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Victoria J. Marsick
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The problem and the solution. Some organizations seek to become learning organizations. Yet, implementation is elusive and is not often based on research about what constitutes a learning culture. Over the past 16 years, a model of a learning organization was developed that draws on both the literature and organizational case studies. However, organizations wanted a way to diagnose their current status and guide change, and scholars wanted better measures of learning to compare organizations and to explore links between organizational learning and the performance of the firm. The solution was to develop and validate an instrument that addresses these needs.

Workplaces—their psychological contract and the demands they place on employees at all levels to learn and work faster—are changing at exponential rates. Organizations often expect that learning and knowledge creation will take place continuously for individuals and that they will share what they know in ways that promote learning in groups and throughout the organization. This article is based on the premise that human resource developers must redefine their relationships to leaders if they wish to influence the conversation taking place among senior leaders about the need to cultivate strategic/informal learning to improve performance and reach strategic goals. Human resource development (HRD) has some opportunity—even when restricted by reporting positions and levels of authority—to proactively influence the direction, pace, and salience of learning in

workplaces. To best play that role, we have argued for a model of change guided by organizational learning diagnostics that are used to assess gaps, guide interventions, and subsequently measure changes (Gephart, Marsick, Van Buren, & Spiro, 1996; Marsick & Watkins, 1999).

Several advocates of the learning organization have developed diagnostic tools for the learning organization. An analysis of such instruments grew out of a project carried out by Gephart, Marsick and Van Buren through the American Society for Training and Development (Gephart et al., 1996). One conclusion was that many instruments have diagnosis and intervention as their purpose but are informed primarily by a change agent's practice, not by research. Instruments without a research base can stimulate change but make it hard to understand preferred pathways to success based on a collective record across organizations of outcomes, dynamics, and conditions of interventions. Instruments sometimes imply that improvement will result if an organization adopts recommended practices. But many factors affect the successful adaptation of practices, including an analysis of the organizational systems' contributions to degree of success. Research can help track these factors and help change agents and decision makers make informed choices about how to modify interventions.

The model and instrument described in this issue—the Dimensions of the Learning Organization Questionnaire, or DLOQ—grew out of our research and practice and has subsequently been tested and modified through research studies such as those exemplified by but not limited to those included in this issue. The DLOQ measures important shifts in an organization's climate, culture, systems, and structures that influence whether individuals learn. Workplace learning in our model is thus conceived as "the little R&D" that provides for ongoing experimentation, using lessons learned to draw a link between learning outcomes and changes in knowledge performance.

Human resource developers typically promote continuous learning opportunities for individuals. Continuous learning at the individual level is necessary but not sufficient to influence perceived changes in knowledge and financial performance. It is argued that learning must be captured and embedded in ongoing systems, practices, and structures so that it can be shared and regularly used to intentionally improve changes in knowledge performance.

Organizational learning is particularly significant in today's workplace where employees may frequently change jobs or hoard what they know because they feel sharing knowledge could be detrimental to their own success. It is our hope that the findings from our work may nudge organizations toward seeing that it is not enough to hold individuals accountable for learning continuously without also building the organization's capacity to support, encourage, and make use of that learning. Most important, we hope

that they will see that it is good business to invest in and reward learning—and that they will not realize these benefits if they do not also attend to the elements of the culture that now squelch learning.

The Basis for the DLOQ: Our Understanding of Learning

Our views of organizational learning began with a mutual observation that significant learning, even transformative learning, was usually the least structured. Yet models of adult learning were generally based on an assumption of an educator structuring learning experiences. We were hardly alone in pondering this, but we were significantly alone in our focus on the workplace where structure was the rule, not the exception, for training (Marsick, 1988; Watkins, 1992). Structured training is still valued and important, for example, as embodied in competency models or performance technology. However, there is an increased awareness that much valuable learning happens informally on the job, in groups, or through conversations (J. M. Huber Institute for Learning in Organizations, 2002). To support such learning, one needs to build a learning climate and culture. Climate and culture are built by leaders and other key people who learn from their experience, influence the learning of others, and create an environment of expectations that shapes and supports desired results that in turn get measured and rewarded.

Learning at the Individual Level

Our theory of informal and incidental learning (Marsick & Watkins, 1990, 1997), based on early work by John Dewey (1938) and Kurt Lewin (1946), helps explain how people shape this climate or culture for learning. Learning takes place when disjunctures, discrepancies, surprises, or challenges act as triggers that stimulate a response. Individuals select a strategy or action based on their cognitive and affective understanding of the meaning of the initial trigger. Once a strategy or plan of action is determined, the individual implements the strategy. The strategy then either works or does not work as expected. When it does not work, there is dissonance and the cycle is triggered again.

Between the initial trigger and the determination of a strategy is an implicit filtering of the information through selective perception, values, beliefs, and framing of the situation. These filters are products of individuals' prior experiences and social contexts. The actions individuals take are constrained by their capacity to act (e.g., skills, authority, resources, and power). When individuals act, they may or may not perceive the results of their actions. If they do observe results, they may try to understand why they got these results. Often, individuals assume that external forces caused

undesirable consequences and desirable consequences are caused by their own actions (Argyris, Putnam, & Smith, 1985). Finally, out of these consequences and attributions about causes, individuals selectively make meaning of the experience and retain or embed these cognitive reconstructions as what is learned from the experience.

Learning at the Organizational Level

On the other hand, what is most significant at the organizational level is that learning is now a collective experience. The stages of learning may be similar, but learning is now the result of an interactive, interdependent process. In this model, environmental jolts or surprises such as a new regulation, a new competitor, market downturns, new technology, customer dissatisfaction or new demands, a new vision, or some other change in the status quo trigger learning. Active scanning of the environmental context of the organization, both internal and external, enables the organization to proactively shape responses. The culture or ideology of the organization serves as a filter to direct the organization's attention. Through their separate functions, key people (separately and collectively) in the organization arrive at a strategy for responding to the trigger. The strategy's success is due in part to the organization's ability to act cohesively. This requires alignment of vision about what to do, shared meaning about intentions, and the capacity to work together across many different kinds of boundaries. This collaborative capacity leads to collective action. Once the organization responds, individuals and departments make assumptions about the effectiveness of that response. There are consequences for both individuals and organizations as a result of these actions. If the response has been to integrate a new technology, for example, considerable learning may be required at the individual level before the organization has a new capacity. Organizational learning is the net result of this cycle. What is learned is what the organization retains such as a new capacity, a new understanding of what does not work, or a new procedure or technology.

Some organizations systematically seek to capture and embed new learning in a manner that facilitates widespread dissemination of that learning both for current and future employees. Our model of the learning organization, which in turn serves as the basis for the DLOQ, grew out of this conception of organizational learning. It is built on the idea that change must occur at every level of learning—from individual to group to organizational to environmental—and that these changes must become new practices and routines that enable and support the ability to use learning to improve performance.

Learning at the organizational level is not the sum of many people learning. Yet, individuals carry within them a microcosmic portrait of the organi-

zation (Argyris & Schön, 1996). Through these portraits, we can detect changes in the organization's mental models, shared values, and memory. Learning by individuals is necessary for the organization to change but not sufficient. When individuals increase their capacity to learn, they can (collectively) enhance the overall capacity of the organization to learn as long as the organization is receptive to their efforts to use their learning and puts in place appropriate mechanisms to enable, support, and reward the use of what is learned. In short, individual learning is related to organizational learning though not equal to it and potentially (though not necessarily) interdependent with it.

What must change for organizational learning to occur? Rules, memory, values, the system of relationships or structure, and the underlying dynamic or pattern that characterizes the organization all need to change. A learning organization is one that has embedded the capacity to adapt or to respond quickly and in novel ways while working to remove barriers to learning. These organizations increase their capacity to learn by making changes in the four systems that influence learning: strategy, structure, slack, and ideology (Meyer, 1982).

Over a number of years, we have developed a diagnostic tool to measure changes in organizational learning practices and culture, the DLOQ. In addition, we developed a measure of changes in performance that has enabled us to begin to ask whether perceived changes in financial and knowledge performance are indeed related to evolution toward what we define to be a learning organization. The section that follows gives the operational definition of the constructs measured in the DLOQ and the self-scoring version of the DLOQ.

Measuring the Learning Organization: The DLOQ

There are seven dimensions of the learning organization (Marsick & Watkins, 1999; Watkins & Marsick, 1993, 1996) that form the basis of the DLOQ. The questionnaire and definitions for each dimension can be found in the DLOQ Self-Scoring Version (Watkins & Marsick, 1997) in the appendix.

More than 200 companies have now taken the DLOQ, and we are beginning to see a number of patterns. Based on research conducted by Watkins, Selden, and Marsick (1997); Watkins, Yang, and Marsick (1997); and Yang, Watkins, and Marsick (1998) measuring organizations against the dimensions of the learning organization, we have seen a correlation between the learning organization dimensions and knowledge and financial performance.

Our initial work was focused on validating the instrument. We submitted it to rigorous critique for meaning and used reliability coefficients to iden-

tify poorly worded items and low performing items. We deleted or revised items until coefficient alphas for each scale were acceptable. The scales have proved consistently reliable, with all scales above the recommended .70 (Nunnally, 1978). We have used our self-published survey with participants from companies in Executive Education seminars at the Columbia University Business School, in the Sociotechnical Systems Network, and in numerous studies in Malaysia, Colombia, the Netherlands, and the United States, beginning with a study of family businesses as learning organizations (Selden, 1998; Selden & Watkins, 2001). The second article in this issue, by Yang, presents additional work done in several stages to assess construct validity of the DLOQ.

Measuring Changes in Organizational Performance

We also developed metrics for perceived changes in knowledge performance from the literature of knowledge and intellectual capital (Watkins & Callahan, 1998). Although as yet there is yet little agreement on these metrics, there are a number of individuals who have identified critical indices of knowledge capital. For several, knowledge capital is the value that a customer or potential buyer places on a firm over and above its book value. This can be thought of as the value of the knowledge of the firm. For example, Coca-Cola sells water, sugar, and bubbles, yet its real value is in its intimate knowledge of markets, customers, and competitors.

> Just imagine that your company is suddenly struck by a knowledge blight that erases all corporate knowledge from the storage media including employees' minds. The difference between the market value of the company before and after the blight struck is the value of the company's intellectual capital. (Nasseri, 1997, p. 1)

What knowledge or information actually brings "capital" or adds value to the organization? A number of approaches to measuring knowledge capital focuses on key indicators of future strategic value. For example, Beck (1992) counted the number of patents and patent disclosures, the percentage of knowledge workers among the total workforce, whether investments in technology are steadily increasing, or the percentage of the organization operating in the "new economy." The company Skandia tracks measures of innovation such as the number of new products per year, the percentage of premiums from new sources, ratio of their growth rate to the industry growth rate, customer satisfaction (including a customer satisfaction index), market share, add-on premiums, and persistence of clients, brokers, and wholesalers. They track their operations' effectiveness and financial results. Drawing on these and other sources regarding knowledge capital and its management, we developed a scale of knowledge performance. Equally important is measurement of current financial perfor-

mance. Hence, we created a measure of perceived changes in financial performance using traditional financial metrics such as return on investments to track this.

There are a number of limitations of the DLOQ, particularly in the performance measures. This is self-report data and a perceptual measure. We have found that individuals at most levels can take the DLOQ itself, but often, only middle- and higher-level managers are comfortable answering the performance questions. Measures such as these are at best proxy measures for actual performance. We cannot show highs and lows over time. This is just a snapshot of perceptions of change at the time the instrument is taken. Outcomes are based on perceptions, not hard financial or company data, and they are measured at the same time that we measure perceptions of the practices that are meant to impact these outcomes. Current measures of performance may reflect consequences of earlier actions. There is often a lag between learning initiatives and results so that the snapshot taken does not capture changes still in incubation stages. And as the evaluation literature always shows, it may be impossible to trace an outcome to learning and not to other initiatives or environmental changes.

On the other hand, movement toward a learning organization is a long-term process. The best we might expect to learn is that the presence of learning organization practices correlate with the perception that the organization is faring better both in terms of knowledge and financial capital. Because the early stages of learning can also include phases of unlearning and steep learning curves, measures such as these may not show much progress or may even show a setback in perceived results. In this sense, these findings do not shed light on whether practices are linked to performance as much as they show covariance with performance. Yet, workplace learning is part of the knowledge capital of the organization, and we believe that it may lead to improved financial performance. These measures are important therefore as one way of measuring the value added of the human resource development function.

Findings Across the Studies in This Issue

Tables 1 and 2 compare several of the studies in this issue to highlight the differences in means by organizational and national context.

As Yang and Hernandez report in their articles, the results of structural equation modeling have shown that our dimensions of a learning culture explain much of the variance in the two organizational outcome variables (knowledge and financial performance). Certainly there are other important variables that better explain financial outcomes (e.g., organizational size, access to raw materials, market niche, or competition). But these results nevertheless suggest an important potential relationship between the learn-

TABLE 1: **Definitions of Constructs for the Dimensions of the Learning Organization Questionnaire**

Dimension	Definition
Create continuous learning opportunities	Learning is designed into work so that people can learn on the job; opportunities are provided for ongoing education and growth.
Promote inquiry and dialogue	People gain productive reasoning skills to express their views and the capacity to listen and inquire into the views of others; the culture is changed to support questioning, feedback, and experimentation.
Encourage collaboration and team learning	Work is designed to use groups to access different modes of thinking; groups are expected to learn together and work together; collaboration is valued by the culture and rewarded.
Create systems to capture and share learning	Both high- and low-technology systems to share learning are created and integrated with work; access is provided; systems are maintained.
Empower people toward a collective vision	People are involved in setting, owning, and implementing a joint vision; responsibility is distributed close to decision making so that people are motivated to learn toward what they are held accountable to do.
Connect the organization to its environment	People are helped to see the effect of their work on the entire enterprise; people scan the environment and use information to adjust work practices; the organization is linked to its communities.
Provide strategic leadership for learning	Leaders model, champion, and support learning; leadership uses learning strategically for business results.
Key results	
Financial performance	State of financial health and resources available for growth
Knowledge performance	Enhancement of products and services because of learning and knowledge capacity (lead indicators of intellectual capital)

ing dimensions measured here and perceived changes in knowledge and financial performance. Future studies based on hard measures of financial and knowledge performance are helping to confirm or disconfirm these relationships such as those conducted by Ellinger, Ellinger, Yang, and Howton, and by McHargue as reported in this issue.

TABLE 2:   **Dimensions of the Learning Organization Questionnaire Means Across Multiple Studies (Total *N* = 3,253)**

Author	Context	N	Organization Type, Respondents	Continuous Learning	Inquiry and Dialogue	Collaboration and Team Learning
Watkins and Marsick	International	389	Multiple, managers and employees of Columbia Business School Executive Program participants	3.94	3.91	3.98
Selden	Southeastern region	142	Small family businesses, CEO or designee	5.01	4.05	4.09
McHargue	National	264	Nonprofit organizations, directors	4.16	4.15	4.33
Lien, Yang, and Li	Taiwan	79	Financial and high-tech firms, management, technical, and professionals	3.97	4.05	4.00
Hernandez	Colombia	906	For-profit, all levels	3.94	4.16	4.01
Maria	Malaysia	628	Government, mostly higher-level staff	4.05	4.08	3.84
Ellinger	National	208	For-profit, logistics managers	4.12	4.04	4.13
Milton and Watkins	Global	37	Association, members and association staff	4.26	4.35	4.32

These studies provide growing evidence of a relationship between performance and the dimensions of the learning organization. What is more interesting is the way in which the people variables influence system variables, which in turn are most likely to influence changes in performance but only when moderated by strategic leadership for learning. Similarly, it is interesting that the only direct predictor of knowledge performance is whether the organization has created systems to capture and share knowledge.

It is striking to note how the resulting model supports Senge's (1990) argument that the fifth discipline—systems thinking, here defined as making systemic connections and creating embedded systems to capture and share knowledge—is the glue that makes the other disciplines work. From this perspective, it was provocative to see that empowerment and team learning loaded in early factor analyses with other individual-level variables to form a cultural infrastructure that was quite separate from the organizational system variables. One might conclude that the learning culture is found in the minds and hearts of the people, and these dimensions of the

Create Systems	Empower People	Connect the Organization	Strategic Leadership	Financial Performance	Knowledge Performance	Mission Performance
3.50	3.74	4.00	4.13	4.18	4.15	NA
3.44	3.83	4.17	4.49	4.39	4.37	NA
3.78	4.2	4.35	4.73	5.52	4.32	2.92
4.13	4.08	4.01	4.26	4.16	4.35	NA
4.09	4.21	3.96	4.27	NA	4.32	NA
3.96	3.79	3.98	4.21	NA	NA	NA
3.70	3.93	4.19	4.26	4.31	4.16	NA
3.13	4.15	3.99	4.42	3.8	3.79	4.22

learning organization (continuous learning, team learning, empowerment, and promoting dialogue and inquiry) are necessary but not sufficient conditions for promoting learning.

Influencing the Conversation—Talking the Language of Business and Learning

Human resource developers can influence the conversation of leaders in their organizations by better talking the language of business and learning. The DLOQ and other such instruments can help build the business case for learning by showing how learning interventions can lead to improved performance and business results. The aspects of the learning culture most advocated in the learning organization literature (e.g., empowered people with a collective vision, collaboration and team learning, and promotion of inquiry and dialogue) were not by themselves strong enough to impact perceived changes in knowledge and financial performance. It is not surprising that so many learning organization experiments sponsored by human

resource departments create more frustration than real organizational change. They clearly must be supported by organizational systems to both capture learning and scan the environment.

Most important, all of these efforts are mediated by leaders and managers who provide strategic leadership for learning. This variable was most significantly related to perceived changes in financial performance. It is critical, therefore, to redefine the relationship between HRD and the leaders who are the brokers and buffers, mediating between what human resource developers do and what their clients can implement. This research provides more evidence that workplace learning programs not supported by leaders who understand the strategic role of learning will have less effect on the very reasons why corporations invest in HRD in the first place—to impact current and future financial performance.

Where We Are Headed

There should be little doubt that a culture oriented toward supporting learning can lead to improved performance. Although studies confirm this, they also suggest that the path toward performance improvement is highly complex and idiosyncratic. What is clear is that organizations need tools to help them figure out where they are not versus where they need to be. The DLOQ is one means of helping them make sense of a complex set of ideas. We make no claim that this is the best or the only measure that might guide organizational change. It is a reliable one and has proven durable across national boundaries, organizational types, and against competing organizational indices. We look forward to additional studies, translation beyond the six languages that we know of, and new practical and research uses that we can only begin to glimpse.

Appendix
Dimensions of the Learning Organization
Questionnaire Self-Scoring Instrument[1]

A learning organization is one that learns continuously and transforms itself. Learning is a continuous, strategically used process—integrated with and running parallel to work.

In the past decade, organizations have experienced wave after wave of rapid transformation as global markets and external political and economic changes make it impossible for any business or service—whether private, public, or nonprofit—to cling to past ways of doing work. A learning organization arises from the total change strategies that institutions of all types are using to help navigate these challenges. Learning organizations proactively use learning in an integrated way to support and catalyze growth for individu-

als, teams, and other groups, entire organizations, and (at times) the institutions and communities with which they are linked.

In this questionnaire, you are asked to think about how your organization supports and uses learning at an individual, team, and organizational level. From this data, you and your organization will be able to identify the strengths you can continue to build on and the areas of greatest strategic leverage for development toward becoming a learning organization.

Please respond to each of the following items. For each item, determine the degree to which this is something that is or is not true of your organization. If the item refers to a practice that rarely or never occurs, score it a one [1]. If it is almost always true of your department or work group, score the item as six [6]. Fill in your response by marking the appropriate number on the answer sheet provided.

Example

Example: In this example, if you believe that leaders often look for opportunities to learn, you might score this as a four [4] by filling in the 4 on the answer sheet provided. There are no right or wrong answers. We are interested in your perception of where things are at this time.

Question	Almost Never					Almost Always
In my organization, leaders continually look for opportunities to learn.	1	2	3	4	5	6

Question	Almost Never					Almost Always
	1	2	3	4	5	6

Individual level

1. In my organization, people openly discuss mistakes in order to learn from them.
2. In my organization, people identify skills they need for future work tasks.
3.* In my organization, people help each other learn.[2]
4. In my organization, people can get money and other resources to support their learning.
5.* In my organization, people are given time to support learning.
6. In my organization, people view problems in their work as an opportunity to learn.
7.** In my organization, people are rewarded for learning.
8.* In my organization, people give open and honest feedback to each other.
9. In my organization, people listen to others' views before speaking.
10. In my organization, people are encouraged to ask "why" regardless of rank.

11.*   In my organization, whenever people state their view, they also ask what others think.
12.   In my organization, people treat each other with respect.
13.** In my organization, people spend time building trust with each other.[3]

Team or group level

14.*   In my organization, teams/groups have the freedom to adapt their goals as needed.
15.   In my organization, teams/groups treat members as equals, regardless of rank, culture, or other differences.
16.   In my organization, teams/groups focus both on the group's task and on how well the group is working.
17.** In my organization, teams/groups revise their thinking as a result of group discussions or information collected.
18.   In my organization, teams/groups are rewarded for their achievements as a team/group.
19.*   In my organization, teams/groups are confident that the organization will act on their recommendations.

Organization level

20.   My organization uses two-way communication on a regular basis, such as suggestion systems, electronic bulletin boards, or town hall/open meetings.
21.   My organization enables people to get needed information at any time quickly and easily.
22.   My organization maintains an up-to-date database of employee skills.
23.*   My organization creates systems to measure gaps between current and expected performance.
24.** My organization makes its lessons learned available to all employees.
25.*   My organization measures the results of the time and resources spent on training.
26.** My organization recognizes people for taking initiative.
27.   My organization gives people choices in their work assignments.
28.   My organization invites people to contribute to the organization's vision.
29.*   My organization gives people control over the resources they need to accomplish their work.
30.*   My organization supports employees who take calculated risks.
31.   My organization builds alignment of visions across different levels and work groups.
32.   My organization helps employees balance work and family.
33.*   My organization encourages people to think from a global perspective.
34.   My organization encourages everyone to bring the customers' views into the decision making process.
35.   My organization considers the impact of decisions on employee morale.
36.** My organization works together with the outside community to meet mutual needs.

37.* My organization encourages people to get answers from across the organization when solving problems.
38. In my organization, leaders generally support requests for learning opportunities and training.
39. In my organization, leaders share up-to-date information with employees about competitors, industry trends, and organizational directions.
40. In my organization, leaders empower others to help carry out the organization's vision.
41.* In my organization, leaders mentor and coach those they lead.
42.** In my organization, leaders continually look for opportunities to learn.
43.* In my organization, leaders ensure that the organization's actions are consistent with its values.

**Measuring Learning Organization
Results at the Organizational Level**

In this section, we ask you to reflect on the relative performance of the organization. You will be asked to rate the extent to which each statement is accurate about the organization's current performance when compared to the previous year. There are no right or wrong answers. We are interested in your perception of current performance. For example, if the statement is true of your organization, i.e., "yes," fill in a [5] on the answer sheet provided. If the statement is not very true of your organization, i.e., "no," fill in a [2] on the answer sheet provided.

44. In my organization, return on investment is greater than last year.
45. In my organization, average productivity per employee is greater than last year.
46. In my organization, time to market for products and services is less than last year.
47. In my organization, response time for customer complaints is better than last year.
48. In my organization, market share is greater than last year.
49. In my organization, the cost per business transaction is less than last year.
50. In my organization, customer satisfaction is greater than last year.
51. In my organization, the number of suggestions implemented is greater than last year.
52. In my organization, the number of new products or services is greater than last year.
53. In my organization, the percentage of skilled workers compared to the total workforce is greater than last year.
54. In my organization, the percentage of total spending devoted to technology and information processing is greater than last year.
55. In my organization, the number of individuals learning new skills is greater than last Year.

Additional Information About You and Your Organization

In this section, fill in the number on the answer sheet which corresponds to the answer which best describes you or your organization.

56. What is your primary responsibility?
    1. General Management
    2. Operations/Production

      3. Administration, Logistics, or Financial/Accounting
      4. Human Resources
      5. Marketing/Sales
      6. Technical/R&D

57. What is your role?
      1. Senior Management
      2. Middle Management
      3. Supervisory
      4. Non-Management Technical/Professional
      5. Non-Management [Hourly Employee]

58. What is your educational experience?
      1. Did not complete high school
      2. High school graduate
      3. Certificate or associates degree
      4. Undergraduate degree
      5. Graduate degree

59. How many hours per month do you spend *on your own time* on work-related learning?
      1. 0 hours per month
      2. 1-10 hours per month
      3. 11-20 hours per month
      4. 21-35 hours per month
      5. 36+ hours per month

60. How many employees are in your organization?
      1. 0-500
      2. 501-1,000
      3. 1,001-10,000
      4. 10,001-50,000
      5. Over 50,000

61. Type of business?
      1. Manufacturing
      2. Service
      3. Government
      4. Other

62. Your organization's annual revenue?
      1. Under $2 million
      2. $2-25 million
      3. $26-99 million
      4. Over $99 million

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2. Items marked with an asterisk (both * or **) are those identified by Yang for the DLOQ-A short form of the survey. Items with two asterisks may also be used separately as the seven items that together create a single scale of a learning culture.

We use the metaphor of sculpting to describe what organizations must do to become learning organizations. Michelangelo spoke of sculpting as chipping away that which does not belong to the essence within the material that is sculpted:

> The best artist has no concept which some single marble does not enclose within its mass, but only the hand which obeys the intelligence can accomplish that. . . . Taking away . . . brings out a living figure in alpine and hard stone, which . . . grows the more as the stone is chipped away.

The sculptor of the learning organization has to see in her mind's eye, and shape structures toward, that which nurtures learning; and then create, sustain, or alter existing approaches to foster this capacity. She will chip away at all of the existing systems, attitudes, and practices, which thwart learning (from Watkins & Marsick, 1993, *Sculpting the Learning Organization*).

DLOQ Answer Sheet

Mark your answer by circling the appropriate response on each item. Then add all of your responses in a category, divide by the number indicated, and record an average for that category. Finally, plot your average response for each category on the chart given.

Question	Almost Never					Almost Always
1.	1	2	3	4	5	6
2.	1	2	3	4	5	6
3.	1	2	3	4	5	6
4.	1	2	3	4	5	6
5.	1	2	3	4	5	6
6.	1	2	3	4	5	6
7.	1	2	3	4	5	6

A. Total for Continuous Learning
Sum ___/7 = ___

8.	1	2	3	4	5	6
9.	1	2	3	4	5	6
10.	1	2	3	4	5	6
11.	1	2	3	4	5	6
12.	1	2	3	4	5	6
13.	1	2	3	4	5	6

B. Total for Inquiry and Dialogue
Sum ___/6 = ___

14.	1	2	3	4	5	6
15.	1	2	3	4	5	6
16.	1	2	3	4	5	6
17.	1	2	3	4	5	6
18.	1	2	3	4	5	6
19.	1	2	3	4	5	6

C. Total for Collaboration and Team Learning
Sum ___/6 = ___

20.	1	2	3	4	5	6
21.	1	2	3	4	5	6
22.	1	2	3	4	5	6
23.	1	2	3	4	5	6
24.	1	2	3	4	5	6
25.	1	2	3	4	5	6

D. Total for Systems to Capture Learning
Sum ___/6 = ___

26.	1	2	3	4	5	6
27.	1	2	3	4	5	6
28.	1	2	3	4	5	6
29.	1	2	3	4	5	6
30.	1	2	3	4	5	6
31.	1	2	3	4	5	6

E. Total for Empower People
Sum ___/6 = ___

32.	1	2	3	4	5	6
33.	1	2	3	4	5	6
34.	1	2	3	4	5	6
35.	1	2	3	4	5	6
36.	1	2	3	4	5	6
37.	1	2	3	4	5	6

F. Total for Connect the Organization
Sum ___/6 = ___

38.	1	2	3	4	5	6
39.	1	2	3	4	5	6
40.	1	2	3	4	5	6
41.	1	2	3	4	5	6
42.	1	2	3	4	5	6
43.	1	2	3	4	5	6

G. Total for Provide Strategic Leadership for Learning
Sum ___/6 = ___

44.	1	2	3	4	5	6
45.	1	2	3	4	5	6
46.	1	2	3	4	5	6
47.	1	2	3	4	5	6
48.	1	2	3	4	5	6
49.	1	2	3	4	5	6

H. Total for Financial Performance

Sum ___/6 = ___

50.	1	2	3	4	5	6
51.	1	2	3	4	5	6
52.	1	2	3	4	5	6
53.	1	2	3	4	5	6
54.	1	2	3	4	5	6
55.	1	2	3	4	5	6

I. Total for Knowledge Performance

Sum ___/6 = ___

Additional Questions

56.	1	2	3	4	5	6
57.	1	2	3	4	5	6
58.	1	2	3	4	5	6
59.	1	2	3	4	5	6
60.	1	2	3	4	5	6
61.	1	2	3	4	5	6
62.	1	2	3	4	5	6

Dimensions of the Learning Organization: Profiling Your Results

On the graph below, plot your average scores from your questionnaire responses on the vertical line denoting each learning organization dimension (marked A to I).

MEAN SCORES **DIMENSIONS OF THE LEARNING ORGANIZATION**

	A	B	C	D	E	F	G	H	I
	Continuous Learning	Inquiry and Dialogue	Collaboration and Team Learning	Create Systems	Empower People	Connect the Organization	Strategic Leadership	Financial Performance	Knowledge Performance
6									
5.5									
5									
4.5									
4									
3.5									
3									
2.5									
2									
1.5									
1									

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Victoria J. Marsick *is professor and director of the Adult and Organizational Learning program at Teacher's College, Columbia University. She is also codirector of the J. M. Huber Institute for Learning in Organizations.*

Karen E. Watkins *is professor and director of the School of Leadership and Lifelong Learning at the University of Georgia. She is the former president of the Academy of Human Resource Development and is the author of numerous articles and books on the learning organization.*