The river of learning in the workplace

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Abstract

Using the metaphor of a river to describe continuous and lifelong learning this paper details an Action Research project aimed at developing effective learning environments in a large, distributed organisation. This project is based on the theoretical assumptions of heutagogy (as opposed to pedagogy and andragogy) which is the study of self-determined learning. It is our belief that heutagogical approaches to learning are more likely to result in an increase in capability as well as competence. The concepts of heutagogy and capability, and the research findings are discussed in detail as well as the implications for vocational education and training.

The river of learning

Rivers are fascinating. Their mountain sources are thin trickles, cold and fresh, that merge into one as the river widens, becomes fuller and finds its way to the sea to be a rich estuary full of life and complete. Rivers meander and wind their way to the sea across all sorts of terrain, through all manner of climates. You can dip into a river anywhere and you can leave it when you will. And of course, its not just a river-it gives birth to all manner of living things.

People know how to learn and are most likely to learn when there is context and meaning to the learning. Carl Rogers (1951) described this phenomenon in terms of the need for learning to be congruent with the self, the images we have of our experience and our relation to it. We do most of our learning outside of what are usually described as structured learning environments (this is an oxymoron of course). We also believe that this ‘real life’ learning is more resilient and more lasting. Another assumption we have made is that people in fact know how to learn. They may have forgotten how to do this because the education system makes them forget from about the age of five onwards. Until that time we are excellent learners. This paper expands on this concept a little further and then describes an ongoing project of developing the river of learning in a large, distributed organisation.

Self-determined learning

Education has traditionally been seen as a pedagogic relationship between the teacher and the learner. It was always the teacher who decided what the learner needed to know, and indeed, how the knowledge and skills should be taught. In the past thirty years or so there has been quite a revolution in education through research into how people learn, and resulting from that, further work on how teaching could and should be provided. While andragogy (Knowles, 1970) provided many useful approaches for improving educational methodology, and indeed has been accepted almost universally, it still has connotations of a teacher-learner relationship.
Heutagogy (Hase and Kenyon, 2000) is the study of self-determined learning and is concerned with how to harness the learning that occurs as a part of a person’s total experience. Heutagogy is interested in approaches to learning that are not teacher centred but person centred. This idea is not new and draws on a humanistic theme that can be followed through the philosopher Heider (Emery, 1974), phenomenology (Rogers, 1951), systems thinking (Emery and Trist, 1965), double loop and organisational learning (Argyris & Schon, 1996), androgy (Knowles, 1984), learner managed learning (Graves, 1993; Long, 1990), action learning (Kemmis & McTaggart, 1998), Capability (Stephenson, 1992), and work-based learning (Gattegno, 1996; Hase, 1998), for example.

A more complete explanation and rational for heutagogy can be found in a recent paper by Hase and Kenyon (2000).

Apart from the philosophical reason for looking at how to harness real learning in real situations there is a more pragmatic reason, particularly for the vocational education and training sector, that has to do with the world in which we currently live. It is a world in which: information is readily and easily accessible; where change is so rapid that traditional methods of training and education are totally inadequate; discipline based knowledge is inappropriate to prepare for living in modern communities and workplaces; learning is increasingly aligned with what we do; modern organisational structures require flexible learning practices; and there is a need for immediacy of learning.

It is our view that heutagogical approaches to learning will help people to remember how to learn and will better prepare them to manage in an increasingly complex world. The thrust that underscores these approaches is a desire to go beyond the simple acquisition of skills and knowledge as a learning experience. They emphasise a more holistic development in the learner of an independent capability (Stephenson, 1993), the capacity for questioning ones values and assumptions (Argyris & Schon, 1996), and the critical role of the system-environment interface (Emery & Trist, 1965).

**The River of Learning in an organisation**

This case study concerns Thiess, an Australian mining and construction company. The company recognises the incredible importance of the capability of its workforce in relation to its competitiveness in a global environment. Thus it has traditionally had a considerable commitment to training and human resource development. Over the past couple of years and with the support of the General Manager, Thiess has attempted to go beyond ensuring the competence (knowledge and skills) of its workforce (competence being an essential condition) to developing capability. Capable people are more likely to: be creative; use their competencies in novel as well as familiar circumstances; know how to learn; work well in teams; and have strong self-efficacy (Stephenson, 1993).

This project can best be described as action learning because it is cyclical and developmental. At the same time there are elements of action research because we have been documenting much of what has happened and attempting to make sense of the results in relation to current theory and practice.

However, given the quite reasonable time and paper length constraints we will describe two major outcomes of the project so far.
During the past decade Thiess Contractors Pty Limited has been experimenting with leading edge inclusive communication and developmental processes. This work had its genesis in the series of Accords created between the Labor government of the 1980’s and 1990’s with the Australian Council of Trade Unions (ACTU) called Award Restructuring / Workplace Reform programs. The first use of these processes for Thiess began with the Junee Goal Project, in NSW, 1991. The project was to build a modern medium security correctional facility in Junee, an area of high unemployment but a wide community of rural workers and railway trades and non-trade people. The project management sought to employ as many local residents as possible and to involve these workers in “workplace teams”. These teams were given the task of work scheduling, programming, the skill development of its people, and accounting for the activities assigned to them.

This inclusive process was further refined and developed in other projects such as RAAF Base Tindal 3C and the Gateway Motorway Extension Project. The process was then called a work activity briefing and had a more inclusive approach for the work activity participants, because the engineering personnel and the management/supervisory staff provided additional support. The work activity briefing had developed to where there was a formal skeleton around which critical information was hung. Such information as the task/activity description, the engineering detail, the risk analysis, the control requirements, the quality assurance requirement, the skill development needs and the action plan became points for dialogue and agreement. The outcome of the dialogue represented a harvesting of the available knowledge, skill and experience, requisite in the activity participants.

The work activity briefing process has been employed in a number of subsequent projects and on each occasion it has been regarded by those participating, as pivotal to the delivery of a project that has exceeded the expectations of the client in the areas of quality, time saving, cost reduction, industrial harmony and safety.

It is a well known psychological phenomenon that is very difficult to change attitudes. Thus, shifting people from a tradition of developing and managing people by control to one of trust and empowerment will be a huge task. The quickest way to change attitudes is in fact through changes in behaviour. The work activity and pre-start meetings described below were a successful approach to this dilemma and are exemplars of shifting organisations to the recognition of how people really learn.

The Work Activity Briefing a form of self managing work team. This activity involves all participants in the activity including engineers, supervisors, specialist support personnel, workers, and in some cases suppliers and subcontractors.

Such teams have become popular, because they offer a range of advantages such as synergy based on the ability to access a pool of experience and knowledge resident within the team. Also an ability to rapidly inform and develop knowledge within the group; and an increased level of involvement / commitment on the part of the group members. The aim of the activity is to identify and apply the best solution to a problem or opportunity within the project context.

In socio-technical systems parlance self-managing teams provide a mechanism by which the technical needs of work and the social needs of the individual and group are able to be drawn
together, an improvement in the quality of working life. The Work Activity Briefing (WAB) process employed with this organisation brings together all parties involved in the activity. With the use of a pro-forma document the essential pieces of information relating the activity including the technical information, the risks, the safety considerations, previous experience that has application and the skills that exist/missing are included in the spaces provided. Having attached all the relevant information a discussion or series of discussions together with any developmental work are completed. The result is a plan for the achievement that represents the best option possible, within the project context. This document is then signed by all participants who use it as the ‘blueprint’ for the activity.

The power relationship changes for the project manager and the engineers. As the workers are able to provide new knowledge, based on their experience, which is outside the knowledge of the engineers the power relationship change for them. The shifts in how the workers are now ‘seen’ suggest a level of equality and acceptance. A change in the normal ‘truth’ applied by management towards labour is changed and thereby the manager or engineer is changed.

Another aspect of the Work Activity Briefing worthy of analysis is that the document produced as part of the dialogue between the active parties. The document becomes a plan and identifies the activities, the parties involved, the actions required by them and the roles and responsibilities of the parties. It might also list the resources together with timings and coordinating data. The document in essence will ‘govern’ the activity.

Using this description we can see that the requirements and specifications of the plan will govern the parties in the activity and, therefore, their actions. The managers and supervisors will exercise power in coordinating the arrival of materials, the workers will exercise power through the application of their skills to the tasks without having to wait for instructions and directions. Indeed the parties will in fact regulate themselves with the terms of the plan and the project context.

With the application of the signature of each of the Work Activity Briefing participants identifies them as being a party to the knowledge and power that can be exercised to achieve the desired outcome.

Another aspect of the Work Activity Briefing worthy of discussion is the taken-for-granted assumptions that also govern the bodies involved in the activity. For example those who were part of the dialogue and certainly those who signed the document take for granted that each participant will do their individual best to achieve the desired outcome. That they will exhibit a level of professionalism and skill that will deliver the quality specified. And that they will demonstrate a level of commitment that will ensure that obstacles that might have proven a limiting factor under ordinary circumstances will not prevent the parties from achieving the deadlines.

An extension of the Work Activity Briefing has been the establishment of Pre-start Briefings in which teams meet at the start of the shift and discuss issues. On conception the primary aim was work safety but soon the briefings involved discussing the days activities and what could be learned from the previous day. Interviews with participants (Hase, Cairns and Malloch, 1998) revealed a high level of empowerment, involvement and sense of commitment to the work team. It was clear that learning was taking place even though it was not credentialed and that the learning was an inherent part of what they did rather than an add-on.
What we see happening with Work Activity and with Pre-start Briefings is the development of the elements of capability such as: learning to learn; higher self-efficacy; using competency in novel situations; creativity; and working in teams. The learning and management are planned but the processes are person centred.

*Extending the training boundary through the Frontline Management Initiative (FMI)*

**Phase 1.**

Supervisors (Foremen / Superintendents) working for Thiess expressed a need to engage in some form of training that would develop their skills. The FMI program was eventually selected and Kangaroo Point TAFE was engaged to provide the assessment processes so that formal credit could be provided.

Three sessions were used to discuss the program to identify in detail the competency standards and then assess each supervisor against the competencies at the diploma level.

The result was a gaining of clear credit in some competencies, an equally clear indication that there was not credit to be given in some and an indication that some skills were being used but the underpinning knowledge supporting those skills was missing.

The decision was therefore made to enhance those skills that were not complete and to develop the knowledge and skills in those that were completely deficient.

**Phase 2**

A meeting was convened where all parties discussed the various options available to them. The key stakeholders in this meeting were the participants in the program. Of all the options the supervisors decided that “a little often” would be easier to handle than an absence from work for even one day.

An after hours workshop approach in which the supervisors gathered for two hours, usually on a Monday, with the Manager for Training and the site Training Officer. A coaching / facilitating role was used to urge, inform and provoke the supervisors to explore the references and their own experiences.

They (supervisors) were given control over the sequence, the subject choice and workshop agenda. In this way they ‘owned’ the process. The only imposition was the first subject to be explored was Leadership. Our argument for this was that all subjects to be explored have their foundations in Leadership. Interestingly, the tension between Leadership / Management was always running through the debates and assignments. All assignments were practical in nature and based in the work they were actually doing on-site rather than invoked by an external examiner.

Each week a new subject area was explored and the next subject chosen for the following week. Each week there was a general report back process controlled by the supervisors in which each supervisor would share how the assignment had gone during the week. In each assignment the subject area was to be used to improve the project, its processes or the workforce.
Towards the end of the project the supervisors, by reviewing their progress, realised that time available would not be sufficient to completed the outstanding skill / knowledge development. They determined that they would devote additional time to the workshops following a negotiation with the facilitators. An interesting trade-off was that they would need to negotiate with the project manager for an evening meal. The test of the skill of the negotiators was evaluated by their peers, the test being the quality of the meal.

At the completion of Phase 2 the Kangaroo Point TAFE re-assessed each supervisor to determine the progress made.

Phase 3

The original assessor was used to determine if progress had been made, sufficient to gain the incomplete and missing competencies. Each supervisor was found to be competent and a Diploma was issued at a graduation ceremony.

On review the supervisors were strong in their praise of the processes of learning they had gone through, of the skills and knowledge they had obtained, of the positive effects it had had on production, safety and work relations with the workforce and subcontractors. There is anecdotal evidence from discussion with the workforce that an almost ‘road to Damascus’ style of change had come about in some supervisors. Even the well regarded supervisors had been observed to have improved.

But the greatest comments came from the supervisors themselves when they declared that whilst they had believed that they had been acting as a team prior to the learning program, it was the experiences throughout the program that converted them into a supporting team operating to assist each other that provided the greatest lesson.

A river of learning in vocational education and training

Heutagogical approaches to vocational education and training will emphasise:

- the process rather than the outcome;
- the importance of the key stakeholder, the learner, in determining learning objectives, assessment, and process;
- the importance of learners learning to learn rather than just obtain a competency standard— that is, learning for the future rather than measuring the past;
- in-vivo learning rather than classroom based experiences;
- provision of resources rather than teaching of content;
- negotiation rather than teacher centred;
- facilitation rather than teaching;
- team based rather than individual;
- learner solutions rather than teacher solutions;
- capability as well as competence;
- questions as well as answers; and
- the person rather than a particular outcome.

A lake is not a river.
References


