
A time for reflection: learning about organizational learning

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Abstract

Describes the development of a course on learning organizations for Auckland Business School. Gives a number of different uses of the phrase "learning organization" and outlines three types of learning: individual; collective; and deuterio. Presents a summary of the literature on organizational learning and outlines three core elements which are considered to be essential: strategy; knowledge; and leadership. Discusses the major themes of the course, dealing with the basic concepts of learning in organizations. Presents a framework which can be used as a template to assist in the study of organizational learning and outlines some of the ways in which the concept of "learning" was used in the teaching of the course.

Recently the author had the opportunity to design and teach a new course on learning organizations for the Executive Programmes of the Auckland Business School at the University of Auckland. It was an exciting experience, giving the opportunity to explore "learning" in many different ways. Roth and Kleiner (1995) state that over 150 books and articles have been published about learning in organizations, or about the concept of a "learning organization", in the last four years. One may even contend that no shared meaning of what constitutes a "learning organization" currently exists[1]. It has, indeed, been said that there are no "true" learning organizations, but only organizations which exhibit certain characteristics we might expect a learning organization to demonstrate. Another contention in the literature is that an organization does not "become" a learning organization. Rather, it develops improved organizational learning. The learning in organizations is merely relative; all organizations learn to some degree.

It seems obvious that there is reasonable confusion among the uninitiated about the concept of learning organizations: what one is, what to do to "become one", and what benefits "becoming one" might offer. While this article will hopefully provide the initiated with a fresh perspective on an evolving topic, it should also provide the uninitiated with a road map which may lead to a fuller and clearer study of "learning organizations". The article primarily seeks to describe the course developed. In doing so, it will first discuss the major themes explored, dealing with basic concepts of learning in organizations. Subsequently, the framework for the course will be presented as a template which assisted the study of organizational learning. Finally, some of the ways in which the concept of "learning" was used in the teaching of the course will be outlined.

Learning

Different uses of the phrase "learning organizations"

The confusion among some regarding the notion of the "learning organization" appears to be more prevalent among authors who write about "learning organizations" as opposed to "organizational learning". This may perhaps be an illustration of their differing foci: learning itself, rather than a

“learning organization” as something to become.

Some uses of the phrase “learning organization” encountered during research for the course include:

- the implementation of continuous improvement;
- an ingredient to attain customer loyalty (Stambaugh, 1995);
- the use of systems thinking;
- the result of a linear development effort (“ten easy steps”) (Kline and Saunders, 1995);
- the development of an employee capability database;
- visual-descriptive academic models of learning;
- an intermediate step, after total quality, before world-class (Hodgetts *et al.*, 1994).

Too often we do not take the opportunity to reflect on our experiences. Some contend that we live in a world of truncated learning opportunities, never properly closing the learning loop (Handy, 1995). This article will hopefully provide some reflection on a topic that has seen a tremendous surge in international interest over the last decade. Perhaps with some high-altitude reflection we may improve our ability to answer the question: so what is a “learning organization”?

Individual learning

A large number of models exist which deal with learning itself. White (1992) describes learning through cognitions, behaviours, and emotions. Garvin (1993) describes maintenance, anticipatory and shock learning. Argyris, Kolb and others have for many years been the centre of individual and group learning research. Argyris (1989; 1991; 1993) is concerned with learning through understanding one’s espoused theories, one’s theories-in-use, and defensive reasonings that preclude learning. Kolb describes his learning loop of concrete experience, reflection, abstract conceptualization, and active experimentation (see Francis and Mazany, 1996). Handy (1995) in *The Age of Unreason* develops his own version of Kolb’s loop.

These all, however, deal predominantly with the individual, and although their theories may apply to groups, theories on group learning are not specifically developed.

Collective learning

Work by Senge, Kim, and others at MIT has extended the brief on learning by examining how it is that organizations, collections of individuals, may “learn”. Kim (1993) attempts to draw a link between organizational learning and individual learning. Similarly, Senge has developed the idea of team learning in his bestseller *The Fifth Discipline* (1990a) and later in *The Fifth Discipline Fieldbook* (1994a). Although the principles of individual learning cannot be directly applied to groups, it appears that group learning can only take place through individual learning. It is the collaborative effect of multiple individuals learning together that creates organizational learning. Single-loop learning in groups occurs when a group learns from observing errors or mismatches, and altering behaviour accordingly. However, it is only through the collective insights and new knowledge of these groups where opportunities for increased learning occur. If those collaborative insights alter the organization’s assumptions and standard operating procedures, then double-loop learning has occurred within the organization.

Deutero learning

A concept of particular significance is that of deutero learning. Deutero learning is the capacity to learn to learn, and it is this ability in individuals which must precede any effective learning, either by individuals or groups. Mumford (1995) talks of learning being either explicit or implicit. Deutero learning is the mechanism which forces learning to become explicit, and it is the avenue for organizations to leverage a continuing commitment to learning. While both single-loop and double-loop learning are concerned with the operational events which are the subject of the learning, deutero learning conceptualizes the learning as an event in its own right, making the learning process that much more conceptual and transferable.

Where to begin: designing a course on organizational learning

While many organizations are cited as learning organizations, there often appear to be few similarities between them. Reasons for their high profile vary, but all appear to have developed particular expertise in one or more

organizational development initiatives. Some examples include:

- scenario analysis (Royal Dutch Shell);
- systems thinking (Hanover Insurance, Analog Devices);
- intensive employee education (General Electric);
- creativity development (3M, Microsoft);
- leadership development (General Electric).

What is the common thread between these organizations? Why do they learn more than other organizations? How do they appear to be “learning” while employing remarkably different tools and techniques? These were daunting questions to confront as the author began course development.

The design of the course was approached with a degree of temerity. Although the author had written a thesis on learning organizations three years earlier, he was nervous about his ability to lecture as an authority on the topic. The very topic of learning organizations itself has been likened to a journey rather than a destination (West, 1994a). Accordingly, the author attempted to present the course as though a fellow student of learning in organizations; albeit with a four or five month preparatory headstart. The second key issue was whether or not to “break the mould” of traditional university teaching – that learning in the course should be radically different to what the students had previously experienced. Demonstrating that the author was there to learn just as much as the student exposed him to a very different sort of dynamic in the class. How does the author practice learning while facilitating the students’ own learning?

Researching course material

Finding material about learning organizations was not hard. The difficulty was in deciding what material to present in the course, and how to do so. An initial concern was the expectation that the course be built around *The Fifth Discipline* or *The Fifth Discipline Fieldbook*. The author did not want to present a “Senge-school” course because it seemed that the issue was significantly larger. The issue with course design was how to present a balanced summary of thinking about a topic that is so vast, while maintaining a practical “how-to” element, considering that the students were in fact key developers of their own organizations’ learning.

In the author’s thesis, a model of organizational learning was developed which seemed consistent with Senge’s five disciplines. Recently published in the *Journal of Management Development* (Francis and Mazany, 1996), the model suggests that developing a learning organization requires a foundation of team-based or participative structures, a compelling (and participative) dynamic organizational strategy, and effective continuous improvement in both quality and process. Included as supporting features are leadership and experientially-based learning. In hindsight, the model is a little simplistic, and probably defines a few manifestations of something much deeper and more complex.

‘...It seems clear that organizations whose individual members are learning may develop organizational learning. Such an observation is the basis of much of Argyris’ work, and it is one that appears to have been forgotten by some authors...’

An early contention was that with such a proliferation of academic ideas, the fact that there appears to be little agreement on what constitutes a learning organization, let alone on how to develop one (that always present practitioner concern), left a blank page when it came to explaining the concept to my students. For illustrative purposes, Table I demonstrates the variety of material.

As part of the research process, a large number of articles and books were read and summarized. Apart from a course structure that began based around Senge’s work, they were other issues that began to surface. The work of Chris Argyris and particularly Edgar Schein had had a profound effect and the author believed that their ideas had to be central to any new organizational learning framework. It seems clear that organizations whose individual members are learning may develop organizational learning. Such an observation is the basis of much of Argyris’ work, and it is one that appears to have been forgotten by some authors.

The same, however, cannot be said in reverse. Organizational learning cannot occur without the presence of individual learning, as it is individuals who form organizations. Note

Table I Summary of organizational learning literature

Genre	Some examples	Topics/interests
US Senge-influence	<i>The Fifth Discipline</i> <i>The Fifth Discipline Fieldbook</i> "Organisational learning – the key to management innovation" "The leader's new work: building learning organisations"	Five disciplines, especially systems thinking, and new management leadership roles
US learning focus	"Strategy implementation: an experience in learning" (Argyris, 1989) "Education for leading-learning" (Argyris, 1993) "Teaching smart people how to learn" (Argyris, 1991) "How can organisations learn faster? The challenge of entering the green room" (Schein, 1993) "The principle of continuous learning" (Covey, 1995) "A model for changing the way organisations learn" (Fulmer, 1994)	Individual learning as an underlying principle
British learning focus	"The learning organisation in review" (Mumford, 1995) <i>The Learning Company</i> (Pedler <i>et al.</i> , 1991) <i>Towards the Learning Company: Concepts and Practices</i> (Burgoyne <i>et al.</i> , 1994)	Types of learning
Literature reviews	"Organisational learning: a review of some literatures" (Dodgson, 1993) "The concept of the learning organisation" (West, 1994b) "The learning organisation: losing the luggage in transit?" (West, 1994a)	Multi-disciplinary review of literature
Learning models	"Building a learning organisation" (Garvin, 1993) "Understanding organisations as learning systems" (Nevis <i>et al.</i> , 1995) "The knowledge factory for accelerated learning practices" (Roth <i>et al.</i> , 1995) <i>The Global Learning Organisation</i> (Marquardt and Reynolds, 1994) "The link between individual and organisational learning" (Kim, 1993)	Descriptive and prescriptive models of individual and organizational learning
Organizational case studies	"HR facilitates the learning organisation concept" (Solomon, 1994) "Pioneering in people" (Lima, 1995) "From the working class to the learning class" (Barber, 1994) "From rust to riches" (Linert, 1994) "Building international agility" (Bonfield, 1995) "In perfect harmony" (Hanke, 1994) "Self-managed learning helps ICC" (<i>Personnel Management</i> , 1994) "Building a learning organisation at Coopers and Lybrand" (Rosenblum and Keller, 1994) "Can the US Army become a learning organisation" (Wheatley, 1994) "Johnston: ahead of its time" (<i>Textile World</i> , 1994)	Case studies that incorporate "learning" or "organizational learning"
Specialty ownership	"HR facilitates the learning organisation concept" (Solomon, 1994) "The learning organisation: an integrative vision for HRD" (Marsick and Watkins, 1994) "Grasping the learning organisation" (Calvert <i>et al.</i> , 1994)	Learning organization as something to be achieved en route to future, or learning organization to integrate speciality or organization development
Prescriptions	"The 12 building blocks of the learning organisation", (Bennett and O'Brien, 1994) "10 steps to a learning organisation" (Kline and Saunders, 1995)	Practitioner focus, practical emphasis

also that learning individuals do not necessarily imply good organizational learning. Perhaps it is this fact that is the cause for much of the interest in developing “learning organizations”.

Establishing a framework

Marsick and Watkins (1994, p. 354) state that “the learning organisation is not a prescription, but rather a template for the examination of current practices. . .”. The framework for the subject that began to emerge from research was based on a number of similar premisses, and had to satisfy several purposes:

- it was to offer a way of learning about learning organizations to both academics and practitioners;
- it was to be able to be utilized by practitioners in the development of their organizations;
- it had to be both general and specific: specific so as to enable reflection and some prescription, and general so as to be valid for all organizations;
- it had to be pluralistic, and not contend to be “the” model of a learning organization;
- it had to appreciate the complexity of why no consensus appears evident in the literature;
- it had to appreciate why vast differences exist between organizations that are held up as “learning organizations”.

It soon became apparent that there are many different models of a “learning organization”, each with similarities to other models, yet no two quite the same. More importantly, no one in particular manages to explain adequately any or all of the others, or the differences between the models.

It seemed that three “core” elements are identified by most authors, either in their models or in case study organizations. Without an explicit and shared understanding of all three elements, outlined below, an organization is unlikely to achieve anything like its learning potential. Moreover, it helps explain why some organizations which excel in particular fields are not perceived to be learning organizations:

- (1) *Strategy*. A dynamic strategy, incorporating a vivid vision, that is crafted, and emerges as the environment creates change in the organization, and (more importantly) vice versa. Strategy includes

learning to change, and very importantly, learning to learn (deutero learning will be discussed in more depth later in this article)[2].

- (2) *Knowledge*. Knowledge and learning become an explicit component of the organizational culture. Measures are taken to facilitate learning, and to develop, create, store, and disseminate knowledge. Innovation and participation by all members of the organization is necessary[3].
- (3) *Leadership*. Learning in organizations begins with the leaders learning to learn. Leaders exhibit Senge’s roles of designer, teacher and steward. Leadership is visionary, visible, and valiant. Change becomes the norm, and organizational change is all about managing the environment, not the workers (see Schein, 1993; Senge, 1990b).

Synthesis beyond these common elements, however, was difficult. Notable “learning organizations” and their use of particular initiatives provided the answer. Why was it that different organizations purported to be examples of learning organizations were so different? Why were there so many “prescriptions” in the literature about the best way to create a learning organization? It is easy to understand why scepticism develops among management practitioners. Indeed, the term “learning organization” has been used to describe a single initiative, or as a first step to becoming or achieving something else (Hodgetts *et al.*, 1994; Lawler, 1994; Stambaugh, 1995).

As research continued, several issues emerged which deserve noting:

- different examples of learning organizations employ vastly different tools and techniques for organizational development;
- the different initiatives apparent in the readings can be broadly called organizational tools and techniques (structures, rewards, programmes) and individual tools and techniques (individual learning, self-development);
- learning takes place at different levels in the organization, and in different ways (Mumford, 1995; White, 1992);
- deutero learning (learning how to learn) is critically important and needs to be explicit;

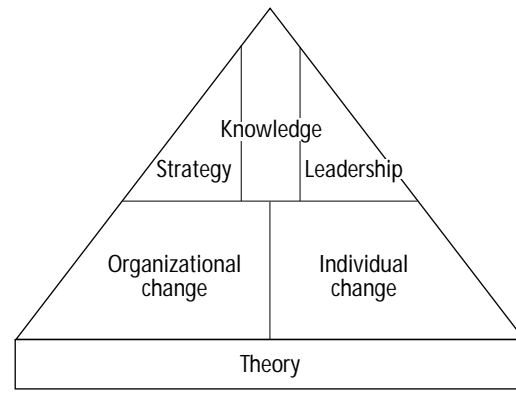
- one must be explicit about “closing the loop”. Organization “truncated learning” experiences proliferate, as they do not adequately employ the reflection stage of Kolb’s learning cycle (Handy, 1995);
- becoming a learning organization is a journey, not a destination (West, 1994a). Like problem investigations in systems thinking, there will always be a next step; you will never “be there”.

Some of the different tools and techniques observed in organizations are shown in Table II. The separation between individual and organizational is largely a semantic matter. The labels attempt to differentiate, if only on a white-grey-black basis, the difference in scope between some tools or techniques and others.

The framework itself is depicted in Figure 1. The base is what formed the beginning of the course. Two weeks were spent exploring a variety of different models of organizational learning, attempting to discover what the common threads were, what issues appeared important, and what was missing from some models that was present in others.

The second stage of the course began to examine the wide variety of organizational initiatives that were appearing either in the models or in case study organizations. Class members discussed particular experiences they had had, and a summary of tools and

Figure 1 Framework for organizational learning



class members with experience in those issues was distributed. The initiative which received most class time was systems thinking. This was due to two factors: first, it is a very potent tool for facilitating learning in organizations, and second, class members were the least familiar with it compared to other initiatives.

It is worth noting that class members began to have an “ah-ha” experience (“the light’s gone on”) from the sessions on systems thinking. It was apparent at this stage of the course that the initial enthusiasm for the topic had moved into a sense of awed confusion, and in some instances over-load. Members of the class had begun to appreciate the wider significance of the tools and techniques we had been exploring, and the manner in which the course was structured also enabled them to tailor-fit their understanding to their experiences. In some instances, the insight experienced helped to position learning derived from earlier courses.

The third stage dealt with the work of Argyris, Schein and Senge. It looked at the necessary appreciation of individual learning that an organization must develop, and at the implications of deutero learning.

The final weeks of the course dealt with the core synthesis elements of strategy, knowledge and leadership. During this phase class members, with only one or two exceptions, developed good insight into the essence of organizational learning, and the tools and techniques that appeared significant to them, identifying a strategy for developing learning in their own organization. Many indicated in class a significant re-framing of their mental models.

A number of class members had initially been quite despondent about their perceived ability to effect change in their organizations.

Table II Example initiatives for developing organizational learning

Organizational change	Individual change
Teams	Empowerment
Coaches	Learning dialogue
Core competences	Learning logs
Management styles	Individual learning assessments
Customer focus	
Scenario analysis	<i>Learning styles</i>
Systems thinking	Schein’s anxieties
Systematic problem solving (continuous improvement)	Single/double loop Argyris’s learning
Process re-engineering	Senge’s team learning
Experimentation	Cognitions, behaviours, emotions
Learning from the past	
Learning from others	<i>Senge’s personal transformation</i>
Transferring knowledge	Personal mastery
Mentoring	Mental models
Future state visioning	
Action learning	
Internal consulting	

It is well known that many students of executive programmes soon afterwards make radical changes to either their personal or working lives, or sometimes both. It was rewarding for me to hear those people, with newly re-framed mental models, strategize for the development of their organization.

One visible outcome of the strong focus on identifying deuterio learning as and when it takes place was that groups began to discuss explicitly their individual contributions to team learning activities. Individual and group mental models became issues for discussion just as much as the task at hand. Issues of espoused theories and theories-in-use were openly, and in some cases heatedly, discussed.

A second observation, and one that surprised many who participated, was that two-thirds of the class met for group preparation before the final examination. The strategy of sharing and developing learning as a group had never been used before by class members. A collective approach to group learning, the class members shared dialogue and debate on their collective mental models and understandings.

'...Rather than being a synthesizing initiative, individual learning is more that of a compulsory starting point. Without individual learning, organizational learning cannot take place...'

In addition to assisting us understand some of the differences between the various models of organizational learning, the framework also enables us to appreciate why it is that apparently "well-developed" organizations, those with many tools and techniques in place, are not considered to be a "learning organization". Without the three core elements of strategy, knowledge and leadership these organizations cannot hope to achieve their learning potential.

Of all the tools and techniques, the work of Argyris and Schein are core in the sense that organizational learning begins with individual learning. Rather than being a synthesizing initiative, individual learning is more that of a compulsory starting point. Without individual learning, organizational learning cannot take place.

The mechanics of individual learning offered by Argyris, our espoused theories and our theories-in-use, and the innate defensive routines we employ are critical to the development of explicit learning in an organization. The insight gained from Schein, that change management is to a large degree anxiety management, is also important for those wishing to develop their organizations. While it is likely that developing individual learning, and in particular deuterio learning, is the only essential tool or technique, it seems apparent that an organization needs a certain "critical mass" of other tools and techniques to begin to achieve the benefits of improved "organizational learning".

All class members were presented with a complete set of readings, distributed at appropriate points in the course. While the quantity of readings was a concern for many students, the material was to become a complete reference for future use. Being presented with such a proliferation of ideas about how to develop an organization also enabled the individual experiences of class members to be placed into a new frame of reference. Many class members commented on achieving new insight about the current and future realities of their organizations.

Facilitating a development programme

Developing a learning organization is not easy, nor is it something which can be achieved in a hurry. It begins by realizing the importance of the core elements of strategy, knowledge and leadership, and by appreciating the work of Argyris and Schein. These three elements provide the synthesis for an explicit, synergistic approach to learning. A weakness in even one of these elements will result in an organization failing to reach its learning potential. As Marsick and Watkins (1994, p. 354) suggest, "organizations often adopt. . . [development initiatives] piecemeal with lip service rather than in the spirit intended, or with major changes that alter the heart of the innovation". Most likely, such an organization will be respected for excellence in one or more tools and techniques but will not be perceived as an example of a "learning organization".

One method for examining where to begin is to think about two distinct dimensions of creating learning in organizations. First, there is the issue of how explicit you are to be about

learning. It may be appropriate to consider tools and techniques that can be used that deal with learning and change implicitly if the current culture precludes open discussion about learning, or if either workers or managers are too threatened to begin to discuss learning (which may suggest that they are not performing well currently).

A second dimension to consider is the tactical-strategic time horizon. Some tools and techniques can be implemented and achieve benefit relatively quickly, while others require a much longer implementation time. Achieving cultural change is a long-term strategic-focus task, while schooling in the use of fishbone (cause and effect) diagrams is relatively instantaneous.

A cohesive plan to develop an organization should achieve a balance between the four quadrants (as shown in Figure 2). While an organization's culture may limit the number of tools and techniques utilized that rely on explicit learning, a balance between doing things now, and paving the way for the future, must also be achieved.

There is not a "correct" way to begin developing a learning organization – it can begin anywhere. A systematic approach to developing learning would focus on applying the core elements in addition to a critical mass of other individual or organizational tools and techniques. Different organizations will favour different starting points. In the course, it was obvious which class members discovered that systems thinking matched their needs. Others focused on strategy development, and others on performance assessment and incentives.

Figure 2 Plotting tools and techniques

	Explicit	Implicit
Strategic		
Tactical		

Teaching differently

A course on "learning organizations" could not have been taught well had the concept of learning not been applied and practised throughout the course itself. A conscious effort was made to approach teaching about learning to learn (deutero learning) just as much as teaching about the topic of learning organizations itself. As in the learning organization framework, leadership is critical element of fostering learning. Leaders must begin learning first (e.g. Kaye and Jacobson, 1995; Kinni, 1994). Dodgeson (1993) writes about needing to appreciate the subtlety of learning, not only event-based learning, but also learning about the process of event-based learning. Thus, a lecturer has a role to play in leading all types of class learning, by learning too.

While becoming a peer "student" of organizational learning was good for stimulating thought and dialogue, it exposed a challenge to the traditional lecturer-student relationship. Both positive and negative elements of lectures were explored and considered. It is worth noting the tendency to focus on the negative as opposed to the positive. Early in the course positive feedback occurred on an individual basis at the end of class. Gradually, a spirit of enquiry began that saw both negative and positive issues being discussed. Further, an exploration of why some issues in particular are perceived as negative frequently provides valuable (individual and shared) insight into an individual's mental models.

Improving dialogue

In the course, Senge's "Popular post-mortems" were used to discuss student satisfaction and dissatisfaction with a particular evening's lecture. In the first week, four out of five issues that provoked negative comments were due to the facility (changed in subsequent weeks), rather than anything specific about the lecture. Later in the course, conflict between students who like group activities and presentations compared to those who prefer traditional lecture-style teaching emerged. Criticisms like "I haven't learnt anything in the last few weeks" are very hard to rationalize[4]. Discussions about this conflict, and its implications for their workplace, were insightful.

Reading widely

Students were provided with, on average, seven articles or excerpts each week of the course. This was done for several reasons. First, to develop deuterio learning in class members so they could read and summarize articles better in the future. Second, with little consensus among the readings about what constitutes a “learning organization”, the author wanted students to have to decide for themselves what a “learning organization” is. Third, the author wanted to provide as much resource for class members to use after the course as possible. Although part-time students, a focus on group research of article material assisted in its absorption and discussion, as well as a collaborative sharing approach.

Flexibility after dialogue

Flexibility of course structure, within bounds, was one objective, in order to best facilitate class members’ learning. Basic objectives about what the assignments or seminars were to achieve were set, and through dialogue, a good portion of the course was altered. Evening structures, course assessment, and assignment due dates were all re-negotiated with the class. On occasions, class discussions or presentations were run with minimal facilitation. We reflected on this strategy in hindsight in a discussion on satisfaction with the learning obtained. Through dialogue, event learning as well as deuterio learning was identified.

Exponential learning

The structure of the course, based on the framework of a learning organization, enabled clear observation of class member learning. Out of initial concern and confusion at the quantity and content of the readings grew an appreciation of particular tools and techniques that appealed to class members on an individual by individual basis. Insights began to occur from the seminar on systems thinking in the “organizational tool and techniques” segment. As we progressed through Argyris and Schein and individual tools and techniques, a greater sense of purpose began to emerge. During the final lectures on strategy, knowledge and leadership, a talk about the structure of the course and the design and teaching approach began to see a number of “light bulbs” switch on. It was as though insight, through new mental models, had

shifted their enthusiasm for learning up a level. Class members who had gone back to the earlier readings were now beginning to appear to appreciate the concepts (including the “big picture”) better.

At the completion of the course, class members were asked to complete a short questionnaire which asked for several adjectives in response to several questions. The questions were:

- What are five adjectives that summarize the course overall?
- What are three adjectives that reflect how you felt before the course began?
- What are three adjectives that reflect how you felt at the beginning of the course?
- What are three adjectives that reflect your feelings half-way through the course?
- What are three adjectives that reflect how you felt during the last few weeks?

The responses were grouped into eight types: positive, indifferent, and negative experiences, positive, indifferent and negative coursework, and applicable and inapplicable learning. Grouped responses are shown in Table III. A second view of the responses is shown in Table IV. Each adjective that appeared twice or more in each question is recorded.

A constant focus on deuterio learning

A focus on developing an awareness and understanding of deuterio learning became an increasingly key element of the course. It was applied in class discussions and in individual and group assignments. The importance of developing deuterio learning as a skill cannot be over-emphasized. Learning how to learn is significantly more important than what we learn. It became apparent that class members began to examine learning explicitly, both their own and that of others. They began to relate the process of learning to events at work and to their personal lives, and many included an unsolicited “deuterio learning summary” in the final course examination.

Conclusion

Practising managers concerned about the long-term future of their organization will find it increasingly harder to ignore many of the principles of developing learning in organizations. One of the most common insights that occurred to the managers in my class was that

Table III Class member course evaluations grouped by response type

Grouping	What are five adjectives that summarize the course overall?		What are three adjectives that reflect how you felt		
	how you felt before the course began?	how you felt at the beginning of the course?	your feelings half-way through the course?	how you felt during the last few weeks?	
Positive experience	33	13	9	17	28
Indifferent experience	9	24	22	19	8
Negative experience	0	0	7	2	0
Positive coursework	4	0	0	0	0
Indifferent coursework	10	0	0	0	0
Negative coursework	0	0	0	0	0
Applicable learning	8	0	0	1	0
Not applicable learning	0	1	0	0	0
Total responses for each question	64	38	38	39	36

Table IV Most frequent adjectives in course evaluations by question

What are five adjectives that summarize the course overall?	how you felt before the course began?	What are three adjectives that reflect how you felt at the beginning of the course?	your feelings half-way through the course?	how you felt during the last few weeks?
Interesting (5)	apprehensive (3)	confused (3)	confused (4)	enlightened (2)
Informative (3)	excited (3)	expectant (2)	interested (2)	knowledgeable (2)
Challenging (2)	curious (2)	unsure (2)	33 others	reflective (2)
Different (2)	non-committal (2)	31 others		30 others
Enlightening (2)	28 others			
Theoretical (2)				
Useful (2)				
46 others				

the concept of a “learning organization” was, above all, an underlying principle of doing business. This insight improved their understanding of their organization, the variety of initiatives that organizations are undertaking, and how these initiatives can be integrated within a greater context of improving learning.

Organizational learning must begin with improved individual learning. Learning must become an explicit part of the organization’s culture. Leadership must demonstrate individual learning and facilitate widespread dissemination of all learning, both about the operations of the business and about how to learn better. The concept of deuterio learning must become an accepted part of the organization’s language, as should single and double-loop learning.

Effective learning has much to do with the concept of creative tension. It requires a very high degree of honesty, as individuals and

teams assess their current reality, develop a shared vision of the future, and are truthful about how they will move forward. Teams are essential to achieving learning synergy. Some tools, such as systems thinking, are very well suited to improving team dialogue and insight.

The framework in this paper provides a high-altitude overview of learning organization theory. It does not intend to integrate the excellent work of authors such as Argyris, Senge, Mumford and the like. Rather, it attempts to provide insight to the uninitiated about how there can be so many different authors writing such diverse material that is all collected under the label “learning organization”. In doing so, it demonstrates both the similarities and differences in the concerns of the various authors.

As with Kolb’s learning loop (White, 1992), perhaps now is an opportune time to reflect on the last few years of research into

learning organizations. The framework in this paper is an outcome of a period of abstract conceptualization. One hopes that in the future we will be able to accelerate, rather than simply continue, further learning in organizations. Only then will we demystify developing learning in organizations so that the idea of "becoming" a learning organization is more appropriately understood.

Notes

- 1 Daniels (1994) and Calvert *et al.* (1994) also illustrate this, writing about a seminar in which "participants weighed the merits of nearly 20 definitions of a learning organization, debating which one explained the concept most lucidly and usefully".
- 2 See Mintzberg's (1987) ideas about crafting strategy Senge's (1990b) creative tension and shared vision hologram, Schein's (1993) theories on change and change anxieties, and Stata (1989) (who also mentions de Geus at Royal Dutch Shell) who contends that the "benefits accruing from planning are not just the objectives and strategies that emerge, but the learning that occurs during the planning process".
- 3 See Nonaka's (1991) tacit and explicit knowledge, other ideas about facilitating creativity and innovation, Senge's (1990b) idea of managing the environment, not the (knowledge) workers. Marquadt and Reynolds (1994) discuss knowledge workers further, including a realization that all workers are knowledge workers.
- 4 It is interesting to note that this class member ended the course having learned a great deal (including achieving the highest-equal grade).

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