Organisational learning in small learning organisations: an empirical overview

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Introduction

“Learning organisations” are currently the focus of considerable academic and practitioner attention. An abundance of related literature has emerged, grounded in a broad range of interrelated disciplines: continuing professional development, vocational education and training, organisational theory, industrial economics, economic history, business, management and development studies (Matlay, 1998; Keep, 1997; Moingeon and Edmondson, 1996). Furthermore, “organisational learning” has been recognised as a valid research topic on its own and is supported by a growing number of dedicated academic and practitioner journals.

The continuing popularity of “learning organisations” can be attributed to a number of pertinent factors. As a concept, learning organisations first gained popularity amongst high profile, innovative organisations that set out to increase their market share through highly successful, learning-based human resource and knowledge management strategies. In terms of sustainable competitive advantage, these organisations proved more responsive to technological and socio-economic changes (Matlay, 1997, p. 3). The publicity generated by these “success stories” propelled the concept of learning organisations to the forefront of strategic management thought (Dodgson, 1993; Kanter, 1989). By the late 1980s, influential academics, policy makers and practitioners promoted organisational learning as a strategic element in the quest for sustainable business competitiveness (Moingeon and Edmondson, 1996; Senge, 1990; Garratt, 1987). At the same time, the profound impact that rapid technological change was having on business activities highlighted the need for a flexible and multi-skilled workforce. Individuals at all levels of organisational hierarchy were increasingly expected to learn new and often radically different ways of reacting to competitive pressures (Rothwell, 1992; Womack et al., 1990). As a dynamic and integrative concept, organisational learning was perceived to include analytical and critical aspects that had the potential to unify individual, team and corporate values into highly successful competitive strategies. Thus, the competitive advantage (both actual and perceived) attributable to learning
organisations is likely to further promote this dynamic and multi-disciplinary concept.

Learning organisations

Origins and evolution
The origins of the “learning organisation” can be traced back to the “organisational development” movement of the late 1960s and early 1970s (Matlay, 1998). As a management tool, “organisational development” was popular for about two decades, a period during which it proved not only fashionable but also revolutionary. In a trend-setting mode, this school of management promised to deliver a great deal in terms of competitive advantage, during a period of growing political uncertainty and socio-economic change. Most contemporary observers hailed it as the panacea to all the problems and challenges posed by rapid technological advances (Pedler, 1994).

However, as the pace of technological innovation increased during the late 1970s and early 1980s, it became obvious that the extent and intensity of organisational change had far exceeded the predictions of contemporary economic forecasters. In a growing number of innovative businesses, knowledge management and support systems proved inadequate in coping with the influx of pertinent data. At most levels of organisational hierarchy, employees were increasingly called upon to deal with growing volumes of internal and external information mostly outside their control and expertise. As a direct result, a new type of business philosophy began to develop and take over from the outdated organisational development movement, one that placed learning at the core of sustainable competitive advantage (Starkey, 1996).

It should be noted that in the UK, “organisational learning” only gained wider recognition with the notable success of Peter Senge’s The Fifth Discipline (Senge, 1990). This widely acclaimed and much quoted book ensured that the principles of organisational learning and recommendations for its implementation would reach a wide audience that included, amongst others, academics, policy-makers, business leaders, educators, trainers, consultants and managers. Apart from direct corporate benefits in terms of competitive advantage, the organisational learning movement also promised indirect gains through its potential impact upon educational, training and human resource development paradigms (Matlay, 1998). Yet more than 20 years later the theory and practice of learning organisations remains confused, fuzzy and difficult to penetrate or implement (Scarborough et al., 1998; Goh and Richards, 1997; Hitt, 1996; Garvin, 1993).

Concepts and definitions
Even though the concept of organisational learning has achieved prominence amongst interested parties, considerable confusion still exists in relation to the definition and use of the term (Matlay, 1998). Most of the learning organisation definitions available in a wide range of relevant publications appear to be complementary rather than fundamentally original or conceptually different (Matlay, 1997). Pedler et al. (1991, p. 1) defined a learning organisation in terms of continuous transformation and improvement through the learning activities of all its employees. According to Dixon (1994, p. 5), continuous organisational transformation can only take place through intentional learning processes at individual, group and system level. The quality as well as the continuity of individual and collective learning in an organisational setting is deemed crucial to the development of a learning organisation (Lank and Lank, 1995). However, de Geus (1998, p. 71), points out that the ability of a workforce to learn faster than their counterparts in other organisations constitutes the only sustainable competitive advantage at the disposal of a learning organisation. It is generally agreed that the primary focus of a learning organisation should be the way in which it values, manages and enhances the individual development of its employees in order to ensure its continuous transformation (Scarborough et al., 1998, p. 2).

Probst and Buchel (1997, p. 16) conclude that there are considerable theoretical, empirical and practical difficulties involved in defining and mapping the learning organisation in a way that is both conceptually consistent and widely acceptable. There are a number of approaches to defining organisational learning. Generally, these offer both a theoretical discussion of the topic and a pragmatic view of its practical implementation. Interestingly, these approaches tend to emphasise a
learning-based interaction between individual employees and the organisation that employs them (Pautzke, 1989; Morgan, 1986; Hedberg, 1981). To add to the fuzziness of definitional approaches, “learning organisation” and “organisational learning” – as generic terms – are often used interchangeably (Romme and Dillen, 1997, p. 68). The main argument is offered by Weick (1991), who argues that these terms are synonymous as both originate from the psychological concept and usage of “individual learning”. Typically, most definitions relating to work-based learning are linked to this basic analogy (see Argyris and Schon, 1978).

The theory of learning organisations tends to distinguish between two types of definition: normative and descriptive. Normative definitions identify specific prerequisites which learning organisations must fulfil (Pearn et al., 1995; Dixon, 1994; Senge, 1990; Bomers, 1989; Hayes et al., 1988). For example, Garvin (1993, p. 81) decrees that a learning organisation creates, acquires and transfers knowledge in order to modify its behaviour in line with competitive strategies. Descriptive definitions acknowledge the fact that all organisations learn, consciously or otherwise (Kim, 1993; Levinthal and March, 1993). Work-based learning in learning organisations is actively encouraged, stimulated and rewarded, mostly as part of specific human resource strategies (Matlay, 1997, 1998). Conceptually, it appears that two important aspects distinguish learning organisations from one another: first, the relationship between individual and collective learning and, second, the distinction between single- and double-loop learning.

Learning in organisations: theory and practice

Most influential writers on the topic of learning organisations differentiate between individual and collective learning (Romme and Dillen, 1997; Huber, 1996). As larger business entities rely upon the performance of various categories of employee, work-based individual learning becomes an important and necessary condition of sustainable competitive advantage. Collective learning in this type of organisation takes place in addition to learning processes occurring at individual level. Importantly, however, although collective learning can occur independently of each individual, it cannot take place if all the employees in an organisation are prevented from learning (Romme and Dillen, 1997; Kim, 1993). Both individual and collective learning can be significantly hindered by a multitude of stress-related problems (Matlay, 1998). In small businesses, the crucial role that owner/managers invariably play in the daily operation of their firms often results in individual learning and development at managerial level. As a direct result, the need for collective learning is significantly reduced or even displaced entirely (Matlay, 1999).

A learning organisation could also be defined or measured in terms of the sum total of accumulated individual and collective learning (Hyland and Matlay, 1997). Indeed, some pertinent research studies in this field were based upon the detailed analysis of learning practices and their effect upon overall business competitiveness (Huber, 1991; Sterman, 1989). Learning at work can be seen as a product of corporate values, internal competition and personal ambitions (Harrison, 1993). Organisational factors, such as working conditions, management styles and employee relations play an important role in shaping learning and knowledge management processes specific to each business entity. It appears that only fragments of the knowledge gained through individual learning are actually recorded or disseminated, either formally or informally, for corporate use. Knowledge emerging from collective learning is much more complete and is usually recorded formally for corporate access and benefit (Matlay, 1997, p. 4).

Some commentators stress the conflict of interest that can exist between individual and organisational learning (Probst and Buchel, 1997; Starkey, 1996). It appears that those researchers who favour personal development also recommend the acquisition of “transferable” skills. This is more likely to be the case in large organisations with internal labour markets that offer opportunities for both personal development and corporate progression (Thomson and Mabey, 1994). It is now widely acknowledged that that micro- and small businesses do not offer development opportunities commensurable with those of larger organisations (Storey, 1994). Progression is very limited and
employees are more likely to leave employment and start their own firms (Matlay, 1996). Consequently, small business owner/managers prefer their employees to acquire firm-specific, non-transferable knowledge, which is both easier to manage and curtails individual opportunities in the external labour market (Matlay, 1998). Work-based learning is closely controlled by small business owner/managers who fear that their competitors would poach their key employees. Bomers (1989) argues that organisational learning is most likely to be handicapped in organisations where most of the knowledge and skills are dependent upon fewer individuals. As most small businesses fall into this category, organisational learning in this type of firm is likely to occur sporadically, as a reactive strategy, rather than as a proactive drive to enhance the quality of the workforce (Matlay, 1997; Kim, 1993).

Carley’s (1992) concept of “learning deterioration risks” through employee turnover placed organisational learning in the context of hierarchical structures and their effect upon knowledge acquisition, management and transfer. The complex hierarchical structures exhibited by larger organisations renders them less vulnerable to personnel turnover and related skills drainage. Conversely, small firms, with simpler and flatter managerial structures, are more at risk from staff turnover and related knowledge deterioration and loss. In larger organisations, new knowledge and skills are routinely transferred to line managers and management teams. Hierarchical organisations also lose some knowledge as it is filtered through complex communication channels across various structural levels. In order to minimise learning deterioration risks through personnel turnover, organisations need to maintain reasonably complex hierarchies and internal markets. However, some researchers found that complex hierarchical forms tend to hinder individual as well as collective learning taking place in organisations of all sizes (Romme, 1996; Pedler et al., 1991; Mills, 1991). Furthermore, the emergence, in recent years, of leaner and flatter organisations did not significantly affect the quantity, quality or intensity of organisational learning (Matlay, 1997; 1998).

Leavitt and March (1988) argue that experiential learning forms an important part of work-based knowledge acquisition. Instances of individual learning from daily activities have been documented in most learning organisations, regardless of their size or type of economic activity. Similarly, where learning curves were used to monitor individual development, these provided evidence of intended, incidental or accidental learning (Matlay, 1998). This type of learning generates knowledge mainly from “trial-and-error” decision-making processes. Experiential learning is seen to make a significant contribution to the knowledge-based competitive strategies of fast growing organisations (Porter, 1980; 1985). An organisation’s cumulative knowledge embodies much of its competitive advantage. Knowledge-based competitive advantage is unique to each organisation and cannot be replicated by other firms (Barney, 1986). With the advent of globalisation, organisations are increasingly forced to operate within a highly competitive “global village”. Knowledge acquisition, management and transfer strategies are currently viewed as the most important differential at the disposal of an organisation in its quest for sustainable competitive advantage (Matlay and Fletcher, 2000).

Conceptually, a distinction is sometimes made between “single-loop” and “double-loop” learning (e.g. Hatch, 1997; Fisher and Torbert, 1995; Rein and Schon, 1994; Argyris, 1994). Single-loop learning involves trial-and-error situations that result in the consolidation or correction of existing organisational processes. According to Fiol and Lyles (1985), single-loop learning is mostly encountered in organisations that incorporate repetitive or routine procedures. Paradoxically, however, this type of learning is less effective at unskilled or semi-skilled levels (Fisher and Torbert, 1995). In Morgan’s (1986) view, single-loop learning mostly involves causal inferences related to actual or probable errors, the correction of which might alter the knowledge base of an organisation. Conversely, double-loop learning involves evolutionary changes in the operational rules that underline organisational activities (Rein and Schon, 1994; Argyris, 1990; 1992). In this context, cognitive processes and insights generate new frames of reference and effective decision-making processes (Argyris, 1994). It appears that the vast majority of large organisations rely upon single-loop learning.
and that instances of double-loop learning are relatively rare (Senge, 1990). March (1997, p. 371) explains this behavioural pattern by arguing that the budgetary controls favoured by larger organisations tend to compare actual to expected outcomes and subsequent target deviations are recorded as variances. Budgetary feedback generates single-loop learning based upon analysis of previous actions, using the resulting knowledge to improve future performance. Most small business owner/managers prefer informal management styles that rely heavily upon their perception and evaluation of previous outcomes. Single-loop learning tends to reinforce an owner/manager’s need to control most, if not all, aspects of organisational activity. Only a small number of owner/managers in growth-oriented, small businesses rely upon double-loop learning as a competitive strategy. Unfortunately, it appears that instances of double-loop learning prove to be the exception rather than the norm (Matlay, 1998).

**Research sample and methodology**

The research study upon which this article is based took place during 1996-1998. It was designed to combine three different analytical approaches. First, it incorporated a telephone survey of 6,000 organisations, which were randomly selected from the 1996 edition of the *Yellow Pages Business Database of Great Britain*. The telephone survey achieved a response rate of 89 per cent and collected a variety of quantitative data on organisational learning. A sub-sample of 600 owner/managers was selected for in-depth, face-to-face interviews. The qualitative data generated by these interviews provided valuable insights into the learning and knowledge management strategies employed by small business owner/managers in their quest for sustainable competitive advantage. In addition, 60 matched case studies were conducted in order to compare and contrast learning-related processes and their outcomes in closely matched growing, stagnating and declining organisations. The data generated by these research methods were used to triangulate and corroborate the overall results of the wider study.

**Size distribution and composition of the research sample**

The telephone survey involved a sample of 6,000 businesses, randomly selected from the 1996 edition of the *Yellow Pages Business Database of Great Britain*. For standardisation purposes, the European Commission’s (1996) size definition was used to provide the basis for longitudinal analysis and comparison. The research sample comprised 2,211 (36.85 per cent) manufacturing firms and 3,789 (63.15 per cent) businesses from the service sector (Table I). The research sample was dominated by 5,383 (89.72 per cent) micro-businesses that employed fewer than ten individuals. The sectoral spread of micro-businesses showed a significant concentration in services (63.53 per cent) while just over one third (36.47 per cent) were manufacturing firms. There were 457 small businesses with a payroll of between 11 and 49 employees. Amongst these, 263 (57.55 per cent) operated in the service sector and the balance of 194 units (42.45 per cent) were active in the manufacturing sector. The predominance of service organisations was also noticeable amongst medium-sized and large businesses: 87 and 19 respectively were operating in this sector and 42 and 12 in manufacturing. The size distribution of the research sample closely reflected the overall composition of the contemporary UK economy (Matlay, 1998).

Before the interviews commenced, the respondents were offered a working definition of learning organisations, using terms familiar to owner/managers. When asked whether they belonged to a learning organisation, all the owner/managers claimed to do so. Further questions on the type and incidence of learning in these firms confirmed the owner/managers’ claims (Table II). Only 2.36 per cent of micro-businesses relied on formal learning, as compared to 10.92 per cent of small and 21.34 per cent of medium-sized organisations. The number of firms reporting formal means of learning increased in proportion with their size. Similar trends were observed in relation to mixed, formal and informal learning – only 13.80 per cent of micro-businesses relied on this type of learning. In small- and medium-sized organisations, the incidence of mixed, formal and informal learning increased to 21.97 per cent and 38.79 per cent respectively.
The respondents were also questioned about the locus of organisational learning in their firms (Table III). In the majority of cases, owner/managers were identified as the gatekeepers of learning processes. In micro-businesses, 98.62 per cent of organisational learning took place at owner/manager level and in 12.81 per cent of firms other managers were also involved in work-based learning processes. Interestingly, in micro-businesses, no other type of employee (unskilled, skilled or semi-skilled) was mentioned in relation to organisational learning. In contrast, organisational learning in small businesses involved owner/managers (97.25 per cent), line managers (27.55 per cent) and skilled employees (6.68 per cent). In medium-sized firms, although owner/manager engagement remained high (96.47 per cent), the involvement of other categories of personnel grew significantly: line managers (57.67 per cent), skilled personnel (16.17 per cent) and unskilled employees (4.34 per cent).

The quantitative data generated by telephone interviews were validated by the qualitative data obtained during 60 semi-structured, face-to-face interviews and 60 case studies. It appears that in micro- and small businesses most work-based learning was incidental and it occurred sporadically throughout routine daily tasks. It would often pass unnoticed and unrecorded. Only a fraction of the knowledge generated by organisational learning was communicated, verbally or in writing, to owner/managers, line managers or colleagues. Typically, “incidental knowledge” was used short-term and mainly within the narrow confines of individual functions or jobs. This type of knowledge was allowed to deteriorate or be replaced by newer information, without due regard to quality or relevance to wider issues. Employees faced the choice of reacting to new situations or trying to manage the influx of incidental knowledge. Both choices were usually compromised by time constraints and customer pressures.

At owner/manager level, it often proved more expedient to ignore the potential benefits of organisational learning and opt for short-horizon knowledge management strategies. Time constraints and administrative pressures significantly reduced these owner/managers’ ability to evaluate or

Table I Size distribution and composition of the research sample

<table>
<thead>
<tr>
<th>Size band</th>
<th>Size definition</th>
<th>Number of employees</th>
<th>Manufacturing ((n = 2,211))</th>
<th>Services ((n = 3,789))</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Micro-business</td>
<td>1-10</td>
<td>1,963</td>
<td>3,420</td>
</tr>
<tr>
<td>B</td>
<td>Small business</td>
<td>11-49</td>
<td>194</td>
<td>263</td>
</tr>
<tr>
<td>C</td>
<td>Medium-sized</td>
<td>50-250</td>
<td>42</td>
<td>87</td>
</tr>
<tr>
<td>D</td>
<td>Large business</td>
<td>251+</td>
<td>12</td>
<td>19</td>
</tr>
</tbody>
</table>

Note: \(n = 6,000\)

Table II Type and incidence of organisational learning

<table>
<thead>
<tr>
<th>Size band</th>
<th>Size definition</th>
<th>Number of employees</th>
<th>Formal learning (per cent)</th>
<th>Informal learning (per cent)</th>
<th>Mixed learning (per cent)</th>
<th>Total (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Micro-business</td>
<td>1-10</td>
<td>2.36</td>
<td>83.84</td>
<td>13.80</td>
<td>100.00</td>
</tr>
<tr>
<td>B</td>
<td>Small business</td>
<td>11-49</td>
<td>10.92</td>
<td>67.11</td>
<td>21.97</td>
<td>100.00</td>
</tr>
<tr>
<td>C</td>
<td>Medium-sized</td>
<td>50-250</td>
<td>21.34</td>
<td>39.87</td>
<td>38.79</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table III The locus of organisational learning within the research sample

<table>
<thead>
<tr>
<th>Band code</th>
<th>Number of employees</th>
<th>Size definition</th>
<th>Owner/manager (per cent)</th>
<th>Line managers (per cent)</th>
<th>Skilled employees (per cent)</th>
<th>Unskilled employees (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1-10</td>
<td>Micro-business</td>
<td>98.62</td>
<td>12.81</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>B</td>
<td>11-49</td>
<td>Small business</td>
<td>97.25</td>
<td>27.55</td>
<td>6.68</td>
<td>0.00</td>
</tr>
<tr>
<td>C</td>
<td>50-250</td>
<td>Medium-sized</td>
<td>96.47</td>
<td>57.67</td>
<td>16.17</td>
<td>4.34</td>
</tr>
</tbody>
</table>
initiate learning-based business strategies. In a few small businesses, learning processes were intentional. These were the direct result of proactive human resource strategies designed to collect, manage and update knowledge that would sustain and improve competitive advantage. Importantly, a large proportion of such “intentional knowledge” was recorded and communicated across the firm. The perceived learning reciprocity and unity of purpose also contributed positively to the motivation and morale of the workforce. Owner/managers in these firms encouraged proactive learning processes and promoted behaviour patterns that resulted in strategic knowledge management throughout the workforce. In their view, strategic knowledge management contributed significantly to the competitive edge and overall success of their businesses.

In total, 60 businesses were matched up in pairs of similar economic activity, age, size and location. The impact of learning strategies and knowledge management upon organisational goals and outcomes was analysed and compared using comparative case study methodology. Significantly, all the firms participating in matched interviews reported considerable pressures arising from an increase in demand attributed mainly to favourable economic circumstances. Skill shortages and hard-to-fill vacancies affected both newer and long-established small firms. Cumulatively, these difficulties seemed to impair a firm’s ability to respond to the increase in demand for their products and services. More importantly, there were considerable delays in the fulfilment of contractual obligations, and the overall quality of goods and services as well as of after-sale support was negatively affected.

Increased levels of economic activity imposed steep learning curves in all the firms in the sample. Managerial and supervisory staff felt particularly under pressure by growing demands upon their time, skills and knowledge. Initially, owner/managers attempted to cope with the growth in demand by offering longer working hours rather than through recruitment of additional personnel. It soon became obvious, however, that prevailing economic circumstances presented significant opportunities for growth. Very few respondents could ignore the growth potential inherent in favourable macro-economic conditions. Importantly, however, none of the respondents in the sample was prepared for, or could have sustained, demand-related growth within the constraints of existing human resource strategies.

During the initial growth period, firms that exhibited incidental learning processes scored short-term successes by working longer hours in order to “mop up” the extra demand for their products or services. As a short-term strategy, incidental learning was less time-consuming and more cost-effective than intentional learning. In contrast, firms that relied on intentional learning strategies were slower and more deliberate in their efforts to fulfil growing demand. In the medium- and long-term, intentional learning processes proved more successful in sustaining competitiveness and organisational growth. As a short-term solution, incidental learning did not contribute significantly to organisational growth, mainly due to its limited effect upon human resource development strategies. In contrast, intentional learning influenced considerably the direction, extent and delivery of a firm’s proactive human resource development strategy.

**Concluding remarks**

Notably, all the 6,000 respondents who participated in the telephone survey claimed to belong to learning organisations. However, much of the learning reported was incidental and it occurred sporadically throughout routine tasks. The frequency of formal learning in these firms increased in direct proportion to their size. The incidence of mixed, formal and informal learning followed similar patterns. Only a fraction of incidental knowledge was communicated, verbally or in writing, to other individuals or to the owner/manager. In a minority of firms, learning processes were intentional, aimed at obtaining, managing and transferring new knowledge that would promote and sustain organisational competitiveness. Importantly, most of the knowledge that emerged from intentional learning was recorded and disseminated to other employees.

Knowledge management – in terms of acquiring, transferring and using learning-based new information – did not feature high on the agenda of most of the small business owner/managers in the sample. Furthermore,
the implications for individual and collective development inherent in knowledge management eluded most owner/managers who were too busy reacting to changes in the market place. The short-term competitive strategies of “reactive” owner/managers ultimately resulted in the deterioration and loss of much of the new knowledge acquired through incidental learning in the workplace. In contrast, “proactive” owner/managers used intentional learning processes as part of competitive strategies that relied significantly upon planned individual and collective development and effective knowledge management.

The results of this research study confirmed that learning, both incidental and intentional, was taking place in most of the small businesses in the sample. Importantly, however, only a minority of small business owner/managers managed learning and the resulting knowledge in a proactive and strategic way to sustain and advance their competitive advantage.

References

Argyris, C. (1990), Overcoming Organisational Defences: Facilitating Organisational Learning, Allyn and Bacon, Boston, MA.


Matlay, H. (1996), Small Business Owner/Managers’ Attitudes to Organisational Learning, DCE, University of Warwick, Coventry.


Kauffman Foundation Entrepreneurship Research Conference, University of South Carolina, Columbia, SC.


