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Leading

Editors' Introduction

Every year there are hundreds of books written on leadership within and across every field, but especially in the business world, having the additive effect of tens of thousands of texts on leadership lined up in professional libraries over the past few decades. Institutes on leadership abound with many focused on a combination of inspiration, collaboration, and the ambiguous negotiation of leadership roles in society. One of the groundbreaking books that had ripple effects across education, Leadership and the New Sciences, was written by Meg Wheatley in the early 1990s. She drew from an array of sources and offered that we could draw from our understanding of physics and nonlinear "systems" to shift how we interact with each other and design leadership structures away from the linear mindset. Wheatley (1992) states:

Our thinking processes have always yielded riches when we've approached things openly, letting free associations form into new ideas. Many would argue that we've used such a small part of our mental capacity because of our insistence on linear thinking. (p. 116)

Not surprisingly, this focus on linear thinking—nested within the formalities of top-down hierarchical relationships—is conceptual infrastructure for leadership... and learning. Schools that have focused on the development of thinking have drawn on a variety of approaches that engage dynamic collaborative structures and models such as Thinking Maps, Habits of Mind, Six Hats Thinking, and enquiry methods for breaking through the linear mindset, and also linear lines of leadership across their schools.

Additionally, around the world a new and odd phrasing for describing those with new ideas that help shift our thinking are called thought leaders. Ultimately, this term does convey the importance of new ideas developed by key people across fields who challenge conventions, and think different, as the late Steve Jobs promoted for those using Apple products. With smart phones, smart cars, and even "smart chickens," and "smart" popcorn brands popping up in markets, we may be convinced that we should all become smarter, thinking leaders.

The chapter ahead draws us into the field with a rich case study excerpted from research in the book Developing Connective Leadership: Successes With Thinking Maps (Alper, Williams, & Hyerle, 2011). The setting is a small school district. Thinking Maps have been introduced and implemented across the schools, driven in large part by the superintendent. But what happens when this leader, who wants "thinking" to pervade day-to-day classroom activities as well as leadership and coaching

practices, comes up against one the most challenging problems an administrator can have: a grievance by a teacher that is certain to go to union arbitration?

This detailed story, reflections by all the participants, and analysis in this chapter serve to bring the ideals of Thinking Schools into focus. Systemic organizational change, and a shift in mindsets supported by explicit models and tools for thinking, are essential to bringing about change in classrooms at the most fundamental level. This is because until all educators in a learning community become “thinking leaders,” thinking approaches used by teachers will remain the domain of classroom practice. Teachers, administrators, the superintendent, parents, and community members who serve on school boards need to align the practice of decision making and problem solving with classroom practices.

Certainly, the common language of Thinking Maps supports interconnective leadership that is not driven by linear, “top-down” thinking processes. As you see in this case study, the importance of thinking through ideas and recognizing emotional frames helps move people from working from positional power to relational problem solving. We see educators engaging and sharing their rich interdependent patterns of thinking, all surfacing from within the heartfelt interplay of thoughtful people.

LEADING CONNECTIVELY

Larry Alper and David Hyerle

TOP-DOWN TO FLAT WORLD ■

The hierarchical structure of leadership in most organizations, including schools, and thus the way roles of authority are traditionally defined and exercised, often impede the development of truly collaborative environments. This top-down design also inhibits thinking in the moment and constrains the explicit development of thinking of all members of schools over time. Networking of ideas and interaction among members of the school community can't develop when lines of communication are rigidly defined and processes are not reciprocal. In schools, this constricted flow of thinking often leads predictably in a particular direction rather than toward the full expression of possibilities for educators and, in real terms, for the students they serve. Such cultures can certainly change, but doing so requires reevaluating beliefs and then introducing new practices and reforming structures to align with the desired change in culture. The development of respectful and sustained conversations in building “equitable partnerships must be accompanied by district and school structures that replace hierarchy with networks and redefine roles, practices, and policies that have historically created and protected uneven power relationships” (Lambert et al., 1995, p. 100). Linda Lambert and colleagues are on target with this assertion: not only does the organizational structure need to change, but also the *practices* and *processes* through which school members communicate between and among the network of people need to be congruent with this change. This is of critical importance for educators committing to make “thinking” as a foundation for the ethos of their schools.

Over the past generation there has been a well-documented shift from top-down to more horizontal, “flattened,” or distributed leadership structures across all types of organizational cultures. In the past, the business world has been dominated by top-down management styles, reflecting a command and control mindset, where ambiguity and complexity are met with procedural practices rather than directly engaged. However, that isn’t necessarily true in all those settings. When asked what she looked for in the people she hired, Ursula Burns, the CEO of Xerox, answered, “I want them to be confident and uncertain” (Bryant, 2010). In a speech he delivered at a 2005 conference on international education, Michael Eskew, the CEO of UPS, offered a similar statement regarding the qualities he valued in his workforce: “Learning how to learn is a trait we will always value. . . . While information is much richer today, complexity and uncertainty have not abated. In fact, they’ve increased” (p. 5). What, then, do these two leaders of major corporations recognize about the current realities of the business environment that caused them to respond so similarly and, to some people, so unexpectedly? Both appear to recognize that a major condition of the current environment is change—and rapid change at that—and that agility as a learner will enable one to thrive and continue to contribute to the organization regardless of the changes that occur.

Does shifting to a more flattened leadership structure ensure high-quality thinking, clarity of communication, dynamic and open collaboration, effectiveness and efficient problem solving, and ultimately “better” decisions? In the case of some manufacturing companies, such as in the automobile industry with real-time inventory, a line worker can now literally hit a button and stop the conveyer belt if there is a significant quality control issue. But when dealing with the complexity of schools with students from a range of family configurations and larger communities in an ever more diversifying society (rather than dealing with manufacturing widgets and cars) the thinking and decision-making processes are challenging. There are no “stop” buttons to push in a child’s education. And there is no guarantee that positive outcomes will come about by simply distributing power laterally rather than top-down. Hundreds of leadership books are published every year, many in the field of education, as schools attempt to move from centralized decision making behind closed doors to collaborative leadership through which all members of the organization contribute in a significant way to solving highly complex, nonlinear problems each framed by moral dilemmas.

In this chapter, we look closely at how the definition, criteria, and intended outcomes of Thinking Schools explicitly convey that all members of the learning organization, whether teachers in classrooms with students, or teachers in working groups with or without administrators, are consciously practicing and improving their thinking through a range of approaches including the use of visual tools for cognitive and critical thinking, dispositions for mindfulness, and modes of questioning for enquiry. This vision also reflects the bully pulpit outcry from business and political leaders around the world: Schools must become places that are seen as the “training ground” for improving student thinking and learning in this century. We need to take them at their word. Thinking Schools are now serving as incubators for the development and

expression of the practices and dispositions associated with thought-filled actions and decision making. If a school is on this journey toward the systematic development of student thinking, then it makes sense to align these very same practices by the educators throughout the school. Congruence is necessary between what is happening in the classroom and what is happening in faculty meetings. Classroom teachers, school administrators, and board and community members may become more proficient at teaching for thinking when they are leading as developing thinkers.

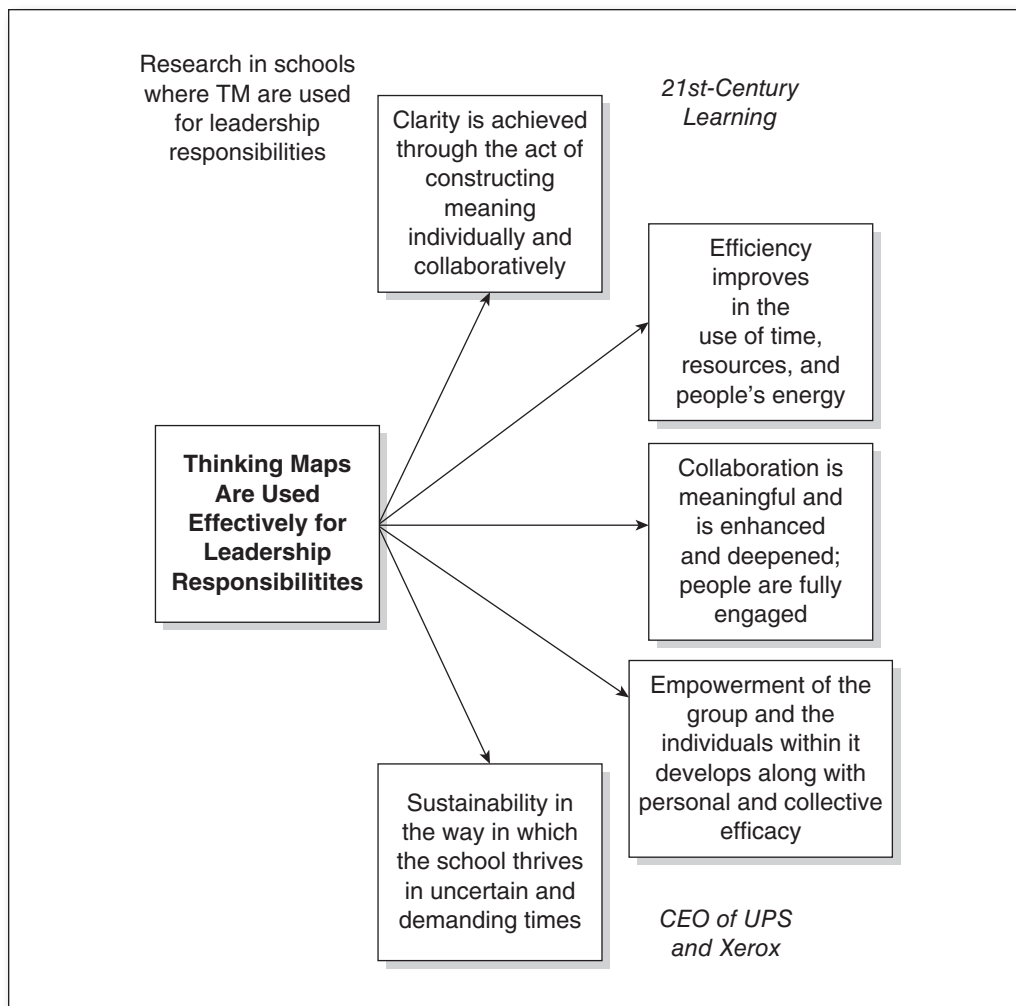
The implication that this new environment has for leadership practices where there can be no *illusion of fixity* is that skillful leadership and skillful participation is required of all members of the school community. Dickmann and Stanford-Blair (2002) state that “. . . it is the leader who acts mindfully, nurturing her or his own intelligence and the intelligence of others, who sets the tone for an organization poised to be successful in the new century” (p. 133). Over time, in a school that has made this kind of commitment, all members of the community are seeing themselves and each other as so-called “thought” leaders and embrace the responsibility and opportunity this statement represents.

In this writing we investigate the use of Thinking Maps as a common visual language for “nurturing intelligence” across Thinking Schools and for facilitating an additional way of communicating, improving dispositions and shifting mindsets, and directly supporting rich questioning for independent and interdependent enquiry across leadership roles and responsibilities. This focus on “thinking leadership” in many ways, as we shall see, resonates with previous chapters showing how Thinking Maps and other approaches blend together to facilitate significant shifts in belief systems and practice: Richard Coe’s description of the multiyear journey his school embraced toward becoming a Thinking School (Chapter 6); Donna DeSiato’s and Judy Morgan’s focus on district-wide development of thinking as the central thrust for change at every level of decision making (Chapter 7); and Kathy Ernst’s view of improving teacher performance via supervision based on visible coaching (Chapter 9). Each of these chapters is in its own way a case study for how to engender thinking leadership and organizational change.

Below we offer a summary of our 3 years of research on Thinking Maps in a variety of school districts that brought about individual, team, school-wide, and system leadership changes. In summary, our findings clearly show five characteristics of shifts toward deeper thinking emerging from within each context: (1) clarity, (2) efficiency, (3) collaboration, (4) empowerment, and (5) sustainability.

These themes have also been amply represented in the literature on leadership and expressed in a variety of ways. However, as we discovered, leaders in our study reported that using Thinking Maps gave these themes added meaning. These findings, abstracted from case studies, can be further explored in the book *Developing Connective Leadership: Successes With Thinking Maps* (Alper et al., 2011).

After offering some background to our research, we showcase one school system and, in particular, one superintendent, who when faced with a complex, highly charged personnel problem related to a teacher’s possible dismissal was

Figure 10.1 Multi-Flow Map of Major Themes

able to draw on Thinking Maps to help resolve the issue. As we shall see, this was possible only because the teacher and everyone else in the district had become fluent with this language for learning, leadership, and dealing with complex problems.

■ GHOSTS IN THE MIND

Over many years of reflective practice in schools and through research in psychology and the cognitive neurosciences, we are now more aware of how people are unconsciously self-deceiving: Our individual, ever-changing brain structures have been wired tight, frozen in some instances by our past experiences and the schemas that frame our thinking. Look into Daniel Goleman's (1985) first book, *Vital Lies, Simple Truths: The Psychology of Self-Deception*, for a full analysis of how our emotions and cognitive states of mind deeply influence our capacities to see ourselves and others with an open mind. "Schemas are the

ghost in the machine," (p. 75) Goleman writes, for these connected patterns drawn from experience, substantiated and reinforced in our minds, which drive our perceptions of the moment and prevent transformational thinking and actions.

How do these "ghosts" influence our work as leaders? As one example, when we sit in or lead a faculty meeting, we already have an invisible, ghost-like frame of reference for what a faculty meeting is about: maybe a mixture of good, bad, and indifferent drawn from our career experiences in faculty meetings. Faculty meetings may also bring up past experiences of *family* meetings. We bring to our concept of "*faculty meeting*" our own mindsets (Dweck, 2006), relationships, and established mental and emotionally connected imprinted patterns that are the perceptual windows through which we see what is happening and what we expect to happen. Our brains actively seek to see what we already know. We are often comforted by replaying the same recording even if the repeating story is negative. A dysfunctional and uncomfortable "normal" often feels better than change to an unknown new place. We have found in our research that the capacity for each of us as individuals and then collectively to identify the existing patterns of experiences, patterns, and "frames" that ground our perceptions and actions is a key to creating participatory, connective leadership in one-on-one conversations, grade-level meetings, and large group sessions such as faculty meetings. We all know that it is often difficult to consciously reframe and repattern our ways of thinking. This may be because we can't easily step back, reflectively, and *see* ourselves and *see* our thinking at work.

As human beings we have primarily depended on the spoken and written word to convey what and how we think. Across districts, schools, and classrooms, we state what we think in our minds through linear strings of words: We write memos, emails, and reports, and we create long, often inaccessible strategic plans. Words, while powerful, do not adequately represent the rich, diverse, overlapping connected patterns of thinking bound in the deeper structures of spoken language and written texts, concepts, and schemata. These are the ghosts in the background of our minds that stay with us, invisible. Our ideas are born in dynamic, complex, multilayered, and differentiated patterns of thinking, but usually we are forced to articulate them in sound bites and/or data bits on spreadsheets.

So how do we as educators, responsible for conveying high-quality communication every day to students, show other people our own connected patterns while seeking out and seeing others' points of view? If our best thinking comes by making connections and building patterns, then what would these patterns *look like*? Simply, what does thinking look like? This may strike most people as an odd question. Many people are now looking to brain mapping as a visual depiction of thinking, but this is the anatomy of a networking brain, not the actual patterns of thinking our mind is generating. Most often we perceive thinking as hidden in the brain and mind behind the interior monologue of our moment-to-moment thoughts and dreams, the words we use to communicate our thoughts to others, the papers we write, the e-mail we send off, and the mathematical spreadsheet problems we solve. We squeeze our words out in strings of sentences like toothpaste from a tube, but we know deep

down that our thoughts and concepts are underrepresented by words alone. Even a picture that “says” a thousand words doesn’t do justice to the complexity of our ideas.

As we discovered through the numerous schools we studied, the well-meaning and collaborative participants in a strategic planning processes, for example, could not *see* their thinking or transform their actions accordingly until the principal mapped them out using Thinking Maps. This was deeply expressed in Kathy Ernst’s description of Visible Coaching in Chapter 9, because the visual representation of thinking patterns offered both detail and a wide-angle view through which teachers could become more reflective and self-interpretive. In the case study below we see how a teacher and a principal had truly “lost sight” of the important focus of their interaction and were unable to “see” beyond their positions and the history they shared that now distorted their vision. Not only was their vision impaired by their emotional “ghosts,” so, too, was their ability to think.

The current context and frame of reference for this transitional point in the history of our educational systems nationally and globally is essential for understanding how Thinking Maps offer a new language for communication and improvement of thinking, learning, and leading. Leaders in the field of education, like parents, businesspeople, and students as future innovators in a global network of technologies and “knowledge workers,” are asking for a new way to facilitate learning and the coleadership in the collaborative, fluid work structures of the 21st century. New kinds of tools and models need to drive to the center of complexity, ambiguity, nonlinear patterns, and emotional frames and also be more than quick-fix strategies for an immediate problem, but engage whole professional learning communities in the improvement of their thinking.

■ A CASE STUDY OF LEADING WITH THINKING MAPS

At first blush, the concept of Thinking Maps may look all too simple, and that is good because as it turns out, simplicity is an essential quality of the maps. The capacity to think, reflect, and then transform our thinking into new behaviors and actions is foundational to living in this new century of connective technology, global knowledge creation, and knowledge transfer. Through its seeming simplicity, Thinking Maps can animate high-quality thinking and nurture self-reflection, metacognition, and dynamic reflective leadership within groups of people. The essential and unique human quality of empathy grows ever more present when we have a language for connecting our thoughts together. In this way, the social ecology of our community is supported and enhanced by a language that enriches the interdependent nature of our interactions and, at the same time, facilitates individual thought and expression in a coherent manner.

The ensuing case study involves traditional levels of power within a school system: a teacher, a principal, and grievance chairperson, and the

superintendent of schools—and how through the use of Thinking Maps they were able to level the conversation about the quality of teaching and the conflict that arose from this point of change. It is an example, too, of how the key leaders involved—the grievance chair and the superintendent—were united in their desire to restore not only integrity to the process that had devolved between the principal and the teacher, but also to do so in a manner that elevated the nature of the interaction. This was also congruent with their efforts to create a school system with thinking as the foundation.

This story comes from a full array of case studies focused on Thinking Maps as a language for “developing connective leadership.” The analysis of these case studies led to the identification of five major conceptual themes, summarized above, about connective leadership in schools that had implemented Thinking Maps for multiple years in their schools. This story provides an opportunity to see Thinking Maps as a foundation for leading Thinking Schools. So often we believe that to make change in schools requires the improvement of teachers—when in fact to make significant change requires that *all* participants be engaged in the process.

Here’s a situation school leaders know all too well: Parents and students complain about a teacher, accusations are made, and while people have raised such issues before, nothing documented in past performance evaluations and no concrete evidence in personnel files indicate any problems that needed attention. Immediately, the teacher feels threatened, the principal is under pressure to act, the union responds to ensure an appropriate process is followed, and the superintendent is called on to intervene, while the issue agitates school board members.

In Superintendent Michael Sampson’s case (for legal/privacy concerns, names have been changed), however, by the time the issue reached him, communication between the teacher and the principal had broken down completely. Feeling threatened, the teacher had already filed a formal grievance with the union. Emotions were running high, and restoring communication on their own was beyond the reach of the teacher and principal. Fortunately for Michael, he had cultivated trusting relationships throughout the system, and most, if not all, viewed his involvement as a positive and hopeful step. Nonetheless, the conflict seemed intractable, with all parties rooted in their beliefs and emotions, and headed for arbitration.

Although relatively new to this district, Michael had successfully begun the process of establishing a strong reputation as a solid instructional leader. He introduced Thinking Maps throughout the system, something he had done successfully in his previous district as the assistant superintendent for curriculum and instruction. Michael extended the introduction of Thinking Maps beyond the classroom to include members of the district’s leadership team. He used the maps in his own practice, facilitating meetings and communicating information to others with these tools. Because each Thinking Map represented a thinking *process* (cause and effect, sequencing, or categorizing), by using them, Michael was prompting his colleagues to both understand new content and actively interact with new ideas. He was leading in a manner that supported and challenged their thinking. In essence, he was also communicating through his

actions that the system could not progress without the ability of those within it to think.

Michael knew the work with Thinking Maps well, believed in it, and was respected for his engagement in the implementation process. Others definitely viewed him as someone who “walked the talk.” Even so, Michael did not foresee the degree to which the ensuing events would challenge his belief in these tools and, consequently, his own reputation as a district leader.

Because of the delicacy of the situation or his reluctance to introduce something into the dynamic that might be perceived in the wrong way, Michael Sampson did not initially decide to use Thinking Maps to facilitate a resolution in this circumstance. However, the chair of the grievance committee and seventh-grade English teacher, Sharon Henderson, did. Sharon suggested to Michael that they use Thinking Maps to facilitate their meeting with the teacher, two principals, a union representative, and the grievance chair. Sharon described her decision to propose the use of Thinking Maps in this grievance situation:

The typical interaction was him (the principal) talking at her (the teacher) and her closing down and walking away. I was complaining (to Michael) about the principal’s administrative style, and he defended the administrator—we had to find a way for it to work. I was using maps in my classroom, and I realized that when using the maps, I am not standing up here spouting great knowledge—the maps are taking focus off me and putting the focus more on the students’ thinking and the tool—the tool is speaking to kids, not me—the tool is generating thinking, not me—takes the focus off me as the expert and allows us all to work together as a team. . . . I had this realization that this was what was needed in this grievance situation. We needed to get visual focus off of us as individuals and onto a neutral focus both people focusing on the same thing—both looking down on this tool—use the tool to solve this problem.

Sharon astutely made the cognitive leap from the classroom to grievance setting. Just as the maps mediated the interaction between teachers, students, and ideas and experiences, Sharon saw the same possibility in a situation in which the constraints of role and emotions prevented communication at the level necessary to resolve this issue. Through the use of this common language, Sharon understood the important role the maps could play in shifting the focus from the people to the behaviors or teaching practices. Attention could be jointly directed to the aspects of the situation that needed to be addressed and to finding solutions rather than to locating blame or defending positions. The externalization of the problem through the use of the maps provided a safe and constructive visual context for all involved to locate their attention. As Sharon notes, the maps create a collaborative space for people to construct ideas together and jointly pursue understanding. They focus attention and promote the *thinking* of those involved on the content of the conflict and the ways to solve it, not on the people involved.

Both Sharon Henderson and Michel Sampson recognized that the need to restore integrity to the interaction between the principal and teacher, and to the grievance process in general, was essential to the creation of a “thinking” school system. Believing it was necessary, however, was not enough. They also understood that the tools to do so were available to all members of the school system and needed to be used in this situation. The use of Thinking Maps in group and interpersonal settings is inevitably collaborative. It begins with simple body language. When leaders begin to map out issues and identify steps to resolve them, they sit down side-by-side with a teacher or others with whom they are engaged in the mapping process. The physical orientation of the participants—focused together on the visual landscape of ideas they are cocreating—signals a power-sharing relationship.

The use of the maps also helps make thinking explicit. In interactions in which participants do not visually represent their ideas or do so in a narrow linear manner, statements may easily go unquestioned or carry weight without further examination. The cognitive patterns used to represent ideas in Thinking Maps, however, invite a level of questioning and precision that helps communication become clear and accountable. This can be critical to the outcome, particularly when emotions run high and the relationship of those involved is perceived as unequal.

Here’s how Sharon, the grievance chairperson, described the impact of Thinking Maps in this situation:

The teachers’ union felt the principal was not being event specific [with the teacher]—the principal was using terms like *always* and *never* without specifics, and the teacher was like, “Prove it.” The Thinking Map forced both parties to look at a particular incident and not do rabbit trailing—going to change the confrontation and the focal point. . . . It also gave the teacher something to walk away with that included her input. One thing that was important was that the administrator was not always holding the pencil—that she [the teacher] also got to hold the pencil and fill it [the Thinking Map] in. We have a very controlling administrator—tends to enjoy that controlling element. The use of the maps releases some of the administrative control and allows the teacher to take ownership.

This strategy has several advantages. First, the leader and the person being led share the responsibility to identify the problem and come up with a solution. Second, the maps allow both parties to focus more on the issues and less on the emotions. All leaders we interviewed agreed that sitting down with the maps diminished the emotional nature of these difficult situations with challenging teachers—even when the outcome was a firing.

As the meeting approached with his building principal, the teacher, the grievance chair, and the head of the union, Michael remarked, “I had a sleepless night the night before thinking that if the Thinking Maps didn’t work in this meeting they’d be dead at Sedgwick (school system name changed).” He went on to say that his credibility as a leader was also at stake. He had invested much of his leadership career in this work and had professed his belief in these tools

for student and adult learning and development. He had modeled the use of the maps in a variety of situations, demonstrated his knowledge and facility with them, and was being asked to apply this to a very real, complex, ambiguous, and intensely difficult situation. Could they engage uncertainty with confidence in a hot-button, career-changing context?

In the case of the teacher with the grievance, she was retained, and the teacher improvement plan was dropped. Michael's successful application of the maps in this interaction affirmed his belief in these tools and, more important, allowed him to be faithful to his beliefs about communication and problem solving in school settings. As a leader, Michael is genuinely collaborative and holds an abiding faith in the ability of people to accomplish extraordinary things, even in the most challenging circumstances. Using the maps supported Michael in going forward in this interaction with an uncertain outcome, but with the confidence that clarity and constructive resolution could be achieved with everyone's dignity preserved or, in this case, restored. On reflection, Sharon observed:

There was a benefit that I never foresaw—not only did we use the maps to diffuse a problem and they were effective and I think will continue to be effective in event-specific issues . . . but what I never foresaw was the benefit from the improvement in the relationship between these two people (the principal and the grieving teacher). For the first time ever, after the meeting, the teacher actually asked for input from the principal—she said it went quite well—this is a complete turn-around . . . we'll have to see if it continues, but so far, so good . . . I credit the maps with diffusing the problem and giving us a plan and a hope for the future.

Not only did the use of the maps help identify strategies for the teacher to improve and a way of resolving the conflict driving the grievance, but in the end, the use of the maps also gave the two parties involved in this substantial conflict a language for talking with each other in the future. The teacher—who prior to the use of Thinking Maps refused to have any more conversations with the principal—now asked to work side-by-side with the principal to improve her classroom performance. A relationship was reclaimed, or perhaps established for the first time, but just as important, the relationship was now built on an appreciation of each person's ability to think and to do so interdependently.

Experiences like this one have a way of empowering people directly and indirectly associated with the event. The successful outcome achieved through Sharon's and Michael's intervention and decision to use Thinking Maps to resolve a complex situation had ripple effects for them and their colleagues. Not surprising, their success in this situation encouraged them and others in the system to deepen and expand their use of this powerful language furthering the development of the organization as a thinking school system.

Michael discussed using the maps with his teachers when engaging in observations. Note the following example.

With the amount of experience I've had with the maps and my background in Cognitive Coaching (Costa and Garmston), I find this is an

enormous asset to guide collaborative planning and also do coaching to guide reflection of particular individuals along the way. For example, one of my Thinking Maps trainers is doing a lesson tomorrow and sat down with me to do a pre-observation conference—I'm going to be the observer. She used the circle, frame, and tree maps to outline the lesson for me. As we talked about what she wanted me to observe in the lesson, together we constructed a multi-flow map of the assessment/evidence that would be available of what objectives to look for. We used another map together to plan for that observational assessment. It is in part my own evolution of knowing these Thinking Maps but also the fact that I'm willing to use them and allow teachers to see how much I value them.

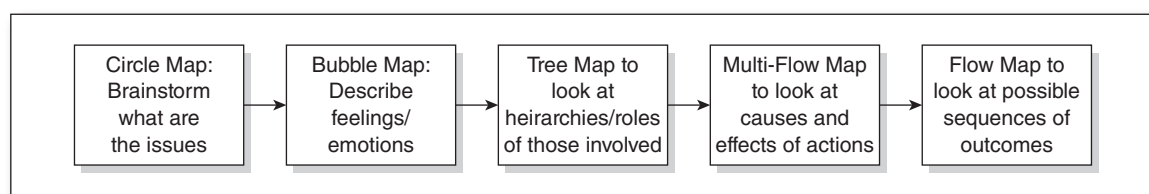
As Michael observed, his ongoing use of the Maps contributed to the development of his fluency with these tools. At the same time, his total engagement with them reinforces their use for teachers as well as models his own willingness to take risks and grow in his practice.

Sharon, the grievance chair, discussed how after this experience she started using the maps when teachers came to her with a grievance. First, they would brainstorm all the issues using a Circle Map. Then, because these interactions are so emotionally laden, she would have the person potentially filing the grievance use a Bubble Map to describe all the emotions he or she felt about the event, issue, or experience.

Sharon observed that it was very important to “validate emotions but then move on.” The use of other Thinking Maps allowed the person involved to look more closely at the issue, develop a deeper understanding of it, and consider a range of possibilities before choosing a particular path. These experiences are intensely emotional, but by keeping attention on the maps—on the *thinking*—the issues remained in focus, meetings were productive, and tension and negative emotions were minimized.

As stated above, the capacity for each of us as individuals and then collectively to identify the existing “frames” that ground our perceptions and actions—and to consciously reframe and repattern our ways of thinking—is a key to creating participatory, connective leadership in one-on-one conversations, grade-level meetings, and large group sessions such as faculty meetings. In the situation that Superintendent Michael Sampson was asked to intervene in, the principal and teacher were rooted in their roles, unable to cross those boundaries to establish clear, constructive dialogue. The principal's inability to recognize the frames from which the teacher and he were responding and how

Figure 10.2 Sample Flow Map for Grievance Process



his approach was driving the teacher into a more defensive posture made the situation seemingly intractable.

Connective leading is about fostering the connections between and among people, between and among ideas within patterns of thinking, and across visual and virtual planes, which the diversity of those present and represented inform and enrich. To lead connectively means to invite possibilities into the process with the bold and confident view that, by design, the collective wisdom of the community of learners will emerge, and from this, effective and meaningful solutions will be determined. Connective leading requires skillful facilitation because it is about interconnecting people in the complex dance of both personal and professional conversations. This critical dimension of leadership is expressed in all aspects of the school community—classroom, meeting room, and boardroom. Its need becomes apparent when emotions are heightened and threaten to dominate interactions. However, when exercised from the beginning and with a common, visual language that represents thought in cognitive patterns, connective leadership builds individual and collective confidence within a Thinking School community to address even the most highly charged situations respectfully and effectively. As Superintendent Donna DeSiato observed, “With Thinking Maps, it’s not about power and position, it’s about understanding and being understood.”

Connective leading requires a significant leap of faith, a fearlessness, and a confidence in self and others in the face of emerging truths—perhaps even uncomfortable realities. The decision to become open to possibilities and to initiate the dynamic interaction between self and others, mind and experience, can be as unsettling as it is exciting. It can be somewhat akin to walking a tightrope without a net underneath. Thinking Maps, however, provide a conceptual net for capturing and representing ideas dynamically and to see connections. The discomfort that often accompanies uncertainty gives way to the confidence Thinking Maps develop in people in their individual and collective ability to think.

■ OUT OF THE AUDITORY AND INTO THE VISUAL

As we researched the impact the use of Thinking Maps had on school communities when applied to different areas of leadership, five themes emerged and are evident in the case study just discussed: clarity, efficiency, collaboration, empowerment, sustainability. As we look more closely at these themes, consider that these are worthy qualities to develop for Thinking Schools.

Clarity, as we came to understand it through the comments of the leaders we interviewed, is not the presumptive certainty of one’s opinions but something that develops from a satisfying process of constructing meaning alone and in concert with others, from suspending judgment and engaging in a process of individual and collective dialogue to allow patterns to emerge. These internal and external conversations were facilitated by a visual language that made evident the content of the ideas, the processes used to arrive at them, and the frames of reference that influenced them. Clarity, too, came from knowing that the actions one decided on aligned with core values and beliefs.

The interaction between the teacher and principal in the aforementioned case study had certainly become cloudy, lacking in both clarity and focus on what was most essential—the improvement of instruction. Superintendent Michael Sampson was able to use Thinking Maps to rebuild communication pathways by ensuring that the dialogue was about teaching, not the teacher or the principal. The Maps provided an external locus of attention and enabled everyone involved to look at, think about, and learn from the patterns rather than judge the people.

Efficiency, we learned from our research, was not to be confused with *expediency*. Certainly, time was an influencing factor in all the scenarios leaders discussed with us. However, the stress occurred not so much from having too little time, but rather from being aware that they could not use their time as effectively as they believed they should. Having more time does not necessarily guarantee that it will be used well. In inefficiently led meetings or in personal processing that gets bogged down, frustration develops not from running out of time but from using that time inefficiently—something more time wouldn't solve. With Thinking Maps, leaders reported that people were more focused and deeply engaged, their attention was more sharply directed, their thinking was attuned, and their ability to do what the brain strives to do—*see and construct patterns*—was supported. The leaders felt the resulting decisions and the actions that developed had integrity and were not simply made to “get it done.”

Collaboration was certainly identified in our research as both an essential aspect of learning communities and an area in which the use of Thinking Maps contributed positively in significant ways. However, as Michael Fullan (2001) observes, “Collaborative cultures, which by definition have close relationships, are indeed powerful, but unless they are focusing on the right thing, they may end up being powerfully wrong” (p. 67). The collaboration that school leaders spoke of in our research was not simply the act of bringing people together but of grounding the collaborative process of learning in which participants were engaged at all levels—intellectually, emotionally, morally, politically, and so on.

In the context of collaboration, dispositions such as intellectual curiosity, commitment to understanding, and suspension of judgment—striving for clarity—were essential elements of the process of working together. While Thinking Maps were a vehicle for bringing people together, they also served to focus the attention of the group on the ideas and not each other. The collaborative process, while social in nature, became highly purposeful and insistent on achieving clarity. Michael Sampson's use of Thinking Maps in the grievance setting to literally draw everyone's attention to the practice of teaching and not the teacher herself helped restore trust and safety to the interaction, essential elements for productive and meaningful collaboration.

As is now perhaps becoming apparent, the interplay of these themes is in itself a crucial observation about the influence Thinking Maps had on these school communities. The collaborative processes described and the clarity and efficiency with which people arrived at understandings individually and collectively could not have been achieved at the levels reported to us if people didn't feel empowered to contribute their ideas to these important processes in their school communities.

Empowerment not only was experienced and exercised as a right of those participating in a democratic context, but also emerged from the confidence gained through using the maps in the ability to formulate and communicate one's thinking and clarify one's ideas internally and to others. The internal web of the school community operated at its highest degree of efficiency and effectiveness when all members of the school were fully engaged, affirmed, and able to confidently engage in situations in which answers and solutions were not immediately apparent. Roles define responsibilities. They do not determine the value of people's contributions, nor should they inhibit people's ability to contribute. Leading thinkers across a school meant not only to enable others to feel *empowered*, but also to know better *the power of their own minds*.

As demonstrated in the Visible Coaching chapter by Kathy Ernst, and in the example cited in this chapter, significant and lasting improvement in teaching will come when teachers are engaged, supported, and assisted in developing their ability to reflect on their own practice and mediate their own growth and learning.

It's not surprising that we would reserve *sustainability* for last. We learned the leaders were not simply speaking about maintaining some sort of status quo or holding precious what their schools had become. Instead, the sustainability they referred to and reached for was the dynamic state of learning, the constant process of becoming built on and sustained by a common visual language for thinking. This common language expressed a core value of these schools—that thinking is the foundation for all learning at all levels throughout their school communities. Eleanor Duckworth, educator and author, once wrote that it is virtuous not to know. It's what we do when we don't know that will ultimately determine what we do know (Duckworth, 2006, p. 67). In the 21st century, where change is the norm, Thinking Schools will embrace the opportunities that present themselves, adapt to new circumstances, and create their own futures, as Senge (1990) proposes healthy organizations will do.

Sustainability, then, is about not simply surviving in these dynamic and uncertain times, but thriving with the benefit of the clarity, efficiency, collaboration, and empowerment that leading connectively through the use of Thinking Maps can inspire.

■ THE INSTRUCTIVE/DESTRUCTIVE POWER OF EMOTIONS

Supporting people in being able stay in heated discussions and staff meetings that might otherwise go awry, and transform and *sustain* a conversation about difficult topics without driving down into what often feels like a bottomless well of emotions or a competition of ideas, is, perhaps, the greatest challenge to any leader. Done successfully, confidence (and trust) in self, the group, and the organization as a whole gradually develops and helps create a culture of sustainability over the years.

In the course of human interactions, issues easily become quite complex and murky as emotions inform and influence them. Often people feel

challenged to remain dispassionate in these interactions, believing that they must set aside their emotions in order to see and think clearly. Attempts to suppress emotions can, however, have the opposite effect on achieving clarity because emotions can be powerful and useful forces in guiding and informing thinking. However, unconsciously allowing emotions to direct thinking and actions can also lead to what some refer to as an *emotional hijack* in which emotional filters not only inform but also control our actions. Daniel Goleman, Richard Boyatzis, and Annie McKee (2002) write, "The prefrontal area (of the brain) can veto an emotional impulse . . . Without that veto, the result would be an emotional hijack, where the amygdala's impulse is acted upon" (p. 29). Such impulsive actions are often taken defensively and aggressively (fight-or-flight) and can cause irreparable harm in already delicate relationships. Power and authority often expressed in hierarchically defined roles also contribute to situations in which emotions can easily create misunderstandings and result in misguided and unproductive actions. This was especially evident in the conflict Michael Sampson was urged to resolve.

Many of the leaders we spoke with viewed Thinking Maps as the visual and practical extension of the brain's executive functioning. From the routine task of designing and executing a simple plan to the more demanding challenge of responding to the endless stream of information and the intricacies of human dynamics in the workplace, each person worked overtime to lead in a positive, constructive, and sometimes visionary direction. Thinking Maps, as we saw and heard from various school leaders, including Superintendent Michael Sampson, were indispensable in building, supporting, and enhancing the capacity of the brain to activate memory and language, direct attention to achieve both short- and long-term goals, and resolve issues of moral and ethical complexity, with emotions as a guide, not as the determinant.

This highly attuned orchestration of thought and feeling results in what Goleman et al. (2002) call *resonant leadership*, or the ability to skillfully, respectfully, and effectively organize and inspire the feelings and thoughts of others as well as oneself toward shared goals. Superintendent Michael Sampson was not only able to employ Thinking Maps to resolve a difficult conflict, but in doing so he also began the process of restoring trust and confidence in the district's ability to handle extremely sensitive matters effectively and with dignity. As efficacy studies have shown, such confidence in the organization often translates into similar feelings of confidence within the individuals of the organization. In this way, the space is opened for skillful thinking to become the defining feature of the school community.

The use of Thinking Maps helps remove artificial boundaries or separateness that narrow interpretations of role relationships can impose. The maps create a visual landscape that allows individuals to express and contextualize the holism of ideas through multiple thinking processes and frames of reference. The nature of this representation system—its grounding in inherent cognitive skills and intimate alignment with how the brain interacts with ideas and phenomena—sets it apart from other visual models or graphic organizers and allows it to function as a common, visual language across roles as well as ages.

The opportunity to fully represent the holism of their ideas clearly empowered many of those we interviewed. Former Superintendent Veronica McDermott observes, “Since the maps are rooted in the psychology of cognition, they, too, push users to be creative and to propel their thinking beyond the obvious.” The maps foster deeper attention to one’s own thinking and to the ideas of others in a way that fundamentally changes the nature of the interaction. They enable people to participate in the collective construction of meaning. In doing so, they support a type of listening that literally and figuratively *draws* users into the dialogue and enables them to attend deeply to what is expressed. This type of listening, what Art Costa (2003) refers to in part as *generative listening*, occurs when “you can slow your mind’s hearing to your ears’ natural speed and hear beneath the words to their meaning” (p. 33). Just as the graphic artist Milton Glaser (2008) describes the act of drawing something as the opportunity to truly know it, literally drawing out ideas *draws* us to them, enabling us to take the time to listen and look deeply for the essence that exists beneath the surface.

■ LEADING CONNECTIVELY

For many of the leaders we spoke with, including Michael Sampson and Sharon Henderson, the use of Thinking Maps altered that internal dialogue and reframed their interactions with others in such a way to allow for greater clarity and reciprocity. As Lambert (2009) asserts, “The brain’s capacity to find patterns and make sense of the world is liberated within such relationships that encourage mutual care and equitable engagement” (p. 11). So often, people describe the experience of using Thinking Maps in group settings as literally finding themselves on the same page with others involved. This is not to say that agreement is automatically achieved. Rather, a space is opened in which all involved enter as equal partners in the generation of ideas as they work toward shared meanings and sound decisions. The purposeful, focused interaction that the use of Thinking Maps facilitates can be quite disarming in a positive sense. Thinking Maps suspend the impulse to compartmentalize things or arrive prematurely at clarity.

Instead, drawing out their own and others’ thinking allows people to become part of what Jaworski and Flowers (1998) describe as *the unfolding* in which we accept others as “legitimate human beings” and appreciate the ever-changing nature of our world and our constantly evolving understanding of it. In this way, we genuinely engage in the process of meaning making, an act of individual and collective construction that rejects “the illusion of fixity” and embraces the challenge and pleasure of living in “a world of continual possibility” (p. 11).

School leaders, especially principals, have tremendous influence over the degree to which their schools and the individuals within them act intelligently and effectively. Influential leaders understand the fundamental nature of learning not only as it relates to students, but also as an essential dimension of the dynamics of a thinking school community itself. With a vision of what it means for a school to be a thinking community, they work intentionally and

skillfully to bring others into this vision and develop their capacities to contribute in positive and constructive ways. Across the reach of this book on *Thinking Schools*, there may be no more profound change in a school for students than seeing in their teachers as leaders—not just “modeling” thinking processes, dispositions, questioning, and enquiry for classroom purposes—but in the reflective practice of improving their own dynamic processes of thinking as leaders.

QUESTIONS FOR ENQUIRY

In this chapter, Middle School teacher and chair of the grievance committee, Sharon Henderson, challenged Superintendent Michael Sampson to use Thinking Maps in a novel way—to transform a seemingly intractable situation between adults into one that could have a beneficial conclusion for all involved. In essence, she was asking for a realignment of practices across the entire system to reflect the district’s commitment to thinking as a foundation for learning for all members. Why was Sharon’s insistence on this so urgently necessary, and what purpose or purposes might such an alignment of practice across all roles and responsibilities in a school or district serve in a school’s effort to transform itself into a “thinking school”?

Both Sharon Henderson’s and Michael Sampson’s actions suggest that they were in the process of reconceptualizing their professional identities as leaders, an outcome that was perhaps initially unintended or unconscious but, with experiences such as this, could become more deliberate. What might be some of the implications such shifts in self-perception would have in other aspects of their respective roles?

In what ways might interconnective leadership be similar or different from interactive leadership? How does the use of a common, visual language for thinking, such as Thinking Maps, promote both interactivity and interconnectivity?

In this chapter, a CEO is quoted as saying she wants her employees to be “confident and uncertain.” The authors themselves suggest that “fearlessness” might be a critical dimension of successful leaders. If these attributes are indeed worthy of development in leaders, in what ways did the use of Thinking Maps support the leaders in this case study to tap into and perhaps develop these essential qualities? How might this connect to your goals for students?

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