Instructions for authors, subscriptions and further details:

http://ijelm.hipatiapress.com

Organizational Learning: Leading Innovations

Vivienne Collinson[1] & Tanya Fedoruk Cook[2]

1) Michigan State University (retired)
2) Private Consultant, Washington DC

Date of publication: July 16th, 2013

PLEASE SCROLL DOWN FOR ARTICLE

Organizational Learning: Leading Innovations

Vivienne Collinson
Michigan State University
(retired)

Tanya Fedoruk Cook
Private Consultant,
Washington DC

Abstract

This article examines the interplay among the environment, learning, leaders, and innovations in school systems. Six conditions that, together, have potential to shape an environment that supports organizational learning are illustrated with data from two leaders of innovation: one in an environment that resisted change; the other in a supportive environment. In one case, the environment limited what a leader of innovation could accomplish. In the other case, a supportive environment allowed the leader to influence widespread change, including a situation where one school's loss of good principals became a gain for the broader profession. Data suggested that modeling is a powerful way to lead and that innovations provide a natural springboard for organizational learning and the emergence of leaders. Findings also demonstrated the importance of innovations, risk taking, collaboration, and communication for organizational improvement.

Keywords: organizational learning; leaders; innovation; modeling; school environment

Aprendizaje Organizativo: Liderando la Innovación

Vivienne Collinson
Michigan State University
(retired)

Tanya Fedoruk Cook
Private Consultant,
Washington DC

Abstract

Este artículo examina las interacciones entre el contexto, el aprendizaje, los líderes y la innovación en sistemas escolares. Las seis condiciones que, juntas, tienen la posibilidad de crear un contexto que permita el aprendizaje organizativo, están ejemplificadas con datos de dos líderes en la innovación: uno en un contexto con resistencia al cambio; el otro en un contexto que respalda el cambio. En el primer caso, el medio limita lo que el líder de la innovación puede conseguir. En el otro, un contexto favorable permite al líder influir para generalizar el cambio, incluyendo una situación en la cual la pérdida de un buen director se convierte en una ganancia para el conjunto de los profesionales. Los datos sugieren que el modelaje es una forma poderosa de liderar y que las innovaciones proporcionan un trampolín natural para el aprendizaje organizativo y la aparición de líderes. Las conclusiones también demuestran la importancia de la innovación, la asunción de riesgos, la colaboración y la comunicación para la mejora de las organizaciones.

hipatia press
www.hipatiapress.com

If your actions inspire others to dream more, learn more, do more, and become more, you are a leader.
John Quincy Adams

T he shift from an industrial society to a knowledge society at the end of the 20th century had profound implications for organizations in all fields. Globalization, communication, and interdependence have meant that organizational members are expected to be learners, leaders, and innovators in order to help organizations thrive and respond to change.

This article examines the interplay among the environment, learning, leaders, and innovations in school systems. We begin with a brief definition of organizational learning and a recent conceptualization of leaders. Six conditions identified as having potential to shape an environment that supports organizational learning serve as a framework. Each condition is illustrated with data from two leaders of innovation: one in an environment that resisted change; the other in a supportive environment.

The two cases demonstrate how the environment affects innovations, risk taking, communication, and members' receptivity to organizational learning and leaders. Our findings suggest that modeling is a powerful way to lead and that innovations provide a natural springboard for organizational learning and the emergence of leaders. In one case, a leader emerged from an unlikely environment, but the environment limited what she could accomplish. In the other case, a supportive environment allowed widespread change, including a situation where one school's loss of good principals became a gain for the broader profession. Findings also demonstrated the importance of innovations, risk taking, collaboration, and communication for organizational improvement.

Organizational Learning and Leadership

Organizational learning has been defined 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" (Collinson & Cook, 2007, p. 8). As such, the process of learning is purposeful and continual instead of accidental or haphazard.

Although organizational learning is multilevel, it begins at the individual level. Individual learning becomes multilevel learning only when it is disseminated to and embedded within a group (e.g., a school) or throughout an organization (e.g., a school system). Such learning involves inquiry (e.g., testing values, assumptions, or norms; making sense of a puzzlement; solving problems) and leads to shared understandings and action. Members' collective action may reflect behavioral changes (single-loop learning) or, at its best, both cognitive and behavioral changes (double-loop learning) (Argyris & Schön, 1978). New attitudes or knowledge that lead to changes in practice allow groups and organizations to improve from within. Because organizational learning represents continual and proactive improvement, members can initiate or respond thoughtfully to internal and external changes instead of merely reacting to decisions that others have imposed.

Until recently, the literature on leadership typically recognized only titular leaders and considered other organizational members as followers (see Gronn, 1999 and Harris, 2008 for shifting understandings of leaders in the field of education). However, there is growing consensus that leaders can "come from many places within an organization" (Senge, 1996, p. 45), that leaders and followers function interdependently, and that both have responsibilities and influence (Collinson & Cook, 2007; Gardner, 1990).

Indeed, Rost (1991) defined leadership as "an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes" (p. 102). Within such a relationship, leaders and followers are "partners in the same dance" (Bennis, 2009, p. 225). They

work together within "continually shifting collaborations of individuals who…both follow and lead one another in whatever combination works best for the task at hand, then recongeal around different followers and leaders for the task coming on its heels" (Smith, 1996, p. 207). Fluid partnerships represent two-way relationships: "exemplary leaders attract exemplary followers" (Kelley, 1992, p. 229) and "good constituents tend to produce good leaders" (Gardner, 1990, p. 24). Dixon (1999) noticed that the process of learning collectively tends to disrupt traditional understandings of leaders and followers by flattening existing hierarchies and creating equals instead of subordinates.

   Influence relationships and collaborations depend on empathy, communication, and trust (Collinson & Cook, 2007). Not only are leaders skillful communicators (Gardner, 1990; Harris & Day, 2003), they are also, "by definition, innovators" (Bennis, 2009, p. 135). They "lead through developing new skills, capabilities, and understandings" (Senge, 1996, p. 45) and by consistently "modeling the behaviors [they] wish to see" in others (Preskill & Torres, 1999, p. 164).

   This conceptualization of leaders argues that leaders regularly effect change by "first being, then doing" (Bennis, 2009, p. 134) and that people "follow to the fullest when leadership is based on expertness or an admirable goal, not because of a title or organizational status" (Kelley, 1992, p. 9; Gardner, 1990). The argument is similar to Weick and Quinn's (1999) "logic of attraction"; that is, "to lead change is to show people how to be" (p. 380).

> To engage this logic of attraction, leaders must first make deep changes in themselves…When deep personal change occurs, leaders then behave differently…and new behaviors in the leaders attract new behaviors from followers. When leaders model personal change, organizational change is more likely to take place. (p. 380).

   Organizational learning, as intentional change for improvement that embeds new thinking and practices, occurs more easily in environments hospitable to learning. So what kind of environment nurtures organizational learning? We previously identified six conditions that

appear to work in concert to support organizational learning:

 • prioritizing learning for all members;
 • fostering inquiry;
 • facilitating dissemination of learning;
 • practicing democratic principles;
 • attending to human relations; and
 • providing for members' self-fulfillment (Collinson & Cook, 2007).

   These conditions provide the framework for comparing two cases in which teachers led change: one in an environment that resisted change and one in an environment that fostered organizational learning. As Gardner (1990) observed, "the setting does much to determine the kinds of leaders that emerge and how they play their roles" (p. 6).

Two Cases: Group Learning and Organizational Learning

The two cases we present provide a lens for considering the influence of the environment on organizational learning and on leaders of innovations. One case illustrates learning limited to a group (the school as the unit of change); the other case illustrates organizational learning (the school system as the unit of change). The particular innovation is peripheral to our focus; it could have been any innovation. However, for ease of comparison, we selected cases in which two leaders chose the same innovation of block scheduling; that is, changing from 40-minute instructional periods to 80-minute blocks of instructional time.
   The two cases are drawn from a larger study that explored the concept of 'exemplary teacher' in secondary school settings (i.e., students aged about 13 through 18). A purposive sampling strategy allowed a group of peers in each successive sample round to compile a pool of exemplary teachers in their school system or local region. By the end of the selection process, the study comprised 81 participants across the U.S., each of whom completed a pre-interview survey prior to an individual three-hour interview. Interviews were transcribed and the constant

comparative method of analysis was used to create categories and sub-categories (for an elaboration of methods, see Collinson, 2012a).

Analysis quickly revealed that the participants in the study were avid learners. Moreover, as a by-product of their own learning and commitment to students, these teachers constantly innovated to improve learning for students. They frequently took the role of leader to effect change, and their influence and collaboration often extended well beyond their classroom, school, or school system (Collinson, 2012b).

The cases that follow are only two of many examples provided by participants (pseudonyms throughout). They describe how Glynis, a middle school teacher (students aged about 13 and 14), and Janet, a high school teacher (students aged about 15 through 18), each led a change effort from within when block scheduling was still at the cutting edge in the U.S.

Case 1: *From individual to group learning.*

Glynis had 12 years of kindergarten, primary school, and middle school teaching at the time of data collection. Despite class sizes of 34 to 38 students, Glynis kept her classes "child centered, individualized…I don't structure my seventh-grade classroom a great deal differently than I structured my third-grade classroom…You can do a great deal of group work."

Inquiry, coupled with observations of children, helped Glynis understand that teenagers need engaging projects and social interactions. She strongly believed that socializing is

> just imperative. It's imperative to their success as students. It's what all the research will tell you. That's where their mind is. That's what they need. It's what they want as well, but they need it in order to learn and grow.

Glynis's frustration that 40-minute periods were limiting group work led her to experiment with block scheduling that would allow 80-minute periods.

Case 2: *From individual to organizational learning*.

Janet had taught every grade at the high school level during her 19 years as a teacher. She worked in a small, rural school system that had only two elementary schools, one junior high school, and one high school.

Janet had a longtime habit of writing grants to improve learning for students, so when budget cuts eroded money for professional development, she sought out a colleague to help her apply for a large, new grant. The grant allowed the faculty to replace lost funding and move forward with block scheduling.

> We were [heading] in that direction even before the grant became reality. And I think too that this [change] is something that the teachers have had to do. We have ownership in it. We're going to make sure it does not fail…I did the brunt of the work and I have become the figurehead for the team at our school. And that is mostly because we have gone through such a turnover in administration that somebody has had to take the reins and drive the team…We are interviewing for our fifth principal in four years.

Environmental Conditions for Organizational Learning and Leading

Environmental conditions influence the kinds of leaders that emerge in a given setting (Gardner, 1990). Leading change involves learning so "conditions that support learning must be part and parcel of any change effort" (Fullan & Miles, 1992, p. 749). Conditions that prepare members for organizational learning and leading rely on "an organization's commitment to providing its potential leaders with opportunities to learn through experience in an environment that permits growth and change" (Bennis, 2009, p. 179). In education, as in other organizations, environments that foster all members' learning and provide extensive opportunities to lead could be expected to produce a deep pool of leaders.

Teachers know that creating an environment conducive to learning in the classroom is vital for students' learning. Similarly, organizational learning at the school (group) level is made easier if it is supported throughout the school system (organizational) level. The six conditions that help foster organizational learning are elaborated in this section (Collinson & Cook, 2007). They are illustrated with Glynis's and Janet's experiences as leaders of an innovation resulting in change.

Prioritizing learning for members. In both cases, Glynis and Janet used collegial networks, teaching experience, and professional development to continually find ways to improve learning for students. As Janet explained, "In essence, if a teacher is updated and doing a much better job, the students are going to do a better job as well." However, "teachers cannot create and sustain conditions for the productive development of children if those conditions do not exist for teachers" (Sarason, 1990, p. xiv). School systems, as organizations, can no longer be concerned only with student learning; their renewal depends on prioritizing learning for adult members as well.

Glynis worked in a school system that did not prioritize learning for members. She described her frustration as an innovator in an environment that maintained the status quo.

> I just go insane because I teach [for] one of these districts that has to talk about everything for 16 years before they'll do [anything]. Oh, I just die. Because I do live by "You get in there and you do it wrong. By doing it wrong, you learn how to do it. You fix it." I always want to change, change, change, change. And I teach with a lot of people that say, "If it ain't broke, don't fix it. Our scores are okay. We're doing fine"… And it's a very middle-aged staff [that] thinks, "Why should we try something new if we're not broken?" And they don't rejuvenate themselves at all.

Glynis succinctly stated her motto of learning: "If it's worth doing, it's worth doing wrong until you can straighten it out and get it done right. It's a proactive attitude. You have to be willing to try…You'll learn through trial and error, just like you learn many things." She also

mentioned that she can learn from everyone. Her motto captures a fundamental assumption of organizational learning theory; namely, that mistakes, failures, and errors (mismatches between expectations and outcomes) are important sources of learning. This view of learning requires an environment that embraces open-mindedness toward inquiry and risk taking.

   Janet, by contrast, enjoyed support for continuous improvement from her high school principal and system superintendent.   Both demonstrated open-mindedness toward innovation. They also facilitated broad member participation to enhance the social construction of learning through open communication and the airing of multiple perspectives.

> At the time that we started looking into the block scheduling, we had a tremendous superintendent and a tremendous principal…They were very good in public relations [PR]. They were our PR people. We were the workhorses and they were our PR people. They planted seeds and let us run with them and do the work, and then they would make sure that we had community support. We had parents, actually, on the committee looking at what kind of schedule we wanted to go to, as well as students. And that is very, very important.   We actually had parents on the interview team when we went to the state to interview for the grant.

   Fostering inquiry.   Learning, whether it is individual or collective, begins with inquiry. Inquiry is often set in motion by questions that arise when members face ambiguity or puzzlement, discover mismatches between expectations and outcomes, try to explain a phenomenon or practice, or simply get an idea.   Dilemmas, dissatisfaction, necessity, or curiosity may also stimulate an inquiry cycle involving a problem, anticipated improvement, information collection, analysis, and action. Fostering inquiry means that values, assumptions, and norms are questioned openly and that questions are welcomed as a powerful stimulus to learning, even if analysis (feedback) from the inquiry cycle is negative.

Curiosity, open-mindedness, and risk taking are necessary attitudes for inquiry and well-known characteristics of exemplary teachers as they work to do their best for their students (Collinson, 2012b; Williams, 2001). Thanks to habits of inquiry, these teachers are capable of providing evidence and reasoning (argumentation) to support their position (Collinson, 2012b). When they decide to disseminate their insights or knowledge beyond the classroom, they are "willing to risk popularity and administrative support in order to do what is right for children" (Williams, 2001, p. 113). As Glynis said,

> Oh my principal tells me all the time, "You can't *make* people change. You can't make them." I keep saying, "Yes you can. Yes, you can. You can do this. You can do that. There's always somebody that's willing to try something"… One of the few ways around [resistance], you have to be willing to take the risk of bringing it to their attention, and you have to be willing to be ridiculed and made fun of, and have people roll their eyes at you…But if nobody will ever take the initiative and take the risk, nobody will do it.

Unlike Glynis, Janet worked with administrators who appreciated the importance of risk taking to the success of learning and improving.

> I think our administration gave us [faculty] the license to take risks and to fail because they knew that we were going to bounce back and find a way to succeed. It was not going to be a long-term failure, throw your hands up in the air, and say, "Forget it." We were going to prove to ourselves that we could do it, and I think we have.

Inquiry is remarkable in two ways: it produces collateral learning and it is self-perpetuating. Engaging in the inquiry process leads to new learning and also strengthens collateral learning or attitudes (Dewey, 1933/1960). Dewey identified those attitudes as "the desire to go on learning" (1938, p. 48), open-mindedness, genuine interest, and intellectual responsibility (1933/1960). Not only are these attitudes prerequisites for inquiry, the inquiry process strengthens them. The cycle of inquiry is also self-perpetuating; that is, by the end of an inquiry cycle, new questions or ideas

are formed, leading to the next inquiry cycle.

For example, Glynis realized that "when students miss an 80-minute class, it's traumatic. The frustration with not being able to replicate discussions…and group work, and then with science lab activities and those kinds of things, teachers are just absolutely frustrated." She began a new inquiry cycle to solve the new problem and decided to videotape her classes. Frustration and feedback also prompted Janet to engage in individual inquiry. She explained that the faculty did not undertake innovation simply "because it's something new and different." Rather, removal of professional development funding occurred at the same time thather school received feedback from a community survey indicating that the 40-minute schedule created some limitations for students.

Janet's inquiry uncovered the possibility of block scheduling, which led to continuing cycles of inquiry. She engaged in further research to write a successful grant. Then, after receiving grant money, the faculty decided to invite guest teachers from external schools that were experimenting with block scheduling to conduct "some mini teach-the-teacher workshops on what has worked, what hasn't worked, what do we need to do, what do you suggest." The workshops led to another collective cycle of inquiry as Janet's faculty discovered that they would need group activities for students because

> planning for [80-minute blocks] is quite different. And we had to take all summer to update our teaching methods. You have to teach completely different…Much of it was on our own. [Administrators] would back us 100%, but we needed to go out and find our resources. I think for the most part, the teachers did an excellent job. I shouldn't put it in the past tense because we're continuing to learn.

Even during the implementation and embedding process, Janet continued to engage in inquiry.

> Grades have been phenomenal…I did a study over the year prior to going on the block schedule and [for several more] years. And I took [test] scores, I took attendance, I took office referrals, I took

teacher attendance. Teacher attendance has gone up. It has just been phenomenal. Nobody wants to miss [classes] on the bolck schedule. But anyway, I took all of these figures and I charted them. And in every category, we have improved.

Disseminating knowledge.   Whatever individual members learn "remains as unrealized potential for organizational learning" unless ideas, insights, skills, and knowledge are disseminated to colleagues (Argyris & Schön, 1978, p. 19). Dissemination (sharing) requires free and multidirectional flows of collaborative exchanges among members. Sharing not only contributes to and raises the level of members' learning, it also avoids constant reinventing of the wheel (Collinson & Cook, 2007).

In schools, dissemination may occur in many ways (see Collinson & Cook, 2004), especially from intentional dialogue about teaching and learning (e.g., writing grants or discussions after hearing students talk about what another teacher is doing). Such exchanges allow members to ask questions, air and weigh multiple perspectives, and arrive at shared understandings. Teachers may have an advantage because they typically start with a powerful shared understanding, captured by Glynis's observation: "I really do believe that the majority of teachers want what's best for their kids." Teachers also want to feel competent (see Rosenholtz, 1989); organizational learning allows members, working together, to "think better, learn more, and accomplish more than any single member operating alone" (Collinson & Cook, 2007).

Perhaps because Glynis worked in a less-than-supportive environment where members had not yet developed a shared understanding of professional community or of seeing themselves as jointly responsible for students' and colleagues' learning, she approached dissemination obliquely (by modeling). She had learned about resistance by leading prior innovations and hearing peer comments like "Don't tell me you can do it any better than I can." She had also learned enough from earlier attempts to worry about problems when teachers "implement and it doesn't go well. They're not willing to try again." Thus, she had carefully thought through her approach of modeling.

> I believe this in kids and I believe this in adults: they will learn by
> modeling. And teachers, even the ones that you're not very fond of, if
> they see something working and see something be successful, their
> chances of trying it are much higher. Now, keep in mind, you've
> eliminated a lot of the hard part for them. They don't have to figure it
> out, and they don't have to test run it, [and] they don't have to see what
> it is. They will make fun of you terribly when you fail. You've taken
> the threat away from them. They see it. You're successful. Then,
> maybe if they see it and it's gone well for you, then maybe they'll try
> it. They haven't done any of the work, but at least you're giving them
> something to look at…[I'm] big into piloting. I piloted 80-minute
> blocks the year before anybody else would even look at it…And all the
> teachers were saying, "Eighty minutes? Oh, my God! I can't teach for
> 80 minutes! What do you mean?!" So I did 80 minutes by myself for
> a year—just my class—the only one in the whole building. They
> watched me enjoy it and they listened to me brag about it all year. My
> whole building is that way now.

Janet worked in a school that had already established a more collegial
environment, so as leader of the block scheduling innovation, she was able
to work collaboratively with administrators and peers to discuss if and how
to implement change. She collaborated successfully with one elementary
school in the organization but encountered barriers at the other schools.

> One elementary [school] has not gotten involved in the grant at all.
> And I think that is mostly because they do not have an administrator
> who believes in it. They do not have any teachers pushing. I think if I
> had not contacted the junior high [school], they would not be in the
> [grant] program either.

Janet had phoned the junior high school when she discovered a new
partnership grant that the state was offering to encourage system-wide
dissemination of good practices. She was unaware that the new principal
and curriculum coordinator had already been pushing faculty members to
write the grant. "Well, the junior high [teachers] didn't want to do it. They

were not into change at all."   Janet knew that open communication was necessary to break this barrier to dissemination and volunteered to talk with the faculty on condition that no administrators would attend the meeting. She explained to the principal that when she had previously encountered perceived coercion,

> the best teachers meeting we had was when there were no administrators present, and that let the teachers feel that they could really voice their concerns…You need to confront that. You may not change their mind, but at least they will feel that they've been able to air that. And with [administrators], many times, teachers don't feel they can air that.

Understanding teacher resistance, Janet spoke candidly to the junior high teachers, saying,

> "I'm not shoving this down your throats. I just got this literature and I contacted your principal, and he said that he'd already talked to you." I said [to them], "I don't want you to think that I am an enemy from the opposite side, that I have been planted here. I just want to show you what we've been able to do with ours [the grant money] and tell you what you could do with yours." And there was a core of about six or seven teachers that said, "We're going to look a gift horse in the mouth if we don't do this." They said, "We've got Janet. She's going to help us write it"…So I became kind of the liaison between teachers and [the] administrator, but they would listen to me because I was a teacher. They will listen to their peers as opposed to [an administrator]. And they wrote the grant and they got it.

Dissemination spread to other school systems in two different ways. As word of the high school's success spread, Janet estimated that about 150 other schools sent faculty to observe and discuss the innovation. Additionally, the departure of four high school principals in four years, although "traumatic" for faculty, contributed to dissemination beyond their school system.

> And as a school [faculty] comes through, the principal will talk about what we're doing on the block schedule—how we've used our grant monies—which has been completely teacher decided. And then schools will snap them [principals] away…And so we've lost some very, very good principals because of that. Professionally, we have become a stepping stone because of [innovations] and it's mostly because of what the teachers have done. And the principals are really reaping the benefits of that—which is good, because they are also going to set another school on a course of change.

Practicing democratic principles. Openness to learning, inquiry, and renewal has a great deal to do with the practice of democratic principles within organizations. Democratic principles include but are not limited to equality, truth and transparency, freedom of speech, vigorous discussion, representation (participation), and consideration for the concerns and aspirations of others. In school systems, organizational learning is severely limited when members do not enjoy freedom "to inquire (e.g., access information), think independently (e.g., question and critique), and speak as equals (dissent without fear of retribution)" (Collinson & Cook, 2007, p. 129).

Although democratic societies expect schools to *teach* democratic principles, many schools and school systems function as hierarchical bureaucracies. As education researchers began to focus on the need for teacher learning and organizational improvement, they realized that a bureaucratic "governance system is simply and blatantly not geared to learn and to spread that learning" (Sarason, 1997, p. xii; Rosenholtz, 1989). In business and industry, companies are discovering that organizational learning creates equals instead of subordinates, that the ideas of titled individuals are not privileged over others' ideas, that all members share responsibilities, and that "learning inexorably leads to shared governance and shared governance requires learning" (Dixon, 1999). Furthermore, people closest to the situation may be in the best position to define problems and find solutions (Collinson & Cook, 2007; Smith, 1996). Glynis was aware that bureaucratic governance in her school did not

encourage member learning, equality, or professional responsibility and that leaders of innovations need courage to stand up to authority, resistance,and ridicule. She was committed to helping students and willing to model change—evolution instead of revolution—but she worried that her attempts to disseminate innovations could be perceived as forced change.

> I don't think teachers necessarily see themselves as professionals. But if they are willing to stand up for what they believe in within their district and they're willing to model that belief, and they're willing to take that belief not just to the other teachers, but to the parents and to the community as well as their children, the changes are going to come. The trick to that is, you're forcing it. And there are those that would tell you, "Any change that is forced upon a person that's not ready, it's not a good change." But sometimes, that's the only way you can get around it.

   Janet used a more direct approach, thanks to a system where a more democratic tradition of participation, search for truth and transparency, and freedom of speech had already been established. Not only were students, parents, and the community accustomed to being asked for feedback through surveys and then seeing action toward improvement, but those groups were also represented as the grant process moved forward. During implementation, Janet said, "We had involved several clubs in the decision-making process. We had people on our committee from the student body, as well as when we ran mock schedules past them." Sharing the workload and decisions seemed to make learning, implementation, and embedding easier and more likely to succeed.
   Community orientation and shared responsibility were so strong that when the faculty was looking for a new principal but had not found a suitable candidate, they decided to ask a colleague to take the role of temporary principal for one year. "He's a classroom teacher for us and [he] said, 'I will take the principalship only because you have nobody and [because] I don't want to see us fall by the wayside with somebody that doesn't want to be here.'"

Attending to human relationships.   Organizational learning is a collective enterprise that depends on member interactions.   Schools where members learn from and with each other are typically referred to as collaborative workplaces that improve learning for students and teachers (Rosenholtz, 1989).   The social infrastructure that makes such learning possible involves the development of human relationships characterized by constructive, mature, respectful behaviors.   Interactions such as dialogue, questioning, argumentation (providing evidence and reasoning), seeking advice, and collective decision making are associated with organizational learning.   These habits, along with their attendant attitudes and skills, represent the kind of human interactions and collaborations that strengthen relationships and build trust.   Without adequate skills and responsibility, members' interactions may dissolve into personal conflicts and defensive behaviors (see Collinson & Cook, 2007).

Both Glynis and Janet intentionally structured their classrooms forstudents' collaborative learning and sharing through group work. However, collaboration among adults was not a norm in Glynis's school so she initially chose to communicate through modeling instead of engaging in dialogue.   As the pilot year progressed, she was able to "brag about it," thus opening up interactions and communicating information slowly.   Her persistence was somewhat like proverbial drops of water that eventually wear a hollow in a stone.

When the junior high school initially resisted the partnership grant proposal from a new principal, Janet was able to speak candidly to the principal.   She had learned from experience that lack of communication can create problems.

> I think our weakest point that we needed to address—and we didn't—was tying this [innovation] in with the other schools in the district when we first started.   I think because of the cut in funds, the other schools were very jealous [of our] professional development because we had [grant money] to work with…There was a lot of misunderstanding [at] the other schools.

Janet was referring to previous derision from some junior high school

teachers who called the high school a "resort" because faculty "only teach four classes." Nonetheless, Janet put aside their past comments and her own impatience that "education isn't changing fast enough" as she kept looking for ways to engage them. When she discovered the partnership grant, she persuaded the faculty by explaining how the innovation benefitted both teachers and students and by offering to help write the grant. Additionally, drawing on her own school's experiences, Janet was able to help the junior high school teachers see the full scope of the innovation by using "skills of 'big picture' explanation that outstanding leaders invariably possess and use to great effect" (Crowther, 2009, p. 124).

> I think the junior high [school teachers] had just been so set in their ways and didn't want to change, saw no reason to change, and they thought, "We can live out our lives." But then, when they see teachers like [my colleagues] and I who are changing for those last few years and enjoying it, reaping the benefits of [changes], and they're saying, "Maybe this isn't so bad." You know, it's different coming from a fellow teacher, a peer. They trust you.

   Providing for members' self-fulfillment. Leaders walk a tightrope as they try to balance the amount of organizational change (future learning) and continuity (past learning). They also have to foster the well-being and aspirations of members, for as Gardner (1990) argued, "the purpose of leaders is not to dominate nor diminish followers but to strengthen and help them to develop" (pp. 21-22; also Combs, 1982; Harris & Day, 2003; Preskill & Torres, 1999). Personal and collective growth, especially opportunities for learning, leading, and deepening collegial relationships, tend to increase members' confidence, refine skills, and provide self-fulfillment (elaborated in Collinson & Cook, 2007). In school systems, when members share this responsibility, everyone benefits: superintendents "model the way principals should treat teachers, and teachers should treat students" (Rosenholtz, 1989, p. 203).
  If a member chooses to lead a given change, the task is easier when peers are receptive to learning; that is, when they want to learn instead of feeling obligated   or   coerced.   Glynis   removed   as   many   risks   and

barriers as possible prior to having peers implement block scheduling. Even so, some teachers did not "permit group work" or change their instruction to maximize student learning in the new 80-minute block: "they'll teach their regular 40 minutes the way they always did" and then give students "the second 40 [minutes] to do their homework."

In environments that are more open and supportive, success can pave the way for members' self-fulfillment in the form of new learning and new opportunities to lead. For Janet, that meant leading "a technology institute [during the] summer which is open to all teachers in the district through [new] grants…The State Department [of Education] is really pushing for systemic change—not just this one little [ice]berg that's changing." She proudly mentioned that the neighboring district "is going to the block schedule. I think it's great. And we have done in-services for [them] on this whole block schedule."

At the high school, learning and working collaboratively also produced unintended psychic rewards such as teacher confidence, collegial support,and socialization for new teachers (Rosenholtz, 1989; Little, 1982).

> We became very close as a faculty because we became our own support system. I think for the newer teachers coming in, they were astounded at our lounge chatter…Lounges have gotten that very negative connotation, [but] we would go in and say, "I fell flat on my face with this lesson"—and we weren't afraid to do that as veteran teachers—and then say, "What would you have done?" It became a planning strategy session when we'd go into the lounge, which was really exciting. And then the younger teachers felt like, "I can say I fell flat on my face if she can say she fell flat on her face."

What Can We Learn About Organizational Learning and Leading Innovations?

In school systems, all members—administrators, teachers, and support staff—share responsibility for creating an environment that supports

organizational learning. That environment can range from resistant to ideal. The ideal environment reflects conditions that prioritize learning, foster inquiry, facilitate dissemination, practice democratic principles, attend to human relationships, and provide for members' self-fulfillment. In an ideal environment, organizational learning is not only supported, it is expected. As members increase their collective learning, they develop skills conducive to shared learning and leading. In other words, the six conditions help members learn how to learn and share. They also allow members to practice skills that, in turn, strengthen their capacity to learn even more together. Environments also influence members' ability to lead and help others learn. That said, lack of ideal conditions does not serve as an excuse for inaction and conditions do not have to be perfect for change to occur.

Modeling innovation as a springboard for learning and leading. Glynis and Janet represent a new kind of leader: organizational members who are avid learners and innovators, who emerge to lead when their current knowledge and expertise can improve students' learning, whomodel deep changes in themselves before asking others to follow suit, who influence others to change thinking and practices, and who prefer working as partners and equals. The experiences of these two leaders indicate that innovations led by teachers can set in motion the organizational learning process vital to both individual and organizational improvement and renewal. Teacher innovations tend to keep the focus on ways to help students learn, the fundamental raison d'être of schools. Glynis believed that most teachers want what is best for their students. Janet also appealed to this belief when she explained to teachers how block scheduling benefitted students. Both Glynis and Janet seemed to intuit what Doyle and Ponder (1977) called a "practicality ethic" (p. 2). That is, they effectively appealed to teachers' acceptance of innovations or changes that are useful, likely to be successful, and beneficial to students or teachers.

Teachers' close connections to students let them see ways to improve learning, sometimes by changing structures (e.g., block scheduling) or strategies (e.g., group work). Just as classroom teachers try different approaches or innovate to reach various students, so Glynis and Janet

used different approaches to lead innovation and influence various members. Prior to the innovation of block scheduling, both had long been leading other innovations by modeling Weick and Quinn's (1999) 'logic of attraction' or Gandhi's famous dictum, "You have to be the change you wish to see." By showing others what is possible, a leader can engender in them a desire to change.

Glynis's belief that modeling can help people want to learn and her principal's comment that "you can't *make* people change" represent a longstanding debate in education—and it is not limited to leaders. As Combs (1982) noted, learning is an internal process linked to a desire to learn and feelings of self-fulfillment that follow growth. Thus, "teachers, too, must learn to work *with* the need for fulfillment. They cannot *make* people learn. They can only create conditions that will help students learn for themselves" (p. 18, italics in original; see also Sarason, 1997).

Glynis interpreted her principal's position as an excuse to maintain the status quo and squelch innovations. She continued to lead innovations anyway but appeared to intuit that "improved results are often threatening to others, and the more dramatic the improvement, the greater the threat" (Senge, 1996, p. 49). One way to diminish threats is by modeling; anotheris by removing barriers to learning (Combs, 1982), as both Glynis and Janet did.

Modeling is a subtle yet powerful way of leading; Einstein is purported to have said that "setting an example is not the main means of influencing another, it is the only means." Leaders can help members want to learn by appealing to their aspirations and fulfillment. To know what might appeal to individuals or groups, leaders require considerable empathy and carefully cultivated human relationships. They also need to know how to navigate a particular environment. As leaders, Glynis and Janet modeled the innovation so colleagues could see the connection between block scheduling and teachers' aspirations to help students do their best. Both influenced change but their different environmental conditions, particularly expectations for learning, meant that outcomes varied. Glynis's modeling stimulated teacher-to-teacher learning; Janet's modeling stimulated school-to-school learning. Lack of full participation did not seem to deter them from continuing to try—patiently and with awareness of timing and receptivity.

Risk taking and receptivity. Members' receptivity to learning and leading shapes and is shaped by the organizational environment. The two cases revealed three kinds of receptivity: receptivity to learning, receptivity to specific leaders, and receptivity to serving as leaders. All demand risk taking. Glynis and Janet linked risk taking and learning together. Although both were receptive to learning from anyone, they understood colleagues' concerns about change, as well as hesitations about leaders (e.g., lack of teacher receptivity to the junior high school principal). Each took risks to lead, needing courage to stand up to resistance and ridicule and, in Glynis's case, authority.

Glynis was troubled by open resistance to learning, a lack of democratic principles, and weak human relationships in her school. However, her commitment to improving learning for all students appeared compelling enough for her to lead innovations, albeit in as non-threatening a way as possible. In her environment, the change process took longer and limited what she could accomplish (i.e., embedding at the group level but not at the organizational level).

Resistance to change is not necessarily explained by members'unwillingness to learn (Szulanski,1996). Even if willingness to learn is present, they may not know how to learn from each other. Szulanski referred to the difficulty of transfer of knowledge in an organization as "internal stickiness" (p. 29). At the dissemination stage, internal stickiness may occur if organizational members lack adequate prior knowledge to let them understand an innovation. At the implementation stage, members may encounter difficulties or have questions, but lack comfortable relationships and quick access for follow-up. Moreover, when organizational members attempt an innovation, new knowledge and skills may be weak and members may feel temporarily less competent than usual (Szulanski, 1996). Fullan (1993) referred to this as an 'implementation dip' where things can get worse before they get better.

Glynis confronted internal stickiness at every turn. To soften resistance, she had to begin the change process concretely by modeling the innovation for a year whereas Janet was able to begin at the abstract level of dialogue. Glynis had to work alone to identify and remove potential barriers in order to decrease risk taking for her peers. She also

had to serve as the sole support member during the implementation phase whereas Janet was able to collaborate with colleagues and build on the expectation of learning and risk taking that her school had already established.   Janet did face barriers when she tried to disseminate block scheduling at the organizational level, but she was able to rely on her school's success and her colleagues' support during implementation at the elementary and junior high school.

   Communication and collaboration skills for learning and leading. Communication—past and present, verbal and non-verbal—clearly plays a vital role in members' receptivity to change and their willingness to collaborate.   Modeling is a powerful form of communication for leaders but additional communication skills are necessary; for example, to explain the 'big picture,' write grants, listen to others' perspectives, and support embedding of innovations.   Indeed, communication is necessary for every phase of the organizational learning process (inquiry,   dissemination,   implementation,   embedding)   and   for establishing social infrastructure necessary for learning (democratic principles, human relationships, and members' self-fulfillment). It is also crucial for building shared understandings and trust (Collinson & Cook, 2007).

   Maintaining the status quo diminishes the need for communication (Rosenholtz, 1989) and takes far less energy than attempting to change one's thinking and behaviors.   Litanies of individuals' failed New Year's resolutions leave little doubt that changing habits is difficult and requires work. Learning new habits can be easier when people work collaboratively with partners or when supportive help is readily available.

   Glynis was particularly concerned because she was the only source of help and collaboration in her school.   She knew that when implementation of an innovation does not go well in a risk-averse environment, teachers might not be willing to try again.   Janet had many collaborative partners.   She began the organizational change process with one colleague (her grant-writing partner) but she was able to build on a foundation of openness to learning and collaboration within her school.   She also had encouragement from the State Department of

Education and from her administrators who planted seeds for ideas, were open to mistakes and failure, established public relations with the surrounding community, and facilitated visits from interested schools. Janet extended an invitation to external teachers to converse with and answer questions from her peers. Once embedding occurred at the high school, teachers had opportunities to practice communication skills and get feedback by providing supportive help to other schools in the school system and later, to the many schools that came to observe and discuss the innovation.

 The faculty became their own support system by openly discussing what did or did not work and helping each other generate potential solutions (error detection and correction). The process served to increase communication and collaboration, thus strengthening relationships. This growth was particularly helpful in socializing new teachers to continue these habits of thinking and behavior. At the same time, classroom success for both teachers and students set the stage for further risk taking, experimentation, and sharing.

   When loss means gain. Janet related three examples of loss as gain that we surmise could happen only in a supportive environment. First, the high school teachers asked a colleague to become a temporary principal while their formal search continued. That colleague sacrificed his preference to stay in the classroom (loss of teaching for a year) for the greater good (gaining a principal who would share the faculty's values and understandings).

  Second, the new principal of the junior high school willingly accepted Janet's offer to talk to faculty without administrators present. Although the principal and Janet both hoped for the same outcome, the principal readily ceded authority by agreeing to her stipulated terms.   Janet commented on how unusual his behavior was. It is, however, typical of successful administrators who support equality and work as partners by setting aside ego and power in the interests of promoting learning (see Rosenholtz, 1989).

  Third, the high school lost a superintendent and four principals in four years to other school systems. Janet deeply appreciated what the school system had gained by having these administrators, if only for one year.

She personally enjoyed working with them as partners and especially recognized their important public relations work to promote her latest innovation. Janet described their loss as traumatic for the school system but she was mature enough to recognize that they too had aspirations and self-fulfillment needs. She knew that the principals were reaping benefits "mostly because of what the teachers have done," yet she was happy that others would gain a principal who would "set another school on a course of change." In sum, when leaders develop new leaders, the organization builds capacity to accomplish even more and potentially to extend dissemination when members move to another organization (Collinson & Cook, 2007; Fullan, 2005).

Concluding Remarks

The two cases we presented reinforce Argyris and Schön's (1996) claim 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" (p. xxii). Individual teachers may also be centrally important as leaders of innovations resulting in organizational improvement and renewal.   Because teachers are closest to student learning and committed to helping students develop and flourish, they are the most likely to look for innovations to improve learning. They may also enjoy stronger collegial rapport and trust, thereby easing receptivity.
  Thanks to years of teaching, observation, and collaboration with professional organizations and networks, both Glynis and Janet had established habits of experimentation, inquiry, and innovation to help students learn. The self-perpetuating nature of inquiry, coupled with these teachers' curiosity and commitment to improving learning for all students, appeared to serve as an impetus for taking risks to disseminate and lead innovations at the school level or beyond. These two leaders modeled deep changes in their own thinking and behavior and drew on their considerable knowledge and communication skills to influence organizational change.
  We have suggested that the six conditions that support organizational

learning may simultaneously help develop a deep pool of leaders. We have indicated how inquiry and collaboration are self-perpetuating. However, it seems possible—and ripe for further research—that all six conditions may function in a continuous, self-perpetuating way.

The two cases illustrated that leading innovations is easier in a supportive environment; possible but limited in a resistant environment. A supportive environment encourages habits such as risk taking, inquiry, innovation, dissemination, and collaboration. These habits impact the development of all members and, by extension, students. In an environment where members resist change to learn and improve, there is little reason to engage in dialogue about teaching and learning or about norms and assumptions. Decreased communication, in turn, inhibits trust, a necessity for constructive collaboration and receptivity to innovations. In supportive environments, members who learn and lead collectively may become capable of sustaining past and future learning even when administrators leave. In such cases, the loss of supportive administrators to other school systems may actually become a gain if they disseminate innovations elsewhere.

The two leaders' experiences indicated how dissemination of teacher innovations can be a fruitful catalyst for organizational learning. Collective learning helps build organizational capacity by helping members become more competent and confident. Additionally, new teachers are socialized to take risks, innovate, communicate, work as partners, and lead. The potential benefit for schools systems is breathtaking. Equally breathtaking is the realization of lost accomplishment and undeveloped potential in organizations where resistance impedes learning, leading, and continuous improvement.

References

Argyris, C., & Schön, D. A. (1978). *Organizational learning.* Reading, MA: Addison-Wesley.

Argyris, C., & Schön, D. A. (1996). *Organizational learning II: Theory, method, and practice.* Reading, MA: Addison-Wesley.

Bennis, W. (2009). *On becoming a leader.* New York: Basic Books.

Collinson, V. (2012a). Sources of teachers' values and attitudes. *Teacher Development, 16*(3), 321-344. doi: 10.1080/13664530.2012.688675

Collinson, V. (2012b). Leading by learning, learning by leading. *Professional Development in Education, 38*(2), 247-266. doi: 10.1080/19415257.2012.657866

Collinson, V., & Cook, T. F. (2004). Learning to share, sharing to learn. *Journal of Educational Administration, 42*(3), 312-332. doi: 10.1108/09578230410534658

Collinson, V., & Cook, T. F. (2007). *Organizational learning: Improving learning, teaching, and leading in school systems.* Thousand Oaks, CA: Sage.

Combs, A. W. (1982). *A personal approach to teaching: Beliefs that make a difference.* Boston: Allyn & Bacon.

Crowther, F., with Ferguson, M., & Hann, L. (2009). *Developing teacher leaders: How teacher leadership enhances school success* (2nd ed.). Thousand Oaks, CA: Corwin Press.

Dewey, J. (1938). *Experience and education.* New York: Collier Macmillan.

Dewey, J. (1960). *How we think: A restatement of the relation of reflective thinking to the educative process.* Lexington, MA: D.C. Heath. (Original work published 1933)

Dixon, N. M. (1999). *The organizational learning cycle: How we can learn collectively* (2nd ed.). Aldershot, UK: Gower.

Doyle, W., & Ponder, G. A. (1977-78). The practicality ethic in teacher decision-making. *Interchange, 8*(3), 1-12.

Fullan, M. (1993). *Change forces: Probing the depths of educational reform.* Bristol, PA: Falmer.

Fullan, M. (2005). *Leadership & sustainability: System thinkers in action.* Thousand Oaks, CA: Corwin Press.

Fullan, M., & Miles, M. B. (1992). Getting reform right: What works and what doesn't. *Phi Delta Kappan, 73*(10), 745-752.

Gardner, J. W. (1990). *On leadership.* New York: The Free Press.

Gronn, P. (1999). *The making of educational leaders*. London: Cassell.

Harris, A. (Ed.). (2008). Distributed leadership through the looking glass. *Journal of Educational Administration [Special Issue], 46*(2). doi: 10.1177/0892020607085623

Harris, A., & Day, C. (2003). From singular to plural? Challenging the orthodoxy of school leadership. In N. Bennett & L. Anderson (Eds.), *Rethinking educational leadership: Challenging the conventions* (pp. 89-99). London: Sage.

Kelley, R. E. (1992). *The power of followership: How to create leaders people want to follow and followers who lead themselves.* New York: Doubleday Currency.

Little, J. W. (1982). Norms of collegiality and experimentation: Workplace conditions of school success. *American Educational Research Journal, 19*(3), 325–340. doi: 10.3102/00028312019003325

Preskill, H., & Torres, R. T. (1999). *Evaluative inquiry for learning in organizations.* Thousand Oaks, CA: Sage.

Rosenholtz, S. J. (1989). *Teachers' workplace: The social organization of schools.* New York: Longman.

Rost, J. C. (1991). *Leadership for the twenty-first century.* Westport, CT: Praeger.

Sarason, S. B. (1990). *The predictable failure of educational reform: Can we change course before it's too late?* San Francisco: Jossey-Bass.

Sarason, S. B. (1997). *How schools might be governed and why.* New York: Teachers College Press.

Senge, P. M. (1996). Leading learning organizations: The bold, the powerful, and the invisible. In F. Hesselbein, M. Goldsmith, & R. Beckhard (Eds.), *The leader of the future: New visions, strategies, and practices for the next era* (pp. 41-57). San Francisco: Jossey-Bass.

Smith, D. K. (1996). The following part of leading. In F. Hesselbein, M. Goldsmith, & R. Beckhard (Eds), *The leader of the future: New visions, strategies, and practices for the next era* (pp. 199-207). San Francisco: Jossey-Bass.

Szulanski, G. (1996, Winter Special Issue). Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic Management Journal, 17*, 27-43.

Weick, K. E., & Quinn, R. E. (1999). Organizational change and development. *Annual Review of Psychology, 50,* 361-386. doi: 10.1146/annurev.psych.50.1.361

Williams, J. S. (2001). Creativity, connectedness, and the spirit of teaching: Factors that contribute to renewal and longevity of exemplary teachers. *Dissertation Abstracts International: Section A, 62*(02), 420.

Vivienne Collinson, Michigan State University (retired), East Lansing, USA

Tanya Fedoruk Cook is a Private Consultant in Washington DC.

Contact Address:E-mail: vrcollinson@yahoo.com