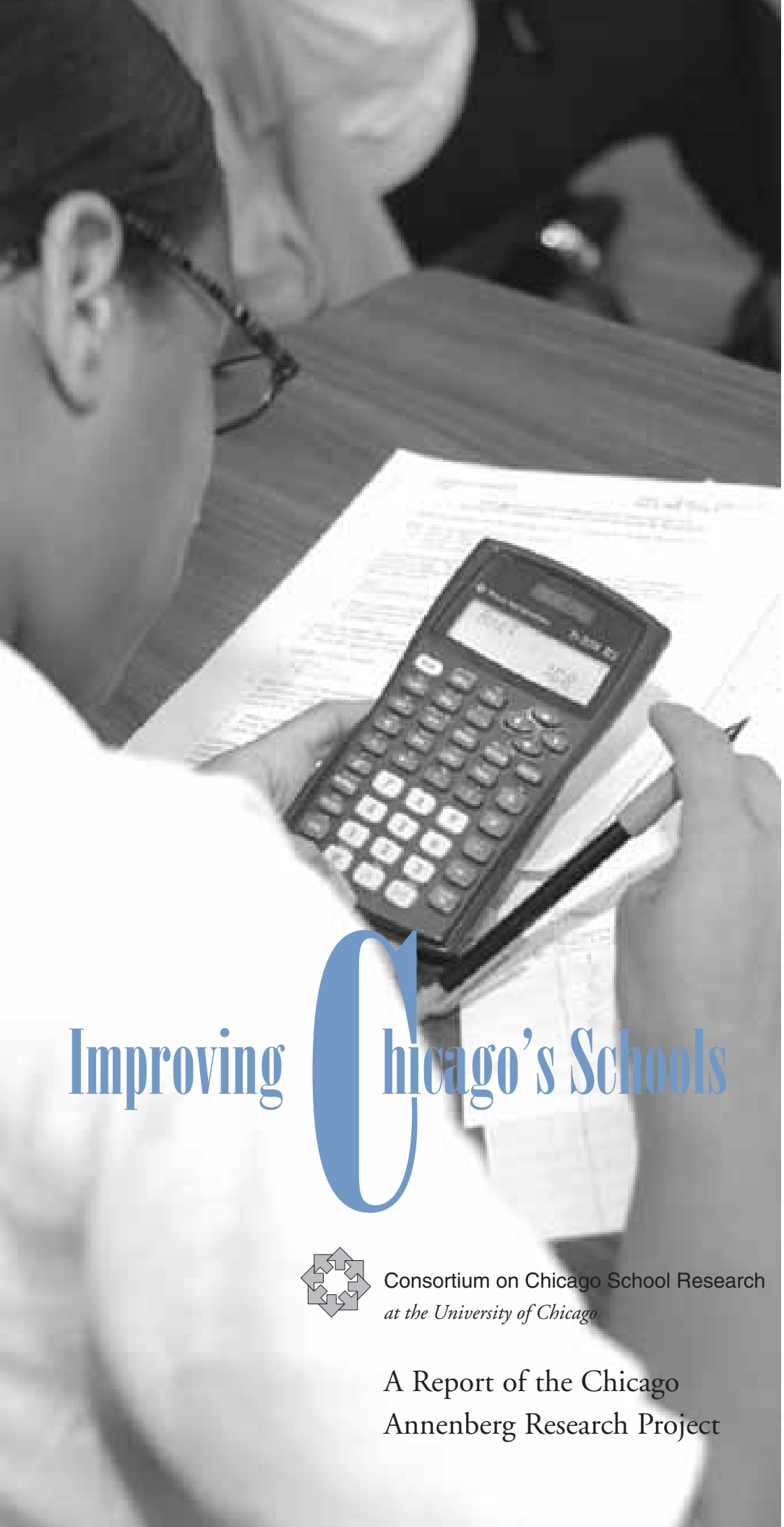

Promoting Instructional Improvement:

A Strategic Human Resource Management Perspective

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Improving Chicago's Schools

Consortium on Chicago School Research
at the University of Chicago

A Report of the Chicago Annenberg Research Project

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Executive Summary

Promoting Instructional Improvement: A Strategic Human Resource Management Perspective is the last report in the Consortium's multi-year series on the Chicago Annenberg Research Project (see p. 25 for additional information on the project). This report argues that instructional improvement, which goes hand-in-hand with efforts at education reform, can be promoted through the strategic use of human resource management (HRM) practices at the school, district, and state levels.

The authors present information from the organizational and management literatures on how firms in several fields have made use of various HRM practices to achieve organizational goals. Considering instructional improvement as a primary goal of schools, districts, and states, the authors then consider how strategic HRM practices might be used to achieve this goal. The model for instructional improvement is the adoption of a set of practices known as intellectually ambitious instruction, which has been the focus of much study in recent years.

Intellectually ambitious instruction is an instructional model that encourages in-depth knowledge of subject matter, higher-order thinking skills, the construction of new knowledge and understanding, and the application of knowledge to real-world situations. A growing body of research shows that intellectually ambitious instruction is linked with improved academic performance, increased engagement with learning, higher-quality intellectual work, and better performance on standardized achievement tests for students and schools of varying backgrounds.

Using vignettes from three elementary schools in the Chicago Annenberg Research Project, the authors then examine how the schools' strategic use of HRM practices affected their ability to change teaching practices. The authors conclude by reviewing how strategic HRM practices might be implemented in educational settings.

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Introduction

Despite the emphasis placed on education reform over the past several decades, few people are satisfied with the results. Fewer still seem to be in agreement about how education reform can be achieved. One approach to reforming education is through improving instruction, although this aim is remarkably complex and difficult to accomplish. Instructional improvement requires teachers to develop new knowledge, skills, and commitments; assume risk; and court failure. In addition to changes at the classroom level, instructional improvement will also require change at the school, district, and state levels. This report examines an approach that can be used at all of these levels to create instructional improvement. After discussing some policy tools that have been applied to instructional improvement efforts, we argue that the strategic use of human resource management (HRM) practices is one way that schools and school districts can attain a variety of desired goals, including instructional improvement.

The concept of strategic human resource management comes from the organizational and management fields. This concept integrates various practices to enable and encourage employees to meet an organization's goals. Already implemented and investigated in a variety of business settings as a means for firms to achieve their goals, we propose that strategic human resource management could be profitably applied to the field of education to achieve instructional improvement in schools.

This report discusses strategic HRM as a means to the end of intellectually ambitious instruction. We chose to structure our discussion in this manner because in order to evaluate the effectiveness of strategic HRM, we need to be able to judge the extent to which it allows us to meet a specific goal. Furthermore, there is

growing evidence of the effectiveness of intellectually ambitious instruction for promoting academic achievement across student populations and school settings.

We first discuss intellectually ambitious instruction and draw on evidence from several sources, including other Annenberg research studies, to argue that it results in improved student learning.[1] We then discuss some tools—policies and administrative practices—that have shown only limited success in meeting general education goals and more specifically the goal of intellectually ambitious instruction. Next, we turn to strategic HRM, which has been shown to help firms achieve various objectives. We examine the key components of this HRM model and research literature in support of its effectiveness in various fields and in education. Using field research from the Chicago Annenberg Challenge, we present vignettes from three Chicago public elementary schools and explore how their strategic use of human resource management practices affected their ability to change teaching practices, yielding more intellectually ambitious instruction. We conclude by reviewing ways in which strategic HRM can support improved instruction.

[1]The Chicago Annenberg Research Project was conducted through the Consortium on Chicago School Research with resources provided by the Chicago Annenberg Challenge. Additional information on the Challenge that is relevant to this report appears on p. 25. Detailed information about the Chicago Annenberg Challenge and the research project, its conceptual framework, its methodologies, and its findings can be found in the project's various technical reports. See particularly Smylie and Wenzel (2003) and Shipps, Sconzert, and Swyers (1999). All of the project's reports can be found on the Consortium's website at www.consortium-chicago.org.

Chapter 1

What Is Intellectually Ambitious Instruction?

We begin by defining intellectually ambitious instruction and exploring how it can lead to improved student achievement. We use the term "intellectually ambitious instruction" to refer to a group of related concepts and models of instruction. These include "teaching for understanding," "intellectually ambitious teaching and learning," and "authentic pedagogy."[1] They also include essentials of effective instruction, such as disciplined inquiry and problem solving.[2] These concepts and models are put forth with the idea that instruction must move toward more meaningful intellectual quality and rigor. Instruction should help students develop in-depth knowledge of subject matter, gain higher-order thinking skills, construct new knowledge and understanding, and effectively apply knowledge to real-world situations.

By focusing on intellectually ambitious instruction, we shift the emphasis from teachers' use of particular instructional practices to the intellectual qualities and demands of the practices that teachers choose. Some teaching practices may be more likely than others to promote intellectual challenge; however, it is generally acknowledged that teaching practices may be weak or strong in intellectual demand.[3] For instance, a well-crafted lecture/recitation may be as intellectually rigorous and productive as well-crafted small group or project work, just as poorly crafted small group or project work may make as little intellectual demand as a poorly crafted lecture. What is important is that teachers make use of instructional practices that embody the intellectual challenges most conducive to student learning and achievement. Furthermore, teachers require substantial discretion in constructing instructional experiences to meet the needs of their students and to address the demands of different subject matters.[4]

Thus, our focus on intellectual quality moves us beyond the search for generalizable "best practices," preserves teachers' discretion to craft instructional practices for the students in their classrooms, and at the same time provides a framework for defining and promoting high-quality instructional practices.

Intellectually ambitious instruction is supported by an expanding body of evidence on human learning and cognition and from a growing number of classroom-based studies.[5] Students who are exposed to teaching that demands complex, higher-order intellectual work are likely to perform as well or better academically than students who are exposed primarily to basic skills instruction.[6] Students who are challenged by intellectually demanding classroom assignments are more likely to be engaged in learning and to produce higher-quality intellectual work than students who are exposed to less demanding assignments.[7] Furthermore, students who experience greater intellectual demand also perform at higher levels on standardized achievement tests, including tests of basic skills.[8] These outcomes have been found across subject areas, including mathematics, reading/language arts, and social studies, as well as across school settings, including innovative, restructured schools and predominantly minority, low-income, under-resourced urban schools.[9] Overall, intellectually ambitious instruction appears promising for students male and female; of different races, ethnicities, and socioeconomic backgrounds; at different grade levels; and of low and high prior achievement.[10]

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[1]For more information regarding the following topics, see the references noted: teaching for understanding (McLaughlin and Talbert, 1993), intellectually ambitious teaching and learning (Elmore, Peterson, and McCarthey, 1996), authentic pedagogy (Wehlage, Newmann, and Secada, 1996).

[2]Hiebert et al. (1996); see also National Research Council (2000).

[3]National Research Council (2000).

[4]Blumenfeld et al. (1997); National Research Council (2000).

[5]For evidence on human learning and cognition see National Research Council (2000).

[6]E.g., Carpenter et al. (1989); Cobb et al. (1991); Knapp, Shields, and Turnbull (1992); Mortimore, et al. (1988); Silver and Lane (1995); Tharp (1982).

[7]Marks (2000); Marks, Newmann, and Gamoran (1996); Newmann, Lopez, and Bryk (1998).

[8]Newmann, Bryk, and Nagoaka (2001).

[9]Newmann and associates (1996); Newmann, Lopez, and Bryk (1998), Newmann et al. (2001).

[10]Bryk (2003); Marks, Newmann, and Gamoran (1996); Newmann, Lopez, and Bryk (1998); Newmann et al. (2001).

Authentic Pedagogy and Student Achievement

One model of intellectually ambitious instruction is authentic pedagogy. Developed at the Center for the Organization and Restructuring of Schools at the University of Wisconsin-Madison, authentic pedagogy is based on the intellectual requirements for adults in both contemporary and future democratic society for economic productivity, responsible citizenship, and effective management of personal affairs.[1] This model does not devalue conventional intellectual work by students or basic skills and proficiencies. Rather, it calls for more intellectually demanding and potentially more meaningful intellectual accomplishment, including the construction of new knowledge and understanding; disciplined inquiry and problem solving, mastery of subject matter, and communication of ideas; and understanding the value of learning beyond school. According to Newmann, Marks, and Gamoran, instruction that aims to achieve these more "authentic" intellectual outcomes should push students toward higher-order thinking.[2] It should develop deep knowledge and understanding of subject matter and at the same time help students produce new meaning and understanding. Instruction should promote interaction among students about academic subject matter, calling on them to explain and justify their ideas to one another and in the process develop new and shared understanding. Finally, it should lead students to make connections between what is learned in school and in public and personal problems and experiences.[3]

Two studies of the Chicago Annenberg Research Project provide evidence of the relationship between authentic pedagogy and academic achievement. These studies were conducted in 12 to 18 under-resourced Chicago elementary schools over a three-year period. Samples of classroom assignments in reading/language arts and mathematics were collected each year from 74 to 116 teachers who taught students in the third, sixth, and eighth grades. In all, about 2,000 assignments were collected. Approximately 3,300 pieces of student work were collected during the first year. Standardized achievement test scores for as many as 2,100 students per year were also used in the analyses.

In one study, Newmann, Lopez, and Bryk found a strong positive relationship between the intellectual demands of writing assignments in reading/language arts classes and mathematics assignments and the intellectual quality of student work produced in response.[4] Across elementary grade levels and subject areas, students whose teachers assigned the most intellectually challenging work were three to four times more likely to produce high-quality intellectual work than students whose teachers assigned the least challenging work. In the second study, Newmann, Bryk, and Nagaoka found strong positive relationships between students' exposure to authentic assignments and their performance on the Iowa Tests of Basic Skills (ITBS) and state standards assessments.[5] Controlling for student race, socioeconomic status, gender, and prior achievement, this study found that in classrooms with authentic assignments, one-year student gains on the ITBS were 20 percent greater than the national average in both reading and mathematics. In contrast, in classrooms where assignments were less demanding, student gains were 22 to 25 percent less than the national average in these subject areas. Similarly large differences were found in student performance on state assessments.

An important aspect of these studies is that the relationships between authentic intellectual demand and student achievement were found in "typical" Chicago public elementary schools; that

is, schools that are under-resourced, racially isolated, predominantly low income, and under-achieving. In other analyses, Newmann, Bryk, and Nagaoka examined relationships between classroom composition and the intellectual quality of assignments.[6] They also examined how students' prior academic achievement related to the benefit of being exposed to intellectually demanding assignments. The researchers found weak, statistically insignificant relationships between the intellectual demands of assignments and the racial or socioeconomic composition of their classrooms. While finding that highly demanding assignments were not commonplace in the schools they studied, Newmann and his colleagues concluded that such assignments can be made in disadvantaged classroom settings and that when they are made, students on the average tend to learn more. These analyses also found that students with high and low prior achievement benefit from being exposed to intellectually demanding assignments, as measured by gains in scores on the ITBS. Students with high prior achievement tend to benefit more in reading; students with low prior achievement tend to benefit more in mathematics. Regardless of levels of prior achievement, students who received assignments that were relatively more intellectually demanding out-performed comparable students who received less demanding assignments.

These findings from the Annenberg Research Project extend the findings of several earlier studies of authentic pedagogy conducted at the Center for the Organization and Restructuring of Schools at the University of Wisconsin-Madison.[7] Those studies involved 24 public elementary and secondary schools across the county that had undergone significant and largely successful restructuring (e.g., participative decision making, team teaching, parent choice, etc.) and focused on mathematics and social studies instruction in the fourth and fifth grades and the seventh and eighth grades. That research found a positive relationship between levels of authentic pedagogy and student engagement in instructional activity, taking into account student race, gender, and socioeconomic status.[8] It also found positive effects from authentic pedagogy on student academic achievement.[9] Controlling for student demographic characteristics and levels of prior achievement, the more that students experienced authentic pedagogy, the more likely they were to demonstrate in-depth understanding of subject matter; higher-order thinking; and application, explanation, justification, and analysis in their classroom work. In a related study, Lee, Smith, and Croninger found that instructional practices reflecting the characteristics of authentic pedagogy also contributed to student performance on conventional standardized tests of student achievement.[10]

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[1]Newmann and associates (1996).
[2]Newmann, Marks, and Gamoran (1996).
[3]More information about authentic pedagogy can be found in Wehlage, Newmann, and Secada (1996) and Newmann, Bryk, and Nagaoka (2001).
[4]Newmann, Lopez, and Bryk (1998).
[5]Newmann, Bryk, and Nagaoka (2001).
[6]Ibid.
[7]Newmann and associates (1996).
[8]Marks (2000).
[9]Marks, Newmann, and Gamoran (1996); Newmann, Marks, and Gamoran (1996).
[10]Lee, Smith, and Croninger (1995).

Supports for Teaching and Learning

The Chicago Annenberg Research Project conducted several studies of "supports" for teaching and learning—academic press and social support, interactive teaching practices, and instructional program coherence. These studies show that such supports are related significantly to student academic achievement. While they do not address the issue directly, the Annenberg studies suggest that these supports may also help promote intellectually ambitious instruction.

Lee, Perry, and Smith used data from city wide teacher and student surveys administered by the Consortium on Chicago School Research, as well as student scores on the Iowa Tests of Basic Skills (ITBS) and found gains in student reading and math achievement in contexts where students experienced both high levels of support and high levels of academic press.[1] Smith, Lee, and Newmann found greater gains in reading and math achievement on the ITBS among students whose teachers used more interactive teaching practices. Gains were significantly smaller when teachers used more didactic practices.[2] In a third analysis, Newmann and his colleagues explored the concept of school instructional program coherence and its relationship to gains in student academic achievement.[3] Using student scores on the ITBS and teacher survey data from Chicago public elementary schools to measure coherence, Newmann and his colleagues found strong, positive relationships between the development of school instructional program coherence and improvement in student achievement in both reading and mathematics.

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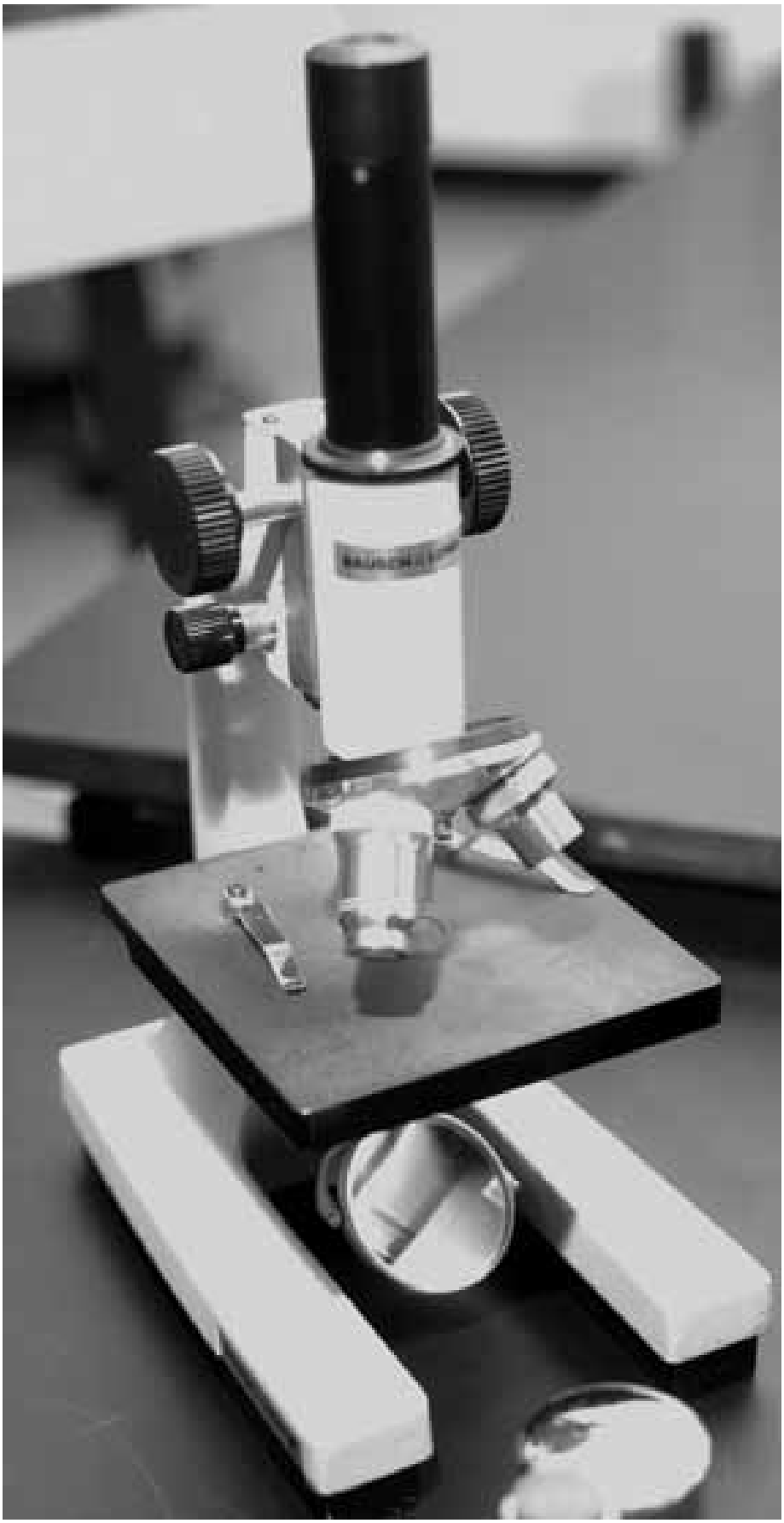
[1]Lee, Smith, Perry, and Smylie (1999).
[2]Smith, Lee, and Newmann (2001).
[3]Newmann et al. (2001).



Chapter 2

Tools for Promoting Intellectually Ambitious Instruction

Given that we wish to promote intellectually ambitious instruction with the aim of improving student achievement, how might a district or school go about encouraging teachers to engage in this type of teaching? Two types of tools, or policy instruments, have been used to promote intellectually ambitious instruction since its emergence.[1] The first type, "guidance" instruments, seeks to influence instruction through specification and regulation. Guidance instruments specify how teaching and learning should be carried out, and they seek to motivate teachers and schools to engage in these activities by holding them accountable for results (mostly in the form of student test scores). Examples of guidance instruments include curricular and instructional frameworks, standards for teaching and student learning, textbooks and other instructional materials, and student testing policies and the stakes attached to them (e.g., student grade-level retention, school probation, and school choice mechanisms).

A second type of tool is "development" instruments, which seek to enhance the capacities of teachers to teach in more intellectually ambitious ways. The most common of these instruments is teacher professional development, a broad class of planned learning activities designed to help teachers develop the knowledge and skills required to enact new instructional practices. Research shows that professional development is essential to promoting change in teaching practice.[2]

The combination of these two types of instruments can also be important. For example, professional development is a necessary complement to guidance instruments.[3] Although guidance instruments can direct, motivate, and perhaps induce compliance with particular teaching practices, they do not help teachers develop the knowledge and skills required to change their practice in meaningful and sustainable ways. Conversely, professional development is not likely to promote much change without incentives, accountability,

and the school organizational conditions necessary to motivate and support teachers in implementing their new knowledge and skills.[4]

The goal of increased levels of intellectually ambitious instruction is difficult to achieve for several reasons. First, the task is formidable. Intellectually ambitious teaching is not prevalent. McLaughlin and Talbert argue that the move from conventional thinking and practice will require "a sea change in notions of teaching and learning."[5] Dutro and her colleagues write about the need for a dramatic "reculturing" of teachers and teaching.[6] Similarly Spillane and Jennings argue that moving toward more intellectually challenging instruction will require changes in "deep" aspects of teaching that go well beyond the use of new materials and teaching practices to include changes in the manner in which subject matter is treated, how students and teachers interact with subject matter, and what teachers understand and value as learning and knowing.[7] According to Spillane and Jennings, these aspects of teaching are especially difficult to penetrate and change. Finally, as Marks and her colleagues have pointed out, research that has examined efforts to move teaching in intellectually ambitious directions has documented enormous difficulties, even among teachers committed to improvement.[8]

More than ten years ago, McLaughlin and Talbert observed that educational leaders, policy makers, and indeed researchers tend to underestimate what it takes to achieve meaningful, widespread, and lasting change in teaching and learning.[9] We contend that little has changed. The second challenge to achieving increased levels of intellectually ambitious instruction is that the instruments we have relied on to achieve this end are not fully effective. Most of the tools are weak; some have created new problems. For example, studies of guidance instruments show that they can influence teachers' instructional practice, sometimes deeply, but

Prevalence of Authentic Pedagogy in Chicago Public Elementary Schools

As part of its study of instruction, the Chicago Annenberg Research Project examined the levels of intellectual challenge found in writing assignments in reading/language arts and mathematics assignments in a sample of elementary schools over a three-year period. This analysis, conducted by Bryk, Nagaoka, and Newmann, illustrates how long and difficult a journey it might be to promote more intellectually challenging instruction on a wide scale.[1] The analysis drew on classroom assignments collected from 74 to 116 teachers of third, sixth, and eighth grades.

In 1999, the last year of findings reported, the following percentages of assignments sampled showed moderate or extensive levels of challenge:

- 64 percent of third-grade reading/language arts writing assignments and 46 percent of third-grade math assignments,
- 48 percent of sixth-grade writing assignments and 17 percent of sixth-grade math assignments, and
- 56 percent of eighth-grade writing assignments and 9 percent of eighth-grade math assignments.

These percentages reflect improvements over levels of challenge found in assignments collected during the first two years of the study period. The data indicate that while intellectually challenging instruction can be found in under-resourced, low-income schools, its occurrence is highly variable and by no means widespread.

[1]Bryk, Nagaoka, and Newmann (2000).

High-Quality Professional Development for Chicago's Teachers

Another study of the Chicago Annenberg Research Project, conducted by Smylie and his colleagues, examined the impact of a model of effective professional development on teachers' use of different instructional practices.[1] This model of effective professional development included three elements:

- the frequency with which teachers participate in professional development activities,
- teachers' exposure to particular content in their professional development, and
- the pedagogical quality of their professional development experiences.

Pedagogical quality was defined as the extent to which professional development addressed the needs of students in teachers' classrooms; was sustained and coherently focused; included enough time for teachers to think carefully about, try out, and evaluate new ideas; included follow-up activities; was closely related to school improvement plans; included opportunities to work with colleagues at teachers' own schools and teachers from other schools; and did not leave teachers to find their own professional development opportunities.

Using data from citywide teacher surveys, this study examined relationships between the three elements of effective professional development and teachers' use of interactive and didactic instructional practices. Smylie and his colleagues found that regardless of which type of practice teachers engaged in, they were likely to participate in professional development that focused on topics closely related that type of practice. Teachers were also likely to rate the professional development experience related to their type of practice as higher in pedagogical quality than did teachers who used the other type of teaching practice. Smylie and his colleagues concluded that both the content focus and the pedagogical quality of professional development affect teachers' use of different instructional practices. These findings suggest that particular practices may be promoted by professional development that is of high pedagogical quality and that is focused on content related to those practices.

[1]Smylie et al. (2001).

mostly superficially or symbolically.[10] If guidance instruments are not explicit about the qualities of instruction they seek to promote, or if they are not well aligned, they may have little impact or lead to unintended consequences, such as teaching to the test.[11]

With regard to development instruments, there has been significant progress during the past few years in identifying effective practices for teacher professional development. Recent research has found that professional development is most effective when it focuses on specific topics and teaching practices associated with intellectually ambitious instruction, as opposed to focusing only on general classroom issues (e.g., classroom management, student discipline, and student grouping for instruction).[12] Furthermore, researchers have found that professional development is more effective when it provides active, sustained, in-depth opportunities for teacher learning; when it is followed up with implementation support; and when it is coherent and aligned with broad school improvement goals and activities.[13] However, the fact remains that the professional

development that many teachers experience falls substantially short of these qualities.[14] Moreover, teacher professional development as an instrument for instructional improvement is not often well aligned with guidance instruments.[15] The resulting fragmentation is sure to weaken the influence of both guidance and development instruments for promoting intellectually ambitious instruction.

Nevertheless, professional development is only one way in which we can support instructional improvement. We have begun to see the emergence of new approaches to instructional improvement that are grounded in the often-overlooked area of school leadership and administration: human resource management (HRM). These new approaches are substantially different from human resource management as conventionally conceived and practiced.[16] Referred to generally as strategic HRM, these approaches reflect new perspectives on human resources, their development, and their management, which have emerged in recent years in the organization and management literatures. There is growing evidence that these approaches can contribute substantially to organizational performance and effectiveness and can play a crucial role in organizational improvement. We argue here that they can also be effective in promoting instructional improvement, specifically intellectually ambitious instruction.

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[1]Cohen (1995). See Hannaway and Woodroffe (2003) and McDonnell and Elmore (1987) for broader discussions of policy instruments in education.

[2]E.g., Cohen and Hill (2001); Dutro et al. (2002).

[3]Spillane and Jennings (1997).

[4]Dutro et al. (2002); Smylie and Perry (1998).

[5]See McLaughlin and Talbert (1993, p. 2). See also Hiebert et al. (1996).

[6]Dutro et al. (2002).

[7]Spillane and Jennings (1997).

[8]Marks, Newmann, and Gamoran (1996). Specific studies Marks and colleagues refer to include Cohen and Ball (1990); Elmore, Peterson, and McCarthey (1996); Prawat (1992).

[9]McLaughlin and Talbert (1993).

[10]E.g., Cohen and Ball (1990); Rowan (1990).

[11]See Nagoaka and Roderick (2004) and Smylie and Wenzel (2003) for discussions of accountability and other instruments.

[12]Desimone et al. (2002); Smylie et al. (2001).

[13]Cohen and Hill (2000); Desimone et al. (2002); Dutro et al. (2002); Smylie et al. (2001).

[14]Randi and Zeichner (2004); Smylie et al. (2001).

[15]Dutro et al. (2002); Spillane and Jennings (1997).

[16]Keep (1993); Rebore (2004).

Chapter 3

Strategic Human Resource Management: An Overview

According to Wright and McMahan, strategic HRM refers to "the pattern of planned human resource deployments and activities intended to enable an organization to achieve its goals."[1] This includes development of employee knowledge and skills—which are thought about in education as teacher professional development—but goes further to encompass ways in which human capacity can be effectively employed, deployed, and managed in an organization.

Nordhaug and Gronhaug observe that the knowledge, skills, and values held by individuals within organizations form a "portfolio" of competencies that help organizations achieve their objectives.[2] Wright, Dunford, and Snell refer to these collective competencies as "stocks of skills" and "strategically relevant" knowledge and behaviors.[3] Organizations perform effectively, the logic goes, to the extent that they are able to strategically develop and blend the many competencies of their employees and coordinate and direct those competencies toward organizational purposes.[4]

Wright and Snell argue that all organizations must perform two basic human resource tasks—competence management and behavior management. Competence management refers to the acquisition, development, application, retention, and displacement of human capital—that is, employees' knowledge, skills, and commitments.[5] Behavior management refers to the coordination and control of that human capital so that it functions effectively within the organization. These two tasks can be performed through various types of HRM practices such as personnel recruitment, selection, training, evaluation, and compensation. Wright and Snell also observe that different aspects of competence and behavior management can be achieved with different combinations of HRM practices.[6] For example, competence

management might be achieved through recruitment, selection, and training; behavior management might be achieved through evaluation and incentives provided through compensation. Moreover, the same practices might serve both functions. For instance, evaluation might develop employee competence through feedback on performance and at the same time manage employee behavior by communicating expectations for performance. Compensation might attract new employees and thus promote competence within the organization at the same time that it motivates particular employee behavior. Wright and Snell argue that the quality and effectiveness of specific HRM practices are important, but even more important is the use of different combinations of practices to develop and manage employees in ways that help the organization meet its goals. Also crucial is coherence or congruence among combinations of practices. In other words, it is "the pattern of planned human resource deployments and activities" in relation to an organization's work that enables the organization to achieve its goals.[7]

Concepts of Fit and Flexibility

In the middle and late 1990s, these basic ideas about managing human resources were further developed according to the concepts of fit and flexibility.[8] "Fit" is generally referred to as the degree to which one organizational component is congruent with another (e.g., an organization's objectives and strategies). According to Wright and Snell, most theories of fit assume that when an organization achieves congruence among components, it is more efficient and more effective than when a lack of fit, a misalignment, or a conflict exists.[9] Fit can be either vertical or horizontal. Vertical fit refers to the relationship between an organization's strategy and its objectives, and between strategy and objectives and demands from the external environment and the organization's human resources. Horizontal fit refers to consistency among various HRM activities. That is, the effectiveness of any HRM practice depends on the effectiveness of other practices in place.

Of course, the problem is that fit is not something that can be achieved once and for all.[10] Both vertical and horizontal fit are constantly challenged by the dynamic qualities of organizational environments and by the ever-changing nature of organizational workforces. An organization's workforce is in constant flux as employees enter and exit and develop or fail to develop knowledge and skills over time. Employee turnover and stagnation in human capacity can compromise an organization's ability to achieve its objectives. Organizational environments change, often in unpredictable ways, and new external demands can challenge an organization's strategies, requiring organizational strategies to be adapted, which may reveal inadequacies in human resources.

These conditions point to the importance of flexibility.[11] "Flexibility" refers to an organization's ability to adapt to diverse and changing demands that may come from sources within or outside the organization. Organizations that are able to modify their practices and develop their human resources in response to internal or external changes are more likely to be effective than organizations that lack flexibility. The concept of flexibility can be applied to human resource management in at least two ways. As organizations adapt their strategies (and perhaps also their objectives) to sustain fit with external demands, they must also be flexible in their practices in order to develop and manage their human resources. And, because an organization's human resources are themselves dynamic, the organization must be flexible in its practices to meet the changing needs of its employees and respond to their varying ability to effectively enact the organization's strategies.

Edgar Schein argues that the most important component of an HRM system is planning because "task requirements are likely to change as the complexity and turbulence of the organization's

environment increase."[12] Accordingly, he assumes that an organization will face new demands and that the nature of work within the organization will need to change over time to meet those demands. Such demands and external changes must be monitored continuously in order to ensure that the right human resources are recruited, developed, and retained to do the organization's work well. Schein concludes that because both individual and organizational needs change over time, the process of HRM must be capable of dealing with a wide variety of employees, all at different stages of their careers.

Supporting Evidence

Studies examining strategic systems of HRM practices provide evidence of their promise.[13] Huselid's study of more than 960 firms representing all major industries finds that a firm's total investments in human resource management were associated with lower employee turnover and greater productivity.[14] This study also finds that the fit between a firm's HRM practices and its overall production strategy was positively associated with increases in firm performance. A more recent study by Huselid, Jackson, and Schuler provides additional evidence of the positive impact of strategic HRM on organizational performance.[15] That study compares "technical human resource management effectiveness" with "strategic human resource management effectiveness" on multiple measures of performance in 293 large U.S. companies. These measures include financial, productivity, and market value indicators. Technical effectiveness refers to the strength of individual HRM practices, such as recruitment, selection, performance evaluation, training, and compensation and benefits management. Strategic effectiveness refers to the design and implementation of "a set of internally consistent policies and practices that ensure a firm's human capital contributes to the achievement of its business objectives."[16] Although not commonly practiced among the firms in the study, Huselid and his colleagues find that strategic effectiveness with regard to human resource management is a stronger predictor of different measures of organizational performance than technical effectiveness.

The literature on organization and management also sheds light onto problems associated with the use of discrete and disconnected HRM practices that are generic, that are not focused on the goals of the organization, and that lack the flexibility required to meet different and changing needs of employees. For instance, Wright and Snell argue that pursuing employee development through such disconnected practices prevents an organization from identifying synergies or conflicts among practices, and thus increases the likelihood of inefficiency, inflexibility, and ineffectiveness.[17] Such pursuits are also likely to generate practice-specific and conflicting definitions of problems and to perpetuate the use of conventional (and perhaps ineffective) means for solving them, thus limiting the strategic alternatives available to the organization. Lepak and Snell find that uniformity in employee development practices can be similarly problematic. Uniformity assumes that there is a single, optimal architecture or strategy for developing and managing all employees.[18] This assumption ignores the reality that employees in any organization are typically quite diverse, with different and dynamic development needs.[19] In Lepak and Snell's estimation, a "one-size-fits-all" development practice, even in the guise of "best practice," is likely to be of limited usefulness.

In one of the most comprehensive reviews of theory and research on employee development practices, Lado and Wilson reach the following conclusions.[20] First, organizations that invest in "non-firm-specific" employee development practices do not perform as well as organizations that focus development practices on specific organizational needs and objectives. That is, organizations that fail to systematically consider

how new hires fit within the organization and help to achieve its goals do not perform as well as organizations that consider this fit. Lado and Wilson also distinguish between employee development practices that focus on the performance of specific tasks and those that focus on broader organizational performance. They find that the former—"minimalist" practices that focus on operational efficiencies and short-term, person-to-job fit—result in organizations becoming "trapped by functional myopia."[21] This may hinder the development of broader, more important competencies that are necessary for organizations to be effective over time. Finally, Lepak and Snell find that overly bureaucratic, standardized, and inflexible employee development practices can impede individual and collective employee performance and engender a sense of "learned helplessness." Such practices can foster dysfunction by compromising employee commitment to the organization and promoting unproductive or counterproductive behavior.

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[1]Wright and MacMahan (1992, p. 298).

[2]Nordhaug and Gronhaug (1994).

[3]Wright, Dunford, and Snell (2001, p. 706).

[4]Wright, Dunford, and Snell (2001); see also March and Simon (1958).

[5]Wright and Snell (1991).

[6]Ibid.

[7]Wright and McMahan (1992, p. 298).

[8]Delery (1998); Wright and Snell (1998).

[9]This theory is from Wright and Snell (1998); see also Nadler and Tushman (1977).

[10]Wright and Snell (1998).

[11]Ibid.

[12]Schein (1977, p. 5).

[13]Lado and Wilson (1994).

[14]Huselid (1995).

[15]Huselid, Jackson, and Schuler (1997).

[16]Ibid, p. 172.

[17]Wright and Snell (1991).

[18]Lepak and Snell (1999),

[19]Arthur and Kram (1989).

[20]Lado and Wilson (1994).

[21]Ibid, p. 714.

Chapter 4

How Can Strategic HRM Work in an Educational Setting?

The idea of strategic HRM suggests a different and potentially more effective way to think about promoting instructional improvement. This perspective does not diminish the importance of individual practices, such as high-quality teacher professional development, for promoting change in classroom teaching. Rather it suggests that different HRM practices can be formed into a coherent and strategic system of instruments aimed at instructional improvement. These are HRM practices that schools and school districts perform routinely, such as teacher recruitment and hiring; induction and socialization; teacher deployment to grade levels, subject areas, and students; supervision and evaluation; professional development; compensation; reward and sanction; and retention and termination.[1] The question, then, is *how* and *to what ends* these practices are performed.

Within an educational setting, the concept of fit can help us think about how instructional improvement can enable schools and school systems to meet the needs of the students and communities they serve. Fit directs our attention to how different human resource management practices help promote instructional improvement, or, as this report specifies, intellectually ambitious instruction. The concept of fit also emphasizes the importance of aligning different HRM practices so that they work in mutually reinforcing ways. The concept of flexibility suggests that schools and school systems must continuously monitor and adapt their HRM practices to meet changing external demands. It also suggests that schools and school districts need to vary their HRM practices in order to accommodate the diverse and dynamic quality of school workforces.

There is an abundance of literature on the effectiveness (or ineffectiveness) of individual teacher development and management practices.[2] However, there are only a few studies that examine how individual practices might function together as a strategic system. Some of these studies have examined district-level practices, others, school-level practices. As a whole, this research shows positive outcomes for instructional improvement when human resource management practices are strategically applied.

District-Level Findings

Several studies have examined the outcomes of district-level efforts to coordinate HRM practices for instructional improvement. For example, in one study McLaughlin and Talbert found that school districts that were successful in their reform efforts employed integrated systems of teacher recruitment and professional development that were strategically aligned to the districts' goals for improving teaching and learning.[3] Spillane and Jennings's study of a school district's efforts to promote intellectually ambitious instruction found that the district's general success was attributable not only to a coherent constellation of instruction guidance instruments—such as a new curriculum guide, new curricular materials, and a revised student assessment system, but also to acoordinated array of development instruments—HRM practices-aligned to those guidance instruments.[4] The HRM practices included extensive staff development workshops organized around new curriculum and assessments, monitoring of classroom teaching by central office personnel to support implementation, and the recruitment of new teachers whose philosophies fit with the district's instructional improvement goals. While this district actively sought to achieve strategic fit between its goals for instructional improvement and its HRM practices, it tended to ignore the need for flexibility. Spillane and Jennings noted that some district reformers believed that teachers, regardless of differences in their beliefs, knowledge, and development needs, would change their practice if the district sent them coherent messages promoting intellectually ambitious instruction. The authors quoted a member of the district's reading taskforce who observed that the central administration "did not teach [and] treat the teachers in a developmentally appropriate way... [T]hey expected that everybody was at the same place at the same time and [teachers] would move to this other place."[5] Failure to address differences in teachers' knowledge, dispositions, and commitments was one of the reasons Spillane and Jennings provided to explain why change occurred in "surface-level" aspects of teachers' practice, such as the use of new materials and the general orientation of instruction, yet change in the "deep" aspects of instruction, such as classroom tasks and discourse was less widely accomplished.

Additional evidence comes from several studies that have been conducted of two school districts widely known for their efforts to link HRM systems with instructional improvement: District 2 in New York City and the San Diego, California district. The basic strategy for linking these practices with instructional improvement was developed by the District 2 superintendent and his staff. The superintendent transported this strategy, with some adaptation, to San Diego. Components of the strategy included recruiting and hiring new teachers, providing intensive professional development using teacher networks and extensive external monitoring and consultation, establishing active teacher evaluation, moving ineffective teachers out of the district, preventing the transfer of ineffective teachers into the district, developing collaborative working relationships among teachers, redesigning teachers' work to provide new opportunities for leadership, and instituting a teacher incentive program. All of

these activities focused on the implementation of an instructional framework and the attainment of standards for student learning.

Anecdotal evidence from District 2 suggests that this system of HRM promoted changes in instruction consistent with the framework.[6] Early evidence from San Diego indicates that although the district experienced a number of political and organizational problems in implementation,[7] this system began to alter the district's organization and the administration's orientation to teachers and instructional improvement.[8] The evidence suggests that teaching practice across the district began to shift in the direction of the framework and that scores on standardized tests of student achievement started to improve.[9] Other evidence suggests that outcomes varied substantially across schools and that additional flexibility may have been needed to address differences in local school contexts and capacities for instructional reform.[10]

School-Level Findings

A few studies of the strategic use of HRM practices at the school level mirror findings of their use at the district level. For instance, in an early study, Louis and Miles found that improvement in the urban high schools they studied was supported by a coordinated array of HRM strategies, each aligned with a particular vision for the school.[11] These strategies included recruitment of new teachers, opportunities for teacher professional development, and efforts to transfer ineffective teachers out of the building.

Additional evidence of the effectiveness of comprehensive, strategic approaches to teacher human resource management comes from Elmore, Peterson, and McCarthey's case studies of restructuring elementary schools.[12] Although their central focus was the relationship between organizational structure and teachers' work in classrooms, these cases reveal different ways that schools approached teacher development to promote their visions of effective teaching and learning. Elmore and his colleagues argued that the schools they studied exemplified "enlightened" practices: a commitment to intellectually ambitious instruction, the establishment of participative decision making on a broad range of issues, changes in the structures for assigning students to teachers and for teachers relating to each other, and frequent formal opportunities for professional development. In each school, principals and teachers collaborated actively on issues of teaching and learning. Although these schools had "restructured" and organized around a similar vision of intellectually ambitious instruction, they varied considerably in the quality and consistency of instruction that occurred and in the depth of knowledge required of teachers to teach in intellectually ambitious ways. The cases suggest that these differences were related to the manner in which the schools strategically developed and managed their teachers to promote the school's approach to teaching and learning.

The school that achieved the greatest depth and consistency of intellectually ambitious instruction went further than the others in the strategic development and management of its faculty. The principal and teachers worked together to hire only those teachers who were committed to and relatively well-prepared in the kind of teaching the school promoted. According to Elmore and his colleagues,

> [These] teachers were expected to be practitioners of a certain kind of teaching when they entered the school. Some teachers were selected from the population of student teachers who regularly circulated through the school; some came to the school through professional networks; and in at least one case a teacher was "apprenticed" to another school for a year to

learn how to teach art before being hired [at the case study school].[13]

This school put new teachers into an environment where discussion and observation of teaching—peer review—were part of everyday work. Doing so set high expectations for teachers, creating and reinforcing a norm that every teacher should have a "consuming intellectual interest" that he or she brought to the school. The school's emphasis on peer review also formed internal and external networks of like-minded practitioners who were available to consult on problems of practice. The school took advantage of professional development workshops provided by the school district (although they were not viewed particularly favorably by teachers at the school) and organized its own formal staff development activities. The school was also "crafty" at obtaining outside resources to help teachers learn and solve particular problems of practice.

In all, teacher development at this school was pursued through a coherent and systemic strategy of assembling a skilled, committed, like-minded faculty; socializing teachers into an environment defined by specific expectations for practice; linking teachers to internal and external sources of learning; and holding teachers accountable for their practice, primarily through peer interaction and professional expectations and norms. The development of teachers was part and parcel of the "fabric of the organization."[14] The other schools in the study failed to achieve such coherence and comprehensiveness in their approaches to teacher development and management.

Evidence from the Chicago Annenberg Research Project

The Chicago Annenberg Research Project provides further evidence of how comprehensive, coordinated, and strategic approaches to human resource management can support instructional improvement at the school level. The research project did not set out to study HRM practices *per se*, but it gathered a great deal of data germane to the issue. In this section, we present vignettes from longitudinal case studies of three Chicago schools that participated in the Chicago Annenberg Challenge—Lake, Sage, and Clay elementary schools.[15] In each school we found strategic systems of HRM practices in place that were organized to promote instructional improvement, which was either guided by an existing program or defined and developed within the school itself. Each school's initiative was intended to push instruction in more rigorous and intellectually challenging directions.

The vignettes that follow illustrate vertical and horizontal fit in the ways that different HRM practices were coordinated with one another and aligned with the goal of instructional improvement. Across the three schools, these practices included teacher recruitment and induction, professional development activities, communication of expectations for teacher performance, specification of classroom teaching strategies, provision of encouragement and incentives, principal supervision and evaluation, and removal of poorly performing teachers. Vignettes of Sage and Clay elementary schools provide examples of flexibility: Sage, by the way in which the school tailored teacher development practices to school and classroom contexts, and Clay, by the way that changes in external demands on the school led to a refocusing of HRM practices on different organizational objectives. The vignette of Clay provides a counter-example of sorts. It shows how initial progress toward more intellectually ambitious instruction was eroded when the school's system of human resource management was redirected to respond to external accountability pressures and key elements of the system fell away.

Lake Elementary School. During its years in the Chicago Annenberg Challenge, Lake Elementary School worked with a university-based external partner to improve classroom instruction, particularly in the

About the Chicago Annenberg Challenge

The Chicago Annenberg Challenge, a six-year, large-scale initiative to improve Chicago's public schools, began in 1995. The Challenge set out a broad vision for change, calling for the "enhancement of learning for all students through dramatically improved classroom practice and strengthened community relationships." Funding from the Challenge created networks of schools and external partners to plan, develop, and implement activities to improve local schools and student learning. At its height, the Chicago Annenberg Challenge supported improvement activities in 210 Chicago Public Schools. These activities focused on many different areas of school organization and practice, including curriculum and instruction, student learning climate and social services, teacher and leadership development, and parent and community involvement in schools and student learning.[1]

The Consortium led the evaluation of the Chicago Challenge, publishing more than 15 reports on the work of the Challenge and issues of urban school improvement related to the Challenge. The evaluation addressed various research questions, such as whether the Challenge schools developed and improved differently from non-Challenge schools; which programs, activities, and practices were most effective in promoting school development; which student outcomes are associated with school improvement; and which factors constrain and which promote school development.

More information about the Consortium's study of the Chicago Annenberg Challenge is available at this web address: http://www.consortium-chicago.org/research/riia02.html. A listing of the reports written about the Challenge is available at this web address: http://www.consortium-chicago.org/publications/pii001.html#ChicagoAnnenbergResearchProject.

[1]Sconzert, Smylie, and Wenzel (2004).

areas of reading and writing. The school adopted a framework of instructional strategies that aimed to increase the rigor and intellectual challenge of classroom teaching. These strategies included collaborative small group work, interdisciplinary units built around themes relevant to students' lives outside the school, journal writing, and student-centered assessments that included personal goal setting and self-reflection. Teachers were to use novels and nonfiction books as their primary instructional resources and to use textbooks only as supplemental resources.

Case data indicate that Lake was largely successful in promoting this framework. As the five-year study period progressed, more and more teachers were observed implementing these strategies in their classrooms. As time went by, "teacher talk" increasingly reflected that teachers were thinking about and working with these strategies. Teachers who embraced the strategies found that they regularly picked up new ideas and continued to shape their language arts instruction in ways that were consistent with the framework. Some applied the strategies to teaching other subject areas, such as social studies.

How We Constructed the Vignettes

Our vignettes were constructed from data collected in the longitudinal field research strand of the Chicago Annenberg Research Project.[1] This strand, which began during the 1996-97 school year and continued through the 2000-01 school year, investigated school improvement processes in a purposive sample of 23 elementary and high schools that participated in the Chicago Annenberg Challenge. The sample was selected to reflect different foci of improvement adopted by schools participating in the Challenge (e.g., instructional improvement, development of school-community relations, improvement of student learning climate) and different types of external partners that worked with schools through the Challenge (e.g., universities, community organizations, education reform groups). Although the research project did not attempt to identify a demographically representative group of schools to study, the schools we studied were similar to the range of schools supported by the Challenge and to schools across the Chicago public school system in terms of size of student enrollments, demographic characteristics (e.g., racial/ethnic composition, income-levels, and language minority status), and levels of student achievement.[2]

For the first three years of the study, a team consisting of a senior researcher and one or two research assistants visited each of the 23 schools. These teams documented the progress (or lack thereof) that schools made to develop different aspects of their organization and instructional programs and practices. These teams also documented efforts that schools made to improve and factors that promoted or impeded their progress. Each year, the research teams conducted an average of twenty-two interviews of administrators, teachers, external partners, and other key informants in each school. They recorded observations made at the school and classroom levels and collected documents and other relevant artifacts. From these data, the teams wrote structured case reports of the status of their schools' improvement at the beginning, middle, and end of the project. Each team also provided in-depth descriptions of the improvement activities and sources of support and constraint evident in their schools for all five years of the project. Case reports and written descriptions of improvement activities, supports, and constraints were independently read and checked for accuracy by three analysts on the project's staff. Reports and documentation were spot-checked against original field data. Then they were analyzed for themes and patterns that distinguished improving and non-improving schools. These findings were verified by the field researchers. Twelve of the original 23 schools continued past the first three years to the end of the study. Most of the eleven schools that did not continue were dropped by the project for lack of school improvement activity to study. The others withdrew from the project citing lack of interest or competing demands.

Our vignettes come from case studies of three of the twelve schools that participated fully in the study from beginning to end. As noted earlier, different schools adopted different improvement foci, and not every school in the Annenberg Challenge or in the research project sample focused on instructional improvement. Of the 12 schools that participated fully in the research project, only six focused on instructional improvement. Of these six schools, the three we selected for our vignettes were the ones with the best evidence of instructional improvement reflective of intellectually ambitious instruction. We selected two schools that made sustained progress during the study period

(Lake and Sage elementary schools) and a third school that made initial progress and then regressed (Clay Elementary School). Each of these schools served children in kindergarten through eighth grade. Student populations were predominantly minority—either predominantly African-American or Latino—and predominantly low-income. Their enrollments ranged from 600 to nearly 1,000 students. Both Lake and Sage enrolled substantial portions of limited-English-speaking students, either Mexican or eastern-European immigrants.

To find evidence about HRM practices, we examined case study reports and documentation of improvement activities for each of these three schools. Our intention was to see if schools where instructional improvement occurred were places where there was also evidence of strategic HRM. Because the research project did not set out to study HRM practices *per se*, we were not able to find enough evidence in all schools engaged in instructional improvement to assess the role those practices may have played in schools that were less successful. This is why the vignette of Clay Elementary School is a particularly useful point of comparison with the other two vignettes.

As the vignettes show, there was a positive relationship between the systematic and strategic nature of HRM practices and evidence of instructional improvement in these three schools. However, these vignettes are not meant to suggest that changes in instruction were attributable completely or primarily to their HRM practices. A number of other factors were also at work, including the activities of the school's external partners and the policies of the central office.[3] Still, there is good reason to believe that in a broader constellation of influences, HRM practices played an instrumental role.

On a related point, we found that each of the three schools experienced school-wide gains in combined math and reading scores on the Iowa Tests of Basic Skills (ITBS) concurrent with their efforts to promote instructional improvement. Between 1997 and 2001, the percentage of students at Lake Elementary School scoring at or above national norms increased from 25 percent to 35 percent. At both Sage and Clay elementary schools, this percentage rose from 30 to 40 percent. While these improvements are encouraging, we urge caution in attributing them to any particular set of factors. We would expect that improvement in student learning would follow improvement in instruction. At the same time, achievement gains at these schools (at least as measured by school-level averages of standardized test scores) may be due to a combination of many factors, including changes in student populations at Lake related to neighborhood gentrification and the growing emphasis on test preparation at Clay.

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[1]Smylie and Wenzel (2003).
[2]Ibid.
[3]Ibid.

Eventually some of the initially resistant teachers began to adopt the strategies as well. As one of the teachers confessed in an interview: "Okay, I will admit, I caved in and I am doing what has been requested and what our school philosophy is. No textbooks."

The case data also show that Lake's efforts to improve classroom instruction were supported by a number of mutually reinforcing HRM practices aimed at promoting the framework. School leaders presented clear expectations for implementation to the teachers. The framework was incorporated into the school's annual improvement plan.[16] As indicated by the statement from the initially resistant teacher, the principal made clear her expectations that teachers use these strategies and she backed up these expectations with directives (e.g., "No textbooks."). The principal supported implementation through regular verbal encouragement and incentives. She provided money and substitute teachers to faculty members so they could attend professional development workshops related to the framework. In addition, the principal created an environment of "bounded" autonomy for teachers that seemed to promote teacher buy-in and motivation for implementation. Within the parameters of the framework, the principal allowed teachers substantial discretion to make instructional choices and shape their work environment. For instance, midway through the study period, teachers voted to restructure the school schedule to create additional time each month for professional development. Teachers were given keys to the school building (unusual for most Chicago public schools) and they were able to spend their allocations of discretionary funds for classroom materials without prior administrative approval. This autonomy was part of a "customer service" orientation adopted by the principal and assistant principal.

Lake organized an intensive, long-term system of teacher professional development activities oriented toward mastery and implementation of the framework. Lake's Annenberg external partner was located in Chicago and provided numerous workshops for the entire teaching faculty both at the school and off site. The partner sent an instruction coach to Lake every few days to work with teachers on implementing new strategies in their classrooms. As mentioned above, resources were available to release teachers to participate in professional development activities outside the school, including activities offered by the external partner and other providers.

Finally, the principal tailored her supervision and evaluation practices to promote and reinforce the implementation of the framework. She spent a great deal of time in teachers' classrooms, observing and giving advice. In the process, the principal supported teachers whose teaching mirrored the strategies outlined in the school's framework and promoted through professional development activities. At the same time, she made clear that in evaluating teachers' performance, she considered the extent to which they embraced the strategies. The principal was not reluctant to remove from the school teachers whose teaching was poor and not based in the framework.

Sage Elementary School. Sage worked with an Annenberg partner that promoted a well-developed national curricular and instructional program in language arts. Elements of the program included ability grouping, cooperative learning, strictly paced and structured lessons, book clubs, and regular student assessments. The curriculum articulated subject matter progression from grade to grade and was aligned with a program of student tutoring. Teachers at Sage were required by the principal to follow this program in their classrooms. Accordingly, morning language arts periods were organized so that all teachers taught the curriculum at the same time. All teachers were provided curricular and instructional materials that included Spanish-language versions for students with limited English proficiency. During the study period, we found a strong and steady level of implementation, and perhaps intensification, of this program.

At Sage, substantial attention was paid to the organization and development of the teaching faculty to shape language arts instruction in the image of the program. At the heart of the effort was a full-time language arts specialist. The specialist, a teacher at Sage, had been hired into the new role and was working with teachers before the study period began. She had a strong working relationship with the principal and both had been at the school for nearly 30 years. The primary source of funding for her position came from the Chicago Annenberg Challenge and when funding expired in 2000, the principal financed the specialist's position fully from school discretionary funds.

Sage promoted this instructional program through an array of mutually reinforcing professional development activities. Faculty members were sent to workshops provided by the school's Annenberg partner at different sites across the city. Each year several teachers went to national meetings related to the program. The school's specialist visited teachers' classrooms regularly to model the program and to coach teachers in implementation. The external partner also sent members of its staff to visit Sage periodically and to provide feedback and recommendations to the school through the specialist. In turn, the specialist would incorporate feedback and recommendations into her work, as she said in an interview, taking the school's context into consideration and translating them into "something that will make positive change in our school." Implementation was reinforced by administrative supervision. Both the specialist and principal spent considerable time making announced and unannounced visits to teachers' classrooms for observation.

Sage was a school with little staff mobility. Teachers who came to the school tended to make their careers there. When new teachers were hired, the school turned to the external partner to provide induction training in the language arts curriculum and instructional strategies. The principal also worked to establish a pipeline to recruit new teachers whose knowledge, skills, and commitments were consistent with the program. Among those he recruited were student teachers from local universities who had done their student teaching at Sage and were familiar with the basics of the program.

Clay Elementary School. Unlike Lake and Sage, whose efforts to improve instruction were oriented around an existing, externally provided framework, Clay's instructional improvement efforts were homegrown. During the years that Clay participated in the Chicago Annenberg Challenge, the school's external partner worked with teachers to improve reading and language arts instruction through team building, teacher leadership, and collaborative planning and problem solving. With the partner's assistance, Clay formed grade-level teams of teachers and helped these teams identify problems in teaching and learning, set goals and agendas for instructional improvement, and assess progress toward achieving these goals. The external partner provided teachers with a resource manual that contained what the partner considered effective practices for teaching reading and developing a school environment conducive to student learning.

The story of instructional change at Clay unfolded in two chapters. Between 1996 and 1999, teachers' work with the external partner began to generate changes in classroom practice that embodied curricular integration, more intellectual challenge, and greater use of constructivist instructional strategies. In 1997 teachers spoke a great deal about organizing their instruction around integrative thematic units. In one interview, a third-grade teacher outlined in substantial detail a unit she developed on butterflies that incorporated language arts, social studies, math, science, and art lessons. Teachers created reading competitions and other activities to encourage students to read. They also began to use student work more extensively to assess learning and develop new instructional strategies.

However, by 1999 these changes had all but disappeared. Instead of using their time together to develop new units and explore new teaching practices, grade-level teams turned their attention to more carefully aligning their instruction with the school system's student learning standards and coordinating subject matter that they would cover during the school year. Teachers met regularly to decide who would teach what and when. Each month they "mapped out" their instructional objectives for the following month. Most focused on the development of basic skills, as opposed to more intellectually ambitious learning. Compared to earlier years, teachers' planning and classroom instruction had become clearly focused on helping students score well on the Iowa Tests of Basic Skills (ITBS) and the Illinois Standards Achievement Tests (ISAT). These tests determine whether students are promoted to the next grade level and whether schools are placed on academic probation, becoming subject to oversight by the school system. As one teacher explained in a 2000 interview:

> In terms of writing, we teach to the essays ... in the ISAT format .... And that doesn't take a great deal of imagination. It's a lot of drudgery for the kids and the basic idea is that they rewrite it endlessly until it's absolutely perfect .... [T]hat's not necessarily the way that I would do it, but those are the orders from above .... I guess it's challenging but it's like facing the firing squad would be challenging too .... [T]o be honest with you, I don't feel that our writing program is challenging at all .... I don't think it fosters a great deal of creativity .... And I think that, rather than creating an interest in writing on the part of our students, I think it does exactly the opposite. I'm quite sure of it.

These changes in instructional styles were associated with changes in several HRM practices, as well as with intensifying accountability pressures from the school system. At first, the principal encouraged teacher participation in the school's Annenberg work and made clear her values and expectations concerning instruction as she supervised and evaluated teachers in their classrooms. She communicated strong support for team teaching and the development and implementation of curricular and instructional changes through teachers' Annenberg work. She granted teachers substantial autonomy in teaching and instructional improvement and encouraged their involvement in school-level decision making. However, by 1999 the principal was less interested in promoting teacher involvement and curricular and instructional innovation than in how teachers prepared students for standardized tests. At the same time that the principal continued to support and create opportunities for grade-level meetings for all Clay teachers, she made clear that her primary instructional expectations concerned increasing student test scores. She shifted the focus of teacher supervision and evaluation to how teachers prepared students for standardized tests.

By 2001, teachers we interviewed complained that the principal's control had become "too tight." Instead of supporting the earlier autonomy enjoyed by teachers in their grade-level meetings, the principal controlled meeting agendas. Without exception, teachers said that the principal visited their classrooms more in 2001 than in 1997. But rather than observing and encouraging the implementation of reading practices developed through teachers' work with their Annenberg partner, the principal focused on promoting the system's learning standards and student preparation for standardized tests. The teachers who were interviewed found that this substantially reduced the discretion they had for creative teaching in their classrooms.

Also key to the story at Clay was a language arts specialist. The specialist provided professional development and classroom-level implementation support to teacher teams at Clay. She guided teachers in using the external partner's manual of instructional practices to improve their work with students. She also helped teacher teams function smoothly and

linked teachers to external sources of professional learning that could help them develop new and better ways to teach. This specialist role was established in 1997, first as a part-time position. It was expanded to a full-time position between 1998 and 2000 with funds provided by the school's Annenberg partner, and it returned to a part-time position when Annenberg funding stopped in 2001. This change substantially reduced the amount of time that the specialist could spend with teachers at Clay. The reduction in hours limited the specialist's ability to support teacher teams and provide professional development opportunities to teachers and classroom support for implementation. Coupled with the shift in the principal's practices, the reduction of support and learning opportunities provided by the specialist contributed to a change at Clay from one instructional emphasis—the school—developed framework—to another—the school system's focus on test scores.

Summary

These vignettes illustrate relationships between strategic HRM and the promotion of instructional improvement. More specifically, each provides an example of vertical and horizontal fit in the ways that HRM practices were aimed at promoting each school's objectives for instruction improvement and in the ways that the practices related to each other. The second two vignettes—Sage and Clay—provide examples of flexibility in human resource management. At Sage, teacher development strategies developed by the school's external partner were adapted to best suit the local school context. At Clay, flexibility can be seen in the redirection of HRM practices from one approach to instructional improvement to another. The story at Clay may not be a positive one with respect to promoting intellectually ambitious instruction; however, it illustrates well the notion of flexibility to meet changes in external demands.

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[1] Miles (1995); Smylie and Miretzky (2004).

[2] Smylie and Miretzky (2004).

[3] McLaughlin and Talbert (2003).

[4] Spillane and Jennings (1997).

[5] Ibid., p. 457.

[6] Elmore and Burney (1997, 1998).

[7] See Cuban and Usdan (2003); Hess (2005); Stein, Hubbard, and Mehan (2004).

[8] Hightower (2002); O'Day (2005).

[9] Hightower with McLaughlin (2005); O'Day (2005).

[10] Darling-Hammond et al. (2003).

[11] Louis and Miles (1990).

[12] Elmore, Peterson, and McCarthey (1996).

[13] Ibid., p. 232.

[14] Ibid., p. 233.

[15] Pseudonyms are used and identifiers are altered or removed to maintain the anonymity of field research sites.

[16] The Chicago Public Schools requires that each school develop its own annual school improvement plan for advancing academic achievement (SIPAAA). The purpose of the plan is to establish goals and expectations for improvement and to help schools organize activities and resources to achieve its goals.

Chapter 5

Concluding Remarks

In this report, we have argued that strategic HRM practices hold promise for promoting instructional improvement. Particularly salient in such systems are concerns of fit and flexibility. Fit emphasizes the importance of aligning a cohesive and strategic set of HRM practices with the school's teaching and learning frameworks. Flexibility emphasizes the importance of variability in HRM practices to accommodate the diversity and dynamics of teaching faculties and the need to address changing demands from the external environment. An implicit assumption throughout has been that in order for HRM systems to be effective, individual management practices must themselves be of high quality and aligned with specific instructional goals and frameworks.

To date, we know of no comprehensive studies of systems of HRM practices in education at the school or district level. The evidence we have presented here is largely indirect and anecdotal; however, the ground is fertile for research that would test this theory of strategic HRM in practice as it relates to instructional improvement and outcomes for students. Little is known about the relative efficacy of different combinations of HRM practices in achieving instructional improvement in varying contexts. Almost nothing is known about the relative financial and organizational costs and benefits of different systems of practices.

Nevertheless, the theory and evidence from the organization and management literature and the limited evidence from the education literature point to the efficacy of these integrated systems of HRM. This is not to say that these systems alone will be sufficient to bring about the deep changes required to promote and sustain instructional improvement over time. Earlier we argued that a combination of tools or instruments may be necessary to promote instructional

improvement. To this we would add other factors, including

- the development of the school workplace as an environment conducive to instructional improvement,[1]
- coherent and supportive policy environments,[2]
- adequate financial resources,[3] and
- effective school- and system-level leadership.[4]

A focus of this report has been on improving instruction, in particular promoting intellectually ambitious instruction. As we noted at the beginning of the report, we focused on intellectually ambitious instruction for several reasons. One was that it is not particularly useful to think about improvement without a sense of what it means specifically. A second reason was the growing evidence of the effectiveness of intellectually ambitious instruction for improving learning and academic achievement among students male and female; of different races/ethnicities, socioeconomic backgrounds, and grade levels; and of varying achievement levels. Another reason is this: Strategic systems of HRM, like other policy and administrative instruments, can be employed to promote almost any approach to teaching and learning. Our third vignette shows as much. Given this, the designation of instructional goals and frameworks to guide teaching and learning is a first-order strategic imperative of school and school system leadership. It is important to remember that strategic HRM is a means to an end and not an end itself.

Even as strategic systems of HRM appear promising for promoting intellectually ambitious instruction, there are several factors that make adoption and implementation difficult. First, there are fundamental and enduring dilemmas in school organization and teachers' work that are likely to come into play.[5] These include tensions between individual teacher discretion and the achievement of school organizational objectives; between decentralization and centralization in governance and across levels of the educational system (e.g., between school and central office); between self-determinism on the part of the teaching profession and administrative prerogative; and between leadership and management. Moving toward more comprehensive, strategic systems of HRM would bring such tensions into sharper focus and may provoke political and philosophical conflict around them.[6] The prospect of such debate may serve as a powerful deterrent to engaging these dilemmas anew and to making meaningful changes in policy and practice.

Second, there are structural and political impediments within schools and school districts that may make strategic systems of HRM difficult to enact. As noted in the literature on organization and management, and as suggested in the education literature, HRM functions have traditionally been separated from strategic planning functions within organizations.[7] In a school system central office, it would not be surprising to find a department that deals with human resources to be only loosely connected, if connected at all, to departments responsible for strategic planning and implementation, or curricular and instructional improvement. One might also find that a department that deals with one aspect of HRM, such as hiring, has little relationship to a department that deals with another aspect, such as teacher induction and professional development. The problem is not only that such departments may be structurally disconnected from one another-their self-interests for influence and survival may institutionalize structural fragmentation, thus impeding coordination and collaboration. We suspect that gaps between schools and central offices would be equally difficult to bridge.

On the other hand, it is interesting to note the growing recognition of the importance of HRM at the school and system levels. Recently, for example, Campbell, DeArmond, and Schumwinger argued for the importance of a central human resource function to support school reform.[8] However, their analysis focused on administrative capacities and system-level leadership support of the central human resource office-both important things, but different from the strategic HRM, concerns of fit and flexibility, and focus on instructional improvement discussed in this report.

Finally, when moving toward more coherent and strategic systems of HRM, schools and school systems will likely confront long-standing institutional patterns of thinking about educational administration, teachers and the nature of their work, and ways to improve teacher quality and effectiveness.[9] As we argued earlier, this may be especially true when HRM practices are aimed at promoting intellectually ambitious instruction. There is a historical mindset in the field of educational administration that school administration is the performance of discrete managerial tasks oriented toward efficiency and effectiveness within the current system, rather than a changed or changing system. This mindset views teachers as semi-skilled labor and teaching as an identifiable set of practices that can be specified, tested for effectiveness, and transmitted through training and evaluation.[10] According to both Callahan and McCarthy, this mindset has guided the preparation of school administrators and defined administrative practice for generations.[11]

An historical review of school administration textbooks suggests that HRM has gotten little attention in the initial preparation of school leaders.[12] Where it has received attention, it has been portrayed as discrete, compartmentalized functions rather than a system of strategic and interconnected practices. This perspective may be changing, though. There are growing numbers of educational administration textbooks that contend that multiple aspects of HRM should be coordinated and connected to instructional improvement.[13] While these texts point in the direction of strategic coordination, they stop short of providing conceptually coherent models or principles to guide practice.

None of these difficulties are insurmountable, nor do they suggest that strategic systems of HRM for instructional improvement are not worth pursuing. The vignettes and emerging evidence presented in this report indicate that they are. Strategic HRM involves individual practices that most schools and school systems perform routinely. What is different and vitally important is how and to what ends those practices are performed. The larger point is that however logical, sensible, or justified by theory and research, moving toward strategic HRM will not be simple. It requires substantial change from conventional administrative thinking and practice, but change that in the end will prove worthwhile, especially in the promotion of improved instructional practice.

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[1]E.g., Newmann and associates (1996); Smylie and Perry (1998).

[2]E.g., Knapp, Bamburg, Ferguson, and Hill (1998); Smylie and Wenzel (2003).

[3]E.g., Keltner (1998); Odden (1997); Smith et al. (1997).

[4]E.g., King (2004).

[5]Ogawa, Crowson, and Goldring (1999); Weick and McDaniel (1989).

[6]Cochran-Smith and Fries (2001); see also Cuban and Usdan (2003).

[7]Wright and McMahan (1992).

[8]Campbell, DeArmond, and Schumwinger (2004).

[9]Meyer and Rowan (1978); Sarason (1996).

[10]Darling-Hammond (1997).

[11]Callahan (1962); McCarthy (1999).

[12]Glass (2004).

[13]E.g., Keep (1993); Rebore (2004); Seyfarth (2005); and Smith (2001).

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Notes

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Consortium on Chicago School Research

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