Theoretical Frameworks to Guide School Improvement

**Lisa Evans[1], Bill Thornton[2],
and Janet Usinger[2]**

Abstract

A firm grounding in change theory can provide educational leaders with an opportunity to orchestrate meaningful organizational improvements. This article provides an opportunity for practicing leaders to review four major theories of organizational change—continuous improvement, two approaches to organizational learning, and appreciative inquiry. These four theories were selected because of their emergence within the field of education, possible adaptability to school systems, and potential to support organizational change. Such theories can provide clear guidelines for successful organizational transformation, promote effective change management, and facilitate operative decision making.

Change constitutes an integral component of the educational landscape. In recent years, educational leaders have adopted and implemented practices designed to improve teaching and learning that parallel private sector efforts to promote organizational advancement. Whether these change efforts have been in response to U.S. federal mandates such as *No Child Left Behind* legislation or born of the initiative from individual school communities, change efforts have become recurring themes within the field. Research-based education, standards-based instruction, brain-compatible

[1]Toronto, Ontario, Canada
[2]University of Nevada, Reno, Reno, NV, USA

Corresponding Author:
Bill Thornton, Department of Educational Leadership, University of Nevada, Reno, Mail Stop 283, Reno, NV 89557, USA
Email: thorbill@unr.edu

instruction, authentic assessment, professional learning communities (PLCs), and multiple intelligences represent but a few of the initiatives implemented. Unfortunately, many leaders fail to link planned organizational changes with an appropriate theory of change, thus forfeiting opportunities to facilitate more effective and sustained improvement.

Fullan (2008b) noted that many school systems suffer from "initiativitis" (p. 1): the implementation of change effort after change effort without regard to how such efforts interact with each other, existing systems, or players within the organization. Often, such efforts create confusion, exhaust both the teacher and leadership corps, and produce minimal improvement. Spillane (2000) contended that initiatives often fail because those implementing change have incomplete knowledge or skills with regard to the underlying purpose of the change effort. In addition, many education leaders lack an understanding of the underlying theoretical structures associated with successful change. This is especially true for principals, who are at the heart of organizational change for our public schools.

Central to the ability of leaders to understand and implement complex change is a solid foundation in the theory of change. Organizational change can be greatly influenced by theoretical frameworks; however, within the educational environment, often, the focus of school reform has been on implementation of programs independent of appropriate theories of change. For some time, researchers and theorists have understood the importance of theory in relationship to planned organizational change. Gagliardi (1986) developed a conceptual framework to guide planned changes in organizational culture, while Pallot (1992) observed, ". . . a necessary first step in the development of a theoretical field is the formation of appropriate concepts, classifications and meanings" (p. 38). Greenwood and Hinings (1996) discussed the "contribution of institutional theory in order to understand radical organizational change" (p. 1041). An appropriate framework provides a basis to study complex interactions, key factors, and assumptions. Furthermore, a theoretical framework represents the collection of interrelated constructs to guide research, implementation, and evaluation.

Using theories of change to guide organizational development is not new; indeed, theories of change have been present in the literature for decades and are part of most educational leadership preparations programs. However, in a recent study of a large, urban school district in the United States, Evans (2010) found that principals and district leaders made statements that strongly suggested that leaders relied more on individualistic approaches to change rather than system-wide strategies based on a common, articulated framework. Furthermore, this individualistic implementation of change hampered the development of shared vision and district-wide leadership thus resulting in little organizational growth (Evans, Thornton, & Usinger, 2010).

A firm grounding in change theory can provide educational leaders with an opportunity to orchestrate meaningful organizational improvements. This article provides an opportunity for practicing leaders to review four major theories of organizational change—continuous improvement model by W. Edwards Deming, organizational learning by Chris Argyris and David Schön, learning organizations by Peter Senge,

and appreciative inquiry by David Cooperrider. These four theories were selected because of their emergence within the field of education, possible adaptability to school systems, and potential to support organizational change. These theories can provide clear guidelines for successful organizational transformation and effective change management.

Continuous Improvement Model by W. Edwards Deming

Deming (2000) discussed the concept of continuous improvement within his seminal work *Out of the Crisis*. Deming's continuous improvement model is based on his work with Japanese companies in a post–World War II environment and the application of the 14 key principles. Since then, several scholars have contributed to the theory of continuous improvement and have enhanced its usability across social science fields (Kelemen, 2003).

Deming (2000) offered 14 strategies to support continuous improvement in an organizational setting. These are (1) create constancy and purpose toward improvement of product and services, (2) adopt a new philosophy, (3) cease dependence on inspection, (4) end the practice of awarding business on the basis of price, (5) improve the system of production and service, (6) institute training on the job, (7) institute leadership, (8) drive out fear, (9) break down barriers between departments, (10) eliminate slogans and targets for production, (11) eliminate quotas and management by objectives, (12) remove barriers to pride in workmanship, (13) institute a program of education, and (14) include everyone in the transformation of the organization (pp. 23-24). He posited that if applied consistently by upper management, a shared vision representing these core values would evolve within the organization and would serve as the foundation of resulting quality organization.

Several of Deming's points are relevant in an educational context. The first point, constancy of purpose, asks leaders of organizations to be forward thinking and to envision the future of the organization. As stakeholders collectively imagine the possibilities for their organization, this shared vision drives subsequent actions. The same holds true for school systems. As leaders throughout a school system imagine what might be possible for students, the vision becomes the guiding force by which decisions are made.

Deming (2000) strongly encouraged organizations to eliminate the reliance on inspections to force quality. He stated, "Quality comes not from inspection, but from improvement of the production process" (p. 29). Professional development, appropriate processes, and stakeholder involvement encourage quality upfront and eliminate the need, in most cases, to inspect products and services on completion. As district leaders support and encourage distributed leadership throughout a school system, teachers become the prime *quality control* agents. PLCs and networks become forums by which teachers collectively analyze student outcomes and make adjustments to instruction when necessary for individual student success. As such, PLCs or other

collaborative structures can promote excellence through professional interactions; this is in contrast to directives by district and school administrators to reach arbitrary targets, which tend to force compliance rather than foster professional engagement. Furthermore, as teachers engage in a process of collaborative inquiry driven by authentic student work, they develop skills necessary to tailor instruction to individual students, respond to unique challenges of each school, and create plans of action that positively affect student achievement (Militello, Rallis, & Goldring, 2009).

Education of employees is the focus of several of Deming's points. In Point (6), Deming argues that all employees must be afforded appropriate training so they can perform well. Deming supported job-embedding training to improve job skills for all. In recent years, educators have discovered that job-embedded professional development is related to improved student performance. For some time, educators have known the value of job-embedded professional development (Sparks, 1994); however, the traditional paradigm of "educators sitting relatively passively while an 'expert' 'exposed' them to new ideas or 'trained' them in new practices" (p. 26) has not been successful. Job-embedded professional development occurs as educators are actively involved in the daily process of teaching; as such, it can focus on context related to a specific school. In addition, such approaches to professional development can apply adult learning theory as illustrated by Knowles (1980). Knowles posited that effective adult instruction should apply the following concepts: (a) adults learn best when they are self-directed, (b) past experiences can provide a basis to understand new information, (c) they are most ready to learn new information when they know that they need it, and (d) adults are problem-centered learners. Effective job-embedded professional development can increase the capacity of individual teachers, which in turn, enable teachers to more effectively meet the needs of students.

Point (7) distinguishes between supervision and leadership. Deming asserted that managers must be skilled in leadership to build the capacity of their workers. Managers must hold the company's vision and hold a systems view of the organization. Deming's Point (13) encourages organizations to support the continuing education of its managers. He asserted that only through education can managers broaden and deepen their understanding of various concepts that add value and promote continuous improvement. Within an educational setting, ongoing professional development for system- and school-based leaders is critical to improvement efforts. In this way, leaders can support collaborative inquiry in their school systems by developing structures to support that collaboration, promoting the development of common formative assessments, and building the capacity of new leaders to enhance the leadership capacity of the system (Reeves, 2010). Attention to experienced leaders' professional development remains an overlooked critical element in school improvement efforts.

Eliminating fear is another strategy that Deming (2000) suggested for transforming organizations. Fear within the workplace can be associated with several factors. Fear of knowledge, fear of losing one's job, fear of reprisals for offering suggestions, and fear of making mistakes permeate many organizations. Deming contended that

effective leaders use data and provide continuous open feedback to drive out fear. An effective principal would identify the source of fear and then specifically address its source. For example, if it was related to making a mistake, the principal would work to help the teacher develop methods to learn from mistakes, make improvements, and then reinforce a culture of learning from mistakes. Thus, leaders successfully promote effective change.

The current culture in education reinforced by *No Child Left Behind* often uses data to punish teachers and schools for failure. The challenge for a principal is to develop a positive culture throughout the school to promote effective use of data-based decision making. The principal must take each opportunity to illustrate how data can be used to improve instruction. As principals help teachers take ownership for not only analyzing data but also for designing and identifying data sources specific to their own students, relationships to data-based decisions, and its power to improve learning outcomes can transform teaching and learning (Wellman & Lipton, 2004).

Breaking down barriers between departments constitutes another strategy to transform school systems. Deming (2000) noted that leaders are often ignorant of the functions of and interconnectedness among departments. He proposed to counter this by promoting the development of teams that incorporate members from all departments to work on issues. Deming encouraged a system-wide approach to improvement rather than relying on incentives that do little to alter the underlying issue of substandard quality. Cross-curricular and grade-level teaming, as well as interschool and interdistrict networks, can contribute to a greater cohesiveness throughout a school system, act as a catalyst for deep and lasting improvement, advance equity and innovation, and increase motivation throughout the educational community (Hargreaves & Shirley, 2009).

Finally, Deming (2000) promoted a transformation process through which all members contribute to creating a shared vision of the organization. In his view, without an appropriate mental model and deep understanding of the 14 points by all members of the organization, change efforts will be unsuccessful.

Deming recommended an improvement cycle to provide a framework to guide change. Augmenting the Shewhart cycle, Deming designed what is now referred to as the plan-do-study-act cycle (Kelemen, 2003; see Figure 1 for an illustration of the model.) In this cycle, stakeholders expect continuous improvement through planned changes. Data and observations inform change that will most likely produce positive outcomes. Stakeholders enact the plan; often, the plans are small, which provide for quick cycles. This represents the "do" portion of the cycle. Once the change has been implemented, teams study its effect and collect and analyze various data. Subsequently, teams take action to either improve the process or institutionalize the practice.

Principals can use the plan-do-study-act cycle to promote continuous improvement of instruction. To illustrate, a teacher (or group of teachers) could develop a simple plan to improve reading instruction for a small group of students, design an implementation process, collect and study results (data), and finally, make a data-based decision on the next step. At each step, the principal would provide the structures, resources, and encouragement to promote this continuous cycle of inquiry.
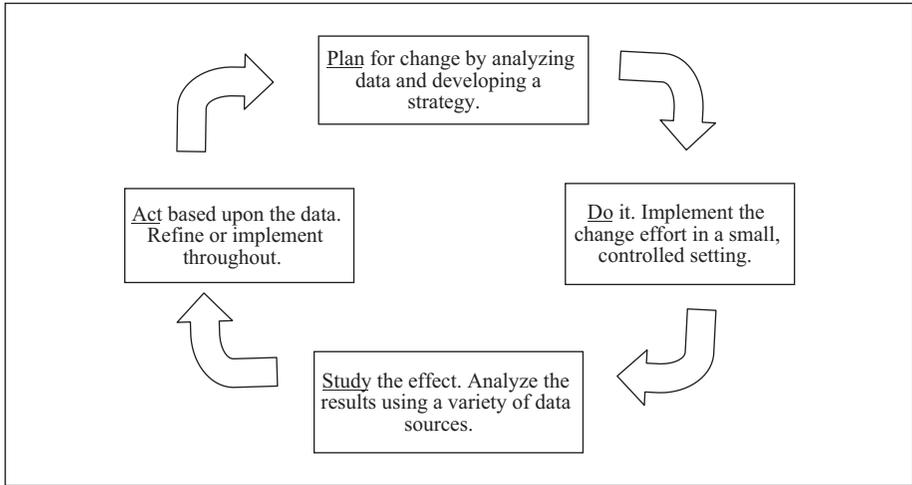
Figure 1. The Deming cycle showing the plan-do-study-act process of continuous improvement
Source. Adapted from Kelemen (2003, p. 26).

Organizational change theory has evolved since Deming first established the tenets that have come to be known as total quality management (TQM). Deming's ideas foreshadowed many current practices in education including fostering collaboration, developing shared vision, and promoting job-embedded staff development. Numerous educational leaders have adopted TQM to guide the improvement process, adapting this business model for the benefit of students.

Organizational Learning by Chris Argyris and Donald Schön

In the 1970s, Argyris and Schön (1996) introduced the theory that organizations possess the capacity to learn and grow in ways that mirror the learning of individuals. Since its original introduction in 1978, the theory of organizational learning has evolved with the assistance of many theorists. According to Argyris and Schön, organizational learning and individual learning are closely linked. However, in order for organizational learning to occur, an organization must employ strategies to systematically integrate individual and collective learning into skills and knowledge that will deeply affect the organization. To illustrate this point, an example from education is used. An individual teacher may decide to implement a new questioning strategy in the classroom that is based on the latest research in cognitive development. The teacher may take courses, visit other teachers in the area who have implemented such practices, and conduct several lessons using the new strategies. On reflection, the teacher determines that this strategy positively impacts students. Did this teacher
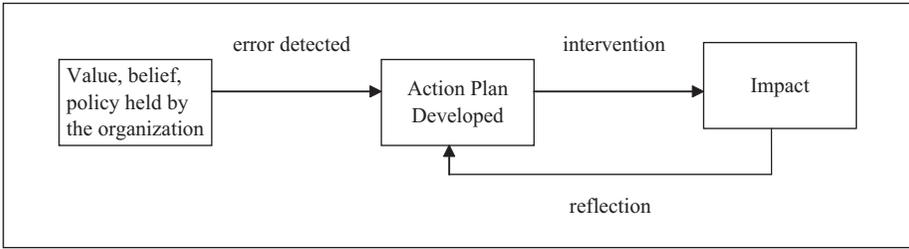
Figure 2. Single-loop learning results in no change of core values of an organization
Source. Adapted from http://www.infed.org/thinkers/argyris.htm

learn? Indeed, this teacher engaged in a series of events that caused him or her to question past practices, integrate new knowledge, and implement strategies for the benefit of students. Did this learning make an impact throughout the school or school district? In this case, Argyris and Schön would argue that organizational learning did not occur because the learning was isolated to an individual. However, this individual's learning could have impacted the organization if the school had structures in place to promote organizational learning.

The principal must create an organizational culture with appropriate norms; for example, an expectation that individual learning will be used to promote corresponding organizational learning. One approach is to use the train-the-trainer model. Teachers who attend workshops that are aligned with school goals would be expected to help others develop skills and knowledge. Parallel expectation would be appropriate for teachers who developed effective classroom techniques on their own. In addition, principals can promote the practice of collaborative inquiry and PLCs to integrate individual learning throughout the school system.

Argyris and Schön (1996) identified three types of organizational learning: single-loop learning, double-loop learning, and deutero-learning. Single-loop learning is a process designed to correct errors within an organization that does not impact beliefs, values, and policies that guide the organization. Schools commonly engage in single-loop learning. For example, a principal discovers that the night custodial staff failed to set the alarm. The principal meets with the staff to explain procedures and expectations to ensure safety of the school. The staff now has the information needed to follow the policy with regard to building security. In this illustration, an error was detected and corrected; however, no change to the organization's core beliefs, values, or policies occurred. Figure 2 illustrates that in the case of single-loop learning, the core values of the organization remain unaffected.

Double-loop learning, however, is a generative process that affects an organization at its core. Not only are action plans evaluated as in single-loop learning, but also the core values of the organization are similarly evaluated. When double-loop learning occurs, the values, beliefs, and policies that guide the organization shift. (See Figure 3 for a representation of double-loop learning.) A school board, for example, might hold
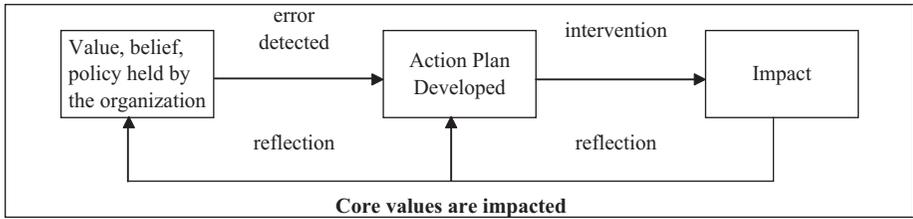
Figure 3. Double-loop learning results in changes of core values of an organization
Source. Adapted from http://www.infed.org/thinkers/argyris.htm

the belief that the only way to prepare students for college and the workplace is through attendance at a 4-year comprehensive high school. The board's policies and practices reflect this belief. Diplomas are only granted through 4-year high schools and funding is not allocated to alternative programs.

However, the district's dropout rate suggests that many students are not responding well to these policies. Several members of the administrative team believe students should be provided alternatives and board's policies should reflect this. The administrators gather data, provide examples from other districts, and engage the board in dialogue with regard to this issue. Based on this process, the board adopts policies that promote and support alternative paths to graduation. In this case, the core values of the organization changed based on the learning that occurred at the organizational level (double-looped learning).

Deutero-learning, a third way organizations learn, Argyris and Schön (1996) described as the manner in which organizations learn how to learn. Leaders of organizations actively aware of and committed to the learning process create structures for learning. Argyris and Schön noted several environmental factors that affect an organization's ability to learn effectively including lines of communication, information systems, the physical environment, procedures for engaging in inquiry, and incentives. These structures either encourage or inhibit organizational learning. However, the individual is regarded as the key to promotion of organizational learning.

Current theorists and practitioners in education have championed the concepts represented within Argyris and Schön's theory of organizational learning. Indeed, City, Elmore, Fiarman, and Teitel (2010) specifically addressed the need for district leadership to actively support effective instructional practices throughout an entire system. Fullen (2008b) also contended that organizational success depends on a system-wide approach to growth and learning and suggested that gains in student achievement will continue to occur in isolation unless leaders throughout school systems can embrace and effectively promote organizational learning.

Learning Organizations by Peter Senge

In 1990, Peter Senge, senior lecturer at Massachusetts Institute of Technology's Sloan School of Management, published *The Fifth Discipline: The Art & Practice of the*
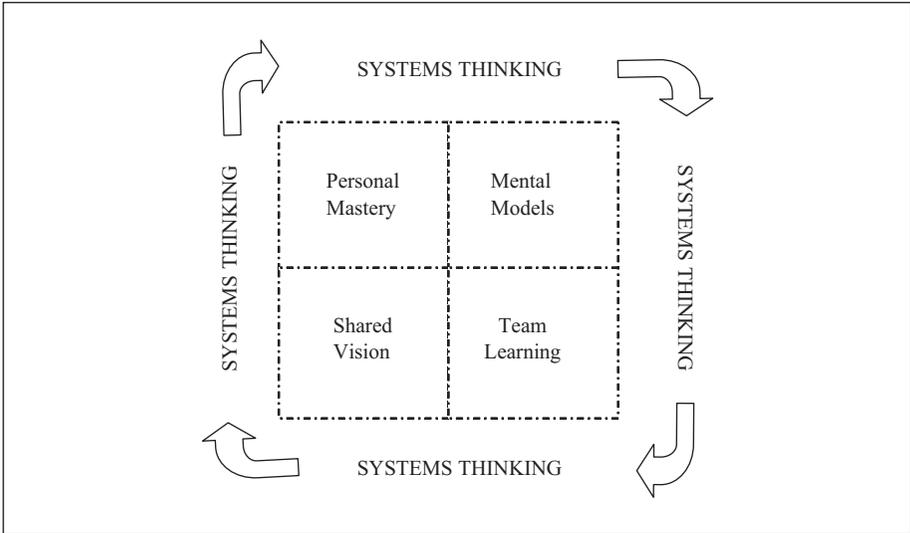
Figure 4. A model of the essential components of Senge's learning organization
Source. Adapted from http://www.12manage.com/methods_senge_five_disciplines.html

Learning Organization. In this work, he provided a theoretical framework for learning organizations by which members of an organization create structures designed to facilitate learning and adaptability to changing conditions. The first four components of learning organizations are personal mastery, mental models, shared vision, and team learning. The dashed lines in Figure 4 indicate that these components, though unique in their definitions, share elements with one another.

The fifth component, systems thinking, pervades all aspects of Senge's learning organization model. The components are interdependent; a learning organization cannot exist without each component working in concert, creating a culture where individual and organizational learning is normalized. When organizations function as learning organizations, their members are attuned to each of the elements and can respond to an ever-changing environment.

Personal mastery represents the first domain of a learning organization whereby leaders within the organization seek to support the personal development and fulfillment of all employees. Personal mastery can be defined as the dance between the vision individuals hold for themselves and the current reality in which they operate. According to Senge, personal mastery develops when a clear vision emerges. This personal vision then becomes a roadmap to guide and inspire people to reach their ideal state. The same can be said of organizations; a clear, articulated organizational vision offers great generative powers for all involved with that organization.

In addition to possessing a personal vision, those who practice personal mastery must also observe current reality as it is. Senge (2006) explained, "An accurate, insightful view of current reality is as important as a clear vision" (p. 144). In order to

observe current reality, one commits to seeking the truth. This is challenging because biases, assumptions, and perceptions shield people from the truth. Leaders of organizations can promote this aspect of personal mastery by creating cultures that value truth, encourage individuals to challenge the status quo and nonproductive mental models, and continuously compare the articulated vision with current reality. Senge concluded that no organization can force anyone to engage in the development of personal mastery; however, the leaders of any organization can model these tenets through their personal and professional behavior.

Principals can promote personal mastery through three main strategies. First, supervisors can use teacher evaluation tools to assist teachers to develop long-term goals for their own professional development. As principals continuously encourage their staffs to grow, learn, and develop as professionals, motivation for personal mastery is enhanced. Traditionally teachers have not viewed the evaluation process and supervision as vehicles to improve practice. These processes with inquiry based on collaboration with principals and alignment with school goals can prove to be a powerful tool to develop mastery and expertise (Danielson & McGreal, 2000; Marzano, Frontier, & Livingston, 2011).

In addition to supporting personal mastery through the evaluation process, principals can support collaborative inquiry based on authentic data to promote truth seeking among educators. Data alone cannot provide information. Reliable data must be neutral; it is the interpretation of data that leads to examining perceptions, biases, and assumptions that teachers bring with them. Wellman and Lipton (2004) explained, "Data are necessary to calibrate perception. Data, and forums for rich dialogue about the data, illuminate frames of reference and surface individual assumptions, creating space for new ideas and new ways of understanding" (p. 51). Principals play critical roles in establishing these forums and norms of collaboration to ensure that personal mastery is nurtured by examining long-held beliefs and assumptions.

Finally, leaders can foster personal mastery in their staffs by acting as role models. A principal's constant thirst for new knowledge and perspectives, effort to develop skills, and a keen interest in learning alongside teachers will not go unnoticed and will serve as an inspiration to others. As Fullan (2008a) observed, "learning is the work" (p. 76). It is this perpetual quest for precision that builds mastery and transformation. As principals attend to their own personal mastery, they strongly communicate the importance of life-long learning to all those they serve.

Mental models, the second component of Senge's theory of learning organizations, are the beliefs and assumptions that individuals hold about concepts and events that impact behavior. Mental models, Senge (2006) suggested, shape the manner in which organizations view reality. When stakeholders possess mental models that are misaligned with organizational goals, the organization fails to move forward. When organizations embrace mental models inconsistent with reality, they are impotent against outside forces. Unchallenged mental models can cripple an organization's capacity to imagine a different future.

Organizational leaders can develop structures that encourage the discussion of mental models. Senge (2006) contended that both inquiry and reflection are critical skills necessary to explore individual and organizational mental models. Senge emphasized the importance of revealing mental models:

> If managers "believe" their world views are facts rather than sets of assumptions, they will be not open to challenging those world views. If they lack the skills in inquiring into their and others' ways of thinking, they will be limited in experimenting collaboratively with new ways of thinking . . . if there is no established philosophy and understanding of mental models in the organization, people will misperceive the purpose of systems thinking . . . (p. 189)

To reiterate, by providing staff with opportunities to engage in professional dialogues about student learning, principals create an environment by which mental models are openly explored. Creating a safe environment to air deeply held beliefs and expose possible flaws requires principals to attune not only to the structural and procedural aspects of PLCs but also to the relational aspects of the players in their school community.

Shared vision constitutes the third component of effective learning organizations. As mentioned in both Deming's model of continuous improvement and Argyris and Schön's model of organizational learning, establishing a shared vision of an organization is critical for effective change. Shared vision, according to Senge (2006), is the collective caring behind the organization. When all members of an organization carry the same vision, this acts as a positive force for change.

Senge (2006) suggested that individuals range in their response toward the vision of an organization from "commitment" to "apathy" (pp. 203-204). As employees share in the co-creation of the vision, commitment to that vision increases. Organizational visions may be considered enlightened; however, when members respond apathetically and counter to the vision, organizational growth stagnates. Principals aware of this continuum can monitor their staffs, enrolling those deeply committed to the vision into key positions of distributed leadership. At the same time, principals can find strategic ways to communicate and reinforce the vision of the school with those staff members at the other end of the spectrum.

Within team learning, the fourth component of learning organizations, individuals deeply inquire into the organization to create a positive impact. Senge (2006) observed, "Team learning is the process of aligning and developing the capacity of a team to create the results its members truly desire" (p. 218). Senge further asserted that most decisions made by organizations are made by teams. Individual learning has little impact on an organization as a whole; conversely, the impact of team learning is great. Teams that are able to function well together, align their efforts toward the shared vision, and capitalize on the strengths of each member frequently produce positive systemic change within the organization.

Senge (2006) identified three conditions that promote team learning. The first condition requires teams to think deeply about complex issues that face the organization. Although this may seem obvious, Senge indicated that teams often become less intelligent than the individual members on the team. Second, effective coordination among team members must be present before team learning can occur. Team members must be able to rely on one another and be conscious of each other's efforts. In this way, a team's actions become coordinated in the same way a basketball team coordinates its plays. Finally, team members integrate into other teams within the organization. When teams exist in isolation from the work of others, their efforts remain outside the context of the greater organization. However, when teams integrate and coordinate their efforts, the organization benefits.

From an educational perspective, a school staff might be engaged in a variety of different collaborative inquiry projects based on grade-level or subject expectations. For example, to promote team learning, the principal could develop strategies to share the learning from one team to another. Monthly staff meetings devoted to professional development is one vehicle for integrating the learning of various teams. Online technology is another tool for integrating the learning of teams into the entire system. As people post their inquiry questions, data, and reflections, others can join the conversation and spread team learning to a much wider audience (Schrum & Levin, 2009).

Systems thinking, the final facet of learning organizations, pervades all aspects of learning organizations and is the foundation from which all other disciplines evolve. Senge (2006) asserted that as conditions in the world become more complex, the need for systems thinking becomes greater. Systems thinking is the ability to see situations from a holistic perspective. Every decision made and action taken within an organization impacts other elements of that organization. As systems thinking develops, members of an organization frame decisions in light of possible impacts on the rest of the system.

Educators navigate a variety of systems including schools, districts, states and provinces, and federal governments. Systems also exist in relationships—teacher-student, teacher-teacher, teacher-principal represent just a few of the human systems that exist. Awareness of these systems provides principals with opportunities to promote engaged decision making and to invite a broader views. For example, English language learners (ELLs) interface with many different systems within a school community. If the education of ELL student remains solely with the ELL teacher, an enormous amount of system interaction is lost. From a systems view, principals can work with their staffs to develop interdisciplinary teams to support ELLs thus encouraging a diverse perspective of these students. Support and interventions for students can emerge from awareness of factors inherent in a student's life. Such a systems approach is more likely to provide ELLs with appropriate, timely, and relevant interventions than those developed in isolation (Hamayan, Marler, Sanchez-Lopez, & Damico, 2007).

Appreciative Inquiry by David Cooperrider

Appreciative inquiry (AI), an organizational change framework principally developed by David Cooperrider, postulates that organizations change in the direction from

which they inquire. If members of an organization inquire into problems, then they will repeatedly find problems. However, if members inquire into the strengths and positive attributes of an organization, they will find more of those qualities (Hammond, 1998). Cooperrider, Whitney, and Stavros (2005) stated, "AI is based on the simple assumption that every organization has something that works well and these strengths can be the starting point for creating positive change" (p. 3). This truly embodies a fundamental shift in thinking from problem-solving approaches.

Five principles of human systems and change guide appreciative inquiry: (a) the constructionist principle, (b) the principle of simultaneity, (c) the poetic principle, (d) the anticipatory principle, and (e) the positive principle (Cooperrider & Whitney, 2007, pp. 83-84). The constructionist principle asserts that social knowledge and its construction are intricately woven with organizational change. The questions that members of an organization ask directly impact the direction the organization develops. Appreciative inquiry integrates imagination and reasoning to construct knowledge that is fundamentally different than traditional change strategies.

The principle of simultaneity illustrates that the process of inquiry cannot be separated from change processes. Cooperrider et al. (2005) asserted that the nature of inquiry directly impacts change efforts organizations choose to engage. They stated, "The seeds of change are the things people think and talk about, the things people discover and learn, and the things that inform dialogue and inspire images of the future" (p. 8). This dance between inquiry—what questions to ask—and change efforts is an ongoing component of appreciative inquiry.

In addition, the poetic principle provides guidance for appreciative inquiry. Within this framework, the organization itself becomes a source of inspiration; the organization's past, present, and future guide the inquiry process. Just as the interpretation of literature depends on the perspective used for analysis, the focus for inquiry is a matter of choice. Members of organizations choose to focus on problems and scarcity or on strengths and abundance.

The anticipatory principle of appreciative inquiry illustrates that having a strong, shared vision about the future is critical to creating that future. Actions taken in the present are guided by the vision for the future. Discussion, dialogue, and inquiry are tools that help members of any organization develop and sustain an effective shared vision.

The positive principle, the final principle that makes up the appreciative inquiry theoretical framework, emphasizes the importance of promoting joy within an organization. Positive inquiries lead to positive outcomes. Subsequently, positive outcomes promote creativity, energy, and joy within an organization. Cooperrider et al. (2005) asserted, ". . . momentum for change requires large amounts of positive affect and social bonding, attitudes such as hope, inspiration, and the sheer joy of creating with one another" (p. 9).

Cooperrider et al. (2005) defined four stages of appreciative inquiry that guide organizations on a transformative journey. (See Figure 5 for the four-dimensional appreciative inquiry cycle.) The first stage of appreciative inquiry is discovery during which members of an organization uncover and articulate the areas they excel and
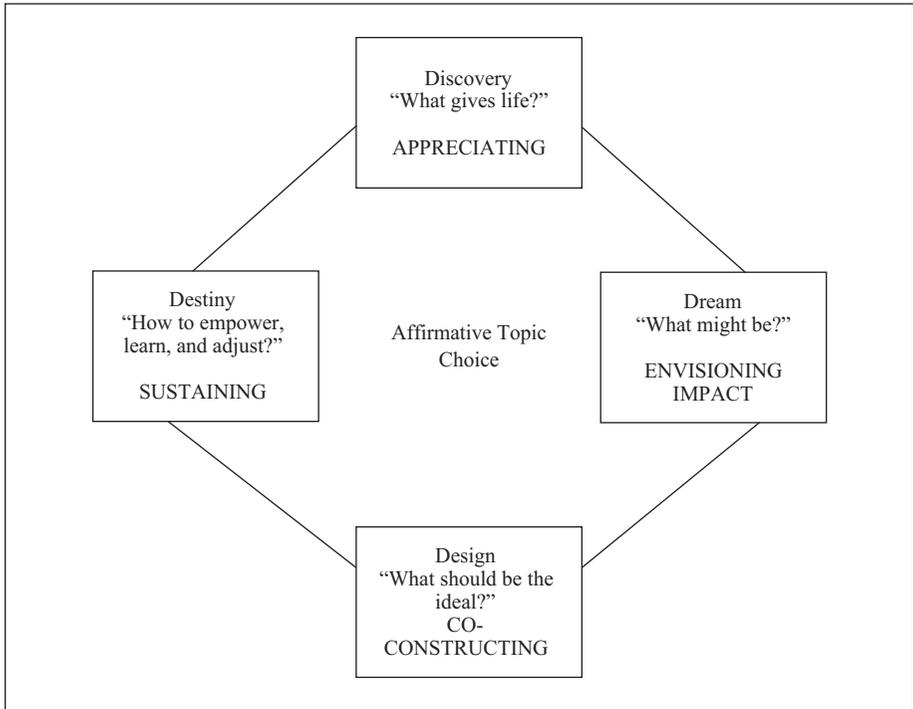
Figure 5. A model of the four essential components of appreciative inquiry
Source. Adapted from Cooperrider and Whitney (2007, p. 77).

value. Stories are told and artifacts displayed highlighting past accomplishments of the organization. Deeply held values and evidence demonstrating those values provide the foundation for further inquiry. Members of an organization consider all the strengths of the organization as they answer the question, "What do we do well?" Cooperrider et al. (2005) explained that during the discovery phase, stakeholders identify the organization's positive core. The positive core then becomes the foundation from which further inquiry occurs.

Cooperrider et al. (2005) stated, "The positive core lies at the heart of the appreciative inquiry process . . . this is where the organization has an opportunity to value its history and embrace novelty in transitioning into positive possibilities" (p. 30). The positive core can be evidenced in many ways including traditions, accomplishments, assets, and innovations.

Throughout the second stage of appreciative inquiry, dreaming, members of an organization imagine possibilities based on values and successes identified in the discovery phase. In addition to dreaming about possibilities, individuals challenge current reality. Building a shared vision for the future is critical in making deep organizational changes. As people dream about the possibilities for their organization, they set the

stage for implementation. Cooperrider et al. (2005) made a distinction between this stage and traditional vision setting strategies in other change theories. That is, they argued in appreciative inquiry, people within an organization build on past successes to develop a shared vision. During this phase, members of an organization imagine ways their organization can positively impact in the world. This creative process provides the framework for finding the organization's purpose and its highest potential.

The intention to create is a key component of design, the third stage of appreciative inquiry. Whitney (2004) maintained, "As members and stakeholders of an organization or community move from dream to design they are invited to an increased awareness of the power of intention and the relationship between intention and manifestation" (p. 143). During this stage, members of an organization engage in dialogue to determine structures the organization requires to reach the shared vision. Furthermore, the qualities of those structures are determined. For example, through discourse, members of an organization may decide that to manifest their dream, strong, shared leadership is necessary. During the design phase, both the structures and quality of those structures are determined.

Destiny represents the fourth stage of appreciative inquiry whereby stakeholders collaborate and discuss contributions each can make to the vision previously created. Commitment to action is made as the organization transforms into one in which members view everything through the appreciative inquiry lens. The enthusiasm, creativity, and motivation that emerged during the dreaming stage are put into action. Integral to this stage is sustainability through the development of structures and processes to support appreciative inquiry. These include the structure of meetings, interconnectedness of all facets of the organization, and language that individuals employ.

Appreciative inquiry asks principals and school staffs to start with strengths then move to possibilities. This can be a shift for some, especially in the recent era of accountability where deficits and failures have been highlighted. As school staffs move more deeply into collaborative inquiry models, principals can encourage them to explore students' strengths and excellence in instruction first. Once teachers experience success in a collaborative environment, the principal can invite the team to explore how to create and implement the school community vision.

Discussion

The four organizational change theories reviewed above illustrate shifts in thinking and behavior necessary to promote sustainable change. Whether explicitly stated or implied, the theoretical framework for planned program changes are critical because a theoretical framework provides a common language for discussion of issues related to planned changes. Implementation issues, challenges, successes, and shared vision are among the many elements of change that can be discussed with reference to a selected framework.

Each approach has pros and cons. Each will require principals to possess skills, knowledge, and a deep understanding, each of which are approach specific. In many

cases, the principals will need to engage in professional development to enhance critical skills necessary to orchestrate effective change. Skills such as team building, collaborative inquiry, and effective use of data must be well-established in school leaders regardless of choice of change theories. In addition, each approach will require time between implementation and results; these approaches are not quick fixes. Each of the four approaches requires individual learning, group learning, ongoing feedback, and transformation leadership.

The main focus of Deming's model is continuous improvement through the effective use of data. Given the current emphasis on data-based decision making in public schools, the Deming approach has many strengths. Deming stressed the importance of data to promote improvement, continuous improvement, and professional development. To effectively implement, the principal would need to become a data-based leader and encourage using data in a variety of forms among his or her staff; however, some principals will find this approach difficult.

Systems thinking and organizational learning promote both personal mastery and team learning. They promote self-managed groups, individual involvement, and use of building level vision. However, both would require shifts in organizational structures and changes in traditional approaches to teaching and learning.

Appreciative inquiry is a positive approach to solving organizational problems and is centered on the belief that inquiry into and discussions about organization strengths, successes, and values will be transformative; pride in the individual's organization is an untapped resource. As such, the principal needs special skills to engage, excite, and integrate communication into the change process. For many principals, effective use of appreciative inquiry will require special training.

Educational leaders have choice with regard to the particular change theory they employ. The four highlighted in this article are merely samples of the theories developed over the past several decades that have guided business and other leaders in developing successful, thriving organizations. Indeed, Fullen (2008a) even suggested that leaders create their own theories; however, practicing educational leaders will most likely find that application of an existing framework is more realistic.

The importance of grounding organizational change in theory cannot be overemphasized as it provides leaders with comprehensive structure to view organizational evolution and suggests appropriate options to positively impact the process. Fullen noted, ". . . if you have strong moral principles along with a theory of change (as distinct from just having the moral principles), you have a greater chance of improving your organization and its environment," (p. 125). As organizations develop, leaders can orchestrate and evaluate all aspects of change through their chosen framework, which provides structure to discuss positive outcomes, unintended consequences, evaluation considerations, and future aspirations. Furthermore, leaders will also discover that using a change framework provides an effective means for community change efforts with every stakeholder within the organization's sphere of influence, thus increasing the leader's ability to build a shared vision.

Declaration of Conflicting Interests

Funding

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Bios

Lisa Evans has several years experience as a teacher, and vice principal in public schools in U.S. She works as a consultant with public school in Canada.

Bill Thornton has served as principal, district office director, and superintendent; his research interest focus on leadership, organizational change, systems theory, program evaluation, school improvement, and educational reform.

Janet Usinger has held several leadership positions in higher education. She has an outreach teaching responsibility, working with K-12 and higher education institutions throughout Nevada with a foucs on P-16 articulation and leadership.