A MONOGRAPH ON CREATING ORGANIZATIONAL CHANGE USING A LIVING-SYSTEMS APPROACH

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Prepared by
Stephanie Baird-Wilkerson, Ph.D.
Principal Evaluator

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INTRODUCTION

This monograph describes a living-systems approach to organizational change. It presents the theoretical underpinnings of this approach as it is evidenced in the literature as well as in practice. It contextualizes the need for such an approach within the current climate of education and the role of state education agencies.

This monograph stems from development and evaluation work conducted by Mid-continent Research for Education and Learning (McREL) on the application of a living-systems model for organizational change in one state education agency. This work provided many of the details to this approach that are described in this monograph, such as principles and practices that guide the translation of the living-systems theory into practice. This monograph also presents procedural knowledge about how to implement this approach including, for example, initial and ongoing needs sensing, connecting the change process to real work, identifying appropriate change practices, and sustaining the change process. The monograph concludes with a discussion about the appropriateness of this approach for organizations as well as the need for further research.

BACKGROUND

Since President George W. Bush signed the No Child Left Behind Act into law in 2002, educators and policymakers have been working to implement the legislation's provisions. The No Child Left Behind Act has implications for students, teachers, local administrators, parents and community members, policymakers, and state administrators. State education agencies must attend to a variety of challenges and responsibilities, including developing or supplementing their assessment and accountability systems, recruiting and retaining highly qualified teachers, identifying persistently dangerous schools, testing limited English proficient students on their English language proficiency, and providing supplemental resources and school choice to low-income students in low-performing schools, to name a few (Cicchinelli, Gaddy, Lefkowits, & Miller, 2003).

Given that funding for the implementation of the No Child Left Behind Act falls significantly short of the authorized funding levels for the Act, a key question is, "How does a state department that has never been charged with direct accountability for low-performing schools ramp up to meet the challenge?" (McREL, 2003, p. 1). Often, externally imposed change generates strong leadership, new ideas, and leveraging of resources. However, it also can result in "overload, unrealistic timelines, uncoordinated demands, simplistic solutions, misdirected efforts, inconsistencies, and underestimation of what it takes to bring about reform" (Fullan, 1991, p. 27).

The No Child Left Behind Act not only has implications for how state education agencies work to accomplish the mandates set forth by the Act, but it affects how state education agencies work with local educators in their states. Under the Act, state education agencies play an even larger policy and accountability role in their states than before. Thus, state education agencies must position themselves to respond to the Act's mandates and do so in a way that addresses the unique contextual factors of the schools they serve. More than ever, state administrators must address the needs of local educators in improving low-performing schools.

Despite the clear directive from the No Child Left Behind Act to improve the quality of education for students, it is less clear *how* state education agencies should do this. For many state education agencies, this means reorganizing the way in which they operate in order to meet new demands. State education agencies also must possess the leadership and organizational capacities to transform low-performing schools into high-performing learning communities. Therefore, state administrators need to refine their organizational practices in order to establish effective and collaborative working relationships with local educators. In order to achieve these relationships, state-level educators need to develop strategies within their agencies that model what they are asking of local education agencies. This necessitates that state education agencies implement or improve upon organizational change efforts that allow staff members to build upon their existing knowledge, to learn new best practices, and to sustain the learning process in order to continually adapt and improve.

A Study of Organizational Change

In 2000, Mid-continent Research for Education and Learning (McREL) formed a partnership with a Midwestern department of education (MDE)[1] in order to initiate McREL's development work using a living-systems model for organizational change. Through this partnership, MDE sought to engage in organizational change efforts that would move the department toward functioning as a learning organization with a service-oriented approach to supporting statewide school improvement efforts. As part of this development effort, McREL contracted with an internationally known consultant in organizational development and living-systems theory, Myron Rogers, to conduct this work with MDE. McREL also funded an evaluation of this work in order to (1) document Mr. Rogers's living-systems approach to organizational change, (2) capture the knowledge necessary to implement this approach, and (3) preliminarily assess the effectiveness of this approach in creating organizational change based on the MDE case study.

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[1] For purposes of anonymity, "MDE" is used as a pseudonym for the department of education with which McREL worked.

The evaluation employed a case study[2] design with a qualitative methodology that used both quantitative and qualitative data collection methods. A qualitative methodology was most appropriate for this study because it examined the *process* of organizational change, which is fluid and dynamic and does not lend itself to an experimental or quasi-experimental design. Furthermore, the evaluation focused on development work and therefore was tasked with defining the intervention, describing the process in which it was implemented, and documenting the implementation context — thus, a qualitative approach was the best design to complete these tasks. Because the study also assessed initial outcomes both internal and external to the client organization, quantitative methods, such as surveys, were used to document changes over time.

Through the use of Erickson's (1986) approach of analytic induction, evaluation information was validated by thoroughly searching the data corpus for confirming and disconfirming evidence. This process involved (1) triangulating data through multiple data collection methods including interviews, pre/post client surveys, staff questionnaires, observations, and document review; (2) capturing the perspectives of various participants; and (3) collecting data at different times throughout the two-year project period. Based on the evaluation findings, the living-systems approach to creating organizational change resulted in MDE staff members

- creating opportunities to reflect on and learn from their work;
- sharing more information both internally and externally through existing and new communication infrastructures;
- conceiving of and designing projects that require cross-group collaboration;
- examining the department's internal leadership and management practices as well as its external service-oriented and regulatory practices;
- involving a broader range of staff members in planning, developing, and implementing work; and
- providing staff with opportunities to engage in meaningful dialogue about organizational values and purpose (Wilkerson, 2003).

[2] A case study can explain, describe, illustrate, and explore a phenomenon and typically includes direct observation and systematic interviewing. A case study is an empirical inquiry that examines a phenomenon within its real-life context, and is most appropriate when the boundaries between phenomenon and context are not clearly evident (Yin, 1989).

Given that participants positively benefited from this approach, McREL is continuing its development work with another state education agency. This monograph shares what McREL has learned about this approach and its implementation in order to guide its replication work. This monograph presents the knowledge gleaned from the evaluation study based on the living-systems model for organizational change developed and used by Myron Rogers.

Many organizations rely on external consultants to engage staff members in the change process, and yet, others depend on internal leaders who have a strong commitment to initiating and sustaining change efforts. Often, organizations depend on a combination of external and internal leadership to facilitate change. This monograph is intended to inform and guide change agents, whether external or internal to organizations, in implementing a process that supports organizational learning and change. By its very nature, this process is dynamic and fluid in its implementation and, therefore, is neither prescriptive nor sequential. The reader should keep in mind, as subsequent sections describe, that the context and dynamics of organizations influence how change agents and organizations apply this approach.

LITERATURE REVIEW

The purpose of this monograph is to present knowledge about implementing a living-systems approach to organizational change obtained through an evaluation of the process. In order to convey the theoretical underpinnings of this work, this section presents a brief literature review of the theoretical constructs relevant to organizational change and living-systems theory.

ORGANIZATIONAL CHANGE AND LEADERSHIP

The nature of organizational change varies as much as the different methodologies and approaches for bringing about that change. What is common to organizations seeking to change is the desire or need to change in order to thrive or survive. Senge (2000) states that change is about creating something new based on an exploration of possibilities. He asserts that this requires a "discipline of planned abandonment" (p. 24), or letting go of the old in order to create something new.

Change theorists categorize and think about change in a variety of ways. Quinn (1996) categorizes organizational change as being either deep or incremental. Deep change requires new ways of thinking and behaving and involves surrendering control and taking risks. It is "major in scope, discontinuous with the past, and generally irreversible" (p. 3). He defines incremental change as being the inverse of deep change; people feel that they are in control of what is happening because it is not disruptive of the past or current patterns of thinking and behaving. Nadler, Shaw, and Walton (1995) also categorize one type of change as incremental, but present three additional types of change: discontinuous, reactive, and anticipatory.

According to Nadler et al. (1995), discontinuous change involves a break from the past and a major reconstruction of the entire organization. Reactive change occurs when an organization must respond to environmental changes. Nadler et al. refer to anticipatory change as occurring when an organization acts in anticipation of changes that may occur in the future. Whereas incremental and discontinuous change refer to the continuity of change, reactive and anticipatory change address the timing of it. These four types of change also differ by their driving force, focus, pacing, and approach to management, and each has different implications for organizational behavior. For instance, an organization that experiences both reactive and incremental change typically expresses an adaptive behavior, whereas an organization experiencing discontinuous and anticipatory change may focus on reorienting itself by fundamentally redefining itself (Nadler et al.). Nadler et al. hypothesize that "all significant change in organizations ultimately originates from the environment" (p. 24).

The environment plays a key role in shaping how organization initiate or respond to change. According to Quinn (1996), when an organization becomes misaligned with its environment, it can adapt or incur a slow death. Organizations frequently are thrust into change work because of a sense of urgency to adapt to external influences (Heifetz, 1994). Fullan (1993) suggests that in complex change efforts, change agents can use external mandates as catalysts for organizations to re-examine what they are doing. He states that learning organizations learn to live with their environment interactively, rather than try to control or dominate them. Fullan continues that organizations must discover better ways of thinking about and approaching change because it is a complex and unpredictable process. Along a similar vein, Nadler et al. (1995) posit that in a period of disequilibrium, organizations need to "find new ways of organizing to generate and nurture new types of capabilities that are more relevant to the new environment" (p. 9).

A core competency of organizations rests in their abilities to accept, lead, and manage change (Senge, 2000; Nadler et al., 1995). The focus should not be on how to lead or how to change, but on how to "provide a particular kind of leadership that an organization in transition demands" (Bridges & Mitchell, 2000, p. 43). Heifetz (1994) adds that leaders must create and maintain an organizational environment in which people can transform stress about change into work. He states that a certain level of tension in the organization is necessary to mobilize people, but that leaders must find a balance between how much pressure individuals can tolerate and how much pressure they need to adapt and change. In adaptive situations, Heifetz asserts that leadership calls for (1) providing questions, not answers; (2) allowing individuals to feel the threat of external pressures, rather than protecting them from it; (3) disorienting everyone in order for new role relationships to organically emerge, rather than orienting or directing them; (4) generating conflict rather than quelling it; and (5) challenging norms rather than maintaining them.

Moral purpose and change agentry are the two key forces that bring order to complex change, or chaos, according to Fullan (1993). He argues that meaningful change occurs when individuals with moral purpose connect it to a broader social, public purpose that is then propelled by skilled change agentry. Fullan presents four core capacities of change agentry that equip organizations with the necessary skills for change: personal vision, mastery, inquiry, and collaboration.

Often the change process brings about an unknown territory in which, as Quinn (1996) states, people "must 'learn' their way" (p. 5). According to Quinn, change often requires individuals to examine their current beliefs, assumptions, rules, or paradigms and develop new theories about themselves and their environment. Inquiry is essential to promoting self-reflection and continuous learning in support of change. Learning organizations promote quality thinking by building people's capacities for reflection and collaborative learning and by enhancing their abilities to develop shared visions and understandings of the organization (Senge, 1990). Learning is most likely to occur when groups and individuals, "effectively reflect on and interpret the outcomes of their actions…. disseminate new learning throughout an organization…. act on their beliefs and leverage new learning (their own and others) to produce the greatest benefit to their organization" (Nadler et al., 1995, p. 115). Learning organizations are also those that view themselves holistically, recognize conflict as a source of energy and renewal, and provide individuals with opportunities to identify with and work towards organizational goals (Fullan, 1993).

The literature on organizational change and leadership presents various explanations and descriptions about the change process. This information highlights characteristics of the change process within organizations and provides a glimpse of how organizations function as systems in relation to their environment. The following section provides more detail about organizations as systems and presents a brief review of the literature on living-systems theory. This description of living-systems theory provides the foundation for understanding organizational change and learning.

LIVING-SYSTEMS THEORY

An integrated living-systems view of change is different from the commonly accepted Newtonian, or mechanistic, view of change. The mechanistic paradigm espouses that organizations run well if they operate like a machine, separated into narrow processes that are linked together. The mechanistic perspective posits that preservation of an organization is preservation of its current form — therefore leaders manage the parts so that the machine continues to function predictably.

In a mechanistic approach, organizations focus on problem solving and define their success by their ability to effectively fix the parts of the system (Senge, 2000). The Newtonian image of the universe reflects the belief that influence occurs as a direct result of force exerted from one person to another (i.e., cause and effect) and that in order to understand the whole, we must study the parts (Wheatley, 1999). Similarly, reductionism defines the whole as *nothing but* a sum of its parts (Kauffman, 1980). These perspectives disregard how the parts fit together and the patterns that exist between them as well as the behaviors and capacities that emerge as a result of individuals working together.

When we observe the patterns and relationships among the parts, we can see the organization of systems, thereby defining a "system" as a collection of parts that *interact* with one another to *function as a whole*, as Kauffman (1980) states. Or, as Wheatley (1999) describes:

> Each organism maintains a clear sense of its individual identity *within* a larger network of relationships that helps shape its identity. Each being is noticeable as a separate entity, yet it is simultaneously part of the whole system. While we humans observe and count separate selves, and pay a great deal of attention to the differences that seem to divide us, in fact we survive only as we learn how to participate in a web of relationships. (p. 20)

Wheatley (1999) adds that systems and individuals exist symbiotically, and the relationships that exist within a system shape its reality and potential:

> What is critical is the relationship created between two or more elements of a system. Systems influence individuals, and individuals call forth systems. It is the relationship that evokes the present reality. Which potential becomes real depends on the people, the events, and the moment. (p. 36)

Kauffman (1980) characterizes a system as one in which all of the parts must be present and arranged in the proper way to do the work; taking any part away from it changes the system. If it does not matter how the parts are arranged and nothing changes if parts are added or taken away, Kauffman argues, then we are dealing with a "heap" and not a system. Kauffman also asserts that the stability, change, or growth of systems depends on negative and positive feedback loops.

Negative feedback is a process that negates change or disturbances in the system to create stability, such as how a thermostat regulates a heating system based on the air temperature. Supervisors perform a similar function when they evaluate and guide employee performance based on standard criteria that define expected outcomes for employees (Wheatley, 1999). Positive feedback amplifies or adds to change, such as the way in which individuals invest rather than consume their profits in order to achieve greater wealth, which in turn gives them more to invest.

The development of the living system is dependent on the continued ebb and flow of information passing through the positive and negative feedback loops in order to sustain itself (Vodicka, 2003). Kauffman posits that any change — no matter how big — will only be temporary if it does not change the important positive and negative feedback loops in a system. Conversely, any change — no matter how indirect or small it seems — will alter the long-term behavior of a system if it affects the relationship between the positive and negative feedback loops.

Whereas negative feedback loops maintain stability or equilibrium in a system, positive feedback loops create disequilibrium that is necessary for a system's growth. In this sense, forces that create disequilibrium are not a threat, but an opportunity to reorganize to respond to new information — or, to self-organize (Wheatley, 1999). A self-organizing system, according to Wheatley, is one that reorganizes into whatever form it determines best suits the present situation and maintains its identity. It is not locked into one structure nor bounded by physical or psychological rigidity. Instead, an organization supports fluid processes that deal with specific and ever-changing needs and "creates workplaces where people, ideas, and information circulate freely" (Wheatley, p. 82).

According to Wheatley (1999), in the midst of disequilibrium, a self-organizing system is stable because it has "clarity about who it is, what it needs, and what is required to survive in its environment" (p. 83) Wheatley continues:

> Self-organizing systems are never passive, hapless victims, forced to react to their environments. As the system matures and develops self-knowledge, it becomes more adept at working with its environment. It uses available resources more effectively, sustaining and strengthening itself. It gradually develops a stability that then helps shelter it from many of the demands from the environment. This stability enables it to continue to develop in ways of its own choosing, not as a fearful reactant. (p. 84)

Wheatley and Kellner-Rogers (1996) add that emergence and maintenance of the new system depends on the interaction of individuals but also on whether change is continuing to occur:

> Systems emerge as individuals decide how they can live together. From such relationships, a new entity arises with new capacities and increased stability. Yet this system-wide stability depends on the ability of its members to change. Strangely, the system maintains itself only if change is occurring somewhere in it all the time. (p. 33)

Unlike the mechanistic paradigm that focuses on the parts of a system, living-systems theory focuses on the whole or the collective. Living systems are dynamic and are based on the following imperatives (Wheatley & Kellner-Rogers, 1996):

- freedom to create oneself,
- the need to preserve oneself,
- the desire to form systems and relationships,
- the capacity to invent, to discover original newness, and
- the need for meaning, contributions, and growth (in humans, at least).

From a living-systems view of change, organizations are systems that self-organize, create, think, adapt, and seek meaning. If the organization violates any of these imperatives, the system will fail. The key then for change work is facilitating a process and building organizational capacity to honor these imperatives. By doing so, the organization is able to learn from itself and create appropriate and relevant change efforts based on new knowledge; hence, it is self-organizing and functions as a learning organization. However, most change work in organizations occurs at the surface level of structures, processes, and systems. Organizations that apply their change efforts at this level often are unsuccessful in creating deep change because they neither identify nor address the root causes that underpin organizational problems.

Myron Rogers states that in order to change anything in an organization, the organization needs to go below the surface to three domains: identity, information, and relationships. Using these three domains — rather than structures, processes, and systems — leads to very different diagnoses of what needs to change. The identity, information, and relationship domains serve as loci for addressing the imperatives of a living system and generating continual organizational learning and change.

LIVING-SYSTEMS APPROACH DEFINED

The living-systems approach to organizational change hinges on three key domains: identity, information, and relationships. Each of these can be defined individually, but these domains are interrelated and interdependent. In this living-systems model, organizations create deep and meaningful change by addressing these three domains. When an organization actualizes the qualities of these domains, it functions as a learning organization. Furthermore, a learning organization stays adaptive to a frequently changing environment and promotes continual growth. Figure 1 presents a conceptual model depicting the three domains and the characteristics of each that are indicative of a learning organization.

A change agent using a living-systems approach to organizational change is continually aware of how a group works within the identity, information, and relationship domains. The change agent follows guiding principles and employs practices so that people can address identity, information, and relationship issues.

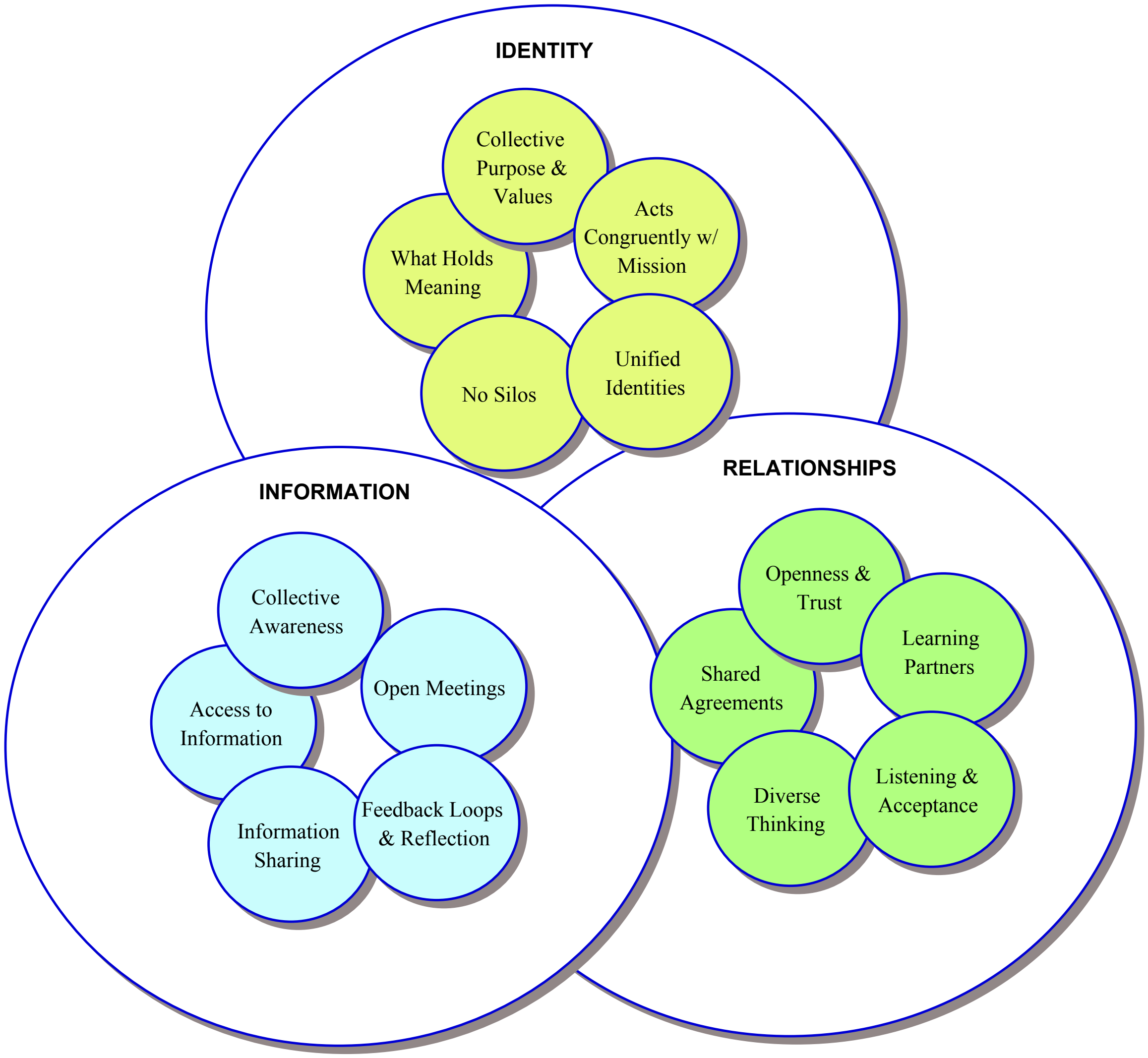

Figure 1. The identity, information, and relationship domains actualized in a learning organization.

KEY DOMAIN: IDENTITY

> There is an essential role for organizational intent and identity. Without a clear sense of who they are and what they are trying to accomplish, organizations get tossed and turned by shifts in their environment. No person or organization can be an effective co-creator with its environment without clarity about who it is intending to become. (Wheatley, 1999, p. 39)

The identity of an organization is how the organization sees itself in relation to what surrounds it and its higher purpose. Identity is reflected in an organization's values, traditions, history, actions, core beliefs, competencies, principles, purpose, and mission (Wheatley & Kellner-Rogers, 1996). What an organization chooses to do is based on what it values and what holds meaning for it. Its ability to withstand and respond intelligently to its environment depends on the organization having a clear sense of self. An organization's identity should be reflected in what it does and what it says it does. Every organizational identity is quite complex. In a learning organization, individuals are willing to truly examine identity issues in order to develop a better and shared understanding of organizational identity. Therefore, when identity is clear and coherent, an organization knows where it stands when change (e.g., federal policy) is introduced.

For example, MDE staff wanted to discover the "next level" for their leadership as an organization and how to achieve that level. They focused on critical identity issues at both management and organizational levels. At the management level, identity issues related to the role of leadership within the department. At the organizational level, identity issues focused on the role of MDE related to its statewide regulatory and service responsibilities. In order for the department to realize its overall purpose of effectively supporting the needs of all learners, the identities at both levels had to be clearly articulated, aligned, and actualized.

These identity issues directly related to what held value and meaning for MDE as an organization and how the staff defined themselves in relation to their environment. The aim for this organization was to create and expand the context in which staff members could identify commonalities, develop a shared understanding of the department's purpose, both generally and specifically as it related to particular pieces of work, and discover how individuals' work contributed to the whole.

KEY DOMAIN: INFORMATION

> If a system has the capacity to process information, to notice and respond, then that system possesses the quality of *intelligence*. It has the means to recognize and interpret what is going on around it. (Wheatley, 1999, p. 98)

A learning organization is one that knows what it knows. The information domain in the living-systems model focuses on how information flows, how it is collected, who needs to know what, and how they need to know it. The information domain goes a step beyond identifying information platforms or infrastructures and emphasizes what information staff members use, where they get it, and how they use it to act (e.g., making decisions, planning work, identifying issues).

Key Identity Questions:
- Who are we?
- What is our purpose?
- How can we conceive of our work differently?
- What are our assumptions, values, and beliefs?

The information that is available within an organization depends on the quality of relationships. In a learning organization, individuals feel safe sharing information because they know there is no retribution or blame for honesty. Often the most insightful information about an organization is shared around the water cooler or in the parking lot. These "water cooler" or "parking lot" conversations reflect an important aspect of information sharing within an organization and reveal aspects of an organization's identity and relationships. A key goal for a learning organization is to build trust and opportunities for bringing “water cooler” conversations into a more public domain of the organization.

Critical information that an organization needs to promote deep change exists in informal conversations, but in many other places as well. An organization can access rich information by examining the projects, key decisions, external events, and influences of its current and past work. Most organizations lack methods for archiving critical information in meaningful ways that would promote reflection and learning as well as inform and guide future directions.

For example, participants on MDE’s leadership team went through a group exercise to capture the knowledge and experiences of the organization over a five-year period. This process involved completing a large, wall-mounted matrix that captured key decisions, crises, projects, external events, policy changes, information sharing, and work evolution related to the organization’s work from 1995 to 2000. When the group reflected on the information generated as a result of completing the matrix, they could see organizational focus areas and priorities, accomplishments, and growth. They also had the information they needed to understand the derivation of current work and thinking in the organization.

KEY DOMAIN: RELATIONSHIPS

> We live in a universe where relationships are primary…. Nothing exists independent of its relationships. We are constantly creating the world — evoking it from many potentials — as we participate in all its many interactions. This is a world of process, the process of connecting, where “things” come into temporary existence because of relationship. (Wheatley, 1999, p. 69)

The relationship domain centers on trust within the organization. It also centers on the norms about who we can work and share information with, and how these relationships are structured by the organizational design. Relationships are the pathways to the intelligence within the organization. An organization that fosters trust opens itself to more diverse and diverging views, which allow it to grow and learn in new ways. In an organization with trusting relationships, individuals are learning partners with shared agreements about how to be together.

Key Relationship Questions:

- How do we need to be together in the work?
- How do we move into agreements and be learning partners?
- How can we serve each other?
- How do we connect?
- How can we create the conditions within the organization where personal truth doesn’t become blame?

Relationships in a learning organization are formed on the basis of shared learning, not hierarchy or power. In understanding relationships within an organization, one would look at the source of connections, control and order, and behavior. Are the connections among individuals open and diverse, or are they prescribed and routinized? Does control and order within an organization preclude sharing information? How do individuals behave when they are together? Behaviors are rooted in agreements — explicit or implicit — about how people will be together that over time become norms and habits.

By first recognizing the agreements that are already in use for working together, one gains a better understanding of how and when information is shared and how the intelligence of the organization is or is not accessed. Individuals in an organization must identify the agreements they are implicitly using for working together and communicating. Next, they must examine what effect these agreements have on the quality of their relationships and determine what agreements they need to create in order to build greater trust. Therefore, trust is a result or outcome of good working relationships. Individuals work on their relationships first by processing the issues and creating the right agreements; then, trust gradually evolves.

For example, during a MDE meeting facilitated by Myron Rogers, he diverged from the agenda to discuss trust and communication issues that had surfaced in the discussion. As with many organizations, MDE staff shared implicit agreements about what information was appropriate to convey during meetings such as this one. Individuals with tenure and authority in the organization could express their opinions, whereas others reserved their comments for safer environments such as side conversations after meetings. A deep-seated mistrust and disconnectedness existed among some staff, but they neither discussed nor acknowledged it openly. Although many participants in the group felt uneasy with directly addressing some of these trust and relationship issues, they became aware of the implicit agreements they had as an organization for working together. By acknowledging these agreements, MDE staff members were able to focus on new agreements that would lead to more open and trusting relationships.

The next section presents guiding principles, practices, and roles for the change agent that support the actualization of the identity, information, and relationship domains in becoming a learning organization.

GUIDING PRINCIPLES

The guiding principles described in this section reflect key elements of this living-systems approach to organizational change. These principles provide the foundation upon which a change agent can work with a group or an organization to address the identity, information, and relationship domains.

Go Where the Energy Is

In order to create organizational change that engenders continual learning, the individuals within an organization must be committed and engaged. The most effective approach for engaging everyone in learning and growth is to "go where the energy is" in the organization; that is, to identify what people care about, what motivates them, what they're talking about, and what they see as priority areas of work. If the process of becoming a learning organization is not integrated into the "energy" of the organization, it will be perceived as an "add-on." Furthermore, individuals will not have buy-in or ownership in learning about the change process, if they did not have a part in creating it.

By identifying what holds energy for people in an organization, the change process can occur while people do real work. That is, people learn new ways of working together by being in the work. In this living-systems approach, learning about and implementing change does not occur separately from the work of the organization; it is directly connected to work that the people within an organization identify as meaningful. This reflects the way in which all living systems notice, respond, and adapt to their environment in order to survive. People can learn about the process (e.g., sharing information, networking, building relationships) while focusing on the content (e.g., low-performing schools, accountability). People are more willing to try new ways of working together if what they are working on is of high value to them.

For example, MDE identified the No Child Left Behind legislation as a new and critical influence on the organization's work. This legislation holds many implications for the department and therefore generated much energy among staff members. They wanted to position themselves so that the organization adapted to this external influence proactively, rather than reactively, and in a way that aligned with organizational values and purpose. Therefore, determining and implementing the department's role in supporting statewide school improvement became the focus of the staff's change work.

Get the Right People to the Table

> How do we know when to broaden the circle? If you want to bring out a community of change, you have to interact non-institutionally. If you bring in the usual suspects, the dynamics won't change and therefore the community won't change. (Myron Rogers, meeting observations, March 20, 2001)

Leaders in a learning organization get the right people to the table. The "right" people are those who have an interest in the issue, who have information that others don't have, and whose contributions expand the thinking among staff members. These individuals have the information an organization needs to define its work further. For instance, when groups discuss issues related to the identity of an organization (e.g., our purpose, our shared goals, or our strengths), the resulting definitions are limited and shaped by who is at the table. In order for the change process to affect an entire organization, leaders must involve a variety of staff members in collaborative learning, discovery, and decision making. An organization develops greater intelligence by inviting multiple perspectives and interpretations into critical conversations. As stated previously, a learning organization is one that knows what it knows and is able to identify and tap into the intelligence within the organization.

Getting the right people to the table is about expanding the critical conversations within an organization that shape its purpose, direction, and accomplishments. The key is involving individuals who have an interest in contributing to the issue and furthering their work. According to the living-systems approach, the real work of an organization takes place around individuals' interests and has little to do with organizational structure. It is often individual interests, not organizational structure, that make the work happen — or, on the contrary, stop the work. By expanding the circle, an organization accesses its intelligence, further develops its networks for information sharing and collaborative learning, and fosters relationships based on trust and openness.

For example, MDE leaders wanted to bring various perspectives into dialogue about an issue that affected educators throughout the state. They expanded their internal group discussions about supporting statewide school improvement and accountability by establishing statewide policy forums. Participants included local and state board members, school administrators, teachers, and parents. The purpose of broadening the MDE circle was to engage a variety of stakeholders in learning together about school improvement and accountability. The intention was to increase stakeholders' knowledge of the research about areas of low performance and accountability without imposing what is "right" or "wrong" or what stakeholders should or shouldn't believe. As a result of these ongoing forums, MDE receives important input and feedback on important issues, concerns, successes, and challenges that educators and parents experience throughout the state.

Build on the Organization's History and Collective Intelligence

> We spend a lot of time designing new pieces of work, but it's grounded in how we work together in relationships and processes. However, most of this is unconscious, and we don't reflect on what the relationships and processes are and where they get us. Once we reflect on our history, we can carry forward what we know deliberately and consciously. (Myron Rogers, meeting observations, May 15, 2001)

How people interpret the history of an organization springs from their definition of its identity and helps to answer the questions: "Who are we?" and "What are our strengths?" Often, organizations do not keep written archives of their history, but, rather, the history resides in the memories of individuals. As a result, people do not share a common "story" about the organization's history, which can result in disconnectedness and losing pieces of the past. Therefore, individuals' perceptions, experiences, and interpretations shape an organization's story and its history of events. An organization's stories remain with its staff members, and these stories influence people's beliefs about who they are and what they can do. These beliefs represent an organization's collective intelligence and, in turn, affect the choices an organization perceives and deems possible.

When staff members articulate a common history, they understand their work together as an organization. A mapped history keeps the organization on track and helps to create the organization's story openly. By developing a visible timeline of the organization, people might see why much of what they do is not working (e.g., work is counteracting), why work was done without everyone's knowledge, or how individuals can get involved in a piece of work. For a more in-depth discussion, an organization can look at the mapped history in relation to identity, information, and relationships. Furthermore, the history gives the context and the background to new initiatives and, therefore, provides an explanation as to why leaders in an organization make the choices that they do. By providing context, or history, there is more understanding.

For example, Mr. Rogers facilitated an exercise with MDE staff in mapping their history of work related to low-performing schools. Mr. Rogers asked members to capture "goals/results, projects/strategies, key events, key people/groups, products/services/sites, earning, leaders, critical decisions and policy events" over a 20-year period (group work, meeting observations, May 15, 2001). The exercise provided a platform for members to see how far MDE had come and what it had learned about low-performing schools. Based on what team members discovered during the history-mapping exercise, members realized that their work was much broader than focusing on low-performing schools specifically. This realization generated an in-depth discussion about the department's school improvement work and what role it had historically played in supporting all schools, not just low-performing schools.

Understand the Process that Produces a Product

As with any system, we witness change at the material level, although it is caused by processes that are immaterial (Wheatley, 1999). The living-systems approach suggests that in order to create meaningful, organizational change, we must look beyond the products of organizations to the processes that give rise to them. It is important for organizations to recognize the significance of the processes they use to conduct their work:

> If you are trying to do something collaboratively, you can't dictate how it happens. The process in which collaboration develops has to be collaborative itself…. The process districts engage in to develop their plans will mirror the process that [MDE] is engaged in to develop its comprehensive plan. . . . This isn't just about you building this plan, but getting knowledge about the process for going about developing a plan that you can share with districts — it's about how you fought your way through the process. (Myron Rogers, meeting observation, May 21, 2002)

In a learning organization, staff members value both the processes and products involved in their work. When an organization develops a product, it is only as good as the process that was used to create it. The product is congruent with the process. When people get results that are not intended, staff members in a learning organization explore without judgment what really went on during the development process, rather than casting blame. When judgment, punishment, and hierarchy are present, frequently no learning takes place and the truth about what happened is not revealed. Individuals also need to know that there is room for learning and growth during the development process. Members of a learning organization prioritize the *process* for conducting their work, not just the work itself. In order to affect the quality of the product, individuals must engage in new ways of working together, otherwise the same results will be realized.

Individuals learn new ways of working together by "being in the work." That is, people can learn about the process (e.g., sharing information, collaborative planning, building relationships) while focusing on the content (e.g., low-performing schools, accountability). For example, during meetings with Mr. Rogers, MDE would engage in an activity or in dialogue about their work and then reflect on how the activity or dialogue generated important information about identity, information, or relationship issues in the organization. By doing this, staff developed a better understanding of how they could improve how they worked together.

Make Sense of Information

In any change process, individuals need opportunities to actively comprehend what is happening. This requires time for individuals to delve into the relevant information and engage in meaningful dialogue. Reading material alone is not enough. A learning organization engages individuals in the change process by providing them with opportunities to share information and to think reflectively and critically about what it means for them individually and collectively as an organization.

Moving forward in a learning organization requires deliberate intentions and a shared understanding about the purpose and outcomes of the organization. Individuals need to explore what the proposed change means for them and their own work as well as what the implications are for the organization. Often, people need methods for processing large amounts of information in a non-linear way. Examples of these methods, such as the World Café or matrix development activity, are described in the following section on guiding practices.

Once people connect personally to new information or prospects of change, they can commit themselves to the process. As Wheatley (1999) states:

> Therefore, we cannot talk people into our version of reality because truly nothing is real for them if they haven't created it. People can only experience a proposed plan by interacting with it, by evoking its possibilities through their personal processes of observation. (pp. 68–69)

Move from Silos to Collaborations

> Silos get named not because of the way that they look, but because of the way we behave in them. (Myron Rogers, MDE meeting observations, May 21, 2002)

In an organization divided into silos, or fragmented, functional teams, leadership resides in a single authority. Knowledge is not shared throughout the organization, and individuals in separate silos rarely know about each other's work with any depth. People who work in consolidated silos are accountable to their leaders only, not to each other or to the organization. When the work gets separated from the broader work of an organization, people create an entrenched identity that is stronger than what the overall organization is trying to achieve. An organization in silos is structured to deepen fragmented identities. Relationships will be potentially stronger where local identities are formed, and there will be more conflict across local identities. Often these individualized, professional identities result in mutual competition and conflict.

In a learning organization, individuals move from getting "my" work to getting "our" work done. The work is about the department, regardless of individual responsibilities. This means that individuals possess a greater sense of "who" the organization is.

GUIDING PRACTICES

The change agent's task in facilitating the change process is to design practices that reinforce the guiding principles previously described. The guiding practices described in this section engage an organization in generating new information and knowledge and lead an organization to

- go where the energy is,
- get the right people to the table,
- build on the organization's history and collective intelligence,
- understand the process that produces a product,
- make sense of information, and
- move from silos to collaborations.

The process that an organization uses to define its work makes a difference in terms of the outcome or product. Therefore, a learning organization focuses on *how* it works, not just *what* it produces. Traditionally, individuals approach a piece of work by defining the purpose, outcomes, and steps for reaching goals. However, people often need a non-linear way to illuminate an integrated picture of the work. Dialogue is the core of the process and provides the foundation for each of the following practices. Through the course of dialogue, participants nourish the web of relationships and engage in reflective practices that lead to a shared view of reality. These practices provide opportunities for people to discover what unifies them and to access the energy in the organization.

Four of these practices — dialogue design, After-Action Review, the World Café, and Open Spaces — are widely used in various forms by general audiences and are all used in Mr. Rogers's living-systems approach. Three of the practices — design teams, design labs, and matrices — were created by Mr. Rogers in order to address the guiding principles and the identity, information, and relationship domains specifically.

Dialogue Design

A well-designed dialogue creates the conditions through which a change agent can engender participant interaction and meaningful conversation.[3] One approach to designing dialogue involves the change agent in developing questions that promote reflection, introspection, and examination of individual and group assumptions. A "true" question — one that we really don't know the answer to — generates energy. For example, "What kind of difference does MDE want to make in education?" and "What could MDE's policy role be in supporting school improvement?" both ask participants to explore new possibilities. The questions, therefore, guide discussion not about what's wrong or how to fix it, but rather, about what's possible. A good question is one that allows people to make sense of information by connecting the issue of interest to their own work and to the organization's work.

Another important aspect of designing a dialogue is how a change agent organizes the structure of meetings to allow meaningful group processing for large and small groups. The change agent must determine when it is appropriate for participants to engage in small-group discussion versus large-group information sharing. A combination of both approaches may be an efficient method for productively processing large amounts of information.

For example, MDE used a "checking-in" exercise to promote honest dialogue when the group seemed a bit disconnected. During this exercise, group members responded both personally and professionally to the question, "What was most significant in your work or personal life last year?" During the checking-in process, people did not respond to each other's comments, which helped ensure that everyone had a voice and no one expressed judgment. Checking-in exercises such as this one reveal commonalities among participants and help surface issues that have been overlooked. This process directly addresses the relationships among the people in the room and often reveals the common issues that everyone recognizes, but refrains from discussing.

Through the design of dialogue, it is possible for the change agent to create expanded learning networks that extend well beyond the organization. The purpose of these networks is not to advocate or build consensus but, rather, to use dialogue to create meaningful group learning where there is a common basis. A change agent's role is to build the capacity of

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[3] For more information and links to resources on dialogue, visit www.turningtooneanother.net.

leaders in an organization to design conditions that engender meaningful dialogue both externally and internally.

After-Action Review

The After-Action Review[4] (AAR) is a reflective learning process developed by the U.S. Army. During an AAR, a group of individuals answer a series of questions about a past event. An event could be a formal engagement, a meeting, a change initiative, a process used to develop a product, etc. The purpose of this process is to identify — as a group — what just happened, why everyone thinks it happened, and what they learned. The process promotes collective understanding and learning.

Participants address three guiding questions in a deliberate and disciplined way: (1) What were the intended outcomes? (2) What was the process for doing the work? and (3) What were the unintended consequences? In addition, participants examine the underlining assumptions of the work (e.g., the assumptions that caused them to set these particular outcomes and the assumptions they hold about the clients or audience they serve). Participants in the AAR recognize all information as relevant; encourage truthful, honest communication; and remove any element of blame.

The AAR provides participants an opportunity to gain a deeper understanding of identity, information, and relationships. It is possible to reflect on the past event and see the organization's dynamics and patterns in these three areas. In the process, the group addresses identity issues by examining their actions and by uncovering how those actions reflect what the organization values and deems important. For instance, participants might realize that the group prioritized timeliness over quality in the rush to meet a product deadline.

In order to get all of the relevant information about the AAR event, participants must equalize the relationships among team members. Participants listen for what is not showing up in the information sharing, what is not being said, and why. The quality of the relationships in the room affects the information the review process generates — there must be trust in order for sharing and learning to occur.

MDE regularly conducts AARs for important events and initiatives that provide opportunities for reflection and learning. For example, MDE convened an AAR following the development and deployment of a statewide online database of school-level data. MDE also conducted an AAR after reorganizing its leadership structure in the department. MDE staff members use AARs as important learning tools for gaining clarity about what happened, how it happened, and what they might do differently next time.

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[4] For more information about the After-Action Review process, visit chap1.htmhttp://call.army.mil/products/spc_prod/tc25-20/

World Café

> If you believe that the health of education is related to the health of community, and if you believe that you are able to influence education, it depends on your ability to be a healthy community. How do you move more fully toward integrity and awareness — how do we move toward collective awareness? (Myron Rogers, meeting observations, January 22, 2001)

One solution for moving individuals toward collective awareness is to engage them in the World Café[5] — a process designed to call people into meaningful conversation. This is an opportunity for peers to engage in shared inquiry and networking in order to move towards a common identity about the topic of discussion. The café process can demonstrate what motivates people and what they feel passionate about. In a World Café, individuals participate as themselves, not in hierarchical work roles. The purpose is for participants to connect with themselves, with each other, and with a higher purpose.

For example, a World Café session might involve participants in addressing four key questions that reflect the identity, information, and relationship domains and that relate to an organization's piece of work:

(1) What's this work (e.g., vision, strategy, and opportunity)?

(2) What will be different because of this work (e.g., relationships, information, shared identity, outcomes, and capacity development)?

(3) Who needs to be part of this work (i.e., mapping out the system — define the system, define the relationships, define the intervention)? and

(4) How do we do this work (e.g., tactics, process) — what processes will we use?

Typically, the large group divides into smaller groups of four to five and begins addressing the questions. One person in each group takes notes and volunteers to be a host. After an extended period of time (e.g., 30 minutes), everyone, with the exception of the host, gets up and goes to another table. The host welcomes the new group and reviews what the previous group discussed. Then the group builds on that discussion and typically rotates twice more. For the final rotation, participants return to their first group to capture how the discussion progressed from the beginning of the café. After the rotations, the small groups share out to the large group. As a result of the café, participants often generate an abundant amount of information about the topic of interest, experience an integration of ideas, and reveal a complete picture of how they want to progress in the work.

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[5] For more information visit www.theworldcafe.com.

For example, MDE planned and facilitated an organization-wide "Vision-Mission-Values Café." Using the World Café format, facilitators engaged about two-thirds of the staff in dialogue about defining MDE's identity. The vision, mission, and value statements were used as a foundation for rich conversation about the identity of the organization and how work teams aligned with the broader purpose of the department. Furthermore, guiding questions such as, What do you think this department should be doing to affect education for your children or your grandchildren? were asked in order to ground the dialogue in the personal values of the participants. The overall purpose, in addition to revisiting the vision, mission, and value statements, was to expand the circles of dialogue within the department, to discover what people held as meaningful for the department's work, and to give everyone an opportunity to contribute to defining MDE. As a result of the café, participants discovered that they needed more opportunities for cross-group dialogue and learning.

Open Space

The Open Space[6] exercise is a practice that allows individuals to name an issue, theme, or inquiry and create a discussion group. It is a process that simulates a "Marketplace." Everyone writes down on a sheet of paper an issue, topic, or question that they want to investigate. Each person who wants to convene a discussion group around an issue announces the topic and briefly explains why it matters. The topic is then taped to the Marketplace Wall where the facilitator and participants combine related issues. People decide which topic they want to discuss, then move into groups, or the Open Space, for discussion. Everyone reconvenes to share out findings, big questions, and new issues. This practice is appropriate for creating reflection and identifying what the shared work is and where the energy in an organization is. It can be applied to more conceptual issues, but is most beneficial for generating meaningful discussion around actual work.

For example, during an MDE meeting, participants used the Open Space activity to generate discussion around topics that they felt passionate about. Participants proposed and discussed a variety of questions including, What do we mean by high academic achievement for *all* students? How do we promote conversations about cultural and racial diversity in the department? and How do we coordinate local, district, and state data collection efforts and reporting? The purpose of this activity was to engage staff in conversations about issues that interested them and that reflected who they were as an organization. Some groups discovered solutions to their questions, and others clarified key aspects of important issues. Through this activity participants were able to address what they valued (i.e., clarifying identity), share ideas and work experiences (i.e., sharing information), and communicate in an open and safe environment across work groups (i.e., building relationships).

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[6] For more information, visit http://www.ourfuture.com/osover.htm.

Design Teams

The role of the design team is to design and manage the meetings during which change work takes place. Design teams are a way for a larger group to go more deeply into advancing a piece of work without involving everyone in each step throughout the process. Design team members meet in-between large-group meetings to further specific pieces of work. This group carries out work that a larger group identifies during meetings and furthers the design and planning for future, large-group meetings. By using design teams as a strategy for facilitating the change process, participants maximize resources and give the work the attention that it needs.

The change agent or external consultant is a member of the design team; however, the emphasis is on members doing their own work. Individuals typically self-select to participate on a design team based on their interests and their work. A group of more than 10 members is hard to work with in an intimate space for a long time. The change agent builds team members' confidence in facilitation and encourages them to accept new challenges. A fully realized design team shares an understanding of the purpose of the work or meeting. As a result, members are able to integrate their own way of facilitating the process congruently and creatively with the rest of the team. If a design team is not clear and is not working collaboratively with a shared purpose, it is imperative that a strong leader carry the work forward.

Design teams are a way to enhance participants' awareness of the processes necessary for deep change and to build their capacity to design and facilitate these processes. The members of a good design team represent the organization or a subsection of it. This representation reflects the diverse perspectives, experiences, and leadership styles of the organization. Therefore, when the design team is working together, the same dynamics or culture of the organization will surface among members of the design team. Designing a meeting enables members to see what design challenges they will likely face when facilitating the meeting with additional participants.

Design team members learn how to identify issues in the organization and how to design meetings so that participants can authentically surface and address these issues. This allows design team members to reflect on and diagnose group development, which in turn, builds their capacity for designing and facilitating meetings. Design team members are a critical network of change agents that facilitate learning and complex growth in an organization. As they participate on their teams and in work throughout the organization, they bring their design team experiences with them.

Design Labs

Design labs are an effective method for staff to learn new ways of working together around a specific piece of work. A design lab focuses on the product and the process that is used to generate the product. Staff advance their current work and goals and build their capacity to collaborate. It is a laboratory environment for creating new knowledge and new capacity for designing, developing, and implementing work and planning processes that lead to achieving intended outcomes for everyone affected by the work. The design lab experience uses real work to develop real-time learning, as well as reflective practices to generalize learning to other endeavors. The lab produces specific work outcomes and increased organizational capacity to achieve intended outcomes in all forms of work.

More specifically, participants gain knowledge and skills in process design, a greater understanding of how individual roles feed into the collective, and a shared view of reality about the context in which the work takes place. Design labs are most effective when they are planned and organized by a design team. In organizing a design lab, one must consider who needs to be involved, what background information should be provided, how team members will interest people in participating in the lab, and what physical space and materials are needed for the meeting to run smoothly. Criteria for identifying people to participate in design labs include those who have the information, authority, or resources related to the work, those who are not on board or who will need to own the work in its implementation, those whose support is essential, those who will be affected by the work and who could benefit from the development process, and those who want to be there.

For example, Mr. Rogers worked with a MDE design team to conduct a two-day design lab. The purpose of the lab — as it connected to the real work of the organization — was to (1) develop organizational goals that provide a foundation for MDE's plan for school improvement, (2) increase understanding of how MDE staff will work together differently to move overarching goals forward, (3) increase awareness of how work connects across the department and to the greater whole, and (4) develop a better understanding of the design and implementation of collaborative work. During the design lab, participants engaged in a variety of activities including the World Café, a matrix exercise about cross-group goals, and Open Space. While focusing on the work of the organization, these activities addressed and surfaced identity, information, and relationship issues in the department. Through these activities, participants learned about the work of other teams; shared common hopes, concerns, and challenges about the work; broadened their perspective of the organization's work; and reflected on how they can work together more effectively. As a result of the design lab, MDE staff members developed meaningful organizational goals and increased their understanding of — and capacity to facilitate — the processes for achieving those goals.

Matrices

Matrices are used to create information from a group in a short period of time in an interactive way so that participants can see the whole or collective perspective of an organization. A matrix is a basic grid that is organized with headings for both rows and columns. For example, MDE staff members completed a matrix that had the organization's work teams listed as columns and organizational priorities, or themes, listed as rows.

Participants divided into work teams to discuss and list their goals, tasks, and initiatives underway and wrote them on sticky notes. They then placed them in the appropriate cell, thereby connecting their team work with an organizational theme. Another example of a matrix, as previously described, is uncovering the collective history of an organization by listing the decades across the columns and work groups across the rows. Work groups then place significant accomplishments, outcomes, and events in the corresponding cells.

Completing matrices as part of a large-group activity organizes and captures a lot of information in a non-linear way. It provides a real picture of an organization's interrelatedness and makes information available to a large group. Participants see where their work fits and how their work contributes to the whole. This process allows people to make sense of large amounts of information by themselves. Once a matrix is complete, participants are asked to make interpretations of what they see, giving special attention to congruence, conflict, synergy or opposition. This allows for both micro- and macro-perspectives, and usually results in participants asking new questions and expanding their perceptions of the work.

When people see new information in a matrix, it moves them out of certainty, because they realize that they have a limited sense of reality. Some people then experience frustration or confusion. It is at that point that learning occurs. It is also then that individuals may reform their picture of reality and their sense of identity.

IMPLEMENTING A LIVING-SYSTEMS APPROACH

This section presents guidance to change agents charged with implementing a living-systems approach to organizational change. It describes roles that the change agent might play during organizational change work. It also includes what a change agent needs to consider when initiating, and then implementing and sustaining, change work with organizations. This information stems from in-depth interviews with and observations of Myron Rogers, who developed this living-systems model of organizational change, and, likewise, reflects considerations for an external change agent.

THE ROLE OF THE CHANGE AGENT

The change agent takes on various roles in implementing a living-systems approach to organizational change. This monograph is intended for anyone catalyzing and implementing change, whether internal or external to organizations. However, it should be noted that internal and external change agents experience and engage in the change process in different contexts.

An internal change agent is strongly tied and committed to the outcome of the work and engages in the organization deeply and daily. This provides the internal consultant with an in-depth knowledge of organizational culture, history, project work, and politics. An internal change agent perceives the change process through the lens of his or her experiences in the organization. The external change agent is more likely to remain clear about how, why, and where the work is taking place. An external change agent is removed from the dynamics in the organization, which makes it easier to reflect back holistic observations, including those that may be difficult for people to hear. The external change agent is positioned to help develop an organization's self-reflective capacity by facilitating opportunities for deep reflection about where the organization is and what the organization is doing.

Change Agent as Reflector

Self-Reflection

Change agents are instruments for change who make choices about appropriate strategies, directions, and practices to guide organizations or groups. How change agents guide, perceive, make choices, and react to groups is shaped by both their professional and personal experiences. Change agents must be self-aware of the impacts they have on groups and the impacts groups have on them. Change agents must be able to see themselves in relation to a group or an organization — that is, how they contribute to the organization's ability to engage in deep reflection, how they collude with the organizational culture, how they react to groups, and how groups react to them. Myron Rogers states, "This work is an art, not a science…. Art does not lend itself to definitiveness, because it is always changing based on the practitioner's self-knowledge, individual practices, and who they are in the world." Although the discipline of the art may not change (i.e., guiding principles, practices, and implementation considerations), a change agent's personal understanding of what is happening with a group depends on his or her own ongoing capacity for deep reflection and learning. Self-awareness allows the change agent to detach from the organization and see it for what it is without personal judgment.

Group Reflection

The change agent's role involves helping individuals to see who they are based on their actions and what they do — not who they say they are or what they say they do. This requires the change agent to be a deep, active listener who does not judge the dialogue and who observes the lenses through which participants create their perceptions of the organization. The change agent uses practices that help individuals to expand their reality of the organization in order to see where it has a *choice* in defining what it is. With the development of collective consciousness and commitment about "who we are right now," people can choose to change and improve the congruence between who they say they are and what they actually do. When individuals reflect on the reality of their organization, they enhance their ability to see what is possible. Individuals reflect on how they can be in the work so that they can choose to participate in the change effort and in the learning that needs to take place.

Usually groups or organizations project frustration or concerns onto the change agent. The change agent must be centered enough not to react but, rather, to reflect these projections back for the group to own. The change agent models the behavior that is necessary for creating healthy relationships. In these instances, the change agent demonstrates the best way to talk about issues that surface by responding reflectively, openly, and honestly rather than defensively, judgmentally, or personally. This allows people to reflect on their own behaviors in relation to those of the change agent. This exemplifies why it is critical that both change agents and groups engage in ongoing reflection both personally and professionally.

Change Agent as Provocateur

The provocateur in the change process raises issues to the group in order to incite a response. Sometimes the change agent needs to deliberately say outrageous things that have a grain of truth, but that the group has not addressed. The goal for the provocateur is to get people engaged in defining and owning who they are in relation to the inciting statement. In response to a provoking comment, a change agent may typically hear group members respond about why the statement is true or untrue and why. This moves the dialogue into a discussion about the group's identity — who they are, what their purpose is, and what they value, for example.

Change Agent as Confronter

The confronter in the change process makes the invisible visible. Often times this results in "taking people exactly where they don't want to go," according to Myron Rogers. The change agent in this role confronts individuals or groups with what they've been avoiding and unveils what people would otherwise not see. Sometimes the things that organizations and leaders refuse to see is what keeps them held in the same place. These may be the embedded values, morals, or agreements of the group that are unsaid and unacknowledged, but that influence the direction and decision of the group. The confronter recognizes and states these things directly to individuals so that they become aware of critical undercurrents of their dialogue.

As a change agent, it can be difficult to uncover the "invisible." The practices mentioned previously are devices to help the change agent and the group to discover what they are avoiding. In order for a group to change, it must first recognize these invisible obstacles. Members of a learning organization seek to uncover and confront what may prevent them from moving forward.

Change Agent as Space Keeper

The space keeper in the change process provides groups with an environment for authentic dialogue. This involves the change agent leveling the playing field among participants and helping them to form and honor agreements. As a space keeper, the change agent supports an environment for mutual inquiry and considers how best to adjust that environment to accommodate the needs of large and small groups.

This may involve changing modalities for people, which might include creating an unfamiliar space at initial meetings that break the habits of "life as usual." This may involve bringing different forms of information into a room. This opens the space in which people are working so that people can incorporate more of who they are into dialogue.

Keeping the space for authentic dialogue often requires the change agent to hold people in an uncomfortable space. In this role, the change agent doesn't let people escape from depth. When people feel discomfort in group dialogue, they often use escape devices to remove themselves from the uncomfortable space. For instance, someone may try to simplify an intense discussion by summarizing "Well, things aren't really that bad." However, this is an escape mechanism that someone might use to steer the conversation away from an uncomfortable discussion.

As a confronter, a change agent names those escape behaviors for the group and acknowledges their discomfort. As a space keeper, the change agent holds the group away from judgment about the discussion and keeps them in a space where they can explore the issue and figure out the root of the discomfort.

INITIAL ASSESSMENT

Choosing Change

Deep change begins with organizational leaders who are dissatisfied with the current way of doing things or who have a vision of a new way of doing things. Even if change is imposed upon them through new policies or legislation or from changes in their community, leaders determine the extent to which they want to catalyze deep change. Many leaders hoping for significant change believe that it is possible to release the potential of their staff, but have been unsuccessful doing so in the past. Some of these leaders may have experienced what is possible when people live up to who they can be. They know it can be achieved; they just don't know how. Organizational leaders often seek to learn a different way of working. Hence, a fundamental condition for change work is that people select it for themselves. Organizations cannot be sold on creating change; however, organizational change is dependent on a leader who desires change, believes it is possible, and is committed to helping it happen.

Transparency

Organizational leaders must honor transparency in order to implement a living-systems approach to change. That is, leaders must be open and willing to remove any boundaries that might preclude organizational growth and learning. Often, the issue that organizational leaders think is the focus of change work is underpinned with deeper, more critical issues. Therefore, leaders must be willing to work with whatever issues surface during the change process. If there are boundaries that prevent a change agent and an organization from addressing the real issues, the change process will be stifled and unauthentic. During initial assessments, the change agent must determine the willingness of organizational leaders to be transparent in order to uncover real issues. To do this, the change agent can gather information by observing body language and listening to what and how leaders speak. Are their interactions with other staff and the change agent formal, guarded, and defensive, or intimate, reflective, and open? Change agents also can reflect back what they hear and observe during initial meetings with leaders in order to determine if they provoked the leaders' defensiveness or openness to further reflection.

New Ways of Thinking

People usually have their own beliefs about how and why change happens, even if they haven't openly articulated it. They also have their own experiences with and perceptions of change. It is difficult to predict what an individual or group is capable of until they are cast into the change process. For example, sometimes people need to experience a crisis in order to experience true transformation. People may not begin change work with a desire for change if they haven't made a personal connection to the work. In the living-systems approach, is it important for people to at least be open to change. Rather than plan a course of work with an organization, it is important for the change agent to convene a leadership meeting or education forum to present general ideas and practical terms about the living-systems approach.

The first meeting with a group typically is organized around four components:

1. How the System Works 101 — introduces theory and dynamics of change in a living system including the identity, information, and relationship domains;

2. How *This* System Works 101 — applies concepts to the shared experience of the organization and examines current agreements, dynamics, and issues of the organization;

3. How to Work the System — identifies concepts, practices, and processes for working with complex systems and applies to current initiatives underway; and

4. How Do I Work In and With the System — explores the role of leaders in complex systems, personal implications for change, and what individuals need from their relationships with each other.

This living-systems theory articulates a world view of how one understands the dynamics of an organization. For many people, the change agent is presenting a new way of thinking about systems in a very practical manner. The change agent provides theoretical models and concrete examples of how one might do things differently and actualize the theories (e.g., organic systems vs. Newtonian mechanics). During this meeting, the change agent can assess if the living-systems approach resonates with the group and provokes them to see the organization differently. Typically, if enough people are unable to shift their thinking and be open to working together differently, the work doesn't proceed. It is not expected that everyone will be on board, but even those who are resistant to change may see the need for improvement. Thus, it is important for the change agent to identify what holds energy for those people in order to engage them. If the group resonates with the living-systems approach, the change agent continues the work.

IMPLEMENTING AND SUSTAINING THE WORK

Connecting to Real Work

Initial change work with an organization usually involves educating participants about the living-systems approach to change, as previously described. During this time, the change agent surfaces what the focus of the change work could be and how it could be accomplished. The living-systems approach to organizational change takes place around real work in the organization. This way, participants can recognize and reflect on what they actually do, rather than what they say they do. Change agents who use the living-systems approach depend on individuals within the organization to provide the content expertise while they facilitate processes for carrying out and reflecting on the work.

Continually Assessing Organizational Needs

Throughout the organizational change process, the change agent observes what's going on within the identity, information, and relationship domains. Because these domains neither occur nor are addressed in isolation of each other, the change agent must pay close attention to where the organization or group is. The change agent assesses if people are clear about their work or if there is a sense of confusion, multiple interpretations, or heavy resistance. This can indicate many things, such as a fragmented organizational identity, limited information sharing, and poor relationships.

The change agent also observes the level of trust among individuals in the organization and, when conflict arises, watches the openness or reticence of the group in its discussion. If relationship issues pervade an organization, it is difficult to work on them directly. Often identity issues are the source of relationship issues. For instance, a competitive organization might exhibit strained relationships because people don't see themselves in shared work. In order to address this identity issue, people have to engage in dialogue about what they value so that they can begin to understand what they are doing and why it is important to the organization. This, in turn, improves relationships as individuals develop a deeper, organization-wide understanding of their work and how it connects to the work of others, and how it connects to the overall purpose and values of the organization. Hence, people begin to emphasize their connections across the organization rather than focusing on competitive differences that engender mistrust.

The change agent also examines the organizational structure in order to identify the cultural behavior that most likely will be present. For instance, a hierarchical organization that is organized into silos — that does not work in cross functional teams — most likely will experience a fragmented identity and the flow of information will be limited. Individual silos or teams will develop their own local identities, which will serve as their lens for interpreting information generated from other parts of the organization. This can result in misinterpretation of the information that is shared, mistrust for those who control the dissemination of information, and tension across teams. Many organizations are organized this way by the heritage or history of the organization.

The change agent also looks at the structures, processes, and systems of the organization and assesses their congruence with what the organization values. For example, if the organization *says* it values distributed leadership, is there an organizational structure, shared decision-making forums, and authority allocation that supports it? If not, the organization most likely will experience many issues that need to be addressed by looking more closely into the identity, information, and relationship domains.

Implementing the Change Process

The change agent does not hold the answers to an organization's dilemma but, rather, provides the process framework for addressing it. There is no prescribed sequence for implementing a living-systems approach with an organization. The effectiveness of this approach depends on the change agent's ability to identify and respond to the unique needs and characteristics of the organization. As previously mentioned, much of the initial work involves educating participants about living-systems theory and how it relates to their organization. The change agent continually identifies the domains in which organizational issues surface and uses the previously described practices to help an organization enact the living-systems guiding principles. Throughout the change process, the change agent guides participants to generate new knowledge through reflection and learning, see the organization as a collective whole and the impact individuals have on each other, and translate that knowledge into action. This section is intended to guide the change agent in facilitating knowledge generation through reflection and learning based on guiding principles and practices. This section also highlights key implementation issues for the change agent to be mindful of as the change work unfolds.

Generating Knowledge

Organizational change occurs as individuals generate and respond to new information and develop ways to sustain the change process. The change agent helps the organization in creating an information-rich environment, interpreting what that information is about, learning from those interpretations, and turning new knowledge into action. The change agent facilitates an inquiry process to enhance individuals' capacities for collective reflection about who they are and what they are doing. The living-systems approach is, in part, about how you get individuals to recognize, feel, and understand the whole organization as one dynamic, interconnected system.

It is critical that people engage in real work in order to facilitate the change process. When people engage in reflection while doing real work, they gain a deeper understanding of how the specific details of pieces of work connect to the larger organizational effort. It is difficult to help individuals see the whole of the organization by teaching theory or facilitating small-group discussion with summarized reporting. According to this living-systems approach, individuals must participate in an inquiry process that allows them to look at what has been done over time and to think more holistically about the web-like, connected nature of systems.

Visual representation, or mapping, is the most effective way for people to sense the whole of the organization in a non-linear format. This allows people to disengage from the linearity, or sequence, of events to examine the patterns across actions, decision making, and outcomes of a project. Inquiry through mapping allows participants to uncover how things were carried out and how decisions were made. Rather than using mapping at a project level, a more complex level of mapping is to look at the patterns of the organizational culture as a whole. Through this process of inquiry and knowledge generation, individuals begin to understand how they collude with a group or a whole culture. They also begin to see the underlying dynamics at play in the organization, and they learn how to change them. The method or sophistication of mapping (e.g., matrix) does not matter, and over time the contents of the mapping expand and contract. This necessitates that graphic recorders track and keep current documentation of activities so that people have the information they need to understand and reflect on what is happening with a project or within the organization.

Linking Guiding Practices to Guiding Principles

A change agent can use any of the previously described guiding practices to engage an organization or group in generating new information and knowledge. The practices a change agent chooses should be congruent with the organization's work and how it functions. If a change agent perceives the need to work with an organization or a group more specifically around one of the key principles, some of the guiding practices are more appropriate than others. Given the dynamic nature of group processing and organizational change, it should be noted that each guiding practice to some extent addresses each guiding principle. Table 1 presents the guiding practices that are most appropriate for addressing specific guiding principles; this information is intended to assist a change agent in making decisions about which guiding practice to use.

It is important for the change agent to keep in mind that these guiding practices are not an exhaustive list of tools to use with organizations. They merely represent the practices observed in McREL's case study, which serves as the basis for this monograph. Change agents use a variety of group-processing practices that may expand beyond those presented in this monograph. The key is to choose a practice that aligns with a guiding principle or domain within the living-systems framework.

Table 1. Linking Guiding Practices to Guiding Principles

Guiding Practices (…the following practices would be appropriate)	Guiding Principles (if the organization needs to…)					
	Go where the energy is	**Expand the Group**	**Build on Collective History**	**Understand and Reflect on Processes**	**Make Sense of Information**	**Move from Silos to Collaboration s**
Dialogue Design	X		X	X	X	X
After-Action Review			X	X	X	
World Café	X	X	X		X	
Open Space	X				X	
Design Teams	X			X		X
Design Labs		X		X	X	X
Matrices			X		X	

Monitoring Implementation Issues

As change work moves forward, it is critical for the change agent to be mindful of implementation issues that may surface and impede the change process. These issues, if left unnoticed and unaddressed, may affect the extent to which deep change is possible for an organization.

Stifling inquiry. When individuals fail to acknowledge the reality of others in the organization, they stifle the organizational change process. Building communication and trust is critical to generating knowledge, reflection, and growth. Thus, when people use different devices for shutting down conversations, such as changing the subject, getting defensive, making deconstructive comments, or by saying "it's not really that bad," they stop the process of inquiry. In order to understand deeply an organization's issues, people need to discuss all sides of an issue without the threat of judgment or blame. If they feel critiqued or mistrusting, they will be unable to share themselves fully with the organization.

Lack of commitment. An organization's engagement with a change agent should be active, committed, and move to deeper levels as the work progresses. If an organization engages the change agent in an inconsistent manner or disconnects from the change agent, this may be an indication that the organization is not fully committed to organizational change, although the organization may have adopted components of the approach.

Hidden issues. Knowing when and how to modify the change process requires the change agent to carefully observe the implementation of the work. When an issue surfaces during a meeting that is a barrier to moving the work forward, the change agent must acknowledge it for the group. If a relationship issue arises that affects communication and trust, the group can help to liberate the organization by discussing it in an open and honest manner. These meeting interruptions reflect the behavior and culture of the organization, so they are an important opportunity for reflection and growth. This living-systems approach focuses on engaging in real work, but the purpose of it is to get into the conversations that matter, which typically are not about the real work. For example, an organization may focus on leadership work, but what will surface in that work is the truth of the organization's culture.

When a change agent observes surfacing issues in meetings, he or she must acknowledge them and present them to the group within the context of the work and in a way that participants can process it. The change agent echoes back for the group or individual what was observed, including what was said and how it impacted others, and asks the group or person to reflect on what they think it was about. However, in order for a group to engage in deeper inquiry to discover greater meaning, they must have a shared agreement that as a group they will be open to exploring these conversations honestly and openly. If a group or individual resists the opportunity for deeper inquiry, the change agent should leave it alone or wait for another opportunity the next time it surfaces.

Sustaining the Change Process

A change agent or external consultant who works with an organization in implementing a living-systems approach to change is engaged in a long-term process, because the nature of the work keeps changing. Once the organization is engaged in a collaborative work process and ongoing learning, the change agent may work solely with a design team in a coaching role in order to further enhance the organization's ability to sustain its work. Long-term, intensive involvement with a change agent can create dependence rather than independence for an organization. Therefore, the change agent needs to allow individuals to have the kinds of experiences and learning opportunities that build their confidence, ownership, and capacity to carry the work forward.

The work of the change agent or external consultant is complete when the organization functions as a creative and dynamic system. A change agent watches the work take on its own life where individuals work together in a natural and integrated way; pay attention to identity, information, and relationships; measure organizational outcomes in a way that is congruent with organizational values and purpose; and design processes that support reflective learning and collaboration. Thus, there is coherence between what an organization says it values and what it actually does. Individuals exhibit ownership and engagement in organizational change when they know how to do the work and understand why the way that they are doing the work is beneficial.

SUMMARY

This monograph presents a living-systems approach to organizational change based on a two-year case study. It includes a description of the underlining theoretical constructs, the guiding principles, the guiding practices, implementation characteristics, and the role of the change agent. The living-systems approach to organizational change focuses on three interrelated domains of identity, information, and relationships:

- The *identity* of an organization is based on what it values and what holds meaning for it. An organization's identity should be reflected in what it does and what it says it does. Key questions related to an organization's identity are, Who are we? and What is our purpose?

- The *information* domain focuses on how information flows, how it is collected, who needs to know what and how they need to know. The information domain emphasizes *what* information staff members use and *how* they use it to act (e.g., making decisions, planning work, identifying issues). A key question related to an organization's information is, What do we know and how do we know it?

- The *relationship* domain centers on trust within the organization and what people feel free to share with one another. Relationships are the pathways to the intelligence that is within the organization. A key question related to the relationship domain is, How do we need to be together in the work?

The guiding principles provide the foundation upon which a change agent can work with an organization to address the identity, information, and relationship domains:

- *Going where the energy is* in an organization allows people to identify what they care about, what motivates them, and what they see as priority areas of work. People learn about the process of working together while engaging in the real work of the organization.

- *Getting the right people to the table* involves identifying and involving people who have the information an organization needs to further define its work, as well as an interest in the work.

- *Building on the organization's history and collective intelligence* allows individuals in an organization to understand the sum total of their work, provide a context for new work, and create an open and shared story among staff.

- *Understanding the process that produces a product* enables people to reflect on how they work together, develop new ways of working together more effectively, and collaborate to produce quality products and services that align with the higher purpose of the organization.

- *Making sense of information* promotes learning and greater understanding of the change process through meaningful interaction and dialogue.

- *Moving from silos to collaborations* breaks down entrenched identities and builds a collective vision by working collaboratively and purposefully across the organization.

The guiding practices of the living-systems approach center on meaningful dialogue. Through the course of conversation, leadership can nourish the web of relationships and provide opportunities for reflective practice that promotes information sharing and further defines an organization's identity. Practices include:

- *Dialogue design* that encourages meaningful conversation by asking the right questions and structuring opportunities for participant interaction;

- The *After-Action Review* to collectively — and without blame — uncover the intended outcomes and unintended consequences of a past event;

- The *World Café* to generate an abundant amount of information, experience an integration of ideas, and reveal a complete picture of how to progress in the work;

- *Open Spaces* to allow participants to engage in dialogue regarding emerging issues, questions, and topics connected to real work;

- *Design teams* to go more deeply into advancing a piece of work and to build capacity for identifying processes in order to surface and address organizational issues;

- *Design labs* to build participants' knowledge about process design and the impact of process on product while advancing real work; and

- *Matrices* to generate large amounts of information in a non-linear way so that participants can see the broader picture of how their work interrelates.

The implementation of a living-systems approach is dynamic, non-prescriptive, non-sequential, and takes place around highly-valued work of the organization. The change agent using this approach implements practices that guide participants to (1) see the organization as a whole and the impact people have on each other, (2) generate new knowledge through reflection and learning, and (3) translate that knowledge into action. In addition to using the guiding principles and practices for facilitating the change process, the change agent takes on various roles such as the reflector, provocateur, the confronter, and the space keeper:

- The *reflector* facilitates both self- and group reflection in order to promote recognition of issues and deep learning.
- The *provocateur* engages people in defining and owning who they are by inciting their response to an outrageous statement that the facilitator makes.
- The *confronter* takes people exactly where they don't want to go in a discussion and unveils what people avoid or would not see otherwise.
- The *space keeper* provides groups with an environment for authentic dialogue, even when it is uncomfortable for people.

IMPLICATIONS AND RECOMMENDATIONS

Education organizations — whether schools, districts, state education departments, or other supporting agencies — will continually experience the need for deep change given constant external pressures. Although this monograph reflects the implementation of this particular living-systems approach within an education context, change agents have applied living-systems theory in a variety of contexts including business, health, and community activism. An organizational change approach such as this living-systems model, offers principles and practices that address the fundamental aspects of any organization.

The elements of this living-systems model are relevant in any change context and promote organizational growth through individual and collective learning and awareness. In several ways, this living-systems approach reflects common organizational change principles such as promoting reflection and learning; identifying values and priorities; accessing the knowledge in the organization; and working with resistance, disequilibrium, and challenges (Quinn, 1996; Fullan, 1993; Senge, 1990; Nadler, Shaw, & Walton, 1995; Heifetz, 1994). What sets this approach apart from the rest is its explicit theoretical framework based on the identity, information, and relationship domains, which align with guiding principles, practices, implementation nuances, and roles for the change agent. Whereas many leaders focus on changing the structures, systems, and processes in an organization (Nadler et al., 1995), the living-systems approach goes a step beyond — and a step deeper — to explore how each of these is shaped by an organization's identity, information, and relationships.

Based on McREL's research, this approach seems appropriate for leaders and organizations who

(1) know they can't find the answers themselves;

(2) have struggled unsuccessfully with change in the past;

(3) are in survival mode and must change quickly;

(4) believe in the possibility of working together in new ways to realize greater potential;

(5) are open and willing to engage in deep reflection to promote learning — especially when it generates discomfort, disequilibrium, and confusion;

(6) prioritize this work enough to commit the resources and time necessary for it;

(7) recognize and value the role of the change agent; and/or

(8) are willing to act on the new knowledge they develop from the change process.

This living-systems approach to change is not an "add-on" to organizational practices. It is a way of knowing and being that reflects fundamental qualities of living systems such as the need to create, preserve, discover, relate, find meaning, and grow. This living-systems approach would not be appropriate for organizations looking for a "quick fix" or an easy solution for creating organizational change.

This living-systems model for organizational change can be defined, in part, by its guiding principles, practices, and roles of the change agent. However, the way in which change agents implement this approach is dynamic, fluid, evolving, and unique to each group or organization. Because change agents serve as the "instrument" for facilitating the change process, much of what change agents contribute to the process depends on their capacities for deep reflection, learning, and change both personally and professionally. Therefore, both the change agent and the context in which the approach is implemented influence the extent to which this living-systems approach promotes organizational learning and change. As such, future research needs to be conducted in order to examine the application of this approach in organizations with different characteristics that may influence the change process such as leadership practices, culture, external pressures, and organizational structure. Further research also needs to be conducted on the extent to which organizations sustain their integration of the principles and practices of a living-systems approach and the long-term benefits and effects that they experience as a result.

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