Work-based Education: What is it?

Introduction

The purpose of this paper is to explore why workplace learning has become an imperative in vocational education and training. Put simply, workplace learning is becoming more important for two reasons: one, workplaces increasingly want workers who are able to learn new skills and roles; secondly, learning experts now say that learning on the job, or what is sometimes called 'situated learning', is very important. But is learning in the workplace a matter of pure chance or can it be organised so that it happens? And if it does happen, how can it be assessed so that it counts towards a qualification in VET? In other words, how and in what ways can the learning that comes from participating in work become more valued? This paper considers these questions and offers some suggestions for a moving forward to the valuing and validation of learning at work.

1 The new workplace

Everyone agrees that there is a lot of change going on in today's workplaces. There are new technologies, new ways of communicating, more team-work, and more responsibility on the shop floor, in the office and in fact, in all areas of work. Nothing stays the same for long, which means that everyone is constantly learning new things and new ways of working. There is much more of an emphasis on written and digital communication than face-to-face talking. And there is more communication and meetings with representatives from other parts of the organisation or other organisations. Workers now have to be able to deal with unclear situations - where old ways of doing things no longer apply. In situations like this, it falls back on workers to trust their own judgement about what to do. They have to use any- and all - information around them to achieve quality work outcomes. As change becomes more rapid, everyone needs to be more adept at adapting and trying to keep with the pace of current practice. And because people change jobs more often these days, everyone is always
trying to catch on to how things are done. This is hard enough when people don't change jobs, but it can be much harder if the way things are done is also changing at the same time.

What all this means is that workers today have to be fast learners. They have to quickly and gently extract every bit of help, information and guidance from whomever or whatever is around to learn what to do. Most of the time, people can no longer rely on what they learnt previously or how it was done in the last job. Today, working is full-on learning, even though it is different from learning in educational settings. Today, 'working' means learning on the job and learning when required. Often, there is little opportunity to learn beforehand. As Jim Davidson, Managing Director of TVET says: "One of the functions of VET is to help people learn how to learn . . ." (Davidson, quoted in Ross 2009, p. 18). This notion of learning to learn is important for trainees but also for their trainers and for all staff in VET. Everyone needs to understand that learning is not just something done 'front on' prior to starting work. These days, learning has become a life long process.

**Changes in kinds of knowledge**

Another reason for the new emphasis on learning in the workplace is a change in the types of knowledge important in a modern workplace compared with the past. A number of academics¹ have claimed that there are three different kinds of knowledge: knowing the theory of things (Theoretical Knowledge), making good judgements (Practical Judgement), and knowing how to do things (Technical Knowledge).

<table>
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<tr>
<th>Three types of Knowledge</th>
<th>Theoretical Knowledge</th>
<th>Practical Judgement</th>
<th>Technical Knowledge</th>
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<tr>
<td>Applying theory to an action or what is done</td>
<td>Applying a judgement in situations that are not clear or ambiguous</td>
<td>How to do something</td>
<td>Practice and experience means a 'feel' is developed for how to do something</td>
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¹ Discussion of one or more of these types of knowledge can be found in Eraut 1994; Schon 1995; Beckett and Hager 2000; 2002; Jones 2005.
In the past, the important thing was *knowing how to do things* (technical knowledge & skills). Why this matters is because *Theoretical Knowledge* and *Technical Knowledge* can both be fairly definite and final. ‘If you want to *do this*, then you must *do that first*’. But *Practical Judgement* is about human beings who are not so predictable as theories or technical processes. For example, when you say something to two different people, they may react differently, depending on where they are coming from and how they see things. So, judging how people will react is a very important part of getting things to happen in a workplace, especially if it is a matter of getting everyone to cooperate in moving to a new system. This means that *Practical Judgement*, e.g. making a decision like knowing about people and how to deal with them, or knowing how to make a judgement to assess a competence is becoming more important for everyone in the workplace.

In the past, a good worker was someone who put their head down and got on with their own work, someone who had deep knowledge of their field - whether trade or theory. But now knowing how to do your own work is not enough. Now everyone is expected to be involved in thinking about how their work relates to others and how to change to new and better ways of working. This means skills constantly need to be upgraded. It also means having to learn to understand and discuss things with workers from other fields, who come with different skills and knowledge. And somehow, in collaboration or in partnerships with these other workers, often from totally different work contexts, the group is expected to find a way to make decisions or offer recommendations about change for more effective production or output.

The knowledge(s) called for by the new workplace now seem to include a good deal of *Practical Judgement*, a form of knowing that guides action in ambiguous and unclear situations. This is because theoretical knowledge, despite its clarity and precision, is increasingly unable to judge 'if or when' it should be applied. That is, work situations can no longer be readily classified under one category or another. So, a different kind of knowledge from theoretical knowledge is needed.
But neither is the experienced-based tacit knowledge of the traditional craft-worker enough. Craft workers have a deep tacit knowledge or ‘feel’ for a traditional way of performing a task, yet this feel, or innate understanding, can be less useful when faced with rapid changes in technology or work processes. In short, the new workplace seems to call for action based on Practical Judgement, as much as it calls for the application of theoretical knowledge or ‘feel’ or skill of technical knowledge.

However, the fundamental shift in workplaces from a setting of stable and predictable work processes, to one that is unpredictable and changing, means that Practical Judgement has a new relevance. Beckett and Hager (2000) have helped give a new prominence to the role of practical judgement in the workplace through their work describing the concept of ‘hot action’. Hot action is when the situation calls for quick holistic judgement and response. The ability to respond in situations of hot action cannot be learnt in the classroom or from a textbook – or perhaps even from so-called ‘authentic’ exercises. Responding in situations of hot action is not a matter of applying previously learnt knowledge. Of course, thinking and 'feel' are still very much a part of making a decision in hot action but what to do is not a simple matter of causal or technical reasoning. It is not the same as ‘doing this always leads to that’. Practical Judgement—deciding ‘what to do’ or ‘how to do it’—is thus often a balancing act that holistically takes account of the situation.

Learning by sharing
This new focus on practical judgement in the workplace leads to a new understanding of how work as practical judgement is learnt. According to this new approach, practical judgement is best developed by taking part in activities in your field, not just through study of a field, or through the learning the 'right' habits. However, over recent times, vocational education and training has consisted of a combination of off-the-job theory and on-the-job experience, where both components are framed in terms of an individual person. The on-the-job component is defined in terms of competencies, while the off-the-job component is defined in terms of knowledge - often abstract knowledge. This can make it hard for learners to draw on their past experience or cultural understandings for engaging with the technical concepts and processes they are trying to learn (Stephenson, 2007). The new theory of learning - work as practical judgement - argues that vocational knowledge is fundamentally social and is
constructed through shared meanings. In place of a narrow focus on the individual learner and their thinking processes, there is now a strong acknowledgement of the organisational, social and cultural element of the workplace (Lave and Wenger 1991; Billett 2004; Billett & Ovens 2007; Hodkinson and Hodkinson 2004). This new focus on knowledge as fundamentally social and is constructed through shared meanings is probably why we hear a lot of talk these days about things like 'team work' or 'shared reflection' or 'communities of practice'. These words and phrases all share a sense of 'taking part in something' or 'participating with others'. Unlike earlier ways of thinking about learning, these words are not about an individual mind and what goes on in it. They are more about the interaction and connection between the individual and others.

The contrast between the different views of learning has been nicely captured in Sfard's (1998) two metaphors of learning: learning as acquisition and learning as participation. Learning as acquisition sees learning as a result of the acquisition of mental concepts or behavioural habits. By contrast, the metaphor of participation sees learning as a result of participation and engagement in an ongoing situation of collaborative and co-ordinated activity and communication. In this view, the learner gradually finds their place and role through observation, mentoring and guided instruction from other workers. If learning is put in this fuller context, as emphasised by the participation metaphor, it meshes with educational pedagogies like problem-based learning, case-based learning and other forms of collaborative learning.²

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<tr>
<td><strong>Acquisition Metaphor</strong></td>
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<tr>
<td>Focuses on the 'individual mind'</td>
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<tr>
<td>Focuses on what 'goes into' the mind</td>
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<td>The mind is like a container to be filled &amp; the learner 'owns' the contents - like they own private property.</td>
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<tr>
<td>Language of AM: 'Possession of knowledge' metaphor draws on language from academia such as credit, stealing, trespassing, borrowing etc and could mean a similar attitude developed to knowing and learning (p. 8)</td>
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² See Appendix 2 for more information on these pedagogies or ways of organising teaching and learning.
Sfard does not suggest teaching and learning approaches should adopt one or the other of these metaphors or ways of thinking about learning. The acquisition metaphor has been around for a long time now, and although it has some weaknesses, it can be coupled with the participation metaphor for more effective learning (p. 9).

So we could say that in these times, all workplaces need to be places of learning. However, some workplaces are more encouraging of learning than others. Workplaces that provide more opportunities for learning generally tend to offer their workers more variety in their work, more discretion over decision making, a greater range of tasks, more open information, more opportunities for teamwork, more shared values, and more access to tools, technologies and softwares (Chappell & Hawke, p. 15, 2008). In other words, a workplace with the characteristics above probably provides more opportunities for participation and therefore more informal learning opportunities.

3. Workplace Learning to Work-based Education: The Challenges

One of the more important challenges … is for organizations to understand the significant conceptual gap that separates learning that takes place in the classroom/training room contexts and learning that occurs at work (Chappell and Hawke, p. 4, 2008).

Given that workplaces now want workers who are able to learn new skills and roles - to be more flexible and given how the best learning is done on the job, the question at the heart of this paper is: how can this informal learning of practical judgement required by the new workplace be recognised in formal VET curriculum?

The challenge facing VET is how to move beyond the types of knowledge that have been its focus in the past, and begin to consider how to support, recognise and assess practical judgement. If vocational capacity includes all three forms of knowledge - theoretical, technical and practical - clearly it is the practical that is increasingly demanded by the new
workplace. Yet, recognising, assessing and supporting practical judgement will require a quite different way of doings things.

*Teaching* practical workplace judgement will be more a matter of assisting learners to engage more fully in the sense-making and decision-making transactions in the workplace. Theoretical or reflective exercises will be more intent on helping learners notice what is happening around them and become sensitive to what lies beneath the surface of what is happening, rather than provide a rigorous or critical theoretical model of the activity domain.

For teachers this means more strategies that focus on real problems at work. These should be solved through team work with problem based learning approaches. To solve a realistic problem requires opportunities for dialogue and negotiation so that shared understandings on how to proceed can be developed. This might involve group communication through face to face work but it might also involve communication through a range of digital technologies. The teacher or facilitator may need to scaffold reflection strategies since reflection is not always a simple or natural practice. The purpose of these strategies - team work, problem solving and reflection - is not just to solve a realistic work-based problem but also to facilitate learning. Today's workplace seeks workers who can engage in collaborative inquiry and show the capacity to shape tomorrow's knowledge.

Similarly, *assessing* workplace practical knowledge will need to be more holistic, more situated than the assessment of theoretical knowledge or behavioural competence. More like the assessment of studio work in the fields of architecture and design, assessing the practical judgement dimension of workplace knowledge might explore the use of a portfolio presented before a panel of judges who assess the learner. Thus assessing workplace practical knowledge would be closer to the recognition of workplace capacity that is *recognised* by a more holistic RPL process (see Smith & Clayton, 2009). To successfully support and capture the non-formal and informal learning of the workplace as recognised work-based education will place new demands on everyone – management, curriculum designers, providers, trainers, assessors, co-workers and learners themselves (Harris & Simons 2008, Mitchell et al. 2006).
It is a challenge to conceptualise work-based education as the recognition, the support, and the assessment of workplace learning across the three dimensions of theory, technical competencies, and practical judgement. However, it is an important and urgent challenge for developing workforce capacity.
References


Appendix 1

Brief Definitions on learning and work

From: National Centre for Vocational Education Research

**Work-based learning**

Programs for both secondary and post-secondary students which provide opportunities to achieve employment-related competencies in the workplace. Work-based learning is often undertaken in conjunction with classroom or related learning, and may take the form of work placements, work experience, workplace mentoring, instruction in general workplace competencies, and broad instruction in all aspects of industry.

**Work-based training**

Training provided by an organisation primarily for its own employees using the employer's own staff or external consultants. Work-based training can be conducted either on-site or at an off-site location.

**Workplace learning**

Learning or training undertaken in the workplace, usually on the job, including on-the-job training under normal operational conditions, and on-site training, which is conducted away from the work process (e.g. in a training room).


From: Smith & Clayton, 2009, Definitions of Formal, Non-Formal and Informal Learning

**Formal learning**

- Formal learning is learning that ‘takes place through a structured program of instruction and which is linked to attainment of a formal qualification or award’ (Smith and Clayton, 2009, p. 7).

**Non-formal learning**

- Learning that takes place through a structured program of instruction but does not lead to the attainment of a formal qualification or award (Smith and Clayton, 2009, p.7).

**Informal learning**

- Informal learning is learning that “results from experience of daily work-related social, family, hobby or leisure activities . . . informal learning is ‘not intentionally accessed by the learner (Smith and Clayton, 2009, p. 8).
From: Evans et al. 2006, Improving workplace learning

Learning in the workplace
  • Here the learner is “engaging with and mastering changing tasks, roles, and environments” (p. 16).

Learning through the workplace
  • Learning through the workplace “takes place when adults access learning through work” (p. 16). This may be an internal or external course, general education courses or other personal development courses.

Learning for the workplace
  • This type of learning is the sort completed by adults wishing to re-enter the work force after time away such as unemployment, family obligations or illness (pp. 16 -17). (Evans et al. 2006)
Appendix 2

Brief Definition of problem-based learning, case-based learning and collaborative learning

Below are some simple definitions of problem-based learning, case-based learning and collaborative learning. For a more thorough discussion on collaborative learning and PBL see Making the links to student learning - Paper for: Academic and Vocational Education Boards, 2005, by Belinda McLennan and Shay Keating. Their paper can be found on the VU website under Teaching and Learning at: http://tls.vu.edu.au/PEC/reports.htm

Collaborative learning
Collaborative learning, or working in a group, involves people working together, for example, in pairs or groups to achieve their shared learning goals.

Problem-based learning (PBL)
A PBL approach is based on practice-based problems. With PBL people learn by working though a problem that is realistic and the focus is to find a good or the best, solution to the problem. The focus is not just about getting the 'right answer'. Like collaborative learning, working in a group or team to find a solution is the common practice.

Case-based learning
Like PBL, a case-based approach uses examples from the real world. It is learner-centred, and involves collaboration. In case-based learning, the group works together and examines a case. For example, a group of nursing or medical students might consider what treatment or medication should be provided to a patient based on their symptoms. For the most part, case-based learning involves trying to resolve questions that have no right answer. This type of learning is often used in medicine, nursing, and in law.