

# DOES ORGANISATIONAL LEARNING CREATE A LEARNING ORGANISATION? CONCEPTUAL CHALLENGES FROM A PROJECT PERSPECTIVE

**Paul Chan<sup>1</sup>, Rachel Cooper, Stuart Carmichael, Patricia Tzortzopoulos, Peter McDermott and Malik M A Khalfan**

*Salford Centre for Research and Innovation in the Built and Human Environment (SCRI), University of Salford, Bridgewater Building, Salford, Postcode M7 1NU, UK*

The concepts of organisational learning and learning organisation have gained momentum in construction management research. It is widely acknowledged that organisational learning holds the key for companies to survive and prosper and much research have centred upon the study of organisational learning as a process, as well as companies as learning organisations. However, management researchers have recently begun to recognise the incoherence of the concepts presented in the literature and identified a lack of a solid theoretical and, more importantly, empirical foundation. To further exacerbate the challenge of embracing organisational learning in construction, the industry is largely project based. This therefore poses the added difficulty for organisational learning to occur. This paper aims to review the concept of organisational learning, in the view of seeking clarifications, with an ultimate objective of exploring the challenges of creating a learning organisation from a project perspective.

Keywords: conceptual review, learning organisation, organisational learning, project-based

## INTRODUCTION

Over the last decade, there has been a proliferation of literature in the area of organisational learning within construction management research. It has been widely recognised that knowledge holds the key to success and that learning is vital for organisational survival and prosperity. Three probable reasons account for such amplified interest in these areas. First, in attempting to offer remedies to the many problems that are deemed to plague the construction industry, there has been a growing and continuing trend in seeking solutions from other industries, particularly the manufacturing industry, as well as other countries. This trend is evidently supported by the fact that a scan of the many academic journal articles revealed the emergence of inter and multi-disciplinary views towards tackling research problems. Notwithstanding the ongoing debate about such existence, it is undoubtedly essential therefore, that one explores learning across disciplines, organisations, sectors and even countries. Second, the inclination towards more collaboration within the academic research community mirrors the tendency towards more inter-organisational cooperation within the construction industry. The call for the adoption of partnering arrangements in the 1990s, for instance, represents an exemplar confirming such

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<sup>1</sup> Author for correspondence. E-mail: p.w.c.chan@salford.ac.uk

affinity towards greater alliance between construction stakeholder organisations. This development is again thought to warrant the need for the industry to look into organisational learning. Third (and which underpins the overall business environment), the ever-increasing emphasis on the knowledge worker, especially in the developed world, according to Drucker (1998) necessitates a productivity revolution where knowledge is a fundamental tool of production. In effect, the budding nature of the attention paid to organisational learning emerges from a shift in management practices.

However, the underlying assumption that these practices provide a panacea for presumably better outcomes seem to receive comparatively little critical analysis. For example, Bresnen and Marshall challenged proponents of partnering when discussing the problems relating to performance measurement, "... in assessing the effects of partnering: how is it possible to know whether outcomes would have been different under a different way of working? (2001: 339)". Where the pursuit of knowledge workers is concerned, Crouch painted a grim future as he predicts "the long term might be... with considerable disillusion being experienced... among those who find that their increased education has served only to submit them to increased competition for jobs (1997: 369)". A sense of negativity is also portrayed as Drucker nostalgically claimed that "we are 100 years past the simple economy in which most people knew what others did at work... but now nobody knows what others do, even within the same organisation (1998: 182)", a comment that derived from a description of the changing trends in the majority of the workforce (from manual labourers to knowledge workers). Yet, despite critique as such, the quest continues as researchers, together with the industry, persistently rides the bandwagon and focus on creating tools to aid the management of knowledge and organisational learning. However, there is growing dissent from among the non-construction research community with the lack of conceptual clarity of organisational learning, which some argue requires a deeper reflection into the legitimacy of advocating the current state of knowledge of this area in business.

Therefore, this forms the premise of this paper, that is, to attempt to critically review the literature available in view of seeking conceptual clarification in organisational learning. Also, as the discussion unfolds, the paper seeks to address the relevance of organisational learning to construction at a project level with the aim of identifying any gaps that could direct the agenda for future research.

## **ORGANISATIONAL LEARNING AND/OR LEARNING ORGANISATION**

Organisational learning research takes the form of two main streams. The first takes the view that organisations are anthropomorphic entities that actually integrate individual learning and translate it into action for the organisation's benefit; the second, and perhaps more useful, is concerned with the identification of behaviours which inhibit or disable individual learning (Phillips, 2003: 99). Examples of work dealing with the former include such authoritative figures as Kolb (1984) who developed the oft-quoted experiential learning model; Schön (1983, 1991) who proposed moving from technical rationality to reflection-in-action; Argyris (1991) who examined the way professionals learn as individuals and subsequently distinguished between espoused theory of action and theory-in-use; and Dixon (1994) who charted the five categories of organisational learning, namely information acquisition, information distribution and interpretation, making meaning out of

information, organisational memory and retrieval. On the other hand, contributors towards understanding the conditions that influence learning include the influential Senge (1990) whose five disciplines of mental models, team learning, systems thinking, shared vision and personal mastery elevated the field of organisational learning both in the industrial and academic world; and Garvin (1993) who suggested that fostering a conducive learning environment meant that time was needed for reflection and analysis, and that boundaries should be opened up to establish a supportive environment strengthened by core learning skills. According to Lähteenmäki *et. al.*, therefore, “the emphasis on organisational learning and learning organisation research has clearly been based on either individual process research or on the organisational conditions for learning (2001: 114)”. They, however, postulated, “the aim of making a clear-cut separation between an organisational learning process and the elements of a learning organisation (and vice versa), and thus studying them whilst disconnected from each other has not... furthered the building of a holistic picture. Instead it has only led to the oversimplification of a complex phenomenon (2001: 115)”. This oversimplification, we believe, represents the underlying assumption that organisational learning should lead to the creation of a learning organisation; and in which we strive to argue its fallacy, particularly where construction projects are concerned. Our frustration stems from three areas: the abstract and ambiguous nature of organisational learning, a lack of empirical evidence and the impetus of learning as the literature suggest.

### **Nature of concept**

Lipshitz *et. al.* acknowledged that “literature on organisational learning has not necessarily led to a clearer understanding of what it means to be a learning organisation” and suggested that “as with many issues in the social sciences, the more closely the phenomenon of organisational learning has been observed and studied, the more complex and ambiguous it has become (2002: 79)”. Indeed, metaphors (e.g. organisational *memory*) and analogies (e.g. Argyris’s use of a *thermostat* to explain the idea of single and double-loop learning) are commonly used in the ever-increasing quest to expand the definition of the concept. While this may be necessary in developing the concept in the abstract sense, Armstrong (2000) paradoxically used the analogy of an inexpensive camera with a zoom lens that only focused on a small portion of the picture (pincushioned) to reveal her trepidation that by concentrating on the abstract written language, we therefore take ourselves away from the “sensual collaboration with our world, essentially, and to our detriment, letting the most of it fall out of focus (the concept of ‘pincushioning’) (p. 355)”.

Unsurprisingly, several commentators have recently called for conceptual clarifications. Huysman (2000), for instance, indicated, “in order to create a learning organisation that is good in organisational learning, we first need to have more conceptual understandings about processes of organisational learning”, but accused the literature for being too conceptual and insights “scattered and unordered”. She went on to stress that “despite the growing number of process-related publications, it still seems to be difficult to gain a solid understanding of the details of learning processes (p. 134)”. Armstrong (2000) supports this view by stating that “before we lobby for such an organisation (learning organisation) and begin construction... it would be good to know just what it is we are building”. Sun (2003) lamented, “unfortunately, in theory as well as in practice, some people... are rather careless in using the concepts of ‘organisational learning’, ‘learning organisations’ and ‘a learning organisation’. Sun’s interesting methodology used language to seek

clarifications and concluded “organisational learning refers to the learning process of an organisation and by the organisation in a collective (organisational) way”. At first glance, this conclusion seems unremarkable. However, in this sense, Lahteenmaki *et. al.* is appropriate in identifying their first conceptual gap, and a conceptual flaw hitherto, by stating “too much emphasis on the learning of individuals instead of on the learning of organisations (2001: 117)”. Put another way, Lahteenmaki *et. al.* illuminates Sun’s clarification in context, that research has not yet attained an understanding of learning as a collective process. Sun’s further clarification on ‘learning organisation’ is to prove even more useful. According to Sun, the term ‘learning organisation’ can be viewed upon as either dynamic or static: the former being an organisation that is continually learning and the latter being an organisation that is for learning. This claim is in congruence with Lipshitz’s *et. al.* (2002) distinction between learning *by* organisation and learning *in* organisation as they propose a multifacet model of organisational learning to marry the two (see figure 1).

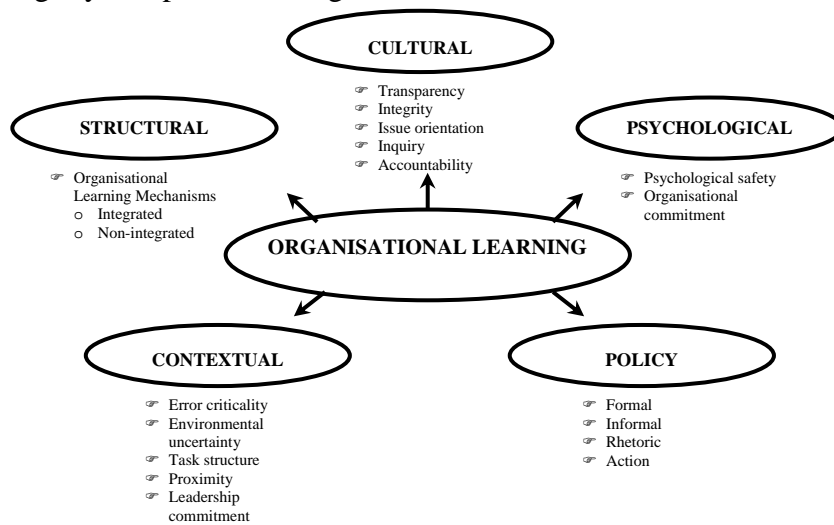
It is believed the Lipshitz’s *et.al.* (2002) Model offers, for the first time, a holistic conceptual framework that explicitly links organisational learning and learning organisation. For example, Huysman (2000) tried to make sense of how organisational learning transcends individual learning by recognizing four types of knowledge, namely individual, communicated, organisational and environmental (or external), that are connected through internalisation, externalisation, objectifying, adapting and institutionalisation processes (see figure 2). Despite her conscious effort to discuss cultural and structural implications, her model ostensibly represents a ‘learning process’ model that lacks the clear link that can be used to explain the foundation of a learning organisation. Surely, it could be seen that Huysman’s ‘learning process’ could easily fit into Lipshitz’s *et. al.* structural facet. A slight improvement is sought in Lahteenmaki *et. al.* (2001) and their two-way affective process of organisational learning (see figure 3), but even their proposal pales in comparison to the relative comprehensiveness of Lipshitz *et. al.* (a brief explanation of Lipshitz’s *et. al.* model will be presented later on in this paper).

### **Lack of empirical evidence**

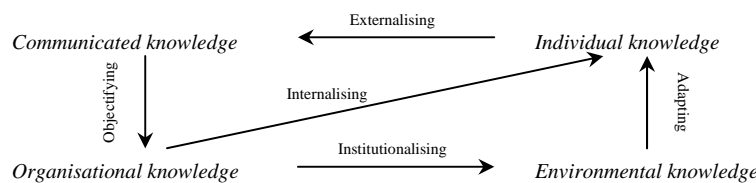
Huysman emphasised “despite its popularity, the ideas concerning the learning organisation more often than not lack a solid theoretical as well as empirical foundation (2000: 133)”. This reinforces the earlier claim that many researchers have striven mainly to expand the concept of organisational learning, albeit the resulting incoherence. Yet, the shortage of empirical evidence seems only natural. Lahteenmaki *et. al.* (2001: 114) exuded “the feeling that little has been done to develop valid measures for organisational learning” and ascribed this to be “the reason for a striking lack of comprehensive empirical research in this area”. They expound that since “the very concept itself still is vague... it is of course impossible to measure the phenomenon without knowing what is”.

Indeed, a lot of the ‘empirical’ research discovered really represents the conduct of surveys (questionnaires, interviews) that are constructed to confirm a superficial aspect of the researcher’s chosen terms to understand the real world. For instance, Martin (2001) used results from a series of interviews to show that female-owned/managed firms are better at organisational learning than their male counterparts; Hodgkinson (2002) explored the existence of shared strategic vision through focus group discussions with sixty middle managers over three years; and Phillips (2003) utilised a questionnaire survey, administered to four functional employee levels, to promote his ideal learning organisation model comprising a menu

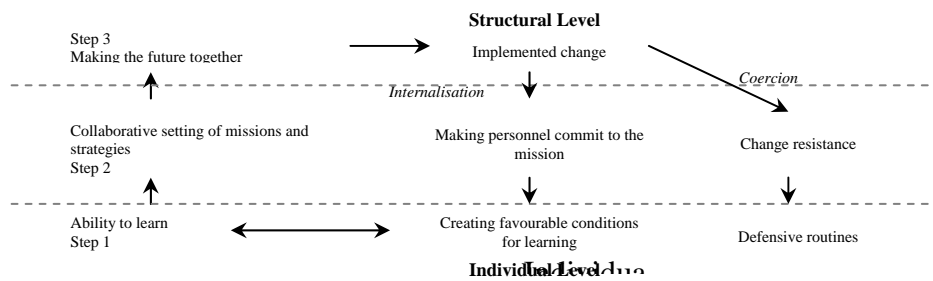
of ten key characteristics, to name a few. In spite of the value of these results in challenging the frontier of existing knowledge, it can surely be argued that without a grounded conceptual framework, these observations merely contribute to the increased ambiguity and pincushioning mentioned earlier.



**Figure 1:** Multifacet model of organisational learning (adapted from Lipshitz *et. al.*, 2002)



**Figure 2:** Learning as institutionalising (after Huysman, 2000)



**Figure 3:** The two-way affective process of organisational learning (Lähtenmäki *et. al.*, 2001)

Studies that appear to delve deeply into the concept within organisations bear yet another major weakness – the study of organisations as singletons. Sun, in distinguishing between ‘learning organisation’ and ‘a learning organisation’, suggested that the former “stands as a subject of scientific study and research” and the latter being “a ‘living’ representative of the image of ‘learning organisation’ (2003: 158)” and concluded that of the eleven principal definitions available on the concepts, he could not find any that categorically fall into the ‘learning organisation’ group. He argued (and he was right to point out) that researchers have merely paid attention to ‘a learning organisation’. Henderson and McAdam (2003), for example, focused on the internal communication process through an organisational learning perspective of a large electrical utility company in Northern Ireland. Whilst their research

acknowledged the importance of change in the view of the external competitive environment, and consequent need for organisational learning, it is regrettable that the researchers did not observe the effect the external environment had on the learning and communication process. Despite having clearly identified such external stakeholder relationships as the link between power-generating bodies and the company's power procurement business unit, Henderson and McAdam went no further, but to stick closely to an intra-organisational perspective. This, we argue, is not appropriate for the research challenge of looking at construction projects.

It would, however, be naïve to think that project-based organisational learning has never taken a foothold in organisational learning research. Examples include Barlow and Jashapara (1998) who explored the role of partnering in fostering organisational learning on construction projects; while Prencipe and Tell (2001) investigated inter-project learning processes and outcomes in project-based firms. Szymczak and Walker (2003) also focused on organisational learning from a project perspective by studying the impact and potential of the Boeing Company to better leverage knowledge from their portfolio of projects. However, these studies have largely been based on looking at organisational learning from an intra-organisational perspective. With the exception of Barlow and Jashapara (1998), the other two studies were merely extending the study of an organisation as a singleton to investigate learning at the project level. Again, while the recommendations of Prencipe's and Tell's (2001) learning landscape (or the mix of project-to-project learning mechanisms that a firm can adopt and implement) and Szymczak's and Walker's (2003) call for an enterprise project management culture may be insightful, they do not address the temporary multi-organisational nature of construction projects since the decision to focus on a particular firm comes as a natural choice in their studies.

Barlow and Jashapara (1998: 89), on the other hand, identified four key characteristics of construction partnering projects that make organisational learning difficult to occur. They include (i) the inherent tensions and conflicts between clients and suppliers; (ii) the success of codifying knowledge, which is dependent on how long-term the partnering relationships are; (iii) the ability to recognise the value of knowledge and apply strategically, i.e. the way knowledge is retained and distributed; and (iv) internal political and cultural environments that enable or inhibit communication structures. These characteristics seem fair and agreeable. It is, however, disappointing that they did not go beyond this identification to analyse the interorganisational perspective that is most needed in construction projects. Rather, the manner of their reporting seem to place a greater emphasis on the portrayal of the client's role in organisational learning, as they observed "in the case studies, it was clear that most individual interviewees claimed they had learned substantially from their experiences" and deduced "arguably, however, this was not always harnessed, especially in the smaller contractors and suppliers (p. 94)". It is noteworthy that their analysis has leaned towards the view of clients spearheading organisational learning and it is felt that the danger of such premature conclusions, without necessarily exploring the issue of leadership of learning (i.e. who, if any, is responsible?) on construction projects, is to deny construction firms the opportunity to aspire to become learning organisations. As far as we know, Holmqvist (2003) is the only one who has compared empirically the unique dynamics of interorganisational learning processes, although not specifically directed at a project level that is similar to that of construction.

### **Impetus for organisational learning**

The aspiration of organisational learning originates chiefly from change, particularly on strategic change, as Burnes *et. al.* (2003) illustrate that the four common propositions of organisational learning relate to change and degree of instability of the environment and the need for, and ability of, the organisation to cope with such change. They summarized “these propositions are based on arguments put forward by proponents of organisational learning that change is now so fast and so prevalent that if organisations fail to keep pace with it they will not survive, and the speed and prevalence of change is such that it cannot be managed in the traditional manner by a few senior managers, but must become the responsibility of everyone in the organisation (p. 453)”. Indeed, we observe the abundance of research aimed at learning to cope with change, so-called adaptive learning. However, several writers, e.g. Bennett (1998) have noted that “learning can be adaptive or generative” and defined the former as “that which enables the organisation to do better what the organisation is currently doing” and the latter as that which “challenges and redefines the basic requirements of the tasks and how they should be undertaken (p. 7)”. Murray (2002) went further to suggest that there is currently an incomplete cycle of organisational learning as he coined the term ‘unbounded learning’ and demanded that “the culture of the business will need to change from one that is established purely on adaptive learning to one accommodating both adaptive and generative learning (p. 242)”. What Murray is effectively implying is that learning should not be just about coping with change, but that learning should also be for the sake of learning.

It is felt that the emphasis placed on adaptive learning leads to two potentially detrimental outcomes. First, because the perceived cause for the need to learn comes mainly from strategic change, much of the focus has inevitably been targeted on managers with very little studies on employees at the lower levels. This not only contradicts the earlier warning reiterated by Burnes *et. al.* (2003) that learning should be the responsibility of everyone, but also, if Argyris’s (1991) argument that professionals do not necessarily know how to learn well were to hold true, then the integration of lower-level employees, which is currently lacking, would be a worthy cause to pursue now. Second, since change is accepted to be fast-paced and uncertain, the spotlight has mainly shone on the process of learning, rather than the outcomes. The resulting abstract notion of knowledge and the claim that organisations should be knowledge-centred, without saying what the knowledge is, does little in achieving the aspiration of a learning organisation. Indeed, it is felt that construction companies that claim to advocate organisational learning could be seen as hypocritical given the industry’s lacklustre attitude towards training in the first place. Perhaps Garratt (1999) was right to point out that many companies want a quick fix, “often by the next month”, but alerted to the fact that in his opinion “I have never yet met a learning organisation (p. 206)”. Armstrong resigned bluntly to the fact that “we have pincushioned our attention on science and the intellect as that which exclusively will lead to increased performance and productivity, to organisational longevity, to the good life” and accused the learning organisation for being “a pimp, and the employees, the hapless prostitutes (2000: 359)”, striking a moral argument against organisational learning.

## CHALLENGES FROM A CONSTRUCTION PROJECT PERSPECTIVE

Within the limitations of this paper, this section aims to highlight some of the research challenges of embracing organisational learning at the project perspective in construction. However, before establishing these gaps, the reader is reminded of Lipshitz's *et. al.* model mentioned earlier, of which a brief description of the five facets is provided below:

- Cultural facet – defined as the norms that are likely to produce valid information and a commitment to corrective action, and includes transparency (openness of one's thoughts and actions in order to receive feedback), integrity (collecting and providing information regardless of implications), issue orientation (focusing on relevance of information regardless of the social standing or rank of the recipient or the source), inquiry (persistence of investigation until full understanding is achieved) and accountability (assuming responsibility of learning and implementation of lessons learnt).
- Psychological facet – encompassing psychological safety (without which it would inhibit personnel from taking the risk of learning) and organisational commitment (without which it would lead to reluctance of personnel to share information and knowledge).
- Policy facet – distinguishing between formal and informal steps taken by management to promote organisational learning.
- Contextual facet – refers to exogenous factors that management either control indirectly or have no control at all, and includes error criticality (immediacy and seriousness of the effects of errors), environmental uncertainty (rate of change), task structure (as linked to the feasibility of obtaining valid information and people's motivation to cooperate with colleagues in learning), proximity to the organisation's core mission (that is linked to the task structure), and leadership commitment to change resulting from learning.
- Structural facet – refers to the organisational learning mechanisms that could either be integrative (i.e. the person learning is also the person performing the task) or non-integrative (i.e. the person learning is not the person performing a particular task).

We have intentionally placed the structural facet as the last of the five, not because it is not important, but rather because we feel that researchers have so far bestowed too much attention upon organisational structures. Perhaps the reason for this is due to its perceived simplicity in adjustment to change. We, however, contend that in order to tackle the issue holistically, it would require more emphasis on the other facets and that attaining success in the structural facet is simply a manifestation of such holistic thinking. Based on the discussions thus far, we propose, and seek to address in future work, the following issues pertaining to construction projects:

- Achieving success in the cultural, psychological and policy facets within construction projects would be a tall order if the issue of leadership were not resolved. For instance, how can one talk about organisational commitment when clearly construction projects are made up of a number of organisations? Besides, if the knowledge output from learning is to help organisations compete, how do we account for the ownership of knowledge in construction projects, given that the chance of a project organisation competing with a



partner in a future project is not unlikely? Indeed, the underlying leadership issue would also have to be resolved before we can examine say, the contextual facet, that is, would the 'leader' not only commit to change as a result of learning, but would, or even should, the 'leader' feel responsible (and consequently accountable) to change? It is envisaged that studies into power and politics need to be rekindled to help us gain a better understanding of organisational learning at the project level. Furthermore, when ensuing these studies, one should consciously be aware of the interorganisational perspective outlined above.

- Earlier discussion on organisational learning research has revealed an emphasis on strategic change. However, at a project level, it is perhaps more accurate and appropriate to talk about operational change rather than strategic change. What therefore, if any, are the unique differences between strategic and operational change and so, what are the implications for learning?
- Last, but not the least, is organisational learning sustainable from a project perspective? Or would the case be that projects become 'learnt' organisations, rather than 'learning organisations'?

## CONCLUSIONS

In conclusion, this paper has offered a critical review of existing literature within the area of organisational learning and found that the concept remains abstract, vague and incoherent. Further, it was discovered that empirical foundation is lacking, especially in terms of viewing from a construction project level. It was proposed that Lipshitz's *et. al.* (2002) multifacet model of organisational learning be adopted to seek empirical evidence of organisational learning in construction projects. Finally, the paper puts forward a number of research challenges that is to be addressed in future work.

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