Chapter 1

New Ways of Thinking

New Ways of Learning

Think back more than half a century to the 1950s, when America’s largest generation of children, the baby boomers, were starting off to school. Most children walked to their neighborhood schools, a large majority of mothers worked at home, and many men found lifetime jobs, especially in the manufacturing sector. Life and work seemed predictable and secure for the nuclear family. Most baby boomers were too young to ascribe meaning to the death of international figures like Albert Einstein in 1955 or to the consequences of the successful launch of Russia’s Sputnik in 1957. They were, however, much more aware of the 1960s—a decade with a booming economy that brought wealth to the expanding middle class; the civil rights movement, which sought to make equality a reality; the birth of the feminist movement; and a huge expansion of universities and colleges to accommodate the first generation to earn college degrees in large numbers. Few people recognized at the time that while the baby boomers were going to school, profound global changes were under way—changes that would later be called a paradigm shift, changes that would affect the world’s thinking and actions, changes that are affecting organizations across the globe, including the organizations we call school systems.

Moving from an Industrial to a Knowledge Society

The latter half of the 20th century witnessed enormous changes around the globe. Advances in transportation contributed to increasing globalization of trade and increasing internationalization of members within organizations. People had new opportunities for traveling or working in other countries, allowing them to experience new cultures and expand their worldviews. Companies like United Parcel Service (UPS) had the ability to deliver almost anything anywhere by the next business day. The continuing trend of international mobility of people, goods, and documents has changed the face of societies in the Western world and continues to
do so as Western companies increasingly outsource jobs to available low-wage countries. Advances in technology such as the fax machine, mobile phones, satellites, and the Internet supported an acceleration of change. These social and technological changes were accompanied by a paradigm shift, new ways of thinking that put greater value and emphasis on learning and flexibility. The new era became known as the knowledge society (Drucker, 1994).

As organizations began to feel the effects of this global paradigmatic shift, routines and adaptive strategies that had appeared to be effective in the past became less effective in the new and unpredictable environment. Restructuring and reengineering (downsizing and redesigning existing roles and responsibilities within the same bureaucratic structure) were among many adaptations that numerous organizations attempted to regain effectiveness. But by 2006, icons like General Motors and Ford saw their bonds reduced to junk status, several major airlines were in bankruptcy, ethics violations had brought down individuals and companies, outsourcing was becoming a concern, and labor unions had lost both members and bargaining strength. Other companies, however, seemed to flourish. What was happening?

Well into the latter part of the 20th century, many organizations, including education institutions, continued to apply what they thought they knew (their assumptions, beliefs, values, and experience-based routines). However, their knowledge was based on ideas and experiences from the modern or industrial era, such as either/or thinking, a rigid bureaucratic structure, and the premise that the environment could be predicted and controlled. Modern ways of thinking were slowly being replaced with postmodern ideas: linear thinking (deduction; dispassionate objectivity) replaced by systemic thinking (inductive thinking; making sense of an environment characterized by fragmentation, complexity, and discontinuity); the focus on a physical world (a relatively unchanging and timeless natural world) replaced with a focus on the social world (learning as inseparable from social networks); independent learning and success replaced with interdependent learning and success (Kikoski & Kikoski, 2004). Table 1.1 elaborates some of the implications of this paradigm shift for organizations.

The new post-World War II environment was anything but predictable, stable, or simplistic for organizations or the individuals that composed them. New technologies were increasingly opening up rapid access to a profusion of knowledge and disrupting the routine of one-way (top down) communication. Employees questioned the assumption of knowledge and decision making as prerogatives of the top layer of the hierarchy. Bargaining, the mainstay of unions, was not helping organizations stay competitive in the newly emerging global economy. In fact, some companies blamed unions for their lack of effectiveness. To succeed, it was no longer enough to effectively replicate the same patterns that had worked in the past.

In business and industry, organizations began to understand that their survival depended on the creation of new knowledge, innovation, and different ways of operating. As Lew Platt, the CEO of Hewlett Packard, explained, “Successful companies of the 21st century will be those that do the best jobs of capturing, storing, and leveraging what their employees know” (as cited in Schwandt & Marquardt, 2000, p. 166). Correspondingly, there are greater demands on and opportunities for organizational members. Organizational members today are expected not only to be learners but also to have the capacity to deal with rapid acceleration and complexity of knowledge. This has profound implications for school systems.

School systems, as subsets of society, are not immune from paradigmatic changes. The shift from an industrial society to a knowledge society put pressure on school systems to shift their own organizational paradigm and to develop individuals who are capable of contributing to new kinds of organizations. As the larger society moves toward a postmodern way of
thinking, children entering the school system and their parents increasingly have new expectations and demands for schools. And as organizations in business and industry have begun to embrace new thinking and practices, so too school systems as organizations are realizing the necessity for change.

**The Need for Systemic Thinking**

The shift to a knowledge-based society underscores the importance of systemic thinking in creating and embedding new knowledge and understandings. Technology has made more information more readily accessible than ever before. Organizational members still need information (facts), but they also need ways to understand and apply that information both individually and collectively. Systemic thinking can help organizational members do this in a holistic manner. **Systemic thinking** involves “the ability to see the connections between issues, events and data points—the whole rather than its parts” (Kikoski & Kikoski, 2004, p. 175). Through systemic thinking, organizational members can begin to better understand patterns, relationships, and applications. Systemic thinking, as distinct from linear thinking,
represents a “philosophical alternative to the pervasive ‘reductionism’ in Western culture—the pursuit of simple answers to complex issues” (Senge, 1990, p. 185).

Because systemic thinking involves understanding interrelationships, it can be useful in structuring an organization to maximize learning. Systemic thinking can be useful on a number of different levels: to help see connections between reforms and current practice, to uncover and understand patterns that shape organizational action, and to discover relationships between an organization and its environment. “Learning to see the structures within which [members] operate begins a process of freeing [them] from previously unseen forces and ultimately mastering the ability to work with them and change them” (Senge, 1990, p. 94).

The modern (industrial) paradigm with its mechanistic view of organizations is still the dominant tradition that shapes the nature of work in many business, political, and education organizations. In this tradition, employees are seen as resources to be “allocated and controlled.... If instead of the mechanical analogy, [organizations] were to fully embrace an organic analogy of the organization as a purposeful social system [they] would derive a very different set of actions—a set that fosters learning” (Dixon, 1999, pp. xviii-xix). School systems face the same challenges as other organizations in shifting from one paradigm to another. However, they have an added dimension because they contribute to the larger social system; the leaders, politicians, artists, scientists, and citizens who will shape society in the future are students in today’s classrooms. We believe that organizational learning offers a promising path for school systems. Blending theory and practice creates a systemic foundation on which they can build.

THEORY AND PRACTICE

One of our goals is to help bridge the theory/practice gap that is particularly evident in the two streams of literature on organizational learning. Tsang (1997) noted that a large and growing dichotomy seems to exist between the two streams in the business literature. Proponents of the organizational learning stream tend to be researchers/scholars who prefer to take a skeptical stance and keep organizational learning at the theoretical level, distancing themselves from the world of practice and sometimes seeming to disregard it altogether. The organizational learning stream, which is descriptive, deals with questions such as: What is an organization? How does an organization learn? What kinds of organizational learning are desirable? Are real-life organizations capable of organizational learning?

Proponents of the learning organization stream tend to be practitioners who adopt uncritically what they think will work in the world of practice, sometimes seeming to jump on any or all bandwagons under the guise of learning organizations. The learning organization stream, which is prescriptive, tends to deal with answers rather than questions and advocates how organizations should learn. Put simply, one “divergency” in the organizational learning literature occurs “between the practitioner literature which is primarily engaged in creating learning organizations and the academic literature which is engaged in the study of learning processes in organizations” (Easterby-Smith, Snell, & Gherardi, 1998, p. 259). Occasionally, authors cut across the two branches of literature, especially in business and industry (e.g., Argyris & Schön, 1996; Huysman, 2000), and that is what we will do as well, but in the field of education.
Another issue separating theorists and practitioners relates to the role of individuals in organizational learning. Clearly, organizations are composed of and cannot exist without individuals. However, boundaries between individuals and the organization are not quite as clear. Individuals not only learn about their own identities by “projecting them into an environment and observing the consequences,” but also collectively clarify the identity of the organization, which then allows the organization to come to an appreciation of its own identity (Weick, 1995, p. 23). In the case of individual behavior, observers might be seeing the individual as himself or acting “more subtly, ‘as the organization’ when he embodies the values, beliefs, and goals of the collectivity. As a result, individual behavior is more ‘macro’ than we usually recognize, and organization behavior is more ‘micro’ than is generally acknowledged” (Chatman, Bell, & Staw, 1986, p. 211).

Specifically regarding organizational learning, we agree with Argyris and Schön’s (1996) position that “individual practitioners [are] centrally important to organizational learning, because it is their thinking and acting that influence the acquisition of capability for productive learning at the organizational level. Unless we begin at this point, we have no chance of producing knowledge useful to practitioners” (p. xxii). Organizational learning is dependent on individual learning and the sharing (dissemination) of that learning with others in the organization. Organizational learning, in turn, feeds back to individuals, affecting how they learn. How individuals learn and interact with others in the organization depends on the organization’s environment:

- The political environment, which allows individuals to “function as agents of organizational action” (Argyris & Schön, 1996, p. xxii)
- The intellectual environment, which positively or negatively influences inquiry, learning, and innovation
- The social environment, which influences the degree to which human interactions can facilitate feedback, dissemination of learning, and collective inquiry
- The ethical environment, which influences both explicit and tacit attitudes and values

In Part III (practice), we build on Parts I and II (theory) to connect the reciprocal role of individuals and the organization and to strengthen the linkages between theory and practice by describing six conditions observed in successful schools and school systems—conditions that appear to allow the organization to influence individual members and individuals to influence the organization in the direction of organizational learning. Practitioners are surely familiar with fragments of the conditions such as collaboration, democratic values, inquiry, professional learning communities, and the like. However, these fragments are rarely drawn together holistically or linked to a theory of organizational learning.

A WORKING DEFINITION OF ORGANIZATIONAL LEARNING

The concept of organizational learning has generated interest for over four decades (see Cangelosi & Dill, 1965; March & Simon, 1958) and although numerous different definitions exist, “little convergence or consensus on what is meant by the term, or its basic nature” had
emerged by the end of the 20th century (Crossan, Lane, & White, 1999, p. 522). Before we introduce our working definition of organizational learning, let us look first at what an organization is.

An organization is a collective that forms for a specific purpose that is beyond the reach of a single individual. In this book, we view the school system as the organization, schools as groups or subsets within the organization, and organizational members (individuals) as all adults working in the school system. The organizational learning process is the same for both the organization and its groups, so the ideas in this book can be used at either the system or school level. However, optimal organizational learning requires all levels—the organization, groups, and individuals—to work together.

When Argyris and Schön (1996) posed the question, What is an organization that it may learn?, they concluded that a group of individuals may be called an organization if it meets three conditions:

1. Individual members agree on procedures (explicit or tacit) to make decisions in the name of the collective.
2. They authorize individuals to act and speak on their behalf.
3. They set boundaries between their collective and the rest of humanity (i.e., define membership).

These conditions distinguish an organization from groups that temporarily come together to serve a purpose (e.g., a crowd that forms to express collective displeasure over the loss of their team in a national championship by trashing the area around the stadium). “By establishing rule-governed ways of deciding, delegating, and setting the boundaries of membership, a collectivity becomes an organization capable of action” (Argyris & Schön, 1996, p. 9). When individuals or groups inquire on behalf of the organization and embed in it new values, understandings, or practices, the organization has learned.

We define organizational learning as the deliberate use of individual, group, and system learning to embed new thinking and practices that continuously renew and transform the organization in ways that support shared aims. Although short and seemingly straightforward, this definition begs a minimal explanation here. Parts I and II, in particular, offer a more detailed elaboration of this definition, but we will briefly outline the key ideas of the definition.

Deliberate Use

We use the term deliberate to distinguish organizational learning from learning that regularly occurs in schools and school systems. Schools routinely adapt to changing environments (e.g., to new state or federal mandates), make corrections (e.g., change the wording of a policy to close an exploited loophole), or try something new (e.g., the Singaporean math curriculum). They may also regularly continue to repeat traditions or practices that fail to help students learn. In other words, learning may occur to a greater or lesser degree, but it may frequently be haphazard or accidental. This kind of “muddling through” may not serve the organization and may produce additional “wasted effort, frustration, and conflict” (Schmuck & Runkel, 1994, p. 14). On the other hand, deliberation (e.g., planning, organized processes, reflective judgment, and evaluation) signals purposeful change and the intention to
be proactive instead of reactive. Deliberation indicates that an organization plans or looks for opportunities to detect and correct errors, encourage innovation, and examine mismatches between expectations and actual outcomes.

**Learning**

We take the position that learning is socially constructed and that it is an active interpretation of experiences that involve both a process and a product. Individuals and groups are constantly trying to make sense of the world around them. (Think of mythology, which represents one way to explain mysteries such as the afterlife or good and evil.) Sometimes the learning is so incremental and so bound to the larger group’s values, norms, and culture that it is impossible to identify how something has been learned. Organizational learning depends on eliciting both explicit and implicit (tacit) knowledge of members within the organization to make thoughtful decisions and to initiate or respond to changes on the inside or from the outside. Sometimes, members change only strategies or behaviors, but at its best, organizational learning leads members to change norms (thinking) as well as behaviors.

**Embedding**

Individuals continuously encode vocabulary, stories, paradigms, ideologies, and theories as a sort of shorthand of what their group or organization stands for or what makes it distinctive. They may or may not be aware that this is happening; it is similar to the phenomenon of teenagers dressing, speaking, and behaving similarly across a nation. In the case of organizational learning, embedding or institutionalizing learning usually takes the form of new norms or routines (e.g., policies, procedures, rules, rules of thumb). The process occurs relatively infrequently and is often slow to take root.

**Renewal**

The purpose of organizational learning in school systems is to continuously renew the organization (see Chapter 5). Just as teachers refer to lifelong learning as a goal for themselves and their students, so organizational learning for renewal is a constant goal for an organization. Learning ensures the survival and continuation of organizations by helping them transform themselves from within and respond responsibly to external challenges as they exploit what they have learned in the past while exploring or innovating to deal with the present and future. In sum, organizational learning helps balance continuity and change, both of which are necessary for renewal.

**CASE STUDY**

To help readers visualize how organizational learning could play out in a school system, we introduce a case study that will be continued and elaborated to illustrate each of the six chapters in Part III. Those chapters introduce the six conditions we have identified as necessary for fostering organizational learning in schools and school systems. The case study is a fictional composite drawn from the literature and our own professional experiences of
working in and with schools in multiple school systems. In this chapter, we provide the background to the case study.

Changing Schools: An Opportunity for Growth

Damian Grainger walked purposefully to the door of a pleasant middle school building in a quiet residential area called Pinehurst. After 14 successful years of teaching in two of the high schools in the Maple Grove School System, he had recently been encouraged by his principal to broaden his experiences and his understanding of students and the curriculum by teaching at the middle school level (Grades 6, 7, and 8). To his delight, he was a candidate that both Pinehurst and Bayside schools selected to interview for their respective middle school positions. Damian had heard good things about the Pinehurst school’s competitive spirit and was looking forward to his visit there to help him decide where he wanted to teach. He had asked to attend an afterschool faculty meeting prior to the interview on the assumption that faculty meetings tend to reveal a great deal about a school’s leadership, cohesion, and goals.

Three days later, he set out for his interview at Bayside Middle School. He was not nervous because he had met many of the middle school teachers in the system on numerous occasions when he had served on a middle-high school curriculum alignment team, a task force on adolescent behavior, and a team to ease student transitions from middle to high school. He had also noticed several of the Bayside Middle School teachers at the school system’s Nature Center three weeks earlier.

Following his visit to Pinehurst and Bayside Middle Schools, Damian was offered a job at both schools. “A no-brainer,” he smiled as he re-read the two offers. “Bayside has some really great things going for it.” Then he remembered that a close colleague, Sonja, had transferred from Pinehurst Middle School to high school several years earlier, so he decided to check out his initial reaction to the offers by asking her perspective about which school he should choose. As Sonja’s mentor during her first year at the high school, Damian had often told her that he had learned as much from her as she had from him. Sonja’s enthusiasm, observations of middle school students, and experiences as a first-rate science teacher had diminished Damian’s initial apprehension about teaching younger students. She had assured him that all middle school students would benefit from his 14 years at the high school level because he would understand the essential knowledge and experiences that could enhance middle school students’ transition to and enjoyment of high school science classes.

When Damian tapped at the open door to the lab, Sonja looked up and smiled. “I hear you’ve been offered a job at Pinehurst,” she said with a grin. Noticing his amazement that she already knew about the offer, she added, “Remember, I still have a big network of middle school teachers. News travels fast!” As Damian explained the additional offer from Bayside and the choice he had to make, Sonja’s laughter faded. “I’m not surprised you were offered both positions,” she said quietly, “and I’m not surprised that you were unimpressed by your visit to Pinehurst, but let me try to explain why Pinehurst really needs you.”

Damian’s astonishment grew as Sonja revealed how glad she was to have left Pinehurst just before the current principal arrived. A group of highly experienced teachers and some young, new teachers had tried to keep student learning engaging and exciting despite regular undermining of their attempts. Sadness crept into her eyes as she said, “It wasn’t that the kids didn’t want to learn. Pinehurst used to be known for its high academic achievement and its sports teams. When I left to come here, teachers were worried about the incoming principal because he favors sports and he totally can’t stand conflict. But some of the best teachers were
within a year or two of retirement and thought it was smarter not to transfer out. When our
new superintendent came and schools like Bayside started to try some of the organizational
learning ideas he was interested in, it seemed that all the teachers who didn’t want to make
those changes transferred to Pinehurst—and there were lots of openings, I can tell you! You
might not have noticed, but Pinehurst has had an incredibly high turnover for at least 4 years.
My shrinking group of idealists is still there fighting, but they need somebody like you to help
energize them before they get totally beaten down.”

Before leaving the school, Damian slipped an appointment request into the principal’s
mailbox. His principal, Michelle, had originally encouraged him to broaden his understand-
ing of children’s development and the science curriculum by moving to the middle school
level. Damian and Michelle met for lunch the following day. Clearly agitated, Damian said,
“I was going to ask you to give me a fair assessment of both choices before I make a deci-
sion. Then, in the middle of the night, I suddenly realized that two of my most difficult
students had come from Pinehurst. This morning, I gave our team’s secretary a list of the kids
who have had the hardest time succeeding in my classes over the past couple years.”

Damian paused unhappily, and his gaze dropped. “This is the list of names I asked her to
check,” he said as he handed a sheet of paper across the table. “As it turns out, almost all of
them came from Pinehurst. Those kids deserve to learn, and they can do as well as everyone
else! How could this happen in one of Maple Grove’s schools? I thought we were all on board
with organizational learning—until I visited Pinehurst. O.L. at Pinehurst might as well stand
for Out to Lunch! Learning wasn’t mentioned once in the faculty meeting or the interview!”

Glancing at the list of names, Michelle said, “This is certainly an example of the need for
interdependence, isn’t it? The Pinehurst students depended on their teachers to do their best.
When those same students got to high school, we couldn’t do our best because the students’
curiosity and love of learning wasn’t where we expected it to be. When these students had
trouble in their learning team or when they acted up in class, they took time away from other
students’ learning too.”

Michelle stood up to get an orange and then continued. “You’re not the only person to
check the data,” she said. “You likely remember my mentioning that at the end of a principals’
meeting last year, principals asked the superintendent to help us structure a systematic
way to collect long-term data on how each school’s students achieved after leaving their
respective elementary, middle, and high schools. We’ve just seen the initial data for the school
system, but I can tell you that it supports your data about Pinehurst and that the superin-
tendent is quietly taking action behind the scenes. I’ve heard that Pinehurst’s principal has agreed
to take early retirement and that the most outstanding new teacher applicants will be desig-
nated for the school.” After a long silence, Michelle noticed the beginning of a smile on
Damian’s face as he digested her feedback. She waited and then said softly, “I think you’ve
made your choice, haven’t you? It won’t be easy starting organizational learning from scratch
again, though your experiences here will certainly help. Maybe at Pinehurst, you’ll have to
start with small changes that produce big results, and of course, you know that the superin-
tendent and all of us will be as helpful as we can.”

LOOKING AHEAD

Organizational learning. The term sounds appealing, but is current interest in organizational
learning simply another example of “what goes around comes around”? Doesn’t organizational
learning that schools are not learning, even though teachers and principals know that learning is going on in many schools? Can theories really translate into practice? Is organizational learning just one more new fad that is falling on the shoulders of already burdened school personnel? Why should school personnel and policymakers pay attention to organizational learning? How would we recognize it in schools? More important, how does organizational learning improve learning for students and adults? In other words, would organizational learning make a difference in schools?

The remainder of the book sets out to explore these questions and the application of organizational learning in schools. Parts I and II focus on the “what” and “why” questions by synthesizing theoretical and conceptual underpinnings of organizational learning that help explain what it is and why it is important in schools in the 21st century. Part III identifies six conditions that appear vital to the practice of organizational learning. It also explains and gives examples of what organizational learning might look like in schools and school systems (the “how” question). Part IV looks back and ahead, offering suggestions for organizations that want to move forward. Taken together, the theoretical, conceptual, and practical work extends understanding of the complex concept of organizational learning and identifies six conditions that appear necessary to support it in educational contexts.

NOTES

1. We have chosen to use school system as a generic term for regional synonyms such as school district, county, board of education, and parish.

2. For an interesting chronological collection of definitions of organizational learning, see Appendix A in Dixon (1999).

Reflective Journal

As you read through this book, we hope you will find ideas that interest and inspire you. Because reflection is central to organizational learning, we also hope you will take the time to reflect on what you have read and learned. Accordingly, at the end of each chapter, we provide some questions to guide your reflection and help you think about what the ideas mean for you and how you might use them in your own school or school system.

Responding to questions often allows readers to articulate and clarify their thinking and understanding at a given time. You can answer all of the questions or only those questions you find relevant, or you can just record your own thoughts at the end of the chapter. Some questions may appear too difficult to answer right now, but they may be worth revisiting when you’ve read more of the book. You can also use these questions to guide discussion for a study group, a faculty/staff meeting, or a school/system improvement team. However you choose to use your reflective journal, we hope you will take the time to write down your ideas about fostering organizational learning in your workplace.

The following questions are to help you think about your ideal school. They relate to assessing your current organizational situation, considering what learning means for your organization, and beginning to think about what you want your school/system to become. The
dynamic tension between where an organization is and the vision of what it could become provides motivation, direction, and energy for learning.

1. Think about your last job search and the things that led you to choose your current job.
   - What aspects of the school/system appealed to you?
   - What aspects gave you pause?
   - How (if at all) have those aspects changed over time?
   - What would you most want to change? (Think both about positive aspects you would like to strengthen and negative aspects you would like to change or eliminate.)

2. Reexamine Table 1.1, which compares the attitudes and actions of the modern (industrial) paradigm to those of the emerging postmodern (knowledge) paradigm. In what ways would you say that your school/system is characterized by the modern paradigm? In what ways is your school/system characterized by the postmodern paradigm? Overall, which way would you say your organization leans?

3. Can you think of any new demands or pressures for change in your school/system that are related to the paradigm shift and underlying social changes (mobility, technology, multiculturalism, education)? How is your school/system addressing those demands and pressures? How is it anticipating changes that might be needed to prepare students for the future?

4. Do members of your school/system see themselves as part of a larger system? Do they look for systemic solutions to the issues they face or try to tackle issues one by one? Do members look for solutions collectively or on their own? Are solutions shared?

5. To what extent do you think your school/system addresses problems systemically (keeping in mind connections to other issues as well as the big picture)? To what extent are mandated changes addressed systemically (incorporated into organizational thinking versus just added on)? What could be done to encourage more systemic thinking in your school/system?

6. Organizational learning depends on individual learning and sharing with others, which in turn depends on the organization’s environment. How favorable is your school/system’s environment to learning and interaction? (Consider the political, intellectual, social, and ethical environments.)

7. We define organizational learning as the deliberate use of individual, group, and system learning to embed new thinking and practices that continuously renew and transform the organization in ways that support shared aims. In what ways does this definition fit your school/system? In what ways doesn’t it fit? How might you know if your school/system was engaged in organizational learning?

8. What other thoughts did this chapter evoke? (This is an opportunity for you to record your own ideas and questions. Jot down things you might want to use in your own school or school system as well as things you want to follow up on or revisit.)