

and the

Learning Organization

Developments in theory and practice



Edited by
Mark Easterby-Smith
John Burgoyne
Luis Araujo



Organizational Learning and the Learning Organization

Developments in Theory and Practice

Edited by MARK EASTERBY-SMITH, LUIS ARAUJO and JOHN BURGOYNE



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Contents

| Cont | ributors | iv |
|------|---|-----|
| 1 | Organizational Learning: Current Debates and Opportunities Mark Easterby-Smith and Luis Araujo | 1 |
| Part | One Review and Critiques | 23 |
| 2 | Organizational Learning - Desperately Seeking Theory? Christiane Prange | 23 |
| 3 | Organizational Learning as the Development of Stories David Sims | 44 |
| 4 | Balancing Biases: a Critical Review of the Literature on Organizational Learning Marleen Huysman | 59 |
| 5 | In Search of a Social Learning Theory Bente Elkjaer | 75 |
| Part | Two Evaluations of Practice | 92 |
| 6 | The Role of Evaluative Enquiry in Creating Learning Organizations Hallie Preskill and Rosalie Torres | 92 |
| 7 | Learning Across Organizational Boundaries Nancy Dixon | 115 |
| 8 | The Concept of the 'Learning Organization' Applied to the Transformation of the Public Sector Matthias Finger and Silvia Bürgin Brand | 130 |
| 9 | Learning, Trust and Organizational Change Amy Edmondson and Bertrand Moingeon | 157 |
| | Project Design for Learning and Innovation Karen Ayas | 176 |
| 11 | Organizational Learning and Organizational Forgetting Frank Blackler, Norman Crump and Seonaidh McDonald | 194 |
| 12 | Developing Learning Managers within Learning Organizations Elena Antonaco poulou | 217 |
| Inde | × | 243 |

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Organizational Learning: Current Debates and Opportunities

Mark Easterby-Smith and Luis Araujo

The idea of organizational learning has been present in the management studies literature for decades, but it has only become widely recognized in the past ten years. For example, Crossan and Guatto's (1996) survey of the literature shows that as many academic contributions in this area were published in 1993 than in the whole of the 1980s. Landmark publications such as the special issue of *Organization Science* (Vol. 2, No. 1, 1991) and its updated version published in Cohen and Sproull (1996) have significantly contributed to raising the profile and generating interest in the topic of organizational learning.

Two developments have been highly significant in the growth of the field. First it has attracted the attention of scholars from disparate disciplines who had hitherto shown little interest in learning processes. For example, business strategists have realized that the ability of one organization to learn faster, or 'better', than its competitors may indeed be the key to longterm business success (Collis, 1994; Grant, 1996). Some economists have taken a similar path, arguing that firms learn by doing, as well as through formal learning processes. Thus Stiglitz (1987: 130) comments that: 'Just as experience in production increases one's productivity in producing, so experience in learning may increase one's productivity in learning. One learns to learn at least partly, in the process of learning itself.' Sociologists, too, have become aware of the central role that learning and organizational knowledge can play in the internal dynamics and politics of organizational life (Coopey, 1995). A consequence of this is that the field has become conceptually fragmented, and representatives of different disciplines now vie over who has the correct model of organizational learning. One debate which has therefore featured in the literature is around whether theorists should try to move toward a single integrated framework, or whether they should simply recognize that each discipline operates from distinct views of reality, and hence that a plurality of perspectives should be seen as a strength (Easterby-Smith, 1997).

The second development is that many consultants and companies have caught onto the commercial significance of organizational learning. Their work has been generally underpinned by a number of theorists such as Senge (1990) in the USA, Pedler et al. (1989) in the UK, and Field and Ford

(1995) in Australia who have focused on making practical interventions in organizations in order to help them become 'learning organizations'. Much of the effort of these theorists has been devoted to identifying templates, or ideal forms, which real organizations could attempt to emulate. Some models of the learning organization have been based on observations of organizations that appear to be good at learning, from which elements of good practice have been extracted and synthesized. Others have relied more on theoretical principles, such as systems dynamics or psychological learning theory, from which implications for design and implementation have been derived.

Consultants and practising managers have added to the theoretical literature on the learning organization with accounts of how their own interventions have worked out in practice. Although these accounts are often very insightful (see for example Ciborra et al., 1995), some may lack the critical objectivity of traditional academic work. Authors of this ilk usually have an eye to the further consultancy opportunities that will flow from a public demonstration of their successes, and hence they tend to be economical in their discussion of unsolved problems. This 'positive spin' is a feature of some of the most influential accounts of learning organizations and it also points to one of the limitations in the state of knowledge about organizational learning.

Although theorists of learning organizations have often drawn on ideas from organizational learning, there has been little traffic in the reverse direction. Moreover, since the central concerns have been somewhat different, the two literatures have developed along divergent tracks. The literature on *organizational learning* has concentrated on the detached observation and analysis of the processes involved in individual and collective learning inside organizations; whereas the *learning organization* literature has an action orientation, and is geared toward using specific diagnostic and evaluative methodological tools which can help to identify, promote and evaluate the quality of learning processes inside organizations (Tsang, 1997).

This divergence of interest was apparent in the papers presented at a Symposium on Organizational Learning held at Lancaster University in September 1996. The chapters of this book are based substantively on papers presented at the Symposium and inevitably follow the same divide: thus the two main parts of the book examine respectively organizational learning and the learning organization. Inevitably the distinction is not as clear-cut as might appear at first sight. Thus, some of the chapters in the second part consider the implementation of theoretical perspectives within organizational settings, and hence provide an opportunity in some cases to add to, or challenge, the precepts of the theories adopted. Indeed, since there is a major shortage of empirical (and potentially critical) research into the learning organization, the chapters in Part Two constitute one of the main contributions of this book. And we also hope that the juxtaposition of the two foci in the same book will enable some of the insights

from the empirical studies in Part Two to throw light on the more abstract debates in Part One.

In this initial chapter we provide a general background for the chapters which follow. This is done first through providing an overview of the main debates and trends in the two fields of organizational learning and the learning organization. Second, we consider the main problems and opportunities for research and understanding in the field as a whole. Finally, we review the contributory chapters in the rest of the book according to how they illustrate or develop each of the debates and trends.

Debates and trends

We will start this section by looking at the current state of literature on organizational learning, before turning to the learning organization.

Organizational learning

The most significant distinction between authors who write about organizational learning can be summarized according to whether they emphasize it as a technical or a social process. The technical view assumes that organizational learning is about the effective processing, interpretation of, and response to, information both inside and outside the organization. This information may be quantitative or qualitative, but is generally explicit and in the public domain. One of the most elegant expositions of this view comes from Huber (1991: 89), who states that: 'An entity learns if, through its processing of information, the range of its potential behaviours is changed . . . an organization learns if any of its units acquires knowledge that it recognizes as potentially useful to the organization.'

Two of the major contributors to this school of thought are Argyris and Schön (1978), who have developed a number of important concepts including the distinction between single- and double-loop learning. The former of these involves the detection and correction of error within a given set of governing variables; the latter involves changing the governing variables themselves. This distinction has become popular with managers and theorists alike, largely because it maps easily onto modes of organizational change (Argyris, 1996). Thus single-loop learning is linked to incremental change, where an organization tries out new methods and tactics and attempts to get rapid feedback on their consequences in order to be able to make continuous adjustments and adaptations. Double-loop learning is associated with radical changes, which might involve a major change in strategic direction, possibly linked to replacement of senior personnel, and wholesale revision of systems.

In managerial discourse, double-loop learning is often portrayed as superior to single-loop learning, particularly by proponents of radical change (Argyris, 1996; Miner and Mezias, 1996). What is often lost in such discourse is exactly what forms of change are associated with learning; and there is also the criterion problem of being able to determine when single-or double-loop learning is appropriate. For example, DiBella et al. (1996) point out that the Chernobyl disaster was caused by engineers experimenting with a new form of on-line refuelling which involved them departing radically from existing operational parameters. If they had been successful their work might have been hailed as a major scientific breakthrough carried out by people with the courage to engage in double-loop learning. But they were not successful, and we all know the rest of the story.

There are a number of dilemmas and problems identified by authors of this persuasion. For example, Levinthal and March (1993) examine the dilemma between exploration and exploitation in the use of technology. The former may lead to the development of new strategies and knowledge in the long term; the latter may lead to high profitability in the short term, but will not lay down the foundation for long-term prosperity. Organizations have to find the appropriate balance between these two, and there are no obvious criteria against which to choose. The main problems from this perspective emerge when people and organizations do not behave according to rational calculation and where political agendas take precedence. Managers do not necessarily follow the logical consequences of the information before them: they may distort and suppress information in order to support their preferred agendas; and they may use information selectively in order to 'validate' decisions taken on other grounds. These political processes may affect both access to, and ownership of, information as well as the process of establishing meaning to data and information (Coopey, 1995).

The emphasis on learning through the processing of information is also linked to the work of Zuboff (1988) on 'informating'. This is the idea that information technology can be put to different purposes: it can be used either to liberate all employees by making more information available to all (informating), or it can be used and accessed selectively in order to monitor and control the behaviour of individuals. While Zuboff argues strongly for the superiority of the former, it is evident that the latter is being used increasingly as a form of surveillance in standardized technological environments such as call centres or customer service departments (Orlikowski, 1996; Pentland, 1992). This distinction provides a neat bridge to the alternative perspective on organizational learning, as a social process.

The social perspective on organizational learning focuses on the way people make sense of their experiences at work. These experiences may derive from explicit sources such as financial information, or they may be derived from tacit sources, such as the 'feel' that a skilled craftsperson has, or the intuition possessed by a skilled strategist. From this view, learning is something that emerges from social interactions, normally in the natural work setting. In the case of explicit information it involves a joint process

of making sense of data; for example, when looking at financial data there are always debates about whether figures are good or bad, and what kind of action is required. The more tacit and 'embodied' forms of learning involve situated practices, observation and emulation of skilled practitioners and socialization into a community of practice (Blackler, 1993; Lave, 1993).

Three of the key contributions of this school of thought are to see organizational learning as socially constructed, as a political process and as implicated in the culture of an organization. The idea of learning as social construction can be seen as remedying directly some of the limitations of the technical perspective, by recognizing that data have no significance in their own right until people determine what they mean. Brown and Duguid (1991) are strong proponents of the constructionist view. They believe that formal instructions about how to do jobs are always inadequate, and therefore look at the way new entrants into organizations learn the unwritten information about how to perform effectively. This is achieved through informal exchanges between experienced and less experienced people, and through the use of anecdotes and war stories (Orr, 1990). A central idea from this perspective is that much crucial organizational knowledge exists not on paper, nor in the heads of individuals, but within the 'community' as a whole. And hence learning takes place either through expansion of the community to incorporate new individuals, or through the adoption of new forms of behaviour and 'non-canonical' practices.

Nicolini and Meznar describe at a broader organizational level how knowledge gets reconstructed following perceived discontinuities in organizational functioning.

Organizations, through the actions of those in charge, construe their identity by transforming change, past choices, past experiments, inventions and so on, into rational accounts of knowledge. In such a way, they symbolically shape the organization, transforming knowledge into the web of experiential constraints that members perceive as the objective aspect of the organization (that is, the constitutive order which transcends the individual power to act). (1995: 740-1)

The idea of organizational learning as a *political process* is touched upon by many of the authors of the 'technical' school, but from the perspective that this is a persistent problem which needs to be overcome and nullified if learning is to take place. Thus Argyris (1986) demonstrates how organizational defensive routines that reduce learning capacity arise because people need to protect themselves from political threat. Similarly, Senge (1990) sees political activity as a major constraint on the establishment of learning organizations and other authors prefer to focus on the need for dialogue amongst different occupational cultures rather than to acknowledge the political nature of organizational life (Schein, 1996).

From the social perspective, however, the goal of eliminating organizational politics is seen as naive and idealistic – because politics are a natural feature of any social process (Coopey, 1994, 1995). If knowledge is socially constructed by individuals and groups, it is inevitable that particular interpretations will suit the interests of some and harm the interests of others. In many cases the 'spin' given to the interpretation of information will be unconsciously produced according to the experiences and settings of individuals who wish to show themselves in a positive light to others. But increasingly within organizations the interpretive process is directly mediated by power relations. Departments, functional groups and project teams will organize consciously to present information internally and externally in a way that suits their purposes. One can argue that it is a necessary responsibility of unit managers to ensure that their groups are presented positively to external stakeholders – whether these are senior managers, shareholders, the media, or public auditors. It is unrealistic to hope that politics will somehow go away, when it is an integral part of organizational transactions and a direct consequence of interests that are differentiated both vertically and horizontally. What is needed, therefore, are conceptions of organizational learning which embrace political processes within them.

The third significant contribution from the social perspective is the notion of learning as a *cultural artifact*. Most normally, it is seen as part of an organizational culture, and most significantly 'learning' is something that takes place not within the heads of individuals, but in the interaction between people. It is manifest in the ways that people behave when working with others, and these patterns of behaviour are normally learnt by newcomers to the community through a process of socialization (Lave and Wenger, 1991). In most cases, the application of this principle is demonstrated by the evolution of tacit skills embodied in craftwork. For example, Orr (1990) looks at photocopy repair technicians, Cook and Yanow (1993) examine the learning process involved in producing flutes within craftshops, and Suchman and Trigg (1993) examine artificial intelligence as craftwork.

But a similar logic can also apply to managerial and professional domains. Diane Vaughan (1996), in her major documentary analysis of the Challenger space shuttle disaster, identifies the way a particular culture evolved within NASA and its suppliers which enabled potential technical problems to be interpreted as if they were not problems. This process, which she labels the 'normalization of deviance', involves regular formal redefinitions of acceptable and unacceptable risks in which all members of the engineering community participate. Thus the crucial decision to launch on the night of 28 January 1986 was fully within the technical guidelines laid down by NASA. The problem was that new circumstances had arisen which were not fully covered by the regulations and also that some of the engineers still had a feeling that the redefined operating criteria were too risky. The interest in high technology is continued in two chapters of the present book, where the examples studied will hopefully lead to more positive outcomes. Thus Ayas considers structural arrangements that can aid the transfer of ideas between and within groups of engineers engaged in aircraft design, and Blackler et al. consider the social process of learning among groups of scientists working in the defence industry.

The majority of studies adopting this perspective has tended to focus on culture as an attribute of organizations, or of groups within them. Some authors have described studies carried out across several different countries (Adler and Cole, 1993; Nevis et al., 1995), but which make virtually no reference to the possibility that cultural differences between countries may also have an impact on learning processes within organizations. A few researchers have, however, explicitly linked learning processes to cultural traits. Thus Shibata et al. (1991) demonstrated that senior Japanese managers in a sample of more than 300 companies provided strong support for innovation, risk-taking, wide dissemination of information and broad involvement in decision-taking. An earlier study by Sullivan and Nonaka (1986) which compared 75 US and 75 Japanese managers showed that senior Japanese managers espouse greater commitment to 'variety amplification' than their US counterparts. Hedlund and Nonaka (1993) and Hedlund (1994) contrast modes of knowledge in Western and Japanese firms and relate them to organizational characteristics of the two business cultures. These findings raise the possibility that different national business cultures and traditions may lead to different learning processes, and perhaps also that the product, or outcomes, of learning may be different in one culture compared to another. This area has received limited attention over recent years despite the increasing globalization of business, apart from a few recent studies of learning in transnational joint ventures (see for example, Barkema et al., 1996; Glaister and Buckley, 1996; Inkpen, 1996; Pilkington, 1996).

In summary, the distinction between the technical and social views of organizational learning can be linked to one current debate and one trend. The debate is about whether the field is becoming too fragmented and needs more effort devoted to integration of theory and practice, or whether distinct schools of thought are complementary and are necessary to the development of the field as a whole. Authors such as Huber (1991) and Miner and Mezias (1996) have argued strongly for the former position, and the debate around the project of integration is well summarized by Prange in the second chapter of this book. On the other hand, it is argued by Easterby-Smith (1997) that approaches to organizational learning are based on distinct, and largely incompatible, views of the nature of learning itself. He summarizes six main 'disciplines', each with its own ontological assumptions, which have started to colonize the territory of organizational learning: psychology/OD, management science, organization theory, strategy, production management, and cultural anthropology. It follows that development might best be pursued within each of these areas, while merely taking note of any parallel progress in related areas.

The trend is the strengthening of the social perspective on organizational learning, and the evolution of methodologies that enable it to be investigated empirically. While much reliance is already placed on traditional qualitative and ethnographic methods (Gherardi et al., 1998; Snell & Chak. 1998), there is a growing interest in the use of linguistic and narrative methods for researching learning processes within organizations. The logic for this is that if meanings are constructed through dialogue and visions are communicated through storytelling, then a closer analysis of the actual words and communicative practices employed is likely to be valuable. Sims argues the case for this particular approach to investigation in chapter 3 of this book. This approach also fits well with recent calls to develop narrative perspectives in management studies (see for example Barry and Elmes, 1997: Czarniawska, 1997).

The learning organization

As explained above, the literature on the learning organization is becoming increasingly distinct from that which addresses organizational learning. The key reason for this is that the two communities of authors recognize distinct purposes for their work, the former concentrating on the development of normative models and methodologies for creating change in the direction of improved learning processes, the latter concentrating on understanding the nature and processes of learning (and unlearning) within organizations. Typically, the former group is represented by consultants (or academics in their roles as consultants), while the latter group is represented by academic researchers. That being said, the learning organization literature is not devoid of theory; it draws very heavily from ideas developed within organizational learning but it is selective on the grounds of utility. So it is not surprising that a similar divide exists here between the technical and social approaches to the creation of learning organizations. Since the basic distinction has already been discussed above in some detail, we will simply focus here on the way that it has been implemented in practice.

The technical variant of the learning organization has emphasized interventions based on measurement. One traditional measure has been the 'learning curve', which involves taking historical data on production costs, which are plotted against the cumulative output of a particular product. In theory there should be an inverse logarithmic relationship between cost and output; thus for every doubling in cumulative output there should be a reduction in costs of 10 per cent. It is assumed that the reduction in costs results from some kind of internal learning process, and that by making the rate of cost reductions explicit this will encourage further learning to take place (see, for example, Argote et al., 1990 and Epple et al., 1991). Garvin (1993) argues for an extension of this principle on the grounds that cost is only one indicator of learning outcome, and hence other (supplementary) measures should be employed including product quality indicators, and attitude/behavioural surveys of employees. The key point here is that the focus is on the outcomes, rather than the mechanisms and processes, of learning.

The emphasis on measurement as the focus of intervention leads naturally to the introduction of information systems to support collection of relevant data. This was illustrated in the study by Adler (1993) of the NUMMI plant in California, a joint manufacturing venture between General Motors and Toyota. A high degree of standardization was established across the plant, which enabled information on production performance, new ideas and problem solutions to be shared rapidly across all relevant work units. In a subsequent study, Adler and Cole (1993) compared the performance of the NUMMI plant with a Volvo factory at Uddevalla in Sweden. The Volvo plant was designed on humanistic principles around the individual and the work group. Thus individuals were encouraged to develop themselves, financial rewards were offered to those who were able to demonstrate increased expertise, and autonomous work groups were expected to share knowledge and work collectively to solve problems. This is a good representation of the social perspective on the learning organization, which focuses on individual and group learning processes as the foundation of organizational learning. Incidentally, Adler and Cole (1993) argue that the NUMMI model was superior to the Uddevalla plant in terms of increased levels of productivity because of the ability to generalize learning right across the factory; whereas at Uddevalla, although groups may have achieved deeper insights into how to solve problems, the existence of group boundaries meant that these insights were not likely to be shared between groups, and even if they were, the high variability of tasks and contexts in Uddevalla meant that many of the insights gained in one location would not be relevant anywhere else.

The debate about the relative superiority of the technical and social variants continued (Adler and Cole, 1994; Berggren, 1994), and remains inconclusive to this day. One of the limitations to the debate is that much of it has been framed around technocratic criteria, such as productivity rates, which inevitably favour those with a technical bent. So we will not try to come to a conclusion about relative superiority at this stage, and will instead develop further the social view of the learning organization. As mentioned above, the starting point from a social perspective is the ability of individuals to learn from their experiences and to learn from/with each other in work settings. Researchers at the MIT Center for Organizational Learning have developed the concept of 'dialogue' as a means of improving the quality of communication between people. This is a structured method for intervention into ongoing workgroups which requires members to allow space for each other to speak, to avoid evaluating the comments of each other, and to be willing to speak out on their own views (Isaacs, 1993; Senge, 1990). This method has its roots in the practice of organization development which was most fashionable in the late 1960s - which is one of the two main inspirations of Senge's work, the other being the systems dynamics approach developed by Jay Forrester at MIT. Further discussion of this topic is outside the scope of this introduction, but Edmondson (1996) provides a useful overview of the antecedents and genesis of MIT's Center for Organizational Learning.

Another feature common to most of the writers on the learning organization is a belief that normative processes can be defined, which will lead to enhanced learning capability. Writers can however, be divided into those who propose linear models with a series of hierarchical stages which become progressively more desirable, and those who propose cyclical models. Argyris' notion of single- and double-loop learning is the inspiration of the former, and has led to many different formulations, including Swieringa and Weirdsma (1992), who propose a three-level model, and Torbert (1994), who extends it to eight levels. The precise formulation varies a little in each case, but there are three assumptions common to all such models: that each level is conceptually distinct from each of the others; that organizational processes can be classified with some confidence as belonging uniquely to one or other of these levels; and that successive levels are increasingly desirable for organizations wishing to increase their learning capacity.

Cyclical models, by contrast, do not posit any hierarchies of desirability; their main claim is that the enhancement of organizational learning is a continuous process which will be helped by working through a series of stages involving the generation of information, the interpretation of information and development of actions on the basis of these interpretations. Most of these models are based loosely on Kolb's learning cycle, and with some additional process to iterate between individual and collective meaning structures (Kolb et al., 1984). Dixon (1994), for example, uses a model which includes the following stages: (i) the generation of information about internal and external performance (much along the lines that Garvin (1993) advocates); (ii) a sustained effort to integrate this information into the organizational context through training and conferencing systems; (iii) a collective attempt to interpret this information through improved interaction and reduced hierarchy; and (iv) encouragement for individuals and groups to take appropriate action on the basis of the shared understanding of the problems to be addressed.

Irrespective of the position taken there is a consistent concern among writers on the learning organization to understand why the concept is so difficult to implement. This has led pragmatically to interest in a wide range of implementation techniques and strategies, and most consultants will specialize on a particular framework or method. The diversity of strategies is reflected in the chapters in the second part of the book, which concentrates on the consequences of different implementation approaches.

Main problems and opportunities in the field today

We have provided above a brief overview of the fields of organizational learning and the learning organization, and have also tried to indicate

where some of the contributions in the present book may be seen to extend our knowledge of this field. We now propose to provide a more personal view of some of the central problems and issues relevant to the development of the field, before returning to a more systematic account, and iustification, of the structure of the book. We see these issues falling into three main categories: empirical work, theory development and utilization.

Empirical work

For a long time, authors have bemoaned the shortage of empirical work in the field of organizational learning (Fiol and Lyles, 1985; Huber, 1991; Miner and Mezias, 1996). Even recently there are no signs of the pattern changing. For example, of 150 papers on the learning organization abstracted in ABI Inform during 1997, only 15 (10 per cent) were based on new empirical data collected by the authors, and of these, ten were based on interventions carried out by the authors themselves. While we have nothing against action research per se, the shortage of independent studies of organizational learning, which might take a critical and 'objective' stance, is worrying.²

A range of approaches has been adopted by those authors who have carried out original empirical work in this field. In Table 1.1 we have specified contrasting features of empirical studies and have also attempted to classify each of the studies presented in this book. Since the empirical studies included in this book do not cover the range of possibilities we identify, we also make reference to other published studies to illustrate our classification system. Furthermore, although the choices represented in each row are intended to be independent of each other, in practice one would usually expect some clustering of options dictated by the need for theoretical or practical consistency amongst a set of choices. For example, studies where the researcher is an active participant (A1) indicate, for practical reasons, an involvement with a limited number of cases (B1). Similarly, a focus on micro-practices within organizational or transitional settings (C2) would normally focus on the processes that concentrate to the learning outcomes (D2), rather than the outcomes themselves (D1).

It seems to us that the most common forms of empirical research focus on processes where the researcher is either an active participant (A1) or a distant observer (A2), favour surveys (B1) over detailed case studies (B2), and privilege outcomes as indicators of learning processes (D1) over the processes themselves (D2). In our view there Is a particular shortage of studies that attempt to induce theory from existing practice (E1), use a small sample of in-depth cases (B2), focus on micro-practices within organizational or trans-organizational settings (C2) and study processes (D2) leading to learning outcomes.

One of the aims of this book is to redress the balance found in the literature more in favour of empirical studies and hence we are pleased to have obtained 5 significant empirical studies for Part II. According to the

Contrasting features of studies of organizational learning

Role of Researcher

(A1)

Studies where the researcher is also a major player in the processes being examined (Dixon)

Methodological Approach

Survey-based comparisons across numbers of organizations (Antonacopoulou)

Unit of Analysis

(C1)

Macro studies which look at total organizations, especially the strategic apex (Finger and Bürgin)

Focus on Learning

(D1)

Studies that focus on outcomes as indicators of organizational learning (Finger and Bürgin, Ayas, Antonacopoulou)

Epistemological Stance

(E1)

Studies which aim to describe practice and then to conceptualize what takes place in a 'grounded' way (e.g. Nevis et al., 1995)

(A2)

Studies where the researcher is detached and distant from the processes being investigated (Blackler et al.)

In depth cases of one, or a small number of, organizations (Dixon, Finger and Bürgin, Ayas)

(C2)

Detailed studies of micro practices within the organizational or trans-organizational settings (e.g. Gherardi et al., 1998)

(D2)

Studies that focus on internal processes that might contribute to organizational learning outcomes (e.g. Pak and Snell, 1998)

Studies which attempt to link, or to apply, specific theories to the phenomena observed (Blackler et al.)

above scheme, the chapter by Nancy Dixon falls into types A1 and B2; the chapter by Finger and Bürgin falls into types B2 and D1; the chapter by Preskill and Torres falls into types B1 and E2; the chapter by Ayas falls into types B1 and D1; the paper by Blackler et al. falls into types A2 and E2: and the chapter by Antonacopoulou falls into types B1, C1 and D1.

In addition to the overall nature/design of research studies of organizational learning, there is also the question of the specific methods and techniques that may be used to investigate organizational learning. If our above suggestion is accepted, that there need to be more studies focusing on the micro processes of learning within organizations, then it will be important that methodologies will be available to do this work. Learning is a notoriously difficult process to investigate empirically, which is why most researchers have taken the easy option by objectifying it and focusing on outputs. It is even more difficult to isolate learning processes within complex organizations because of the many potential levels of analysis and the wide range of actors involved. In search of methods that can tap into the more subtle processes of learning within organizations, Miner and Mezias (1996) emphasize the need to move beyond traditional positivist methods, and advocate greater use of qualitative methods in general, of applied research, and of modelling tools such as simulations. In this context we can add that the analysis of language and stories is likely to

prove important (Elmes and Kasouf, 1995), as are methods involving coresearchers, the development of multifaceted case studies over time and cognitive mapping.

Theory development

In parallel to the complaints about the lack of good empirical work on organizational learning, there is concern that insufficient attention is being paid to the cumulative development of the field (Huber, 1991; Miner and Mezias, 1996). This is manifest by a tendency to take for granted a small number of existing nostrums without submitting them to critical examination. We offer two examples below to illustrate this point.

First, as we have noted in the previous part of the chapter, many authors regard organizational politics as one of the main barriers to the establishment of learning organizations, and hence focus on ways of reducing the incidence and impact of political behaviour. It is assumed that 'good' learning takes place in a climate of openness where political behaviour is minimized (Argyris, 1986; Senge, 1990). But this is one assumption which can easily be questioned, and if so, we need to start looking for theories of organizational learning which take the political nature of information and knowledge as a starting point. A good example of this is Coopey (1995), who adopts a critical perspective on the learning organization, and who then starts to examine ways of helping managers to make explicit, and work with, these political processes (Coopey, 1998). The aim is therefore to incorporate politics into organizational learning, rather than to eradicate it.

The second example relates to the current dominance of North American theories of management and organization, which is reinforced by US control of key resources such as top journals and information databases. In this climate it is difficult for 'international', non-US views to become recognized as valuable (Boyacigiller and Adler, 1991). Usdiken and Pasadeos (1995) conducted a bibliographic study of two organization studies journals in the US and Europe, and demonstrated a highly divergent set of citations used by American and European authors: Americans rarely cite Europeans, and vice versa. Yet there is an increasing amount of work taking place outside the USA, such as the philosophical, critical and multicultural perspectives in Europe which are hardly recognized by US academics. The same can be said for the field of organizational learning where US models and literature still dominate internationally, and which contain a hidden bias towards North American cultural and institutional features such as: abundant economic resources; individualism in cultural values and career patterns; an emphasis on rationality and the importance of explicit information; and the application of scientific methods.

The work of Nonaka provides a rare example of an international contribution becoming accepted in the US mainstream, and is, perhaps, the exception that proves the rule. The originality of Nonaka's work lies in his detailed case studies of innovation processes in Japanese organizations where he argues that features of Japanese culture operate which makes innovation easier than in the US. These cultural features include the willingness of employees to identify with their work groups, the critical role of middle management in generating and interpreting information, and the preference for thinking of problems holistically. As a consequence, Nonaka has come up with concepts such as 'middle-up-down-management' and the knowledge creation spiral, which involves continuous translations between explicit and tacit knowledge (Nonaka, 1994; Nonaka and Takeuchi, 1995). These ideas are distinct and do not fit easily with the US mainstream, but they have attracted attention due to the interest within US management academia about Japanese economic recipes, and because Nonaka has worked in US academia and communicates well in English.

Following the lead of Nonaka, it seems that we should be looking for theories of organizational learning which are based on cultural and institutional assumptions other than those that prevail in the USA. There are enough cultural differences even between the UK and the USA to have resulted already in a distinct approach to the learning organization, based loosely around principles of Action Learning (see Burgoyne et al., 1994), and this has been matched by distinct centres of interest elsewhere in Europe (e.g. Trento, Nijenrode). It seems that if the field is to develop over the next few years in parallel with the globalization of business and economic affairs, then substantial efforts should be made to 'ground' new theories of organizational learning on the contexts of different countries outside North America and Europe. In this respect recent work on organizational learning in India, Singapore and China (Kumar, 1997; Snell and Chak, 1998; Tsang, 1997) are very welcome, and one hopes that further studies of this ilk will both enrich local practice, and be seen as a challenge to mainstream theories within North America.

Utilization of ideas

The third issue we would like to discuss in this section is both a problem and an opportunity. It concerns the utilization of theories and techniques around organizational learning by companies and other organizations. The notions of organizational learning and the learning organization have sustained considerable popularity in academic and corporate circles throughout much of the 1990s. As Dodgson (1993) noted, the concept of learning provides considerable promise — to academics because it may revitalize tired disciplines, and for managers because it may be the key to corporate competitiveness. The danger is that it may become over-applied, and hence either exhausted or discredited, especially amongst practitioners who have traditionally given very short shelf lives to corporate panaceas.

Much of the existing literature on the implementation of organizational learning has been produced by people who were closely involved with the

examples described, either as internal sponsors (Butler, 1994; DeGeus, 1988; Lank, 1998) or as external consultants (Pedler, 1994; Senge, 1990). But a trend which has established itself recently is the idea of combining insiders and outsiders when studying organizational learning (Bartunek et al., 1998; Bood et al., 1998). This has the distinct advantages of making access easy and of allowing an accommodation between the emic perspective (insider interpretations) and etic perspective (outsider interpretations). It also allows a differentiation of roles between the insiders who may be considerably committed to the success of the initiative, and the outsiders who may be much more likely to adopt a critical perspective. Several of the chapters in the present volume involve a degree of insider/outsider collaboration (Finger and Bürgin Brand; Preskill and Torres), and it is a style of research that we would wish to encourage in the future.

Structure and overview of this book

We have clustered the chapters in this book into two main sections. The first part looks at theoretical debates to do with organizational learning; and the second part looks at issues of implementation in a range of settings. Chapters in the second part are roughly, but not exclusively, consistent with the literature on the learning organization. We say that because one of the explicit aims of this book is to provide a meeting place between the two communities of academics and practitioners in a way which does not assume a one-way traffic in concepts and theories – from the former to the latter. Thus we believe that there are direct practical consequences of the ideas developed in Part One, and there are significant theoretical insights to be gained from the empirical studies in Part Two.

Part One looks at the theoretical aspects of organizational learning and the four chapters provide reviews and critiques of current thinking and debates in the field. Christiane Prange critiques the realist ontology and positivist epistemology bias within much of the literature on the grounds that it leads to partial conceptualizations of the subject matter. She advances the idea of using metaphors to understand organizational learning, as a way to avoid the rush to prescriptive theories while acknowledging the complex and multifaceted nature of organizational learning. Marleen Huysman extends this critique by identifying and deconstructing five further 'biases' largely within the literature of the learning organization: improvement, individual action, systems thinking, normative, purposeful and systematic learning. Bente Elkjaer puts the critical spotlight onto one fashionable area of 'non-positivist' literature: communities of practice (COPs). Her argument is that COPs prove to be inadequate for dealing with areas of application, and hence she looks at the potential of ideas drawn from related fields such as symbolic interactionism and experiential learning theory. In particular, she is interested in developing Dewey's notions of language as the 'tool of tools' in order to overcome the disjunction between action and cognition. The search for alternative conceptualizations based on a 'linguistic turn' is taken up by David Sims, who explores the possibility that organizational learning can be seen from a narrative perspective, as part of a 'canon of stories'. He regards learning as a matter of changes in memory, and memory as retained in stories rather than propositional statements. Hence, canons of stories are suggested as being a fruitful hunting ground for understanding both the content and process of organizational learning.

Part Two contains seven chapters which look at the implementation of organizational learning within a range of organizational settings by using a number of different intervention methodologies. There are a number of overlaps between chapters within this part, and with chapters in the first part. Thus Nancy Dixon and Matthias Finger and Silvia Bürgin Brand use similar Action Learning methodologies, respectively within Canadian and Swiss public sector organizations. Dixon focuses on learning between museums, whereas Finger and Bürgin Brand consider the extent to which the intervention has succeeded and failed in turning the Swiss Post Office into a 'learning organization'. The chapters by Karen Ayas and Frank Blackler et al. focus on the process of innovation in manufacturing organizations. But again there are differences. Avas looks at the consequences of establishing a network of Project Groups within Fokker to disseminate innovations between aircraft designers; whereas Blackler et al. look at the effect of organizational and cultural changes on the roles and behaviour of scientists within the defence industry. The latter's emphasis on the conceptual value of metaphors provides a good link back to the chapter by Sims in Part One.

The other chapters in Part Two all make use of empirical data to examine different intervention strategies aimed at increasing organizational learning. Elena Antonacopoulou provides a carefully researched study which looks at the effect of training interventions within three UK banks, and it demonstrates the impact of organizational culture on the efficacy of these interventions. Hallie Preskill and Rosalie Torres note that external interventions in the form of evaluation studies so often fail to achieve the required results and speculate that they will be more likely to succeed if seen within the broad framework of organizational learning. Bertrand Moingeon and Amy Edmondson provide, from interviews and personal communications, a comparison of the intervention styles of two leading intervention theorists: Michel Crozier and Chris Argyris.

Concluding comments

It is normal practice, at this stage, for the editors to express the hope that their volume will contribute to push the frontiers of the field, and to call

for more comprehensive and less fragmented theories of their subject matter. We do indeed hope that chapters in this volume will stimulate and encourage further research in the field. The co-existence of two related, but hitherto separate, approaches to learning in the same volume is bound to create feelings of unease and hopefulness in equal measure. We make no apologies for attempting to start a dialogue between two camps that may share little in common other than an interest in collective learning phenomena. But our agenda is clearly to stimulate dialogue and collaborative competition rather than paradigmatic closure, or an idyllic metatheory of organizational learning.

The recent surge of interest in learning in and around organizations cannot disguise the fact that few or any of the perspectives we have identified in this introduction have developed to any great extent the theoretical and methodological implications of their approaches to learning. Nor is it legitimate to expect that they will do so in the near future. The magic juxtaposition of the terms 'organization' and 'learning' stresses, rather than hides, the need for clear and elaborate conceptualizations of what is meant by both 'organizations' and 'learning'. It also raises the possibility that the two terms may be co-existing precariously, in many instances. The notion that all forms of collective learning will necessarily encompass or be constrained by formal organizational boundaries is a shaky assumption.

In conclusion, our call is for a measured and healthy pluralism in developing theories of learning in and around organizations. Hopefully, this volume will illustrate the richness of the different perspectives on organizational learning and learning organizations and help to convince sceptics of the dangers of premature paradigm closure. In essence, we argue for an ecological view of theory development where variety must always precede selection and retention. On the other hand, we hope this volume contributes to erode some of the more artificial distinctions between descriptive and prescriptive intentions in theory building. We have argued that all descriptive theories have, potentially, prescriptive implications whether their proponents acknowledge it or not. But, equally, all prescriptive propositions are based on substantive, theoretical models which, all too often, remain implicit and hidden from view. Many of the contributions in this volume will, no doubt, help to clarify the practical implications of theoretical statements as well the advantages of basing interventions on sound theoretical ground.

Notes

- 1. The distinction was first propounded in Argyris (1977).
- 2. These figures also hold reasonably well for UMI citation searches between 1994 and 1998.