



---

How Can Organizational and Sociocultural Learning Theories Shed Light on District Instructional Reform?

Author(s): Michael S. Knapp

Source: *American Journal of Education*, Vol. 114, No. 4 (August 2008), pp. 521-539

Published by: [The University of Chicago Press](http://www.press.uchicago.edu)

Stable URL: <http://www.jstor.org/stable/10.1086/589313>

Accessed: 13/07/2011 11:21

---

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/action/showPublisher?publisherCode=ucpress>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).



The University of Chicago Press is collaborating with JSTOR to digitize, preserve and extend access to *American Journal of Education*.

---

## Introduction

### How Can Organizational and Sociocultural Learning Theories Shed Light on District Instructional Reform?

MICHAEL S. KNAPP

*University of Washington*

This article explores how organizational and sociocultural learning theories can help us to understand the problem of system-wide instructional reform in school districts. After briefly summarizing the central challenges facing leaders in such districts, the article reviews key ideas associated with each theoretical lens and considers how each lens can sharpen understanding of these challenges and how, viewed together, these organizational and sociocultural lenses might offer a more integrated understanding of this leadership problem. After noting some blind spots, the article concludes with several observations about prospects for this kind of work.

A problem of system-wide leadership practice is begging to be better understood: the attempts by large school districts to substantially reform the quality of teaching and learning in classrooms across the system. This particular problem has ramifications for the learning opportunities of many students, often the nation's most disenfranchised, underserved schoolchildren. Once viewed as an obstacle to educational improvement, the district—specifically, its central office and system-wide leadership—has attracted renewed attention in the past decade as the site of ambitious experiments to guide improvements in the quality of learning opportunities and ultimately the learning of young people (e.g., Hightower et al. 2002; Marsh et al. 2005; Snipes et al. 2002; Supovitz 2006; Walsh 2006). While these attempts have met with mixed success, tangible progress has clearly been made. Understanding what is taking place in such instances and how leadership improves the quality of instruction, or fails to do so, will generate insights that may benefit large numbers of young people.

The articles in this special issue explore how two lines of learning theory might shed light, separately and jointly, on the dynamics of district instructional

*American Journal of Education* 114 (August 2008)  
© 2008 by The University of Chicago. All rights reserved.  
0195-6744/2008/11404-0001\$10.00

## Introduction

reform. The first concerns what its originators have termed organizational learning, which are organizational level processes that resemble, at least metaphorically, the learning of humans or animals (Cohen and Sproull 1996; Cousins 1998; Huber 1991). This loose collection of theories, originating outside of education, increasingly has been applied to educational phenomena, especially at the school level (e.g., Collinson and Cook 2007; Leithwood and Louis 1998).<sup>1</sup> The second, described as sociocultural learning theories, which combine sociological and anthropological ideas with a branch of psychological theory that locates human learning in social interactions, views learning as inseparable from the relation between individuals and their social, cultural, and institutional contexts (e.g., Engestrom 1999; Herrenkohl and Wertsch 1999; Lave and Wenger 1991; Rogoff 1994). In education, this family of theories is often used to make sense of student learning, teaching, and, more recently, efforts at reforming teaching and learning (e.g., Franke and Kazemi 2001; Stein and Brown 1997). Used selectively, ideas and assumptions from each set of theories constitute potentially useful lenses for viewing district instructional reform.

This article starts with the problem of system-wide leadership practice confronting district reformers, then briefly summarizes key ideas associated with each theoretical lens. After that, the article considers how each lens can illuminate the problem of district instructional reform and how both together might offer a more integrated understanding of this leadership problem. After noting some blind spots, the article concludes with several observations about prospects for this kind of work.

### A Problem of System-Wide Leadership Practice

A central puzzle of contemporary educational reform resides in school districts—especially large urban districts—that have committed to substantially improving the quality of instruction and ultimately student learning for a diverse student population. Theoretically and practically, leaders in these districts face a substantial challenge, dwarfing the relatively well-understood prob-

---

MICHAEL S. KNAPP, professor and director of the Center for the Study of Teaching and Policy at the University of Washington, focuses on educational policy making, school reform, leadership development, and policy research methods, with an emphasis on how policy and leadership connect to classroom and school improvement. His studies have concentrated on the education of disenfranchised populations, mathematics and science education, and the professional development of educators. His most recent book is *Leading Learning in Schools and Districts* (2007).

lem of creating an “effective school”: to develop and sustain a strong system of schools, given substantial variation in school capacities and performance.<sup>2</sup>

In recent decades, thinking about district-wide instructional improvement has evolved. In the early 1980s, scholars sought to conceptualize and empirically identify instructionally effective school districts, building on models of effective schools (e.g., Hallinger and Murphy 1988), and to characterize how district leaders might guide such systems toward effectiveness (Floden et al. 1988). That way of construing the problem gave way to a preoccupation with systemic reform in the late 1980s and early 1990s; although largely conceptualized at the state level, this line of thinking was also applied to districts (e.g., Christman 2001; St. John et al. 1994). Such models focused on the potential benefits of aligning curriculum, assessments, policies, and supports with agreed-upon learning improvement goals. The district leaders’ job was to forge and sustain alignment among components of a complex educational system. More recently, standards-based reform married the notion of systemic alignment to ambitious learning standards and systems that hold educators, schools, and districts accountable for progress toward these standards (e.g., Cawelti and Protheroe 2001; David and Shields 2001; McLaughlin and Talbert 2002; Skrla et al. 2000). The federal No Child Left Behind policy, the latest and most demanding variation on this theme, challenges district leaders to set clear, compelling targets for improvement that meet state and federal expectations while motivating and enforcing system-wide efforts to reach these targets.

While useful to a point, these approaches have generally failed to grapple fully or successfully with several persistent tensions facing district leaders in the instructional improvement effort:

*Pursuing ambitious goals, with limited and uneven capacity.*—Especially in recent years, reformers and the constituencies to which they answer expect a lot from the schools. The capacity to reach the ambitious reform goals, however, is typically limited by a lack of curricular expertise, scarcity of funds, staff turnover, or other such conditions. The situation pressures leaders to settle for less than reform initiatives call for or else seek ways to build capacity and garner new resources.

*Maintaining a singular reform focus in the midst of multiple, competing agendas and logics.*—Inevitably, an agenda for instructional reform (e.g., improving literacy practices and outcomes) competes with other agendas: other subject areas want their due, the union is concerned about key provisions in the upcoming contract, community groups are calling for frank conversations about race, and so on. While perhaps seeking to accommodate some of these agendas, the instructional reform cannot maximize all of them. Inevitably, the reform faces renewed advocacy from the excluded interests as time goes on.

## *Introduction*

*Undertaking new tasks within old structures and routines.*—Typically, district reforms call for staff to do their work differently, both in classrooms and in the layers of administration and ancillary services that support classroom work. Established work practices at all levels—especially the district central office—make it harder to imagine or reinvent ways to support learning in more powerful and equitable ways, thereby compromising reform in the short or long term.

*Developing grand plans, guided by incomplete (sometimes incoherent) theories of action.*—School district reforms typically ask for major changes, and there is clear symbolic value in doing so. But the incentives for enacting major changes, often in a context demanding quick results, do not necessarily support careful planning, execution, or the internal logic of the reform initiative. The “theory of action” may often not clarify or anticipate the conditions necessary for the reform to be realized.

*Confronting unanswered questions, with limited information and understanding.*—No matter how well developed the district’s theory of action, the engineering of reform in large school systems is necessarily complex, and the sources of information, time, and cognitive capacity for making sense of it are generally limited. Questions about the reform typically outstrip the ability to answer them, yielding ambiguity about events and progress.

Given these issues, it is not surprising that scholars and reformers have begun to use the construct of learning to embrace much of the challenge facing reforming districts. For example, improving teaching capacity means, among other things, helping teachers engage in new professional learning (Thompson and Zeuli 1999). It also implies adequate resources for hiring qualified teachers and for the infrastructure that professional learning implies, not to mention a new capacity to assemble and interpret data about school and district functioning. By implication, it implies not only individual learning of new skills but also a collective learning challenge: the organization itself needs to “learn” new ways of working, coping with the uncertainties, and managing the tensions that ambitious reform entails.

Enter theoretical tools and frameworks from learning theorists. A few scholars have brought ideas about collective or system-wide learning to bear on the puzzles of district-wide instructional reform. Recent work on San Diego City Schools, for example, treats reform as learning that occurs in overlapping communities of practice (Hubbard et al. 2006). Analyses of Duval County’s embrace of the America’s Choice reform (Supovitz 2006) and the implementation of collaborative educational policies in Oakland, California (Honig 2006), reveal several varieties of organizational learning. Work by these authors and others is beginning to demonstrate that learning theories can offer deep, detailed understandings of districts as learning systems. Yet to date, few occasions have systematically promoted work in this vein, generated interaction

among scholars across both lines of theory, or brought learning scholars into dialogue with reform practitioners about these matters (the Spencer Foundation-funded conference that produced the articles in this issue is an exception).<sup>3</sup>

### Lenses from the Learning Sciences

To sharpen and elaborate what these two traditions can bring to the leadership problem just described, a brief overview of each theoretical tradition is helpful.

#### *First Lens: Organizational Learning Theories*

At first blush, organizational learning is simultaneously a loose, generative metaphor and a label for multiple strands of theory designed to capture organizational phenomena that often resemble yet move beyond the learning of humans or biological organisms (for summaries, see Cohen and Sproull 1996; Cousins 1998; Huber 1991; Levitt and March 1988). Across these lines of work, most theorists treat the learning of an organization as a collective, often “intelligent” response to events and conditions inside or outside of the organization, manifested in changes in collective thinking, organizational design and behavior, or organizational potential for behavior. As with discussions of human or biological learning and compounded by the fact that organizations involve the coordinated work of many humans, the notion of organizations “learning” anything is richly ambiguous and open to divergent interpretations (not all theorists agree that organizations are really capable of “learning” anything as humans do).

Ideas about what and how organizations learn originated outside of education in scholarship on private and public sector organizations, where scholars have long focused on questions of organizational change, innovation, and optimal performance. In the 1970s and 1980s particularly, scholars of organizational behavior, business management, and information processing devoted considerable energy to conceptualizing the phenomenon, identifying its dimensions, and empirically demonstrating its existence. This body of work generated more intellectual ferment than consensus, but certain central ideas emerged and have continued to intrigue scholars ever since. Serious applications to educational organizations began to appear in the late 1990s (e.g., as summarized in Collinson and Cooke [2007], Leithwood [2000], Leithwood and Louis [1998], and Senge et al. [2000]).

The multiple strands of organizational learning theory offer the following kinds of central constructs, although no one strand subsumes them all:

## *Introduction*

*Information flow and management (search, storage, retrieval, interpretation, etc.).*—Many organizational learning theories focus attention on information—how it moves into and through an organization, what meanings it acquires for whom, and what consequences it has for the organization (Huber 1991).

*Inquiry, interpretation, and sense-making.*—Various organizational learning theories presume some form of active, collective inquiry by organizational members into, and subsequent interpretation of, events and conditions inside or outside the organization (e.g., see Daft and Weick 1984), as well as the framing of action implications (e.g., as in “error correction,” Argyris 1999).

*Organizational embedding, encoding, and memory.*—In various formulations, a number of theorists presume some form of organizational “memory”—that is, a way that information and the meanings ascribed to it are retained in accessible form or even transformed into a repertoire of routines, practices, or guidance for action (e.g., Argyris and Schon 1996; Levitt and March 1988).

*Collective “intelligence.”*—In many versions of organizational learning, especially those that emphasize the cognitive dimensions of organizational learning, organizational response to internal and external events is construed as intelligent—in the sense that cumulative or shared meanings concerning these events are developed that may alter subsequent patterns of action (Leithwood et al. 1998). This intelligence is not the same as thoughtfulness, good sense, or “smartness”—attributes often linked to conceptions of human intelligence.

*Organizational response to experience under conditions of ambiguity.*—Other strands of theory place more emphasis on the behavioral response to organizational “experience,” especially under conditions of ambiguity (e.g., March et al. 1991). This experience occurs as organizations attend to and participate in events happening within the organization or external to it in environments on which it depends for resources or legitimacy.

These ideas, far from an exhaustive list, illustrate the kinds of constructs this collection of theories has to offer. Stated simply, the list masks many complexities, ambiguities, and issues that have long fueled debate in the field. For example, as in disciplines focused on human learning, this idea set leaves open the question of whether learning refers to a process, its results, or both; whether the organization’s learning is a matter of behavior, cognition, or some combination; or whether the organization’s learning necessarily implies improvement. These matters are inescapably part of an attempt to view district instructional reform as a case of organizational learning.

*Second Lens: Sociocultural Learning Theories*

A second theoretical lens, lodged in sociocultural learning theories, refocuses attention on finer-grained aspects of organizational life. Here, learning is viewed as an essentially social process, situated within cultural, institutional, and historical contexts. This tradition does not necessarily address organizations per se but does situate learning in the interaction among individuals—that is, in the collective—rather than within individuals, as earlier generations of learning theory do.

Sociocultural learning theories have deep roots in a reconceptualization of cognition pioneered by Lev Vygotsky, whose early work on the social nature of learning set in motion several streams of sociocultural work. The first of these, generally referred to as activity theory (Engestrom 1999) or, regarding earlier lines of work in Russia, as cultural-historical activity theory (see Herrenkohl [2008, in this issue] regarding the work of Leont'ev, Luria, and Davydov), investigates the relationship between individual action and collective activity, initially through studies of children's play and school settings and later in work settings. A second stream concentrates instead on the social mediation of individual action, specifically through cultural and historical artifacts. As elaborated in the work of James Wertsch and others, individuals "internalize" aspects of the culture (e.g., language, physical tools, and symbols) as they develop and learn. A third stream, associated with Lave and Wenger (1991), among others, takes work practice as its central focus. Here, learning is defined as the ways in which individuals and communities gradually transform their practice through the ongoing negotiation of meaning.

These streams of sociocultural learning theory contribute constructs potentially useful for understanding school district reform, among them:

*Participation in activity.*—From this perspective, learning is fundamentally social; it is inseparable from participation in activities (Engestrom 1999; Rogoff 1994). Since learners are participants, the analyst pays less attention to what individuals "think" and more to how they participate in activity settings.

*Practice.*—An emphasis on participation leads the analyst to attend to practice, especially work practice in organizational settings. Practice refers to engagement in situated behaviors that presume not only activities but also a historical and structural context for work (Bourdieu 1977; Wenger 1998).

*Communities of practice and joint work.*—A logical context for learning is communities of practice, collectives in which the members share joint work and have developed a common vocabulary and repertoire for approach-

### *Introduction*

ing this work (Lave and Wenger 1991). These collectives arise organically and reflect the lived relationships among coworkers who regularly spend time with one another.

*Reification and tools.*—Through processes of reifying—that is, making abstract ideas concrete and easily accessed by others—participants in organized settings construct conceptual or material tools that define, prescribe, illustrate, or conceptualize matters of potential importance to participants in the workplace (Herrenkohl and Wertsch 1999; Wenger 1998). These tools or objects (documents, policies, guidance, curriculum outlines, etc.), which can be used by various organizational members, are products of participation as well as central elements in participation.<sup>4</sup>

*Appropriation and the transformation of participation.*—Learning necessarily involves change, through processes that transform participation in activity settings. As part of this process, participants “appropriate” ideas—that is, by stages, actively internalize and embody them in daily practice (Herrenkohl and Wertsch 1999).

While this rendering of sociocultural learning ideas only scratches the surface of this body of theory and ignores differences among particular theories, it illustrates a conceptual vocabulary for illuminating what is going on in school district reform.

As with organizational learning theory, the application of these ideas to district instructional reform reveals unresolved theoretical matters that reflect ongoing discourse among this class of learning theorists. For example, these frameworks reflect an enduring tension between attention to the individual and to the collective, and between “designs for learning” and the actual lived experience of learners, construed as something that happens more organically, no matter what the design.

### How These Lenses Can Inform the Leadership of District Instructional Reform: Starting Points

Considering how theoretical lenses can inform the problem of system-wide leadership practice with which we began, several questions beg for answers:

1. What aspects of the leadership problem do the lenses help us to see? Where do they blur our vision?
2. How can the two lenses inform each other? Together, can they offer an integrated understanding of the leadership problem?

To answer these questions, we need scholarship that brings one or both traditions to bear, selectively and often in dialogue with each other, on various

aspects of district reform. The three ensuing articles in this special issue are examples of this emerging work. The first piece, by Gallucci (2008, in this issue), uses the lens of the “Vygotsky space” (Harré 1984) to illuminate a professional learning process in one district, embodied in the experience of one veteran teacher, which is then amplified through the involvement of other teachers and leaders to prompt a kind of organization-wide learning. The second piece, by Stein and Coburn (2008, in this issue), focuses on the balance of reification and participation at the overlap between different communities of practice (e.g., those of teachers or mathematics coaches) in two contrasting districts. Here, sociocultural ideas enable comparison between the design or “architecture” for professional learning across the organization and how that learning actually plays out for staff. The Honig (2008, in this issue) article brings both lines of theory to bear on the work practices of central office administrators seeking to support improvement efforts in schools—especially their participation in “assistance relationships” with school staff (viewed in sociocultural terms) and their use of evidence to inform central office policies and practices (viewed in organizational learning terms).

*Observations about What These Lenses Can Bring into Focus*

The work of these scholars, and others who may pursue this path, will do the heavy lifting of applying learning theories to district reform and elaborating the theories; along the way, a few overall observations set the stage for their work.

*What organizational learning theories may illuminate in district reform.*—Organizational learning constructs, for example, can give new and richer meaning to activities in school-district reform involving the nature and flow of information, its interpretation (especially in the face of considerable ambiguity), and how the organization processes its experience of reform events. In the most limited sense, organizational learning theories can shed light on the district’s approach to explicit, continual uses of performance data, especially test scores, for planning and demonstrating accountability, as required by the current accountability environment. Here, such theories can be helpful in understanding how school districts have been trying to increase their capacity for data-based practice (e.g., Supovitz 2006). The capacity-building process itself, undertaken by external organizations and growing technical assistance literature that urges districts to become “smarter,” may draw on organizational learning ideas (e.g., Holcomb 2004; Leithwood et al. 2001). On the surface, this way of framing school-district reform highlights the way decision makers consider data about district performance, resources, staffing, or activity structures in response to external policy pressures.

## *Introduction*

But organizational learning theory can take the matter further, for example, by raising questions about what counts as data or evidence, underscoring inherent ambiguities in the hard data on which district decisions are to be based, drawing attention to how decision makers ask questions about the district and frame the problems of practice they hope to solve, and considering what constitutes data use by participants throughout the organization (e.g., see Honig and Coburn 2008). Broader perspectives on the role of data in district leadership, rooted in organizational learning ideas, thus take us beyond wishful projection of human “smartness” onto the organization, to the way the district searches for an appropriate response to environmental or internal contingencies.

Paying attention to these aspects of school district reform naturally leads the analyst to examine how information flows into and within the district. Doing so entails organizational learning constructs such as search, storage, retrieval, and interpretation, and raises questions about what information is secured, in what form, by whom, and for what purposes. In addition, organizational learning ideas highlight the disposition and communication of the information to others, the sense that is made of it (by whom, for what uses, etc.), and even the capacity to make sense of information that is inherently incomplete and ambiguous.

Furthermore, these theories subsume but go beyond the limited view of information as data that sit in a database, to be accessed by decision makers who pose questions about organizational performance. Instead, these theories assert that the encoding of information and its interpretations can take many forms and can reside in rules, policies, procedures, new expectations for practice, and the like as easily as in district data banks on conversations about improving performance.

These are complex matters at the heart of a school district’s attempts to educate young people and plan alternative ways of conducting that business. Armed with such constructs, the analyst will naturally be concentrating on problematic aspects of the district’s engagement in reform, assembling evidence of reform progress or failures, generating diagnoses of the reasons for progress or failure, framing new courses of action, and developing new procedures, policies, rules, expectations, and the like.

*What sociocultural learning theories may illuminate in district reform.*—Sociocultural theories direct attention to related, although different, facets of the district instructional reform story. For starters, such theorists might look for collective acts of intelligence in communities of practice whose members take responsibility for the organization as a whole or its subunits (e.g., the superintendent’s cabinet, a district-wide task force on improving science instruction). By virtue of their purview and joint enterprise, such groups provide a natural location for the design and guidance of the district’s instructional reform. Other com-

munities of practice within the district reveal the work that realizes, adapts, or subverts the design (e.g., communities that coalesce around teaching, supervision, counseling, school administration, or other functions implicated in the reform). Connections among these communities of practice, operating at different levels of the organization, become an important site for understanding how the district as a whole grapples with reform challenges.

The work of district instructional reform thus resides in the daily practice of organizational members throughout the district. At all levels of the district, guided by historically developed routines and meanings, individuals and groups engage in situated behaviors that reflect the constraints and enabling forces set in motion by a reform initiative, as well as their long-established ways of doing business. Some forms of practice are likely to be treated as visible targets of reform, like the classroom practice of middle-school mathematics teachers; the practice of others—such as the central office administrators charged with supporting the math reform—may be less visible to reformers but are nonetheless implicated in the district’s reform story.

Capturing practice and understanding how practice might change leads the sociocultural analyst to examine the members’ participation in various activity settings and to changes in participation patterns. Here, the notion of appropriation is particularly helpful, given its attention to the agency of the individuals as they interact with new ideas about their practice. Consistent with the notion that individuals negotiate the meaning of their work, this focus of analysis reveals how members (e.g., teachers and instructional support personnel) make sense of a new instructional reform, resist or modify it, and ultimately internalize and “own” the modified meanings. Such negotiations are under way constantly in reforming districts. Sociocultural theories seem well adapted to understanding how these negotiations take place and what conditions support or frustrate them. Specifically, sociocultural theories help reformers construe the ownership of, or “buy-in” to, a reform as a “learning” problem.

### *How the Two Lenses Do or Can Work Together*

New insights often emerge at the interface between existing lines of work, and the juxtaposition of learning theories under consideration here seems to afford many such possibilities. For one thing, the two may complement each other by attending to different aspects of organizational activity that they are most suited to exploring. Sociocultural ideas emphasizing participation, for example, are especially suited for getting at daily work and, in particular, collaborative

### *Introduction*

work that takes place among people who spend time together. Such frames usefully illuminate the processes of professional development, collaborative curricular planning, school improvement planning, and other regular events in school and district reform where the relationships among actors are in view. Sociocultural frames are not necessarily as focused on capturing the content of relationships, but shifting units of analysis (and theoretical frames) from participation to information flow, as many organizational learning theories do, reveals the nature of the data, evidence, and content focus of organizational members' collective work. Here, the two lines of theory work the way different frameworks in multiple-perspective analyses do, enabling parallel yet distinct takes on a phenomenon whose complexity defies what a single framework can embrace (Malen and Knapp 1997).

But more is possible than a theoretical division of labor. Each set of theoretical ideas makes it possible to deal, in a nuanced way, with the connections between micro and macro aspects of district instructional reform, although there are not many attempts to date to do so. Here, once again, the articles in this special issue are instructive. Sociocultural ideas about the transfer of reform idea at the intersection of overlapping communities of practice (see Stein and Coburn [2008, in this issue] regarding the way members of the math coaches' and math teachers' communities intersect) present a micro account of the movement of a reform message at one point within a school district while simultaneously mapping the whole organization as a series of such overlaps, thereby offering a more macro picture of the reform process. Gallucci (2008, in this issue), similarly, presents a way to theoretically understand how appropriation of reform ideas (here concerning literacy reform) by even one teacher can occur in settings and through processes that encourage the reform message to be substantially amplified through and "learned" by different levels of the district.

One other theoretical advance can occur at the intersection of these learning theories. By offering different accounts of the same aspects of district instructional reform, the two lines of learning theory inform and potentially add theoretical depth to each other. Take what sociocultural theorists refer to as reification (Wenger 1998) and organizational theorists describe as encoding or incorporation (e.g., Argyris and Schon 1996; Levitt and March 1988). Do the two theoretical traditions mean the same or similar things by these different terms? One answer is yes (see Honig and Ikemoto [2006] for an exploration of this point with regard to the activities of the Institute for Learning), as implied by the fact that "tools" (one form of reification) are seen by both organizational and sociocultural theorists as important to learning processes (Honig 2008, in this issue). Understood in sociocultural terms, participation in what might be called the "community of school improvement practice" in a single school, for example, might develop various reifications of the idea of

improvement—specifications for the school’s organization and time schedule, a set of principles to guide instruction, and benchmark indicators to reveal when performance improved. Through the lens of organizational theory, the same event might be construed as an instance of encoding the results of a search (for ideas about improvement of the school, for environmental demands on the school, etc.) and inferences made about these results in a new way of organizing effort in the school.

Where such theoretical accounts intersect, one must ask what is gained by having more than one way of theoretically describing what is going on, beyond duplication of vocabulary. Potentially, much is gained because the differing terms for and accounts of the same phenomenon are still subtly different and nuanced in ways that may suggest possible extensions of the original theories. In this instance, theoretical convergence opens up the possibility that encoding involves the negotiation of meanings, an idea that is foreign to the original formulations of encoding yet central to conceptions of reification.

This is only one instance in which theories might grow—by growing together. The work ahead is to identify the ways in which each theoretical frame can inform and possibly enrich the other, with the ultimate goal a more sophisticated and satisfying explanation for the dynamics of district instructional reform (or any other application for that matter). The goal is not necessarily a binding marriage between the two, however, nor is that likely to be possible. While the theories work with multiple units of analysis (e.g., the organization or the organizational members’ practice), these units may inform each other better when they are not the same, even though they are related (the members’ practice takes place within an organization and collectively constitutes the organization’s work). The search for a unified theory of learning dynamics in organizational contexts might compromise the unique contributions each may make in understanding the complex whole under study (on this point, see the commentaries by Bransford and Vye [2008, in this issue] and Herrenkohl [2008, in this issue]).

#### *What the Lenses May Blur or Do Not Reveal*

Although ideas from learning theories can clearly capture central aspects of the story of district instructional reform, other features of the instructional reform territory may go unnoticed or less fully examined. Here are two candidates: (1) power, resistance, and conflict, and (2) the content focus and subject-matter context of district instructional reform.

*Power, resistance, and conflict.*—Unlike political theories, learning theories do

### *Introduction*

not assume that the interests of participants (stakeholders and organizational members) are inherently in conflict, although they may acknowledge the centrality of negotiation or confrontation in organizationally based learning processes. Some work also considers the social power that derives from identification with a community of practice (e.g., Wenger 1998) or the way conflicts rooted in different interests of organizational members can be a potential source of learning (e.g., Collinson and Cook 2007). Due to this lack of focus on conflict, power, and resistance, learning theories may not speak effectively to the full range of conflicts in district reform, nor to the management of conflict or exercise of power. Take, for example, the overt and covert racial politics of urban district reform: as currently applied, learning theories are not necessarily helpful in deepening understanding of these dynamics.

That said, both organizational and sociocultural learning theories can and do address questions of control, directly or indirectly. For example, membership or participation in communities of practice is unlikely to be completely open: individually or collectively, community members exert covert or overt control over who is allowed in—an essentially micropolitical process. Similarly, the flow of information and its interpretation reflects the exercise of power by those who guide or channel information to and from organizational members and who control its interpretation. Not all interpretations count equally—once again, a manifestation of power dynamics. Explicating these manifestations of power and its organizational implications falls within the purview of learning theories, although as yet, relatively little work has tried to do so (an exception is Hubbard et al. [2006], in which conflict and power dynamics are centrally featured in an account of district reform as learning). A future challenge lies in elaborating ways that learning theories can account for resistances, power struggles, and competition among agendas that are so often in evidence.

*The subject-matter context of instructional reform.*—District instructional reforms are geared toward specific areas of academic knowledge—in recent years, gateway subjects like literacy and mathematics, although other aspects of the curriculum have been the target of instructional reforms as well. For the most part, the learning theories we have considered are preoccupied with generic learning processes that apply no matter what the content of the learning. As such, these theories do not consider whether the organizational or sociocultural dynamics of collective learning about mathematics instruction differ from that associated with early reading or environmental science. In principle, as subject-matter theorists would argue, the subject-matter context generates different things to learn and unique challenges (Grossman and Stodolsky 1995). As such, the question remains: Can the two lines of learning theory we are considering here have anything useful to say about these dynamics?

## Concluding Reflections and Exhortations

As the preceding argument has demonstrated, these two sets of learning theories can apply to the leadership challenges with which this article began. For example, regarding the way districts pursue ambitious goals in the face of limited and uneven capacity, the learning theories have much to say about how these goals are (or are not) understood, interpreted, and incorporated into daily routines. Regarding the undertaking of new tasks within old structures and routines, these learning theories focus analysis on the nature of practice (how tasks are undertaken) while underscoring that the “working memory” of the district may reside in already-established routines. The two lines of theory, working together, also help to unpack how participation in new forms of daily practice might become encoded into revised structures and routines. Armed with these understandings, district leaders may redirect their efforts toward ways of stimulating, guiding, and supporting the learning processes that are implicated.

But applying these theories to district instructional reform involves risks. Chief among them is the temptation to make the theories prescriptive and normative. While “learning” sounds like a good thing, it is possible to learn the wrong things, develop bad habits, and even internalize dysfunctional routines. An especially tempting prescriptive target is an image of “the learning organization,” in which intentional use of data and evidence guides every step of the organization’s work (see Senge et al. [2000] for examples of this imagery at school level). While imagining and documenting districts that exemplify these learning processes may sometimes be helpful, an image of what that learning should look like may restrict, as much as open up, educators’ thinking. A far more generative theoretical goal is to enrich our pictures of how districts learn and what learning means in the context of instructional reform initiatives.

The articles and commentaries in this issue are a first installment of needed dialogue between complementary and powerful learning theories, and the possibility of integrative theoretical work at the intersection of the two lines of learning theory, as applied to the challenges of district instructional reform. In one sense, the work is largely theoretical, as the limits of these frameworks and their implications for each other are being explored. But in another sense the work is fundamentally practical: these learning theories help us to see with fresh eyes both the daily work of the organization and the organizational conditions that support cumulative changes in daily work. Ultimately, the integration of these two lines is only worth doing if it makes sense of pressing practical challenges in the real world of educational reform.

Instructional reform in school districts affords an excellent test case for exploring the usefulness of these ideas, as many, if not most, school districts are engaged in some instructional reform efforts in the current era of standards-

## Introduction

based accountability. As the work unfolds, it will be important to make sure that the sense-making these theories provide scholars is grounded in the sense-making of practicing educational leaders. With that in mind, it is time to get on with the work.

## Notes

1. This body of work may be more accurately thought of as multiple strands of theory, all of which share a common label but construe learning differently (e.g., in cognitive or behavioral terms, or some combination thereof) and position learning in relation to improvement (e.g., as part of intentional processes aimed at improvement goals vs. more fundamental processes concerned with a variety of organizational changes or adaptations, whether or not these represent improvement).

2. Not everyone agrees with this way of framing the systemic challenge. Another way of stating the challenge, currently articulated by the leaders of the New York City Department of Education, is to develop and sustain a system of strong schools rather than a strong system of schools.

3. One such occasion, an invitational conference entitled *Marrying Organizational Learning and Sociocultural Learning Theories: How School Districts Learn to Improve Instruction*, sponsored by the Spencer Foundation and the Center for the Study of Teaching and Policy (September 14–15, 2006, in Seattle), brought together cognitive, sociocultural, and organizational learning theorists with practitioners engaged in district-wide instructional reform. Working papers developed for this conference were earlier versions of the articles in this issue.

4. In one theorist's view, participation and reification exist in a kind of duality, informing and interacting with each other in a continual interplay that shapes the negotiation of meaning in a community of practice (Wenger 1998, 62–71). They are, thus, not opposites of each other nor sequentially related.

## References

- Argyris, Chris. 1999. *On Organizational Learning*. 2nd ed. Oxford: Blackwell.
- Argyris, Chris, and Donald Schön. 1996. *Organizational Learning II: Theory, Method, and Practice*. Reading, MA: Addison-Wesley.
- Bourdieu, Pierre. 1977. *Outline of a Theory of Practice*. Cambridge: Cambridge University Press.
- Bransford, John D., and Nancy Vye. 2008. "District Reform and the Learning Sciences: Issues and Opportunities." *American Journal of Education* 114 (4): 665–72.
- Cawelti, Gordon, and Nancy Protheroe. 2001. *High Student Achievement: How Six School Districts Changed into High-Performance Systems*. Arlington, VA: Educational Research Service.
- Christman, Jolley Bruce. 2001. "Powerful Ideas, Modest Gains: Five Years of Systemic Reform in Philadelphia Middle Schools." Report, Consortium for Policy Research in Education, Philadelphia.
- Cohen, Michael D., and Lee S. Sproull, eds. 1996. *Organizational Learning*. Thousand Oaks, CA: Sage.

- Collinson, Vivienne, and Tanya Fedoruk Cook. 2007. *Organizational Learning: Improving Learning, Teaching, and Leading in School Systems*. Thousand Oaks, CA: Sage.
- Cousins, J. Bradley. 1998. "Intellectual Roots of Organizational Learning." In *Organizational Learning in Schools*, ed. K. Leithwood and K. S. Louis. Lisse, Netherlands: Swets and Zeitlinger.
- Daft, Richard, and Karl Weick. 1984. "Towards a Model of Organizations as Interpretation Systems." *Academy of Management Review* 9 (2): 284–95.
- David, Jane L., and Patrick M. Shields. 2001. *When Theory Hits Reality: Standards-Based Reform in Urban Districts*. Menlo Park, CA: SRI.
- Engestrom, Yrjö. 1999. "Activity Theory and Individual and Social Transformation." In *Perspectives on Activity Theory*, ed. Yrjö Engestrom, Reijo Miettinen, and Raija-Leena Punamäki. Cambridge: Cambridge University Press.
- Floden, Robert, Donald J. Freeman, Andrew C. Porter, and Linda E. Alford. 1988. "Instructional Leadership at the District Level: A Closer Look at Autonomy and Control." *Educational Administration Quarterly* 24 (2): 96–124.
- Franke, Megan Loef, and Elham Kazemi. 2001. "Teaching as Learning within a Community of Practice: Characterizing Generative Growth." In *Beyond Classical Pedagogy in Teaching Elementary Mathematics: The Nature of Facilitative Teaching*, ed. Terry Wood, Barbara Nelson, and Janet Warfield. Mahwah, NJ: Erlbaum.
- Gallucci, Chrysan. 2008. "Districtwide Instructional Reform: Using Sociocultural Theory to Link Professional Learning to Organizational Support." *American Journal of Education* 114 (4): 541–82.
- Grossman, Pamela, and Susan Stodolsky. 1995. "Content as Context: The Role of School Subjects in Secondary School Teaching." *Educational Researcher* 24 (8): 5–11.
- Hallinger, Philip, and Joseph Murphy. 1988. "The Characteristics of Instructionally Effective School Districts." *Journal of Educational Research* 8 (3): 175–81.
- Harré, Rom. 1984. *Personal Being: A Theory for Individual Psychology*. Cambridge, MA: Harvard University Press.
- Herrenkohl, Leslie Rupert. 2008. "Sociocultural Theory as a Lens to Understand Organizational Learning." *American Journal of Education* 114 (4): 673–80.
- Herrenkohl, Leslie Rupert, and James V. Wertsch. 1999. "The Use of Cultural Tools: Mastery and Appropriation." In *The Development of Mental Representation: Theories and Applications*, ed. Irving E. Sigel. Mahwah, NJ: Erlbaum.
- Hightower, Amy M., Michael S. Knapp, Julie A. Marsh, and Milbrey W. McLaughlin. 2002. *School Districts and Instructional Renewal*. New York: Teachers College Press.
- Holcomb, Edie. 2004. *Getting Excited about Data: Combining People, Passion, and Proof to Maximize Student Achievement*. 2nd ed. Thousand Oaks, CA: Corwin.
- Honig, Meredith I. 2006. "Implementation as Organizational Learning." In her *New Directions in Educational Policy Implementation: Confronting Complexity*. Albany, NY: SUNY Press.
- Honig, Meredith I. 2008. "District Central Offices as Learning Organizations: How Sociocultural and Organizational Learning Theories Elaborate District Central Office Administrators' Participation in Teaching and Learning Improvement Efforts." *American Journal of Education* 114 (4): 627–64.
- Honig, Meredith I., and Cynthia E. Coburn. 2008. "Evidence-Based Decision Making in School District Central Offices: Toward a Research Agenda." *Education Policy* (forthcoming).
- Honig, Meredith I., and Gina S. Ikemoto. 2006. "Making and Re-making the Link between Research and Practice: The Case of the Institute for Learning." Research report, MacArthur Network for Teaching and Learning, Stanford, CA.

## Introduction

- Hubbard, Lea, Hugh Mehan, and Mary Kay Stein. 2006. *Reform as Learning: School Reform, Organizational Culture, and Community Politics in San Diego*. New York: Routledge.
- Huber, George P. 1991. "Organizational Learning: The Contributing Processes and the Literatures." *Organizational Science* 2:88–115.
- Lave, Jean, and Etienne Wenger. 1991. *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.
- Leithwood, Kenneth. 2000. *Understanding Schools as Intelligent Systems*. Stamford, CT: JAI.
- Leithwood, Kenneth, Robert Aitken, and Doris Jantzi. 2001. *Making Schools Smarter: A System for Monitoring School and District Progress*. 2nd ed. Thousand Oaks, CA: Corwin.
- Leithwood, Kenneth, Doris Jantzi, and Rosanne Steinbach. 1998. "Leadership and Other Conditions That Foster Organizational Learning in Schools." In *Organizational Learning in Schools*, ed. K. Leithwood and K. S. Louis. Lisse, Netherlands: Swets and Zeitlinger.
- Levitt, Barbara, and James G. March. 1988. "Organizational Learning." *Annual Review of Sociology* 14:319–40.
- Malen, Betty, and Michael S. Knapp. 1997. "Rethinking the Multiple Perspectives Approach to Education Policy Analysis: Implications for Policy-Practice Connections." *Journal of Education Policy* 12 (5): 419–45.
- March, James G., Lee S. Sproull, and Michal Tamuz. 1991. "Learning from Samples of One or Fewer." In *Organizational Learning*, ed. Michael D. Cohen and Lee S. Sproull. Thousand Oaks, CA: Sage.
- Marsh, Julie A., Kerry A. Kerr, Hilary Darilek, Gina S. Ikemoto, Marika J. Suttorp, Ron Zimmer, and Heather Barney. 2005. *The Role of Districts in Fostering Instructional Improvement: Lessons from Three Urban Districts Partnered with the Institute for Learning*. Santa Monica, CA: Rand.
- McLaughlin, Milbrey, and Joan Talbert. 2002. "Reforming Districts." In *School Districts and Instructional Renewal*, ed. Amy M. Hightower, Michael S. Knapp, Julie A. Marsh, and Milbrey W. McLaughlin. New York: Teachers College Press.
- Rogoff, Barbara. 1994. "Developing Understanding of the Idea of Communities of Learners." *Mind, Culture, and Society* 1:209–20.
- Senge, Peter, Nelda H. Cambron McCabe, Timothy Lucas, Bryan Smith, Janis Dutton, and Bryan Smith. 2000. *Schools That Learn: A Fifth Discipline Fieldbook for Educators, Parents, and Everyone Who Cares about Education*. New York: Doubleday.
- Skrla, Linda, James J. Scheurich, and Joseph F. Johnson Jr. 2000. "Equity-Driven, Achievement-Focused School Districts: A Report on Systemic School Success in Four Texas School Districts Serving Diverse Student Populations." Report, Charles A. Dana Center, University of Texas, Austin.
- Snipes, Jason, Fred Doolittle, and Corinne Herlihy. 2002. *Foundation for Success: Case Studies of How Urban School Systems Improve Student Achievement*. Washington, DC: MDRC.
- St. John, Mark, Jeanne Rose Century, Felisa Tibbetts, and Barbara Heenin. 1994. *Reforming Elementary Science Education in Urban Districts*. Inverness, CA: Inverness Research Associates.
- Stein, Mary Kay, and Catherine Brown. 1997. "Teacher Learning in a Social Context: Integrating Collaborative and Institutional Processes with the Study of Teacher Change." In *Mathematics Teachers in Transition*, ed. Elizabeth Fennema and Barbara Scott Nelson. Mahwah, NJ: Erlbaum.
- Stein, Mary Kay, and Cynthia E. Coburn. 2008. "Architectures for Learning: A Comparative Analysis of Two Urban School Districts." *American Journal of Education* 114 (4): 583–626.
- Supovitz, Jonathan A. 2006. *The Case for District-Based Reform*. Cambridge, MA: Harvard University Press.

*Knapp*

- Thompson, Charles, and John Zeuli. 1999. "The Frame and the Tapestry: Standards-Based Reform and Professional Development." In *Teaching as the Learning Profession: Handbook of Policy and Practice*, ed. Linda Darling-Hammond and Gary Sykes. San Francisco: Jossey-Bass.
- Walsh, Kiley. 2006. "Aligning an Instructional System to Close the Gap: Illinois School District U-46." Research report, Stupski Foundation, Mill Valley, CA.
- Wenger, Etienne 1998. *Communities of Practice: Learning, Meaning, and Identity*. New York: Cambridge University Press.