

# ***A Personal Perspective on the Structure of a Post-graduate Work-based Learning Programme at an English University***

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## **Abstract**

This paper critiques a work-based learning (WBL) programme at an English university. This post-graduate diploma for regulatory professionals is enacted via a tri-partite arrangement between learners, their public-sector employer and the university. Prompted by my need, in a new role, to understand more about WBL I explore the literature surrounding WBL, in particular the complexities of the inter-relationships between acquisition of academic knowledge and practical learning. What is the source of knowledge, how is it obtained and who holds it are fundamental questions. I find that WBL is aligned with a social constructionist epistemology whereby knowledge is built-up by the practitioner through exposure to practice; however, discipline-based propositional knowledge is still vital as a basis for the development of practical knowledge. In considering the programme's practices I acknowledge my perspective as a module leader and highlight elements contrasting with a constructionist epistemology. I address questions that include whether WBL is fully employed and might use of Technology Enhanced Learning (TEL) be beneficial. The dichotomous nature of knowledge is discussed as is recently upgraded thinking on 'Mode 2' knowledge, and the concept of learning as social participation. The epistemology of practice is framed and I show how knowledge becomes coherent only through practice. I question whether this programme's concept of WBL is sufficiently well-defined and identify two areas where change might be explored: firstly, the two controlling actors might consider involving learners more explicitly and, secondly, closer alignment to the principles of WBL is suggested. Allowing learners to steer, and using technology to support learning, perhaps via a virtual community of practice may be found to be worthwhile. Such use of TEL should incorporate the ontological considerations illustrated in this paper: namely, co-construction of learning and foregrounding the contextualised creation of individuals' knowledges by blending propositional with practical knowledge. Lewin's (1951) field theory may be helpful in facilitating change. Equally, Parchoma's (2006) consideration of potential forces which may drive or restrain adoption of e-learning may be useful to reveal the mix of forces operating in this programme's situated context. The complexity and messiness of establishing a WBL programme is evident and reflection, by the university and partner organisation, is advocated.

## **Keywords**

Work-based learning, higher education, technology enhanced learning, social constructionist epistemology

## **Introduction**

This paper critiques the structure of a work-based learning (WBL) programme at an English university. Costley et al. report a significant gap in the published literature in this respect 'though tutors/researchers in the field are aware that there are reservations about the substance of WBL programmes and modules from some parties' (2009:17). I focus on a post-graduate diploma for regulatory professionals enacted via a tri-partite arrangement between learners, their public-sector employer and the university. I explore the literature surrounding WBL, including the complexities of the inter-relationships between acquisition of academic knowledge and practical learning, and consider some of the programme's practices. What is the source of knowledge, how is it obtained and who holds it are fundamental questions.

Work-based learners are situated in the workplace and, according to the QAA (2007) and others (Jackson, 2006), programme design centres on the learner and their employer's interests. This programme's intent is covered by Gibbs and Garnett's (2007:410) definition of WBL as:

a learning process that focuses higher-education-level critical thinking upon work ... to facilitate the recognition, acquisition and application of individual and collective knowledge, skills and abilities to achieve specific outcomes of significance to the learner, their work and the higher education institution.

Writing this paper allows me to reflect on the tensions, challenges and successes thus far. I consider the extent to which WBL is employed and whether use of Technology Enhanced Learning (TEL) might be beneficial. This paper provides a personal perspective at one moment in time. It is not an evaluation of the programme which would require a research study involving stakeholders.

## **The programme's background, structure and organisation**

This employer requires regulators to attain a post-graduate qualification: to ensure the calibre of thinking professionals supporting organisational success; to promote academic credibility with the organisation; and to initiate continuing professional development. Their vision is for learning 'to be a productive part of everyday work, embedded in the culture, structures, relationships and processes of the workplace' (Boud & Solomon, 2001b:25). Tailored to the organisation's business needs this embryonic programme 'attempts to bring knowledge 'under control'' and to make regulators 'more manageable' as learning is aligned with anticipated work activities (Rhodes & Garrick, 2002:87). Hence both collaborates, university and employer, achieve control over learners' experiences.

In accordance with government policy on higher education this collaborative programme advocates WBL (Jackson, 2006; Rhodes & Garrick, 2002). Nevertheless, development of a 'learning partnership' (Gustavs & Clegg, 2005:9) to increase regulators' intellectual capital necessitates a balance between the university's academic integrity (Boud, Solomon, & Symes, 2001; Jackson, 2006) and the employer's requirement to influence regulators' practice and legitimise 'working knowledge' (Boud & Solomon, 2001b:28). Government policy also recognises that learning contributes to work, making links between a skilled workforce and learning - a convergence that can withstand competition (Forrester, Frost, & Ward, 2000) and influence marketability (Beckett, 2000b). Similarly, discourse of the knowledge economy (Parchoma, 2006; Rogers, 2006) attributes improved productivity to increasingly knowledgeable workers (Beckett, 2000b) and capable, competent workers are considered essential for economic survival (Forrester et al., 2000). Some academics try to sidestep such discourse by promoting issues like the contribution of knowledge to new thinking about work practices (Forrester et al., 2000). Nevertheless, economic arguments prevail (Gustavs & Clegg, 2005) and learning as a source of competitive advantage is set 'in the context of our lived experience of participation in the world' and is seen as 'a fundamentally social phenomenon', rather than 'an individual process' (Wenger, 1999:30).

This four year part-time programme has four modules, residing across three faculties. Teaching and assessment is distributed amongst university faculty and devolved through formal collaborative arrangements to our partner. Representation of the 300 learners started recently. Contextual details in this paper are necessarily scant due to client sensitivities. I lead two of the four modules during which students meet regularly, generally for several days, on a number of occasions throughout the four years. Assessment of these two modules is via two 4000 word written assignments; these are closely linked with activities undertaken as part of students' professional practice. Though traditional face-to-face teaching predominates there is a course website which is used largely as a notice board and document repository, with occasional use of tutor-led discussion forums. Costley et al. acknowledge that a blend of approaches to learning may be aligned with WBL learning processes (2009).

I was aware of the importance of propositional knowledge about WBL as I acclimatised to a new role and noted that WBL, as a learning process, appeared to have received little attention during programme development. However, I find this is not unusual: Costley et al. report that university managers and academics 'do not always have a clear understanding of WBL and its different strategies and models'; surmising this may be because WBL is not a subject discipline (2009:3). Reflecting on this situation I find my accumulated practice-based knowledge and intuition valuable in directing my actions and note that there is 'a significant gap in literature that would be of direct use to work-based learners and tutors designing programmes and supporting WBL students' (Costley et al., 2009:3). Furthermore, I observe variation in colleagues' interpretations and assumptions which reinforces my view that our attention has been on the exigencies of programme delivery before fully establishing its foundation.

## Work-based learning

The Higher Education Academy highlighted WBL by commissioning Costley et al.'s literature review of employee learning (2009). Perhaps the most significant feature of WBL is the acquisition of knowledge from practical work-based sources to accomplish learning. The importance of situating practice against 'the unfolding lives of learners in different contexts' (Forrester et al., 2000:487), though perhaps also drawing on disciplinary knowledge (Costley et al., 2009), is recognised. Costley et al. describe such learners as being: concerned with professional practice, autonomous and learner-centred. Meanwhile Boud and Solomon identify the importance of institutions selecting 'staff who can cope with working with students outside their disciplinary comfort zone' (2001a:220). Thus it is widely identified that WBL programmes draw on learners' experience during their work though, as Costley et al. acknowledge, didactic educational formats such as lecturing or classroom teaching may be part of the mix to which learners are exposed (2009).

The focus on practice fuels debate about the dichotomous nature of knowledge, which is variously spoken of as formal studies/informal experiences (Beckett, 2000b; Forrester et al., 2000; Lave, 1996), and traditional/practice-based (Costley et al., 2009). Traditionally, formal learning provides out-of-context knowledge emanating from instruction, whereas informal learning produces highly contextualised context-bound knowledge (Lave, 1996). Lave's apprenticeship research questions the efficacy of formal studies relative to the powerful robustness of informal practice and she uncovers an 'insightful perspective on learning as social practice' (1996:153).

Practice-based learning has been widely supported since the 1990s, sitting alongside the turn to learning as social participation. Lave sees learning resulting from 'changing participation in changing practices' (1996:161). What matters, according to Wenger, is that 'we are social beings', knowledge being concerned with competence (1999:31). Likewise, to know, requires participation or 'active engagement in the world' and our reward for such engagement is meaning - so participation 'is both a kind of action and a form of belonging' (Wenger, 1999:31). Wenger and Lave both challenge the belief that classroom-based learning is paramount.

Use of WBL also resonates with Eraut's concept of learning as 'ready-to-use', where knowledge is applied through and for work (2004:248); therefore establishing a partnership between the workplace and the institution where the institution cannot prevail as 'the sole validator and evaluator of high level knowledge' (P. Gibbs & Garnett, 2007:410). The learning process, in WBL, utilises Schön's concept of the reflective practitioner who through 'naming and framing', because they notice a problem, set 'a direction for action' requiring reflection-in-practice (1987:4). Where WBL is 'structured into a relevant and well-led higher education program' it 'can be an effective way of engaging people in a "real world" educational experience that links each individual with corporate capability' (Costley, 2001:63). This seems a realistic aspiration for this programme.

It is held that 'learning has changed from remembering 'facts' and 'knowledge' to seeking to understand and be critically aware of the things to be studied' (Jarvis, Holford, & Griffin, 2003:9). Jarvis et al. propose that expert information, such as that transmitted during this programme, should be regarded as discourse which requires critical reflection before it is rejected or accepted. Learners need to be reflexive so they can discriminate and continually shift their view depending upon the 'truth' of the situation they find. Thus, 'work situations can be improved, workplaces transformed and productivity enhanced' (Boud, 2001:55). WBL aligns with a social constructionist epistemology where knowledge is built-up by the practitioner through exposure to practice. Nevertheless WBL acknowledges discipline-based propositional knowledge as a basis from which practical knowledge is developed. Learning becomes a blend of formal/informal knowledge. Equally it may be accomplished via formal/informal learning modes allowing learners to develop their stance.

## Reflective interlude

The rhetoric of WBL is not evidenced prominently and I believe there is scope to extend a constructionist perspective into this programme's structure and learning style. Reflection on the discourses used to shape and frame learning may assist. As Wenger points out 'we need to reflect on the perspectives that inform our enterprises' (1999:33) and to me this means crafting the learning process in social terms. Initially two voices predominated: the employer judging what the workplace could offer whilst co-constructing the curriculum with

the university. This fixed curriculum negates individual negotiation found in pure WBL programmes (Boud et al., 2001) where 'the key decisions about learning are made by the student, or by the student through negotiation with the teacher' (G. Gibbs, 1995:1). A major gap emerged: the exclusion of learners' voices.

A Learning Log, devised by the employer, prescribes information to read and situations to observe/experience. Conceived as a helpful guide this offers little acknowledgment of learners' varying needs and perhaps limits them accepting responsibility for identifying their own learning needs. One notable exception is reflection prior to/following teaching contact where they do consider these needs. However, anecdotal evidence from learners suggests they may be interpreting the Learning Log as a bar to achieve rather than a springboard to learning.

Control is seemingly paramount, as may be further evidenced through the initial course specification where in one instance 50 learning outcomes were associated with two-days of teaching forming part of a module. Though the QAA recognises that learning outcomes associated with WBL programmes 'may be highly specific' (2007:8), this prescriptive approach represents a traditional didactic pedagogical model rather than a programme 'constructed such that learning strategies and assessment criteria are developed to evidence and recognise learning through or from work' (Costley et al., 2009:7). Nevertheless, the overarching course and module aims and learning outcomes on this programme aim to integrate evidence and learning from learners' professional practice, as do the assessments. This wider interpretation of learning is more in keeping with the open structure of WBL and a constructionist approach to teaching and learning.

Learners' responsibility for steering knowledge development may be shown by negotiated learning outcomes and reflexivity. In this instance it would seem to make sense for the tri-partite partnership to co-construct learning, recognising individuals' backgrounds, experiences and interests. Schön observes that 'what aspiring practitioners need most to learn, professional schools seem least able to teach' (1987:8) highlighting the essential dichotomy of professional knowledge. Recognition that a traditional education based on propositional knowledge is too divorced from excellent professional practice is the basis for an epistemology of practice.

## Epistemology of practice

This programme's propositional knowledge is drawn from three faculties and multifarious specialists within the employer's organisation. Possibly the most significant point to recognise is that regulators' practice requires a quite distinct way of framing this propositional knowledge. For instance, in relation to noise regulators need to know the letter and the spirit of the law and understand the scientific/technical basis underlying such propositional knowledge. They need to be aware of alternative approaches to meeting legal requirements in diverse situations and be able to make an informed judgement. Finally, they must determine the extent of regulatory intervention required. Such knowledge forms a coherent whole only through practice. It is a practical knowledge about 'doing' the work of a regulator and is situated in its specific context where complexity abounds. As Jarvis et al. argue: 'there is something profoundly different about practical knowledge - it is integrated and subjective' (2003:8). Each unique case requires construction of 'a coherent problem worth solving' using 'improvisation, inventing and testing' in its context-bound situation (Schön, 1987:5-6). In simple terms it is knowledge that works (Barnett, 2000; Rhodes & Garrick, 2002).

WBL's constructionist framework represents Gibbons et al.'s (1994) 'Mode 2' knowledge production: 'new' knowledge 'generated within a context of application', adopting 'a range of theoretical perspectives and practical methodologies to solve problems', offering 'much greater diversity of the sites at which knowledge is produced, and in the types of knowledge produced', being 'highly reflexive' rather than 'objective', and utilising 'novel forms of quality control' (Nowotny, Scott, & Gibbons, 2003:186-7). These five features, though originally defined in relation to research, are strongly associated with approaches to WBL. Boud considers 'One of the major challenges of the work-based learning curriculum is how to reconcile the Mode 1 knowledge of the university and the Mode 2 knowledge of the workplace' (2001:37). Recent development of 'Mode 2' knowledge emphasises that 'local contingencies shape synergy and potential' and identify that knowledge needs to be more 'socially robust' as its validity is determined by broader communities (Nowotny et al., 2003:191). Cook and Brown (1999) highlight how knowledge is part of the social world with which we interact and that it can facilitate or frustrate our interaction. These points are pertinent as regulators need to form and re-form their thinking in alternative contexts, each requiring unique mixes of propositional and practical knowledge. Gibbons et al. see Mode 2 knowledge as transformative, dynamic and transdisciplinary – the 'shape of the final solution' being 'beyond that of any single contributing discipline' and arising from 'genuine creativity' (1994:5).

Authenticity of response is determined by a range of actors hence the need for social robustness. Furthermore, the concept of agora ('the problem-generating and problem-solving environment in which the contextualisation of knowledge production takes place') may be used to represent the 'jostling' of contending stakeholders who have an interest in the outcome of practitioners' contextualisation of knowledge production (Nowotny et al., 2003:192). In other words, regulators have to create knowledge, arising in diverse contexts, and determine their response knowing that their knowledge production will be subject to interpretation and questioning. This is similar to Gibbons et al.'s view that 'the quality control process' in Mode 2 knowledge is 'multidimensional' and 'broadly based' (1994:8). Regulators' knowledge is contingent upon what their interactions reveal.

Another aspect of upgraded thinking on 'Mode 2', that has resonance with our learners, is that 'it is necessary to reach beyond the knowable context of application, towards the unknowable context of implication' (Nowotny et al., 2003:192). Having identified a regulatory intervention regulators need to anticipate its likely implications. This involves anticipatory reflexivity as they distil the possible implications of their decisions. This is akin to Dewey's notion of productive inquiry – inquiry that precedes action – a deliberate (though not necessarily conscious) activity 'seeking what we need, in order to do what we want to do' (Cook & Brown, 1999:388).

I have referred to action and interaction throughout. Cook and Brown (1999) describe two parallel, mutually enabling and supporting tracks, namely the epistemology of possession - what we possess/know how to do (which is more about a body of knowledge), and the epistemology of practice - which is concerned with ways of knowing – what we do, not what we possess. The doing of practice implies real-world action: 'action informed by meaning' (Cook & Brown, 1999:387). It is a deliberate act. So, in a regulator's practice meaning comes from understanding the (w)holistic context in which their work is situated. 'Improved practice may not always be the product of acquiring more knowledge; it may also result from developing innovative ways of using knowledge already possessed' (Cook & Brown, 1999:388). Thus, reflexivity is integral - essential to practice. Much of what regulators need to learn is difficult to describe. It is tacit knowledge about how things are done. Knowledge that resides in actors' heads or is embodied in a specific context; such tacit knowledge is 'learned on the job through training and experience' (Gibbons et al., 1994:25). This cultural perspective of learning also underlies Cook and Yanow's thesis (1993).

An earlier diploma failed to meet this employer's business needs for an integrated approach to learning and working. Returning to the workplace from a traditional university-based course, knowledge of x did not transform into know-how. Something was missing. The 'amorphous and ephemeral alchemy of 'experience'' was insufficient to act on the propositional knowledge (Beckett, 2000b:41). A more explicit mechanism by which to transform experience and make it productive is required. Beckett raises questions of how know-how can be articulated drawing on Giddens to consider whether tacit knowledge though performed might be too difficult to verbalise (2000b). Wenger shares Beckett's concern, identifying that despite participation 'we do not have very systematic ways of talking about this familiar experience' (1999:33). If professional practice is purposeful and comprised of actions it is the analysis of 'these 'hot' actions, evident minute by minute across the working day, [that] constitute the intentional embodiment of decisions and judgement we make at work' (Beckett, 2000b:42).

So a view of knowledge aligned with regulators' needs draws on a constructionist epistemology blending the knowledge of possession with that of practice. Learners need to know they are creating 'a practice to do what needs to be done' (Wenger, 1999:32). Without the 'dynamic affordance' produced by doing, by interacting, there will be 'no learning and no enactment of what is learnt' (Cook & Brown, 1999:390). Learners need to achieve the knowledge of knowing so they can contribute to the generation of 'new knowledge and new ways of using knowledge' to future-proof their organisation (Cook & Brown, 1999:394). In this geographically dispersed organisation it is suggested this will require the support of technological and organisational infrastructures. Next I will briefly address the former.

## **Technology Enhanced Learning**

The term TEL is used in the broad sense defined in the 2008 UCISCA survey (which noted its 'increasing currency') to mean: 'any online facility or system that directly supports teaching and learning' (Browne, Hewitt, Jenkins, & Walker, 2008:2). More recently HEFCE, in discussing their revised approach to e-learning strategy, continue to favour a broader approach without fixed definitions, they decline to define 'e-learning' or use any other term such as TEL or 'networked learning', preferring to focus more broadly 'on enhancing learning,

teaching and assessment through the use of technology' (2009:1). Arguably 'networked learning', as defined by Jones and Steeples (2002:2), remains a more nuanced term with its focus on connections:

Networked learning is learning in which information and communication technology (C&IT) is used to promote connections: between one learner and other learners, between learners and tutors; between a learning community and its learning resources.

Regardless of the term that is chosen this paper has established that interaction can benefit learning, that learners on this programme are geographically dispersed, and that there is a need, in my opinion, to root the programme more securely in learners' practice.

Adoption of TEL can be misconstrued as an opportunity to place documentation prepared for classroom-based learning into a Virtual Learning Environment (VLE) - perhaps reinforcing the importance of acquiring propositional knowledge. Within an on-line context, the pedagogical focus of such domain-centred design tends to focus on transmitting predetermined messages (Parchoma, 2007). This approach fails to encompass the key principles of WBL and may act to distance learners from the context of practice. Conversely, learner-centred design shifts focus 'to what is known about and what is valued by learners' (Parchoma, 2007:14). This emphasis fits well with WBL, representing a shift away from concerns about 'what will be taught to a careful examination of learner characteristics and to ensure that learners will perceive content as worth knowing' (Parchoma, 2007:14). Subsequently, activities focus on contextualising learners' practice (Parchoma, 2007). Such points are important and a carefully designed VLE that complements a WBL approach might be an asset.

Here I propose an argument for enabling learners' interaction using a virtual community of practice (COP). Indeed, the dispersed teaching team, across two organisations, may equally benefit. Cook and Yanow's (1993) case that learning occurs within groups in organisations (as well as individually) supports this initiative. 'Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly' (Wenger, 2006:1). Wenger asserts three crucial characteristics: domain, community and practice to assist this focus on people and the social structures to enable mutual learning which advances organisational capability (2006). Thus stated this appears a suitable structure to support this programme. Learners and the teaching team share a domain, interacting to share knowledge and provide support might be mutually beneficial. Equally, such an environment could act to reaffirm, alter or maintain 'the know-how that the organisation already possesses'; constructing shared and compatible meanings - enabling innovation and preservation to formulate organisational expectations (Cook & Yanow, 1993:407). However, Wenger's caution that hierarchical organisations and in particular bureaucratic government organisations, can be challenged by 'open knowledge sharing' suggests this option should be approached carefully, particularly given the issues of control I mentioned earlier (2006:4).

Adoption of TEL for a WBL programme should incorporate the ontological considerations illustrated in this paper: co-construction of learning and foregrounding the contextualised creation of individuals' knowledges by blending propositional with practical knowledge. Learning needs to be embodied and learners' empowered as they determine how to achieve their working knowledge. As such, 'scepticism towards new technologies in education is essential' (Beckett, 2000a:81). Quite what TEL might look like in this context is worthy of an action research project undertaken by the programme's tri-partite community. Further study is required to explore the possibilities for learning via asynchronous and real-time technologies incorporating peer-to-peer interaction and collaboration, as well as interaction with teachers and online resources.

## What next?

My epistemological position, in this paper, is constructionist. I disparage the notion that the programme's aims require a prescriptive route, believing that many trajectories may achieve the learning outcomes deemed important. Thus there can be varying realities. My selection of this literature is partial and situated according to the specific instances upon which I have reflected. Furthermore, I am intricately entwined with the topic's complexity both as module leader and as a work-based learner in my own right - the epistemology of practice being evident in my learning. This constructionist perspective contrasts with a positivist view of reality where objective methods obtain concrete outcomes. This would be analogous to the detailed learning outcomes and prescriptive pedagogy evident in elements of the programme - an apparent mismatch that is subject to ongoing negotiation within the developing tri-partite partnership.

From my perspective I now question whether this programme's concept of WBL is sufficiently well-defined. Stepping back from the exigencies of running and delivering the programme might be a useful act to help identify where change could be mutually beneficial across the tri-partite partnership. Again, from my perspective, I would be keen to explore two areas for change. Firstly, the two controlling actors might consider loosening their control of learners' learning and involving learners more explicitly in the process. Secondly, I would welcome an environment where university faculty more consciously align themselves with this programme's WBL needs, rather than existing in disciplinary silos. Thus, we might create a durable structure. In outline, borrowing from Lewin's (1951) field theory, we could consider following his three step process to facilitate change, namely: unfreezing (rejecting the status quo), moving (adopting new practices aligned to emergent needs), and refreezing (settling into a quasi-stationary, new status quo) (Parchoma, 2006). A broad perspective programme review may assist and facilitate exploration of whether an alternative blend of learning mechanisms is appropriate to support this programme's WBL needs.

TEL holds some promise despite colleagues' and learners' limited understanding of, for example, how a virtual COP could provide benefit. However, the contract does not include funding for such TEL infrastructure. Initially I propose attempting to establish a COP for markers, to encourage them to explore its value, thus foreshadowing consideration of a COP for learners at a more 'propitious moment' (Parchoma, 2007:5). Parchoma's (2006) consideration of potential forces which may drive or restrain adoption of e-learning may be useful to reveal the mix of forces operating in this programme's situated context. As Parchoma (2006:238) recognises: 'learners need to balance commitments to learning, work, and family ... access to distributed learning options may be the most pragmatic solution to meeting their learning needs'. Likewise changes need to be contextualised with both partner's organisational structures and cultures to ensure that tensions are mediated successfully to maintain organisational health (Parchoma, 2007).

Furthermore, defining what excellent regulatory practice looks like will position us to create a learning environment to deliver what is needed – the how as well as the what. Closer adherence to the principles of WBL, allowing the learners to steer, and using technology to support learning, perhaps via a COP, may be worthwhile. The complexity and messiness of establishing a WBL programme is evident and reflection, by the university and partner organisation, is advocated to find a compatible path through contested issues – a process that will require 'considerable skill and courage' (Onyx, 2001:139).

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