classrooms and schools. Typically linked to accountability systems, this category of investment strategy included efforts to orchestrate staff, time, and technology so that school and district staff could engage in a continuous inquiry process about the learning improvement challenges they face.
- *Increasing capacity, flexibility, and support for school-level investment.* This strategy sought to enhance the discretion and wherewithal for school-level staff-

ing decisions that served instructional support needs, as determined by school leaders. Arrangements for increasing capacity and flexibility were coupled with efforts to build the leaders' capacity to make good use of their discretionary resources.

A common strategy in each of these districts—and perhaps the most straightforward way of investing in instructional leadership—was to create and fund district-level instructional leadership positions that serve multiple schools. Instructional improvement goals prompted the creation of new leadership roles, many of which focused on providing instructional support to specific schools and teachers. Positions such as instructional coaches, achievement coordinators, data and assessment specialists, and other types of teacher leaders and central office support staff were utilized in a variety of ways. Additional new revenue sometimes supported the creation of these positions; other times, the positions were funded through a reexamination and repurposing of existing staffing resources. In the short term, building a school-driven market for instructional leadership support appears to maximize responsiveness to the school's expressed preferences for assistance, not all of which are directly related to instruction. However, creating and filling mandated school-level instructional leadership positions alone is no guarantee that instructional leadership will be exercised effectively. Investments of other district and school resources, combined with related organizational changes, are crucial to realizing the potential of this instructional support.

Investing for Equity

While the tug of war over scarce resources can be seen as a process of negotiating among competing interests, it is also a central occasion for state, district, and school leaders to consider notions of *equity and fairness*. Based on some compelling vision of what is equitable and fair, the leadership challenge is to invest resources in ways that respond to the unique needs of students, teachers, and schools while maximizing these goals and developing politically sustainable strategies for doing so. Either explicitly or implicitly, these matters were a central concern in the districts we studied, and the districts' experiences in investing resources bring to light the core issues at stake and some possible ways they can be addressed.

Investing staffing resources equitably—which generally means in a differentiated and ostensibly unequal way—is difficult conceptual work. Leaders and other stakeholders have to come to grips with the slippery definitions of equality, equity, and fairness, and more than one conception of fairness is at work. Since pursuing the

goal of equitable learning improvement almost always means more than equalizing resources, opportunities, or treatment, leaders find themselves in the position of differentially investing resources to realize an equity agenda. Thus, students who have been historically underserved generally need more than their more advantaged peers; hard-to-staff schools often require a greater investment in staffing than do those that have little difficulty attracting staff; and so on. But leaders investing in equity are likely to encounter stiff resistance from stakeholders who have traditionally been advantaged by existing systems, and may need to adjudicate the contest over what is fair that inevitably results.

The politics of equity-focused investment seemed most productively managed where leaders—

- Adopted a long-time horizon for planning equity-related investments—in effect, they invested in planning for equity. Through elaborate processes with repeated occasions for engaging stakeholders, they built an awareness of equity issues, some working consensus on equity principles, and the basis for more focused action.
- Continued to shepherd the equity conversation over time, while taking action on steps that were feasible. In shepherding the conversation, they took pains to be proactive, getting out in front of the issue rather than reacting to an equity-related debate framed by events or other parties; used data publicly and often as a reference point for conversation; and invested in coalition building to broaden the base of support for decisions that could be unpopular in various quarters.
- Anticipated and persevered in the face of the inevitable pushback from groups that perceived differential investments to be unfair to them and their interests, even if justified as a productive way to address the achievement gap.

Case study analysis found the overarching principle was that the pursuit of equity goals meant taking the long view—implied by the notion of investment itself—and engaging in processes that unfolded over years. While there are strategic advantages to students' learning when educational leaders operate from a long-range, investment perspective, successful long-range investment planning depends upon incremental, short-term implementation successes and lessons, grounded in an ongoing inquiry process. A long-term investment perspective offers schools and school districts the opportunity to deal more effectively with periods of compressed fiscal resources. Investing in learning improvement occurs both in times

of fiscal plenty and fiscal cutbacks. Most of the study sites experienced severe retrenchment in recent years, and used these times as occasions for creative improvisation on what they had been doing before.

Meeting the Investment Challenge

Across our study sites, we found that leaders can and do take action and create conditions, tools, and systems (both formal and informal) that (1) assist with efforts to reallocate staffing resources more strategically, (2) prioritize and address equity challenges through resource investments, (3) communicate with the broader community regarding priorities and action plans that make the case for necessary change, and (4) take steps to increase the likelihood that the investment strategies will pay off. However, a number of unsolved problems of leadership practice persist regarding efforts to invest staffing resources productively and equitably.

This study shows there are encouraging results when districts have connected the investment itself with conditions that create a web of support for productive investments of resources over time. In such instances, district and school leaders have recognized that investing staffing resources in learning improvement means more than getting people into positions, especially new and unfamiliar positions that, however exciting they may be, will take time and care to become fully functioning and welcomed parts of the system. There are also advantages from investments in data-based practice of the sort we found in the study districts: efforts to engage staff (at the district or school level) in a focused, structured, and continuous inquiry process about the learning improvement challenges they face often resulted in purposeful, new action to address the particular problem.

A leader's flexibility and autonomy to invest, allocate, or reallocate resources at the school or district level is conducive to meeting school-specific performance objectives, potentially within a more accelerated time frame. In study sites, principals relied on the existing resources allocated to their schools—and the flexibility granted them—to create alternative staffing or instructional support arrangements. Given flexibility in allocating resources, the central office units made use of resources in ways that affected their approach to exercising or supporting instructional leadership—generally developing a more responsive relationship with schools. Each of the districts pursued the investment strategies described above using existing resources for the most part, often acquired through reallocation

activities—e.g., by adjusting staffing ratios, modestly increasing class sizes, restructuring and reducing central office arrangements, or substituting positions within their base allocation.

Opportunities in Challenging Times

Current financial pressures provide the opportunity for leaders to critically examine their investments in staffing resources and consider ways in which resources can be shifted, reallocated, or repurposed with a more strategic scope or focus. Economic challenges further increase the tensions that leaders must negotiate when it comes to decision making about staffing resources, particularly with respect to the differential allocation of scarce resources among schools and students with varying needs. And as at times of relative plenty, there are strong voices that assert the only fair thing to do is to make sure everyone bears the burden equally, a move that tends to reinforce any inequities in the current resource allocation system. So the challenge of finding the most equitable way of proceeding still remains, even if the main business of the day is making cuts.

Even given challenging contexts, district and school leaders in our study sites demonstrated an ability to engage in strategic, coherent actions to improve student learning. However, drawing from what we learned from our study sites, we find that a prominent unsolved problem concerns support for systemic and sustainable leadership action. Educational leaders tend to distinguish between investments for students, classroom teachers, and instructional leaders, and they have well-developed frameworks for thinking about support for the first two. But less frequently do they assume that people in leadership roles need support, too, and as a result, build an accompanying aligned system of leadership support related to the changes made in individual work responsibilities, supervisory relationships, or organizational structures. Even in cases where productive leadership activities are taking place, attempts by school and district leaders to reallocate staffing resources often occur in a piecemeal fashion, sometimes due to budgetary constraints or uncertainty, but also influenced by whether or not these systems of support are in place.

A second unresolved problem—perhaps more properly thought of as an enduring tension to be managed—resides in the politics of resource investment. Even when leaders succeed in differentially targeting or reallocating resources, a substantial counterforce emerges in the form of pushback from a variety of sources. Anticipat-

ing the pushback and finding the political will to stand up to it is a major issue for leaders. Sustaining changes may be more challenging than the initial conceptualization and implementation of leadership actions regarding the types of investment strategies to pursue.

Learning to think in investment terms, manage the politics of differential investment, and keep investments focused on learning improvement are a "curriculum" for developing leaders that preparation programs and districts may or may not be offering. Deep and specific knowledge about the types of investments that might be most applicable and effective appears to be in short supply. In essence, a knowledge gap needs to be bridged so that leaders are supported in their effort to engage in actions that will produce desired results.

A shift is needed from conceptualizing the leadership challenge as a matter of reducing the overload on leaders toward an orientation that builds collective capacity at both district and school levels. Principals articulated a need for navigational tools to manage the breadth and depth of the responsibilities they assume and a way to build collective capacity to address the numerous instructional and practical challenges they face. This shift in thinking about improving leadership goes beyond dependence on the heroic leadership of individuals who happen to possess unique traits, energy levels, and abilities, as well as persuasive personalities. Instead, learning-focused leadership is most evident when leaders and leadership teams take strategic actions, at various points in a school system, that build investment frameworks; encourage innovation and flexibility in responding to unique needs; create webs of support for instructional leadership; and sustain coalitions necessary for maintaining a focus on improving outcomes for all students, and particularly for those most in need.

Chapter 1

Investing Staffing Resources to Support Learning Improvement in Urban Districts and Schools

In an interview midway through the school year, the principal of a large elementary school in New York City explains why he has rearranged his budget to support team teaching arrangements in his first and second grades, resulting in classrooms of approximately 28 children taught all day by two certificated teachers:

A lot of people think I'm crazy and ask "How can you possibly afford it?" It's a long-term investment. I really believe strongly that this is going to help those kids—that I don't have to have after-school programs and Saturday programs and test prep programs and this or that program for third-, fourth-, and fifth-graders, which is really not going to merit much gain. ... I think by making the investment in the early grades, I'm making an investment that's going to payoff in the long run and I think I'll see it on the other end. There may come a time though, and I'm aware of it, but I may have to look out to other organizations to help fund and support it—foundations that will fund and support that kind of work because we're heading towards some real tough, difficult economic times not just in the city but throughout the country....I just hope the chancellor and the mayor don't pull out all my money before I can prove it.

This principal made this choice after having gone through a careful and difficult process of aligning his budget with a learning improvement agenda he established with his staff. There are other worthy things he could have done with the money needed to pay for the team teaching arrangement—among them, reducing class sizes across all grades (though by less than the radical reduction in the early-grade classrooms); mounting an array of remedial programs for older struggling students; creating targeted test-preparation classes; and the like. But he has opted to substantially change class size and instructional attention for a particular segment of the nearly 1,000 students in the school, and to bring to those first- and second-graders instructional resources that may actually be more than the sum of two teachers. The early returns suggest his hunch may be working, not only in student learning but in the quality of the teachers' work as a team:

The teachers that are team teaching are working twice as hard, maybe three times as hard because they challenge each other, they question each other. I walk into the classrooms and even in the morning or on their preps or during lunchtime....

I almost feel like I'm interrupting a conversation and it's not about what's on sale at Macy's, it's about the kids.

What has enabled this principal to visualize the possibilities and the trade-offs, to imagine this move as a long-term investment? What has empowered him to actually make this somewhat unorthodox staffing arrangement? How does he persist in the face of resistance, both from within and outside his school, if not his own self-doubt? How does he figure out whether the investment is paying off? And how does the district in which he works funnel sufficient resources to him to enable this kind of staffing arrangement, especially at a time of economic downturn? Furthermore, how is the district investing in him, his efforts, and those of his leadership team to guide learning improvement efforts in his school? These kinds of questions could be asked of hundreds of leaders like him, at both the school and district level in urban systems, who are serious about improving the quality of teaching and learning.

A number of urban school reform efforts call for or presume an investment of resources that align with instructional improvement priorities and build a basis for improvement over the long term. What is more, reforms often imply differential investments of resources in response to the needs of a diverse student population. Strategies for enabling leaders to direct resources to these purposes are gaining popularity—among them, weighted student funding, greater flexibility in the use of funds at the school level (a condition that enabled the scenario above), greater choice for parents in selecting schools, increased autonomy for school principals to hire and assign staff, and greater accountability for principals regarding their schools' performance, particularly in urban settings. The aim of many of these proposals is to close persistent achievement gaps, and the logic is simple enough: if more or different things need to be done to close achievement gaps, or if certain groups need more help for this goal to be achieved, then investing resources to achieve these purposes is essential.

Yet, despite examples such as the one above, resources often are neither well aligned with reform goals or student needs, nor directed to long-term, sustainable changes. Across diverse settings, staff are deployed in remarkably similar ways (Chambers, Shambaugh, Levin, Muraki, & Poland, 2008; Odden & Picus, 2008; Monk, 1994; Miles, 1995), with only small adjustments made, often to honor staff preferences or requests for a change. Typically, last year's budget predicts this year's, with only incremental adjustments (Erlichson & Goertz, 2002; Hartman, 1999; Odden & Archibald, 2001). Or, when substantial budget cuts are required, all units' budgets

are reduced by the same percentage, leaving current priorities intact and unexamined. In a similar way, the master schedule for the coming year often closely mirrors the current year's allocation of time and course offerings. Leaders avoid redirecting funding from one purpose to another lest they unleash a howl of protest from those whose budgets are shrinking the most. Put simply, how resources are distributed and used in a district or school is often remarkably resistant to change, despite the call for a substantial shift in the way the district does business (Adams, 2008; Miles, 2001). Consequently, more often than not, decisions about the allocation and use of staffing resources made in any given year reflect the ebb and flow of year-to-year changes in the amount of resources available.

It is time to look more closely at what it means for leaders to invest resources in schools and districts—especially staffing resources—with the aspiration to fundamentally improve learning opportunities and outcomes, and to do so in ways that enable historically underserved students to prosper in their schooling. Instead of the traditional pattern of allocating funds to a specific need, leaders may approach the investment of resources in ways that are coherent, effective, equitable, and sustainable. By *investment* we are referring to a more comprehensive and dynamic approach that includes considerations that go beyond the acute and immediate needs of a classroom, school, or district. Investing resources, as in other contexts outside education, implies the use of a long-term approach with an accompanying set of coherent decisions aimed at maximizing identified goals. It also implies that calculated risks must be taken at times and that strategies should be monitored and adjusted on a regular cycle, in light of changing conditions and accumulated evidence over time regarding the effectiveness of particular investment strategies.

As district and school leaders rethink how to best initiate, support, and sustain learning improvement and close achievement gaps, the need for an orientation toward investment becomes particularly salient. An orientation toward investing resources is one approach to leadership that helps align an ambitious vision with specific long-term direction regarding how to engage schools and school systems in continuous improvement. We know leadership has an effect on school improvement (Hallinger & Heck, 2009; Leithwood & Riehl, 2005), and we posit that the positive effects of leadership can be enhanced by improving leaders' capacity to make smarter, more effective, and more equitable decisions about investing resources. A focus on staffing resources is particularly important since more than four fifths of an education budget is spent on personnel. A look at how staffing resources are being invested, and the ways in which they are supported over time,

provides a means to assess the ways in which leaders are focusing attention and effort on the instructional improvement priorities they have identified.

Based on a 2-year investigation of how leaders invest staffing resources in 14 schools in four urban districts located in the eastern, southern, and western parts of the country, this report provides analyses about (1) what staffing challenges prompt or guide district and school leaders to consider investing staffing resources differently than their prior practice, and what frameworks they construct to guide their resource decisions, in relation to a learning improvement agenda; (2) what strategies leaders pursue to bring staffing resources to bear more directly on improved, equitable learning outcomes for all students; and (3) how leaders establish and sustain support for differential investment of staffing resources in pursuit of greater equity in learning improvement.

To introduce these analyses and to ground our work in a particular perspective on how leaders invest resources, we first locate our thinking in ideas that link leadership to learning, followed by a way of conceptualizing the investment of resources and the particular challenges learning-focused leaders face in making decisions about staffing resources.

Investing Resources as a Problem of Learning-focused Leadership Practice

We approach our examination of how leaders invest resources as a part of what we have referred to as *learning-focused leadership*.² This perspective focuses on actions by school and district leaders that promote "powerful, equitable learning," not only for students, but also for professionals and the system as a whole (Knapp, Copland, & Talbert, 2003; Copland & Knapp, 2006). This work further assumes that enhancing learning for students cannot be maximized without also promoting learning for professionals and the entire system. The perspective helps to identify ways that district and school leaders go about this work: by establishing a persistent public focus on learning, building professional communities that emphasize learning improvement as their central business, engaging external environments that matter for learning, mobilizing efforts that have particular promise for a specific locale, and creating coherence among learning improvement efforts. As they focus attention and mobilize effort in all these ways, learning-focused leaders are

² These ideas build on others' work using similar terms—for example, *the learning-centered principal* (DuFour, 2002) and *leadership for learning* (Resnick & Glennan, 2002; Stoll, Fink, & Earl, 2003).

inevitably and continuously concerned with the investment of resources that enable the efforts of educators.

Deciding how to invest resources presents a fundamental leadership challenge. The ways in which resources are acquired, distributed, developed, and utilized have a direct bearing on the quality of teaching and learning. Inevitably, basic issues of equity and access to resources arise in this endeavor. Recognizing and addressing these issues comprises a major portion of the leadership challenge in addressing the achievement gap, whether it be decisions related to the level of spending on high- and low-performing schools, how dollars are distributed across programs or student subpopulations, or how teachers are allocated or assigned to schools and teaching positions. In all of these areas and more, leaders face fundamental questions about how their investment decisions match—and are likely to maximize—instructional improvement priorities and values (Picus & Wattenbarger, 1996; Odden & Picus, 2008). If powerful and equitable learning opportunities are to be provided for students at every school, then the way resources are directed to and within schools and the discretion leaders have to configure these resources need immediate attention.

Central Problems of Leadership Practice in a Context of Accountability

Leaders face some common problems of practice with respect to investing resources in an era of increasing accountability for performance (Plecki, Alejano, Lochmiller, & Knapp, 2006). Four of these are central to leadership that focuses on powerful, equitable learning:

- 1. Identifying where and how resources can support gap-closing activities:

 Leaders have to look carefully to discover inequities in current ways of doing business and imagine new ways of deploying resources that enhance the prospects for equity. The key leadership act is to put the money where the rhetoric is, by making achievement gaps a basic reference point for investment decisions.
- 2. Organizing schools to enable the alignment of resources with learning improvement: District and school leaders can do much to structure time, programs, and the composition and assignment of staff so that they collectively emphasize learning improvement priorities, but doing so may confront structures, norms, and processes that do not support these priorities. The leadership challenge is to imagine alternatives to current practice and to create the organization.

- nizational conditions at the district and school level that enable resources to be invested in more productive ways.
- 3. Developing the human capital of the school or district: Investing in human resources inevitably implies providing supports, incentives, and opportunities for learning that build motivation and expertise, thereby fostering higher performance. While teachers are of prime concern here, the development of human capital also includes others who work throughout the educational system, including principals, central office staff, school board members, and state officials.
- **4.** Managing the politics of learning-focused resource investment: Because the allocation of resources always involves competing interests, from both inside and outside the district or school, leaders find themselves mediating the political pressures associated with investment decisions.

District and school leaders confront these challenges in a context that increasingly asks them to do more with less. Accountability initiatives like No Child Left Behind have shifted the focus of attention toward outcomes in schools and across districts, and the corresponding wealth of published data about student performance has brought issues of disparity to school leaders' attention. The districts and schools explored as a part of this study are representative of many, if not most, large and mid-sized districts across America; they are wrestling with the complex and dynamic challenge of trying to raise the academic performance of all students, close the achievement gap among students, and distribute educational access and opportunity more equitably to every student they serve. These objectives compete for both attention and resources, and leave school leaders struggling to find adequate or useful decision-making models and resource investment strategies. Adding to this challenge is the growing realization by many school leaders that creating new funding or distribution formulas is not enough—the challenge also involves responding to powerful political pressures.

Confronting Technical Solutions and Political Challenges

Unfortunately for most school and district leaders, the devil lies in the details. Leaders must wrestle with the design of technical solutions to achieve more equitable and effective investments of resources and the management of complex political dynamics involved in maintaining support (from teachers, principals, parents, the school board) for the long-term continuation of programs designed to give some schools more, and others schools less.

The technical challenges and political obstacles to *equalizing* the allocation of resources to all schools are significant, as have been the political obstacles, as demonstrated by the history of school finance over the past several decades. To date, efforts to reduce spending inequities due to local wealth disparities have been largely successful. Yet differences in the quality of educational services across districts and schools persist (Corcoran & Evans, 2008; King, Swanson, & Sweetland, 2003; Odden, 2007).

It is quite another thing to make the allocation of resources more *equitable*. Observers have long recognized that in many circumstances equal is not always equitable (Berne & Stiefel, 1999; Baker & Green, 2008). As a practical manifestation of this principle, many districts have discovered that, even after efforts to equalize inputs, some schools continue to underperform. It has been recognized that schools serving disproportionately higher numbers of students from economically disadvantaged families, students with special education needs, and students who are English language learners (ELLs), have differential resource needs. Not only do these schools need additional funds from supplemental sources to support these students, but schools with higher concentrations of harder-to-serve students appear to put a greater demand on the general fund as well (Ladd, 2008).

While the effort to support these schools equitably raises complicated technical and practical questions, the political challenges are even more acute. Specifically, as some schools receive disproportionately more resources, stakeholders in other schools may feel slighted and are likely to resist. This resistance is heightened in times of shrinking enrollments, increasingly diverse student populations, and declining revenues, when all schools are asked to do more with less and fiscal stress is felt throughout the district. School and district leaders face a conundrum in trying to address the particularly unique needs of students in highly impacted schools, while at the same time maintaining access and opportunity for all students across the district.

Study Focus: Investing Staffing Resources

Ultimately, the leadership problem concerns decisions on how best to invest in staffing resources. In this study, *investing in staffing resources* refers to the variety of leadership decisions and subsequent actions involved in recruiting, hiring, distributing, assigning, reallocating, evaluating, and supporting staff. We distinguish investing in staffing resources as having two additional features: (1) an orienta-

tion toward the long term, and (2) a focus on the payoff of these investments, as measured by the achievement of learning improvement goals, especially for underserved students.

Thinking about how leaders make investments in education is not a new concept. One prominent example is found in the work of Elmore & Burney (1999), an examination of the extensive district reform effort in New York City's Community District #2 titled "Investing in Teacher Learning." Figuring out how best to invest staffing resources is one of the most important activities district and school leaders undertake in learning improvement. As an ever-growing body of research indicates, highly qualified teachers are a hugely important factor affecting student achievement in the classroom (Rivkin, Hanushek, & Kain, 2005; Levin & Quinn, 2003; Rice, 2003; Goldhaber, 2008). A parallel body of research emerging over the past decade establishes a similar point concerning the effects of school leadership: high-quality school leadership has reciprocal, if indirect, effects on student learning (e.g., Hallinger & Heck, 2009; Hallinger & Heck, 1996; Leithwood & Riehl, 2005). Given the key role that human resource investments play in learning improvement, a focus on those who provide leadership, instruction, and instructional support is warranted.

Which Resources Are Invested?

To make sense of how leaders invest staffing resources to pursue learning improvement, we need a clear working definition of *resources* (including money, people, and time) along with a way to understand the leadership challenges concerning the investment of key resources. While of vital importance, dollars alone do not fully describe the resources necessary to operate a successful school or school district. During the past decade, conceptualizations of resources in education have pushed beyond the assessment of the dollar amounts allocated per student, per district, or per school to a more robust way of thinking about educational resources (Rice & Schwartz, 2008; Grubb, 2009). Indeed, the resources needed to actively and fully support the education system are inherently complex and require an understanding that goes far beyond assessing the level of spending or how the dollars are distributed.

People paid with available funds do the work of the educational system, and bring to bear on its challenges differing levels of motivation and expertise, developed over time through training and experience. The decisions that leaders make about human resource investments often occur in the context of significant inequities—in

which certain schools and student populations receive the benefit of higher quality or more abundant resources than others. Leaders are in a position to invest resources in ways that focus energy and attention on these inequities. They can and do influence how teachers are assigned to schools and to specific students and subjects. Leaders also play a role in determining how human resources are developed and supported to take on the responsibilities to which they are assigned (Boyd, Lankford, & Wyckoff, 2008).

The work of classroom teachers, leaders, and other instructional staff takes place within an agreed-upon structure of time that allocates hours within the day and across the year to different functions, thereby creating more or less opportunity to accomplish goals. Determining the amount of time and attention paid to a variety of instructional improvement goals are fundamental resource investment decisions. Thus, time is a valuable resource that can be invested in a variety of ways. Closely related is the assignment of staff to tasks within time blocks. Staff have different strengths and skills, and therefore the match between what staff know and know how to do, and what students need or what other professional obligations require, has much to do with how successfully learning improvement priorities are pursued. The leadership challenge is often focused on how best to configure scarce time and assignments, in alignment with learning improvement priorities.

When considering resource investment, it is important to note that the various ways in which money, people, and time are used are interdependent. Each affects the others, and even depends on the others in order to achieve the intended purpose. An abundance of money and time, for example, without the knowledge, motivation, and expertise of teachers (human capital) does little to maximize the learning opportunities created for students. Furthermore, an abundance of human capital without money or time to distribute or develop it does little to alter practice in classrooms or promote the sharing of expertise with others. From their position of influence over the investment of resources, educational leaders attempt to coordinate and render coherent the relationship among all three kinds of resources, mindful of the goals they set out to achieve.

Focus on Investing Staffing Resources

As they make decisions about staffing resources in relation to a learning improvement agenda, district and school leaders take action on one or more of three types of investments: *cultivating the supply of staff relevant to the learning improvement agenda* (e.g., by judicious use of new resources to acquire staff with particular

skills), reallocating or repurposing current staffing resources (e.g., by aligning staff work more closely with learning improvement priorities), and strengthening staff capacity and performance (e.g., by investing in instructional leadership, guidance, and feedback systems). Table 1 illustrates the way leaders might be addressing the three challenges at different levels of the system.

Table 1. Three Types of Leadership Actions Aimed at Improving Staffing Resources

	Cultivating Supply of Staff Relevant to Learning Improvement Agenda	Reallocating and Repurposing Existing Staff	Strengthening Staff Capacity and Performance
State	Transforming certification standards for teachers and leaders Creating alternative routes to certification in shortage areas Establishing standards for new leadership roles	Shifting from a compliance orientation to a focus on support Encouraging new roles and strategies for providing instructional leadership Providing support for changing leadership roles	Creating incentives based on individual or group performance Establishing sanctions for underperformance Investing in a robust data infrastructure
District	Developing targeted recruitment mechanisms Strengthening support for new teachers Creating new instructional leadership or support positions	Redefining administrative positions to emphasize instructional support Improving human resource functions and support for schools	Requiring and supporting data- based forms of leadership practice Investing in school-based professional learning support for teachers
School	Creating new teacher leadership positions in the school Serving as a host school for student teachers	Changing teacher leadership assignments Developing instructional support teams Matching talents with tasks Reallocating instructional time based on student needs	Restructuring professional learning time to increase collaborative efforts Improving instructional coaching in response to performance Engaging with community resources to advance improvement agenda

In this study, we concentrate our efforts on understanding investment decisions that affect staff, especially those who provide instructional leadership and support. Included in this group are the teachers, principals, instructional coaches, mentors, paraprofessionals, and central office support staff whose primary role is to provide either direct instruction to students or to assist those who serve in direct instructional roles to improve the quality of teaching and learning. We concern ourselves with how leaders invest *new* staffing resources that may become available at the district or school level, as well as how leaders may reallocate, reconfigure, or

repurpose *existing* resources in order to better align existing staffing with instructional priorities, student learning needs, and professional learning needs.

Study Design and Sample

To explore the investment of staffing resources in pursuit of a learning improvement agenda, the study concentrated on four urban districts and 14 schools that vary in size, demographics, and educational governance and finance systems. A "nested" research design, explained more fully in the Methodological Appendix, allowed us to examine interactions among state, district, and school levels. The time period of the study was the 2006–07 and the 2007–08 school years. In this report, we provide information and analyses related to three questions:

- 1. What challenges prompt or guide educational leaders to alter how they invest staffing resources inside districts and schools? What frameworks do district leaders construct to guide these resource decisions, in relation to a learning improvement agenda?
- 2. What specific strategies do leaders pursue to bring staffing resource investments to bear more directly on improved, equitable learning outcomes for all students?
- **3.** How do principals and district leaders establish and sustain support for efforts to differentially invest staffing resources to equitably meet the learning needs of all students?

Data Sources and Data Collection Strategy

To investigate these questions, research team members conducted site visits to each of the 14 school sites at least four times over the course of the 2-year study. School principals were interviewed at each site visit along with other staff exercising leadership within the school (formal and informal), as well as a representative sample of teachers; in addition, researchers observed a wide variety of school-based activities, including classroom instruction, staff and community meetings, and other leadership events (e.g., coaching work). The research team conducted a minimum of five site visits at the district level, including interviews with the superintendent, other district-level leaders, school board members, and business and community leaders. Research team members also observed a host of other activities, including leadership training sessions, budget meetings, school board meetings, and community events, and had access to some of the district's personnel and fiscal databases.

Additional details about the specific methods employed in this study can be found in the Methodological Appendix.

Overview of the Case Study Sample

In order for the reader to understand better the descriptions and analyses that follow, we provide a brief portrait of each of the case study districts in our sample—Atlanta Public Schools, Atlanta, GA; New York City Department of Education/ Empowerment Schools Organization, New York, NY; Portland Public Schools, Portland, OR; and Lane County School District Number 4J, Eugene, OR—outlining some of the basic facts about the districts and emphasizing their unique qualities in relation to one another to set the stage for subsequent chapters. We also briefly summarize the range of schools, within the four districts, in which we developed school-level insights into the resource investment strategies under study.

Atlanta Public Schools, Atlanta, GA. This district serves more than 49,000 students across 103 learning sites. Atlanta's student population is 86% African American. More than three quarters of students are from low-income families, and there are 89 Title I schools in the district. The district's current superintendent, Dr. Beverly Hall, came to Atlanta in 1999 after serving as a superintendent in Newark, NJ, and as a deputy superintendent in New York City. Ten years ago, achievement throughout the district's elementary, middle, and high schools lagged behind many districts in Georgia and well behind most comparably sized urban school districts throughout the nation. The district's high school graduation rate was below 40%. Turnover among classroom teachers was high and the district was experiencing chronic difficulties finding qualified teachers for special education, mathematics, and science. Throughout the district many principals were inadequately prepared for the rigors of standards-based instruction.

The district approached these challenges by implementing multiple strategies, phased in over time and aimed at established performance targets for each school. Central features of the district's reform include the selection of comprehensive school reform models for struggling elementary and middle schools, the transformation of comprehensive high schools into small schools or learning communities, the replacement of 93% of building principals, and the implementation of common protocols for observing and critiquing classroom instruction. Considerable changes were also made to the central office structure, including the creation of School Reform Teams charged with supporting schools with their improvement work. The creation of a balanced scorecard provides for an accountability system that focuses

resources on particular improvement priorities, and offers a variety of supports for accomplishing these goals. The schools in our sample include elementary, middle, and high schools that have been the focus of specific district reform initiatives. While challenges still remain, the overall trend over the past several years is one of continuing improvement.

New York, NY. New York City houses the largest school system in the United States, serving more than 1 million students in 1,499 schools. New York City employs approximately 80,000 teachers with an annual budget of more than \$20 billion. The system has been under mayoral control since 2002 and the current chancellor, Joel Klein, has been in office since that time. Given that New York City schools serve more students than several states, in a sense, it operates as a "city-state" with complex systems of governance and significant variation within the district along numerous dimensions, such as the economic conditions in local communities, the nature of the student population, the size of schools, and the distribution of certified teachers.

New York City's reform theory emphasizes autonomy and flexibility at the school level, fewer regulations, and more discretionary resources, combined with multiple, centrally controlled accountability measures and an emphasis on data-guided decision making in pursuit of improved schools. The theory places great reliance on the school principal as CEO of the school, on the assumption that, given maximum discretion, sufficient resources, and clear accountability incentives, leaders will do the best they can for children. The theory of action further presumes that a streamlined, decentralized, and customer-oriented central office structure will provide the most responsive set of supports for school-level educators. Thus, the district bureaucracy has been radically altered and now consists of an array of School Support Organizations (SSOs), which principals choose as their front line of support for both instructional and operational guidance and assistance. Changes in the city system also include the establishment of a multipronged accountability system that combines periodic assessments, annual state and city assessments, surveys of parents, staff, and students, and feedback from review teams to form an annual school progress report.

In this study, we focus on schools and associated central office supports within one of the city's School Support Organizations, the Empowerment Schools Organization (ESO), which includes approximately 500 schools, or nearly a third of

the city's schools. The majority of our data collection came from schools within the ESO, and from portions of the central office with which these schools worked directly, though some background data came from other sources outside this SSO (e.g., citywide databases and some interviews with state and district officials, leaders of professional associations, and others). In this sense, we never set out to study New York City Department of Education reform, and New York City/ESO comprised the relevant district for most of our analyses.³

Lane County School District 4J, Eugene, OR. Several orders of magnitude smaller than the New York City mega-system, the Eugene School District serves approximately 17,500 students and is the fourth-largest school district in Oregon. Like many medium-sized, historically suburban districts in the country, the characteristics of the student population in Eugene schools are changing, and estimates are that by 2015, close to a third of the district's students will be persons of color and approximately 40% will be students from low-income families. Affordable housing is becoming increasingly difficult to find within district boundaries, and as a result enrollments are increasing in surrounding communities and declining in Eugene. The school district is organized into four geographic regions, with each region serving as a feeder system of elementary and middle schools and one comprehensive high school. The district also has an extensive history of offering a number of small alternative schools, often housed adjacent to or in the same building as the traditional neighborhood school. Accompanying the history of alternative schools is a long-standing district school choice policy that allows families to apply to and, if accepted, attend any school within the district.

Across a time period comparable to Atlanta's, the district has enjoyed significant stability in leadership and in its teaching corps. George Russell has served as superintendent since 1999, and a number of the current central office and school leaders have worked in the district for many years. Over the last 5 years, reducing the achievement gap has been the principal reform priority for the Eugene 4J district—as indicated by a clear and resounding message from the school board, superintendent, district leadership, and principals.

Due in large part to the superintendent's vision, determination, and leadership, cultural competence and issues of fairness and equity have been consistent themes

³ For a more complete discussion of the district arrangement and theory of action in New York City/Empowerment Schools Organization and Atlanta Public Schools, see a companion report, *Central Office Transformation for District-wide Teaching and Learning Improvement* (Honig, Copland, Lorton, Rainey, & Newton, forthcoming).

within the district and central to the reform theory. There is little disagreement across the district that some schools have been disproportionally impacted by the changing demographics of the community, and that student performance has been tightly linked to poverty and racial/ethnic differences. The district's commitment to equitable outcomes for all students forms the basis for its reform strategy of improving access to strong programs in all neighborhoods and increasing staffing resources and support for those schools and programs most in need. Several of the district's targeted schools are included in our sample.

Portland Public Schools, Portland, OR. Portland Public Schools serves approximately 47,000 students in 85 regular school buildings. While academic achievement in the district's elementary schools has risen over the past 5 years, less than half the district's middle schools and less than a third of the district's high schools have had similar results. At one point, the district had a 40% achievement gap between students of color and their white peers. Unlike the preceding three districts, which have enjoyed remarkably stable senior leadership, Portland faced the disruption of top leadership turnover more than once over the past decade, most recently in the middle of a significant new reform thrust. The entrance of a new superintendent, Vicki Phillips, in 2005-06 not only established the current reform direction of the district, but also introduced a number of uncertainties that accompany leadership transitions and the launch of new initiatives. Three years later, Carole Smith took over as superintendent and continued to advance a number of the improvement initiatives of her predecessor while focusing attention of the district and community on some specific, long-standing equity concerns. As a context for the investment of resources and other steps to promote learning improvement, Portland's circumstances illuminate how leadership transition can shape reform efforts, and demonstrate the challenges these reform efforts often encounter as they mature.

Middle schools have been one of the most visible targets of Portland's reform activity. Ten of the district's middle schools either entered or were close to entering the first step of Adequate Yearly Progress in 2005–06. Middle schools located in the higher-poverty eastern and northeastern attendance areas were a particular concern for the district as achievement lagged and enrollment dropped more precipitously than in other areas of Portland. The district responded to these problems by shuttering five middle schools and converting 19 elementary schools (which had shown strong progress in meeting new accountability requirements) to K–8 schools. In our sample, we focus on a selected number of these K–8 schools.

Moving toward improved performance

Each of the case study districts has been intensely involved in designing and implementing reform strategies to address issues of underperformance and inequity, and each district has shown signs of improvement (see Table 2). In all four cases, district- and school-level leaders have faced specific leadership challenges and opportunities regarding how to invest resources in support of improvement efforts and goals.

Table 2. Overview of Student Performance in Case Study Districts

District	2007 Percent Proficient in Reading Achievement	5-Year Reading Trend	2007 Percent Proficient in Math Achievement	5-Year Math Trend	2007 On-time Graduation
New York	53%	+14%	65%	+23%	62%
Atlanta*	89%	+14%	90%	+20%	72%
Portland	78%	+8%	77%	+13%	63%
Eugene	83%	+3%	79%	+2%	90%

^{*} The reported trend for Atlanta Public Schools is for 3 years of data due to the change in assessments that took place in 2004.

Case study schools within the four districts

Within these districts we selected a small number of case study schools, 14 in all, in which we examined at close range the dynamics of resource investment decisions and their relation to a learning improvement agenda. These schools were chosen to exemplify cases in which some progress was being made (however that was defined locally) in student learning for the full range of young people served by the school, leadership was shared, and attempts were being made to align resources with a learning improvement agenda (see the Methodological Appendix for a more complete discussion of sampling criteria and process). These schools served a largely impoverished clientele, with significant proportions of students of color, and often substantial linguistic diversity as well, as Table 3 summarizes. They included elementary, middle, and high schools, as well as some combinations of grade levels (e.g., K–8 and 7–12 configurations). These schools do not reflect the full range of schools served by the district but, rather, offer an image of those schools in which leadership has focused more persistently on learning improvement.

Table 3. Characteristics of Case Study Schools

Grade Level	October 2007 Enrollment	% Poverty	% Students of Color	% ELL Students
Elementary	462	81%	100%	6%
Elementary	332	81%	46%	13%
Elementary	374	73%	59%	11%
Elementary	685	78%	99%	27%
Elementary	1,122	93%	99%	33%
Elementary	1,708	83%	98%	27%
Middle	958	78%	100%	1%
Middle	510	40%	32%	6%
Middle	501	84%	99%	22%
High	1,006	81%	98%	2%
Combination*	387	73%	47%	17%
Combination	235	96%	90%	15%
Combination	355	70%	70%	10%
Combination	386	86%	99%	27%

^{*} Combination schools are those serving multiple levels—either elementary and middle grades, or middle and high school grade levels.

Organization of This Report

In what follows, we first describe the contexts and conditions in which our study districts are situated and how those conditions influence leaders' actions concerning the investment of staffing resources. In Chapter 2, we articulate several overarching challenges regarding staffing resources that are typically found in urban schools and districts, and we present a typology of investment frameworks created by the districts that shape leadership decisions regarding staffing resources. In Chapter 3, we use data from the case study districts and schools to describe, analyze, and compare emerging strategies used to invest in instructional leadership and leadership support, data-based practice, and school-level discretion in

cultivating effective allocation and use of staffing resources. Chapter 4 examines leadership actions associated with resource investments to promote equity-based practices. The analysis identifies the types of leadership actions that differentially invest resources in pursuit of greater equity within and across schools, and explores how leaders persevere in the face of political pressures that resist distributions of resources that seek to make matters more equitable. The report concludes in Chapter 5 by summarizing what can be learned from the study districts for policy makers, practitioners, and researchers engaged in improving leadership in urban settings.

Chapter 2

Staffing Challenges and Conditions That Frame Leaders' Investment of Resources in Learning Improvement

To understand how decisions are being made to invest staffing or other resources in efforts to improve instruction or enhance students' learning experiences, one must grasp in some detail the fundamental staffing challenges urban district and school leaders face and the basic conditions they work within—and co-construct—that shape a *human resource environment* for learning improvement. Put another way, these challenges and conditions frame leaders' attempts to increase the *sup-ply* of staff in various positions that impinge on learning improvement, define the *purpose* for these roles, enhance staff *capacity* to carry out these roles, and ensure high *performance* in these roles.

Shaping the human resource environment is largely a district matter, though other levels of the educational system participate as well (e.g., the state creates labor laws and certification standards; school leaders recruit staff). Accordingly, in the four case study sites, we paid close attention to districtwide conditions affecting resource investment and particularly to steps taken by district leaders to frame their ongoing investment decisions in a productive manner. Paying close attention to these district efforts acknowledges the importance of the district as a potentially positive influence in urban school reform (e.g., Hightower, Knapp, Marsh, & McLaughlin, 2002).

In this chapter, we describe districtwide conditions and actions that framed their investment activity—first, by reviewing several overarching staffing challenges that confronted districts leaders in the four districts we studied and, indeed, in many districts nationwide. We show how concerns about the presence and quality of leadership that bears directly on teaching and learning lie at the root of these challenges. We then identify different *investment frameworks* that the districts created that influenced more specific decisions about the allocation and development of staffing resources. Along with other conditions (e.g., variation in the amount of available fiscal resources), these frameworks set parameters around more specific attempts to build staff supply, repurpose staff roles to align with learning improvement priorities, develop staff capacity, and ensure capable staff performance.

Enduring and Emerging Staffing Challenges That Confront District and School Leaders

If they are serious about learning improvement, district leaders quickly recognize two overarching staffing challenges: (1) recruiting and retaining a well-qualified, diverse teacher workforce, and (2) strengthening administrative leadership at the school level. At the intersection of these two lies a third: the challenge of building and supporting an instructional leadership cadre that complements and augments the capacity of school principals to carry out this function. Satisfactorily addressing these challenges raises the full array of issues involved with investment

Like many, if not most, urban school districts. these districts face four interrelated challenges regarding the quality of their workforce: maximizing the quality and longevity of teaching staff and leaders in high-needs schools, which are typically hard to staff; deploying and supporting novice teachers and administrators; managing and minimizing the often high rates of teacher and principal mobility and attrition; and matching the ethnic, racial, and linguistic diversity of the student population with corresponding diversity in the teacher ranks.

decisions, including supply, reallocation and repurposing, capacity, and performance discussed in the previous chapter. Without a successful approach to these matters, efforts to achieve systemwide learning improvement are bound to fail.

To varying degrees, these challenges exist in each of our case study districts and they are also experienced in urban districts nationwide. We review briefly what leaders in the study sites were confronting.

Recruiting and Retaining a Well-qualified, Diverse Workforce

The quality of the educator workforce has long been recognized as the backbone of the public school system and of all efforts to improve public schooling. The districts we studied were clear examples of the enduring challenges urban districts encounter as they seek to attract and retain a high-quality workforce.

Maximizing the quality and longevity of teaching staff and leaders in high-needs schools

New York City and Atlanta exemplify a familiar pattern of large urban districts with high numbers of schools considered difficult to staff that experience a shortage of well-credentialed, high-performing candidates for teaching and leadership positions, relative to districts with predominantly white, higher-income, higher-scoring student populations. In each case, the school district embraces a relatively impoverished inner city core surrounded by more affluent suburban communities, which offer a tempting destination for teaching staff who find the rigors of urban teaching less desirable than the teaching situation (and generally higher compensation) in surrounding communities. Not every district in our study faces these challenges. In Portland, the district has a relatively experienced teacher and principal cadre. Experienced teachers are more uniformly distributed across the district, although higher-poverty schools often have a greater proportion of early-career classroom teachers.

The consequences of this pattern are well documented in research on the urban educator workforce. Previous research indicates that in many districts, schools with the highest proportions of poor, nonwhite, and low-scoring students are more likely to have inexperienced teachers, teachers lacking appropriate credentials, teachers with lower test scores, and higher rates of teacher and principal mobility and attrition (Boyd, Lankford, & Wyckoff, 2008; Clotfelter, Glennie, Ladd, & Vigdor, 2006; Clotfelter, Ladd, Vigdor, & Wheeler, 2007; Peske & Haycock, 2006; Lankford, Loeb, & Wyckoff, 2002; Betts, Rueben, & Danenberg, 2000; Bonesrønning, Falch, & Strøm, 2005).

Deploying and supporting novice teachers

Urban school districts are likely to have high numbers of new and novice teachers, despite efforts to lower these numbers. While New York City has reduced its overall percentage of novice teachers in recent years (Boyd, Lankford & Wyckoff, 2008), more than a third of the city's teachers have fewer than 5 years of experience (38%). Atlanta and Eugene also have higher percentages of novice teachers in their overall teacher workforce. In 2007–08, more than one quarter (29%) of Atlanta teachers had fewer than 5 years of teaching experience, while 25% of Eugene's teacher workforce were novices (see Table 4).

Among the novice teacher ranks are many teachers brand-new to the profession. Some research studies indicate that first-year teachers produce student achievement gains that are significantly lower than similar teachers with 10 to 15 years of experience (Rockoff, 2004; Rivkin, Hanushek, & Kain, 2005; Kane, Rockoff, & Staiger, 2006). In 2006–07, New York City had 6,798 first-year teachers (8.6% of all teachers), Portland had 109 first-year teachers (6% of all teachers) and Atlanta

Table 4. Novice Teachers* as a Proportion of All Teachers in Case Study Districts (2007–08)

District	Total Number of All Teachers	Number of Novice Teachers	% Novice
New York DOE	79,109	30,061	38%
Atlanta Public Schools	3,689	1,064	29%
Portland Public Schools	2,498	581	23%
Eugene School District	778	198	25%

^{*} Novice teachers are defined as those with 1–5 years of experience.

had 139 (4%). Designing ways to meet the specific needs of beginning teachers is a critical dimension of district and school leadership work. Helping first-year teachers make a successful transition into teaching includes additional orientation, mentoring, and supports.

Managing and minimizing the often high rates of teacher and principal mobility and attrition

Some of the challenges associated with improving the supply of talented teachers are related to high rates of teacher mobility or attrition. Based on analysis of data from the National Schools and Staffing Survey and the Teacher Follow-up Survey, Ingersoll (2004) reported that "school staffing problems are primarily due to a 'revolving door'—where large numbers of qualified teachers depart from their jobs long before retirement" (p. 2). According to this extensive national data set, highpoverty public schools, especially those in urban communities, lose on average over one fifth of their faculty each year. This research indicates that turnover is largely the by-product of teacher job dissatisfaction and teachers' pursuing other jobs. One main reason for high rates of turnover in these schools is lower compensation than in other kinds of schools, but this is not the only reason. Ingersoll (2004) reports that in urban districts, teachers attribute their turnover to six factors: a lack of resources, support, and recognition from the school administration; a lack of teacher influence over school and classroom decision making; too many intrusions on classroom teaching time; inadequate time to prepare; poor salaries; and student discipline problems.

The case study districts and schools varied in their retention rates of novice teachers. To provide an example of the challenges, Table 5 includes data on the rates in which novice teachers are retained from one year to the next.

Table 5. Retention of Novice Teachers from One Year to the Next, in Case Study Districts (2006-07 to 2007-08)

	New York	Atlanta	Portland	Eugene
Number of Novice Teachers	30,061	1,064	581	198
% District Teacher Workforce	38%	29%	23%	25%
Average Novice Retention	78%	67%	72%	84%
Highest Novice Retention	100%	100%	100%	100%
Lowest Novice Retention	33%	10%	0%	0%
Coefficient of Variation	0.19	0.25	0.14	0.33

Among case study districts, 1-year retention rates for novice teachers (from 2006–07 to 2007–08) are highest in Eugene (84%) and lowest in Atlanta (67%). The relatively high turnover rate of novice teachers in Atlanta is particularly striking given that novices comprise more than one quarter (29%) of all teachers in this district. Additional variation exists in retention statistics school by school within a given district. For example, when examining school-level differences, some schools in our case study districts retain all their novice teachers, while other schools retain none. Retaining novice teachers presents a significant leadership challenge, as numerous factors influence these retention rates, including school enrollment fluctuations, expectations for performance, availability of funding, and changes in attendance boundaries, to name a few. On average across our case study districts, one quarter of novice teachers who were at a given school in 2006–07 were no longer there in 2007–08.

Matching the ethnic, racial, and linguistic diversity of the student population with corresponding diversity in the teacher ranks

As part of recruiting and retaining well-qualified teachers, district and school leaders are also trying to increase the racial and ethnic diversity of the teacher workforce. Urban administrators indicate considerable difficulty in recruiting and retaining minority teachers (Farkas, Johnson, & Foleno, 2000). For example, Portland is a district with a striking demographic mismatch with the student population, pairing a predominantly white teaching force (91% of Portland's teachers are white) with an increasingly racially and ethnically diverse student population (45% are students of color). In Atlanta, the demography of the teaching force is considerably more comparable to its student population, where 80% of teachers

are teachers of color, as are 91% of the students. In Eugene, there is also a closer match between teachers of color (34%) and students of color (37%). Table 6 provides data that compares the racial and ethnic makeup of teachers compared to the student population.

Table 6. Match Between the Race/Ethnicity of Teachers and Students (2007-08)

	New York	Atlanta	Portland	Eugene
% White Teachers	59%	20%	91%	66%
% White Students	14%	9%	55%	63%
% Nonwhite Teachers	41%	80%	9%	34%
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% Nonwhite Students	86%	91%	45%	37%

Strengthening Leadership at the School Level

Getting the most out of those working in classrooms and other instructional and support roles calls for capable leadership at the school level, especially by school principals.

Identifying and retaining well-qualified principals, given the difficulty of the job in urban settings

To begin with, the nature of the school principalship itself in urban settings makes it hard to attract and retain committed and capable school leaders. The scale of the problem is most dramatically seen in a district like New York City: to serve its approximately 1,500 schools, for example, district leaders estimated that 300 new principals would be needed every year. The number reflects many considerations, including the district's judgment about whether school principals are effective or need to be replaced. In Atlanta, across the 9 years of the current superintendent's tenure, nearly all the principals have been replaced.

This issue applies to many school districts across the nation, not only those in cities; but various aspects of the urban setting make it doubly difficult to identify and retain school principals. Research on urban communities similar to those in this study indicates that districts with high concentrations of racial and ethnic minorities and parents with low incomes experience difficulty in recruiting prospective principals as well as convincing principals to stay in their positions (Advocates

Strengthening school leadership represents a second major staffing challenge for urban districts and schools that manifests itself in (1) identifying and retaining well-qualified principals, given the difficulty of the job in urban settings; (2) equipping current and incoming school administrators for the new roles and responsibilities that state or district reforms may require; and (3) developing principals' capacity for engaging in instructional leadership, while protecting their time for doing so.

for Children & Youth, 2007a, 2007b; Clotfelter et al., 2007). While recent research does not report a shortage of certified principal candidates, "a nationwide shortage of individuals who not only are qualified for the position but also would be effective in it and willing to take on the position in highneeds schools may still be looming" (Coggshall, Stewart, & Bhatt, 2008, p. 3). Districts have also not always had clear, specific, and targeted systems for developing a high-quality pipeline of potential principal candidates. As one human resource administrator noted:

We do a pretty poor job of cultivating our teachers to become teacher leaders and our teacher leaders to become principals.... I'm not sure we have a *path* for them to follow.... Honestly, I think we aren't very strategic... it really depends on the person whether we get a good principal or not.

The sheer difficulty of the work in urban settings is a big part of the problem. Survey research based on responses from 1,006 superintendents and 925 public school principals illuminates both the difficult nature of the job and the high turnover rate (Farkas, Johnson, Duffett, Syat, & Vine, 2003). Dealing with

uncompromising politics and bureaucracy in large urban school systems is the predominant reason for principal departures, and daily challenges include working with complaining parents, cumbersome special education laws, threats of litigation, and uninformed press coverage of education, on top of other administrative responsibilities required to keep a school or district running smoothly (Farkas et al., 2003, p. 15). Add to that the more recent metric of effectiveness under current accountability systems: those principals who cannot demonstrate improvement in their schools are likely to be asked to leave.

Equipping current and incoming school principals for the new roles and responsibilities that state or district reforms may require

As if the enduring challenges of urban school administration were not enough, many of the reform efforts underway in the case study districts, as elsewhere in the nation, have direct implications for the roles and responsibilities of school leaders.

For one thing, the nature of a district's reform thrust may call for specific competencies, and these may vary across districts. In a district such as Eugene, which emphasizes cultural competency, school leaders must reflect district expectations for multicultural education and culturally affirming pedagogy. In a large urban school system such as New York City that has devolved much decision-making authority to the schools, school principals must demonstrate heightened entrepreneurial capacity and independent resourcefulness to stay competitive in an educational marketplace. Among Empowerment Schools in New York City, where principals as school CEO are given the greatest responsibility for school decision making, school administrators need enhanced capacity for operational management, performance-focused practice, and the acquisition of relevant resources from a rich and varied resource environment. Furthermore, in New York City and elsewhere, school leaders in newly formed small schools (often within existing large schools) or entirely new schools may need capabilities that match the particular theme or specialty geared to the student population the small school seeks to serve.

For all these districts, and many more across the nation, stronger accountability systems, more rigorous academic content standards, and state assessment requirements mean that school leaders need to be more adept at data analysis, proficient with targeted goal setting, and able to use assessment data for instructional improvement. The push for closing achievement gaps has intensified the need for use of disaggregated data by student subgroups such as English language learners, students with disabilities, and racial and ethnic minority groups, as well as the capacity to differentiate instruction and academic support to students by discrete skill areas within academic content areas. Working within a reform environment that prioritizes progress on achievement gaps, schools need to be equipped to respond to this environment, either through their initial preparation for a leadership role (e.g., an administrator certification program), through ongoing support while on the job, or both.

Developing principals' capacity for engaging in instructional leadership, and protecting their time for this work

Given the multifaceted nature of school leadership and the conditions of work that intensify these pressures in urban settings, it is not surprising that school principals' time for instructional leadership might be compromised, or that their expertise in this regard might not be fully developed to begin with. Regardless of the setting, preserving time for productive interactions with teachers, administrators, and staff on instructional issues, amid managing demands for reporting, budgeting, legal obligations, facility issues, and the like, has always been a challenge for school principals. Prior research indicates that instructional leadership is only one of seven critical arenas in which principals provide or orchestrate leadership: instructional, cultural, managerial, human resources, strategic, external development, and micropolitical (Portin, Schneider, DeArmond, & Gundlach, 2003).

In varying degrees, the districts we studied have recognized the challenges associated with the numerous responsibilities of the principalship and some have taken steps to address it. In Atlanta, as elsewhere in the nation (see Turnbull et al., 2009), for example, experiments are underway in some schools to differentiate the school leadership function, by creating a position called School Administrative Manager (SAM), an additional administrative position that is intended to free up the time of principals to spend more time with teachers, coaching them in classrooms, assessing progress, and coordinating educational programs.

But time is only part of the equation. School principals often have much to learn about guiding and supporting instructional improvement, as various attempts to enhance their instructional leadership capacity in recent years have demonstrated (e.g., Fink & Resnick, 2001). For veteran principals, who came to their jobs in an era when certification, licensure, and leadership preparation standards placed less emphasis on this area of expertise, the learning curve can be steep.

Strengthening Support for Instructional Improvement: Filling a New Staffing Niche

At the intersection of efforts to strengthen the teacher workforce and shore up school leadership capacity is a new kind of staffing challenge for urban school districts: how to grow and manage an instructional leadership cadre within and across schools. Even with sufficient time and expertise, school principals cannot shoulder the full load of supporting instructional improvement in the school. Yet many school staff can offer this kind of assistance to teachers, and they are begin-

ning to appear in larger numbers and greater variety in urban schools, as elsewhere across the nation. This development was evident in the districts we studied, where educational reforms prompted the development of new roles such as achievement coordinators, instructional coaches, teacher leaders, data specialists, and assessment coordinators, or further distribution of performance-based leadership throughout staff. For a more detailed description of these roles and their contribution to the school, see a companion report, *Leadership for Learning Improvement in Urban Schools* (Portin et al., 2009).

In light of the ofteninexperienced teaching
staff in urban schools
and the clear need to
ratchet up teaching
performance, a niche
has developed for staff
who can bring instructional expertise to a
wider range of teachers
on a continuing basis,
as they struggle to
reach their diverse student populations more
effectively.

Attempts to fill this niche bring a new set of staffing challenges, not the least of which is finding the wherewithal to compensate such people in an era of tight budgets. But given available fiscal resources, districts need to locate and develop staff to fill these niches (e.g., by drawing on accomplished teachers), as well as define their roles so that their place in between the principal and classroom teachers is normalized and legitimized (Portin et al., 2009). Appropriate support systems for these staff need to be put in place so they are helped to exercise their leadership roles effectively, and in concert with one another and the overall learning improvement agenda of the district and school.

These staffing challenges—concerning the teacher workforce, school leadership, and the new instructional leadership cadre—presented the district and school leaders we studied with a tall order. To meet

these challenges, and do so in ways that furthered the goal of learning improvement, meant shrewdly and strategically directing human resources toward areas of need and figuring out strategies that were focused on acquiring the greatest benefit from substantial investments made in staffing resources. Accordingly, efforts were underway in the districts we studied to build systems that support instructional leadership at district and school levels, and to do so in a way that would improve the equity of educational outcomes for students. In the chapters that follow, we describe those efforts. But first we consider preliminary steps taken by district leaders, in light of conditions and contingencies in the broader environment, that framed their more concerted investment strategies.

Framing District Decisions to Invest Staffing Resources in Learning Improvement

To strengthen their teacher workforce and school leadership capacity—and especially to address the quality of instructional leadership—district leaders take action in, and at the same time co-create, a busy and demanding *human resource environment*, which reflects external contingencies, in part, but also their own policies, organizational designs, and theories of action. Other conditions also affect, and are affected by, leaders' actions—in particular, the vagaries of the fiscal revenue stream (which district leaders can sometimes influence at the margins), the accountability system they work within (and also help create), the size and shape of the talent pool for potential staff (again a condition they may influence), the organization of the district's human resource function, and the role of teachers' unions. We briefly review these conditions, with examples from the four districts.

A central step in investing staffing resources concerns the creation of an investment framework that determines the rules governing further decisions—especially the decisions made at the school level—regarding the allocation, assignment, distribution, and ongoing support of staff.

Establishing an Investment Framework That Guides Decisions about Staffing Resources

Each of the districts in our study has taken deliberate steps to address the staffing challenges we noted and, more broadly, the achievement gap, by focusing on particular improvement goals, accountability systems, and reform strategies. In each of the districts, these steps have resulted in changing the relationship between the central office and individual schools, particularly with respect to the conditions under which investment decisions take place. A variety of instruments served as leverage points for improving teaching and learning, but central to them was a set of overarching decisions about where initiative for improvement activity lay and, specifically

what flexibility, autonomy, responsibility, or discretion was expected or allowed at different levels of the school system. Consequently, each district set up a unique investment framework that influenced its decisions made at the school level regarding staffing resources.

Our analysis of the policies and practices in the four districts revealed four types of investment frameworks that influence staffing resource decisions:

- A mandated investment framework, imposed on district and school leaders that stipulated the ways in which a particular staffing resource should or might be used. For example, the district might require a principal to use a staff position for a specific purpose or to have a specific role in their building as part of a districtwide reform strategy.
- A negotiated investment framework, unlike mandates, offered leaders varying degrees of latitude to choose among options. For example, the district might limit, but not mandate, the types of staffing expenditures that a principal can make with the Title I budget or other categorical resources. Or a school might receive a lump sum from the district for professional development and be able to design the content and type of approach to professional learning that will be undertaken. Negotiated investments sometimes result from an external partnership, grant, or other discretionary source, and may allow principals greater latitude in deciding how to invest staffing resources.
- An incentive-based framework created mechanisms for rewarding or sanctioning leaders' as well as other staff's performance in response to particular school-level outcomes. For example, a district might incentivize improved instructional leadership by rewarding school principals who met student performance goals. Or districts might choose to embrace an incentive system that widely and publically disseminates results from individual schools and compares similarly situated schools on the basis of relative improvement.
- Market-based or market-like investment frameworks were created to encourage staffing resource decisions that responded to the demand for particular services, generally through choice arrangements (e.g., parents' choosing schools or programs, schools' choosing support services). For example, a district might make centralized services available on a fee-for-service basis and eliminate those services that were not bought, while simultaneously increasing others that were in greater demand. This approach to investing can be enhanced by allocating discretionary resources to the units (e.g., schools) that were participating in the market.

Each framework makes different assumptions about the way school leaders understand their role and their responsibilities for investing staffing resources. In our case study districts, these assumptions varied in important ways and reflected differences in the districts' approaches to learning improvement and supporting school leadership. In fact, no district employed a single framework, but instead

combined frameworks in ways that emphasized certain arrangements over others. We provide a description of the combinations, summarized in Table 7, in each case study district below.

Table 7. Configuration of Investment Frameworks in Case Study Districts

District	Mandated	Negotiated	Incentive-based	Market-based
New York	X	X	XX	XXX
Atlanta	XX	XXX	XX	
Eugene	Х	XXX		XX
Portland	XX	XX	Х	

XXX = Major district emphasis; XX = Moderate emphasis; X = Minor emphasis; -- = Little to no emphasis.

The New York City Empowerment Schools Organization (NYC/ESO) employs a combination of market-based and negotiated conditions, with specific rewards for principal and school performance. The system of School Support Organizations—central office support arrangements that schools choose to associate with (and in fact pay for)—is based on the assumption that market forces serve as a prominent influence on resource and other decisions made at the school and district level. However, while market-based strategies are a prominent feature of New York's approach to resource allocation, other components of the district's accountability system reward or sanction the work of principals and school staff, particularly the School Progress Report and School Quality Review. The NYC/ESO environment also contains mandated and negotiated frameworks that form the basis for school staffing allocations.

In contrast, Atlanta sets parameters around investment activity primarily through a combination of mandated and negotiated frameworks, coupled with a system that offers some rewards and sanctions. Staffing resources in Atlanta are invested in a uniform way across schools, with both the number and types of positions determined at the district level (e.g., the Model Teacher Leader (MTL) positions). As previously described, Atlanta allows for some discretion at the school level, but the available choices are restricted to a menu of options that have been articulated by the district. In addition to monetary rewards, Atlanta also maintains a focus on celebrating the accomplishments of schools when they reach their targets and engages in several public activities that highlight the success of schools, staff, and

students. Accountability systems are mandated at both state and district levels, with the balanced scorecard playing a prominent role in determining the focus and use of staffing resources.

In Eugene, a different configuration of investment frameworks is in place, in part due to the district's history of decentralization and the long-standing practice of providing an extensive system of schools of choice. Thus, resource investment activity is framed by a combination of negotiated and market-based arrangements. The district provides additional resources to targeted schools, and principals have some decision-making discretion regarding how these staffing resources are utilized, using data to assist with the identification of strategies aimed at addressing learning priorities. At the same time, principals of neighborhood schools feel the impact of parents' utilizing the market by opting to send their children to one of the district's schools of choice.

Portland provides yet another arrangement, in which negotiated and mandated frameworks shape the deployment and use of staffing resources, along with a limited use of sanctions. While the district allows school-level discretion with respect to use of staffing resources, tight budgets have restricted staffing levels, even as student needs have increased. The district's recent shift towards common curriculums adds mandates that influence how staffing resources are used. In addition, the decision to create K–8 schools was, at least in part, influenced by the record of underperformance in the middle schools that were closed. The shift to a K–8 model had significant implications for the merging and reallocation of staffing resources in order to serve the widely varying needs of both elementary and middle school students, staff, parents, and community.

Working With, and Within, Other Conditions That Frame Leaders' Efforts to Invest Staffing Resources

Other conditions are a partial result of district policy or organizational decisions, and in part a reflection of events or contingencies in their environments. The *ebb* and flow of fiscal resources provides the basic capacity for allocating, distributing, or repurposing staff. The *current and potential sources of staff supply*, residing in a local labor market and whatever talent pools the district is able to set up, offer personnel for the schools and central office. The arrangement of the district's human resource function, including various rules and processes established by the district, handles the hiring or ongoing work of staff. Collective bargaining agreements and the culture that surrounds bargaining have much to do with the nature

of staff and how they are or can be deployed. Finally, *the district's accountability system* (subsuming that of the state and federal government) directly or indirectly frames and assesses staff performance. While these conditions are not the main focus of our analysis in this report, their presence as part of the staffing investment equation must be acknowledged.

Besides the investment frameworks that district leaders create in approaching urban staffing challenges, several other conditions have an important role in shaping decisions about staffing resources: fiscal conditions, sources of staffing supply, the district's human resource system, collective bargaining agreements and culture, and the district's accountability system.

Ebb and flow of fiscal resources

It goes without saying that many, though not all, staffing decisions imply the outlay of money, and therefore the availability of funding in each cycle of staff hiring or deployment is a central condition for further investment. The four districts we studied had different histories in this regard, though all were facing the prospect of substantial budget cuts due to the current economic downturn at the close of our data collection period. Both of the Oregon districts, for example, had weathered a significant budget shortfall in the years preceding our data collection window due to state tax limitation measures and enrollment decline, whereas New York City and Atlanta had been relatively prosperous during the same time frame. Districts can be proactive in seeking ways to generate additional revenue, and the four we studied are no exception, as multimillion dollar corporate and philanthropic grants were secured by New York City, Atlanta, and Portland during our study time frame. But these sources are

episodic and do not alter greatly the fundamental facts of fiscal life determined by state finance systems, local tax levy systems, and enrollment numbers.

Current and potential sources of staff supply

Rooted in local or regional labor markets, but also reflecting specific district policies, districts and schools face differing talent pools—that is, available and willing individuals who are qualified to do the teaching, leadership, or administrative support work within the city's schools. These pools of prospective new teachers and leaders are fed by various tributaries, among them, local universities and training institutions and alternate route programs hosted under different auspices (including the district itself). Given that such talent pools are likely to be shallow, both

in numbers and quality, district leaders face a continuing challenge of trying to boost the numbers and expertise of the individuals who are secured through these means. The in-house or closely linked alternative leadership preparation programs in Atlanta and New York City are one example of a district response to this problem (e.g., Superintendents Academy for Building Leaders in Education program in Atlanta, the New York City Leadership Academy, and New Leaders for New Schools in New York), as are the extensive efforts to encourage alternate routes for qualified teachers (e.g., New York Teaching Fellows, Teach for America).

The arrangement of the human resource function

The ability of school or district leaders to take advantage of what local talent pools offer, or even to assemble those pools in the first place, reflects in large measure how the district has arranged its human resource function. Often overlooked, the human resource department in large city school systems can play a pivotal role in the ability of the district to populate the schools with capable staff, as recent research on efforts to transform these systems testifies (e.g., Campbell, DeArmond, & Schumwinger, 2004). In particular, these transformation efforts highlight the role that department staff skills play, as well as the way the department is organized and what tools it employs (especially technological tools). Absent attention to these matters, the human resource department can be a significant constraint on efforts to upgrade the teaching talent in schools (National Commission on Teaching and America's Future, 1996) and bolster the administrative ranks.

Not surprisingly, district leaders in the sites we studied are reconsidering how the human resource *function*, broadly construed, could be improved. Efforts are underway in these districts, as in many others (see Campbell et al., 2004), to provide human resource services that are more connected, responsive, and tailored to the individual needs of schools, while at the same time building policies and processes that attract sufficient numbers of appropriately trained individuals to fill positions. A multipronged effort underway in New York City exemplified the most wide ranging attempt to transform this function among the districts we studied. There, the human resource function has been divided among a Human Capital Development office, a separate centralized unit handling routine personnel transactions, and Integrated Services Centers supplemented by Network Team staff who offer immediately accessible support to school leaders for their human resource needs. These kinds of arrangements, or their counterparts in other districts, have

much to do with the ability of school leaders to secure the staff they want and attend to their needs over time.

Collective bargaining agreements and culture

Policies born out of collective bargaining agreements also exert influence on staffing matters such as the evaluation of teaching, the assignment (and reassignment) of staff, the methods for filling vacancies, and the various leadership roles that teachers might assume. The teacher evaluation system provides specific types of protections once teachers have passed the tenure point, and it is more difficult for principals to remove teachers after the probationary period. The depth and quality of the supervisory process and its relation to learning improvement goals varies by school.

In New York City, as in some other urban districts throughout the country, the union offers a peer assistance and review (PAR) program for teachers who are reported as not performing well. This program offers what is considered by teachers and the union to be a more helpful process, due to several factors such as linkages to professional development, time spent on evaluation, and transparency of the evaluation process. The PAR coach presents evaluation data and feedback to a panel of teachers and union executives. If the coach does not have evidence of improvement, that is also reported. The panel then makes a decision regarding dismissal or continuation.

Apart from the formal summative evaluation of teaching performance, a new pilot effort in New York City aims to help teachers and their supervisors get better information on their actual contribution to students' learning. This Teacher Data Initiative will provide an individual Teacher Progress Report showing how much progress the teacher's students made over the last 12-month cycle. While not intended to be part of the formal evaluation process, this step is nonetheless meant to help guide professional development and teacher assignment decisions. The New York City teachers' union also runs a teacher leaders program (LEAD) designed to engage the participation of two high-performing teachers as schoolwide instructional coaches, while sharing responsibility for one classroom. Teachers receive higher pay and use this opportunity to have demonstrations in their classrooms and/or observe teachers in their own classrooms.

Policies governing transfer and assignment of teachers exist in districts without formal teachers' unions. For example, in Atlanta in 2007–08, the district adopted

a new transfer policy for all certificated teachers. The prior policy allowed principals to shuffle ineffective teachers around the district. Consequently, teachers whose performance was deemed unsatisfactory in one school could be transferred to another school. This often meant that principals received teachers not knowing that they had existing performance deficiencies. In response, the district now requires a teacher to remain in a school building for 3 years prior to transferring from the assignment. Similarly, the executive directors for each School Reform Team (SRT) must now approve any transfer that brings a teacher from another SRT. This requires that the teacher's prior performance be disclosed to leaders of the receiving team.

The district's accountability system

Finally, each district we studied had fashioned an elaborate and demanding accountability system, in part not only to respond to the state and federal accountability expectations, but also to project local expectations for student, school, and staff performance. All these systems were likely to call for demonstrable levels of school performance, and thereby to project what school administrators would be expected to accomplish, often within a limited time frame (e.g., 2 years in both Portland and New York City was considered by school principals the realistic time period in which they had to show some progress or risk losing their jobs). But teachers could be targeted individually as well, as in Atlanta, in which particular teachers were give annual performance targets. As a basic condition of investment in staff resources, the accountability system could be influential in many ways—at the front end, for example, by encouraging or discouraging candidates based on whether they were willing to be held accountable and, later on, by documenting levels of staff performance, as well as pointing the way toward areas of possible improvement.

How Investment Frameworks and Related Conditions Might Affect Leadership-oriented Investment Strategies

These conditions and the framing of investment decisions discussed previously create a complex environment within which school leaders and their counterparts at the district level work. These interacting conditions, displayed in Figure 1, had much to do with the ways in which district leaders framed and pursued particular investment strategies, and how leaders at the school level responded to or worked within the strategic parameters these policies set up.

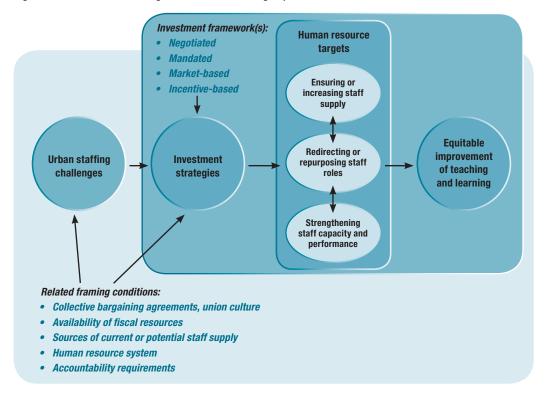


Figure 1. Investment of Staffing Resources in Learning Improvement

We turn to this matter in the next chapter, as we examine three prominent investment strategies intended to shape the deployment and use of staffing resources, especially those resources that addressed the leadership needs of the schools and district.

Chapter 3

Investing in Instructional Leadership, Data-based Practice, and Flexibility at the School Level

Given the persistent staffing challenges described in the previous chapter, a central question concerns how staffing resources can be directed to improving the teacher workforce, principal leadership, and the work of an instructional leadership cadre operating between school administrators and the classroom. The districts we studied accomplished various goals in this regard, but central to their efforts was one or more of three interrelated strategies that took aim at the quality of learning-focused leadership in and between schools. The first targeted the exercise of instructional leadership, the second aimed at promoting data-based practice, and the third bolstered school leaders' discretion in, and capacity for, taking strategic action regarding staffing resources. In all three strategies, district leaders invested substantial amounts of funding and political capital, within parameters established by the investment conditions described in Chapter 2.

Admittedly, these three strategies do not exhaust all the improvement-oriented activity in evidence within these districts. Some energy, for example, was devoted to overhauling relevant aspects of the district central office and, in particular, the human resource function, as noted earlier. Other efforts targeted curriculum or teacher recruitment. But the three strategies had in common the goal of shoring up a critical, central function: the enactment of leadership, distributed throughout the school system, that offered the most immediate support to teachers. As such, districts were seeking to bolster the work of designated school administrators and other instructional leadership staff, both those located in schools and others who work in multiple schools from a district home base. Arguably, without this kind of accessible, proactive support for instructional improvement, other reform activities were unlikely to yield the desired results.

At the heart of these allocation strategies is the idea of investing in the improvement of learning. In other words, leaders engaged in strategies designed to enhance the instructional work of the district with the expectation that there will be long-term returns in the form of improved educational practice and rising student achievement. Such a conception emerges from an expansive body of literature on the means and mechanisms by which organizations invest in human capital (Cascio & Boudreau, 2008; Odden & Kelly, 2008; Lawler, 2008; Smylie & Wenzel,

2006; Pfeffer, 1998; Becker & Huselid, 2006). As such, these investments simultaneously raise questions about the staffing supply (Do we have the right people in place to do this work? If not, how can we find them or grow them?), capacity of staff (Can staff achieve the desired goals? If not, what supports are needed?), and also performance (How will we know when staff are doing their jobs well?). A central part of our analysis concerns how leaders consider and address all these matters—that is, ensure supply, allocate or repurpose staffing resources in productive and equitable ways, further develop staff capacity, and motivate as well as demonstrate performance—as they identify and implement investment strategies.

Leaders' investment decisions related to instructional leadership and leadership support involve more than the acquisition and assignment of staffing resources per se. Their investments may also involve instructional time, material resources, expertise, and facilities, or combinations of these resources. Thus, leaders may find themselves balancing multiple resource streams in relation to a common instructional goal or in support of a core instructional strategy. Addressing these matters is a central leadership challenge at all levels of the system: the school, district, and state. What happens at each level both guides and constrains what happens at others, raising questions of coherence and coordination across levels or, simply, cumulative opportunities and constraints, in relation to learning improvement goals. But at the center of the strategy formation process lie decisions made at the district level, as suggested by Figure 2.

Investment framework(s) Illustrative investment activities **Investment strategies** Investing in Increasing supply of positions and staff in instructional Instructional leadership roles leadership **Equitable** Repurposing school improvement Urban staffing staff roles to exercise of teaching challenges instructional Data-based leadership and learning practice Supporting professional learning about data use and instructional Flexibility, capacity, leadership and support at the school level Feedback loop Related framing conditions

Figure 2. Investment Strategies Aimed at Learning Improvement

As indicated in the figure, our analysis has identified three principal investment strategies in use within the study sites, often in combination, that have potential for enhancing the "web of support" (Knapp, Copland, Plecki, & Portin, 2006) for the improvement of teaching and learning in urban settings:

- Investing in instructional leadership within and across schools. This strategy (re)directs staffing resources to positions, team structures, and other arrangements that increase instructional leadership activity inside or across schools (e.g., to staff operating between the principal and the classroom, or across schools, between the district central office and the school) (Miles & Frank, 2008; Odden & Archibald, 2001). As such, it concentrates on both the supply of people able to exercise instructional leadership and their capacity to do so (Odden & Kelly, 2008).
- *Investing in data-based practice*. This strategy aims more at performance, and also capacity building, by focusing resources on the development of useful data sources and the systems that facilitate the use of these data for addressing problems of practice in classrooms and schools (Miles & Frank, 2008). Typically linked to accountability systems, this category of investment strategy includes efforts to orchestrate staff, time, and technology so that school and district staff engage in a continuous inquiry process about the learning improvement challenges they face (Guthrie & Hill, 2007; Knapp, Copland, & Swinnerton, 2007).
- Increasing capacity, flexibility, and support for school-level investment.

 This strategy seeks to enhance the flexibility and wherewithal for school-level arrangements that serve instructional support needs, as determined by school leaders. In so doing, district leaders acknowledge the potential to both motivate and fine-tune the instructional support arrangement by "empowering" school leaders, while at the same time noting that not all school leaders have the same capacity to exercise leadership in their buildings in service of learning improvement (Goertz & Hess, 1998; Iatorola & Steifel, 1998; Miles & Darling-Hammond, 1998; Guthrie & Schuermann, 2009).

In the ensuing sections we analyze each of these strategies and show alternative ways that local leaders found to implement them. Our analysis notes how leaders found resources to make the investments, how their districts responded, and what conditions made it more or less likely for the investments to pay off.

Strategy 1: Investment in Instructional Leadership Across and Within Schools

The repurposing of staff or reallocation of existing or new fiscal resources is a centerpiece of attempts to support instructional improvement, as often noted in the school finance literature (Odden & Archibald, 2001; Miles & Frank, 2008). However, more attention has been paid to the assignment and allocation of *teaching* resources than the function of instructional leadership, which is often assumed to be the responsibility of school principals. Related analytic work that frames other district investments in support of instructional improvement, such as spending for professional development, has primarily concentrated on the development of classroom teachers without distinguishing what districts might do to influence the exercise of leadership or the quality of leadership practice (Odden, Archibald, Fermanich, & Gallagher, 2002; Rice, 2001; Plecki & Monk, 2003).

The districts we studied addressed this matter head-on by funding new or redirected positions that were mainly concerned with instructional leadership support, in various ways we will describe below. But these districts' staffing resource decisions did more than concentrate on supply alone (e.g., finding staff who can occupy new instructional leadership roles) or even supply and capacity (e.g., by offering the new staff some support). Rather, they also considered what is

The likelihood that investments in instructional leadership will pay off reflects the extent to which districts and schools couple the investments with related changes in individual work responsibilities, supervisory relationships, or organizational structures.

necessary to translate supply and capacity into performance (e.g., by arranging conditions, incentives, and relationships to bring sustained instructional leadership support to classrooms).

We explore first the investments that enhanced instructional leadership *across* schools, that is, exercised by a cadre of staff whose home base was typically a central office unit and who served multiple schools.⁴ We follow with an analysis of investments *within* schools, in members of a school-based instructional leadership cadre whose efforts were limited to that school.

⁴ The analysis here concentrates on the initial investment of resources, more than the ongoing reinvention of work practice that individuals occupying instructional leadership positions may undertake. For a more detailed exploration of changes in central office work practice, see a companion report, *Central Office Transformation for District-wide Teaching and Learning Improvement* (Honig, Copland, Lorton, Rainey, & Newton, forthcoming).

Investments in Instructional Leadership Across Schools

As part of a larger attempt to reconfigure the central office and its relationship to schools, districts invested in support of cross-school instructional leadership by creating and filling new positions, or by reassigning staff with supervisory responsibilities (e.g., assistant superintendents, executive directors) or nonsupervisory central office staff (e.g., curriculum coordinators, professional development specialists) into new roles more closely aligned with the needs of school principals and their schools. These staff may operate out of a traditional district office unit or be reassigned to (or specifically recruited for) an intermediary unit located between the district office and the schools, providing direct, more accessible support to schools. These staff are often assigned to, or supervised by, district administrators who also supervise schools and their principals. Such intermediary roles can act as a catalyst for reform (McLaughlin & Talbert, 2002) and become part of a central office "transformation strategy" aimed at improving student learning (Honig & Coburn, 2008)—a matter we examine in greater detail in a companion report,

Two broad investment patterns appear in the districts we studied: (1) district attempts to orchestrate instructional leadership activity through mandated or negotiated investments in central office staff who served multiple schools or who were sometimes embedded within individual schools; and (2) the development of a "market" for central office instructional leadership, driven by school needs, preferences, and choices.

Central Office Transformation for District-wide Teaching and Learning Improvement (Honig, Copland, Lorton, Rainey, & Newton, forthcoming).

Orchestrating cross-school instructional support through mandated or negotiated investments

A common strategy in each of our districts—and perhaps the most straightforward way of investing in instructional leadership—was to create and fund district-level instructional leadership positions that serve multiple schools. This approach could be achieved in different ways, but a straightforward way was to make individuals with subject-specific expertise available to schools. Portland Public Schools' experience to date highlights both the potential and early implementation issues that such a strategy encounters. To improve support for classroom teachers, the district invested \$3.6 million annually to create and maintain a cadre of 60 Teachers on Special Assignment (TOSAs) housed within the central office and assigned to specific content areas. The TOSAs were expected to work directly

with individual teachers, teacher teams, or entire school staff on the delivery of the district's common curriculum or specialized education services (e.g., special education, gifted, English as a second language, etc.). Given their curricular focus, the TOSAs reported directly to the director of curriculum.

According to district leaders, this investment had yet to realize its potential, and they pointed to several factors that may be limiting its value. First, the TOSAs' ability to work directly with classroom teachers was often delayed, due to the multistep process of requesting support, though the process could sometimes be facilitated by prior relationships among the parties. Second, TOSAs were often confused about whether they reported to the school principal, the principal's supervisor, or the directors of central instructional departments. Third, given the many demands placed on them by multiple schools, TOSAs found it hard to distribute their time and support adequately and fairly to all requesting schools. As senior district administrators and school principals readily admit, budget restrictions and other fiscal constraints in recent years have compounded these difficulties.

The approach in Atlanta also involves an investment in a new role for teacher leaders, but it is conceptualized differently than the approach used in Portland. Atlanta maintains a cadre of 42 Model Teacher Leaders (MTLs) at a comparable level of investment (\$3.1 million annually). Like the TOSAs in Portland, these staff are intended to provide direct support to classroom teachers and teacher teams in schools that request their services. Atlanta has had more time to develop this strategy and has taken the concept of a district-level instructional support system a step further than Portland, largely in response to many of the same challenges that Portland has been encountering. As one senior district official noted, when the district's MTL model was first developed it lacked systems to manage the demands placed on the district-level instructional support staff and bring continuity to the support they provided. In response, the district changed the reporting structure for the MTLs, so that they now report directly to the principal's supervisors, the Executive Directors for each School Reform Team (SRT). Additionally, the district now allows classroom teachers to request support directly from the MTLs; alternatively, principals can call upon the MTLs when individual teachers need assistance. Moreover, the district has relocated the MTLs to the SRT office—thereby placing the MTLs closer to the schools they serve.

In the Atlanta schools involved in our study, classroom teachers and principals signaled that the MTLs were an indispensable source of support on a host of matters related to instruction and their work as instructional leaders.

- According to one classroom teacher, "I can go to the Model Teacher Leaders with any question I have or any concern and they have always been able to help me."
- A senior administrator described the significant connection that exists between the MTLs and the schools they serve. "The Model Teacher Leaders know the school achievement plans at each [of their] schools, they know their comprehensive school reform designs... they begin to own those schools and build strong professional relationships with those teachers so that the teachers trust them."
- Another senior administrator noted, "When the MTLs enter a school it's not uncommon for teachers to run toward them asking them questions or inviting them into their classroom."

Senior district leaders see the Model Teacher Leaders as a significant component of the district's instructional reform agenda. They noted that the overlapping support provided by the MTLs, in addition to support provided by school principals, helps teachers "deliver instruction at a deeper level."

Related workload, supervisory, and organizational changes, not to mention a stable overall stance towards reform, appear to enhance the prospects for a more vital and continuous connection between these instructional leaders and both principals and classroom teachers. All together, the strategy approximates what has been characterized as an "infrastructure for learning" (Darling-Hammond et al., 2005). However, the organizational positioning, supervision, and communication pathways are not all that it takes for cross-school instructional leadership to provide effective instructional support to schools. But the evolution of a more workable and better-supported investment and accompanying organizational conditions is clearly an important part of the story. As mentioned previously, relationships with labor unions can be an important consideration in developing instructional support capacity. The terms and policies governed by collective bargaining agreements often influence decisions about how instructional support roles will be allocated, how positions will be filled, how working conditions for these roles will be configured, and how supervisory relationships will work. As one district leader noted, "What is really a simple switch organizationally actually becomes a much more complicated one when the contract gets involved."

Building a market for cross-school instructional support driven by school needs, preferences, and choice

The current version of New York City school reform, which depends on both district and school-level resource decisions, provides a different image of district investing in cross-school instructional leadership support. Unlike Portland or Atlanta, this reform theory redirects resources from central office functions to schools, thereby augmenting their discretionary funds, and then requires them to select one of the 14 School Support Organizations (SSOs) that occupy an intermediate niche in the system comparable to Atlanta's School Reform Teams. Within the SSO, schools ally themselves with a network of 20-25 schools, clustered around a Network Leader and a team of four Network administrators—and pay an annual fee for this membership (\$29,500 per year within the Empowerment Schools Organization). Reflecting market-like forces, networks only come into being if a sufficient number of schools want to join them; otherwise, almost literally, they would go out of business. At the same time, the district limited the market through the use of a preapproved slate of SSOs, some of which were created by the district and others that were external organizations approved by the district.5

This approach also differs from Atlanta and Portland in that the Network Teams were initially conceived as the most immediate source of support for all school needs, not just those related to instruction. However, there are specific positions within the Network Teams, namely, the Achievement Coach and the Lead Instructional Mentor, whose work is centrally concerned with helping schools boost achievement and the quality of instruction, especially for novice teachers. Achievement Coaches responded to whatever the school deemed necessary to boost student performance, including help developing more data-based modes of practice and engineering professional development around school-identified instructional improvement needs. Lead Instructional Mentors offered support to whomever the school had designated as mentors for first- and second-year teachers. In the 2007–08 school year, 500 or so schools were supported through 22 Networks set

⁵ The New York City Department of Education does allow schools to "opt out" of district-approved support provided the school meets certain performance criteria and pays a modest fee to the district for administrative activities (e.g., payroll, custodial, etc.).

⁶ Other positions in the Network Team included a Business Services Manager (who assisted schools with a variety of matters related to budgets, personnel, hiring, procurement, and fiscal or facilities compliance), a Student Services Manager (who assisted with matters related to the placement of special needs students, related compliance reporting, and other matters concerning services for such students), and the Network Leader (who provided overall leadership support of many kinds).

up through the Empowerment Schools Organization, each with one (or in a few cases more than one) Achievement Coach and one Lead Instructional Mentor.

As an investment strategy, the New York City Empowerment Schools arrangement represents a shift from more traditional practice in three ways. First, it separated the link between central office support functions and the formal supervision of school principals. Second, the arrangement made the *school* the primary investor in instructional leadership support. Third, it enabled the school as investor to differentiate radically the instructional leadership support in which it invested. Empowerment Schools could go elsewhere for instructional leadership support (e.g., to external partners, the city's Office of Teaching and Learning, or local university programs) or could internally organize and implement its own professional development.

While the Network Team arrangement represents a departure from standard practice, it also comes with a significant risk. Whether or not the Achievement Coach—or any members of the Network Team, for that matter—engaged in instructional leadership or instructional leadership support depended on what schools asked for. In the 2007–08 school year, school leaders, especially the inexperienced ones, typically asked for assistance not closely related to instruction—budgeting, personnel actions, dealing with irate parents or community members, handling procurement issues, meeting compliance requirements, and navigating the placement of special education students, to mention only a few of the matters that prompted a call to the Network Team administrators. And given the introduction of an ambitious new set of accountability tools during the 2007–08 year, school requests were often directed at the Achievement Coach or others to assist with the deployment of these tools or the use of data they yielded.

Thus, as an investment in support of instructional leadership, the Network Team arrangement could fall short of providing sustained, expert attention to the various instructional improvement issues facing a school's staff. That said, several related actions could mitigate this fact. First, schools could and often did go elsewhere for particular kinds of instructional leadership, especially to universities and external partner groups, and also to other schools in the peer networks that began to develop in the Empowerment Schools arrangement. Second, the relationship between Network Teams and school leaders could evolve so that, once more pressing needs were met, school staff would turn more to instructional support matters. Third, the Network Teams could seed requests for instructional assistance by

engaging school leaders in an ongoing conversation about instructional matters, as they started to do in 2008–09 with the introduction of an ESO-developed instructional framework tool. Network Teams started using this tool to prompt school leaders' consideration of their instructional improvement needs and the ways the Network Teams could be helpful.⁷

In the short term, building a school-driven market for instructional leadership support appears to increase responsiveness to the school's expressed preferences for assistance, not all of which are directly related to instruction. Only time will tell whether the mutual interests of schools and the Network Teams will result in a sufficient focus on instructional leadership. Once again, the long-term success of this strategy depends on other resources, policies, conditions, and incentives that are coupled with the initial investment decision.

Investments in Instructional Leadership Within Individual Schools

Investments in instructional leadership *within* schools often accompany efforts by districts to strengthen the cross-school activities described above. Within-school investments, made by district officials, school principals, or both, generally reflected three approaches to budgetary control.

The default: Leave it up to the principal

Some districts assume a less directive or active role regarding in-school investment in instructional leadership support, leaving it largely up to principals to do so, if they wished, as in one school we studied in Portland. In this example, unprompted by the district and without a dedicated budget source, the principal enlisted selected classroom teachers as co-leaders of the school's instructional improvement agenda. Referred to as facilitators, these teachers participated on the school's leadership team and acted as liaisons between the principal and grade-level teams. While retaining full-time classroom teaching responsibilities, facilitators regularly participated in meetings focused on administrative and instructional issues. The principal made these roles possible by collaborating with the teachers' union to arrange for extended duty pay and by cultivating support for this model among

⁷ As described in greater detail in a companion report, *Central Office Transformation for District-wide Teaching and Learning Improvement* (Honig, Copland, Lorton, Rainey, & Newton, forthcoming), Network Team Leaders and other Network Team members often had clear and focused agendas around improving school principals' instructional leadership, and in various ways engaged principals in assistance relationship that strengthened this aspects of principals' practice.

the teachers in the building. This familiar form of teacher leadership development in the school reveals several challenges for districts seeking to create a coherent instructional reform agenda. For one thing, principals varied in their capacity to imagine and carry out such arrangements, leaving the possibility that instructional leadership in some schools would be in short supply. Furthermore, the creation of these roles in particular schools could do little to ensure that the school was adopting practices that supported the district's reform agenda.

A reallocation alternative: Funding particular positions for within-school instructional leadership

Alternatively, districts made an investment in school-level instructional leader-ship whereby dedicated resources must be used for installing or strengthening the within-school instructional leadership cadre. Atlanta Public Schools has done so by funding, in addition to the Model Teacher Leader roles discussed above, a within-school Instructional Liaison Specialist (ILS) who works collaboratively with the principal and classroom teachers to facilitate instructional change to help the school meet district-derived performance targets. This investment was made possible by modifying the existing allocation formula for assistant principals, in effect, repurposing some assistant principal positions (beyond the single position which all schools above a certain size are allocated) with one ILS per school. In doing so, the district created 70 such positions through reallocation of existing funds. The ILS has no classroom teaching responsibilities and spends the majority of his or her time working with teachers or teacher teams, planning or facilitating professional development, working individually with students, and otherwise supporting the school principal and school administrative team.

Through this means, the district has institutionalized a new addition to the within-school instructional leadership capacity. The ILSs are part of the school staff and, as such, they share in the dynamics of staff relations in the school and respond to the leadership of the school principal. However, unlike the facilitators described above, the ILSs are required school-level positions. Consequently, even while the principals can reconfigure or add to the ILSs' predefined duties, their ability to redirect the resource for other purposes is substantially limited.

As with the investments at the district level discussed earlier in this chapter, the following appear to play an important role in creating conditions that maximize the potential of the original investment:

- Investing sufficient time on a regular basis for those in instructional leadership roles to work with teachers (in and out of the classroom).
- Creating team structures for those exercising instructional leadership to coordinate instructional support efforts within the school.
- Investing in professional learning opportunities specifically designed for those exercising instructional leadership.
- Devoting sufficient time and energy to recruiting, orienting, and preparing the individuals who occupy these roles, on the premise that not everyone is right for the job and few are fully prepared for the demands of working in such roles.

Attending to these matters was largely up to the school principal, though the district sometimes played a role as well.

Creating and filling mandated, school-level instructional leadership positions alone is no guarantee that instructional leadership will be exercised effectively. **Investments of other** resources-some under district control, others controlled by the school—combined with other organizational changes are key to realizing the potential of this instructional support.

A negotiated investment alternative: Enabling schools to expand their instructional support cadre

A wider range of within-school instructional leadership arrangements is possible when the district transfers to the school both the resources and the discretionary authority to create instructional support positions to suit particular school needs, as in one New York City Empowerment School that used these resources to fund three assessment coordinator positions, conceived as experienced staff who could both manage the logistics of testing and help teachers interpret and use the assessment information. After a first year of experimentation with the role, the school settled on an arrangement for 2008-09 in which one of the three became a fulltime testing administrator, dedicated to the massive task of coordinating and administering testing for the entire school (diagnostic tests every 6 weeks, plus the annual rounds of testing for the city and

state). The two others, specifically recruited for their skills in interfacing with classroom teachers, took on professional development to help classroom teachers learn from and work with the data the testing process yielded.

Table 8. School-level Staffing Comparisons in Three Elementary Schools

	School A (NYC)		School B (APS)		School C (PPS)	
Investment Conditions	Combination of negotiated & market-based conditions with rewards and sanctions for principal's performance		Combination of mandated and negotiated conditions, with some rewards and sanctions		Combination of mandated and negotiated conditions, with no explicit rewards or sanctions	
October 2007 Student Enrollment	1,122		472		387	
Free or Reduced Price Lunch	93.0%		80.0%		73.0%	
Total FTE (2007–2008) (rounded to the nearest FTE)	154.0 FTE		48.0 FTE		35.0 FTE	
	FTE	Percent of Total FTE	FTE	Percent of Total FTE	FTE	Percent of Total FTE
School Administration (e.g., principal, assistant principal, dean, etc.)	5.0	3%	2.0	4%	2.0	6%
Core Teachers (e.g., English, math, science, etc.)	77.0	50%	27.0	56%	17.0	49%
Non-core Teachers (e.g., art, music, etc.)	12.0	8%	7.0	15%	2.0	6%
Certificated Instructional Support Staff (e.g., instructional coaches, achievement facilitators, etc.)	6.0	4%	2.0	4%	0.0	0%
Non-certificated Instructional Support Staff (e.g., paraprofessionals, education assistants, etc.)	1.0	1%	5.0	10%	5.1	14%
Student Support Staff (e.g., counselors, school psychologist, ESL or ELL teachers or non-certificated staff, special education teachers or non-certificated staff, etc.)	47.0	31%	3.0	6%	5.8	17%
Other School Staff (e.g., non-certificated staff who are in secretarial, clerical, or office support roles, custodians, cooks, etc.)	6.0	3%	5.0	5%	3.1	8%

Some differences in staffing allocation strategies also emerge. For example, as summarized in Table 8, School A in New York City invested proportionately more in both certificated instructional support roles and in student support staff, as com-

As with the districtdirected investments. the ultimate payoff of within-school instructional leadership investments depends on many things: staff chemistry, overall leadership, capacity to create a supportive school culture, and persistence by school staff in working through the ambiguities of these instructional support roles.

pared to the two other schools. School B in Atlanta invested more heavily in classroom teachers (71% of all FTE [full-time equivalents] at the schools) than School A (58%) or School C (55%). School A invested the least in non-certificated instructional support staff (1%) as compared to School B (10%) or School C in Portland (14%). While all of the schools in Table 8 served high percentages of students living in poverty, the student population in these schools varied in important ways. School A served more than twice the proportion of students who were English language learners than School B or C. Ninety nine percent of students in Schools A and B were students of color, compared to just under half of the students population in School C. The percentage of students receiving special education services in Schools A and C was double the proportion served in School B. These differences in student characteristics also played a role in staffing allocation decisions.

Whether backed by strong leadership of the school principal as in the Portland case, supported by a common instructional framework as in Atlanta, or guided by a clear accountability system as in New York City, the primary driver of successful investment at the school level appears to be the nature and type of support offered to these individuals. A full exploration of these issues appears in a companion report, Leadership for Learning Improvement in Urban Schools (Portin et al., 2009).

Strategy 2: Investments in Data-based Practice

A second strategy focuses resources on data-based practice through the development of a variety of useful data sources, the systems that manage this data, and the capacity to use the data to address problems of practice in classrooms and schools. While ultimately aimed at teachers, this strategy concentrates in the short term on various individuals in a leadership position (e.g., district central office staff, school principals, instructional coaches, and others who work with teachers). These arrangements are typically linked to federal, state, or district accountability systems, but not exclusively. Though accountability-focused investments can prompt compliance or generate feedback that is used in limited or

punitive ways, the press for data-based practice evident in the districts we studied seemed to be encouraging a wider array of responses.

Learning-focused leadership depends upon the use of data to inform decisions and leadership actions related to instructional improvement (Copland & Knapp, 2006). Recent discussions of district reform have increasingly focused on the use of data as a primary lever for systemic instructional improvement (Murnane, City, & Singleton, 2008; Supovitz, 2006; Darling-Hammond et al., 2005). Districts that use data effectively often do so as part of an "inquiry cycle" (Copland, 2003), a potentially valuable tool for making resource investment decisions in schools, districts, or states (Plecki, Alejano, Lochmiller, & Knapp, 2006). While research is emerging on the way district decision makers use evidence in their work (Honig & Coburn, 2008), few cases extensively use data to inform or facilitate changes in existing resource allocation patterns, or else underscore the lack of data use for these purposes. More to the point, research has yet to consider how resources are invested in the development and use of data and what exactly leaders do to build and use an informational base for instructional leadership.

Our data suggest three related investments in data-based practice. The first, focused on the effort to *develop data infrastructure* (e.g., data systems, software, and protocols), seeks to make data use possible and information accessible to staff at all levels of the system. A second investment attempts to *promote data literacy and use* (Earl & Katz, 2002), and refers to the leaders' ability to make use of data to inform their practice. This strategy seeks to install specialized staff roles (e.g., student achievement coordinators or data-focused coaches), support professional development, and create regular occasions for making sense of data. Third, to realize either or both of these investments in terms that are meaningful to a particular local context, district or school leaders may need to *generate new forms of data* along with the occasions that invite or compel people to make sense of the data. Table 9 summarizes particular forms these investments took in the study districts.

Investing in Data Infrastructure

As Table 9 illustrates, each of the study districts invested in data systems—whether specifically designed to meet internal needs or provided as part of a larger accountability system. Portland Public Schools and the Eugene School District have relied heavily on a state-based data system. These systems allow school testing coordinators and district assessment staff access to student performance on statewide assessments. Teachers, principals, and others access this information

Table 9. Illustrative District and School Efforts to Increase Data-based Practice

	NYC / ESO	Atlanta	Portland	Eugene
Investments in data infrastructure (e.g., data systems, computer software, data warehouses, etc.)	Development of Achievement Reporting & Innovation System (ARIS)	Utilization of Georgia Online Assessment System (GOAS) Infinite Campus	Utilization of the Oregon Assessment of Knowledge & Skills (OAKS) system Utilization of eSIS, statewide student information data system Investment in "PPS Data Mart" and data warehouse	Utilization of the Oregon Assessment of Knowledge & Skills (OAKS) system Utilization of eSIS, statewide student information data system Investment in data warehouse
Investments in data literacy and data use (e.g., through specialized data support roles or team structures, and related professional development)	Creation of school- based Inquiry Teams Establishing district data support roles (e.g., Senior Achievement Facilitators) School-by-school creation of data support roles (e.g., Achievement Coordinators)	Support for professional learning opportunities at the district and SRT level Support for Model Teacher Leaders (MTLs) as data analysts serving multiple schools Creation of Instructional Liaison Specialists (ILSs) within the school	Provision of professional learning opportunities Selection of data protocols and other analytic tools Funding for research staff to work with school principals	Regional principal's meetings Participation in external professional development (e.g., Wallace LEAD Initiative) Provision of FTE for the Student Achievement Coordinator position in high-needs neighborhood schools
Efforts to generate new forms of data (e.g., by collecting data from internal and external stakeholders)	new forms of data e.g., by collecting data from internal and external stake- School Quality Reviews		Surveys of school principals and school-level staff concerning support from central departments District-level Performance Audits Frequent meetings with community leaders and business executives	Surveys of school principals, school-level staff, and community members (e.g., as part of a strategic planning or budget process)

directly through a statewide data warehouse or through a district portal, allowing the user to query information and generate customized reports.

Data systems could be developed more specifically for a district's needs, as in Atlanta Public Schools, which recently deployed a district-specific data warehouse integrating information from the Georgia Online Assessment System (GOAS) with its district-level data system built around a software package called Infinite Campus. While the district has only just begun rolling this system out, it will ultimately enable teachers, administrators, and district staff to drill down to individual students and track progress toward one or more district-defined learning targets. One district administrator described the district's investments in data infrastructure as "a way of encouraging differentiated instruction and accountability...so that you are guaranteeing that the system is going to become a high performer over time."

New York City's Department of Education has invested \$80 million in a system that combines data warehousing with knowledge management. The Achievement Reporting and Innovation System (ARIS) is intended to provide timely information to those most directly involved in educating students (teachers, principals, instructional coaches). Further, unlike systems that typically focus only on student achievement data, this system will also store and share information regarding effective or innovative instructional practices, linked to educators' analyses and queries regarding particular issues of learning performance. This system has not been without its challenges, however, as the system had not yet become fully functional as of the beginning of the 2008–09 school year.

Investing in Data Literacy and Data Use

While setting the stage for enhanced data-based practice, the data infrastructures just described will not ensure by themselves that the information generated will influence or inform instructional practice in schools and individual classrooms. Rather, the challenge is to ensure the data reaches teachers in understandable form, linked to their classrooms, with sufficient time to consider what the data means, and with suggestions about workable practices or approaches. As one principal noted, data is only useful when it "forces teachers to constantly look at where their students are struggling and... [helps them] provide immediate intervention for those children." This principal added that getting such data is time consuming and often "impossible" given the district's demands on her and her staff, and other responsibilities.

In response to the lack of data literacy, each of the study districts has made significant investments in staff who support school leaders, especially principals, in collecting, analyzing, or presenting data related to student achievement.

Portland Public Schools invests in staff in a central Research and Evaluation Department who are responsible for analyzing and reporting data to principals. One staff member in this unit noted that "75% of my time is to be a consultant in the use of data," working with principals and doing presentations at schools or to school-affiliated groups. Within schools, principals serve as the primary collectors and interpreters of data, generally creating a larger data set than that provided by the central office, which generally relies on data required for the state. For principals, meaningful data include information obtained from the

district, regular assessments, discipline records, lesson plans, or informal surveys of staff.

Because principals' ability to generate data is often impacted by other demands placed on them, districts can make resources available that encourage data use in school buildings beyond what a principal might be able to manage. With this in mind, the Eugene School District provided staffing resources to principals in the form of a part-time Student Achievement Coordinator (SAC), ostensibly to augment the principal's ability to monitor student learning. The SAC job description refers to keeping "the school focused on what can be done to improve student achievement and close the achievement gap," which may include "leading systematic inquiry into the achievement gap or facilitating professional development on how to understand data and on how to take action" in light of what the data represent. In practice, however, SACs took on various responsibilities, including coordinating Title I activities or leading an intervention team for students struggling with behavioral issues.

The two largest districts in our study put in place a more extensive support system for using data productively. Both the New York City Department of Education and Atlanta Public Schools have invested in roles dedicated to analyzing data and assisting principals in data use, often linked in some way to the assessment and accountability system. These staff are generally responsible for working with data provided by a centralized data system, presenting the information to school staff, and working with the school to develop instructional strategies in response to patterns in the data This mix of staff responsibilities enables them to integrate

data with other aspects of their instructional leadership work, as an Instructional Liaison Specialist (ILS) in Atlanta noted:

I look at data, I analyze data... I look at lesson plans... critique lesson plans, do informal observations... and also prepare reports for my principal... [I provide] professional development training... and also look at the type of trainings that we might need.

Though not always related directly to student achievement, most of the information managed by the ILS is linked to support for students or reflects district assessment information. According to an ILS, "The best thing about the data is that it tells us where we are, where we need to go, what kind of changes we need to make." School to school, principals have come to expect that the ILS will be the point person for these types of issues.

The system of support for data-based practice in New York City Empowerment Schools is even more elaborate. First of all, specialized staff called Senior Achievement Facilitators (SAFs) work with schools in one or more of the ESO networks (or with networks in other SSOs) on the implementation and use of the accountability tools. Reporting directly to the Assessment and Accountability Office, SAFs often assume a teaching role vis-à-vis school staff who are not so sure what they can and should be doing with data, or who cannot grasp a larger vision of data-based practice. As one SAF puts it:

I think the bigger picture is around how do we support student achievement and improvement in schools...part of it is through inquiry team, but we're also looking at quality review, we're also looking at periodic assessment, we're also looking at the progress report. So it's how all of these different structures and systems really come together to support the school in the bigger umbrella of student achievement and improvement.

Others provide data-related assistance to the schools. The Network Achievement Coach often spends time with school staff (at their request, generally) on how to make sense of periodic assessment information, prepare for a School Quality Review, or engage in a cycle of inquiry to address instructional improvement issues. Together and separately, SAFs, Achievement Coaches, and even Network Leaders offer various forms of assistance for expanding the school staff's data literacy or use—all within the parameters of what schools ask for. As another SAF put it, "So we tailor it [to what schools ask for]. I mean whatever anyone needs, I try

Though test score data were central to their efforts to promote data-based practice, districts were employing a variety of data sources, and often creating new or different sources that would otherwise not have been available or considered.

to meet their needs. But I think the bigger challenge is how do you put yourself on their agenda when they don't exactly see the need." In this sense, in a substantially decentralized system like New York City, expanding the support system alone will not guarantee that the support is received or utilized.

Generating New Forms of Data and Opportunities to Make Sense of It

Investing in data-based practice in the districts we studied meant more than creating a data infrastructure or a support system for promoting data literacy and use. It also implied attention to the

different kinds of data that can most usefully inform instructional improvement activities.

Among the forms of data in current use are the following:

- Tools aimed at classroom practice: Data collection activities embedded within instructional support processes and performance management activities—for example, in Atlanta, a common instructional framework, set of expected teaching practices, and common instructional observation protocols.
- Tools for assessing support services and school climate from multiple vantage points: Surveys of service users, such as principals in Atlanta, concerning the amount and type of support they receive from central support departments as input to the district's annual Balanced Score Card or, in New York City, annual Environmental Surveys of school staff, parents, and (above the sixth-grade level) students, as input to the school's annual Progress Report.
- Tools for appraising many aspects of school functioning: Tools such as an annual School Quality Review (SQR) process in New York City to monitor school activities and identify areas that require attention or additional support, achieved by teams of outside assessors who spend three days onsite looking into every aspect of the school's functioning.

Coupled with these efforts to collect different forms of data were opportunities created at district or school levels to discuss and give meaning to the data. In Portland, where the master schedule provided teachers 180 minutes of collaborative time each week, a school had a regular time for teachers to work on instructional planning matters. While the content of discussion varied, the time was periodically focused on what data meant. In one meeting we observed, teachers focused intently on recent assessment results to identify how each student had progressed and then developed a clear plan for struggling students.

To maximize the likelihood of consulting data in instructional planning, districts experimented with ways to facilitate and structure these collaborative opportunities—for example, through protocols, advisory visits (e.g., following School Quality Reviews in New York City), and professional development for teachers, principals, and instructional support staff. In Portland, the district retained an external professional development organization to teach teams from the district's K–8 and middle schools to engage in inquiry cycles across the school year. Another approach appeared in the Inquiry Team initiative in New York City, noted earlier, which encouraged the team members to develop various forms of data about a targeted group of struggling students and then fashion an intervention guided by the results. Consider the following data points collected regarding the literacy skills of 15 targeted students in one elementary school's Inquiry Team process during the 2007–08 year:

- One or more individual observations of the students' engagement in independent reading during the literacy block.
- An interview with each student about how he or she spent time in the independent reading task and what was being learned during this time.
- An interview with the teacher concerning his or her approach to teaching during this segment of the literacy block and perspectives on the targeted student activities during this time.
- An analysis of the students' reading scores over the past year (annual test and periodic assessments).
- An analysis of student work (e.g., reading log, journal) kept during the independent reading time.

These items of information were then used to construct a profile of each targeted student in an attempt to identify what about their activities during the independent reading time might explain their low level of performance. The district structured this data collection, conversation, and sense making through the support of central office staff. In the case study schools, these forms of assistance helped people with varying degrees of data literacy to proceed with inquiry tasks that were often quite unfamiliar.

The Payoff of Investments in Data-based Practice

While many of these investments were relatively new, and there is no guarantee that they will be sustained until a more robust data literacy prevails in schools, the effort was already penetrating instructional practice. As detailed more fully in a companion report, Leadership for Learning Improvement in Urban Schools (Portin et al., 2009), school leaders and other staff in the case study schools were paying close attention to data (especially from testing) and developing a language for talking about instructional improvement that is fully oriented to systematic data sources.

Strategy 3: Increasing Flexibility, Support, and Capacity for School-level Investment

The third strategy seeks to maximize the flexibility that districts grant to principals to invest resources, specifies the types of staffing resources over which flexibility extends, and provides support to principals as they consider resource investment decisions and strategies. In effect, the district allocates three types of resources: *authority* for school leaders to act on particular kinds of staffing (or other resource) decisions, *actual resources* over which the school leaders can legitimately exercise discretion, and *assistance* to enable school leaders to take good advantage of these discretionary opportunities.

This investment strategy can be—and frequently was—integrated with one or both of the previous strategies, especially in districts in which a market-based investment framework prevails. For example, principals who were granted increased flexibility over resource decisions could benefit from additional information generated through a districtwide data system, accountability-based feedback, or opportunities to engage staff within their schools in collective inquiry about student or professional learning needs.

This strategy can be understood as the latest version of decades-long experimentation with granting greater autonomy to schools, on the premise that those closest to the classroom are in the best position to make good decisions on behalf of children's education. A wave of site-based management experiments in the 1980s (Brown & Saks, 1987; Beck & Murphy, 1998) and more recently the expansion of charter schools, in some respects the small school movement (e.g., Raywid, 1996), and a continuing movement toward creating "systems of autonomous and differentiated schools" (Honig, 2009, p. 2) have tried to make good on the premise. Yet the evidence is not clear that, by itself, freedom to maneuver prompts appropriate investments that support better outcomes. Principals who have more options often default to familiar allocation strategies (Monk, 1987), especially in the area of staffing. Rather, reminiscent of the argument for combining bottom-up change with top-down support (Fullan, 1994), the combination of increased flexibility with focused support may be what enables principals to successfully examine and rethink their resource investment approaches and strategies.8 While decentralizing authority and resources, the district retains a distinct, even strong, presence in the way these resources are used, a pattern noted in reforming districts in which "significant authority and responsibility are assigned to the schools" at the same time that the district maintains "a strong presence" (McLaughlin & Talbert, 2002, p. 188). Others have pointed to critical deficiencies in a pure decentralization model and have argued that various conditions are necessary for decentralization to work, among them, a focus on local capacity building, a commitment to rigorous accountability, and stimulation of innovation (Bryk, Sebring, Kerbow, Rollow, & Easton, 1998). Still others note a tendency over time for the district to oscillate between more centralized and decentralized structures (Yee, 1996), a tendency one senior administrator acknowledged:

[The district used to] be very restrictive—you got money for this, money for this, money for this. Then the district sort of swung the other way... schools were suddenly allowed to make decisions about how they wanted to use their FTE. And I think now we're swinging a little bit back toward the prescriptive.... We're saying we're going to give you this because it's in the best interest of the kids but expect you to use it in this specific way.

⁸ In this instance, the nature of the supportive relationship itself is likely to matter a good deal—specifically, how the district central office establishes and evolves its "assistance relationships" with schools. See analyses of these relationships in a companion report, *Central Office Transformation for District-wide Teaching and Learning Improvement* (Honig, Copland, Lorton, Rainey, & Newton, forthcoming).

How the District Combines Flexibility and Support

More appears to be at work in the districts we studied than a simple swing of the pendulum between a largely decentralized approach to reform and a more centralized one, or vice versa. A more complex pattern appears as the case study districts seek to couple increased flexibility with intentional capacity building and guidance. Their current resolutions spread along a continuum that reflects the nature of the resource environment surrounding the schools, differing allocations of authority to act, and resources with which to act.

At the root of the strategy to maximize school-level flexibility in investing resources was a calculation about how much support school principals needed and how best to get it to them.

District officials were well aware that, as one district administrator noted, "Just because principals have been granted more freedom doesn't mean that they'll know what to do with it." The matter of how to help principals know—and learn—how to make good use of the new authority was resolved differently. The district could approach this question by restricting the range of school-level decision making. Despite granting principals considerable flexibility in configuring school resources, the Atlanta Public Schools also restricts the types of investment options

available to principals, and provides some specific frameworks that guide school-level decisions. In Title I-eligible schools, for example, instead of expecting principals to recreate their budget annually, the district provides a menu of choices believed to be essential to successful implementation of the school's chosen comprehensive school reforms. According to one senior administrator, "We provide them with choices so that they don't have to try to figure everything out and so that they can make their decisions and then move forward." Principals have come to accept this as a source of support for their decision making. As one principal commented,

At first the district's approach really bothered me because I thought [the district] hired me to run this school... so my thought was, let me run it... but I learned a lot from the protocols that they provided... sometimes I've resisted... but I've realized that I can make it work.... I've been a principal now 15 years... and there are some things that sometimes you're in the rut, you're doing the same thing over and over.

From this principal's perspective, the district protocols provided fresh ideas and alternatives to practices that she had relied on but never fully assessed in terms of their effectiveness.

Alternatively, the district could offer principals far greater latitude, including freedom to choose the form and degree of central office support they preferred, as in New York City's Empowerment Schools Organization. There, Empowerment School leaders were granted considerable autonomy and control over many aspects of their budgets, raising the possibility that principals might not ask for help when they really needed it (as judged by knowledgeable outsiders). The Network Team's support was there to be called on if needed, but at the school leader's discretion. And initially the schools, mostly run by experienced principals, tended to be very selective in calling on the district for help. However, moving from the 2007-08 school year to the next, the relationships forged between the Network Teams and the principals in the case study schools seemed to be deepening, involving more interaction around a greater range of issues, with more openings for the district to encourage what it judged to be wise use of the school's resources. To some degree, these interactions were prompted by central office staff: some Network Business Managers, for example, scanned the schools' use of budgeted resources to determine whether principals were making full and appropriate use of them, and did not hesitate to contact the principals where they spotted a potential problem. One Business Manager explained:

The intimacy with the schools allows me to get involved in all phases of the business and really how the funds come together to allow the principal to max out the resources. And one thing I've been good at is exactly that—[maximizing] the resources, and that's one of the things that the schools lack is someone who can see if we use our money this way—you know, if you use your Title I funds one way it costs you less, if you use it another way it costs you more. So the idea is really how to take advantage of the different funding sources the school has.

So, despite the loose relationship between district and school and the wider latitude granted principals in this system, a supportive relationship with immediately accessible central office staff was helpful in fine-tuning the principals' decisions about how best to invest resources.

How School Leaders Make Use of Flexibility Granted to Them

Principals respond in various ways to the flexibility granted to them over the configuration of staffing resources, arrangement of instructional time, and allocation of discretionary dollars, as illustrated in Table 10. In each instance, *principals relied on the existing resources allocated to their schools—and the flexibility granted them—to create alternative staffing or instructional support arrangements*.

Table 10. Illustrative Examples of Principals Using Flexibility to Focus Staffing-related Resources on Instructional Improvement

	Staffing Resources	Instructional Time	Discretionary Dollars
Elementary School	Principal "departmentalized" grades 2–5 requiring teachers to prepare for fewer lessons and to specialize in specific content areas.	Principal created passing periods within a departmentalized staffing plan to prepare upper elementary students for middle school.	Principal used discretionary funding to allow staff to visit schools serving low-income students to observe effective instructional practices.
K-8 School	Principal enlisted classroom teachers with special interests as elective teachers when additional resources for elective courses were unavailable.	Created a schedule to allow classroom teachers in grade-level teams to collaborate for 180 minutes per week. During collaborative time, students are in elective courses.	Principal compensates facilitators for extra duty using discretionary funds. The facilitators serve as teacher leaders in the building connecting the school's leadership team with each grade-level team.
Middle School	Principal revised student- teacher ratios to create five instructional coaches in subject areas. Coaches provide increased support to classroom teachers and increased adult presence in hallways during passing periods and lunch periods.	Principal and staff created a new master schedule that allows classroom teachers to "loop" with their students in an attempt to enhance student-teacher relationships (and also separates students during passing periods to reduce behavioral problems).	Principal used discretionary funds to provide before- and after-school tutorials (including transportation) for students struggling in math.
High School	Principal used resources intended for assistant principals to create academy leader positions that extended instructional support into each small learning community.	Principal created a Professional Activity period for teachers, used to address instructional priorities for that day. Activities included one-on-one tutoring with students and contacting parents.	Principal changed budget process by dividing the discretionary budget among three small learning communities and allowed teacher leaders to make decisions regarding expenditures.

In one elementary school, for example, the principal was able to create an innovative departmentalized model that reduced the number of lessons teachers had to prepare for, increased the amount of time spent on specific subjects such as reading and math, and helped prepare upper elementary school students for middle school by introducing them to passing periods and rotating among different teachers.

Alternatively, a high school principal used the flexibility to revise the school's budget process by decentralizing decisions to teacher leaders in each of the school's small learning communities. As a result, teachers had more input into resource decisions, while the principal had more time to spend in classrooms.

By all accounts, the allocation of increased authority and discretionary resources to the school, coupled with formal or informal supports, sits well with the principals we studied, especially in the circumstances created in the New York City Empowerment Schools, where principals chose to operate within a system of enhanced discretion, as detailed more fully in *Leadership for Learning Improvement in Urban Schools* (Portin et al., 2009). An elementary principal noted:

Normally, [the money I have put into partnerships] would have been...spent by the district before I even saw it, in staff developers. You know, the staffing, the support personnel, having more control over having the mentor that I want on staff, and not the district sending me a mentor—I can hire one of my own people to do that role, and make sure that mentor really matches the teachers.

This principal does not speak for all his colleagues across the city. Not all opted to be a part of the Empowerment Schools arrangement, nor did they want as much control over professional development or instructional support resources as the individual above. But the system allowed for this variation.

Flexibility at the Central Office Level

Paralleling the flexibility and support for school principals' efforts to invest resources, flexibility over the use of resources was extended by several districts to the units of the central office that supervised school principals or worked directly with schools. Given flexible resources, the central office units made use of them in ways that affected their approach to exercising or supporting instructional leader-ship—generally developing a more responsive relationship with schools.

Area Directors in Portland's central office cited their inability to secure or direct resources to the schools they supervised as a significant barrier to providing effective support for schools. Area Directors noted that their job was to "advocate" for the principal and their school but noted that the process was "time intensive" and often meant that "support didn't reach the school as quickly as it should."

- Executive Directors in Atlanta's School Reform Teams deployed their Model Teacher Leaders differently from one another: in some instances, having them work nearly full-time inside of schools, with relatively less coordination with other SRT staff, in other cases splitting their time between schools and SRTbased activity.
- Some Network Teams serving the New York City Empowerment Schools adapted the basic template of staffing positions they were initially asked to follow so that they could offer services their schools needed. By the 2008–09 year, some had added extra Achievement Coaches, for example, or other positions (e.g., related to data management) that responded more directly to a call for instructional support.

These examples underscore the role that investment in flexibility may play at multiple levels. Those who support principals can make good use of the flexibility as well as principals. In the districts that have extended such flexibility, principals generally indicated that they appreciate the immediacy of support provided them by their supervisors and the increased responsiveness from the central office. As one Atlanta principal noted, "We are getting some professional courtesy to use our best judgment," but at the same time "we appreciate the advocacy and

Each of the districts pursued the investment strategies described above using existing resources often acquired through reallocation activitiese.g., by adjusting staffing ratios, modestly increasing class sizes, restructuring and reducing central office arrangements, or substituting positions within their base allocation.

responsiveness from the Executive Directors and others in the SRT and Central Office." Each of the principals cited the support they received on issues relating to human resources, acquiring support for struggling teachers, getting assistance on facility or maintenance issues, or gaining approval to expend Title I resources in ways not specifically listed on the district's Title I budget forms.

Financial Constraints as a Prompt for (Re)Investment

While our data suggest that there is promise in each of these strategies, there are significant challenges for each strategy or each district—none greater than the serious financial challenges that are now confronting many schools, districts, and states throughout the nation. While we acknowledge

that these are challenging times for education and that the investments reviewed here may seem difficult to sustain at the moment, the districts in this study give grounds for hope.

In Portland, which had endured a decade of budget cuts following the implementation of a voter-approved tax limitation measure, principals used resources in ways that support student learning despite receiving no additional or discretionary resources. The principal in one of our case study schools eliminated a part-time instructional technology position in order to fund a full-time counselor. In Eugene, the district made substantial equity-related investments (to be discussed further in the next chapter) in response to declining enrollment and significant changes in the student population. By changing the way that general fund resources were allocated and by decreasing or eliminating central office positions, the district was able to create three discretionary funding streams targeted to schools serving large numbers of students from traditionally underserved populations. One senior district leader noted that the district has pursued these investments despite the fact that "we've cut the equivalent of \$40 million since 1991."

While Atlanta has not endured financial pressures similar to those of Portland or Eugene, the district has engaged in a thorough reexamination of its existing investments. The district contracted with an external consulting firm to review its instructional and operational activities. This evaluation yielded a series of recommendations that have led the district to reduce spending in central administration, target more resources to schools, and place support services in closer proximity to school principals and classroom teachers. The reductions have increased the number of instructional support staff in schools and resulted in the creation of various instructional leadership roles, two of which were discussed previously.

Thus, while the financial realities facing schools and districts cannot be denied, the examples from each of these districts suggest that financial challenges need not deter investments in instructional leadership or leadership support. Rather, such challenges can serve as a catalyst for examining current investments and rethinking expenditures with the interests of students in mind. As one senior administrator suggested, "We have the money we need in our budget... it's just that we haven't found a reason to use it differently." As the superintendent in one of our districts noted in a presentation to the school board,

We have many, many initiatives underway in our schools. Some of the programs in our schools are there simply because they always have been, or because they

were funded by a targeted grant (perhaps since expired), or maybe because last time the program was proposed to end, 50 people showed up at a board meeting. We have started initiatives and failed to follow through, we have let other promising ventures suffer from neglect and, at times, we have failed to pull the plug on efforts that just aren't delivering....Adding to the mix: we have faced constant budget pressures... our financial cuts have limited the offerings for our students while diverting families and staff into a distracting scramble for funding.

As this superintendent's statement suggests, districts and schools often are subject to various tensions—both technical and political—that influence their resource allocation decisions. In the next chapter we discuss in detail the efforts within our study districts to examine existing investments and redirect available resources toward more equitable educational opportunities, as well as the mechanisms leaders employed to manage or mitigate some of these external or internal pressures.

Chapter 4

When Equal Isn't Equitable: Differential Resource Investment as a Leadership Tool for Enhancing Equity

The investment strategies discussed in the preceding chapter presume that resources are targeted to particular purposes—and not others—within the district and its schools. In so doing, the investor is likely to be asked by others in the district or its schools: why not use the resources for X or Y or Z? Why favor that school, unit, or program and not this one? How *fair* is this allocation? Will this specific group of students (or teachers) benefit? Will all students (or teachers) benefit equally? The answers to these questions invoke the delicate politics involved in investing resources alluded to in the discussion of barriers at the close of the preceding chapter. The questions also confront a basic premise of learning-focused leadership, and indeed the broad policy movement that seeks to "leave no child behind": that leadership and reform aim at providing *all* young people with education that is both powerful *and equitable* (Copland & Knapp, 2006; Clune, 1994; Ladd, 2008; Organisation for Economic Co-operation and Development [OECD], 2007).

While the tug of war over scarce resources can be seen as a process of negotiating among competing interests, it is also a central occasion for state, district, and school leaders to consider notions of equity and fairness. Based in some compelling vision of what is equitable and fair, the leadership challenge is to invest resources in ways that respond to the unique needs of students, teachers, and schools while maximizing these goals and developing economically and politically sustainable strategies for doing so.

Either explicitly or implicitly, these matters were a central concern in the districts we studied, and their experiences in investing resources bring to light the core issues at stake and some possible ways they can be addressed. Their attempt to grapple with equity concerns while investing resources to support learning improvement highlights the complexity of this facet of leadership work in two ways. First, it highlights the conceptual challenges of dealing with this fundamental but difficult idea. Put most simply, as various scholarly literatures have long recognized (Berne & Stiefel, 1999; Baker & Green, 2008; Grubb, 2009), the conceptual problem resides in the fact that *what is equal is not always "equitable.*" Despite the natural leadership tendency to make sure all parties have equal resources—thereby "leveling the playing field," as it were—educators and their

constituencies know intuitively that not all students need the same supports for learning, and that some students who face significant economic, linguistic, or other disadvantages are likely to require much *greater* support, to ensure an "equal" opportunity to succeed, no less to ensure success itself (Downes & Stiefel, 2008; Harris, 2008).

Second, as noted in Chapter 1, the attempt to invest resources equitably and effectively within the districts and schools highlights the fact that achieving equity goals is not only a *technical* problem, it is also a *political* challenge in which diverse views of what constitutes "fairness" must be adjudicated (Oakes, 2005). In broad strokes, the more an equitable solution diverges from an equal allocation, these political dynamics are likely to become all the more acute—that is, where certain interests get an increasingly disproportionate share of a given resource (staffing, funding, time, expertise, materials), while others get less. Retrenchment conditions are also likely to surface tensions, as leaders are forced to do the same (or more) with less, and the stakeholders of education view the resource distribution equation in stark, zero-sum terms.

Additional contextual factors may also contribute to the nature of the political dynamics and leadership challenges involved in developing more equitable responses to addressing the learning needs of all students. These factors include the nature of the relationships among school administrators, school boards, and labor unions and the specific policies that result from collective bargaining agreements. These labor arrangements can impact the types of staffing resource allocation strategies available for consideration in both productive and unproductive ways.

Thus, an explicit focus on equity brings a new dimension to the investment equation, as suggested in Figure 3. We explore this dimension in this chapter as follows. Following a brief discussion of the concepts at play, we distinguish different types of resource decisions that invite the *differential* investment of staffing and other resources in activities aimed at particular schools, classrooms, programs, or students, and show how these actions attempted to realize the goals of learning-focused leadership. We explore each of these with examples from the district and school level across our sites. Then, drawing from an instructive case, we explore how leaders managed the political dimensions of leading for equity; we do so by identifying both the main sources of these political dynamics and some strategies leaders used to address them. We conclude the chapter with a few observations about the leadership actions leaders may consider as they move through stages of an equity agenda.

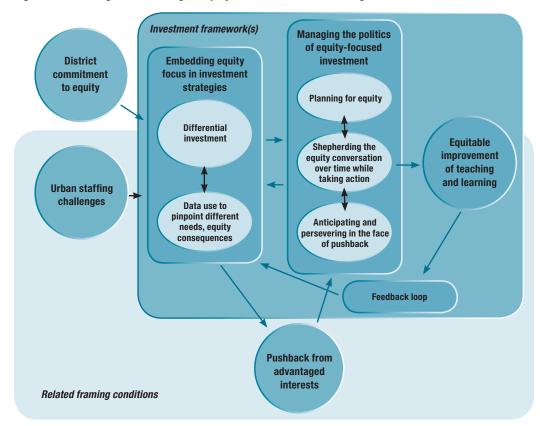


Figure 3. Embedding and Sustaining an Equity Focus in Investment Strategies

Conceptions of Equity in Educators' Thinking and Actions

When we asked our informants explicitly about equity as a concern or principle of their leadership action, we received responses that ranged from equity as the equal distribution of workload across teaching staff, to the reduction of achievement gaps, to the attention paid to special needs students as compared with others, to the pursuit of social justice in communities of poverty.

At the root of what we heard were some notions of fairness and equality (e.g., equality of opportunity), coupled with heightened concern for the circumstances of less advantaged individuals or groups.

Beneath what people said or thought were three notions that have been articulated by the school finance literature across the past several decades: equality, equity, and adequacy (National Research Council, 1999; Springer, Houck, & Guthrie, 2008; Hanushek & Lindseth, 2009; Corcoran & Evans, 2008). Of particular concern are the multiple and evolving meanings for the term *equity*, for they highlight

The educators we interviewed talked about—or around—issues of equity in their work in a variety of ways, but often with difficulty, or in ways that indicated they struggled to reconcile competing ideas.

the source of many struggles in this realm of leadership work.

The initial anchor for many people's thinking is that *equality* is a fundamental value in schooling, if not the larger society. On the surface an uncomplicated idea, the term simply connotes sameness, and invokes the value that all students, classrooms, teachers, and schools should be treated the same. And in the circumstances of "savage inequalities" that have often been described in urban schooling (e.g., Kozol, 1991), more *equal* treatment of all parties is an easily agreed upon goal. That is not to say that this goal

will be easily met, and discussions of urban education have persistently pointed out that, in very basic ways, the material, intellectual, and social resources of schooling remain stubbornly unequal, even when attempts are made to equalize the availability of books, technology, adequate facilities, literacy coaches, and other such resources (OECD, 2007; Rothstein, 2004). Confronted by these basic inequalities, the first impulse of reformers is to try to equalize available resources. The underlying assumption is this: When parties (districts, schools, teachers, classrooms, etc.) are themselves considered equivalent, then equal treatment is generally viewed as the "equitable" thing to do—this principle is described as "horizontal equity" in the language of school finance scholars (Berne & Stiefel, 1999).

But because the receiving units (school, teachers, classrooms) may not all be equivalent, "vertical equity," or *the appropriate treatment of unequals* (Berne & Stiefel, 1999; King, Swanson, & Sweetland, 2005; Underwood, 1994), comes into play: this conception of equity acknowledges that the differences among students within the system may warrant differential support, and that this appropriately *unequal* treatment provides additional resources in direct relation to the educational needs or "disadvantages" of these students. That is the basic principle underlying the compensatory education arrangements (e.g., Title I) and weighted student formulas, which offer extra services or funds to schools to help them undertake the more complicated or costly work of educating a more disadvantaged student population.

But viewed either way, these notions of equity may unduly focus on the inputs to education rather than the outcomes. And the greater attention in recent years to results, coupled with the persistent patterns of low performance for some seg-

ments of the student population (even when inputs disproportionately favor the least advantaged), have led educators and scholars to focus more on equality of outcomes, and specifically on allocating the level of resources that are *adequate* to support equitable outcomes for all students (National Research Council, 1999; Clune, 1994; Odden & Clune, 1998; Downes & Shay, 2006). Rather than focus on relative inputs, this conception focuses on "an absolute threshold…. An education system meets an adequacy standard if all schools have sufficient resources to achieve a specified outcome standard, given the particular set of students they serve" (Ladd, 2008, p. 404).

This brief review of underlying concepts underscores the complexity of the task confronting the districts and school leaders we studied. It often was not enough for these leaders to provide equal (or even equivalent) inputs for schools, for decades of research have shown that not all students come to school equally prepared, and achievement gaps among students persist (Reardon & Robinson, 2008; Harris, 2008). Developing resource investment strategies that target specific groups of students, and the schools that have disproportionally high numbers of these students, appears to show promise, but this technical solution is not without its political challenges. As we will present in the following sections, district and school leaders who have pursued these initiatives of differentially supporting targeted schools have discovered that these are not quick fixes and that moving a school, and a district, toward a more equitable balance of access, opportunity, and student performance takes careful, consistent, and persistent leadership action over time.

A range of staffing investment decisions can address equity concerns by differentiating the resources that go to different units (classrooms, schools, teacher groups or teams, programs) in proportion to perceived need.

Varying Forms of Differential Investment Toward Increasing Equity

The districts we studied used the investment of resources as a central tool in seeking to enhance equity.

Some of these decisions concentrate on increasing the supply of staff who can address particular learning improvement needs; others concentrate more on reconfiguring roles for staff; while still others are more centrally concerned with improving staff capacity and performance. We discuss and

illustrate these approaches with examples drawn from two of the districts that, at first glance, represent nearly opposite conditions. On the one hand, Lane County District 4J encountered long-standing equity issues that had escaped notice and serious attention for years. On the other hand, the New York Department of Education presented district and school leaders with every imaginable equity issue in stark terms. Yet despite the differences in these settings, many if not most of the underlying approaches to investing staffing resources differentially to improve learning more equitably are very similar. In these cases, five types of differential investment strategies are readily apparent. These types of leadership decisions, summarized in Table 11, occur at district and school levels (and sometimes at both levels simultaneously):

Table 11. Types of Differential Investment Decisions to Enhance Equity

Type of differential investment decision	Focus of equity concern	Level of decisionmaking
Decisions to allocate funds or staffing FTE (full-time equivalents) in proportion to need	Schools experiencing the greatest need or that are hardest to staff	District
Decisions to invest most heavily in building capacity of staff based on need and challenges	Concerns within or across schools about weaknesses in staff knowledge, skill, and commitment	District, school
Decisions to improve the match between students and staff through changes in classroom or school assignment	Mismatch between staff capacities and particular student learning needs	District, school
Decisions to augment the allocation of instructional time for underserved or underperforming students	Insufficient instructional time (that can be addressed through alterations of the master schedule, repurposing of particular time blocks, teaching assignments within time blocks, or additions to the normal school day)	School
Decisions to pool and concentrate existing resources to maximize assistance to struggling students	Insufficient concentration of resources (e.g., dollars, FTE, or even students, treated as a resource), brought to bear on students exhibiting the greatest need	District, school

Staffing or Funding Schools Differentially

Perhaps the most obvious form of investing resources differentially to promote equity occurs when district leaders change the amount of staffing resources that they allocate to each school in the district in an attempt to offer more dollars or staff to schools that face greater challenges in educating their student populations. This straightforward approach to realizing vertical equity, described earlier in this chapter, typically offers schools some combination of (1) specific staff positions, or (2) an additional funding amount, much of which may be used to pay for

staffing resources. To accomplish this purpose, districts can redesign their base allocation formula so that it integrates some notion of vertical equity—e.g., by weighting the funding formula so that more intensive learning needs are reflected in the budget—or they can maintain a base allocation formula that *equally* distributes resources to schools while supplementing that base with additional resources designed to bring about more equity.

Among our study sites, the New York City Department of Education has gone the furthest in redesigning its base school resource allocation formula in an attempt to increase equity. According to the district's official communications in 2007, the reason for developing this new way to allocate money to schools, which they termed Fair Student Funding (FSF), was that

Every child deserves the same opportunity for a great education. And that means every school deserves fair funding. For years, our school budgeting has fallen short of that promise. It's time to change that. Under Fair Student Funding we will begin to fund schools based on the needs of the children at each school. Because that's what matters most. (*Fair Student Funding: Making It Work for Your School and Your Student*, May 2007)

Under the FSF reforms, a weighted student funding formula determines the amount that each school *should* be funded based on student enrollment demographics, so as to create more equitable conditions. Under the new formula, some schools gained, while others received proportionally fewer resources. The weighting could be done with a more targeted purpose, as in Eugene, which offered all schools a special literacy fund over and above the basic allocation, based on a formula that took into account the proportion of students in poverty, English language learners, and special education students. The difference in what a school received could be substantial: In the 2004–05 school year, literacy funding augmented school budgets by amounts ranging from \$5,600 to \$28,900 per elementary school. For middle schools that same year the amounts ranged from \$30,600 to \$47,300 per school; and at the high school level, from \$62,700 to \$108,000.

Alternatively, the additional resources could come as a grant or lump sum, as in New York City where schools with high poverty numbers got a special allocation of Contract for Excellence money (originating from the state), earmarked for class-

⁹ Actually, no money was taken away from the better-funded schools in the short term. The district grandfathered the excess funding on the grounds that there would be too much disruption of programs and hiring if schools were suddenly and unexpectedly cut back.

size reduction and several other purposes presumed to enhance the instructional program in these schools. In Eugene, equity grants were made to schools with the highest minority and poverty counts, starting in 2002. Eligible schools submitted proposals to the district for how they would spend the grant money and the amount allocated to each school depended on the proposed uses (sometimes adding staff, in other instances aimed at staff capacity). Therefore, the amount each school received through this program would vary.

Alternatively, the district could invest in particular staff positions directly, in proportion to assumed need. The role of the allocated Student Achievement Coordinator position in Eugene was somewhat defined by the district to be assessing the progress of students and supporting school staff in analyzing and using that data to improve instruction. This additional half-time staff person was made available to a small number of schools with declining enrollments and low performance that had been negatively impacted by a school choice policy, schools whose remaining student populations reflected higher-than-typical concentrations of students from low-income backgrounds.

Investing in Building Staff Capacity to Increase Equity

Beyond making resources available to schools that typically increased the supply of staff, districts could direct resources differentially toward increasing staff capacity, typically through one or another form of professional development investment. Most obviously, these investments could concentrate on particular groups of teachers or even individuals whose skills seemed most in need of support or who were working with challenged groups of students. But in a more subtle way, professional development funds could also be targeted to all staff to help them differentiate their teaching work more effectively, thereby allocating the resource of their instructional attention and energy more equitably among their students.

In Eugene, the targeted literacy funds and academy grant funding offered an obvious resource for this kind of capacity-building work, and many schools opted to take advantage of it for this purpose. In this respect, the district's investment simply provided school decision makers with a flexible resource that could be directed to purposes that were explicitly intended to enhance equity, but could be used in a number of ways. More often than not, in situations where school leaders have substantial amounts of discretionary funding available for professional development, as in New York City Empowerment Schools, the funds were used to support a

variety of professional learning needs, all of which were loosely related to improving school performance, but often without a explicit equity justification.

But given a clear equity agenda on the part of the school leader, with or without similar expectations from the district, discretionary, capacity-building funds could serve a focused equity-oriented purpose, as in an elementary school in Eugene where the principal invested time and resources to have his staff visit and observe two elementary schools in a nearby district. While the district allowed schools such as this one the freedom to use their academy funds for a variety of professional development and school redesign purposes, the district had suggested that schools use the money to visit other schools. This school's principal responded accordingly, largely to raise his staff's expectations for how the minority, low-income, and English language learner students of their school could achieve academically. The principal described his staff's reaction to visiting schools with similar demographics in which a high percentage of students were achieving state standards:

I mean we did school visits as a staff 4 years ago when we were trying to find places that looked like us that were successful, and we were the best staff, the most resources of any—hands down—anywhere we went. [But this time] it was like...these people are getting 90% of their kids reading at benchmark and they look exactly like us and they're operating with like a third less resources.

The principal pointed to these visitations as key turning points in changing the expectations of his staff for how they as a school could get their particular student population to achieve. In a related way, the investment by a New York City elementary school principal in a year-long professional development series focused on differentiated instruction was meant to help his staff visualize more concretely how to align instruction more responsively to their students' strengths and needs. Though aimed at all staff in the building, this investment in capacity building concentrated on differentiation of teaching time and attention, such that the most needy students would get a more powerful learning experience.

Altering Student, Teacher, or School Assignment Policy

Beyond the gross distribution of staff FTE or dollars and the systematic differences in staff capacity that disadvantage some school or students over others, significant inequities often exist in the ways staff and students are assigned to each other and to schools. Especially at the school level, but also through district-level action,

leaders face the puzzle of matching students to the settings and people who can help them learn most effectively. Attempts at doing this matching more equitably sometimes involve altering the assignment of students or teachers to schools. Within schools, it may mean searching for a more equitable assignment of students among programs, classrooms, instructional experiences, and teachers.

Assigning students more equitably to schools

Assignment policies can enhance equity in several ways. First, school assignment can increase certain students' access to programs they may need and in which they were formerly unable to participate. Second, the reassignment may change overall enrollment distributions, thereby ensuring that enrollment shifts do not erode certain schools' capacity to mount high-quality programs. In the extreme cases, reassignment can mitigate against or forestall precipitous enrollment declines, which can have a devastating effect on a school's staff capacity, not to mention morale, particularly in cases where the decline is due to larger economic and demographic shifts occurring throughout the community.

To return to the Eugene case, the flow of students out of neighborhood schools and into alternative schools under the district's choice plan had generated some serious inequities that prompted several reassignment policies. The first policy, to forestall the tendency for middle-class students to leave neighborhood schools, created an "alternating pick" lottery system to increase the probability that low-income applicants would have access to these schools. The second policy capped enrollments in secondary schools, slowing a trend for certain more affluent schools to increase enrollment, thereby accelerating the extent to which the student populations in other schools were increasingly segregated by social class. Third, the district ended the collocation of alternative schools and neighborhood schools, as this practice seemed to encourage the migration of students from the neighborhood school to the alternative provided under the same roof. Together, these reassignment policies were meant to prevent the growing separation and concentration of student needs by social class, with its natural tendencies to exacerbate inequities. These moves were not without controversy, a matter we take up later in the chapter.

Assigning teachers more equitably to schools

Either by guiding the movement of teachers among schools, or simply recruiting and hiring in a targeted way, districts and schools together could seek to assemble a staff that better matched student needs, a matter most dramatically seen in

schools that served a large English language learner (ELL) population, generally Spanish speaking. In one New York City Empowerment School, the principal made a concerted effort over a period of years to recruit and retain Spanish-speaking staff, especially those who had grown up in or resided in the school's community. The principal's efforts in this regard were in large measure successful, in part a reflection of the discretion granted to schools in hiring and configuring staff. One of the Eugene elementary schools, serving a similar population, engaged in a parallel effort, this time through active collaboration with the district central office and the teachers' union, to increase the number of Spanish-speaking staff in the school. This school was also one of the district's targeted schools. When developing the district policies regarding designation as a targeted school, district leaders recognized that the shift in status and focus in the targeted schools would potentially be problematic for some teachers who had worked in those schools for years. Consequently, the district negotiated an arrangement with the teachers' union to allow teachers in targeted schools an earlier window to apply for other positions in the district. They also negotiated an arrangement that allowed the school to post their open English as a Second Language positions earlier than other schools in the district. These efforts changed the composition of the staff in these two schools in such a way that students, who often found school a foreign and unresponsive environment, encountered a more engaging set of learning experiences.

Assigning students more equitably to teachers, programs, and groups within schools

No matter what resources came to the school—in the form of increased dollars, staff with particular capabilities, an appropriate mix of students—a finer-grained challenge resided within the school. Here, leaders confronted a range of inequities, some overt, some less visible, that meant that certain groups of students were systematically exposed to teachers without the capabilities requisite to meet their needs, or some students clearly needed more and different kinds of help with their learning. To address within-school inequities, school leaders could take many steps—especially with the way particular teachers were asked to take on classroom assignments that played to their strengths or, conversely, were shifted to assignments that minimized the effects of their weaknesses—as in one New York City School in which struggling teachers who showed no sign of responding to feedback and instructional assistance were immediately removed from the regular classroom and given small pull-out assignments, while their classrooms were taken over by more competent specialists.

The pursuit of equity through student assignment was nowhere more dramatically seen than in the grouping of students, and here differing notions of equity came into play. In one New York City Empowerment School, students were clustered by their apparent profile of multiple intelligences into separate academies within the school, each designed to approach learning in ways that optimally matched particular learning profiles. Another principal, holding steadfastly to a principle of social equity, persisted in assigning students to classes heterogeneously, on the basis that this would prevent pernicious forms of social class segregation that he saw as corrosive to learning of all students, and especially those from low-income backgrounds. In contrast, the principal of another school in the same district advocated regularly adjusting homogeneous grouping of students for literacy instruction, on the premise that this would most effectively lead to greater equity of academic outcomes.

However assignments were made, and whoever was officially assigned, the net effect was to alter the way staffing resources were deployed and used—and often for little or no change in the outlay of dollars or FTE. Where the reassignment enabled needy students to get better or more concentrated help with their learning, the reinvestment of staffing resources was differentially based on equity principles, whether or not they were so stated. A number of subtle possibilities arise here that are easily overlooked by educators seeking a structural, and often more expensive, solution to inequities in the schooling experiences or outcomes of those they serve.

Altering the Allocation of Instructional Time

Two kinds of time reallocation within the schools we studied were designed to give struggling learners a better chance at success, by enabling some learners to get more minutes of instructional time or more concentrated instructional attention (or both) than they otherwise would have, or more than other students experienced. The first approach simply added to the total hours of instruction for certain groups of students over and above what they would typically experience. Either outside the school day, as in after-school programs and Saturday school, or within the formal school days through additional intervention periods, these students spent additional time working on literacy or mathematics (and occasionally other subjects), sometimes with their regular classroom teachers and sometimes with other instructional staff. One district institutionalized this effort by selectively extending kindergarten from a half day to a full day in a small number of the schools serving the most impacted students. Other districts or schools increased the minutes of the

school day, made resources available for Saturday classes, or used other devices that added time to the weekly or yearly instructional total.

A second kind of time reallocation came about by deploying staff in more concentrated arrangements that enabled teachers to spend intensive small-group or one-on-one time with particular students who needed it the most. For example:

- In one elementary school, supplementary funds intended to reduce class size were used to create team teaching arrangements in kindergarten through second-grade classrooms, on the supposition that early literacy was a fundamental foundation for subsequent school success.
- Intervention classrooms in another school replaced the 25-student classroom with one that focused on the same material with a classroom group of 6, comprised of students who were experiencing difficulties, as indicated by their periodic assessment results.

These arrangements represent a way in which the deployment of additional staff in unusual roles (team teacher, intervention teacher), alongside or sometimes in place of a regular classroom teacher, effectively increased the total time and attention that particular students received.

Pooling Existing Resources to Create a Critical Mass of Support for the Greatest Needs

One final means of investing differentially in instructional support for particular groups of students occurred through school leaders' efforts to pool resources, such that, in the aggregate, they enabled an improved form of instructional service to be targeted to a particular learning need. We saw this most dramatically in ways that districts or school leaders clustered English language learners (ELLs) so that the special funds available to serve their needs could facilitate the hiring of staff with specialized skills. Without the clustering, these students would have been dispersed among a number of schools or classrooms that would not be able to create the specialized program. Two schools in New York City reflect this strategy:

One school, created as a magnet for recent immigrants from Spanish-speaking countries, constructed a dual-language program that promoted fluency in both their native language and English. Another large school in the midst of a schoolwide restructuring into four thematically defined academy programs set up one of the academies with a focus on "world studies." The great majority of the school's ELL students were clustered in this program, as were most of the bilingual teachers.

Schools in other districts reflected other variations on this theme, and in several instances leaders were able to articulate a productive way of thinking about what they were doing with resources. Most notably, rather than approaching ELL students as a problem, they saw the students themselves as a social resource, whose cultural backgrounds could enrich the learning experience for other students, given the right kinds of conditions and support.

Such pooling arrangements are not without potential drawbacks. Clustering of students who might otherwise be underserved by the school can create a kind of segregation that can have an isolating effect, with negative social and academic ramifications. But our informants seemed to believe that such concerns were outweighed by the benefits that students would receive from a staff that had the skills and commitment to best meet their particular educational needs.

Managing the Political Dimensions of Equity-focused Investments

In taking action aimed at increasing equity of opportunity across all schools, district leaders are being asked to make judgments based on comparisons of the circumstances and needs of specific schools or groups of students, and ultimately develop resource plans that represent the district's goals and objectives. These decisions can, and often do, signal the way that specific schools and groups of students are valued within a district, which can have profound political implications for leadership within the district and the community. In attempting to manage the political dimensions of both introducing and sustaining investment practices that target equity within a district, three central strategies or practices appear to show promise from the cases we explored for this study. Those strategies suggest three overlapping phases of equity-focused political work that play out across a long-term time frame.

Planning for equity: In this phase, which can last years, leaders engage in groundwork that identifies the equity challenges facing a district or school and publicly builds a community mission that prioritizes enhancing the equity of the educational system.

- Shepherding the ongoing equity conversation while taking action: During this phase, leaders engage stakeholders in continuing conversation leading up to, and implementing, specific decisions to invest resources disproportionately, and in so doing, try to craft coherence and foster deeper commitment among the various parties.
- Anticipating and persevering in the face of pushback: During this phase, subsequent to one or more resource-related decisions, leaders anticipate and manage pushback from interests both inside and outside the education system who perceive their relative advantages to be severely reduced or eliminated and actively resist the proposed changes.

We elaborate on these stages by reviewing recent actions in Portland's reform planning process and the decade-long chronology of Eugene's efforts to underscore the political dimensions of this investment story and how it can be addressed. While the dynamics revealed by these cases are particular to district-level action, the same dynamics play out in resource decisions within schools. In addition, though the specific conditions of these case stories are not necessarily replicated in other school districts, the basic principles are likely to apply in many instances, as we indicate by references to equity-related resource allocation cases from our other sites.

If equity principles are to guide the investment of staffing or other resources, a legitimized forum for these concerns to surface is helpful, along with multiple occasions for these issues to be given voice, and a process that develops both technical plans and broad-based, stakeholder support.

Planning for Equity

Equity is a goal that requires long, strategic, persistent, and patient planning for many reasons, among them to air, recognize, appreciate, and adjudicate differing values, perceptions, and interests that come into play as leaders pursue an equity agenda.

Sustaining the dialogue: Planning for equity in Eugene

A look at equity-oriented planning by leaders in Eugene suggests a basic principle: to keep planning anchored to equity, leaders may find it useful to engage in a long-term, multistage planning process that continually revisits and builds a politically viable basis for equity-oriented investments. A brief review of Eugene's decade-long process of planning and enacting an equity agenda under-

scores the point. This process, summarized in Table 12, reveals successive stages through which equity concerns became identified, explored, and embedded in

Table 12. Chronology of District 4J's Pursuit of an Equity Agenda

Time Frame	Key Events	Central Equity-related Concerns	Outcomes
1999–2001	Schools of the Future planning process and follow-up	Surfacing inequities inherent in neighborhood schools versus alternative schools of choice How equal-per-pupil allocation process yielded inequitable resource distribution, especially in context of enrollment decline Consideration of potential school consolidation and closures, and their potential differential impacts	Public recognition of equity concerns Need for resolution of disparities in school resource/attendance situation
2001	Board discussion on establishing equity-related principles	Search for consensus among different stakeholders concerning school choice and its ramifications	Consensus statements on school choice that recognized equity principles
2002	Board retreats and follow-up actions	Continued discussion of the relation between school funding and school choice	Board forms a commitment to close achievement gap and enhance equity as central district goals Equity grants to the neediest schools
2003-04	Access and Options Committee planning process, and aftermath	Exploration of alternatives for realizing equity principles within a framework of school choice	Committee recommendations concerning school configuration alternatives and ways to enhance access and equity Differentiated literacy funding to all schools, based on weighted formula
2004–05	District outreach process (through survey, focus groups, community forums, meetings with school staffs, principals, and union)	Assessing stakeholder views and commitments, in relation to <i>Access</i> and <i>Options</i> recommendations	Superintendent's recommendations to board—e.g., changing lottery system for alternative schools, redrawing attendance boundaries, designating neighborhood academy schools Extra funding to academy schools
2006-08	Shaping 4J's Future planning process (focus groups, survey-driven deliberative process, etc.)	Imagining services and facilities for the next 5 years and more to support district's instructional program, to increase achievement of all students and reduce the achievement gap	Reaffirmation of equity, excellence, and choice as district values Limiting inter-school transfers (to limit drain from poorer schools) Movement toward differentiated staffing

a larger vision of the development of the district, often in the face of overt or potential resistance.

The case of Eugene underscores the fact that, in the early stages of the process, district leaders took deliberate steps to identify publicly the scope and nature of equity challenges facing the district. Specifically, they first invested resources in exploring what equity was (and was not) within the district. Defining the term equity was a critical leadership action that enabled participants to come to a shared, collective understanding of the differences between allocation policies designed to equalize resources across the district and those that promote an equity agenda. Doing so laid a critical foundation upon which district and school leaders could develop a broader program and curricular restructuring agenda focused on equity. From there on, successive cycles of planning and action, involving numerous committees (Schools of the Future, Access and Options) and district-sponsored initiatives (Shaping 4]'s Future), built on the foundation. Critical to this process was the inclusion and support of union representatives, school board members, parents, and members of the local business community. District leadership invested in a process that included these parties and built a broad-based network within the district and throughout the community. At each stage, district leaders invested heavily in the planning that surrounded both the process of trying to understand the differences between equality and equity, as well as in the deliberate move to include a broad cross-section of the community in the process of moving forward toward a shared policy goal for the district.

Another key element to Eugene's success appears to be the deliberate transparency of the process. Committees designed to explore issues of equity or inequity were broad based and inclusive, and reports from these committees were openly discussed in school board meetings and in meetings the district leaders held with members of the public. In our conversations with union leaders, principals, faculty, and parents, it was clear that they knew what the district was up to with these committees and initiatives, and what the goal of all this work was—to increase access, opportunity, and achievement for all students within the district. The clear, consistent, and open message from district leaders appears to have helped build support among both district personnel and the community.

Even with an extensive process of planning and an initial base of political support for equity-related actions, a continuing proactive conversation offers a much needed way for participants to work though the inevitable distractions and disagreements.

Shepherding the Ongoing Equity Conversation While Taking Action

Any time a school leader decides to diverge from the notion of equal being fair, a case must be made for why it is more fair to give one person or group more resources than others. At a district level, this conversation and debate is magnified, and conscious steps to shepherd this conversation over time appear to be helpful and probably necessary.

Our data point to four leadership actions that show promise for managing the political dynamics of this process over time:

- Being proactive rather than reactive
- Basing decision making and public discussion in data
- Investing in coalition building
- Translating equity principles into tangible investments

Being proactive rather than reactive

One of the clearest messages coming from the Eugene case is the significant advantage to getting out in front of this process. As noted in Table 12, the superintendent called for a process to assess the current state of the district shortly after assuming his position. The resulting *Schools of the Future* report highlighted a number of areas in which the district was deficient, with issues surrounding dimensions of equity at the forefront. The report and its conclusions acted as a springboard for further efforts to both better understand and meet these challenges. Clearly, being proactive and taking the lead on exploring, identifying, and articulating the district's equity challenges allowed district leaders to direct the initial conversation (both within the district and the community) surrounding issues of equity, as well as demonstrate the district's ability to critically assess its performance as a public sector institution.

Basing decision making and public discussion in data

One of the most significant and lingering benefits from the No Child Left Behind (NCLB) policies of the recent past may be the amount of school-level achievement data produced. These data have fueled conversations of many kinds among many stakeholder groups, and the conversations are often about equity. School leaders and other audiences could see very clearly that the gap existed, where it existed, and for whom it existed. The increased transparency created an objective yard-stick for the public to measure and critique the educators' work. It also provided a much-needed catalyst for creating new and innovative investment strategies that target underserved students.

In Eugene, as elsewhere, this wealth of specific performance data allowed district leaders to provide quantitative evidence of a difference in performance for specific populations of students across the district. Mining the data for answers, principals were able to identify students who were consistently falling behind academically. As a result, initiatives such as full-day kindergarten, before- and after-school programs, and additional, intensive reading and math instruction were developed. At the district level, the examination of data supported the creation of policies designed to reallocate resources for specific programs and students.

Investing in coalition building

What may be a by-product of all the planning and processing that occurred in Eugene is the way this investment resulted in the creation of a broad coalition of constituents having a shared interest in the process and the outcomes of equity policies within the district. The length and complexity of the processes at work are also an indication of the degree of coalition building that may be necessary to make an equity agenda a reality and to sustain it over time.

Not all our districts displayed such a continuous and persistent dialogue among stakeholders orchestrated by district leaders. That is not to say that an equity agenda was either absent or uncontested. In New York City, for example, a primary justification for the elaborate accountability system (fashioned by leaders with backgrounds in civil rights law, among other experience) was to provide multiple streams of feedback to educators and other audiences in the hope of addressing established achievement gaps among the city's diverse student population. Under a mayoral control arrangement, and absent a viable school board, the city's current reform arrangement does not create the same space or context for the public deliberation of value-based principles that the Eugene case exempli-

fies (Fruchter, 2007). Under such circumstances, coalition building to support an equity agenda must find other avenues of influence.

Translating equity principles into tangible investments

Finally, the fact that planning is punctuated by periodic actions that build incrementally on each other means that an equity agenda is more than just talk. The Eugene case illustrates one way that participants arrived at principles that embodied an aspiration to address inequities, resulting in specific decisions about the development and implementation of resource investment strategies. The resulting steps set the stage for the next round of agenda-building and deliberation.

Anticipating and Persevering in the Face of Pushback

As they shepherd the conversation, district leaders will inevitably face pushback from constituencies who feel slighted by the impending or recent allocation decisions. Issues of equity and fairness as they relate to the investment of resources across a district can create pockets of tension both inside and outside schools and districts. Challenges can at times be less about the actual amount of dollars going to a school and more about the ability of parents to control access to, and opportunities for gaining, social capital from schools or programs. One of the least understood and most complex dimensions of pursuing a districtwide equity agenda is in anticipating the types and degrees of staff, family, parental, and community pushback. Clearly, not everyone is going to consistently support district actions that invest resources differentially.

A growing cadre of parents in Eugene, for example, began to push back on the notion of differential funding for schools, and questioned the fairness of a funding formula that was designed to be unequal. For example, when a proposal was forwarded by the district to provide transportation to a school of choice for students who could not get to the school otherwise, parents with children already attending that school (who were providing their own transportation on a daily basis) asked the district if transportation would now be provided for all students.

What incidents like this began to suggest was that parents in the schools with fewer ELL students, students from low-income backgrounds, or students from single-parent households (the nontargeted schools) were comfortable with the targeted schools getting additional resources if the resources were used *within* those targeted schools—not used to integrate those targeted students into other schools/programs across the district. A particularly troubling representation of this per-

spective was seen in the dismay expressed by some parents toward teachers who had decided to send their own children to a targeted school. "That's a good school for *those* students, but..." was the sentiment expressed by one questioning parent.

The pressure to resist changes in resource reallocation practices can also come from school personnel who are impacted, especially when resources are limited or shrinking. In the Eugene case, early efforts to provide the targeted schools with additional resources came at a time when there was an overall increase in the size of the district budget. The district was able to supply all schools with an incremental increase while simultaneously directing proportionately more resources to the targeted schools to help meet the district's equity goals. Under those circumstances, educators throughout the district could readily understand and support the adjustments made in the district's resource allocation system. However, when resources become more limited (as in the current fiscal environment), concerns can mount from those working in schools that are not targeted for additional supports, as they may feel they are being asked to continue to improve performance with proportionately fewer resources than those schools identified as needing additional, equity-based supports.

For purposes of better understanding the nature of this kind of pushback, we have defined it as *the margin of perceived competitive advantage*. A general summary of this pattern of behavior is that those who have historically held a competitive advantage within a society and school system have a dynamic, flexible threshold of acceptance or support for allowing others who have not held the same advantages to receive temporarily an unequal distribution of access or resources so that they can catch up. This acceptance and support usually lasts up until a point at which the historically advantaged ("the haves") perceive their ability to maintain and perpetuate a margin of increased access to, and control of, information or resources (their "advantage") is threatened.

Looking at these episodes of inconsistent and conditional support from a school's or district leaders' perspective, one can begin to anticipate how and when they might anticipate pushback from staff, families, or other community members. If superintendents or district leaders were trying to move forward with a targeted funding formula that treated schools disproportionately, they might expect both support and potential pushback at predictable points and, knowing that, take proactive steps to counter the pressures to back away from differential investments. As they do so, they will likely need to replicate the kinds of tactics discussed above

to shepherd the equity conversation over time. As in the Eugene case, they will be getting out in front of the issue, naming it and framing it in the most productive way possible, engaging in data-based conversations about different scenarios and, as they do so, build coalitions of support.

Chapter 5

Toward Investment in Learning Improvement: Conclusions and Implications

There is a rhythm to the distribution of resources in districts and schools. Closely following the annual budget cycle, leaders at different levels of the system work from existing funding categories, dollar figures, and FTE (full-time equivalents) counts in the most recent round and make incremental adjustments—positive, negative, or none at all—as they imagine the next year of budgeting and staffing. The whole process emphasizes stability, and for good reasons: livelihoods are on the line, communities hold expectations regarding what will be offered in schools, and education itself plays out in relationships that require continuity over time. No wonder next year's budget looks like this one, and next year's staffing roster is so familiar, but for the new names replacing those who have retired or left the system. To be sure, hard choices are made in the process, and especially in times of tight funding, painful losses are reflected in the budget process, but there is a natural tendency for these choices to be limited as much as possible.

The pressure to retain the familiar patterns of the annual resource allocation cycle leaves out two important matters. First, questions of the alignment of staffing or other resources with learning improvement priorities are easy to ignore, as the existing conceptions of staff positions and daily practices may not be optimal for enhancing learning. Considering other options and approaches can raise many questions that are hard to answer, especially in the absence of clear or compelling data or evidence of proven alternatives. It is also easy to be mesmerized with the test score data alone, without asking broader and more compelling questions about what learning improvement might entail. Second, questions of a long-term focus and payoff of resource investments are also easy to forget: the tyranny of current urgencies may make long-term matters seem academic.

But the essence of leadership is that it imparts to a district or school a long-term sense of purpose, identity, and commitment, and mobilizes effort in pursuit of those purposes. District and school leaders have the opportunity and the obligation in contemporary urban schooling to take a long-term, learning-focused view of their work. As they do so, viewing resource allocation as investment in learning improvement opens up a realm of possibilities for improving the quality of urban education. Here the essential idea is one of making resource-related decisions with

a long-term expectation of payoff or return on the investment, and corresponding steps taken to make good on that expectation.

This study focused on what it means to *invest* staffing resources in pursuit of learning improvement in urban schools and districts. In doing so, we took advantage of a set of districts in which the leadership vision and, in all but one case, the continuity of executive leadership made it possible to see how investment can work and what is involved. In particular, our engagement with these sites across a year and a half yielded specific pictures of three dimensions of the puzzle when districts take seriously the idea that staffing resources should be directed at enhancing the power and equitability of learning opportunities:

- 1. *Likely investment targets and conditions*, set up by school districts to guide how specific staffing resource decisions are made.
- **2.** *Investment strategies* that mobilize specific staffing resources to strengthen the way education is accomplished.
- **3.** The dynamics of investing for equity, given the mix of technical puzzles and political forces that inevitably play out when resources are invested differentially as they must be to address enduring inequities.

A brief recap of what we learned about each of these dimensions follows.

Investment Targets and Conditions

The districts we studied face staffing challenges that are well known in urban school systems across the nation, necessitating nearly constant attention to strengthening their teacher workforces and bolstering the ranks of formal school administrators. Accordingly, district leaders are taking steps to address these needs, ranging from aggressive recruitment campaigns to induction support programs to in-house preparation programs. But these district leaders have taken aim at a third, emerging staffing challenge that can easily be overlooked: that of putting in place a sufficiently robust and coherent cadre of staff who offer instructional leadership to teachers far beyond what can be managed by school principals, who are traditionally seen and expected to work as instructional leaders in their buildings. Located in between the principal and the classroom, or in between the district central office and the school, a variety of positions are subsumed in this cadre, including instructional coaches, instructional leader-

ship specialists, assessment coordinators, and others who are in a position to bring expertise to bear on questions of instructional improvement. But the target of investment is a core set of staffing challenges associated with these positions, among them finding the right people for the job, normalizing and legitimizing their positions within the system as a whole, and supporting their work over time.

The districts created an overarching set of investment frameworks that influenced how school principals and central office officials approach specific staffing decisions. These frameworks significantly alter who assumes the initiative and responsibility for staffing decisions, among other things, and could have important implications for leaders with respect to their decision-making authority, ability to imagine creative possibilities, and motivation to address staffing matters. In particular, the following four frameworks, often present in particular combinations, set the stage for how staffing resources are invested.

- A mandated investment framework imposed on district and school leaders a requirement to stipulate the ways in which a particular staffing resource might be used.
- A negotiated investment framework, unlike mandates, offered the recipients varying degrees of latitude to choose among options. Negotiated investments sometimes resulted from an external partnership, grant, or other discretionary source, and within parameters set up by this source allowed leaders greater latitude in defining how staffing resources will be used.
- An incentive-based framework offered rewards or imposed sanctions, depending on staff performance in response to particular school-level outcomes (or occasionally unit-level outcomes, in the central office). Typically, these actions affected individuals in leadership positions (e.g., school principals), who might be commended, compensated, or even terminated, based on the results they obtained.
- A market-based or market-like investment framework encouraged staffing resource decisions that responded to the demand for particular services, generally through choice arrangements (e.g., parents choosing schools or programs, schools choosing support services). This type of framework could be accompanied by allocating discretionary resources to the units (e.g., schools) that were participating in the market.

These four, often in combination, reflected overarching conditions that districts created to guide the use of resources.

Investment Strategies

Within the parameters created by the combinations of investment frameworks just described, leaders in the districts and schools set out to address their central staffing challenges, especially through the use of staffing and other resources that created a thicker layer of instructional leadership support, a better base of instructionally relevant information, and flexibility as well as support for using school-level staffing resources in a more differentiated way.

Enhancing and supporting leadership was at the center of these districts' investment strategies. In each of our case study districts, instructional improvement strategies prompted the creation of new leadership roles, many of which were focused on providing instructional support to specific schools and teachers. Positions such as instructional coaches, achievement coordinators, data and assessment specialists, and other types of teacher leaders and central office support staff were utilized in a variety of ways. The creation of these positions was sometimes supported with additional new revenue, but also realized through a reexamination and repurposing of existing staffing resources. Often these positions represented an effort by the district to develop systems that support the continuous improvement of instructional leadership expertise and capacity.

Three overlapping investment strategies were at work:

- *Investing in instructional leadership within and across schools.* This strategy (re)directed staffing resources to positions, team structures, and other arrangements that increase instructional leadership activity inside or across schools. As such, it concentrated on both the supply of people able to exercise instructional leadership and their capacity to do so.
- *Investing in data-based practice*. This strategy aimed more at staff performance, and also capacity building, by focusing resources on the development of useful data sources and the systems that facilitate the use of these data for addressing problems of practice in classrooms and schools. Typically linked to accountability systems, this category of investment strategy included efforts to orchestrate staff, time, and technology so that school and district staff could

engage in a more continuous inquiry process about the learning improvement challenges they face.

Increasing capacity, flexibility, and support for school-level investment. This strategy sought to enhance the discretion and wherewithal for school-level staffing decisions that served instructional support needs, as determined by school leaders. Coupled with these arrangements for alternative staff supply, role definition, capacity, and performance were attempts to build leaders' capacity to make good use of their flexibility and discretionary resources.

School and district leaders responded to these strategies in ways that aligned staffing resources with learning improvement priorities. When given increased flexibility to invest staffing resources, school principals fine-tuned teaching assignments (e.g., by encouraging departmentalized teaching roles in elementary grades, setting up team teaching arrangements, and reassigning staff with leadership potential to instructional coach roles), rearranged time for instruction and professional collaboration (e.g., through passing periods and various team meeting arrangements), and used discretionary funding to prompt professional learning in new ways (e.g., through visits to see promising practices in other schools, specialized professional development, and schoolwide leadership facilitation). At the district level, central office staff changed their practice to link accountability expectations for principals with those expected of instructional staff, often through assignments to work in targeted ways with a network or specified group of schools. District staff experimented with new ways to provide responsive support to principals, while pushing for greater emphasis on matters related more directly to instructional leadership such as professional development, classroom practice, and specialized programs.

We cannot say with any certainty what the long-term payoff of these arrangements will be; in most cases, the strategies have not been in place long enough to show sustained gains. The early returns are encouraging where districts have connected the investment itself to conditions that create a web of support for productive investments of resources over time. In such instances, district and school leaders have recognized that investing staffing resources in learning improvement means more than getting people into positions, especially new and unfamiliar positions that, however exciting they may be, will take time and care to become fully functioning and welcomed parts of the system. And the contribution of these investment activities is hard to separate from other features of the reform environments each district has established.

Investment for Equity

The theme of increased differentiation that is prominent in the investment strategies summarized above—including differentiation of support for school leaders, teachers, and teachers' work with the varied learning needs in their classrooms—brings to the fore both the possibility and the problems of directing resources to the equitable improvement of learning. Because pursuing the goal of equitable learning improvement almost always means more than equalizing resources, opportunities, or treatment, leaders find themselves in the position of differentially investing resources to realize an equity agenda. Students who have been historically underserved generally need more than their more advantaged peers; hard-to-staff schools often require a greater investment in staffing than those that have little difficulty attracting staff; and so on. But leaders investing in equity are likely to encounter stiff resistance from stakeholders who have traditionally been advantaged by existing systems, and may need to adjudicate the contest that inevitably results over what is fair.

District and school leaders in the sites we studied were more than willing to take this challenge on. Both rhetorically and practically, leaders place a high value on achieving greater equities in urban schooling, especially through addressing both the opportunity gaps that are readily apparent and the resulting disparities in performance that collectively reflect the achievement gap. But in taking up this challenge, they predictably encountered some conceptual, political, and technical issues that needed to be addressed if an equity agenda is to be sustained over time.

First of all, investing staffing resources equitably—which generally means in a differentiated and apparently unequal way—is difficult conceptual work. Leaders and other stakeholders have to come to grips with the slippery definitions of equality, equity, and fairness, and more than one conception of fairness is at work. Coming to full awareness, no less a working consensus, on what is fair takes hard thought and sufficient dialogue at the onset of the initiative and throughout the process of designing and implementing specific strategies.

Given the competing interests at play, the investment decisions themselves and their aftermath involve equally difficult political work (Whose interests are being served? How can a viable coalition of interests be assembled behind a particular differentiated allocation plan?). At the same time, complicated technical questions need attention (Exactly what will this formula yield in successive years for Schools A and B and C? How can the particular needs of special education students and

English language learners be attended to?), and though the technical solutions never remove the political wrangling, they can do much to clarify the debate and the likely consequences under consideration.

The districts and schools wrestled with these matters in generally productive ways, and from their experiences some principles for pursuing an equity-oriented approach to investing resources and for managing the politics of equity can be discerned. The politics of equity-focused investment seemed most productively managed where leaders

- Adopted a long-term horizon for planning equity-related investments—in effect, they invested in planning for equity. Through elaborate processes with repeated occasions for engaging stakeholders, they built an awareness of equity issues, some working consensus on equity principles, and the basis for more focused action.
- Continued to shepherd the equity conversation over time, while taking action on steps that were feasible. In shepherding the conversation, they took pains to be proactive, getting out in front of the issue rather than reacting to an equity-related debate framed by events or other parties; used data publicly and often as a reference point for conversation; and invested in coalition building to broaden the base of support for decisions that could be unpopular in various quarters.
- Anticipated and persevered in the face of the inevitable pushback from groups that perceived differential investments to be unfair to them and their interests, even if justified as a productive way to address the achievement gap.

Across all these steps, the overarching principle was that the pursuit of equity goals meant taking the long view—implied by the notion of investment itself—and engaging in processes that unfolded over years.

These leaders would be the first to acknowledge that differential investment of resources is no guarantee of equitable consequences, and so a continual adjustment process is called for, whereby leaders watch for equity consequences, both intended and unintended, and adjust their investment frameworks and related allocations accordingly.

Investment Challenges in the Current Climate of Retrenchment

The leadership actions undertaken in our case study districts and schools were certainly influenced by the availability of resources, and the fiscal circumstances in which the cases are located have clearly changed over the time period studied. However, it would be a mistake to assume that investing in learning improvement can only be contemplated in times of fiscal plenty. Quite the contrary: most of our sites had experienced severe retrenchment in recent years, and had used these times as occasions for creative improvisation on what they had been doing before.

In a similar spirit, the current financial hard times also provide the opportunity for leaders to critically examine their investments in staffing resources and consider ways in which resources can be shifted, reallocated, or repurposed with a more strategic scope or focus. The economic challenges further increase the tensions that leaders must negotiate when it comes to decision making about staffing resources, particularly with respect to the differential allocation of scarce resources among schools and students with varying needs. And as at times of relatively plenty, there are strong voices that assert that the only fair thing to do is to make sure everyone bears the burden equally, a move that tends to reinforce any inequities in the current resource allocation system. So the challenge of finding the most equitable way of proceeding still remains, even if the main business of the day is making cuts.

What Can Improve the Investment of Staffing Resources in Learning Improvement?

Across our study sites, we found that leaders can and do take action and create conditions, tools, and systems (both formal and informal) that (1) assist with efforts to reallocate staffing resources more strategically, (2) prioritize and address equity challenges through resource investments, (3) communicate with the broader community regarding priorities and action plans that make the case for necessary change, and (4) take steps to increase the likelihood that the investment strategies will pay off. One of our informants captured a sense of possibility that many of the leaders we came to know exhibited:

I think the common view is that principals can't do much with the resources in their schools... the contract won't let them, the district won't let them, or they simply don't think they have enough... but I have never bought into that view... I think there is a lot that we can do... but it takes a lot of work... it takes getting your teachers on board, it often requires working with the union, sometimes you have to engage your parents or your PTA... so are there things that can get in the way? Yes. Can you do everything you want? No. But over time there are a lot of things you can do. You just keep plugging away at it....I think that too many of my colleagues give up when they realize that they can't get there by June... they think that's all the time they have ... but for principals it's about thinking ahead, what you want the school to look [like] and be in 4 or 5 years. It's about taking care of those you have in the building now, but also thinking ahead to those who will come through the door tomorrow and the day after.

To realize these possibilities, unsolved problems of leadership practice must be addressed, and leaders must be provided with various kinds of help.

A prominent unsolved problem concerns support for systemic and sustainable leadership action. Educational leaders tend to distinguish between investments for students, classroom teachers, and instructional leaders, and they have well developed frameworks for thinking about supporting the first two. But less frequently do they assume that people in leadership roles need support, too, and as a result, build an accompanying aligned system of leadership support related to the changes made in individual work responsibilities, supervisory relationships, or organizational structures. Even in cases where productive leadership activities are taking place, attempts by school and district leaders to reallocate staffing resources often occur in a piecemeal fashion, sometimes due to budgetary constraints or uncertainty, but also influenced by whether or not these systems of support are in place.

A second problem—perhaps more properly thought of as an enduring tension to be managed, not solved—resides in the politics of resource investment. Even when leaders succeed in differentially targeting or reallocating resources, a substantial counterforce emerges in the form of pushback from a variety of sources. Anticipating this pushback and finding the political will to stand up to it is a major issue for leaders to handle. Sustaining needed changes may be more challenging than the initial conceptualization and implementation of leadership actions regarding the types of investment strategies to pursue.

Learning to think in investment terms, manage the politics of differential investment, and keep investments focused on learning improvement are collectively a curriculum for developing leaders that school districts (or preparation programs)

may or may not be offering. Accordingly, a different problem of leadership practice concerns the extent to which principals or other leaders are adequately prepared to address fundamental questions regarding effective and equitable uses of staffing resources. We found that principals, for example, wanted more specific knowledge about how to best allocate their own staffing resources for the full spectrum of educational issues that emerge in a specific school, district, or community. Deep and specific knowledge about the types of investments that might be most applicable and effective in meeting the unique needs and circumstances of specific schools appears to be in short supply. In essence, a knowledge gap needs to be bridged so that principals are supported in their efforts to engage in actions that will produce desired results.

Even in an impossible job, district and school leaders in our study sites demonstrated an ability to engage in strategic, coherent actions to improve student learning in powerful, equitable ways with scaffolds for improved leadership knowledge and skills. Drawing from what we learned from our study sites, we suggest that a shift is needed away from conceptualizing the leadership challenge as a matter of reducing the overload on leaders and toward an orientation that builds collective capacity at both district and school levels. Principals articulated a need for navigational tools to manage the breadth and depth of the responsibilities they assume and a way to build collective capacity to address the numerous instructional and practical challenges they face. This suggests a shift that goes beyond dependence on the heroic leadership of individuals who happen to possess unique traits, energy levels, and abilities, as well as persuasive personalities. Instead, learning-focused leadership is most evident when strategic actions are taken by leaders and leadership teams at various points in a school system that build investment frameworks, encourage innovation and flexibility in responding to unique needs, create webs of support for instructional leadership, and sustain coalitions necessary for maintaining a focus on improving outcomes for all students, and particularly for those most in need.

Methodological Appendix

This study investigates how district and school leaders create conditions and enact strategies to invest staffing resources that support powerful, equitable learning. Because this kind of research requires solid knowledge of the particular conditions, policies, contexts, and leadership actions that are undertaken inside districts and schools, we created a design that focused our attention on a small number of schools and districts (between three and five schools for each of four districts) that we could visit repeatedly over a year and a half. The schools were located in districts chosen because each, in its own way, was engaged in a variety of leadership activities at both district and school levels that were aimed at investing resources more productively and equitably. The resulting nested, multiple-case, multimethod design (Creswell, 2008; Yin, 2008; Johnson & Christensen, 2008; Johnson & Onwuegbuzie, 2004) afforded the opportunity to explore study issues in 14 schools located within four urban districts.

Study District Criteria and Selection Process

This kind of research study lends itself well to a multiple-case design of selected schools nested within contrasting district and state contexts. In this study, we focused on both district and school levels, and in order to do a good job of capturing phenomena and relating them to the actions that may influence them, we limited the study to a relatively small number of schools. Our purposive sample (Patton, 2003) included at least three schools per district, one at each level (e.g., elementary, middle, and high school, and also some combined grade configurations such as K–8 and 7–12), to maximize our ability to get at subtle features of staffing resource allocation that are influenced by the level and size of the school. The final sample included three schools in each of two districts (Eugene and Portland), four schools in a third district (Atlanta), and five in the fourth (the New York City/ Empowerment Schools Organization).

In general terms, schools were chosen to maximize three primary criteria:

Progress on improving student learning for the full range of a diverse student population, in whatever terms the school defined progress, so long as this definition considered progress of all identified subgroups as well as the school's population in aggregate. Of those schools that met this criterion, we invited a range of possibilities, from those that were performing relatively low in an abso-

lute sense to others that were performing relatively high, on whatever measures were considered locally meaningful.

- Reconfigured leadership arrangements within the school designed to share the leadership work and maximize leaders' attention to teaching and learning. Thus, schools were identified that had set up their leadership assignments, team structures, and roles so that considerable attention was directed to teaching and learning issues.
- Experimentation with the allocation of staffing resources to maximize attention to the equitable improvement of student learning. Schools were also considered for the study that had directed their staffing resources (all categories of staff) to address school needs for serving a diverse student clientele equitably.

By selecting schools that fit these criteria, we were purposely seeking study sites that would be likely to display the focus of the study in sufficient detail to allow us to capture it in relatively well established forms. To make sure we saw learning-focused leadership in action in a sufficient variety of schools, we chose schools from all three levels, as noted above, and also sought some variation on the following secondary criteria in sampling choices:

- School size and structure. An attempt was made to include, across the full sample, both large and small and more and less traditionally organized schools. This enabled us to get at the interaction of leadership role configurations and structures that encourage collaborative work (e.g., at the high school level, including one school explicitly organized into small learning communities and others that were not).
- Leadership turnover and stability. Having schools in the sample in which the formal leadership team was quite recent, and in others where it had long-established roots in the school community, helped to surface the variety of dynamics associated with the opportunities a leader has to establish trust or provide a fresh perspective on the work of the school.

We assembled candidates in each district site after consultation with district officials and other knowledgeable observers through a networking process that surfaced approximately twice the number of possible sites than needed. We then contacted prospective school sites, and briefly visited them to verify their fit with the criteria and their willingness to be included in the study, and chose the set that

maximized that fit across all four study sites (not all criteria could be equally met in a single site).

District (and State) Sampling Plan

The sample for this investigation included four districts and their corresponding state settings, each of which had made the revitalization of school leadership a major priority, though they had sought different means to do it: Atlanta Public Schools (Atlanta, GA); New York City/Empowerment Schools Organization (New York City, NY); Lane County School District 4J (Eugene, OR); and Portland Public Schools (Portland, OR). Two other attributes of the district setting were important:

- Urban setting, poverty, racial, ethnic, and linguistic diversity. We aimed to work in sites that were primarily urban in nature, serving student populations that are racially diverse and poor. Our focus on sites of this sort stemmed from a desire to understand learning-focused leadership within school districts and schools facing the most daunting learning challenges.
- The Wallace Foundation connection. To the extent possible, we wished to work with sites that had active relationships with The Wallace Foundation, either through participation in the Foundation's *Leadership Issue Group* (LIG) activity between 2005 and 2008, or via involvement in grant-supported leadership development work, as part of several foundation-initiated grant programs between 2002 and 2009.¹¹ We expected these sites were among those most likely to be engaged in the types of leadership practices that were the focus of this study, while also affording us the deep level of access our analysis demanded.

¹⁰ As described in the body of this report, under the current organization of the New York City Department of Education, all schools in the city choose to be part of one of 14 School Support Organizations (SSOs), the segment of the district central office that offers the most direct support to the school. We concentrated our research on the largest of these SSOs, currently called the Empowerment Schools Organization (ESO), which subsumes approximately 500 schools, or nearly a third of the city's schools. The great majority of our data collection came from schools within the ESO and, to a lesser extent, portions of the central office with which they worked, though some data providing background to our analyses came from other sources outside this SSO. In this sense, we never set out to study the whole of the New York City Department of Education reform, and NYC/ESO comprised the relevant "district" for most of our analyses.

¹¹ The Leadership for Educational Achievement in Districts (LEAD) grant program and grants to states under the State Action for Educational Leadership Project (SAELP) offered selected districts and states around the country resources for experimenting with improvements to the development and support for leadership in relation to learning improvement.

The resulting district sample included three that had an established relationship with The Wallace Foundation, as well as with other key external partners. The fourth had a long-term relationship with the Nike Foundation, which had helped the district bring concentrated energy to bear on the quality and deployment of school leadership, among other reform targets.¹²

This set of districts offered a variety of contexts in which to study the investment of staffing resources, varying in student populations, regional context, and district size, from modest-sized urban centers like Eugene to mega-city settings as in New York. The number of district settings (four) was sufficient to generate school sites at each level (elementary, middle, and high school) without overwhelming the resources for the research. A brief capsule of what each district site offered appears in Chapter 1 of this report.

The three states in this sample (Georgia, New York, and Oregon) are all paying serious attention to the quality and support of school leadership, each in its own way. At the same time, these state contexts offer important regional, economic, political, and demographic variation.

Data Sources and Data Collection Procedures

The multiple qualitative and quantitative data sources outlined below were all designed to develop an in-depth portrayal of how district and school leaders create conditions and develop practices that help them invest staffing resources in effective and equitable ways. The data we collected thus came from sources at both district and school levels from those working within and outside the education system. One primary source of data collection was through interviews with school and district leaders, school and district instructional support staff (e.g., instructional coaches), teachers, board members, parents, and other community members. Other sources of data included district and school budgets, staffing rosters, and

¹² One other criterion was at play: as part of a coordinated set of studies within the Study of Leadership for Learning Improvement, at least two of the sites needed to overlap with other two companion studies and therefore needed to meet their sampling criteria as well: (1) how those in formal and informal school-level leadership roles exercise "learning-focused leadership," described in a companion report, *Leadership for Learning Improvement in Urban Schools* (Portin et al., 2009), and (2) intentional efforts to reform the district central office, inquiry focus, and conditions supportive of district-level transformation efforts, as explained in *Central Office Transformation for District-wide Teaching & Learning Improvement* (Honig, Copland, Lorton, Rainey, & Newton, forthcoming).

related personnel data; field observations of school, district, and community activities; and a variety of other documents, data, and artifacts from district and school sources. Each data source served as a vantage point from which to explore the research questions, and all together allow us to develop a convergent picture of investing in staffing resources at work.

Interviews

Through four waves of site visits, we gathered intensive semi-structured interview data concerning leadership decisions about the investment of staffing resources and its relation to powerful, equitable learning for students and professionals. The interviews captured the activities and perspectives of several different kinds of individuals at both school and district levels, both within and outside the education system:

- Principals and other titular leaders (assistant principals, department heads) who spend a significant portion of their time figuring out how best to configure staffing resources at the school and to provide support.
- Individuals in instructional leadership roles (e.g., teacher leaders, instructional coaches, or other staff) whose task it was to guide and support classroom teaching. Often these individuals were members of school leadership teams.
- District leaders, especially those who would be immediately implicated in resource allocation decisions or support for resource-related work, including superintendents, associate superintendents, and other members of the district leadership team, directors of instructional and instructional support programs (including categorical grant programs), business managers, and human resource administrators.
- Members of the broader community, including school board members, parents, members of the business or local philanthropic community, and participants in district committees and other community-based events.

As this interviewee list indicates, we had conversations with a number of different kinds of people to get an accurate picture of the investment of staffing resources and its relation to learning improvement and equity. Not all these interviews occurred in a single visit. Rather, across the full range of visits, we interacted with our participants at least once, and several times with selected key participants (e.g., the principal, district leaders).

A central task of these interviews was to yield detailed descriptions about the investment of staffing resources; that is, how staff were recruited, allocated, assigned, deployed, and supported. Alongside this focus of data collection, we also learned about the context of the district and the schools we were studying. Interview data provided important background information and a variety of perspectives regarding leadership activities, the ways in which ideas about equity were conceptualized by individuals, the organization of human resource functions and activities, the personal aims and motivations surrounding leadership decisions, and views regarding the effectiveness of specific leadership activities aimed at investing staffing resources in particular ways. This qualitative data was combined with quantitative data about budgets and staff, and with data from documentary sources and site observations to provide a multimethod, comprehensive picture of leadership actions that transpired at both district and school levels.

District and School Budgets

We gathered budgetary data from both district and school sources to help us understand issues such as the level of spending, formulas for allocating resources to individual schools and programs, sources of funds that supported various types of teaching and instructional support staff, and funding for mentoring and professional development. District and school leaders provided budget data in multiple forms, and we met with knowledgeable district and school personnel to ensure that we were interpreting fiscal data accurately. We examined data over a 5-year period in order to gain an understanding of the ebb and flow of fiscal resources over time. We also requested and examined documents that explained how funds were differentially allocated to specific schools or groups of students in order to address inequities within the district.

District and School Staffing Rosters and Personnel Data

Given the study's focus on staffing resources, data regarding the characteristics of teachers, administrators, and instructional support staff provided an important source of information. We examined data regarding the number and type of certificated personnel working at each of our study sites, and conducted analysis of the mobility of teachers and the proportion of novice teachers in the district's and school's workforce. We also looked at job descriptions for the variety of instructional support staff roles present in each district. This staffing data, combined with the budgetary data, allowed us to make comparisons of staffing resource allocations across schools and districts.

Other Pertinent Data and Documents

In addition to various types of fiscal and staffing data, we also examined district and school trend data about student demographics and achievement. We collected numerous documents that described key district and school initiatives, such as district strategic plans, letters to the community from district and school leaders, policies governing school attendance boundaries and staff assignment and transfers, district memoranda to school staff, human resource policies and procedures, district and school improvement plans, school board meeting minutes, and the like. Information gleaned from these sources served as additional points of triangulation with data collected from interviews and analysis of fiscal and staffing data.

Field Observations

The successive waves of field visits allowed us to carry out observational work on a limited scale to gain additional insight about the investment of staffing resources. Observational work was limited to events in which issues of staffing resources were likely to be discussed (such as school and district leadership team meetings, presentations to the school board, school improvement planning sessions), when these coincided with the timing of field visits. Some observations of classroom activities were also done, mainly to yield data on the nature of the learning challenges targeted by the school and the response of teaching staff to leadership initiatives. This observation data provided additional context for understanding ways in which staffing resources were deployed and supported.

Site Visiting Strategy

The design called for a two-phase strategy for data collection. In the first phase, we concentrated on describing and understanding staffing resource allocation practices, while the second phase went deeper to further analyze and explain how leaders made investment decisions regarding the deployment and support of teachers, principals, and instructional support staff to ensure high-quality, equitable learning opportunities for students. In phase 1 (taking place in the first half of the 2007–08 school year) we identified the learning and staffing challenges and strategies in the districts and schools; described the way the districts and schools had organized themselves, including how they had configured their staffing resources to meet the learning challenges they had established; characterized the main influences on the district and school leaders' investment strategies, including forces and

conditions inside and outside the school; and noted any innovative practices and arrangements in the way the leaders approached this work.

Phase 2 (largely occurring in the latter half of the 2007–08 school year and first few months of the 2008–09 year) deepened the descriptions of investment in staffing resources (taking advantage of a new school year in which to see decisions about staffing resources enacted all over again) and explored more specifically the relation of staffing resource investments to learning improvement strategies and to equity goals. Here, the research team analyzed the outcomes of investment decisions; connected with district and school leaders, teachers, and other instructional support staff to find out how they understood the staffing investment decisions (with a particular focus on their understanding of the equity goals that were being addressed); and mapped and compared the various types of allocation patterns within the schools, as well as explored further how instructional leadership, accountability, data, and equity influenced the investment strategies at work.

Analysis Process

Our overall approach to data analysis involved the triangulation and integration of data from the variety of qualitative and quantitative sources previously described. We employed multiple methods for analyzing the data as appropriate to each type of data collected (Johnson & Christensen, 2008). Quantitative data was verified and cross-checked before converting the data to units of analysis that could be compared across districts and schools (for example, student-staff ratios, expenditures as a percent of the total budget, instructional support staff as a percent of total certificated staff, etc.). In terms of the qualitative data (primarily in the form of transcripts from interviews), an adapted form of grounded theory analysis was used (Strauss & Corbin, 1994, 1998) that took advantage of the situated within-site meanings of the data from each case district and school, while enabling cross-site claims to be developed and substantiated (Miles & Huberman, 1994). Throughout the analysis, the primary units of analysis were the district and the school. The whole process differed from classical grounded theory work primarily in that we did less systematic category identification and elaboration between site visits and reserved more of our analytic work until a later stage. Like typical grounded theory, however, we approached the data with a largely inductive frame, and without firm commitments to an a priori conceptual framework, preferring to evolve and refine analytic categories and relationships in the course of the analysis process. The resulting theory offers local empirical models surrounding the phenomenon under

study (Hughes & Jones, 2003) rather than the grander vision of theory that some other traditions of social science seek. That said, we went into the work with various conceptual ideas about the nature of resource allocation and the conditions and actions that influence it, informed by relevant literature in the fields of school finance and leadership (Plecki, Alejano, Lochmiller, & Knapp, 2006).

The formal analysis of our interview, observations, and documentary data began with a coding process, in which we developed a broad open coding scheme that offered large analytic "bins" (Miles & Huberman, 1994) for capturing what we were learning from each school and district site. The resulting coded versions of interview transcripts, entered into a qualitative analysis software package (NVIVO), created a database that allowed us to efficiently search for data that pertained to the major analytic questions and targets.

The coding process fed a process of constructing a resource allocation and resource environment analytic memo for each district and school case. These memos provided a low-inference descriptive rendering of the staffing investment practices that were observed and the main contexts, conditions, and events associated with it. These accounts were developed by pairs of research team members who had primary responsibility for the district or school in question, with one team member drafting the analytic report and the other elaborating, refining, and corroborating (or correcting) it, to reflect the site as accurately as possible. These analytic memos were reviewed and refined by all team members who had spent time in the particular site. Summaries of the analysis of budget and staffing data were also incorporated into these analytic memos.

Having completed this phase of analytic work, we embarked on a cross-site process of reading across the memos by analytic category to spot emerging patterns, possible hunches, and new categories or relationships that needed deeper exploration. This process yielded a cross-site analytic outline—subsequently refined into the outline for the study report—that clustered cross-site patterns around central themes related to the study's main research questions. The work then proceeded in analytic subgroups that developed chapter-length analyses of each major theme, drawing on material from the analytic memos, the coded data runs, additional data runs developed around new codes, and data runs from the budget and personnel databases. The chapter drafts were subsequently merged into an overall report draft and then cross-checked for accurate representation of each site, possible disconfirming evidence, and the existence of triangulating evidence.

References

Adams, J. (2008). *National working group on funding student success: Final report*. Paper prepared for presentation at the 2008 annual meeting of the American Education Finance Association, Denver, CO.

Advocates for Children and Youth. (2007a). Principal turnover in Prince George's County Public Schools. *Voices for Maryland's Children*, 5(4). Retrieved February 9, 2009, from http://www.acy.org/upimages/FINAl_12_12_PG_doc.pdf

Advocates for Children and Youth. (2007b). Principal turnover in the Baltimore City Public School System. *Voices for Maryland's Children*, 5(6). Retrieved February 9, 2009, from http://www.acy.org/upimages/FINAL%2012%2012%20Bal%20City(1).pdf

Baker, B., & Green, P. (2008). Conceptions of equity and adequacy in school finance. In H. Ladd & E. Fiske (Eds.), *Handbook of research in education finance and policy* (pp. 203–221). New York: Routledge.

Beck, L., & Murphy, J. (1998). Site-based management and school success: Untangling the variables. School Effectiveness & School Improvement, 9(4), 358–385.

Becker, B., & Huselid, M. (2006, December). Strategic human resource management: Where do we go from here? *Journal of Management*, 32(6), 898–925.

Berne, R., & Stiefel, L. (1999). Concepts of school finance equity: 1970 to the present. In H. Ladd, R. Chalk, & J. Hansen (Eds.), *Equity and adequacy in education: Issues and perspectives*. Washington, DC: National Research Council Committee on Education Finance.

Betts, J., Rueben, K., & Danenberg, A. (2000). Equal resources, equal outcomes? The distribution of school resources and student achievement in California. San Francisco, CA: Public Policy Institute of California. Retrieved November 17, 2008 from http://www.ppic.org/content/pubs/report/R_200JBR.pdf

Bonesrønning, H., Falch, T., & Strøm, B. (2005, February). Teacher sorting, teacher quality, and student composition. *European Economic Review*, 49(2), 457–483.

Boyd, D., Lankford, H., & Wyckoff, J. (2008). Increasing the effectiveness of teachers in low-performing schools. In H. Ladd & E. Fiske (Eds.), *Handbook of research in education finance and policy* (pp. 535–550). New York: Routledge.

Brown, D., & Saks, D. (1987). The microeconomics of the allocation of teacher's time and student learning. *Economics of Education Review*, 6(4), 319–332.

Bryk, A., Sebring, P., Kerbow, D., Rollow, S., & Easton, J. (1998). *Charting Chicago school reform: Democratic localism as a lever for change*. Boulder, CO: Westview Press.

Campbell, C., DeArmond, M., & Schumwinger, A. (2004). From bystander to ally: Transforming the district human resources department. Seattle, WA: Center on Reinventing Public Education, University of Washington.

Cascio, W., & Boudreau, J. (2008). *Investing in people: Financial impact of human resource initiatives*. Upper Saddle River, NJ: Pearson Education.

Chambers, J., Shambaugh, L., Levin, J., Muraki, M., & Poland, L. (2008). A tale of two districts: A comparative study of student-based funding and school-based decision making in San Francisco and Oakland Unified School Districts. Washington, DC: American Institutes for Research.

Clotfelter, C., Glennie, E., Ladd, H., & Vigdor, J. (2006). Would higher salaries keep teachers in high-poverty schools? Evidence from a policy intervention in North Carolina (Working Paper No. 12285). Cambridge, MA: National Bureau of Economic Research. Retrieved September 11, 2007, from http://www.caldercenter.org/PDF/1001057_High_Poverty.pdf

Clotfelter, C., Ladd, H., Vigdor, J., & Wheeler, J. (2007). *High-poverty schools and the distribution of teachers and principals* (Working Paper). Washington, DC: National Center for Analysis of Longitudinal Data in Education Research. Retrieved February 9, 2009, from http://www.caldercenter.org/PDF/1001057_High_Poverty.pdf

Clune, W. (1994). The shift from equity to adequacy in school finance. *Educational Policy*, 8(4), 376–394.

Coggshall, J., Stewart, J., and Bhatt, M. (2008, June). *Paving the path to the urban school principalship*. Washington, DC: National Comprehensive Center for Teacher Quality.

Copland, M. (2003). Leadership of inquiry: Building and sustaining capacity for school improvement. *Educational Evaluation and Policy Analysis*, 25(4), 375–395.

Copland, M., & Knapp, M. (2006). Connecting leadership and learning: A framework for reflection, planning, and action. Alexandria, VA: ASCD.

Corcoran, S., & Evans, W. (2008). Equity, adequacy and the evolving state role in education finance. In H. Ladd & E. Fiske (Eds.), *Handbook of research in education finance and policy* (pp. 332–356). New York: Routledge.

Creswell, J. (2008). Research design: Qualitative, quantitative, and mixed method approaches. Thousand Oaks, CA: Sage.

Darling-Hammond, L., Hightower, A., Husbands, J., Lafors, J., Young, V., & Christopher, C. (2005). *Instructional leadership for systemic change: The story of San Diego's reform*. Lanham, MD: Rowan and Littlefield Education.

Downes, T., & Shay, M. (2006). The effect of school finance reforms on the level and growth of per-pupil expenditures. *Peabody Journal of Education*, 81(3), 1–38.

Downes, T., & Stiefel, L. (2008). Measuring equity and adequacy in school finance. In H. F. Ladd and H. B. Fiske (Eds.), *Handbook of research on education finance and policy* (pp. 222–237). New York: Routledge.

DuFour, R. (2002). The learning-centered principal. Educational Leadership, (59)8 (May): 12–15.

Earl, L., & Katz, S. (2002). Leading schools in a data-rich world. In K. Leithwood & P. Hallinger (Eds.), *Second international handbook of educational leadership and administration*. Dordrecht, The Netherlands: Kluwer Academic Publishers.

Elmore, R., & Burney, D. (1999). *Investing in teacher learning: Staff development and instructional improvement*. San Francisco: Jossey Bass.

Erlichson, B., & Goertz, M. (2002). Whole school reform and school-based budgeting in New Jersey: Three years of implementation. In C. Roellke & J. Rice (Eds.), *Fiscal policy in urban education: A volume in research in education fiscal policy and practice*. Greenwich, CT: Information Age Publishing.

Farkas, S., Johnson, J., Duffett, A., Syat, B., & Vine, J. (2003). *Rolling up their sleeves: Superintendents and principals talk about what's needed to fix public schools.* New York: Public Agenda. Retrieved February 9, 2009, from http://www.publicagenda.org/files/pdf/rolling_up_their_sleeves.pdf

Farkas, S., Johnson, J., & Foleno, T. (with Duffett, A., & Foley, P.). (2000). *A sense of calling: Who teaches and why*. New York: Public Agenda. Retrieved February 9, 2009, from http://www.publicagenda.org/files/pdf/sense_of_calling.pdf

Fink, E., & Resnick, L. B. (2001). Developing principals as instructional leaders. *Phi Delta Kappan*, 82, 578-606.

Fruchter, N. (2007). *Urban schools, public will: Making education work for all our children*. New York: Teachers College Press.

Fullan, M. (1994). Coordinating top-down and bottom-up strategies for educational reform. In R. Elmore & S. Fuhrman (Eds.), *The governance of curriculum* (pp. 186–202). Alexandria, VA: Association for Supervision and Curriculum Development.

Goertz, M., & Hess, G. (1998). Processes and power in school budgeting across four large urban school districts. *Journal of Education Finance*, 23(4), 490–506.

Goertz, M., & Stiefel, L. (1998). School-level resource allocation in urban public schools: Introduction to special issue. *Journal of Education Finance*, 23(4), 435–446.

Goldhaber, D. (2008). Teachers matter, but effective teacher quality policies are elusive. In H. Ladd & E. Fiske (Eds.), *Handbook of research in education finance and policy* (pp. 146–165). New York: Routledge.

Grubb, N. (2009). *The money myth: School resources, outcomes, and equity.* New York: Russell Sage Foundation.

Guthrie, J. W., & Hill, P. T. (2007). *Making resource decisions amidst technical uncertainty*. Seattle, WA: Center for Reinventing Public Education.

Guthrie, J.W. & Schuermann, P. J. (2009). Successful school leadership: Planning, Politics, Performance, and Power. Upper Saddle River, NY: Allyn & Bacon.

Hallinger, P., & Heck, R. (1996). Reassessing the principal's role in school effectiveness: A review of empirical research, 1980–1995. *Educational Administration Quarterly*, 32(1), 5–44.

Hallinger, P., & Heck, R. (2009). *Leadership effects on school improvement: Testing unidirectional and reciprocal effects models.* Paper prepared for presentation at the annual meeting of the American Educational Research Association, April 2009.

Hanushek, E., & Lindseth, A. (2009). Schoolhouses, courthouses, and statehouses: Solving the funding-achievement puzzle in America's public schools. Princeton, NJ: Princeton University Press.

Harris, D. (2008). Educational outcomes of disadvantaged students: From desegregation to accountability. In H. Ladd & E. Fiske (Eds.), *Handbook of research in education finance and policy* (pp. 551–570). New York: Routledge.

Hartman, W. (1999). School district budgeting. Reston, VA: Association of School Business Officials International.

Hightower, A., Knapp, M., Marsh, J., & McLaughlin, M. (2002). School districts and instructional renewal: Critical issues in educational leadership. New York: Teachers College Press.

Honig. M. I. (2009). No small thing: School district central office bureaucracies and the implementation of new small autonomous school initiatives. *American Educational Research Journal*, 46(2), 387–422.

Honig, M., & Coburn, C. (2008). Evidence-based decision making in school district central offices. *Educational Policy*, 22(4), 578–608.

Honig, M., Copland, M., Lorton, J. A., Rainey, L., &. Newton, M. (forthcoming). *Central office transformation for district-wide teaching and learning improvement*. Seattle, WA: Center for the Study of Teaching and Policy, University of Washington.

Hughes, J. and S. Jones (2003). Reflections on the use of grounded theory in interpretive information systems research. Proceedings of the European Conference on Information Systems (ECIS 2003), Naples, Italy.

Iatarola, P. & Stiefel, L. (1998). School-based budgeting in New York City: Perceptions of school communities. *Journal of Education Finance*, 23(4): 557–76.

Ingersoll, R. (2004). Why do high poverty schools have difficulty staffing their classrooms with high quality teachers? Philadelphia: University of Pennsylvania Center for American Progress. Retrieved February 9, 2009, from http://www.americanprogress.org/kf/ingersoll-final.pdf

Johnson, R., & Christensen, L. (2008). *Educational research: Quantitative, qualitative and mixed approaches*. Thousand Oaks, CA: Sage.

Johnson, R., & Onwuegbuzie, A. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14–26.

Kane, T., Rockoff, J., & Staiger, D. (2006, March). What does certification tell us about teacher effectiveness? Evidence from New York City (Working Paper 11844). Cambridge, MA: National Bureau of Economic Research.

King, R., Swanson, A., & Sweetland, S. (2003). School finance: Achieving high standards with equity and efficiency. New York: Allyn & Bacon.

King, R., Swanson, A., & Sweetland, S. (2005). Designing school finance structures to satisfy equity and adequacy goals. *Educational Policy Analysis Archives*, 13(15), 37–62. Retrieved February 24, 2009, from http://epaa.asu.edu/epaa/v13n15/.

Knapp, M. S., Copland, M. A., Plecki, M. L., & Portin, B. S. (2006). *Leading, learning, and leader-ship support*. Seattle, WA: Center for the Study of Teaching and Policy.

Knapp, M. S., Copland, M. A., & Swinnerton, J. A. (2007). Understanding the promise and dynamics of data-informed leadership. In P. A. Moss (Ed.), *Evidence and decision making*, The 107th Volume of the National Society for the Study of Education (1) New York: Teachers College Record. 74–104.

Knapp, M., Copland, M., & Talbert, J. (2003). *Leading for learning: Reflective tools for school and district leaders*. Seattle, WA: Center for the Study of Teaching and Policy, University of Washington.

Kozol, J. (1991). Savage inequalities. New York: Crown Publishers.

Ladd, H. (2008, Fall). Reflections on equity, adequacy, and weighted student funding. *Education Finance and Policy*, 3(4), 402–423.

Lankford, H., Loeb, S., & Wyckoff, J. (2002, Spring). Teacher sorting and the plight of urban schools: A descriptive analysis. *Educational Evaluation and Policy Analysis*, 24(1), 37–62.

Lawler, E. L. (2008). Strategic talent management: Lessons from the corporate world. Madison, WI: Consortium for Policy Research in Education.

Leithwood, K., & Riehl, C. (2005). What we already know about successful school leadership. In W. A. Firestone & C. Riehl (Eds.), *A new agenda: directions for research on educational leadership*. New York: Teachers College Press.

Levin, J., & Quinn, M. (2003). Missed opportunities: How we keep high-quality teachers out of urban schools. New York: The New Teacher Project.

McLaughlin, M., & Talbert, J. (2002). *Reforming districts: How districts support school reform*. Seattle, WA: Center for the Study of Teaching & Policy, University of Washington.

Miles, K. (1995). Freeing resources for improving schools: A case study of teacher allocation in Boston Public Schools. *Educational Evaluation and Policy Analysis*, 17(4), 476–493.

Miles, K. (2001). *District issues brief: Rethinking school resources*. Arlington, VA: New American Schools. Retrieved July 30, 2008 from http://www.educationresourcestrategies.org/documents/rethinking-resources.pdf

Miles, K., & Darling-Hammond, L. (1998). Rethinking the allocation of teaching resources: Some lessons from high-performing schools. *Educational Evaluation and Policy Analysis*, 20, 9–29.

Miles, K., & Frank, S. (2008). *The strategic school: Making the most of people, time, and money.* Thousand Oaks, CA: Corwin.

Miles, M. & Huberman, M. (1994). *Qualitative data analysis: A Sourcebook*. Thousand Oaks, CA: SAGE.

Monk, D. (1987). School district enrollment and inequality in the supply of classes. *Economics of Education Review*, 6(4), 365–377.

Monk, D. (1994). Resource allocation in schools and school systems. In T. Husen and T. N. Postlethwait (Eds.), *The International Encyclopedia of Education* (pp. 5061–5066). Oxford, UK: Pergamon Press.

Murnane, R., City, E., & Singleton, K. (2008). Using data to inform decision making in urban school districts: Progress and new challenges. *Voices in Urban Education: Using Data for Decisions*, 18, 5–13.

National Commission on Teaching and America's Future. (1996). What matters most: Teaching and America's future. New York: Author.

National Research Council. (1999). *Making money matter: Financing America's schools*, H. F. Ladd & J. S. Hansen, (Eds.), Committee on Education Finance, Commission on Behavioral and Social Sciences in Education. Washington, DC: National Academy Press.

Oakes, J. (2005). *Keeping track: How schools structure inequality* (2nd ed.). New Haven, CT: Yale University Press.

Odden, A. (2007, January). Summing up fifteen years of school finance research. Madison, WI: Consortium for Policy Research in Education. Retrieved June 25, 2008 from http://cpre.wceruw.org/publications/sfpolicy.php

Odden, A., & Archibald, S. (2001). Reallocating resources: How to boost student achievement without asking for more. Thousand Oaks, CA: Corwin.

Odden, A., Archibald, S., Fermanich, M., & Gallagher, H. (2002, Summer). A cost framework for professional development. *Journal of Education Finance*, 28, 51–74.

Odden, A., & Clune, W. (1998). School finance systems: Aging structures in need of renovation. *Educational Evaluation and Policy Analysis*, 20(3), 157–178.

Odden, A., & Kelly, J. (2008). *Strategic management of human capital in education*. Madison, WI: Consortium for Policy Research in Education. Retrieved November 18, 2008, from http://www.smhc-cpre.org/

Odden, A., & Picus, L. (2008). School finance: A policy perspective (4th ed.). New York: McGraw-Hill.

Organisation for Economic Co-operation and Development. (2007, June). *No more failures: Ten steps to equity in education*. Proceedings from the Fairness and Inclusion Conference: Trondheim, Norway.

Patton, M. Q. (2003) *Qualitative evaluation and research methods* (3rd edition). Thousand Oaks, CA: SAGE.

Peske, H., & Haycock, K. (2006). *Teaching inequality: How poor and minority students are short-changed on teacher quality*. Washington, DC: The Education Trust. Retrieved February 9, 2009, from http://www2.edtrust.org/EdTrust/Press+Room/teacherquality2006.htm

Pfeffer, J. (1998). *The human equation: Building profits by putting people first*. Boston: Harvard Business School Press.

Picus, L., & Wattenbarger, J. (Eds.). (1996). Where does the money go? Resource allocation in elementary and secondary schools: 1995 Yearbook of the American Education Finance Association. Newbury Park, CA: Corwin Press.

Plecki, M., Alejano, C., Lochmiller, C., & Knapp, M. (2006). *Allocating resources and creating incentives to improve teaching and learning*. Seattle, WA: Center for the Study of Teaching and Policy, University of Washington.

Plecki, M., & Monk, D. (Eds.). (2003). School finance and teacher quality: Exploring the connections: 2003 Yearbook of the American Education Finance Association. Larchmont, NJ: Eye on Education.

Portin, B. S., Knapp, M. S., Feldman, S., Dareff, S., Russell-Atesoglu, F., Samuelson, C., & Yeh, L. (2009). *Leadership for learning improvement in urban schools*. Seattle, WA: Center for the Study of Teaching and Policy, University of Washington.

Portin, B., Schneider, P., DeArmond, M., & Gundlach, L. (2003). *Making sense of leading schools:* A study of the school principalship. Seattle, WA: Center for Reinventing Public Education, University of Washington.

Raywid, M. (1996). Taking stock: The movement to create mini-schools, schools-within-schools, and other small schools. New York: ERIC Clearinghouse on Urban Education.

Reardon, S., & Robinson, J. (2008). Patterns and trends in racial/ethnic and socioeconomic academic achievement gaps. In H. F. Ladd & E. B. Fiske (Eds.), *Handbook of research in education finance and policy* (pp. 497–516). New York: Routledge.

Resnick, L., & Glennan, T. (2002). Leadership for learning: A theory of action for urban school districts. In A. Hightower, M. S. Knapp, J. Marsh, & M. W. McLaughlin (Eds.), *School districts and instructional renewal* (pp. 160-172). New York: Teachers College Press.

Rice, J. (2001). A cost framework for teacher preparation and professional development. Washington, DC: The Finance Project.

Rice, J. (2003). Investing in teacher quality: A framework of estimating the cost of teacher professional development. In W. Hoy & C. Miskel (Eds.), *Theory and research in educational administration*, *Volume 2* (pp. 209–233). Greenwich, CT: Information Age Publishing, Inc.

Rice, J., & Schwartz, A. (2008). Toward an understanding of productivity in education. In H. Ladd & E. Fiske (Eds.), *Handbook of research in education finance and policy* (pp. 131–145). New York: Routledge.

Rivkin, S., Hanushek, E., & Kain, J. (2005). Teachers, schools, and academic achievement. *Econometrica*, 73(2), 417–458.

Rockoff, J. (2004). The impact of individual teachers on student achievement: Evidence from panel data. *American Economic Review*, 94(2), 247–252.

Rothstein, R. (2004). Class and schools: Using social, economic, and educational reform to close the black-white achievement gap. New York: Teachers College Press.

Smylie, M., & Wenzel, S. (2006). *Promoting instructional improvement: A strategic human resource management perspective*. Chicago: University of Chicago Press.

Springer, M., Houck, E., & Guthrie, J. (2008). History and scholarship regarding United States education finance and policy. In H. Ladd & E. Fiske (Eds.), *Handbook of research in education finance and policy* (pp. 3–22). New York: Routledge.

Stoll, L., Fink, D., & Earl, L. (2003). *It's about learning [and it's about time]: What's in it for schools?* London & New York: Routledge Falmer.

Strauss, A., & Corbin, J. (1994). Grounded theory methodology: An overview. In Denzin, N. K. & Lincoln, Y. S. (Eds.), *Handbook of qualitative research* (pp. 273-285). Thousand Oaks, CA: SAGE.

Strauss, A., & Corbin, J. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory. Thousand Oaks, CA: SAGE.

Supovitz, J. (2006). The case for district-based reform. Cambridge, MA: Harvard Education Press.

Turnbull, B. & Colleagues (2009). *Evaluation of the School Administration Manager Project*. Washington, DC: Policy Studies Associates.

Underwood, J. (1994). School finance as vertical equity. *University of Michigan Journal of Law Reform*, 28, 493.

Yee, G. (1996). Miracle workers wanted: Executive succession and organizational change in an urban school district. Unpublished doctoral dissertation, Stanford University.

Yin, R. (2009). Case study research: Design and methods (4th edition). Thousand Oaks, CA: Sage.

The Study of Leadership for Learning Improvement

With support from The Wallace Foundation, a team of researchers from the Center for the Study of Teaching and Policy at the University of Washington has undertaken an investigation of leadership in urban schools and districts that are seeking to improve both learning and leadership. The study explored the following overarching question: What does it take for leaders to promote and support powerful, equitable learning in a school and in the district and state system that serves the school? The study pursued this question through a set of coordinated investigations, each with an intensive qualitative or mixed-methods strategy and with overlapping samples, designed to offer images of what is possible in schools and districts that take learning improvement seriously. Study sites were chosen to reflect a focus on learning and leadership improvement and varying degrees of progress toward improvement goals.

- School Leadership investigation: The reconfiguration and exercise of leadership within elementary, middle, and high schools to enable more focused support for learning improvement
- Resource Investment investigation: The investment of staffing and other resources at multiple levels of the system, in alignment with learning improvement goals, to enhance equity and leadership capacity
- Central Office Transformation investigation: The reinvention of central office work practices and relationships with the schools to better support districtwide improvement of teaching and learning

Separate reports detail the findings of each investigation, and a synthesis report identifies themes connecting the three study strands.

Learning-focused Leadership and Leadership Support: Meanings and Practice in Urban Systems

By Michael S. Knapp, Michael A. Copland, Meredith I. Honig, Margaret L. Plecki, and Bradley S. Portin

Leadership for Learning Improvement in Urban Schools

By Bradley S. Portin, Michael S. Knapp, Scott Dareff, Sue Feldman, Felice A. Russell, Catherine Samuelson, and Theresa Ling Yeh, with the assistance of Chrysan Gallucci & Judy Swanson

How Leaders Invest Staffing Resources for Learning Improvement

By Margaret L. Plecki, Michael S. Knapp, Tino Castaneda, Tom Halverson, Robin LaSota, and Chad Lochmiller

Central Office Transformation for District-wide Teaching and Learning Improvement

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