Interactions of organizational culture and collaboration in working and learning

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ABSTRACT
This paper reports the methodologies and findings of research done by the Enterprise Social Learning Architecture (ESLA) Task into learning processes in two diverse environments within the Australian Defence Organisation. The research focused on identifying factors that enable and facilitate social learning. These factors are discussed in view of the preliminary architecture proposed by the research team and in view of the socio-technical environment within which people work and learn. The paper concludes by suggesting that the development of information systems requires an understanding of the cultural and interpersonal issues prevalent in work environments.

Keywords
Knowledge Management, Organizational culture, Organizational learning, Socio-technical approach

Introduction
The management and organizational learning literature of the 1990s reflects profound and continuous changes in the business climate due to uncertainty. In this world of uncertainty, organizations need to continually renew, reinvent and reinvigorate themselves in order to respond creatively to market forces. This process of reinvigorating requires shifts in organizational structures and processes. Organizational knowledge, and how it is effectively incorporated into the organization’s practice, is the critical issue for business activity. Many organizations invest heavily in implementing information technology (IT) in the hope of providing a seamless solution to managing information resources and organizational knowledge. Unfortunately, these initiatives are often implemented without much regard to how people in organizations go about acquiring, sharing and making use of information (Bednar 2000; Davenport 1994; Vandeville 2000). There is an increasing awareness of the importance of the social aspects of systems. Some researchers argue that a sound understanding of organizational culture, human (social) interactions, communication and relationships is required in order to make progress (Butterfield & Pendegraft 1996; Davenport et al., 1992).

This paper sheds further light on the personal, cultural, social and organizational factors that facilitate organizational learning. A four-year research study to investigate social learning within the Australian Defence Organisation (ADO) is being conducted by the Enterprise Social Learning Architectures (ESLA) Team of the Defence Science and Technology Organisation (DSTO). The immediate aim of this research is to understand the
issues inherent in building learning, adaptive and sustainable organizations. The long-term objective is to develop architectures that will support the development of information systems to guide and enhance organizational learning and facilitate knowledge management.

Social learning

As Jordan (1996) explains, informal learning is inherent in all human activities. In work life, socially-based learning occurs frequently. Lave and Wenger (1991) refer to the interactions between people and the environment as situated experience or situated learning. It is through learning that we see ourselves in a different context and this transformation of oneself through learning is particularly important if one is to contribute to the dynamic changes in the organizational landscape.

For our research, social learning is defined as learning occurring within a group, an organization, or any cultural cluster and it includes:

- the procedures that facilitate generative learning – learning that enhances the enterprise’s ability to adjust to dynamic and unexpected situations and to react creatively to them; and,
- the procedures by which knowledge and practice are transmitted across posting cycles, throughout time and across different work situations.

Below is a brief description of our study methodology, followed by ESLA research results on the role of personal and cultural factors in social and collaborative learning in the workplace.

Study Methodology

To date, the ESLA team has conducted three studies. Two of these studies were pilot studies, one in a single service tactical headquarters (HQ) and one in a joint strategic HQ. The joint strategic setting was of particular interest as it has a much higher degree of ambiguity as opposed to the tactical setting where the environment is very structured.

The third study concerns the social learning occurring within a single service strategic HQ. The focus is to find out whether social learning constructs differ from those in a joint service environment and in a tactical setting.

Given the exploratory nature of the research, as well as the importance of the context, the research team uses ethnographic techniques in the form of fieldwork. This entails observing work in different settings and using directed questioning to clarify issues. In addition to observation, we used unstructured interviews with a sample of personnel from the joint and single service strategic HQs. A stratified sampling technique was used to ensure adequate representation including: branch and directorate (sub-branch) affiliation, gender, rank, military or civilian status, work location, and duration of placement. Fifty-nine interviews were conducted, 15 in the joint service headquarters and 44 in a single service headquarters.

Furthermore, quantitative surveys were also used in both joint service and single service HQs. In both settings, the total population was surveyed and the response rate in the joint HQ was 96.7% and in the single service HQ, 71%. The purpose of the survey was to validate the qualitative findings foremost, and also to move the focus of the research from “what the researchers might think” to “what the staff of a particular setting thinks”.

Research data were triangulated by methods of data collection, by researcher (a multidisciplinary team) and by functional role (each study has taken place in different locations as well as in functionally different sections of the ADO). The study methodology evolved as the ESLA team moved from one setting to another in order to best understand the situation.

Study findings

Our findings represent the collective research results to date; preliminary results are discussed in this paper. These findings are multilayered and have resulted in the following set of overarching values that facilitate effective social learning:

- empowerment;
- forgiveness of mistake making;
- trust;
- individual and organizational commitment;
- sharing of information;
- openness of decision making; and,
- cultural cohesiveness.

Although we do not use the term "organizational climate" or "organizational culture", our set of overarching values are reflective of these terms. We do not take a position on whether this set of values is solely an organizational property adopted by individuals (Tagiuri, 1968; Taylor & Bowers, 1972) or whether it is influenced by, or based on individual members’ behaviour and beliefs (Ashforth, 1985; Pritchard & Karasick, 1973).

Apart from the overriding set of values, the research team identified an additional set of factors that supports and enables effective social learning. These factors fall into two categories. The first, **Learning Capability Development**, refers to characteristics in the environment and provides a context in which the second category operates. This second category is referred to as **Enablers** and represents processes and strategies that, if present and effectively applied in an enterprise, can facilitate social learning.

![Factor Impacting on Social Learning in Organizations](image)

*Figure 1. Factors impacting on social learning in organizations*

The characteristics of these Enablers, like the organization’s set of values, emanate from personal and cultural elements within it. The Enablers can, from time to time, be either challenged or inhibited by these elements; examples might include uncertainty of budget allocations, inconsequential work practices, a highly politicised environment, organizational change (change fatigue), and changing organizational cultural values. Figure 1 shows these relationships.
Factors and Constructs

The ESLA team identified seven basic categories that constitute enabling processes and strategies to facilitate social learning: Common Identity, Problem Solving, Team Building, Access to Information, Development of Individual Expertise, Communication, and Induction and Enculturation (see Figure 2). The constructs overlap in order to represent their interrelationship.

**Common Identity** – a common ground/understanding to which many people/groups can subscribe, and requires a shift from seeing oneself as separate to seeing oneself as connected to and part of an organization unit. Based on our research, issues impacting on Common Identity are: goal alignment, cultural identity, gendered identity, language, morale, and workplace design (spatial and physical design).

**Problem Solving** – a core activity. Problem solving fosters social learning, because each instance of it represents an opportunity to generate knowledge. Issues associated with this enabler are: networking, improvisation, perceptions of the organization, systemic understanding, and time for inquiry and reflection.

**Team building** – working together and understanding what each member is trying to do. Team building is essential to effective social learning and problem solving. Issues associated with this enabler are: leadership, team-based morale, performance management, public recognition and reward systems, use of humour, and workplace design.

**Access to information** – the easy availability of corporate information in whatever format. Access was observed to effect knowledge acquisition and generation of new knowledge and social learning. Issues associated with this enabler are: record keeping, networking, meetings, and information technology (IT) infrastructure.

**Development of individual expertise** – the acquisition and development of expertise was seen as an integral part of social learning. Issues associated with this enabler are: career trajectories, professional currency, professional training, postings and promotion, and mentoring.

**Communication** – this enabler was observed to be essential to effective learning within an organization and to effective social learning. Issues associated with this enabler are: overall communication climate, formal and informal information flows, time for inquiry and reflection, use of humour, language, and workplace design.

**Induction and enculturation** – facilitates social learning by providing a foundation upon which an individual can become fully productive. Issues associated with this enabler are: timeliness and comprehensiveness of the process, buddy/mentoring system, handovers and information packages, and training.

These factors enabling social learning identified from our data are by no means exhaustive. The ESLA team is elaborating the relationship between these enablers. Figure 3 depicts these relationships and their impact on social learning.
Data Summary

The role of the values of trust, sharing of information, and forgiveness in cultures that foster generative learning.

Values of trust

Research on the cultural aspects of those organizations that foster new knowledge and generative learning suggests that employee trust and open communication play an integral role. Furthermore, higher levels of trust between managers and employees are correlated with more open communication (Argyris, 1973; Ruppel, 2000).

The research reported in the literature supports our findings that trust is pivotal in climates of organizational change and when environments are uncertain. The results of the quantitative surveys indicate that trust in the leaders and their decision-making played an important part, with just over half (53%) of the respondents in the single setting strategic HQ saying that they trust decisions made by their leaders. It is interesting to note that the higher up the chain of command, the greater the level of agreement with this statement. One of our informants put it very succinctly: “We need a far more open information network that actually allows us to see how the organization works”.

The findings on open communication were also indicative that levels of trust amongst lower level staff are greater than between them and senior defence managers. For instance, 96% and 84%, respectively, in the joint and single service strategic settings reported being able to voice their opinions to their immediate supervisor. Furthermore, a large proportion (75% and 60%) felt that they received adequate feedback, and a vast majority (84% and 80%) felt they were taking part in decisions that affect their work. On the other hand, this open communication was not perceived to be as prevalent with senior managers, with only 30% and 32% respectively agreeing that they could voice their opinions to them. During the period of frequent organizational changes only 17% and 40% respectively indicated that the organizational change process was consultative at all levels. However, it is interesting to note that 81% and 72% respectively said that they were comfortable with expressing their views about the changes taking place. Table 1 shows these results.
<table>
<thead>
<tr>
<th>Question</th>
<th>Joint Strategic Setting (%)</th>
<th>Single Service Strategic Setting (%)</th>
</tr>
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<tbody>
<tr>
<td>I trust the decisions made by leaders</td>
<td>-</td>
<td>53</td>
</tr>
<tr>
<td>I am able to voice my work-related opinions to immediate supervisor</td>
<td>96</td>
<td>84</td>
</tr>
<tr>
<td>I have the opportunity to voice my work-related opinions to senior defence managers</td>
<td>30</td>
<td>32</td>
</tr>
<tr>
<td>I receive adequate feedback on my work</td>
<td>75</td>
<td>60</td>
</tr>
<tr>
<td>I take part in the decision-making processes that affect my work</td>
<td>84</td>
<td>80</td>
</tr>
<tr>
<td>Organizational change process involved consultative process at all levels</td>
<td>17</td>
<td>40</td>
</tr>
<tr>
<td>I was comfortable in expressing my views about organizational change</td>
<td>81</td>
<td>72</td>
</tr>
</tbody>
</table>

Table 1. Quantitative findings on trust and open communication

Information Sharing

Schein (1993) and Phillips (1997) have studied the impact of information sharing on the development of common identity (commonality). They suggest that information sharing promotes common identity, mutual trust, and organizational learning, and is directly related to organizational cultures that foster generative learning. Schein (1993) also claims that opening up and sharing encourages integration between organizational subcultures and in turn, organizational adaptation to change. Our findings strongly suggest that in addition to an information sharing culture, the development of common identity is achieved also through induction and enculturation progresses. This aspect of common identity was not effective in the joint service strategic HQ since only 12% stated that their induction was well managed and 33% reported that they received adequate briefing regarding their duties. The following comment well summarises the sentiments of many people we interviewed:

“Through my 25 years experience, handovers are a disaster, for the most part - with some exceptions. If the individuals take extra effort to do a good handover, that will occur. Organizationally, there's very little in place to make it happen.”

Enculturation and induction are forms of sharing information. If effective, they not only promote development of common identity but also facilitate social learning by providing a foundation upon which the individual can become fully productive more quickly, and thus is more likely to generate new knowledge. It follows, therefore, that negative perceptions of induction held by members of the joint service strategic HQ could hinder social learning.

In the single service strategic HQ, the results were more encouraging with 46% feeling positive about the conduct of their induction to the organization and 51% receiving adequate briefing about their duties. Further, 59% stated that when they first joined in it only took a few weeks before they had a good grasp of how the team did things. In this setting, therefore, social learning would be facilitated via the promotion of common identity as well as by the transfer of information and organizational knowledge.

Forgiveness in Culture

The ESLA team observed that settings characterised by a culture of forgiveness and a climate where exploration, mistakes and taking some risk were allowable were those where collaborative generation of new ideas was more prevalent. Davenport and Prusak (1998) claim that lack of forgiveness for mistake making is one of the basic stumbling blocks because it slows or prevents or even erodes some of the knowledge as it moves through the organization (sharing of information). Organizations have a responsibility to create a culture in which learning occurs, and that culture will determine the quality of learning that takes place. A culture that minimises the fear of making mistakes and exercises praise and rewards, not only for those who succeed but also for those who tried hard and might not have achieved the desired results, is important in the learning organization. Similarly, Ellinger (1999) points out that open communication and the encouragement of questions are effective vehicles for driving organizational learning.

This culture of forgiveness and learning from mistakes was widely prevalent in the tactical environment where mistakes were freely admitted and discussed. This process became a vehicle from which the whole group benefited. The ESLA team observed that this positive communication climate was supported by a high level of trust between group members and across hierarchy. Also, in the single service strategic HQ, 92% of those surveyed reported that they can positively learn from the mistakes they make, and the same percentage stated
that their supervisor would stand by them when they make a good suggestion. Research by Oldham, (1996) indicates that when supervisors are highly supportive of their subordinates (e.g., showing concern for the employee’s ideas and feelings), it enhances employee initiative at work.

A vast majority of respondents (99%) were willing to share their knowledge not only within their immediate team but also across directorates and other functional groups, and 93% stated that they were neither inhibited in asking for help, nor did they hide their lack of knowledge if they were unsure how to do their job. In the joint strategic environment, on the other hand, the climate of forgiveness and the application of lessons learned were not so prevalent. A number of informants said they avoided asking questions because “the culture was unforgiving and there was intolerance for not knowing”. However, we were also told that in order to learn and do one’s job well it was necessary to have “an arrogance of not knowing” and that one can’t be expected to know certain things without asking questions, and that if criticised, one should respond by saying “well no, I don’t know and I really do think there’s a problem”.

It was also observed, in the case of some individuals, that having information and knowledge was perceived as having power:

“… he’s just the type of guy that if you get something out of him, it’s like he’s doing you a favour… it’s just like he’s scoring a point by doing it.”

The tendency to hold on to information rather than share it would inhibit social learning by preventing its transfer to others. Withholding of information may hinder or even prevent individuals from developing a knowledge foundation from which new knowledge can be generated. Indeed, this expertise when combined with ‘position power’ provides the power base that makes one indispensable and influential in the organization (French and Raven, 1968; Carlopio et al, 1997).

Information technology and learning

Information technology plays an important role in enabling organizations to use information and knowledge to their strategic advantage. To investigate information technology’s role in collaborative learning, the ESLA team gathered self-reported data on the use of human and non-human means of acquiring and transferring knowledge. The data pointed to information technology being used as a vehicle for better utilising personal networks complementing rather than replacing person-to-person contact. For instance, in the single service headquarters, personal networks and then meetings were ranked as the most preferred non-technology information sources. Further, email and telephone were ranked above shared drives and Internet/Intranet sources as preferred technology-based information sources. These results suggest that even when employees are using technology, they are doing so to enhance communication within their personal networks. Moreover, informal channels, such as chatting with colleagues, either in person, over the phone or via emails, were used by 62% of respondents to obtain work-related information. Interestingly, the majority of these were middle managers or below, and although 59% of respondents also claimed to use formal means to obtain work-related information, the largest proportion were senior managers. This apparent contradiction is clarified by data from semi-structured interviews where the vast majority of people, across all three settings, stated that they found human sources the most effective, and usually the most efficient, means to obtain work-related information.

A possible explanation for this preference may be that information from technology-based sources might be stripped out of its context and rendered less meaningful. Through interpersonal interactions individuals are able to probe and question and obtain not only the desired information but also the richness of contextual meaning. The study results point to the technology being used to facilitate interpersonal networks within which interaction occurs.

Another possible explanation for these preferences is that much information is actually knowledge that resides only in people’s minds. The preferences are not due to ineffective records management because there has been no codification into a written form.

Conclusions

The implication of this study is that organizations seeking to improve information sharing and knowledge generation need to develop a greater awareness of the processes and strategies of organizational learning. Organizational knowledge is distributed across functional groups and its generation and continual existence is
dependant on the overall communication climate which is embedded in the organizational culture. This study indicates that information sharing and subsequent knowledge generation would be successful when interactive environments are cultivated before technology based solutions are implemented. When the results of the most recent study, the single service HQ, have been analysed a research report on the full study will be published.

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References


