

# THE SCHOOL AS LEARNING ORGANIZATION: SOME REFORMATION ON MALAYSIAN SCHOOL MANAGEMENT SYSTEM

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## ABSTRACT

*To move Malaysia towards a fully developed country by the year 2020 as aimed by the “Vision 2020”, will be victorious if systemic changes take place in Malaysian school management system. Indeed, Malaysian schools needs to expand and learn continuously at a higher or equal rate of any changes that occurs in this technological world that are changing rapidly. To be a part of the nations success, Malaysian schools need to be driven from traditional management practices into the learning organization paradigm. Without a doubt schools in Malaysia can adapt to the changes in a natural way by addressing the importance of being learning organizations where continuous learning will be the main ingredient. The smart school and vision school concepts introduced by the government shows a positive indicator that Malaysian schools have the potential to become learning organizations. This paper attempts to address the five disciplines of learning organization which are crucial to sculpt Malaysian schools into learning organizations.*

### **Keywords**

*Learning Organization, Malaysian Schools,  
Education, Learning Disciplines*

## **1.0 EDUCATION: THE CENTRAL ISSUE IN THE DIGITAL ERA**

In the era of globalization and ICT, education is being regarded as one of the basic necessities to give the nation knowledge, skills and inspiration to go into the knowledge based workforce with full confidence. Societies in the twenty-first century are living in a rapidly changing and increasingly complex world that demands more education and training throughout their lives. As other developing countries, Malaysian labor market has changed

dramatically over the past decades and therefore schools have been urged to engage in change and improvement activities to prepare the young nation with sufficient knowledge, skills and attitudes. In meeting the economic demands of the future and the requisite manpower needs of the country; more and more knowledgeable nation are required. More specifically, knowledgeable nation are needed to meet the demands of the developing Malaysian economy and further attain the “Vision 2020”. At the same time, Malaysia’s National Philosophy of Education also expressed that “Education in Malaysia is an ongoing effort towards further developing the potential of individuals in a holistic and integrated manner, so as to produce individuals who are intellectually, spiritually, emotionally, and physically balanced and harmonious, based on a firm belief in and devotion to God. Such an effort is designed to produce Malaysian citizens who are knowledgeable and competent, who possess high moral standards, and who are responsible and capable of achieving high levels of personal well-being as well as being able to contribute to the harmony and betterment of the family, the society, and the Nation at large” (Education Guide Malaysia, 1997, p.2). Malaysian schools play a vital role in producing sufficient knowledgeable manpower for the growth of the nation. The new knowledge and skill adapted by the future workforce remains as the cornerstone of Malaysia’s successes in this rapidly changing world. Moreover the quality of early education gives the young nation more opportunities in their lives and therefore they have a greater capacity to contribute to the country’s social and economic success. Hence education in Malaysia has to undergo tremendous changes to build a world-class education system that enable the young nation to face the challenges of globalization and ICT. Without a doubt, a society that does not continually participate in any form of learning or skill development activities will most likely be marginalized in this digital age.

At present there has been ongoing debate on reformation of Malaysian education system. Such debate shows that the society is very concern on current education system, which aims to develop and maintain a world-class education system. There is an emerging consensus across the nation that educator's developments are essential to successful education reformation. Consequently educators' development is the bridge between where educators are now and where they will need to be to meet the new challenges of guiding the entire young nation in achieving higher standards of learning. Increasingly "It stands to reason that student learning should be enhanced by the efforts of teachers who are more knowledgeable in their field and are skillful at teaching it to others" (Darling-Hammond, 2000). In an ideal world, quality workforce only can be obtained from quality education, which comes from continuous professional growth and renewal among the educators. Moreover to face the challenges in today's global education environment, educators need to increase the learning capacity and make changes by adapting the new knowledge accumulated from their learning's. Owing to this, educators have to undergo tremendous professional development in order to build a world-class education system. Teaching is a complex task and substantial time will be required to create professional development opportunities that educators need in order to help all students achieve their ambitions. According to Moore (2000) "Professional development is about change and renewal. It is an indispensable vehicle we use daily to strengthen our interactions with children and families, improve our work experience, increase the quality of our programs, and achieve local, state and accreditation goals. Incorporating staff development as an ongoing habit will benefit everyone as you accomplish all of these goals in a fun, meaningful, and professional way" (p.15). The government, being concerned about the quality of school education, must attempt to increase educators' effectiveness that further enhances students learning.

To make it possible for educators to develop professionally couple with the aims of improving the education systems, Malaysian schools must be learning organizations. The vital ingredient for the learning organization is continuously learning new things and utilizes that learning to improve performance and development new ideas. Curriculum restructuring is an important element for meeting the workforce requirements in a knowledge-based economy. Thus Malaysian schools needs to learn and fulfill those demands in a fast mode. Schools as learning organizations, which is devoted to expand the learning capacity of

its members, will focus to a culture where it supports and create opportunities for everyone to become lifelong learners. According to Gephart et al. (1996, p.39) "culture is the glue that holds an organization together...A learning organization's culture supports and rewards learning and innovation; promotes inquiry, dialogue, risk taking, and experimentation; allows mistakes to be shared and viewed as opportunities for learning; and values the well-being of all employees". Indeed a more inclusive culture can be achieved in schools if educators learn, adapt and change as the environment changes (Carrington and Elkins, 2002). In addition, the ability to increase learning capacity among the school members becomes essential especially in developing and maintaining a world-class education system. The learning schools can be created through progressive and concrete ongoing learning activities to meet individual needs. In fact, learning schools plays a key role in setting up a framework to ensure that an adequate supply of qualified, highly skilled and well-trained manpower is structurally placed to meet Malaysia's aims to become a knowledge-based economy in the foreseeable future.

All Malaysian schools have one common basic characteristic that is they are teaching institutions. Educators in Malaysia are working hard to instill appropriate new knowledge and skills needed by the young nation in order to be productive in their future career advancement. Even though Malaysian educators are undertaking initiatives to improve student's knowledge and skills, unfortunately at time they fail to apply that knowledge and skills to further improve their institutional intellectual capacity. To make it possible for Malaysian schools to learn, adapt and cope with changes, the most appropriate strategies is to transform the schools into learning organizations. A true learning organization can create its own future by proactively keep phase with new discoveries and ideas. Furthermore the rapid generation of new knowledge and skills is important in the development of learning for both teachers and students. In addition, the successful learning organization enables all school members to collaborate in the processes of creating a dynamic system that changes as the needs of the society changes. Becoming successful learning organizations requires the knowledge and information that is central to schools direction and decision-making that further helps these schools to achieve the goal of improving students learning abilities.

Educators and administrators in schools must be urged to use their invaluable knowledge and experience in creating a tangible structural support system that will foster the development of a

learning culture. The precondition for a school to be transformed into learning organization is to ensure that there are existents of ongoing learning opportunities that help the entire school members to learn and develop collectively in a regular, ongoing manner. To bring systemic change in Malaysian schools, the ability to learn collectively is the biggest concern. Without learning, a school organization cannot progress in the global knowledge-base economy of the twenty first century. The first task in school improvement should be focused on how educators and administrators learn to improve their skills and become more knowledgeable with personal maturity and readiness to keep learning ongoing. To facilitate cooperative learning is the most effective way to improve academic learning and revitalize the school where the pursuit of intellectual interests and professional collaborations are supported and encouraged. Owing to this, educators and school administrators must have a good communication and thinking skills, initiative and motivation, and a high level of literacy proficiency. Malaysian schools have the potential to become learning organizations and this can be succeeded if the government gives continuous support together with every parent, teacher, business and community leader.

## 2.0 THE LEARNING ORGANIZATION PARADIGM

The idea of learning organization was popularized by Senge (1990) with his book, *The Fifth Discipline: The Art and Practice of the Learning Organization*. Senge defines a learning organization as one “where people continuously expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together” (p.3). Since the year 1990, implications of the learning organization phenomenon for organizational success have been extensively investigated. A successfully learning school is one that can creates its own future by proactively learn how to adapt to environmental changes. Senge et al. (2000, p.5) further asserts that “It is becoming clear that schools can be re-created, made vital, and sustainably renewed not by fiat or command, and not by regulation, but taking a learning orientation. This means involving everyone in the system in expressing their aspirations, building their awareness, and developing their capabilities together. In a school that learns, people who traditionally may have been suspicious of one another... recognize their common stake in the future of the school system and the things they can learn from one another.

But the “learning organization” approach to education is more than just an imperative to work and talk together. By now more than two decades’ worth of experience has accumulated, among hundreds of schools and thousands of people, in the practice of re-creating schools as learning organizations.” Senge et al. (2000) have provided an important insight into how educators and school administrators can successfully transform their schools into learning organizations.

Building a learning organization needs commitment from members at all levels of the school thus “a long-term commitment must be made at the absolute pinnacle ...” of the school (Watkins and Marsick, 1993, p. 1). Furthermore Garvin (1993, p.91) asserts “Learning organization are not build overnight. Most successful examples are the products of carefully cultivated attitudes, commitments, and management processes that have accrued slowly and steadily over time”. Senge (1990) has coined the idea of the learning organization and has identified five disciplines to enable an organization to become a learning organization. The five disciplines are personal mastery, mental models, team learning, shared vision, and systems thinking. Recent book by Senge et al. (2000) *Schools that learn: A fifth discipline fieldbook for educators, parents, and everyone who cares about education*, further provides important insight on how schools can be transformed into learning organizations. This five discipline has been widely used and discussed by organizational developers worldwide and has been proven to be successful. Malaysian schools also have the potential to become learning organizations and it can be succeeded if the five disciplines are inculcated in school’s vision. This paper is further organized according to five learning disciplines of Senge (1990), which become the core disciplines in building the Malaysian Schools into learning organizations. “These five disciplines are not “reform” or “programs” imposed from the outside, but ongoing bodies of study and practice that people adopt as individual and groups. As many teachers and administrators have noted, the learning disciplines offer genuine help for dealing with the dilemmas and pressures of education today” (Senge et al., 2000, p. 7). As noted by Senge (1990), the systems thinking, is the most important discipline and underlies the rest, so this paper will address systems thinking first and followed by the other learning disciplines.

## 3.0 LEARNING DISCIPLINES

### **3.1 Systems Thinking**

Systems thinking have come to the attention of educators and they look at it as a tool for problem solving or decision-making. Most of the problems of today's schools do not exist in isolation but they are interrelating to each other. Now more than ever before, systems thinking offers a new perspective and "it is enriched by a set of tools and techniques that have developed over the past thirty-five years, particularly since the advent of powerful computers" (Senge et al., 2000, p.78). Indeed it can be used to address the most complex problems in schools nowadays. Furthermore it is crucial for understanding reality that emphasizes the relationships among a system's parts, rather than the parts themselves. Successful learning has come from adopting the perspective that school organizations are systems, instead of seeing as a single elements or parts. Traditional approaches to school organization management have emphasized the analysis of individual problems and make dramatic change, but this will no longer applies as schools continue to experience complex changes due to the societies demand on quality education that cultivate knowledge-base workforce. Consequently, having a systems view is significant to accomplishing effective school development. Systems thinking can be used as restructuring tool to create a more effective school organizations because it encourages other disciplines such as personal mastery, shared vision, mental models, and team learning. Malaysian educational system is still caught up in a fragmented traditional way of thinking which is focused on the individual processes than the very system. Systems thinking, on the other hand, acknowledge the interrelated nature of the various subsystems that constitute the whole. This broad view helps one to identify the real causes of issues and encourages thinking about solutions with an eye toward the long view – develop and maintain a world-class education system.

Educators and school administrators must look beyond individual issues towards a broader perspective, where an individual issue is seen as part of a coherent whole. They must look at the interrelationships amongst problems to make sure any solutions for the problem does not adversely affect other related issues. It is impossible for an individual to solve any problems by themselves because their own perspective on solving a given problem is not enough to wholly understand it. Therefore in solving any problems we must apply many different perspectives. According to Lannon-Kim (1991), there are two ways to apply systems thinking to schools: first, as a problem-solving framework that enhances students' understanding of

a subject; and secondly as a restructuring tool for creating a more effective educational system. Systems thinking bring integrative and creative views to our existence. Systems thinking help administrators, teachers, students, support staff, parents, and community leaders to see the events and patterns "as component of large structures" (Senge et al., 2000, p.78) and further respond to them in higher leverage ways. Senge et al. (2000, p.8) further asserts that "In this discipline, people learn to better understand interdependency and change and thereby are able to deal more effectively with the forces that shape the consequences of their action...Systems thinking is a powerful practice for finding the leverage needed to get the most constructive change". Each individual has unique insight, therefore systems thinking allowed all to access to the great amount of knowledge that is spread across the various level in the school, and thus something can be contributed to the whole. According to Senge (1990) the fifth discipline integrates four other disciplines - shared vision, personal mastery, mental models, team learning. All these disciplines are useful when planning and implementing change within complex school organizations.

### **3.2 Personal Mastery**

Senge et al. (2000 p.7) states "Personal Mastery is the practice of articulating a coherent image of your personal vision-the results you most want to create in your life-alongside a realistic assessment of the current reality of your life today. This procedures a kind of innate tension that, when cultivated, can expand your capacity to make better choices and to achieve more of results that you have chosen". According to Senge (1990) personal mastery is one of the core disciplines needed to build a learning organization. He further asserts that, "Organizations learn only through individuals who learn. Individual learning does not guarantee organizational learning. But without it no organizational learning occurs" (p.139). The learning organization learns as its people learn and develop personal mastery. This means continually clarifying what is important and learning how to see current reality more clearly in order to focus on meaningful personal growth. Besides that schools must also able to identification potential barriers that might prevent personal mastery from taking place. In fact opportunities for personal reflection and the learning of new skills and knowledge must be made available.

A learning organization cannot exist without a commitment to lifelong learning for its people, so the linkages between training and development and learning are sustained. In the rapidly changing

world, educators and school administrators must continue to learn all through their lives to foster the learning needed for personal development and in meeting any further demand in their current job. Consequently, personal mastery and the desire for continuous learning must be integrated deeply in the belief system of each person and it is vital for a knowledge-base economy. “People with a high level of personal mastery live in a continual learning mode. They never ‘arrive’. Sometimes, language, such as the term ‘personal mastery’ creates a misleading sense of definiteness, of black and white. But personal mastery is not something you possess. It is a process. It is a lifelong discipline. People with a high level of personal mastery are acutely aware of their ignorance, their incompetence, their growth areas. And they are deeply self-confident. Paradoxical? Only for those who do not see the ‘journey is the reward’” (Senge, 1990, p.142).

### **3.3 Mental Models**

A mental model is an individual’s way of looking at the world. These are “deeply ingrained assumptions, generalizations, or even pictures and images that influence how we understand the world and how we take action” (Senge 1990, p. 8). In other words, it determines how we think and act. The processes of mental models help identify and examine the internal pictures that each person draws upon to understand and take action (Argyris, 1993). “The discipline of mental models starts with turning the mirror inward; learning to unearth our internal pictures of the world, to bring them to the surface and hold them rigorously to scrutiny. It also includes the ability to carry on ‘learningful’ conversations that balance inquiry and advocacy, where people expose their own thinking effectively and make that thinking open to the influence of others.” (Senge, 1990, p.9). Bringing mental models to awareness and re-examining them in the light of espoused beliefs brings about change. Mental models are the assumptions that influence how we understand what is happening. Senge (1990) further argues that we need to have a clear understanding of our mental models as well as the mental models of those with whom we work because mental models are guides to behavior. The culture of any school is often dominated by unspoken perceptions that guide the way in which people behave. These mental models are conservative and must be overcome for real change to take place. Mental models influence the vision of how things happen at schools and thus the ability of the educators and schools administrators to dialogue about the nature of learning gives them a chance to evolve continually and useful ways of seeing the school and direction. Inquiry and

dialogue helps school members to learn more creatively and on a continuous basis. Furthermore the school members can integrate information from diverse sources, which are required in the development of new knowledge and skills, or even it could be useful when conscious changes are to be made.

Schools can focus on making learning visible to challenge the learner to represent what they know and enable the teacher not only see a solution but to see the underpinnings and mechanisms that generate that solution. Learning only comes from seeing the world the way it really is (Argyris, 1993). If school organizations are to develop a capacity to work with mental models then it will be necessary for the educators and schools administrators to learn new skills and develop new orientations through teamwork that gives them the chance to propose unique models for the consideration of others. Moreover this allows open communication, which is vital in seeing the underlying potential in others, and then cultivating those talents in a meaningful way that provides benefits for the individuals and the school as a whole. Senge et al. (2000) further points out that “Working with mental models can also help you more clearly and honestly define current reality. Since most mental models in education are often “undiscussable” and hidden from view, one of the critical acts for a learning school is to develop the capacity to talk safely and productively about dangerous and discomfiting subjects”(p.7).

### **3.4 Team learning**

The purpose of team learning is to promote team cohesiveness and performance while facilitating individual learning. This is essential to educators and school administrators where the emphasis is on creation of new knowledge that cannot be completed by working alone. The team learning environment provides an opportunity for the educators and school administrators to contribute social support to each other, as well as fostering the development of job related skills. Team learning is built through meaningful conversation and these conversations can take place in the form of dialogue and discussion. Dialogue provides an opportunity to defend and clarifies ideas about particular issues through positive talks. Furthermore dialogues are exploratory in nature and thus it is a route to collective learning in schools. In fact dialogue and inquiry is dedicated to promote intellectual and professional activities, which foster school members’ developments. Senge (1990, p. 236) defines team learning as “...the process of aligning and developing the capacity of a team to create the results its members

truly desire. It builds on the discipline of developing shared vision. It also builds on personal mastery, for talented teams are made up of talented individuals." Senge further asserts "the discipline of team learning starts with "dialogue," the capacity of members of a team to suspend assumptions and enter into a genuine "thinking together"… Team learning is vital because teams, not individuals, are the fundamental learning unit in modern organizations" (p. 10).

School leaders must encourage collaboration and team learning in their school organizations because school members bring complementary strengths to compensate weaknesses of each other that further accelerates learning in the schools. Knowledge is shared most effectively when school members collaborate and the culture of collaboration can be cultivated by sharing responsibilities and credits. Each team member needs to learn how to present ideas and solutions in a way that will influence other team members. Indeed communication is the essential process that links team members together. Learning is turning knowledge into something of value to school members and it should be realized that social interaction are inseparable. The interaction, which provides direction to the schools and gets the tasks done takes many forms and happens among the members in the schools. With collaborative effort and team learning, each school members shares knowledge and experience with each other, resulting in jointly constructed knowledge and the accomplishment of school's goals. Helping the members learn to work together is something that the school sees as critical for its own growth. Through this collaborative and team learning culture, the individual learns, the group learns, and, finally, the school as a whole learns.

### **3.5 Shared Vision**

At present the Malaysian education system aims to achieve the country's long-term development vision, referred to as "Vision 2020" which aims to develop Malaysia into an industrialized country by the year 2020. In order to face the challenges brought by the "Vision 2020", a united Malaysian nation with a sense of common and shared destiny should be build. The vision is often a long-term goal that the individuals want to reach; indeed Malaysian education system primarily aims to become a world-class education system that further leads to a fully developed nation by the year 2020. The vision of the country has already been accepted by the whole nation and everyone knows where he or she is going and why. Moreover Malaysian schools are urged to play a vital role in making this "vision 2020" a success, by taking proactive plans to develop our young nation to meet the workforce

requirements of a knowledge-based economy. Educators and school administrators possesses a strong sense of personal vision to achieve the national policy and education philosophy that foster to the achievement of Malaysian "Vision 2020". In a learning organization the vision must be created through interaction with all the individuals rather than mandated by few people. Personal visions must be used, as a foundation to create shared vision. Nevertheless a shared vision begins with the individual, and an individual vision is developed from common beliefs and values, creating a consistent direction for all involved. Moreover a shared vision discovers the common ground among personal visions and gives voice to a shared picture of the future. According to Senge et al. (2000 p.7), "This collective discipline establishes a focus on mutual purpose. People with a common purpose (e.g., the teachers, administrators, and staff in a school) can learn to nourish a sense of commitment in a group or organization by developing shared images of the future they seek to create and the principles and guiding practices by which they hope to get there. A school or community that hopes to live by learning needs a common shared vision process". The common view fosters commitment rather than dictated compliance (Kline and Saunders, 1993). Shared vision, is referred to a process in which the original vision probably determined by the leader is translated into shared pictures around which the individual in the organization finds direction and reasons for existing (Senge, 1990). "The practice of shared vision involves the skills of unearthing shared "pictures of the future" that foster genuine commitment and enrolment rather than compliance. In mastering this discipline, leaders learn the counter-productiveness of trying to dictate a vision, no matter how heartfelt"( Senge, 1990, p. 9).

## **4.0 CONCLUSION**

Senge et al. (2000) recognizes schools as "a meeting ground for learning—dedicated to the idea that all those involved with it, individually and together, will be continually enhancing and expanding their awareness and capabilities" (p. 6). Moreover school leaders must be able to access the entire body of knowledge carried within the members of their school and further encourage them to share with each other. Senge et al. (2000) further noted that "Schools that train people to obey authority and follow the rules unquestioningly will have poorly prepared their students for the evolving world they will live in"(p.7). Thus a shift from traditional school management system to a learning organization paradigm would offer the chance to develop and maintain a world-class education system in line with the government's

efforts in producing potential manpower to propel Malaysia into the next decades and further drive to fulfill “Vision 2020”. The twenty first Century places new demands on both students and teachers, while being a learning organization leads learners to the required knowledge and skills. Senge's “five disciplines” are the keys to achieving an ideal learning organization: personal mastery, mental models, shared vision, team learning, and systems thinking. According to Senge, the fifth, systems thinking, is the most important and underlies the rest of the learning disciplines. All the five disciplines should be applied against the challenges and problems of schools now and in the future. Senge's learning disciplines helps educators and policy makers see the school as a learning community, whom able to mobilize and convert knowledge into useful form to maintain their competitive edge.

Obviously, to thrive in this digital age, schools must become adaptive organization with capability of continuous learning, growth, and change. Schools also must embrace the need to use their resources and expertise to address the issues and opportunities faced by the individuals, teams, organizations, and the communities they serve. This is accomplished by breaking down the walls that separate the schools from the outside world. No schools can effectively implement change or achieve excellence unless its goal is to be a learning organization. This undertaking should be the foundation upon which all strategic decisions are made. Given the growing demand for high quality education and the resulting pressures on educators' professional development, there is a need for more school diversification and a structured development of continuous learning. Besides valuing learning, collaboration and innovation, schools must also create a tangible structural support system, which will foster the development of a learning and innovation culture. The journey towards learning organizations, also need proper leaders who are future driven, have the credibility of adapting new things and knowledge into the school, able to innovate and sustain new culture and most importantly these leaders must empower everyone to change with them. The school as learning organization would be a victory if all those who are involved directly and indirectly; such as administrators, teachers, students, support staff, parents, and community members who have a stake in how the school operates, plays their role respectively. Confronting the coming challenges and opportunities, the schools, which takes on the responsibility of bringing up Malaysians innovation ability through innovative generation, need to experience a thorough reformation on the current school management systems. By being learning schools,

both teachers and schools as a whole will be able to meet the challenges ahead. Lastly, any necessary reformation to be done in the school management system must ensure to promote national unity in meeting future challenges largely bought by the Malaysian “Vision 2020”.

## 5.0 REFERENCES

Argyris, C. (1993). *Knowledge for Action: A Guide to Overcoming Barriers to Organizational Change*. San Francisco: Jossey-Bass.

Darling-Hammond, L. (2000). Teacher Quality and Student Achievement: A Review of State Policy Evidence. *Education Policy Analysis*. 8(1). Available at: <http://epaa.asu.edu/epaa/v8n1/>

Education Guide Malaysia (1997). Kuala Lumpur: Challenger Concept.

Garvin D. (1993). *Building a Learning Organization*. Harvard Business Review. 71(4): 78-91

Gephart, M.A; Marsick, V. J.; Van Buren, M.E.; and Spiro, M.S. (1996). Learning Organizations: Come Alive. *Training and Development*. 50(12):36-41.

Kline, P., Saunders, B. (1993). *Ten Steps to a Learning Organization*. Arlington, VA: Great Ocean Publishers

Lannon-Kim, C. (1991). *Revitalizing the Schools: a Systems Thinking Approach*. The Systems Thinker. 2( 5), June/July. Available at <http://www.clexchange.org/ftp/documents/systemed/SE1993-06RevitalizingSchool.pdf>

Moore, K. B. (2000). Successful and Effective Professional Development. *Early Childhood Today*. Nov/Dec 2000. 15(3):14-15.

Senge, P. M. (1990). The fifth discipline: *The art and practice of the learning organization*. New York: Doubleday Currency.

Senge, P.M., McCabe, N.C., Lucas, T., Smith, B., Dutton, J., Kleiner, A. (2000). *Schools that learn: A fifth discipline fieldbook for educators, parents, and everyone who cares about education*. New York: Doubleday Currency.

Watkins, K.E., Marsick, V.J. (1993). *Sculpting the Learning Organization*. San Francisco, CA: Jossey Bass Publishers.