What Is a Learning Organization?

Reflections on the Literature and Practitioner Perspectives

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Introduction

What is a "learning organization," and does this model help organizations achieve desired outcomes? The impetus for investigating literature and talking with practitioners about organizational learning was to understand whether it is relevant to my thesis project, an endeavor to improve environmental protection work at the Wisconsin Department of Natural Resources (WDNR). This project is the focus of my graduate work at the University of Wisconsin-Madison, Institute for Environmental Studies, Land Resources Program.

My advisor, Dr. Patrick Eagan, and I began work on this project in May 2002 through the University of Wisconsin - Madison, Engineering Professional Development (EPD) Department. During the first six months of the project, Dr. Eagan and I worked with several leaders at the WDNR to scope out project goals, objectives, and desired outcomes. In brief, the goal of WDNR leaders is to improve environmental protection by promoting continuous improvement, innovation, and stakeholder collaboration. While scoping out the project and conducting some reconnaissance literature reviews of effectiveness and innovation in environmental management, I encountered a number of references to organizational change and learning. In fact, a number of practitioners suggest that barriers to effective and innovative environmental programs, such as an environmental management system, are largely organizational issues (Kirkland and Thompson, 1999), (Allenby, 1999), (Klein and Sorra, 1996). In addition to understanding the essence and effectiveness of organizational learning, I hoped to find some effective approaches for building a learning organization that would support implementation of organizational change at WDNR. Work on this project also involves understanding similar efforts worldwide and led to a dialogue and information exchange with the Gelderland Department of Environment and Water in the Netherlands, underscoring an international interest in organizational learning.

Research Approach

My review of learning organization literature began with two fall 2002 courses: *CAVE 705: Community Building, Leadership, and Action* and *Business OIM 770: Quality and Productivity Improvement.* I found a number of articles and books through an electronic literature search of the University of Wisconsin library system. Other sources came from colleagues from around the world who know I am investigating learning organizations. I sought sources that informed my research by 1) defining learning organizations, 2) asserting and demonstrating that organizational learning promotes organization outcomes, especially improved performance, innovation, and stakeholder community-building and/or 3) offering proven approaches for building a learning organization.

As I proceeded to review reports, books, and academic papers, I began to wonder about what today's practitioners are doing. This curiosity was the impetus for creating an independent study course called *Organizational Learning for Environmental Management*, with the help of Dr. Sandra Courter, Director of the UW Engineering Learning Center. The primary activity of the course was facilitating a dialogue with organizational learning experts and enthusiasts. At our first meeting in January 2003 we discussed a number of topics, including the accepted definitions of organizational learning organization. The results of this first dialogue, and the

direction of my thesis project led to the development of a second dialogue, called *A Conversation About Organizational Learning*, to be held on May 5th, 2003. A summary of this first dialogue, a sheet we used to discuss these definitions, and an announcement for the second dialogue meeting are provided in Appendices.

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I would also like to express my gratitude to Tricia Tooman, Soulstice Training, who cofacilitated the January 9th, 2003 dialogue with me. She introduced me to some great facilitation strategies and tools for my novice toolbelt. Thanks also to Rebecca Morgan, UW Office of Human Resources, who did a seamless job of coordinating registration for the May 5th *Conversation About Organizational Learning*, and Danielle Hinrichs, who edited this paper. A number of UW faulty and fellow students, as well as friends and family members, helped by sending me relevant source material, and by providing support and encouragement. Finally, I would like to thank the Wisconsin Department of Natural Resources, and in particular, Lloyd Eagan, Mark McDermid, and Jeff Smoller, for inviting me to work with them on their organizational change project.

Literature

The literature I reviewed about learning organizations fell into these categories: The "Founders" Real-world Definitions and Critiques Promoting Continuous Improvement, Innovation, Stakeholder Collaboration Organizational Learning and Organizational Outcomes Today's Approaches for Building Organizational Learning

The "Founders"

Where did the concept of a "learning organization" originate? Who helped create and disseminate this concept? What are the landmark publications that changed our thinking in the 1990s? In literature and conversations with practitioners, the authors whose names came up again and again as "founders" of sorts of this approach are Peter Senge, Chris Agyris, Donald Schon, and Margaret Wheatley. Also highlighted in this section is Shana Ratner's description of the fundamental shift in learning approaches in the latter half of the 20th century that has given rise to exiting new fields like organizational learning.

Peter Senge

Peter Senge is considered by most to be the "father" of organizational learning (Dumaine, 1994). Senge is a director at Innovation Associates, a Cambridge consulting firm, and advises government and educational leaders in centers of global change like South Africa. Senge's message of growth and prosperity holds strong appeal for today's business leaders. His research center at MIT, the Center for Organizational Learning, started in 1990, has 18 corporate sponsors, including AT&T, Ford, Motorola, and Federal Express. Each contributes \$80,000 a year to create learning organization pilot programs with the help of Senge and his colleagues.

The learning organization concept gained broad recognition when Senge published his bestselling *The Fifth Discipline* in 1990. In it he writes that a learning organization values, and derives competitive advantage from, continuing learning, both individual and collective. The five disciplines are systems thinking, personal mastery, mental models, shared vision, and team learning (Senge, 1990). Senge proposes that people put aside their old ways of thinking (mental models), learn to be open with others (personal mastery), understand how their company really works (systems thinking), form a plan everyone can agree on (shared vision), and then work together to achieve that vision (team learning).

None of these concepts are new, but Senge created something new and powerful by putting them together. Unfortunately, at first glance these ideas can seem ambiguous As a result, only a small percentage of the huge number of people who bought the book have read it, and only a small percentage of those have carried out its ideas (Dumaine, 1994). To make the learning organization more accessible to seasoned managers, Senge and several co-consultants published *The Fifth Discipline Fieldbook*, a more "hands-on" work.

The Fieldbook explains that anyone who wants to be part of a learning organization must first go through a personal change (Senge, Kleiner et al., 1994). This means that if some members of the group like to tell people what to do and are too busy to listen, they must be willing to change themselves. Senge and his colleagues consult with organizations, where they teach an elaborate set of personal-awareness exercises with names like dialogue, the container, and the ladder of inference.

Once you have "shifted your personal paradigm," Senge says, you must master something called systems thinking, a scientific discipline that helps you understand how organizations work. "The outsider, faced with such a formidable field to master, might ask, Why bother? Senge argues that the very future of the planet hangs in the balance (Dumaine, 1994)." This comment reflects Senge's interest in tackling issues like overpopulation, hunger, and the environment, and his commitment to a personal life that reflects these professional ideals.

Chris Argyris

Chris Argyris is also lauded for disseminating pioneering ideas about how learning can improve organizational development success (Abernathy, 1999). Argyris is Professor Emeritus of Education and Organizational Behavior at the Graduate School of Business, Harvard University, the director of the Cambridge, Massachusetts-based Monitor Company, and the ASTD winner of the Lifetime Achievement for Advancing Workplace Learning and Performance Award. He is probably best known for distinguishing between learning that challenges the status quo, called double-loop learning, and learning that is routine, called single-loop learning.

Double-loop learning is about solving difficult problems, according to Argyris. We discover and establish truth when we subject people's claims to rigorous tests. That allows us to see more clearly the causal processes embedded in those claims. Argyris calls this transparency. Double-loop learning depends on stewardship, or the internal commitment by employees to seek truth, transparency, and personal responsibility in the workplace. For single-loop learning, people are programmed to believe that transparency and truth are good ideas, but only when they're not threatening or embarrassing, he says.

In his article "Good communication that blocks learning," Argyris says that the new but now familiar techniques of corporate communication, like focus groups, surveys, management-by-walking around, can block organizational learning even as they help solve certain kinds of problems (Argyris, 1994). These techniques, he explains, promote defensive behaviors by encouraging employees to believe that their proper role is to criticize management while the proper role of management is to take action and fix whatever is wrong. Worse yet, they discourage double-loop learning, which is the process of asking questions not only about objective facts but also about the reasons and motives behind those facts. Argyris's double-loop learning encourages people to examine their own behavior, take responsibility for their action and inaction, and make conscious the kind of potentially threatening or embarrassing information that can produce real change.

So, how can businesses put these ideas into action? Argyris says people need to recognize that "expert" business advice becomes a fad and slowly fades away. What remains is a deepening

sense of lack of credibility and believability for those who gave and used the advice. The result is that organizations develop ultra-steady states that make it difficult to carry out advice given by the line executives and professional change agents.

People can overcome these counterproductive consequences in themselves, in groups, or in the organizational cultures in which they work by examining "expert" advice in order to surface the gaps and inconsistencies, Argyris says. He recommends that managers challenge employees to think constantly and creatively about the needs of the organization. This goal is to fill employees with as much intrinsic motivation and as deep a sense of organizational stewardship as any company executive. By applying these ideas to individual or group performance reviews, managers can create an incentive for employees to increase their commitment to continuous, non-routine learning and for implementing strategy.

Donald A. Schon

For about 40 years, Don Schon wrote about and consulted in the field of organizational learning. His name was often associated with Harvard scholar Chris Argyris with whom he coauthored *Theory in Practice* and *Organizational Learning*. Many of Schon's insights, though not well distinguished in the management literature, continue to have a significant impact on the conceptualization of organizational learning (Lichtenstein, 2000).

Schon's work can be organized into four themes: (a) his concept of inquiry as reflection-inaction, (b) constructing a learning dialectic in organizations, (c) the practice of learning how to learn, and (d) his commitment to a new educational paradigm that teaches practitioners how to reflect-in-action. In his book, *The Reflective Practitioner: How Professionals Think in Action*, Schon describes his structure for reflection-in-action and describes patterns and limits of reflection-in-action across the professions. "Reflection-in-action," he explains, "is both a consequence and cause of surprise." When a member of a bureaucracy embarks on a course of reflective practice, allowing himself to experience confusion and uncertainty, subjecting his frames and theories to conscious criticism and change, he may increase his capacity to contribute to significant organizational learning (page 328, (Schon, 1983))." Schon also warns that most organizations are not comfortable with the threat of instability that is the result of this learning.

In the March 2000 *Journal of Management Inquiry*, Benyamin M. B. Lichtenstein summarizes Schon's contributions to the field of organizational learning and proposes his own (Lichtenstein's) theory of "generative knowledge," which he says builds on Schon's ideas about reflexive action. Lichtenstein writes that Schon's work rests in part on a powerful insight that is now all but taken for granted. Schon, he explains, insists that managers and all decision makers in science and the professions must move beyond a purely rational model of understanding to one that is transactional, open-ended, and inherently social. He advocates a mode of knowing that can inquire into and transcend its own axioms, as well as inquire into and transform one's own practice. Whereas natural science is based on imparting knowledge about isolated events and "objective" entities, Schon's approach is relational, allowing for a direct connection between epistemology (how do we know) and reflective practice, inquiring into the process of knowing itself. In this interactive mode, "the inquirer does not stand outside the problematic situation like a spectator; he is in it and in transaction with it."

When compared to the current literature on organizational learning, Schon's deep integration of knowing and doing can be seen as pioneering work (Lichtenstein, 2000). Most literature on organizational learning describes the process as a series of separable elements that may generate learning over time. According to Schon's approach, action and reflection should occur at the same time so that learning is necessarily embodied in concrete situations. Recent workers call this type of learning "generative" because cognitive understanding is generated through one's active participation in a project, group, or system (Lichtenstein, 2000).

Some comment that that Schon does not emphasize how rare it is for persons to solicit feedback about mismatches between their principles and their actions. "The fact that such learning may be extraordinarily useful and enlightening does not mean that many individuals are willing to undergo the suffering it often requires," says Lichtenstein.

Margaret Wheatley

Margaret Wheatley's book *Leadership and the New Science: Learning about Organizations from an Orderly Universe* has been recognized as introducing a new paradigm for organizational development that involves "reintegration" of society (Dennard, 1996), (Brown, 1993), (Anonymous, 1994). First published in 1992, *Leadership and the New Science* suggests that people develop a new outlook about organizations, leadership, change, and chaos. Wheatley offers these core ideas: 1. Everything is a constant process of discovery and creating. 2. Life uses messes to get well-ordered solutions. 3. Life is intent on finding what works, not what is right. 4. Life creates more possibilities as it engages with opportunities. 5. Life is attracted to order. 6. Life organizes around identity. 7. Everything participates in the creation and evolution of its neighbors.

Reflecting on her revisions for a second edition (Wheatley, 1999), Wheatley notes that "chaos and complexity have emerged as serious branches of science." Both editions suggest that scientists and leaders need to cultivate the participation required for communities of all sizes - from neighborhoods to organizations to countries - to work together in harmony. The transformative steps that will give rise to organizational harmony is described in Chapter 8, "Change: The Capacity of Life."

"Our ideas and sensibilities about change come from the world of Newton. We treat a problematic organization as if it was a machine that had broken down. We use reductionism to diagnose the problem... to repair the organization, all we need to do is replace the faulty part - { a bad manager, a dysfunctional team, a poor business unit} - and gear back up to operate at a predetermined performance levels... But when we encounter life's processes for change, we enter a new world. We move from billiard balls banging into one another to effect change, to networks that change because of information they find meaningful. We stop dealing with mass and work with energy. We discard mechanistic practices, and learn from the behavior of living systems. New change dynamics become evident. ... The first great shift is ... {that we} need to work with the whole of a system... {The second shift is to} leave behind the *imaginary organization* we

design and work with the *real organization*, which will always be a dense network of interdependent relationships... If we are interested in effecting change, it is crucial to remember that we are working with these webs of relations, not with machines."

Using a spider's web as a metaphor, Wheatley vividly demonstrates how organizations are living entities and that learning and change strengthen their structure and their communities.

"Once we recognize that organizations are webs, there is much we can learn about organizational change just from contemplating spider webs. Most of us have had the experience of touching a spider web, feeling its resiliency, noticing how slight pressure in one area jiggles the entire web. If a web breaks and needs repair, the spider doesn't cut out a piece, terminate it, or alter the entire web apart and reorganize it. She *reweaves* it, using the silken relationships that are already there, creating stronger connections across the weakened spaces. ... In order to change, the system needs to learn more about itself from itself. ... We are terrified of emotions aroused by conflict, loss, love. In all of these struggles, it is being human that creates the problem. We have not yet learned how to be together.... After all these years of denying the fact that we are humans, vulnerable to the same dynamics that swirl in all life (plus some unique to our species), we are being called to encounter one another in the messiness and beauty that names us as alive."

Shana Ratner on Old and New Answers to How We Learn

Shana Ratner's (1997) "Emerging Issues in Learning Communities" offers an insightful description of the fundamental shift in learning approaches in the latter half of the 20th century that is giving rise to exiting new fields such as active learning, collaborative learning, and organizational learning. This shift, from thinking of learning as a transaction to learning as a process, is shown in Table 1. This shift eliminates the separation of teacher from student and replaces it with dialogue between teacher and student to encourage joint responsibility for learning and growth (Burkey, 1993).

Old Answers	New Answers
Knowledge is a "thing" that is transferred	Knowledge is a relationship between the
from one person to another.	knower and the known; knowledge is
	"created" through this relationship.
Knowledge is objective and certain.	Knowledge is subjective and provisional.
Learners receive knowledge.	Learners create knowledge.
We all learn in the same way.	There are many different learning styles.
Knowledge is organized in stable, hierarchical	Knowledge is organized "ecologically;"
structures that can be treated independently of	disciplines are integrative and interactive.
one another.	
We learn best passively, by listening and	We learn best by actively doing and
watching.	managing our own learning.

 Table 1: Old and New Answers to How We Learn (Ratner, 1997)

We learn alone, with our minds, based on our innate abilities.	We learn in social contexts, through mind, body, and emotions.
We learn in predictable sequences from	We learn in wholes.
simple "parts" to complex "wholes".	
Our "intelligence" is based on our individual	Our intelligence is based on our learning
abilities.	community.

Ratner defines a learning organization as "one in which people at all levels, individually and collectively, are continually increasing their capacity to produce results they really care about." She describes Peter Senge's *The Fifth Discipline Fieldbook* as "one of the most powerful set of tools for examining our assumptions."

Real-World Definitions and Critiques

Since the 1990 publishing of Senge's *The Fifth Discipline*, many have attempted to promote learning at their organizations. Below are perspectives from some of these practitioners about what a learning organization is to them and about worked... and what did not.

What Defines and Propels a Learning Organization?

Linda Levine is a senior member of the technical staff at the Software Engineering Institute of Carnegie Mellon University, and has authored many articles about organizational change management. Her 2001 article "Integrating Knowledge and Process in a Learning Organization" describes the similarities between technology change management (TCM) and learning organizations. She describes a learning organization as one in which:

The organization remembers and learns

Public recording is unobtrusive and useful in the execution of work processes and decision-making.

Principles and concepts may refer to a group, an organizational unit(s), or a community, suggesting notions of scalability and tailoring.

The notion of learning is different from the additive sum of individual contributions (the whole is more than the sum of its parts).

Learning is applied to produce or modify individual dispositions, policies, processes, and procedures.

She also lists several compelling reasons for promoting organizational learning:

About 70 percent of business efforts in process reengineering efforts or redesigns fail. Work groups in the 21st century will manage change in dynamic situations.

Traditional management constructs are incompatible with the collaborative development approach for new technologies.

R.P. Mohanty's (1999) article about a strategic learning model for advanced manufacturing technology (AMT) starts with Peter Senge's list of learning organization characteristics:

There exists a shared vision that everyone agrees on.

People discard their old ways of thinking and the standard routines for solving problems.

Members think of all organizational processes, activities, functions, and interactions with the environment as part of the system.

People openly communicate with each other without fear of criticism or punishment. People sublimate their personal self-interest and fragmented departmental interests to work together to achieve the organization's shared vision.

The article offers six "generic and interactive forces that influence any business corporation to evolve into a learning organization" (Mohanty and Deshmukh, 1999). These forces also speak to organizational performance.

Customer power Information power Global investors power Global market power Power of simplicity Power of the organization

Costa Mesa's (1998) "Recasting employees into teams" describes how Signicast of Milwaukee, Wisconsin, developed a "learning organization mindset" at a newly constructed plant (Mesa, 1998). Important strategies and points include the following:

Worker-executive dialogue about building the new facility was critical for engaging workers and improving designs.

Cross training makes jobs more interesting, teaches employees new skills, and reduces injuries.

Learning incentives promote cross training and reward good performance.

Including workers in shift scheduling is one way to promote a strong work/life balance.

The Validity and Applicability of Organizational Learning Models

Glasmeier, et al's (1998) article about manufacturing modernization programs offers a critique of the validity and applicability of organizational learning models. The article presents these criticisms as "propositions," which are listed below. These propositions highlight areas where programs that promote organizational learning may fall short, and are areas that need to be considered for assessment. The article also points out that "firm-learning" is a function of a firm's personnel, and that the literature is "mostly silent" about this.

- Proposition 1 The lack of a universally accepted definition of firm learning has led to significant misuse of the term.
- Proposition 2 Normative in intent, most discussion of the learning organization lacks appreciation of the rote nature of learning in organizations.
- Proposition 3 Learning is about the acquisition and use of information. We know little about how firms determine the need to acquire new information and develop the ability to act in response to newly acquired knowledge.
- Proposition 4 Information absorption is critical to learning. Yet, a firm's ability to absorb new information is a function of its previous experiences with similar types of information.
- Proposition 5 Learning is history-dependent. Firms act on the basis of historical precedent. Doing what you know is the safety net.

Promoting Continuous Improvement, Innovation, Community Building

Because my thesis project focuses on how to help the Wisconsin Department of Natural Resources promote continuous improvement, innovation, and stakeholder collaboration, I looked for links between these topics and organizational learning. Early on, I learned that the WDNR's challenge is not unique, and that other professionals have also found that organizational challenges are often the primary barrier to effective and innovative environmental programs such as an environmental management system (Kirkland and Thompson, 1999), (Allenby, 1999), (Klein and Sorra, 1996).

Learning Organizations Promote Continuous Improvement

Deane, Clark et al. (1997) make an interesting link between learning organizations and performance in their article "Creating a Learning Project Environment." The article looks at whether project outcomes meet customer needs, explaining that a variety of gaps can exist between the two. The article presents a model that helps managers assess and narrow these gaps and foster a continuous improvement cycle "typical of learning organizations. (Deane, Clark et al., 1997)." Some investigators are finding that a focus on organizational learning has great potential to build the collaboration and continuous improvement programs that promote organizational performance (Levine, 2001).

Learning Organizations Promote Innovation

Argyris, Schon, and Senge have long asserted that organizational learning promotes creativity and innovation. A recent, quantitative study builds on parallels between the characteristics of learning organizations and those described in the literature on organizations that are designed to support innovation and employee creativity (Ramus and Steger, 2000). When Ramus and Steger developed a list of supervisor behaviors that support employee creativity and innovation for this empirical investigation, they used the extensive literature on organizational learning.

Learning Organizations Foster Community Building

Dori Digenti's paper, "Toward an Understanding of the Learning Community," explores the thoery of a learning community as a mechanism for creating the learning organization (Digenti, 1998). The learning community combines the emotional and intellectual learning needed to break through defensive routines and seed effective learning behavior. The learning community is viewed through three lenses: 1) the vision and attributes; 2) prosocial behaviors which form a foundation for learning and transacting; and 3) cognitive skills built through community learning methods.

Digenti suggests that "by combining intellectual and emotional learning, the learning community fosters a vision of wholeness - the ability to bring one's whole self to the organization." An organizational climate that fosters this commitment sounds like a wonderful formula for employee happiness and ownership of organizational values at once.

Many others recognize the value of organizational learning: "...technology alone is insufficient for modernization - behavior change is also necessary. Thus, there is a growing acceptance of concepts and actions prescribed in the burgeoning literature on firm learning" (Glasmeier, Fuelhart et al., 1998).

Organizational Learning and Organizational Outcomes

To understand whether organizational learning was a viable approach for my thesis work to help the Wisconsin Department of Natural Resources become more effective and innovative, I also looked for *evidence* that organizational learning promotes organizational outcomes. I found some evidence, and also found that many experts suggest that an assessment tool is a highly effective way to promote organizational learning (Pace, 2002), (Redding, 1997), (Gephart, Marsick et al., 1996). Recent investigations are developing ways to measure the impact of organizational learning on outcomes such as financial performance, productivity, waste production, continuous improvement, customer focus, and employee behaviors, satisfaction, and performance.

The Learning Organization Audit

The most informative article regarding methods for evaluating learning organizations was written by R. Wayne Pace (2002). His "The Learning Organization Audit" article examines alternative ways to assess organizational learning. The article begins by "highlighting the enormity of the task" of a learning organization, which many describe as an ideal that organizations continue to strive for (Redding). Pace describes assessment approaches for measuring three aspects of organizational learning.

The first assessment approach is an Organizational Learning Profile (OLP) survey that assesses to what degree organizational learning is taking place. This approach measures four factors that describe important elements of learning in an organization: a) information-sharing patterns, b) inquiry climate, c) learning practices, and d) achievement mindset. Information-sharing patterns include the ways and the extent to which organizational members share information. Inquiry climate includes the ways and extent to which organization members inquire, challenge, and experiment to improve organizational functioning. The learning practices factor focuses on the kinds of activities in which organizational members engage to learn. Finally, the achievement mindset factor has to do with the perspective that organizational members have regarding their desire to achieve in the organization. The OLP consists of 34 items that cluster around these four factors. The survey asks respondents to indicate the extent to which they agree or disagree with the 34 assertive statements, using a six-point scale. The focus of the OLP is the learning process and, in particular, how well respondents perceive that the learning elements are implemented.

The second instrument Pace describes is the Dimensions of the Learning Organization Questionnaire (DLOQ). This survey assesses whether an organization has the characteristics of a learning organization. The survey consists of 55 statements about organizational practices related to seven dimensions of a learning organization: a) creates continuous learning opportunities, b) promotes dialogue and inquiry, c) promotes collaboration and team learning, d) empowers people to evolve a collective vision, e) establishes systems to capture and share learning, f) connects the organization to its environment, and g) provides strategic leadership for learning. The survey items are organized by organizational level: individual, team, and organization. Respondents indicate the degree to which they perceive these practices occur, using a 6-point scale from *almost always* to *almost never*. A third type of audit assesses whether organizational outcomes are affected by learning initiatives. Here he describes two instruments. The first instrument is the section of the DLOQ survey that assesses perceptions of desired organizational outcomes. While the survey measures perceptions, Pace notes that the researchers "have not attempted to secure objective performance measures related to these perceptions." The second tool, which he does not name, collects objective data before and after learning programs are implemented on at least four business results: total products produced, project costs, overtime hours and pay, and employee satisfaction, for measurement.

These audits offer three very different types of measurements: whether organizational learning is taking place, whether an organization has the characteristics of a learning organization, and whether certain outcomes are affected by learning initiatives. Of these three assessments many firms may argue that only the latter is of value since it correlates learning initiatives with measures of organizational success outcomes. As global competition increases, assessing organizational outcomes seems to be becoming increasingly important.

Case Studies of Success

In their article "Hardwiring the Learning Organization," Gephart, et al (like Redding) point to the American Society for Training and Development Learning Organization Assessment Framework. The authors purport that most learning organization models emphasize leadership and management, culture, and systems for communication, information, and knowledge. They say less emphasis is placed on organizational structure and systems for facilitating change, including support systems for performance. Through a number of case studiesthe authors emphasize how important such support systems are for promoting organizational learning and, vice versa, how important organizational learning is for promoting organizational outcomes. In fact, the article provides examples of how Corning, Analog Devices, GE, and others link learning to important company performance measures.

Linking organizational learning with improved financial performance comes from research at the Center for Effective Organizations at the University of Southern California. Organizational learning had a positive effect on the perceived and actual financial performance of companies in the Center's study. For individual employees, organizational learning had a significant effect on areas including continuous improvement, customer focus, employee commitment, and overall work performance. However, the authors caution that support systems "are only as good as the measures they track."

More evidence of the desirable outcomes of fostering organizational learning is included in Tim Boydell's case study of British Insulated Callendar Cable (1992 to 1994). Outcomes include the following:

Employee productivity increased 113 percent Absenteeism fell 58 percent Scrap decreased by 50 percent Market share rose from 17 to 40 percent On-time delivery rate became the highest ever The article offers a noteworthy mention of a 1992 survey of executives about the effect of organizational learning on innovation and competitiveness. "The survey found that experimentation significantly enhances innovation but not competitiveness," the article explains, "...continuous improvement and knowledge acquisition enhance competitiveness."

The article also provides a list of essential features of a learning organization:

Continuous learning at the systems level Knowledge generation and sharing Critical, systems thinking A culture of learning A spirit of flexibility and experimentation People-centered

Does Your Company Have Learning Organization Characteristics?

John Redding's "Hardwiring the Learning Organization" is a step-by-step guide to conducting an assessment to determine whether your company has the characteristics of a learning organization. Redding emphasizes the uniqueness of an organization, stressing that each "must discover their own solutions, not borrow them" when it comes to assessing learning characteristics. He offers an example process that is based on "dozens of assessments conducted by the Institute for Strategic Learning," and indicates that a wide variety of instruments exist.

Redding recommends that a first step of the assessment process is to clarify the reason for the assessment, naming several common purposes and uses. Also critical during this first step is designating the "owners" of the assessment appropriately, i.e., the owners should be key business decision makers. Redding names these common purposes and uses for learning organization assessments:

Determine a company's current status as a learning organization Educate a company on what it means to be a learning organization Engender creativity and innovation Encourage dialogue, common understanding, and sharing of different perspectives about organizational success

For tool selection, the second step, organizations can follow the ASTD guide to assessment instruments. Redding explains that the guide divides the items in each instrument into two categories: Levels of Learning and Organizational Systems, based on the ASTD Learning Organization Assessment Framework. Levels of Learning items assess learning at individual, team, and organizational levels. Organizational Systems items assess the following subcategories:

Vision and strategy Leadership and management Culture Structure Communication and Information Performance Management Technology

Change Management

Pace described a tool for assessing organizational outcomes. While Redding doesn't offer a tool, he poses the following questions about the relationship between organizational learning and performance:

What learning organization characteristics are most correlated with high performance? How much do those characteristics vary across business settings and contexts? Are key characteristics missing in the current concept of the learning organization? How do those characteristics fit and relate to produce high performance?

Today's Approaches for Building Learning Organizations

One of the primary questions that came out of the January dialogue I held with local organizational learning experts is, "What really works when attempting to build a learning organization - from attaining management commitment, to engaging the right people, to sustaining momentum once you start?" The famous concepts and individual success cases described above are great, but how can we apply these ideas successfully? Several practitioners address just this question.

Workplace Climate is Key

To talk about becoming a "learning organization" without creating a learning atmosphere is an exercise in futility, according to Dr. William J. Rothwell, professor of workforce education and development in the College of Education at Pennsylvania State University. In his recently published book, *The Workplace Learner: How to Align Training Initiatives with Individual Learning Competencies*, Rothwell says that a workplace learning climate is only favorable when employers take specific, carefully planned steps to ensure that their employees learn (Rothwell, 2002).

According to Rothwell, company leaders first have to commit sufficient financial resources and time for workplace learning, while establishing realistic goals and expectations for learning. This commitment has to be matched by middle management, union leaders, and the employees themselves. Next, management has to share a common vision of what it ultimately hopes to achieve through workplace learning. At the same time, the company must inspire sufficient trust in employees that they will participate in workplace learning programs, despite the risks involved in breaking out of one's routine and comfort zone. "Finally, organizations should give their employees ample incentives and rewards to encourage them to pursue workplace learning and make sure they know `what's in it for them,'" Rothwell says.

Rothwell formulated these conclusions based the results of a five-year study of managers, professionals, technicians and workers in five industry sectors: health and human services; office, financial services and government; accommodations and personal services; manufacturing, agribusiness, mining and construction; and trade, transportation and communications. Rothwell's research focused on ways to measure learning climate. To do that, he asked employees about the conditions in their workplaces that either encourage or discourage their real-time learning efforts to solve work-related problems.

Appreciative Inquiry

The concept of appreciative inquiry builds on Wheatley's assertion that an organization "must learn more about itself from itself." In her book *The Thin Book of Appreciative Inquiry* (Hammond, 1998), Sue Hammond describes Appreciative Inquiry as a way for an organization to focus on, discover, and do more of what works in an organization. At the 2003 University of Wisconsin, Office of Quality, Showcase event, two speakers talked about appreciative inquiry. Dr. Seema Kapani, UW Equity and Diversity Resource Center, described appreciative inquiry as a "constructive approach to organizational change and development." Also at this conference, UW Office of Quality Improvement Consultant Ann Zanzig named appreciative inquiry as a tool organizations can use to formulate a description of their "ideal," which is a critical, early step for process improvement.

Appreciative Inquiry suggests we look for what works in an organization. Through the appreciative inquiry process, we review past successes to formulate statements that describe where an organization wants to be. Because the statements are grounded in real experience and history, people know how to repeat their success.

- 1. Formulate the questions to explore the topic. Example: "*Describe a time when you were proud to be part of an innovative effort. Why were you proud? What organizational climate and skills existed at the time?*"
- 2. Through interviews, identify examples, or stories, that illustrate the answer to the question.
- 3. Identify common themes of the circumstances that made success (in this case, extraordinary customer service) possible, such as "necessary data is available."
- 4. Transform the themes into "Provocative Propositions" that answer "what if." For example, "{what if} The information we need is available at the touch of a finger."
- 5. Integrate the Provocative Propositions into the organization.

Evaluative Inquiry

In their recent book *Evaluative Inquiry for Learning in Organizations* (Preskill and Torres, 1999), Hallie Preskill and Rosalie Torres explain that "just as organizations need to transform themselves to survive, so must evaluation theory and practice." They propose that in addition to providing a means of accumulating information for decision making and action (operational intelligence), evaluative inquiry can be "equally concerned with questioning and debating the *value* of what we do in organizations."

The book begins with a description of how today's organizations are changing and what it means to learn at the individual, team, and organizational levels. Early on the authors also outline four learning processes that facilitate evaluative inquiry: dialogue; reflection; asking questions; and identifying and clarifying values, beliefs, assumptions, and knowledge. Then, through the use of an illustrative case, the authors guide you through the three phases of evaluative inquiry - from focusing the inquiry to developing action plans. Also included are interviews from four different organizations: Land O'Lakes, Colorado Department of Education, Ford Motor Company, and Presbyterian Hospital and Healthcare Services. Also covered are additional tips for when practicing evaluative inquiry, including an exploration of the evaluator's role and challenges to implementing evaluative inquiry in today's organizations.

Sustaining Momentum in Learning Organizations

Since Senge published "The Fifth Discipline" in 1990, he and his associates have frequently been asked by the business community, "How do we go beyond the first steps of corporate change? How do we sustain momentum?" (Senge, Kleiner et al., 1999). A more recent book by Senge and several colleagues, *The Dance of Change: The Challenges to Sustaining Momentum in Learning Organizations* discusses how the challenges to sustaining momentum are largely internal and offers strategies for success.

Using nature as a metaphor, which is familiar to students of systems thinking, Senge and colleagues illustrate how organizations have a life cycle like any organism. They assert that biology, which shows that organisms are affected by both growth and limiting processes, can teach us much about the growth and premature death of organizational change initiatives. The authors suggest that most organizational learning initiatives deal only with growth processes and not with the limiting processes. By thinking of sustaining change more biologically and less mechanistically, we can overcome the challenges of redesigning and rethinking: not enough time, no help, not relevant, and not walking the talk. A focus on limiting processes is also key for facing the challenges of sustaining transformation, which he calls fear and anxiety, assessment and measurement, true believers and non-believers.

Reflections

The sources described above outline historical and current efforts over this time to define, build, evaluate, and sustain learning organizations. Cornerstone definitions of a learning organization include Peter Senge's *Fifth Discipline* (1990) definition and the American Society of Training and Development's Learning Organization Assessment Framework (1995).

<u>Peter Senge's Definition of a Learning Organization (Senge, Kleiner et al., 1994)</u> A learning organization is "an organization that is continually expanding its capacity to create its future. For such an organization, it is not enough to merely survive. 'Survival learning' or what is more often termed 'adaptive learning' is important - indeed it is necessary. But for a learning organization, 'adaptive learning' must be joined by 'generative learning,' learning that enhances our capacity to create."

<u>The Learning Organization Assessment Framework (Gephart et al, 1995)</u> Created by the research dept, American Society for Training & Development

Learning Orientations

- Individual
- Group or team
- Organizational

Facilitative Organizational Systems

- Vision and strategy
- Leadership and management
- Culture
- Structure
- Change management
- Systems and Processes
- Communication, information, and knowledge systems
- Performance management and support systems
- Technology

Advocates agree that "learning organizations are more likely than other organizations to be adaptable and flexible, lack complacency, experiment with and create new knowledge, rethink means and ends, and tap people's potential for learning as a strategic competitive advantage" (Redding, 1997). Practitioners say the most effective approaches for building learning organizations are assessment instruments and recent approaches that focus on appreciative inquiry, evaluative inquiry, workplace learning climate, and sustaining organizational learning.

Recent studies provide evidence that organizational learning can promote "bottom line" outcomes like profits, customer satisfaction, performance measures, and innovation. This research has great value if businesses believe "the ability of organizations to learn and improve faster than their competitors may be the only sustainable competitive advantage in the businesses world of the 21st century..." (Deane, Clark et al., 1997). It is worth noting that businesses can improve competitive advantage and facilitate organizational learning by drawing from organizational learning as well as the related fields of knowledge management and intellectual capital (McElyea, 2002). It is no longer possible for CEOs and managers to take in enough knowledge to make decisions, according to McElya. "Through use of knowledge management and valuation of intellectual capital, learning organizations become much more effective," he explains.

Some see organizational learning as offering the holistic advantage of promoting competitive advantage and employee happiness at once (Gephart, Marsick et al., 1996). Others take this a step further. For example, appreciative inquiry professional Seema Kapani, UW Equity and Diversity Resource Center, proposes that bringing the whole person to work is a critical first step for building a learning organization. UW Office of Quality consultant Ann Zanzig reinforces this when she says that appreciative inquiry is a good way to develop an "ideal," or vision, which is a critical early component of her Accelerated Improvement Process work. This begins to sound like "tough love" in that full participation is critical for empowerment and commitment, as long as there are ground rules. I think the challenge for many organizations is striking this balance: honoring full participation while maintaining reasonable expectations for people's behavior and for realistic use of organizational resources.

The concept of organizational learning dates back at least 30 years (Levine, 2001). What is interesting is that the learning organization approach has a kind of "staying power," to quote Linda Levine. "Researchers and practitioners have written about this for decades, and yet issues debated in the field 20 or so years ago bear a striking resemblance to those still debated today," she writes. This is no surprise given the advice of Redding to recognize that "the learning organization is an ideal" and no pure one exists. These issues of cooperation and integration reflect issues that are part of our humanity, which Wheatley proposes can evolve if more people promote integration.

This sentiment of elusiveness was evident during the January dialogue I held with local organizational learning experts, which included people from the American Society for Training and Development, the Madison Area Quality Improvement Network, the UW Office of Quality, as well as consultants and academics. Some consultants like Senge and his crew, and some organizations seem to be "masters" of this very human approach for promoting organizational success. However, our organizational learning dialogue group emphasized the continuing challenge of persuading organizations to make organizational learning a priority, and of applying organizational learning approaches. Indeed, it is impossible to ignore that a number of organizational culture. These factors that have nothing to do with a healthy, sustaining organizational culture. These factors include market trends, monopolies, and inventions. What I gather from reading the newspaper and talking to business experts is that these successes are often short-term and are too often gained at the expense of social values. While organizational learning may not be the only approach to success, it may just be the one

that offers the most sustainable, ethical path. However, our society has not reached the "tipping point" (Gladwell, 2000) needed for transformation to Wheatley's integrated that is society adept at deriving value and strength from change.

The ideas from this literature review and from the Madison area dialogue about organizational learning will contribute to the Wisconsin Department of Natural Resources organizational change effort. Specifically, it will help our EPD-WDNR team to create skill sets for organizational learning and stakeholder community building, and to formulate a roadmap for creating a supportive organizational environment for acquiring and applying these skills.

Appendix: Madison Area Dialogue - Summary of January 9th, 2003 Meeting

LOGISTICS

Date: Thursday, January 9, 2003

Time: 9 am – 12 noon

Where: Room 1047, Engineering Centers Building

Attendees:

Name	Phone	Email
Rebecca Cors,*	263-1085	cors@epd.engr.wisc.edu
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Partners in Place		
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Madison Area Quality Improvement Network		
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Bob Shaver,	441-7774	bschaver@bus.wisc.edu
UW School of Business, Extension Education		
Tricia Tooman,*	438-4680	trtooman@wisc.edu
UW CAVE Dept and Soulstice Training		

* facilitators

DISCUSSION

The discussion began with participants introducing themselves and briefly describing their interests in organizational learning. Rebecca described how she is working to learn more about organizational learning for her thesis project. Because no UW-Madison courses have a primary focus on organizational learning, she began to interact with experts in organizational learning about the possibility of holding a dialogue, perhaps a workshop, about the topic. Her focus has been primarily on assessment because, while she has read a lot about organizational learning. A second reason for Rebecca's focus on assessment is that some of the articles she read show that an organizational learning assessment is a great way to introduce and improve organizational learning.

The ensuing discussion covered these main topics:

_	How do participants define organizational learning/ learning organizations?	24
_	How are the concepts Organizational Learning and Learning Organization perceived?	25
_	Who might have an interest in dialogue about organizational learning?	25
_	Looking forward - how would gatherings add value?	26
	Parking Lot & Significant Comments	

How do participants define organizational learning/learning organizations?

Participants jotted down two or three characteristics that define organizational learning and then shared them with the group. Group sharing inspired some to expand the list with additional thoughts about characteristics that built on each others' ideas. Some commented that this list of organizational learning characteristics is how we define learning organizations.

- Applying Senge's Disciplines
- Inquiry permeates all levels of communication; pace of work allows this
- Shared passion about the best possible team effort
- Participatory needs assessment/improvement/evaluation to empower learners
- Learning before, while, after doing (Harvard Tapes)
- Reflection and continuous improvement
- Mission- and values- centered
- Lateral inter- and intra-organizational learning
- Systemic, conscious, purposeful learning and sharing
- Learning with an organization/ dynamic and ongoing/ individual and collective
- Includes multiple perspectives and stakeholders
- Varying paces/ speeds
- Learners can teach
- Ownership for learning is essential for sustaining learning
- "and" learn from successes and "accidents"
- Organizations embrace mistakes and conflict for future learning
- Encourages experimentation

How are the concepts *Organizational Learning* and *Learning Organization* perceived? Participants offered their perspectives.

- Learning organizations are considered "cutting edge" in the business world.

- Organizational learning seems more *academic* and learning organizations are a kind of organization that you develop in *practice*.
- Organizational learning addresses *how* means; learning organizations describe *what* it is end.
- The terms have become "contaminated" by ineffective programs in the past.

Who might have an interest in dialogue about organizational learning?

Participants reviewed and added to this list of organizations that would have an interest in a dialogue about organizational learning. Dawn suggested that we share the summary of this (January 9th, 2003) meeting with these people, listed below.

Government

- Department of Workforce Development
- Department of Public Instruction
- Wisconsin Department of Natural Resources
 - Tim Mulholland, Darin Harris, Carolyn Garber
- Wisconsin Department of Transportation: Janet Nordorft and others

Non-Profit

- Friends of Troy Gardens Sharon Lezberg is contact
- Community Action Coalition Joe Mathers is contact
- Wisconsin Forward Award Bundy Trinz is contact

Private Organizations/ Professional Associations

- Cuna Sue Racine, Cynthia Venden are contacts
- Consultants
 - Anne Forbes, Partners in Place
 - Michael Millis, Soulstice Training
- Professional Associations
 - American Society for Training and Development
 - Madison Area Quality Improvement Network
 - Society for Human Resources Management

University of Wisconsin

- Dr. Rick Brooks, Social Change Expert
- Dr. Aaron Brower, UW Social Work
- UW School of Business Faculty
- Continuing and Vocational Education Faculty and Students(?)
- UW Office of Quality
- Dr. Seema Kapani, Equity and Diversity Resource Center

Looking forward - how would gatherings add value?

Participants shared their ideas about how future gatherings could be valuable to participants.

- Activities to try or model

Don Schutt (UW) attended the World Trade Center "Guided Dialogue."

There are many café models for small group conversation where you don't need to target an audience; you just need to develop good focus questions.

Appreciative inquiry, conversation.

A sharing conversation that creates a learning community - "bring your best practices."

Small groups then debriefing then reporting.

Gil Styles and Associates - large-scale organizational change.

Identify energy spots in first dialogue - figure out what people want through dialogue or perhaps a needs assessment.

"Mastermind" group - Dawn.

Guided Dialogue.

Focused Conversation.

Demonstrate a facilitation method/ learning activity people can take back to work.

- Organizations who could be potential partners

Link an organizational learning meeting to the Midwest Facilitator's network meetings (they usually have additional funding).

April 14th - UW Office of Quality Showcase of improvement - "doing good work during challenging times."

April ASTD session about related topics (?).

- What people (potential attendees) want?

People want a "how to."

Take-aways like tools, information about a model in practice, an example of how to facilitate learning circles, other practical applications.

It is rare in today's society to slow down and to be heard and to listen - this in itself may appeal to some.

People want to know how to recognize a learning organization when they see it. Tools that encourage reflection.

Enough lead-time to plan to attend.

People want to know how to get into a position in their organization to "sell" organizational learning.

People want to understand how organizational culture can support the use of organizational learning tools and vice versa.

MAQIN's members will be most interested in practical applications and tools If this becomes on going a website should be developed

- If this becomes on-going, a website should be developed

Parking Lot & Significant Comments

Two comments that were either in the "parking lot" or were general enough to mention here.

- We are in a "pressure-cooker" society that reduces people's ability, interest, and time to learn.
- Senge's 5 disciplines from a conceptual framework to tools, skills, "rubber meets the road."

Appendix: Madison Area Dialogue - Definitions for Organizational Learning and a Learning Organization - Discussed at the January 9th, 2003 Meeting

Defining Terms: Learning Organization vs Organizational Learning

January 9th, 2003 Madison Area Dialogue about Organizational Learning Hosted by UW Engineering Professional Development

Organizational Learning is a broad term that can describe a variety of types of learning in organizations; a few examples are listed here.

- An individual training program
- Group decision-making based on data, dialogue, reflection
- A program to promote acquisition of a certain skill organization-wide
- A purposeful effort to promote learning to improve organizational performance

The term **Learning Organization** is most often used when it is accompanied by a description of its characteristics, as shown in the examples below.

The Learning Organization Assessment Framework (Gephart et al, 1995) Created by the research dept, American Society for Training & Development

Learning Orientations

- Individual
- Group or team
- Organizational

Facilitative Organizational Systems

- Vision and strategy
- Leadership and management
- Culture
- Structure
- Change management
- Systems and Processes
- Communication, information, and knowledge systems
- Performance management and support systems
- Technology

From John Redding's "Hardwiring the Learning Organization"

Key Premises for Learning Organizations

- Organizations and groups, not just individuals, learn.
- The degree that an organization learns determines its capability to transform itself to meet demands for fast, fundamental change.
- A company is a learning organization to the degree that it has purposefully built its capacity to learn as a whole system and woven that capacity into all of its aspects: vision and strategy, leadership and management, culture, structure, systems, and process.

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Appendix: Madison Area Dialogue - Invitation to May 5th, 2003 Conversation

DO YOU WONDER ...

- 1. What kind of circumstances and skills promote organizational learning?
- 2. How can my organization build on what works?
- 3. How can I join others in the greater Madison area in an on-going dialogue about "learning organizations"?

Then join us for a guided conversation...

UW Engineering Professional Development Department invites you to participate in...

A Conversation About Organizational Learning

On Monday, May 5th, 2003, Registration and Refreshments at 8:00 a.m. Conversation runs 8:30 a.m. until 11:30 a.m.

At the UW Engineering Centers Building, 1550 Engineering Drive at the Corner of Breese Terrace & University Avenue, Room 1003

- \$5 donation requested for snacks and refreshments -

A Conversation to Learn, Experience, Connect

The workshop will begin with a brief overview of the origins of an emerging dialogue in the Madison area about organizational learning. Through small and large group discussions participants will 1) illuminate characteristics and practices that promote organizational learning and 2) consider how an on-going dialogue about organizational learning would be valuable to them. The format for these discussions will demonstrate innovative approaches for facilitation and organizational change, including "appreciative inquiry."

Participants will...

- Receive a summary of the day's conversation, including a list of "what works" for promoting
 organizational learning.
- Experience an innovative approach to organizational change, called appreciative inquiry, which they can apply in their own organizations.
- Network with people committed to the principles of organizational learning & innovation.

Registration

For registration and directions go to <u>http://www.ohrd.wisc.edu/special/engrlearn.htm</u>. Registration limit is 50.

Organizing Committee

Organizers include lead facilitator Rebecca Cors, UW Engineering Professional Development; co-facilitator Anne Forbes, Partners in Place; Dr. Sandy Courter, UW Engineering Learning Center; and Dr. Dean A. Pribbenow, UW Office of Quality Improvement.

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