The field of education routinely adopts systems developed and used in other professions. The practice of instructional rounds comes from physicians. The use of consultancies and issues of accountability hails from corporate practices. Specific, unbending directives from a central office mimic a monarchy or dictatorship. Often these professional habits involve strategies for policing teachers rather than suggestions for specific growth as an organization. The theory of institutional growth as outlined in Senge's The Fifth Discipline: The Art and Practice of the Learning Organization would be far more beneficial for schools to adopt than most other routines and procedures taken from other professionals. That schools are not growing institutions is counterintuitive.

Senge defines a growing institution as one that "is continually expanding its capacity to create its future" (Senge 2006, 14). To achieve this goal, he identifies five components or disciplines that must be followed; if all are not followed, the depth of learning will be compromised. If the five disciplines are followed as intended and not in isolation, the potential for school improvement is great, and teachers will become more engaged in helping create a successful environment for students and themselves to learn.

**Systems Thinking**

The first discipline, systems thinking, is the conceptual framework for an organization. It is the discipline that consists of the interrelatedness of the various

The model of Peter Senge's The Fifth Discipline: The Art and Practice of the Learning Organization has successfully been used in the transformation of corporations into learning organizations. This article outlines how his model of leadership applies to schools and defines the obstacles which impede its implementation in education.
parts of the organization. The various departments and divisions of organizations are interdependent on one another and approached as such (Senge 2006). In schools, it is the realization that the first person a student sees that day, whether a bus driver, secretary, or classroom teacher, makes an impact on her. Every person with whom the student interacts is a part of the system. This discipline is composed of and is a result of the other four disciplines. Senge lists several "laws" for systems thinking. While all are important, it is perhaps the violation of his last law that most undermines growth in schools – "there is no blame" (Senge, 2006, p. 67). In true systems thinking, all stakeholders are a part of a single system and "there is no separate ‘other’" (p. 67). In practice, the situation is far different. When explaining low student proficiencies, college and university educators tend to blame high school teachers; high school teachers tend to blame their counterparts in middle school, and middle school teachers shift the blame to tend to blame elementary faculty, and most all educators blame the parents (Feldman, 2012). The reality of education is that most faculty members, regardless of grade level taught, sees "other" and targets "other" for blame. Senge sees the relationships being the "cure" in creating and maintaining a learning organization. With relationships come dialogue and discussion and a start to systems thinking. Effective school leadership should foster and develop the needed dialogue and discussions needed for change.

Dialogue and discussion require time. Time is also an obstacle in the development of relationships among educators. Teaching in itself is a time-consuming endeavor as teachers have lessons to plan, papers to grade, and mandatory professional development for licensure. A systematic solution is to embed time for teachers to meet and the skills where needed to create meaningful professional relationships. By respecting subordinates' time, school leaders show they value and trust their faculty and staff.

**Personal Mastery**

The concept of mastery is well-applied to education (Wong & Wong, 1998). Less so is the concept of personal mastery. This discipline entails a "special level of proficiency" (Senge, 2006, p. 7). It is the focus of our efforts and the ability to see in an objective manner, our sense of commitment, and the deepening of our personal vision. Like other professions, teaching requires the attainment of continuing education units for renewed licensure. Mandatory professional development, while designed to improve school success, is not personal mastery; personal mastery is intrinsic and stems from a concrete personal vision. Attaining personal mastery involved continually focusing and refocusing on what is wanted and, once attained, permits a greater connection to the world.

A school will not become a learning organization if employees do not learn; however, individual learning automatically does not necessarily produce a learning organization (Senge 2006). Unlike other reforms or programs imposed from outside sources, the basis for Senge's model requires "ongoing bodies of study and practice that people adopt as individuals and groups" (Senge, Cambron-McCabe, Lucas, Smith, Durton, & Kleiner, 2000).

**Mental Models**

The generalizations we make and the pictures or images we form in our minds are our mental models, Senge's third discipline. Mental models increase personal awareness, influence what we see and how we act (Senge, 2006) This discipline includes the sharing of our thinking with others effectively and having our thinking open to the influence of others. Working with mental models develops the skills of reflection and inquiry. An end product of mental models is the challenge of previous thinking, which paves the way for an examination of assumptions and generalizations about organizational practices. In education, implementing this discipline requires
Team learning requires proficiency in dialogue and discussion which can be complementary. The engagement of dialogue involves becoming aware of one’s own assumptions, sharing one’s assumptions with other, and inviting others to inquire about one’s thoughts and beliefs. When dialogue happens, people learn to think together (Senge, Cambron-McCabe, Lucas, Smith, Dutton, & Kleiner. 2000). Senge sees dialogue as causing exploration of complex issues as members listen to one another while questioning their own views. The purpose of dialogue is to extend understanding. Discussion involves the presentation and defense of different views with the goal of support for the best decision at hand. Unless teams learn, there will be minimal or no growth in the organization. Whereas the purpose of dialogue is not to form a conclusion, the goal of discussion is to identify one. Discussion involves the presentation and defense of the different views espoused by the learning team members with the goal of creating a new view or opinion (Senge 2006). Productive discussions result in a conclusion or course of action. True team learning fluctuates between the use of both dialogue and discussion.

Schools currently have a vehicle for team learning, the professional learning community (PLC). The literature on PLCs indicates a wide variance of interpretation and implementation. Of the various PLC models developed, Hord and Sommers’ (2008) is most logical to use when implementing Senge’s five disciplines. Hord and Sommers defines five attributes of an effective PLC: (a) shared beliefs, values, and visions; (b) shared and supportive leadership; (c) collective learning and its application; (d) supportive conditions; and (e) shared personal practice (Hord, 2008). The role of the educational leader is to a part of the creating of the vision, but she also shares the vision with other stakeholders. PLCs are dependent on whole school professional learning, involvement, and collaboration. Hord and Sommers acknowledge that trust is a key part of PLCs and sees trust as a goal that requires substantial time and activities. A the creating of new definition of leadership and organizational structure in terms of decision-making (Isaacson & Baumberg, 1992).

Shared Vision

Personal mastery and the sharing of mental models are the basis for creating a shared vision. Shared vision includes the shared and collective goals, values, and missions that characterize an organization. To truly share a vision, visions of the future are unearthed to gain greater commitment and are not merely goals or outcomes written and displayed in a hallway or office. It is evident in both the sharing of personal visions and the physical space of the learning organization. Deriving a shared vision promotes trust from coworkers and creates a common identity. The key to successful shared visions is communication. Shared visions are spread through enrollment or commitment rather than compliance. Employees who are enrolled or committed personally want the shared vision, whereas compliance is simply the acceptance of another’s vision (Senge, 2006). Educational leaders can move toward enrollment by inviting teachers to be involved in the creation of the school’s vision. When administrators create the vision in isolation, it will be merely tolerated by most staff.

Team Learning

In any organization, be it a sports team, business, or school, the "intelligence of the team exceeds the intelligence of the individuals on the team" (Senge, 2006, p. 9). This discipline begins with dialogue and a suspension of assumptions to permit the discovery of insights through the free flow of ideas. A team is far more than just a group of people who happen to work for the same company or in the same department. To be a learning team, members must have a shared vision, comparable purpose, and complement another’s efforts. Team learning “is a process of aligning and developing the capacity of a team to create the results its members truly desire” (Senge, 2006, p. 218) and building on personal mastery and vision.
The role for building leadership is to provide the time and activities needed for successful PLCs.

Learning Disabilities of an Organization
For each of the five disciplines that make organizations grow, there are an equal number of counter forces at work in schools that effective leadership could minimize or eradicate. Senge (2006) refers to the practices that impede systems thinking as a learning disability and lists seven of them. These disabilities are not germane to schools but apply to all organizations. The first disability is the tendency of people to obtain their identities from their employment position. This tendency impedes the vision of the overall purpose of the organization. Being tied to an identity produces the second disability of finding an external person or organization to blame. Just as outside forces tend to be blamed so too do we tend to practice the third discipline as we eek the solution from another and, fourth, focus on an event rather than the process that causes the events. The fifth disability, Senge refers to as "The Parable of the Frog" (2006, p. 22). As people become used to a situation, they become more complacent just as the frog in this parable. The sixth disability addresses our experiences. Having prior experiences in an area does not help when actions needed stem beyond what we know. The last disability is the normal practice of incompetent management teams, a term that is poor commentary on many school leaders.

Learning Disabilities in School Organization
The reliance on top-down administration demonstrates the most common learning disability exhibited by many educational leaders. The traditional role of the principal is to provide "guidance, support, and encouragement to staff" (Marczely 2001, p. 225). Their jobs also entail hiring and evaluating personnel, sustaining and improving the building appearance, supervising instruction, maintaining business record, handing public relations, and developing professional development. Applying Senge's disciplines to schools would involve principals redefining their position to one of creating the environment and time for collaboration, and becoming more of a team player than a coach. Integrating the five disciplines would make this position less onerous, improve staff enrollment into the goals of the school, and ultimately improve student growth.

Yet this does not happen. The actions of the school leadership impede the institution from learning and growing. The administrators' chief offenses? Squelching disagreement and laying blame (Senge, 2006). Senge's disciplines are dependent on trust. When ideas are squelched and blames if laid, trust cannot be maintained or developed. Historically little trust exists between stakeholders in education – teachers, parents, administration, and local business officials (Senger, Cambron-McCabe, Lucas, Smith, Durton, & Kleiner, 2000). Rather than work in opposing directions, mutual trust and respect are critical in order for stakeholders to learn and support each other. Without trust and respect toward staff, school officials look to outside sources for solutions rather than relying on those who have expert knowledge of the problem – the teachers. Bringing in outside "help" assumes that faculty is not able to find a solution and removes the opportunity for faculty to learn and grow. School leadership seems so focused on finding outside solutions that they often overlook the obvious; if educational consultants and vendors were consistently successful, the number of failing districts would be reduced. The use of funding for purchasing products and services could better be channeled to direct services for students such as counseling, physical education, art, music, and developing connections to parents and community (Senge et al.).

An organization with mutual trust and respect negates placing blame. When a school is a learning organization, leadership trusts staff, and staff trusts leadership. Decisions are not made in a top-down manner, but rather with collaboration. Even under the best of circumstances, the best of educational leaders are not extensively in the classroom and know students or course content as well as teachers.
In schools, blame can be eliminated if the practice of "shifting the burden" (Senge, 2006, p. 103) is also eliminated. This common practice happens as people look for simple and easy solutions to student achievement. Senge sees these types of solutions as being possibly effective in the short-run but relatively worthless long term. Easy and quick solutions tend to address the symptom and fail to address the systemic issue or problem being addressed.

The Benefits of Overcoming Learning Disabilities and Implementing Systems Thinking

Implementation these five disciplines without the counter forces on a school-wide or district-wide level would engage teachers and staff to participate in personal mastery and the other disciplines. This approach would mean that administrators involve faculty and staff in decision-making and practice transparency. Leadership would become participatory, collaborative, and transparent. Changing a school to a learning organization would require leadership from teachers, and the commitment of administration as well as other stakeholders in education (Senge, 2012). As the institution grows through learning, the effect should trickle down to students as terminology and practices are incorporated into daily routines and vocabulary. Systems thinking is not limited to educators according to Senge. He posits it could be part of overall classroom pedagogy as well and thus teach the next generation of educational leaders how to be effective.

References


