

Integrating Individual and Organisational Learning Initiatives: Working Across Knowledge Management and Human Resource Management Functional Boundaries.

Christine van Winkelen and Jane McKenzie
Henley Management College, Oxfordshire, UK
Christine.vanWinkelen@kmforum.co.uk
Jane.McKenzie@henleymc.ac.uk

Abstract: Knowledge management initiatives enable an organisation to learn from its successes and mistakes. The nature of knowledge and learning processes means that in seeking to improve the way the organisation learns, knowledge management also has to pay attention to the learning of individuals. In most organisations, other functional specialists also have responsibility for individual learning. This exploratory qualitative research has examined the ways that planned learning initiatives generated by knowledge management and human resources management functions can be integrated more effectively.

A survey of the planned individual and organisational learning activities and processes in ten large organisations was undertaken. Eleven examples of initiatives that integrate individual and organisational learning were also identified from within these organisations. These were evaluated and the issues associated with implementation explored through an expert panel and interview process with knowledge managers and human resource managers.

Factors that positively influence integration were found to include widespread recognition of the business value of both individual and organisational learning, high level sponsorship that acts as a bridge across functional boundaries and line managers adopting an integrating approach to learning in managing their people and the tasks they undertake. Factors that negatively impact the adoption of an integrated approach were found to include the lack of mechanisms to coordinate across functions and a culture in which functional managers feel unable to change practices.

This research has generated a model that appears to be useful in organising the analysis of the planned learning initiatives that are being undertaken by different functions. Together with the examples of integration and its enablers and barriers, knowledge managers and human resource managers can use this to proactively move forward with a more "joined up" approach to learning.

Keywords: knowledge management, human resources management, individual learning, organisational learning

1. Introduction

Although the scope of knowledge management is very broad and the design of a knowledge strategy needs to be highly contextual if it is to generate organisational value (McKenzie and van Winkelen 2004) learning is a necessary element of any knowledge strategy. For example, the business and industry context determine the dynamic balance an organisation needs to establish between exploiting existing knowledge to improve organisational efficiency, and exploring new knowledge domains to improve effectiveness (Gupta et al. 2006). However, both knowledge exploitation and the development of new knowledge rely on the capability of an organisation to learn from its own actions and from the environment in which it is operating.

The connection between individual learning and organisational learning is demonstrated in the knowledge creation spiral proposed by Nonaka (1991). In this, organisational knowledge is created through the conversion of the experience and intuitive knowledge of individuals into articulated and recordable knowledge, with group and organisational processes progressively refining, testing, integrating and institutionalising it (Crossan et al. 1999). Whether the individual or the organisation has the most important role in generating valuable new knowledge and therefore should receive the most attention is still the subject of discussion (Felin and Hesterly 2007). However, knowledge management initiatives seeking to improve organisational learning will inevitably need to encompass aspects of individual learning too.

The effective integration of individual and organisation learning is an important characteristic of what has come to be known as the learning organisation. As Charles Handy noted:

"The learning organisation can mean two things. It can mean an organisation which learns and/or an organisation which encourages learning in its people. It should mean both." (Handy 1995, p179)

In most large organisations Human Resource Management, Human Resources Development, Personnel, Training and Development, or Corporate Universities functions are "responsible" for individual learning in that

they shape policies and direct resource allocation. For conciseness, we will refer to all of these as the “human resources management” function.

In an organisation that also has a specific knowledge management function, the fact that different functions have different roles and responsibilities with respect to aspects of learning raises the issue of agendas and the question as to whether they are necessarily pursuing objectives that are consistent with each other. The research described in this paper was initiated when knowledge managers from twelve major organisations perceived that there was a need to understand more about how to integrate the various learning initiatives within each of their organisations, specifically in relation to those being pursued by knowledge managers and their human resource management colleagues.

Exploratory research was undertaken to address the question: in what ways can planned learning initiatives in organisations be integrated more effectively?

Three assumptions were made in undertaking the research:

- In many organisations planned learning related processes and activities may be happening in relative isolation to each other.
- Different kinds of learning related processes and activities might need to be “joined up” in different ways.
- Dialogue between people involved in learning in different functional areas is the basis for understanding how to achieve this “joined up” approach.

In this paper, two perspectives on the nature of knowledge and learning are described, together with the consequences for the design of both individual and organisational learning initiatives. This was used to develop a research framework to study the planned learning initiatives in ten large organisations. The issues associated with adopting a more integrated approach to learning were explored through an expert panel and interviews with knowledge managers and human resource managers.

2. Perspectives on the nature of knowledge and learning

The mechanisms by which knowledge is constructed as the result of a learning process have been the subject of much debate. Here we treat two of the perspectives as complementary, though we acknowledge that it has been argued that their different ontological positions mean that they are actually contradictory (Easterby-Smith and Araujo 1999). (For a more detailed discussion of the ideas presented in this section see Ventzin et al. 1998, von Krogh et al. 1994).

In the information processing perspective, learning by individuals is viewed as an attempt to make increasingly accurate representations of the world. The environment is accepted as available to everyone to understand in the same way and learning efforts are focused on collecting and assimilating information about that environment in order to understand it better. New information is compared with previously acquired mental models and frames of reference and efforts are made to adjust internal models of the world closer to an actual reality. Achieving a more accurate representation of reality is achieved by collecting more data (Schramm 2002, Burgoyne 2002).

At the level of organisations, this view of knowledge construction corresponds to the technical view of organisational learning (Easterby-Smith and Araujo 1999, Huber 1991). Identifying, collecting and redistributing information are the mechanisms by which new knowledge is developed. Knowledge transfer between individuals and groups across organisations (viewed as learning processes) is improved by information management systems. Again, there is an assumption of an objective reality, but now different experts collect information about parts of the representation and the local nature of the network determines how this is jointly combined into knowledge of “reality out there.”

In the second perspective on the construction of knowledge, the mental act of perceiving knowledge is viewed as a creative act rather than a descriptive one. Learning is viewed as a process of extracting meaning from experiences, activities, ideas and feelings. This is the psychological perspective of learning (Easterby-Smith 1997). The way a person interprets these inputs is highly context dependent and the knowledge developed is subjective. Knowledge is no longer an abstract entity to be searched for, but is interpretation cultivated through the process of living and uniquely construed at each level of the social system, be that in the head of the individual, or in the small and large groups to which he/she belongs.

Individuals primarily create meaning through the use of language and “linguaging” is the general term to describe the emergence of meaning as a result of linguistic distinctions (von Krogh et al. 1994). It is recognised that the language of expertise can act as a barrier that excludes others who do not share that language (Szulanski 1996). Within an area of shared work practice, a system of meaning is communicated through a common language that allows knowledge to develop and be embedded in the practice (Wenger 1998) and in the case of a professional specialism, the knowledge domain boundary may sit across the external boundary of the organisation. Knowledge can leak from organizations when practices are shared with outsiders and it can stick in certain places within organizations where practice is not shared sufficiently to allow effective communication (Brown and Duguid 2001). Explicit knowledge is knowledge that can be communicated through language, though different systems of meaning making inevitably result in different constructions, interpretations and application by different people. Tacit knowledge cannot easily be put into words and therefore is inherently more difficult to transfer between individuals. It takes time and effort to develop, and is potentially the source of more value to the organisation because of this, and is highly dependent on the systems of meaning making involved.

The concept of absorptive capacity provides further insights into the connection between individual and organisational knowledge “levels” (Cohen and Levinthal 1990). Prior related knowledge impacts the firm’s ability to “*recognise the value of new external information, assimilate it, and apply it to commercial ends*”. This is essential if the organisation is to learn and adapt to a changing world. Factors that affect absorptive capacity are known to include breadth of knowledge of individuals within the organisation (diversity) and “gatekeeper” or “boundary spanner” individuals who provide linkages across the boundaries of the firm. There are two key facets of absorptive capacity (Zahra and George 2002). Firstly, potential absorptive capacity, which is the acquisition and assimilation of potentially useful knowledge, produces breadth of perspective and requires a strong learning culture. Secondly, realised absorptive capacity, which relates to the transformation of potential knowledge into operational capability, is the basis for value generation and it requires the reduction of structural, cultural and behavioural barriers that might hinder knowledge integration between functions, groups and businesses.

2.1 Implications for the design of learning interventions

The information processing perspective of learning views the individual as a relatively passive recipient of learning, while the psychological perspective view requires the individual to be actively engaged in the construction of meaning. The training and development interventions that are commonly undertaken in many organisations encompass both of these schools of thought, with the content and context usually being used to determine the most appropriate approach. A spectrum to describe learning activities and initiatives in terms of the level of involvement of the individual learner has been proposed by Leonard and Swap (2004), see Figure 1.

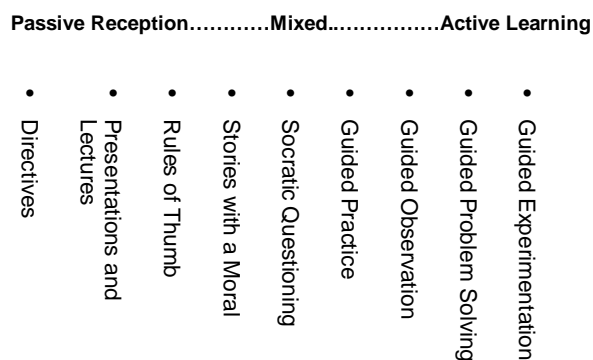


Figure 1: Spectrum of learning activities according to the level of engagement of the learner (Leonard and Swap 2004)

The passive learning interventions would only be expected to be able to convey information (organised facts) and rely on the information processing perspective of learning. Progression through the spectrum towards active learning implies the intention that explicit knowledge and finally even tacit knowledge could be conveyed (Baumard 1999). This is based on the psychological perspective of learning in which understanding and meaning making are the basis for learning and require the active engagement of the individual in this process.

Knowledge management initiatives aimed at improving organisational learning can also be viewed as falling on a similar spectrum, with initiatives focusing on sharing information and explicit knowledge (for example through database systems) at one end where shared language supports knowledge exchange and relatively passive individual involvement is required, and those attempting to support tacit knowledge exchange (for example through communities for knowledge creation) at the other where language cannot easily transfer knowledge and shared experience and active participation are also needed. Increasingly, there is a view that groups defined by a knowledge domain associated with a work practice play an essential role in stewarding and developing both explicit and tacit knowledge (see for example Brown and Duguid 1991, Brown and Duguid 2001, Wenger 1998, Wenger et al. 2002).

3. Methodology

The interactive research method (van Winkelen and Truch 2002) was used for this research, which was undertaken collaboratively within the Henley KM Forum. This is research with and by working groups of active practitioners, and keeps attention close to the reality of organizational issues and priorities. Findings are tested against experience, as well as interpreted within the appropriate body of academic literature, typical of Mode 2 applied research (Bryman and Bell 2003, p5). Experienced knowledge managers from twelve large organisations (multi-national private sector and UK public sector) were involved in this research and participated in the collection and interpretation of data and validated the conclusions by providing additional evidence from their experience. This exploratory research was undertaken in two stages:

1. For the first stage, data was collected through a structured qualitative survey based on the research model shown in Figure 2. This was used to collect comprehensive information about individual and organisational learning initiatives, categorised against Leonard and Swap's (2004) nine-point spectrum from active to passive. Data sets were received from ten of the participating organisations, representing a comprehensive review of planned learning interventions in a cross-section of private and public sector organisations. Additionally, the survey asked for examples of current integrated approaches to learning that bridged individual and organisational learning, as well as requiring cross-functional involvement, where they existed.
2. For the second stage, an expert panel of twelve knowledge managers and six human resources managers evaluated the integrated approaches that had been identified, proposed new ones based on the individual and organisational learning initiatives collated through the survey and explored the issues associated with implementing them. The panel also received input from two additional two human resource managers who explored the ideas with their knowledge management colleagues in face-to-face interviews rather than in the workshop sessions due to availability considerations.

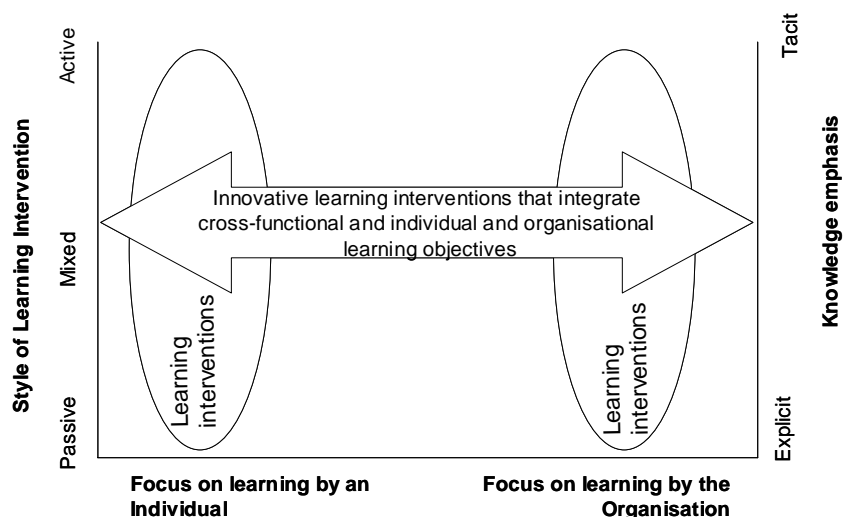


Figure 2: Conceptual model

The limited data set and qualitative methodology means that the data cannot be used to prove the best way to produce a more integrated approach to learning. However, the diverse nature of the organisations involved provided an opportunity to carry out a comparative study that focused attention on similarities and differences between different types of organisational context and as a consequence, the findings can be viewed as having some generalisability. Further research would be needed to confirm the findings.

4. Findings

4.1 The pattern of individual and organisational learning initiatives.

The consolidated view of planned learning initiatives that focused on learning by individuals and learning by the organisation is presented in Figure 3. As might be expected, many (though not all) of the interventions relating to individual learning were initiated by Human Resources or training functions. Many (though not all) of the interventions relating to organisational learning were initiated by knowledge management functions.

The organisational learning activities involving tacit knowledge exchange rely on the active engagement of individuals. However, their categorisation as organisational rather than individual learning activities is justified, as their purpose is to enhance organisational knowledge, rather than to develop an individual.

4.2 Integrated learning initiatives

Eleven examples of integrated learning activities and processes were identified through this research and these are summarised in Table 1. They range from technology systems integration (intranet, people finder, human resources learning management systems), to process integration (for example, human resources processes at various stages of the employee cycle being combined with knowledge management processes to capture and share knowledge), to people-based interventions (for example that identify mentors through communities of practice).

Communities of practice were viewed as playing a particularly important role in the “mixed” and “active” categories. This would be expected as they are known to form a “bridge” between individual and organisational learning (reaching across the “individual” and “group” categories). The lifecycle of an employee within an organisation proved to be one useful way to map some of the opportunities to link individual and organisational learning initiatives, and demonstrates the collaboration opportunities that this would present for KM and HR specialists. Figure 4 illustrates what this might involve.

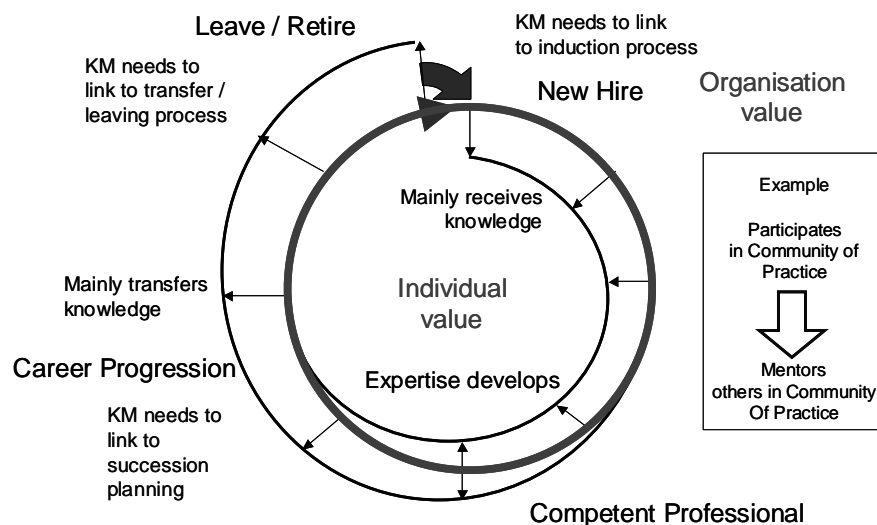


Figure 4: Joining up processes and activities across the employee lifecycle

In addition to looking at how communities of practice operate in the organisation, a joint cross-functional community of practice for all training, knowledge and learning specialist was recommended as the vehicle to review and maintain progress in implementing an integrated approach to learning.

4.3 Factors affecting integration

Three factors tended to facilitate the integration of learning initiatives across traditional functional boundaries in the organisations studied:

- Widespread recognition of the importance of individual and organisational learning for the future performance of the organisation: effectively the business case for learning had been made and accepted.
- High-level sponsorship and understanding that bridged functional boundaries within the organisation.

- Line managers empowered and expected to adopt an integrating approach to learning in managing both their people and the tasks for which their teams are responsible.

The focus group and interviews with knowledge managers and human resource managers showed that functional agendas with regard to learning are often significantly different and currently act as barriers to collaboration. This was often reinforced by different objectives being placed on the leaders of the functions.

Style of Learning Intervention	Active	On the job learning Research projects Job rotations Secondments and shadowing Mentoring Graduate training scheme Developmental programmes and courses Team meetings Buddy systems Action learning projects	Communities of practice for problem solving and expertise development Coaching senior managers in problem solving using KM techniques Knowledge "harvesting" activities – collecting knowledge from experts in person Self and peer assessments to facilitate peer learning across boundaries Providing time and space for people to talk informally	Tact
	Mixed	Training in best practices and standard operating procedures Metaphors and stories used in induction and training Staff briefings with Q&A sessions Coaching programmes Participative training courses Support for further education Support for institution membership Participation in conferences and external fora	Supporting collaboration with people search databases Collaborative working guidance and technology Workshops to audit knowledge flows Communities of practice for knowledge sharing Identifying and sharing best operating practices Developing and sharing "knowledge nuggets" Developing case studies of successes Tools / facilitated workshops to support learning before, during and after projects and major activities. Joint activities with external organisations	Knowledge emphasis
	Passive	Compulsory information based training, e.g. H&S Lunchtime lectures, e-learning material, on-line induction. E-mail and intranet announcements, newsletters, technical updates. Communication of policy revisions Subscription to journals / guided reading	Design kits / project management guidance Process based capture of lessons learned from operational situations Document management / sharing systems KM newsletters	Explicit
		Focus on learning by an Individual	Focus on learning by the Organisation	

Figure 3: Consolidated summary of the planned learning interventions in ten organisations

Table 1: Eleven integrating learning processes and activities

Predominant type of learning	Integrating activity or process	Individual learning dimension	Organisational learning dimension
Active learning	<ol style="list-style-type: none"> 1. Employee leaver and transfer processes linked to knowledge capture and transfer initiatives. 2. Communities of practice used as a vehicle to support mentoring programmes. 3. Personal and organisational development initiatives to generate better quality productive conversations between people. 	<ol style="list-style-type: none"> 1. Expertise developed in post. 2. Judgement and in-post expertise refined. 3. Decision-making skills and innovative thinking developed. 	<ol style="list-style-type: none"> 1. Retained organisational memory. 2. Distributed knowledge channelled to where it is needed. 3. More viewpoints taken into account in organisational decision-making; improves creativity and reduces risk.
Mixed	<ol style="list-style-type: none"> 4. Formal courses and e-learning reinforced through activities in communities of practice. 5. Communities of practice provide experience and expertise to shape the design and delivery of formal training & e-learning courses. 6. Induction process enables and encourages new hires to join Communities of Practice and includes training in knowledge sharing behaviours, using collaborative tools etc 7. Knowledge sharing / management principles included in management and leadership programmes. 	<ol style="list-style-type: none"> 4. Training in specific skills and competencies. 5. Training more relevant and applicable to job. 6. Individuals more quickly learn “who knows what” and how to access their knowledge. 7. Managers learn how to help their teams be more productive. 	<ol style="list-style-type: none"> 4. Higher return on training investments expected. 5. More rapid updating of training materials to reflect business conditions. 6. New ideas and challenging discussions keep communities vibrant and interesting. 7. Cultural development to embed learning in all activities enhanced by management understanding and commitment.
Passive learning	<ol style="list-style-type: none"> 8. Learning from after action project and event reviews fed into induction and training design (courses and e-learning). 9. New hires complete yellow pages / people finder type information during induction. 10. Participants in conferences / standards meetings etc provide briefings and seminars as part of continuous professional development initiatives. 11. Intranet Portal used in a coherent way to distribute information, good practices, policies etc as well as links to experts. HR learning management/e-learning systems combined with the intranet/knowledge portal of the company. 	<ol style="list-style-type: none"> 8. Training more relevant and applicable to job. 9. Individuals become more visible and involved in interesting projects more quickly. 10. Personal visibility enhanced. Learning reinforced by having to explain to others. 11. Performance improved through time saved with single system access and better view of how to access disparate resources for to solve problems. 	<ol style="list-style-type: none"> 8. Reduced errors in the future (saving money and time). 9. Expertise of new hires more quickly accessible across the organisation. 10. Increased value from expenditure on attendance. External perspective brought into wider range of decisions. 11. Cost saving from maintaining a single system. Clearer communication possible about priorities.

Further barriers to learning integration were identified as:

- The current trend to e-learning as the preferred method of training delivery pushes learning towards the “passive” mode and can reduce the productive conversations that may allow tacit knowledge to be exchanged. This impacts the individual learning potential, as well as the organisational learning potential by limiting feedback loops.

- Lack of mechanisms for different functions to know what respective priorities are and opportunities (and time) to communicate regularly with each other to identify areas of common interest.
- A culture in which functional managers do not feel that they have the remit to change the way learning is managed. Anything working in opposition to the prevailing culture is unlikely to be effective in the short term and a more productive approach was seen to be changing processes and systems within the existing culture.

5. Discussion

5.1 Differentiating types of learning initiatives

The research model differentiated between active and passive learning mechanisms and it was an assumption of this research that this was important. Although the research design was not appropriate for testing whether or not it was a valid assumption, the pattern of integrating learning processes and activities suggests that it is indeed a useful approach as it reflects the reality that both knowledge management and human resources functions focus attention and resources differently on different kinds of initiatives.

A strategic approach to knowledge management requires decisions to be made about the relative emphasis on tacit and explicit knowledge (for example, in a consulting organisation context, this has been described as a personalisation versus codification strategy (Hansen et al. 1999)). Similarly, a strategic approach to human resources management requires a view of the relative worth of the human capital of the organisation and the investments needed in different categories of employees (Lepak and Snell 1999, Lepak and Snell 2002, Kang et al. 2007). Active learning initiatives tend to be more resource intensive and are therefore more likely to be used with core workers.

Aligning and integrating initiatives requires a way for these priorities to be clearly communicated and the research model based on the active-passive spectrum was a useful way to do this as it provides a "bridge" which resonates with the strategic considerations of both functions.

5.2 Working across functional boundaries in organisations

This research aimed to better understand the issues associated with integrating initiatives generated by different functions (specifically knowledge management and human resource management). The advantage of grouping jobs by function is that *"when like specialists are grouped together, they learn from each other and become more adept at their specialized work"* (Mintzberg 1979, p122), and therefore individuals may tend to have more similarity with each other in terms of their system of meaning making with regard to that specialism, than they do with others outside the group.

Child and Heavens (2003) discussed the social context and internal boundaries within organisations and what this means for learning. These boundaries distinguish different groups and departments. They comment that:

"Each of these specialities will have its own set of competencies and knowledge. However, specialised groups attach their own values to their expertise and express them through their own codes and terminology" (Child and Heavens 2003, p317).

They add that where these groups are also broadly aligned with professions then the codes and language of their discipline can be seen as reflections of their social identity and market value, and this can be particularly strong when *"this identity is bolstered by an external institutional base"* (in other words, a professional institution – which is certainly the case with human resources management, and increasingly the case with knowledge management). This impacts the learning capability of the organisation as:

"It therefore can be difficult to bridge internal boundaries and integrate the contributions of different groups to organizational learning because of contrasts in the technologies they offer, and the goals they attach, to the process" (Child and Heavens 2003, p317).

Organisations seeking to benefit from the multiple specialised knowledge bases represented by different functions must resolve the organisational dilemma of differentiation and integration (Lawrence and Lorsch 1967). A consequence of this tension is that there will be differences of opinion and interest, and potentially conflict. Child and Heavens quote Mary Parker Follett who expressed the view that conflict is the legitimate

expression of differences of opinion and interest and that this should be “*acknowledged and made to work for people, rather than hidden or ignored*”. This requires conflict to be resolved in a constructive way and she “*advocated integration as the most fruitful approach. Integration involves searching for an innovative solution in which all expressed desires and views find a place. Her argument implies that the most fruitful way of dealing with conflict that arises across internal organizational boundaries is to turn it toward collective learning and knowledge creation. If achievable, an innovative solution embodying collective learning stands not only to be enriched by the range of internal organizational specialties: it should also help bridge internal boundaries by offering a mutually attractive solution to the various parties involved.*” (Child and Heavens 2003, p318)

In organisations where different functions (for example, knowledge management, human resources management and training) have responsibility for different aspects of learning, we propose that differences of opinion and interest are probably inevitable. Different approaches to the design of interventions are likely to arise from the different professional knowledge bases and frames of reference involved and the tensions that result are best resolved by integration. The eleven integrating mechanisms identified in this research are examples of approaches that could be adopted. Alternatively, knowledge management and human resources management colleagues could map their respective initiatives using the research model as a framework and collaboratively seek their own innovative opportunities for integration.

Much of the implementation of knowledge management has change management at its heart. The issue of integrating learning activities and processes is no different. There has been work elsewhere that offers generic advice on how to go about this. Seo (2003) studied the impact of emotional barriers, political obstacles and management control processes on individual and organisational learning. His main recommendations are summarised in Table 2.

Table 2: Overcoming barriers to learning (Seo 2003)

Barrier	Recommendation
Emotional barrier	Encourage a positive attitude by: Trust / friendship building Starting with incremental win-win approaches Actively engaging emotionally with those involved
Political obstacle	Leveraging opposing forces by: Utilising an organisational crisis moment Actively joining with potential change agents
Managerial control imperative (the goals and objectives that are shaping current behaviour).	Bringing external legitimacy by: Reframing with an alternative logic Actively connecting to outside institutions

It is interesting to see the emphasis placed on “external legitimacy” as a mechanism for challenging current internal goals and objectives that have been long accepted within the culture. Effectively this research and its recommendations could be viewed as providing just such external legitimacy for knowledge managers looking to shift priorities.

6. Conclusion

Political and power realities are different in every organisation. Bridging functional divides to collaborate with colleagues interested in learning was clearly a political challenge in several of the organisations studied in this research. The different frames of reference and mindsets of different functions make any kind of cross-boundary learning problematic. There is no reason to expect anything different from the different functions involved in learning related activities in an organisation. The step forward we are proposing is in Parker Follet’s words (Child and Heavens 2003, p318) that this should be “*acknowledged and made to work for people, rather than hidden or ignored*”.

Nahapiet, Gratton and O Rocha (2005) argue that the knowledge economy places ever more emphasis on cooperative relationships within organisations (and with partners). Yet, the design of organisations has historically assumed that people and their relationships are motivated by self-interest. Their proposition is that encouraging and institutionalising cooperative relationships requires a fundamental shift in assumptions about motivation. The central proposition is that people strive for excellence and the challenge is to create an environment that encourages and allows people to achieve their potential. Fostering mutual respect and knowledge exchange, encouraging the habits of cooperation and fostering a sense of community shifts the patterns of behaviour in the organisation and encourages the emergence of cooperation as the norm. This

requires a long-term perspective that may be more possible in some organisations than others. In making cooperation the norm, the consequences of the functional boundaries that we have been exploring in this paper may become much less relevant and the shift from an industrial era to a knowledge era organisation may be supported.

This research has generated a model that appears to be useful in organising the analysis of the individual and organisational planned learning initiatives that are being undertaken by different functions. Together with the eleven examples of integrated learning processes and activities and the enablers of and barriers to integration, knowledge managers and human resource managers can use this to proactively move the debate forward in their organisations. Further confirmatory research to evaluate the outcome of this process is recommended.

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