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Valuing the development of practice, expertise and research in the continuing professional development of Vocational Education and Training Professionals

*Paper presented at European Conference
on Educational Research
(ECER 97 Conference)*

Frankfurt am Main, 24-27 September 1997

Dr Alan Brown
Institute for Employment Research
University of Warwick
Coventry, CV4 7AL

Tel: 01203 523512
Fax: 01203 524241
Email: Alan.Brown@warwick.ac.uk

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1. Abstract

The training of Vocational Education and Training (VET) professionals needs to be reflective, forward-looking and dynamic. It needs to give a solid conceptual underpinning in relation to a range of teaching, learning and assessment processes. It needs to equip those educating others with the ability to support the development of particular occupational skills, knowledge and understanding, as well as seeking to accommodate requirements for complexity and flexibility. The size of the tasks is daunting, and is only achievable with a commitment to continuing professional development within a culture which acknowledges the importance of developing practice, expertise and a research capability.

2. Context

This paper is one contribution to the debates being generated by the European Leonardo Research and Analyses (EUROPROF) project on 'New forms of education for vocational education and training.' EUROPROF focuses on the changing requirements for the education and training of VET professionals, with a key aim of the project being to develop and foster an innovative research culture for VET in Europe. It is in this context that the argument is made for the need for continuing professional development for VET professionals to take place within an approach that acknowledges the importance of developing practice, expertise and research in an inter-related way.

The aim of this paper is to make a particular contribution to debates generated by the EUROPROF project. Given this circumscribed intention, it is perhaps important to point readers to earlier contributions to these debates. In particular Attwell (1997a) gives an overview of the cornerstones of EUROPROF around which the project was constructed. Ellström (1997) argues that those involved in VET need to develop a broad developmental and interactive view of occupational competence, while Attwell *et al* (1997) draw attention to the significance of work-related knowledge and work process knowledge in the development of occupational competence. Attwell (1997b) further argues that if VET professionals are to play a transformative role in the education and training of others, then their own education and training needs to be transformed. This has implications for the type of continuing professional development which will be appropriate for VET professionals in future.

3. Developing practice

A teacher has to be able to apply their skills, knowledge and understanding in particular curricular and institutional contexts. Initially teachers usually have to acquire and apply their developing skills, knowledge and understanding within the context of either 'teaching practice' and/or within circumscribed work roles.

Initial competence is often associated with the ability to 'survive' and gradually assume a full position within the various 'communities of practice' within teaching (Lave, 1991). However, practitioners need to have a continuing commitment to explore, reflect upon and improve their professional practice. This in turn means that practitioners have to develop the understanding, skills and knowledge necessary to evaluate and review their professional practice, recognising that such practice often takes place in complex and dynamic contexts.

Indeed practitioners increasingly have to be able to manage continuing change in aspects of their practice and in the contexts within which their practice takes place, as well as coping with the complexities inherent in teaching and learning processes. This adds further impetus to moves whereby the competent teacher is seen as a 'reflective practitioner,' able to respond to professionally problematic contexts through reflection and 'reflection in action' (Schön, 1987). That is, the essence of competent practice is that the teacher is able to respond intelligently in situations which are sufficiently novel that the response has to be generated in situ (Elliott, 1990).

4. Developing expertise

The initial keys to going beyond competent practice lies in the capacity to understand ideas and concepts that inform practice and in the ability to transfer skills, knowledge and understanding from one context to another (Eraut, 1994). Engeström (1995) concurs that this ability to switch between contexts is fundamental to developing expertise in VET in a broader sense. Thus VET professionals have a responsibility to help their students develop poly-contextual skills, which will enable them to perform effectively in a variety of contexts, including when they work with groups with different kinds of expertise (Engeström, 1995).

Developing expertise also requires the ability to handle the complexity and inter-relatedness of issues. One aspect of this relates to the importance of developing representations of knowledge structures into appropriate mental models. These models may take the form of maps (Soden, 1993), schemas (Hesketh et al, 1989) or networks (Simons, 1990), which help people organise and apply what they have learned. The linking of concepts into networks is also associated with a deep learning style (Schmeck, 1988), another valuable characteristic associated with developing expertise. These models though have to be flexible enough, such that they are capable of handling increasing complexity and inter-relatedness of issues. Such models may contain implicit or explicit 'theories in use' and link to the way an individual is able to hold and inter-relate ideas from different spheres (practice, research and theory) to get a fuller, deeper contextualised understanding of professional issues, which affect policy and practice. The next step then revolves around the capability to apply that contextualised understanding to particular situations and, if appropriate, to translate that understanding into action.

Young and Guile (1997) argue that these types of demands represent a significant shift in the role of VET professionals, who are now required to possess a connective, rather than an insular, form of specialisation. As connective specialists, VET professionals will still need to retain specialist skills and knowledge, but they will also need to be aware how their specialism relates to other specialisms, the curriculum as a whole and to changing occupational and organisational patterns (Young and Guile, 1997).

There is clearly not a precise moment when one can identify a shift from 'competent practitioner' to 'expert', not least because it requires a degree of self-acknowledgement as well as recognition by others (Brown, 1997a). Additionally, there are dangers in simply equating expertise with hierarchy and the increased complexity of managerial tasks, in institutional terms. That is, some managerial tasks may require significant time for planning, co-ordination, development and implementation, but successful performance in these tasks relates to competence (or expertise) at a different set of functions, rather than representing a further stage in the development of expertise as a teacher.

Expertise rather lies at the conjunction of research, theory and practice, such that the practitioner can be considered 'reflective', not only upon action, but also upon 'reflection in action' (Schön, 1983). This means that an individual will be able to engage in processes of analysis and critical reflection, such that he or she is able to build understandings, interpretations and explanations to 'test' these against other research and theory as well as against practice. [A further test might be whether the individual can communicate her or his understanding in such a way as to convince others.] In such an interpretation the ability to be able to create new knowledge is significant (Engeström, 1995), and therefore in order to develop expertise it is important for practitioners to develop their research skills and be able to apply them to their professional practice. In an important sense then expertise is itself partly generated through research.

It should also be noted that understanding and, if appropriate, application of theory has a role within developing expertise. While the value of practical theory or 'theorising' in the sense of reflecting upon her or his own practice is central to the process of becoming an experienced professional (Schön, 1987), this on its own is insufficient. Rather because it is locked into current modes of practice, it is important that 'theoretical learning' is also developed (Guile and Young, 1996). Theoretical learning provides the concepts for analysing the problems that arise for professionals at work and for making explicit the assumptions underlying existing practice (Guile and Young, 1996). This conceptual knowledge can then be used to underpin reflection upon practice at a deeper level than just 'theorising' practice. Such conceptual knowledge can have both explanatory power and be applied to (changes in) practice. It therefore complements the development of practical learning, based upon reflection on practice. Crucially, however, the development and application of theoretical learning also facilitates a forward-looking perspective: enabling thinking about how practice **might** be developed in future.

## 5.	Developing a research capability

Those operating within the Action Research paradigm within education have long recognised the value of supporting the development of teachers as researchers (Stenhouse, 1975). Within the UK, this approach has achieved a degree of formal recognition through the set up of a scheme of Teacher Research Grants by the Teacher Training Agency (TTA). These grants enable practising teachers to undertake small-scale classroom-based projects on a variety of topics, to inform their own classroom practice and that of others. The results of these studies are subsequently published by the TTA as summaries of findings.

This approach was intended to be illustrative of a commitment to making teaching a research-based profession (TTA, 1996), where teachers' practice is not only informed by research, but new knowledge about practice is capable of being generated by teachers themselves. This entails explicit recognition that teachers have a key role to play in how new knowledge is generated and applied in practice. Further this could be linked with an attempt to create a wider community of practice that embraces research as a guide to both policy and action.

The ability to design and carry out authoritative research into aspects of professional practice individually or as part of a team is an integral part of practitioners developing a research capability. However, possession of research skills will also be valuable in helping professionals analyse, interpret, evaluate and, if appropriate, apply the research findings of others.

The whole thrust of VET professionals developing a research capability is that they will be able to test their developing understandings and interpretations against theory and research of their own and others, as well as against existing practice. This broad research capability therefore offers the prospect of being used as a tool to create new forms of knowledge and to transform current practice.

## 6.	Personal development

Personal change and development is central to the educational process, and this applies equally to teachers in their role as learners as it does with any other group of learners. So VET professionals have to be receptive to challenges to their ideas and existing patterns of thought and action. This requires a degree of self-directed critical reflection (Hammond and Collins, 1991), but reflecting upon and responding to change will also involve complex social processes in which the ability to communicate effectively is essential: with communicative competence opening up the possibility of more democratic dialogues with students, colleagues and others (Habermas, 1974). It may be that a range of communication skills require further development: for example, the ability to give constructive feedback, be an effective listener and engage in reflective summarising are all skills, which are often under-developed, even though they underpin effective communication in a range of contexts, including team-working (Brown 1997b).

## 7.	Inter-relationships

One of the problems with the preceding commentary is that it was focusing upon a number of strands which are heavily inter-connected. The rationale for the approach adopted in this paper was utilitarian: it was simply a way of moving towards, rather than starting with, a high degree of complexity.

However, if 'developing practice' subsumes a model of the reflective practitioner, then practice itself contains both a research dimension and aspects of personal development from the outset. This is because professional knowledge is itself regarded as a personal synthesis of situational understandings, derived from experimental learning and through a process of critical reflection. Guile and Young (1996) take this a stage further in arguing that in 'developing practice' more attention needs to be focused upon 'theory' itself, not just 'theorising practice.'
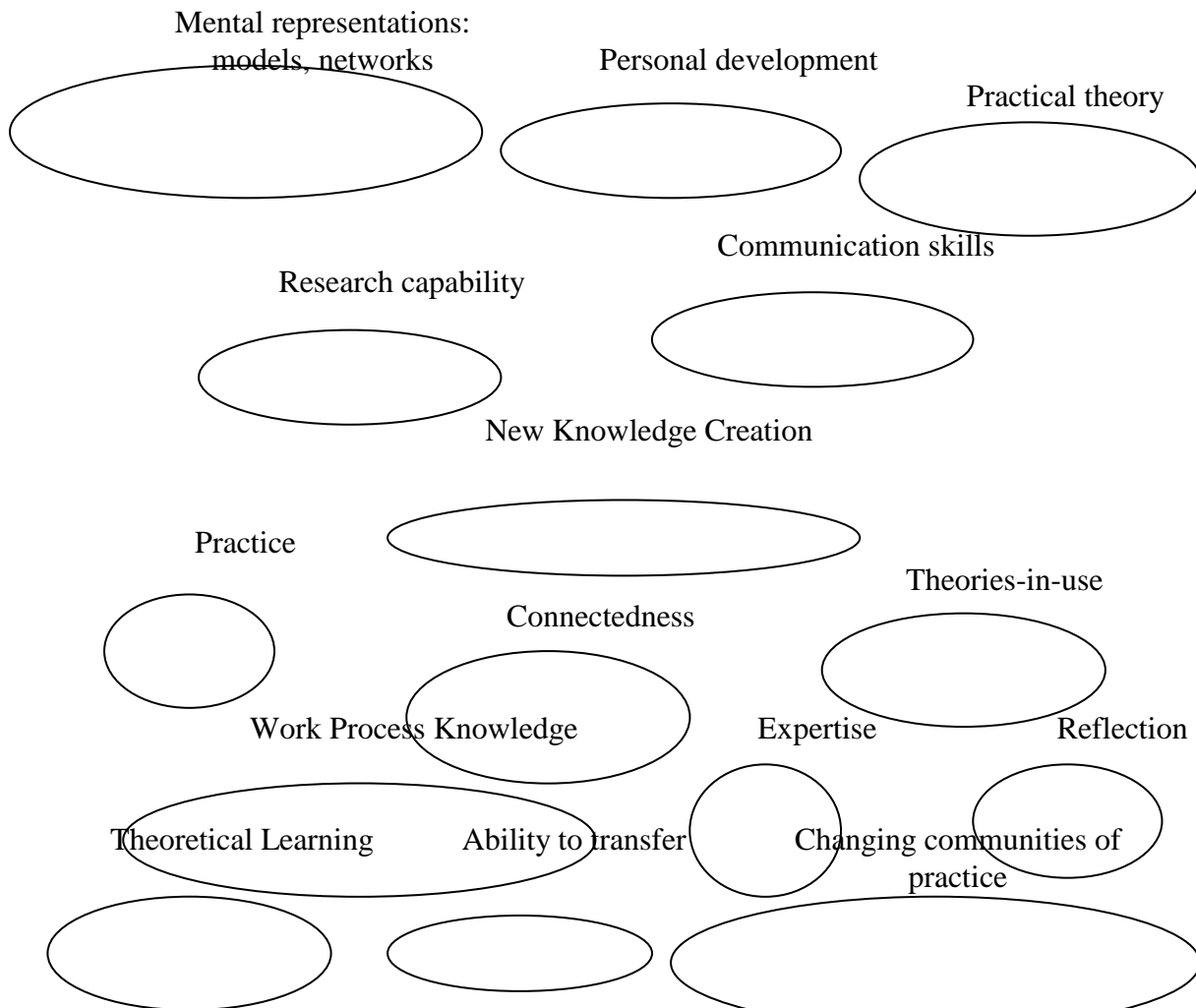
Continuing professional development has at its core a number of inter-related commitments. The most obvious is a commitment to personal development. The others include:

- exploration of, reflection upon and improvement of professional practice.
- development of skills, knowledge and understanding necessary to evaluate and review professional practice.
- need to understand processes of change (as practice increasingly takes place in complex and dynamic contexts).
- ability to create new knowledge.
- ability to transform current practice.
- development of theoretical knowledge to underpin and complement reflection upon practice.
- study of the interplay between theory and practice.
- need to be able to transfer skills, knowledge and understanding from one context to another.
- need to be able to support the development of poly-contextual skills in students.
- the generation of expertise through research.
- ability to handle complexity and inter-connectedness of issues (including through the formulation of mental models, schemas or networks).
- able to operate as connective specialists.
- the need for self-directed critical reflection.
- development of contextualised understandings.
- translation of understanding into action, as appropriate.
- further development of communication skills.
- attempt to create a wider community of practice that embraces research as a guide to both policy and action.
- ability to design and carry out authoritative research into aspects of professional practice.
- ability to analyse, interpret, evaluate and, if appropriate, apply the research findings of others.

8.   Conclusion

This brief review of aspects of continuing professional development for VET professionals has shown that the picture is complex. Indeed I struggled to try and find a way of representing the inter-relationship of key concepts in a two dimensional diagram. In the end, the task defeated me, so I settled for an 'open field' diagram without any indication of direction or strength of relationships: see Figure 1.

Figure 1: **Key concepts of relevance for the continuing professional development of VET professionals**

Now in order to give focus to arguments that continuing professional development should take a particular direction, it may be useful to emphasise a much smaller sub-set of these concepts (compare Schön, 1983; Lave, 1991; Engeström, 1995; Guile and Young, 1996; Attwell et al, 1997). I think the reason for selection of particular sub-sets depends upon the time, context and the purpose which the selector is trying to achieve.

So why have I opted to stress, in particular, the development of practice, expertise and research as providing an appropriate focus for the continuing professional development of VET professionals at this time? The choice of 'development of practice' is to convey some continuity with ideas about the need for 'reflective practitioners' (Schön, 1983; 1987); to acknowledge that there is still much to find out about 'work process knowledge' (Attwell et al, 1997); and because there is a need to acknowledge that many VET professionals could

benefit from informed reflection upon and engagement with changing patterns of work: practice is changing rapidly and practitioners do need support in developing their practice.

However, an exclusive emphasis upon 'development of practice' can have significant limitations, precisely because of its narrow focus (Eraut, 1994; Guile and Young, 1996). Hence the choice of 'development of expertise,' with expertise implying the need to go beyond the confines of current practice; to be informed by theory (theoretical learning); and for a transformed understanding of practice being used to inform changing communities of practice (Lave, 1991).

Finally, the choice of emphasis upon the 'development of a research capability' was made partly because the application of research skills underpin the development of practice and expertise, particularly as the processes which underpin such development are themselves dynamic (Brown, 1997a). The major reason for the choice though is because VET professionals will be increasingly faced with the requirement to create new forms of knowledge in the future (Engeström, 1995): this shift will see a research capability as a vital component to enable the VET professional to perform effectively.

A culture which acknowledges the importance of the combination of developing practice, expertise and a research capability would help ensure that the continuing professional development of VET professionals is reflective, forward-looking and dynamic. This would then help VET professionals 'model' the processes, characteristics and attitudes that they would wish to support in the vocational education and training of others.

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