These days, principals, like managers and leaders in other enterprises, are being sold a misleading bill of goods. Policy-makers and arm-chair critics emphasize the link between a principal’s managerial skills and school performance. Setting high standards, supervising instruction, and holding teachers accountable for student performance have become the sure route to better test scores. Principals themselves often rate their people skills on a par with their task-related duties in making schools work. They believe that high morale is as important as a tight ship. Taken together, these two roles—taskmaster and counselor—eat up most of their time.

**Business Research**

Research in other sectors paints a different picture. Educators seem to either look to business or government for definitive answers to pressing issues, or steadfastly maintain that schools are completely different and can learn very little from other
types of organizations. Ironically, they often overlook or ignore some interesting lessons about how to manage and lead effectively. The primary challenge in both business and education is dealing with people and relationships. Three important business studies stand out related to our focus on networks: one conducted by Kotter (1982), another by Lynn (1987), and the third by Luthans, Yodgetts, and Rosenkrantz (1988).

The Kotter study focused on effective senior managers in business; Lynn looked at politically appointed heads of federal agencies. These successful leaders shared something in common with principals: both struggle to determine what they should be doing and how they should be doing it. They relied on networks of people whose support and energy were essential. Consequently, they spent most of their time setting agendas, building networks, and relying on networks to accomplish their missions.

The Luthans et al. investigation looked at a sample of middle- and lower-level business managers. They discovered that these people (like school principals) spent almost two-thirds of their time on routine, task-related activities and about a fifth on people-related issues. Just a sliver of their remaining time was devoted to networking. But when the researchers compared the behavior of effective and successful managers with others (using subordinate satisfaction, unit performance, and promotions as criteria), a different pattern emerged. Effective managers spent much of their time on communication and people issues, while networking was the only behavior that paid off in their advancement. But the very successful managers spent almost half their time on networking, attending to the political and cultural aspects of their operations. These results are consistent with Bolman and Deal’s studies of school principals and managers in other sectors (Bolman & Deal, 1992, 2003).

What are the implications of these studies? Energy intended to improve schools may be misdirected, and the way principals spend their time might be profitably reallocated. Instead of concentrating mainly on structure and human relations, they need to focus more thought and time on building
power relationships and cultural bonds. This does not imply that leaders should ignore tasks and people, but rather that they should take into account the political dealings and symbolic commitments that appreciably affect their work and bolster their faith. This requires a grounded understanding of the set of connections—task, friendship, power, and culture—that tie an organization together and release the full potential of people in concert. Teams are able to accomplish things that fall outside the grasp of any individual working independently. Teams work—but what makes them work? To access the secrets we need to probe behind and below the veneer and look at the variety of ways people connect to one another.

**Predominance of Networks**

More and more, we hear a lot about networks and networking. Most associate the term with telephone or Internet connections: *Reach out and touch someone.* Or in a more recent television advertisement: *Who are these people? Oh, they’re my network.* The term is also used extensively in the fields of management and leadership. Books and career gurus encourage networking among employees within and among departments. And we are reminded time and time again that relationships are critical to success—maybe more so than predetermined policies or strategies. Even so, when we engage in relationships at work, we rarely consider the strategic importance of networks and networking—whether good or bad.

With Web 2.0 tools, such as Wikipedia and Weblogs, anyone can share information with everyone, thus bypassing traditional communication sources. From potentially career-killing escapades flooding MySpace to career-enhancing conferences promoting job networking, we live in a “networked society.” More than ever, we are coming to realize that everything seems to affect everything else: organizations do not exist in a vacuum; careers are not laid out in advance; the world’s economy affects ours; and *anyone* can make a profound difference . . . or at least give it a shot.
IMPACT ON SCHOOLS

Schools, like other complex organizations, feel the impact of this rapidly changing communication world. In reality, intra-organizational networking is not new; it’s just that we are now paying more attention to its significance. Unfortunately, much of the advice school leaders still receive does not take into account the chaotic yet markedly patterned networks of people, products, coalitions, and ethnic groups that exist just beyond our normal range of reach and grasp. Educational leaders are expected to make major changes in their schools and districts; they are encouraged simultaneously to be visionary instructional leaders and efficient fiscal managers. They know that their job descriptions include, but are not limited to, building manager, politician, professional developer, fundraiser, organizational figurehead, chief negotiator, and part-time custodian. Left out of the equation is the realization that patterned chaos is, and always has been, a way of life in schools. No matter how adept in leadership, a principal cannot master and control everything. For instance, we know clearly that teachers do not get all their instructional direction or advice from the person designated as “instructional leader.” Teachers bring their own history and values into the classroom and pass it along in the teacher’s lounge, mail room, and after-hours gathering spots. Policy-makers have long sought to sterilize schools from the natural flow of human preference and social influence by encouraging scripted “teacher-proof” instructional materials and touting models of effective classroom practices. Despite these seemingly endless peripheral efforts, many schools go on as dynamic, colorful, and unique as ever. But sadly, the prevailing counsel to principals remains as simplistic and unrealistic as ever: take command, make bold improvements as soon as possible, and get those test scores up by tomorrow.
MISREADING CLUES

Misconceptions of the realities principals face thwarts their well-intended efforts. Think about Stephanie. She is earnestly approaching her role at Garvey with the view that the school’s organization looks something like Figure 1.1. But the situation she is inheriting and wants to shape actually looks more like Figure 1.2. As we will soon see, Stephanie’s difficulty in assuming her new role and balancing needed changes to an entrenched status quo comes out of a mistaken belief that her school is as hierarchically ordered and clearly defined as a typical organizational chart brings to mind.

Figure 1.1  Stephanie’s Perception of School Organizations

Eventually, though, Stephanie will learn that schools are inevitably untidy and tangled places. When she accepts this, as long as she retains her initial passion for transforming Garvey, she will see how her messy, gnarled school is a normal human enterprise. It naturally will resist her and her
agenda for improvement. Yet if she works with the flow rather than tries to single-handedly untangle the complicated web as depicted in Figure 1.2, she has a good chance to help her staff make a difference. The Chinese call this *wu-wei*, or effortless doing—the balanced zone between leaning and forcing. This state is reached only through an intimate, give-and-take union between one’s self and the social environment.

**Figure 1.2** The Reality of School Organizations

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**THE CONTEXT OF LEADERSHIP**

The principal who understands networks and flow can be characterized by Max DePree’s (1992) jazz band metaphor. It captures the fragile interplay of (school) leadership that thoughtfully weaves art with science.

One way to think about leadership is to consider the jazz band. Jazz bandleaders choose the music, find the right
Developing a good jazz group is a multipart undertaking. Leaders need skills, theories, and a good ear to weave cacophony into melody and capture the full potential of human capacities. The problem is that most of the tools, theories, and training available to them are inadequate for the insubordinate jumble they have to confront daily. It may be easy to identify chaos, but it is hard to make sense of it—and even harder to find patterns in disorder to help shape it into a shared symphony. At the heart of this talent is the skill of understanding the rhythm and character of networks.

Newer educational literature reminds us that the principal is only one source of leadership in the learning network maze. Professional learning communities (McLaughlin & Talbert, 2006) and the concept of distributed leadership (Spillane, 2006), as examples, place the principal in an intricate web of other influences. With so many unofficial leaders to offer guidance, networks of learning, power, gossip, politics, and meaning become contorted and tousled. Using the framework of social networks, leaders can step back and be more sensible about the true nature of their work. From this angle, many will realize that their main role is to ferret out and empower others. A network map will help them chart a course. Likewise, they will be able to better grasp the links and routes that supply negative, unproductive, and useless influence.

The basic idea behind social network analysis, like most other kinds of analytic research, is that visual, mathematical, or linguistic representations can help to simplify our understandings of large and complex phenomena. The social and professional milieu of a group of teachers in a school is sufficiently
complex to warrant an analytic tool that can seek out patterns and anomalies that impact a school’s culture and productivity. While the term network is applied to power grids and television stations and the term social network is applied to Web sites and personal relationships, when we talk about social network analysis, we are referring to the exploration of the patterns of relationships within a group. While our personal networks are important to us as individuals, the organizational social networks in which we are embedded are much more dynamic and complicated.

**MANAGING NETWORKS**

This book offers a way of looking at schools by examining the social, professional, political, and cultural networks of teachers and other staff. By itself, this take on day-to-day happenings will not solve all the problems principals face. Yet social network analysis can be considered one of the many tools principals can draw upon to make sense of and enhance the livability and performance of their schools. To outsiders, the route to improvement seems clear and straightforward. But to many principals, what happens day-to-day seems opaque and bewildering. Even as they begin to see the light, access is often obscure or denied. The messiness created by complex systems of relationships, emotions, politics, and traditions can overwhelm even the most rational of principals. Understanding the social networks of those systems can help principals gain right of entry to their organizations.

Only a handful of empirical and theoretical papers and books have applied social network analysis to the work environment of K–12 schools (for a description, see the Appendix), but we see that changing dramatically in the near future, as imaginative principals and superintendents are beginning to see the value of mapping the social landscapes of their schools and districts before implementing big changes. In an effort to underscore the importance of doing so, we point to three
ongoing areas of school improvement where understanding social networks can help insure success: professional learning communities, organizational culture, and communication. We begin with professional learning.

**Professional Learning Communities**

The importance of collaboration and building professional learning communities in schools gets much attention. Collective effort, paradoxically, is often touted as a means to build *individual* capacity to carry out difficult tasks. While significant research shows that teaching in American public schools is a lonely and private endeavor (Little, 1990; Lortie, 1975; McLaughlin & Talbert, 2001), a similarly significant body of research shows that productive collegial relationships positively affect school culture and student achievement (Ancess, 2001; DiPardo, 1999; Kruse, Louis, & Bryk, 1995; Little, 2003; McLaughlin & Talbert, 2006; Newmann, Rutter, & Smith, 1989; Rosenholtz, 1991; Yasumoto, Uekawa, & Bidwell, 2001). Countless workshops, books, and articles have publicized the various ways strong professional learning communities can be created within schools. Yet for all the attention—as well as the shining success in some schools—many schools are still struggling to realize the potential advantages of schoolwide teamwork and cooperation. To many educators, strong faculty collegiality seems “conceptually amorphous” (Little, 1990, p. 509), and “difficult to spell, hard to pronounce, harder to define . . . hardest still to establish in a school” (Barth, 1990, p. 30). Grossman, Wineburg, and Woolworth (2001) pointed out that “[r]esearchers have yet to formulate criteria that would allow them to distinguish between a community of teachers and a group of teachers sitting in a room for a meeting” (p. 943). And many are already casting “professional learning communities” as yet another failed education reform measure.

Before school leaders give up on creating professional community, consider again research that shows when communal
work-related bonds are present in schools, positive results often follow. The problem can be summed up by Michael Fullan’s (2006) argument that many leaders are duped into believing that professional learning communities are an end in themselves—that they are just another “bandwagon” to hop aboard. While professional learning communities may be a vital step in the process of school improvement, they should by no means be considered a goal. Furthermore, these noble communities cannot necessarily be “instituted” and still work flawlessly. The difficult truth is that most professional groups develop organically because of a collective commitment to serving young people in better ways.

How can social network analysis help? By tracing contacts between teachers, leaders can determine who in a school is getting important information or assistance in a timely manner. By determining the extent to which a high school department is “dense” with connections, leaders can unpack assumptions about classroom practice that most likely only get bandied about in sheltered professional conversations. By examining patterns of work-related communication, leaders can support emerging professional communities as teachers strive to be more positive and productive.

By discovering how things really work, for example, Stephanie (Garvey’s new principal) can determine where people are getting their instructional influence and advice. She can then try to bridge gaps in the network so that people needing encouragement, better instructional information, or subtle influence can have access. Stephanie will have a much better handle on improving instruction if she had a way of analyzing existing professional ties. Once she sees existing connections, she can become more of a “matchmaker” and help connect individuals to the appropriate network star.

School Culture

Even amidst the pandemonium of high-stakes testing and politically charged reform, there is significant evidence that a school’s culture needs to be acknowledged and shaped. Deal and Peterson (1990), for example, suggest that “[c]ulture consists of
the stable, underlying social meanings that shape beliefs and behavior over time” (p. 7). Culture is created through human interaction and thereafter provides the subtle cues and codes that affect school protocol and educational outcomes.

Schein (2004) categorizes culture on a continuum from visible to invisible: On the visible side, various artifacts and rituals, not easily decoded by outsiders, take center stage. A coffee maker serves as a perfect example. One school principal on his first day at a new school was snidely notified by one of his teachers that his most important job was to ensure that coffee is made each morning. Baffled by the fortitude of this teacher to say this to her new boss, the principal realized that to keep feathers unruffled he better conform. He continued to make coffee each day as principal of the school. To an outsider, the coffee maker was just a coffee maker. To the teachers, the coffee maker was a symbol that their principal was willing to be a “servant” leader.

“Espoused values,” in between visible and invisible on Schein’s continuum, are known to people, even though they are not manifested physically. Teacher lounge talk, and often the perceived negative portrayals of students that come out of it, constitute espoused values.

“Basic underlying assumptions” comprise the invisible side of Schein’s spectrum. Whereas the “espoused values” are visible through actions and words, basic underlying assumptions are often held below the level of consciousness. A basic underlying assumption among teachers is the right to operate autonomously behind a closed classroom door. A much more disturbing basic underlying assumption in some schools is the idea that all students, particularly those from certain backgrounds, cannot necessarily achieve.

Schein’s work on culture emphasizes that culture is manifested through the interactions of employees in social networks. As he suggests, culture is hard to read. Yet mapping a school’s network can provide clues to patterns often amorphous or hidden. Return to Stephanie’s challenge of improving the instructional capacity of Garvey. People who are very involved in the life of the school—whether through
sports, clubs, or strategic planning—communicate regularly. Conversely, those who consider themselves to be uninvolved in the life of the school, constituting a significant portion of the faculty, barely talk to one another at all. How much influence can Stephanie have on the culture when so many people are detached? She can rely on the dense network of involved people as she seeks to shape the school’s informal patterns. But she will have a much harder time reaching the disconnected. Only by capitalizing on the existing social network information can she begin to find those keys that unlock the green door that now blocks her way. And in Garvey’s case, the key must somehow unlock a much more intangible culture than the culture espoused in sports and activities.

Communication

More and more of a principal’s time is spent on school safety. Still, unexpected disasters continually seem to run afoul of even the best laid plans. A little after lunch on Wednesday, October 10, 2007, Asa H. Coon, a ninth-grade student at SuccessTech Academy in Cleveland, Ohio, armed with two handguns, opened fire in the school corridors. The two news items that echoed throughout that day focused on the warning signs that existed prior to shooting and the PA system announcement of “code blue.” Anyone who has worked in schools for at least the past decade likely thought to him or herself, *What if that were my school?* To combat the chilling chances, district and school administrators put various plans and policies into place. Counselors are on the lookout more and more for “warning signs.” And in many schools, security systems, such as metal detectors, now grace (or disgrace) the building entrances as students and staffs enter each day. But underlying the policies, procedures, and metal detectors, we have spent little time asking ourselves how communication really works. On paper, we often see that the principal is supposed to issue an announcement when something catastrophic occurs; the secretary makes a call to the
local police; teachers close and lock their doors and wait for further instructions over the PA system.

But what happens when our systems fail? What are teachers’ natural inclinations of communication? And when there are warning signs about students, how do those get communicated in the proper channels? These and other issues can be illuminated by social networks that capitalize on the normal channels of communication. But these must first be identified by a comprehensive map that includes well traveled veins of side-roads, shortcuts, and paths away from the formal arteries.

FINDING DIRECTION

Principals are told by their superintendents, as well as by parents, board members, business representatives, and the media, to improve the culture of teaching and learning in their schools, increase professional learning, enhance communication, raise test scores, improve efficiency, and more. Baffled principals tend to look for advice through books, seminars, graduate programs, and mentors. Often, they will seek out influential people on campus to look for inspiration and allies. But so often, they act like stereotypical men who avoid asking for directions when lost. The metaphor of the Green Door is apt as principals stand outside their schools’ cultures, only wishing they could determine the route into the heart of the enterprise. Unfortunately, they often end up shooting in the dark—heading vaguely in a direction, but not knowing specifically how to get there. The science of networks provides principals with a glimmer—a strategic directional map through the Green Door’s restricted maze.