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**Maximising benefit from researching
learning through work.**

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Researching learning through work

In the context of researching learning in the work-place, it is useful to distinguish between learning **at** work and learning **through** work. The former can include formal sessions such as in-house training and socially inspired life-skills classes 'after hours' for which researchers can observe, use control groups and measure completion and attainment rates. As in conventional class-rooms, the aim of such research often is to improve the effectiveness of the interventions.

Learning **through** work, on the other hand, presents different problems for the researcher and can lead to improvements in the organisation itself. Learning through work is often an individual experience. It is usually unplanned, 'just-in-time', associated with dealing with unforeseen problems and can be stimulated and supported by informal (i.e. undefined, casual, personal) networks and groups. Above all it is tacit, in the sense that the learners may not be aware of what they are learning or, if they are, they may not think of their growing experience as 'learning'. In contrast with formal training courses, this form of work-place learning is difficult to observe when it is happening and difficult to measure. The experience has to be unravelled by the participants themselves, either individually or in groups. Researchers delving into this domain have developed a variety of techniques focused on helping participants tell their stories in one to one discussions, informal discussions, formal 'focus groups' or autobiographic accounts.

Beneficiaries of this kind of research can include the persons being studied. The process of eliciting and sharing their own experience of their learning can build confidence in their ability to take it further. Reflective narrative, making personal sense and story telling can raise subjects' awareness of their own learning, promote job satisfaction and job performance and enhance self esteem and social life. If the conditions are right these benefits can extend through the learners to the organisations that employ them. Understanding the process of informal work-place learning better helps us to facilitate its development and give formal recognition to its achievement. Such recognition (e.g. in the form of academic as well as vocational awards (certificates)) further stimulates motivation and encourages others.

Within organisations, research that encourages the sharing of personal reflections on learning contributes to knowledge management and intellectual capital. Research focused on identifying and describing the processes by which informal learning takes place can help us understand better the conditions under which learning through work flourishes thereby facilitating activities like to promote organisational development.

Accessing learning in organisations

Processes for accessing learning through work include conversations, dialogue, appreciative inquiry and learning histories.

Conversations

Organisational Development consultant Patricia Shaw (2002) describes how her own stance changed through wondering with whom her clients were discussing the conversations they had had with her and what sense the other participants were making of them. Conversations, she observes, can move from specific items to uncertainties that can focus understanding of what the specifics might mean, expose issues and concerns that would otherwise not surface and give expression to 'half-formed ideas, intuitions that we clothe in words for the first time'.

Dialogue

Dialogue has been much used since being promoted by Peter Senge in his books to focus on 'team learning'. One process involves a group, sitting in a circle, to respond to 'trigger questions' in such a way that only one person speaks at a time and to reflect on issues arising out of the group in response to the trigger question. An observer captures each statement on, for example, a post-it note or magnetic hexagon. At the end of the dialogue each person in the group selects 3-4 statements at random and seeks to make connections and posts them up on a public board telling others their 'story' of why they connect. Each makes connections with their own and with other statements already posted. Then the group clusters themes and gives them names.

Appreciative inquiry

At the heart of appreciative inquiry is reconstructing stories around experiences from the past on which we wish to build the future. There are four stages in the process usually referred to as the 4D-Appreciative Inquiry Cycle. The first stage in the process (**D**iscovery) is for all groups with a stake in their organisation's future to share their stories and agree common themes about the experience of service excellence.

The next phase of the process (**D**ream) is to move from the past to the present and future and envisage what the organisation might look like if it was able to provide and support the kind of experience shared in groups, leading to 'provocative propositions' of what the organisation would be like if the dreams came true.

The provocative proposition leads into the third phase (**D**esign) where groups 'co-create the future' by agreeing what group members and the organisation need to do to realise the dream

The final phase is '**D**eliver' where the organisation commits resources and support to ensure the blueprint agreed at the design stage is brought into being. Cooperrider and Whitney (1999) question the appropriateness of the word 'deliver' and suggest '**D**estiny' on the basis that 'organisational change needs to look more like an inspired movement than a neatly packaged or engineered product' (Cooperrider & Whitney 1999 p9).

Learning histories

The idea of learning histories was conceived in the early 1990s by a group of social scientists and managers at MIT's 'Center for Organizational Learning' who were looking for a way of helping organisations to reflect collectively and learn from past experience. They came up with what they called a 'Learning History' which was literally a 'story' as told by the participants involved in a particular change or new initiative in an organisation which needed to be shared more widely.

What is shared is a document typically 50 -150 pages long, which has a particular format of two columns. In the right-hand column there are direct quotes from people who took part in the change event. Before the document is compiled a wide range of people will have been interviewed about their experience of the change/ new initiative and permission given for

selected extracts to be quoted. The left column contains an analysis and commentary on the quotes immediately facing them in the right-hand column. This will identify 'recurrent themes in the narrative [and pose] questions about its assumptions and implications' (Kleiner & Roth 1997)

The whole point of the document is that it should *provoke* further debate. As Kleiner and Roth (the main proponents of this technique) have pointed out learning histories should not be judged by the reports themselves. They should be judged by the quality of the conversation that they provoke. The learning history is conceived not as an end in itself but rather as a means toward better conversation.

Some of our research

The authors have themselves researched into ways of eliciting learning taking place through work and have tried to make sense of the process by which it occurs and ways in which work-based learning can be facilitated, captured and acted upon. Two items are presented here.

The first item (Stephenson, Williams, Cairns and Critten 1999) was a review of the learning experiences of people in ten large organisations that led to the formulation of twenty five indicators of a healthy learning milieu within which learning can be facilitated. These indicators are presented in Table One in APPENDIX A. The indicators provide a diagnostic tool to judge the extent to which the milieu already exists and what actions could be taken to bring one about. These indicators can be summarised as circumstances that provide active support and reward for employees who take ownership of their learning whilst engaged in their normal business within the organisation.

The second item is a conceptual modelling that addresses the challenge of creating the conditions of a healthy learning milieu within established organisations where other dynamics and inertia inevitably exist. Critten has argued that though organisations are increasingly espousing the values of 'shared learning' through such concepts as 'the learning organisation' (Senge 1990) when they try to put into practice what they preach they always came up against the boundaries of traditional views of organisation and management as grounded in a 'mechanistic' paradigm' (Critten 2002). He advocates the need for a complete 're-framing' of what is meant by organisation in order that individuals' capacity to learn as individuals and groups can find expression in an organisation's structural capital.

He draws heavily on 'complexity' theory and the work of Professor Ralph Stacey at the University of Hertfordshire's 'Centre for Complexity Management'. Stacey argues that organisations are inherently 'adaptive and non-linear' but they tend to be run *as if* they were 'linear' and predictable - this he calls the 'legitimate' system which 'consists of links that are either (1) formally and intentionally established by the most powerful members of an organisation or (2) established by well understood, implicit principles that are widely accepted by members of the organisation - that is a shared culture or accepted ideology' (Stacey 1996 p24)

But, as anyone who has ever worked in an organisation knows, these conditions are not always satisfied; surprises occur out of what Stacey describes as 'idiosyncratic behaviour of the agents' which, potentially, 'would endanger the predictability that the legitimate system exists to occur'. Stacey gives the name of 'shadow' system to those links in an organisation that are

'spontaneously and informally established by individual agents among themselves during the course of interacting in the legitimate system. The result is another network, a kind of shadow of the legitimate system consisting of informal social and political links, in which

agents develop their own rules for interacting with each other in the course of their interaction' (Stacey 1996 p26)

Critten has developed a model (See diagram 1 in APPENDIX B) which explores the links between the 'legitimate' and the 'shadow' side of organisations through both internal and external dynamics which can shape what an organisation can become in respect of two dimensions giving four zones: the Strategic, the Normative, the Formative and the Transformative

STRATEGIC is defined by 'Top-Down' and 'Outside-In' dynamics. This is how business is usually perceived and embraces the kind of disciplines offered at most business Schools – Marketing, Performance Management etc. Within Stacey's definition of 'Legitimate' this falls wholly within a legitimate domain 'formally and intentionally established by the most powerful members of an organisation'.

NORMATIVE is defined by 'Outside-In' and Bottom-Up'. This is the centre of cultural norms and the domain of HR matching requirements derived from 'strategy' in response to market forces with capacity from within (Bottom-Up). It is legitimate in the sense that it comprises 'well understood, implicit principles that are widely accepted by members of the organisation - that is a shared culture or accepted ideology' (Stacey) but is also in the shadow side of the lurking and implicit knowledge.

FORMATIVE is defined by an 'inside-out' view of the world which follows a 'social constructionist' view (as described earlier) whereby we create and enact our environment rather than be shaped by it (which is the 'Outside-In' end of the dimension) This is the zone where potentially transforming conversations are started and ideas shaped but, because it is wholly within the shadow side, these ideas may never get to the 'legitimate' side.

TRANSFORMATIVE is described as inside out and top down. This crucial stage mediates ideas that emerge from the formative zone, ideas that cannot *directly* impact on an organisation. The arrows on the model suggest a cycle which any intervention to bring about change in an organisation has to follow if the consequences of the intervention are to be sustained and embedded within the organisation. The transformative zone requires people who have the ear of the managing director and the board but who are also close to what is emerging in the shadow side.

The relevance of this model for our research into how organisations can 'maximise benefit ...from learning through work' is that it enables us to position where 'traditional' work based learning lies and gives us clues of where much richer learning could be mined and how it can add value to an organisation's 'structural capital' (Stewart 1997)

The mainstream view is of knowledge being located in peoples' heads that

'must be extracted from individuals and preserved for the organization in the form of practices, routines and codes of one kind or another in which organizational knowledge is said to be stored. This perspective focuses attention on the codification of knowledge in artifacts, and the use of information technology' p40

Critten suggests this is also a good description of how work based learning is perceived in many organisations linked as it is with the view of knowledge as structural capital.

In sharp contrast is a 'social constructivist' (sense making by individuals and sharing of stories) and 'social constructionist' (knowledge comes out of relationships) where 'knowledge is embedded in the ordinary, everyday conversations between people' (Stacey 2001 p36). In such a context 'knowledge... is not an "it" but a process of action' (p116). This leads to his use of the term 'communicative interaction'

The power of conversations was picked up by Patricia Shaw (cited earlier) where she reinforced Stacey's notion of 'communicative interaction':

In the movement of our everyday communicative activity, we are creating who we are and what we can do together within shifting constraints of a material, technological and social nature. This is not the way we usually describe what we are doing in organizations;' p30

Critten suggests that if we take on board these kinds of notions they could provide a radically different view of how Work based Learning might be viewed in an organisation. At the moment Work based Learning falls into the first category Stacey used to describe knowledge, codifying what is in people's heads – which makes it explicit and manageable in the legitimate side of organisations. But that is only half the story. If we view the kind of learning underpinning work based learning as 'communicative interaction' we will understand more about it and how it can be 'potentially transforming' if we study it in its natural context, the shadow side of organisation. This view of work was anticipated by William Savage in a book called '5th generation Management' in which he described work as ' Dialogue':

'Work has a more fundamental meaning than whether we get *paid* for our time, one of its basic definitions. There is human engagement and expression in work, wonder and uncertainty and striving to give expression' (Savage 1996 pp208-209)

Above all work is a social activity in which we learn as much about each other as we *engage* in the work process: 'We learn together and add further information to our knowledge. This is work as dialogue' (Savage 1996 p213)

Critten suggests that Work-based Learning's home is in the formative zone but what usually happens in making Work Based Learning explicit is that it is prematurely transferred to the legitimate zone and converted into structural capital without 'engaging' sufficiently in its roots – where it needs to grow through conversations and enable people to arrive at new identities in the way Etienne Wenger was describing in his work on 'communities of practice' (Wenger, 1998)

He suggests that organisations need to become more aware of the shadow side of the organisation of what he calls the formative zone and to enable people to draw on their experiences here in such a way that they can really impact on the organisation via 'the transformative zone.

Critten is currently using techniques like 'dialogue', appreciative inquiry' and 'learning histories' to help organisations 'surface' learning in such a way that it can be made explicit and add to an organisation's structural capital in the legitimate (strategic) zones.

Critten also uses these techniques as examples of action research. At the heart of action research is the capacity to generate 'usable knowledge or theory' (Coghlan and Brannick 2001). Critten's proposal is that organisations need to become more aware of what he calls the formative zone in the shadow side of the organisation and to enable people to draw on their experiences here in such a way that they can impact on the organisation via 'the transformative zone.

Conclusion

Learning through work is an exciting area for educational research. It addresses a large proportion of the sum total of all human learning that takes place everyday. The process by which this mainly informal learning is elicited, captured and used has the potential not only

to benefit the research community but also and crucially the persons researched and the organisations within which they work. If we perceive schools and universities as places of work for teachers and professors, and not just places for learning for students, then researching learning through work can transform educational practice by tapping Critten's 'shadowy' side of teacher culture and discourse, and help us to appreciate the importance of effective participation in the transformative zone.

The Internet has the potential to extend the scope of the processes described above to a global perspective. The Internet is already facilitating the sharing of published work and is servicing the community of professional researchers. Virtual communities of practice can engage in appreciative inquiry, the sharing of histories, dialogue and conversations about conversations on a global scale, helping virtual groups of farmers, miners and business managers world-wide to unravel collective and individual meaning from the experience of their work leading to shared formulations of collective understanding and proposals for actions. Through their interventions, researchers can make a direct contribution to the global transfer of work-place expertise, lifelong learning and enhanced quality of life.

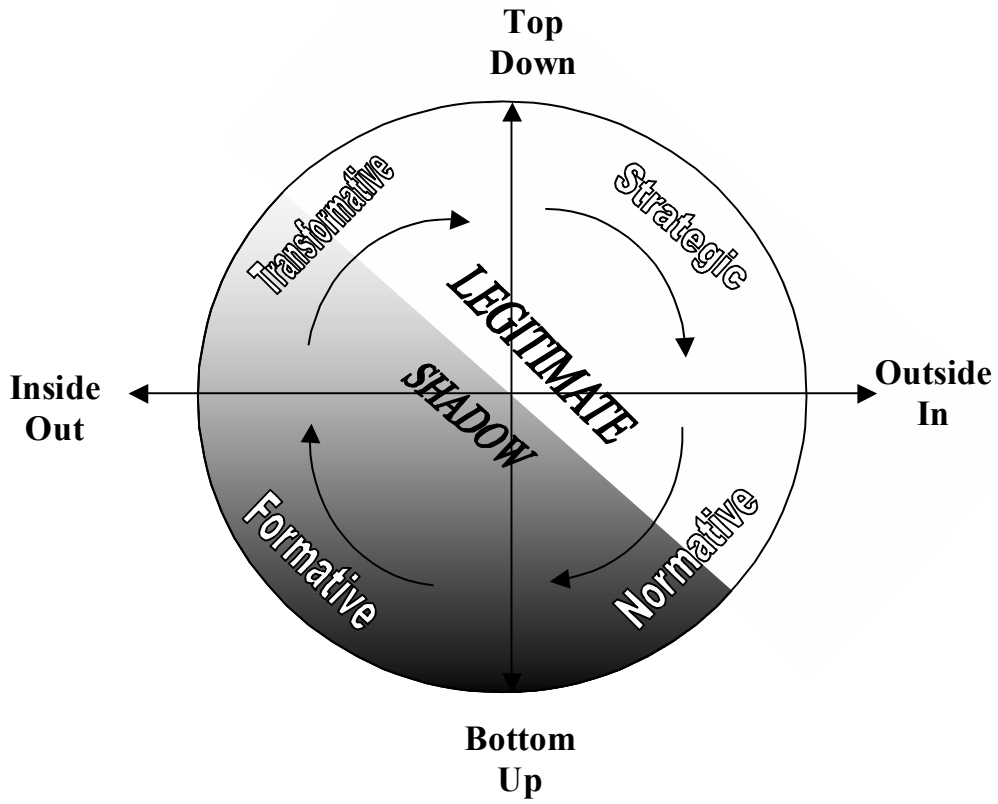
APPENDIX A

Table 1. A Healthy Learning Milieu in the Work-place (Stephenson et al 1999)

A healthy learning milieu, in the context of organisational capability, would exist when:		
all members including the most senior)...	the culture shows..	the organisation ensures...
<ul style="list-style-type: none"> • see their learning linked to improved performance for the organisation • perceive they have a role in their own learning • identify with the organisation's vision and work • perceive that the organisation has a role as a learning driven organisation • have a conscious awareness (mindfulness) of learning and thinking to solve problems • value learning as knowledge development • have a perception of being empowered • seek out learning and qualifications 	<ul style="list-style-type: none"> • work-talk is centred on solving problems and the role members have in that process • employee development and learning are encouraged • self-efficacy and corporate self-efficacy are valued, seen, developed and discussed • a palpable focus on innovation, creativity, and adaptability is fostered, encouraged and valued by the organisation • collaboration in learning is valued 	<ul style="list-style-type: none"> • training is seen as more than short term skill development • management of the organisation is aware of the need for learning at all levels • supervisors and managers are involved in the training and learning processes • self-managing teams exist in the organisations • self-management of individual development and in teams is supported • competency-based approaches extend to management • the organisation openly professes to be either a Learning Organisation or a Capable Organisation (or some other term) • formal procedures (wage and salary conditions and contracts) assist the learning process • feedback processes are in place to ensure that employees know their value and appreciation by the organisation • middle managers are trained in roles to foster and develop learning • middle management have a role in learning • assessors or "partners-in-learning" play a role in training/learning

APPENDIX B

Diagram 1 legitimate and shadow zones of organisations



References

- Coghlan, D & T Brannick (2001) *Doing Action Research in Your own organization* Sage, CA
- Cooperrider D L & Whitney D (1999) *Appreciative Inquiry*, Berrett-Koehler Communications Inc, San Francisco
- Critten P (2002) '*From Communities of Practice to a Corporate Curriculum – Creating a New Home for Organisational learning*' Working paper given in the knowledge and Learning track of British Academy of Management Annual Conference 2002 at Novotel Hotel., Hammersmith, London
- Savage C M (1996) *5th Generation Management : Co-creating through Virtual Enterprising, Dynamic Teaming and Knowledge Networking* Butterworth Heinemann
- Senge P, Ross R, Smith B, Roberts C and Kleiner A (1994) *The Fifth Discipline Fieldbook: Strategies and Tools for Building a Learning Organisation* Nicholas Brealey Publishing, London
- Shaw, P. (2002), *Changing conversations in organizations – A complexity approach to change* Routledge, London
- Stacey R D (1996) *Complexity and Creativity in Organizations* San Francisco Berrett-Koehler
- Stacey R (2001) *Complex Responsive processes in Organizations – Learning and Knowledge creation* Routledge
- Stephenson, J., Williams, R., Cairns, L., and Critten, P., (1999), *The Contribution of National Vocational Qualifications (NVQs) To The Learning Milieu of The Work-Place*, OCR, Coventry.
- Stewart T A (1997) *Intellectual Capital – the New Wealth of Organisations* Nicholas Brealey
- Watkins J M & Mohr B J (2001), *Appreciative Inquiry: Change at the speed of imagination*, Jossey Bass/Pfeiffer San Francisco
- Wenger E (1998) *Communities of Practice: Learning, Meaning and Identity* Cambridge University Press Cambridge