

New possibilities for the professionalisation of VET professionals in the UK

Michael Young and David Guile
Post 16 Education Centre
Institute of Education
University of London

Introduction and aims of the paper

Vocational education and training (VET) in the UK and the state of training provision for VET teachers and trainers is at a crossroads. It has a legacy from the 19th century of systematic neglect which was well documented as long ago as the late 1980's (Finegold and Soskice 1988). On the other hand, there is an increasing awareness in the UK, on the part of both government and business, that in the future no country's economy will be internationally competitive if it is not supported by a high quality system of vocational education and training. There are already signs in the UK that current economic and technological changes together with a number of recent VET policy innovations designed to respond to them are placing new demands on VET professionals which go far beyond the fragmented and partial scope of existing provision.

The aim of this paper is to explore the possibilities of these for a new approach to the education and training of 'the VET professional of the future'. The paper has three sections. Section 1 provides a context for the later analysis by giving a brief description of the current state and status of VET and the training of VET professionals in the UK. Section 2 identifies the new demands on VET professionals that have arisen as a result of recent economic, social and technological changes and considers the range of converging and diverging forces that may pressure the new government¹ in the UK to re-consider both the strategic role of VET and, as a corollary, the professional status and training of VET professionals. Section 3 will argue that what is needed is not just an upgrading of the status of VET in the UK, but a new model of the VET professional based on the idea of the VET professional as a 'connective specialist' (Young 1993; Young and Guile 1994; Young and Spours 1995). The section goes on to set the context for discussions about the 'VET Professional of the Future' in two key debates; the first is that concerned with pedagogy in VET and the second with the potential of the new technologies of telematics¹. In common with much recent EU research in the field, we argue that the new technologies pose significant new challenges for both vocational education and training at work and in technical colleges, and therefore for VET professionals more generally.

¹ telematics refers to the new technology that is emerging as a result of the digitalisation of communications technologies and their being combined with computing.

The paper goes on to develop the elements of this model of the VET professional as a 'connective specialist', paying particular attention to the need for a new approach to learning and pedagogy and the new types of skill and knowledge that the 'VET professional of the future' is going to need. The model is based on an analysis of the competitive economic conditions faced by the UK (and other EU countries) and the new skill and knowledge demands that such demands will make on the preparation and continuing professional development of VET professionals. For such a model of the VET professional to become a reality, much will depend on the education and training priorities of the recently elected Labour Government, the relationship that the government develops with VET professionals, private sector employers and trade unions, and the vision each party develops of the function of VET. The recent IPPR report **Promoting Prosperity: a Business Agenda for Britain** (IPPR 1997) offers one view of what such a vision might look like and the priorities that the new government would need to adopt. At the time of finishing this paper, very little, except a commitment to lifelong learning, is known about the new government priorities in this field. We will therefore consider the possible implications of the IPPR report in Section 4 of the paper.

SECTION 1-The context

1. The current state and status of VET in UK

Unlike the case in a number of the countries of continental Europe, where there exists a relatively coherent and strategic set of concepts, institutions and personnel involved in vocational education and training, VET in the UK is made up of a disparate and fragmented set of activities undertaken by people with little in common in terms of either the job they do, the qualifications they have, their professional preparation and status or the location of their work. Any attempt to list VET professionals in the UK would need to include full and part time lecturers in Colleges of Further Education, teachers of applied subjects in the upper forms of secondary schools, lecturers in a number of departments of the new universities (especially those that up to 1993 were Polytechnics or Colleges), careers education and guidance counsellors, company-based trainers, and employees of private and charitable training organisations; there is also the small new VET (more usually referred to as Post compulsory Education and Training) research community that is emerging in a number of the universities, old and new. Some VET professionals are former apprentices and craftsmen (and occasionally craftswomen), some will have trained as technicians and some of them are graduates; some have had a year's full time professional teacher training, others have been trained part time and many have had no specialised VET teacher training at all (Young et al 1995). Only since the polytechnics became universities, has the university sector been involved more than marginally in the professional education of VET professionals, and only since the late 1980's has a tradition of VET research begun to emerge. The first specialist Masters Degree in VET was launched in 1989 and research concerned with VET is found either in general Education Faculties, in one of

the social science Faculties or in one of the Business Schools which has a tradition of research in Industrial Relations. There are no Departments of Vocational Education and Training in British universities and most university Departments of Education define their research field almost exclusively as related to schooling.

2. UK Employers, VET and VET professionals

Most English employers have little regard for vocational qualifications in their recruitment processes (Brown and Scase 1995), despite the fact that the Confederation of British Industry (CBI) and other employer organisations continue to advocate the importance of work-related or 'key' skills (CBI 1991, IIE 1995, CIHE 1995). UK employers use academic qualifications, at various levels up to university degrees, as screening devices for recruitment, while leading edge companies, which realise the need for their employees to develop new combinations of skill and knowledge, concentrate on their own in-house training (BT 1993, ICL 1993). Partly for these reasons, much of the recent expansion in post compulsory education has been expressed in the increasing numbers gaining academic qualifications; as a result, vocational qualifications have continued to be seen as little more than something for those who fail to get on to academic courses. National provision of VET remains associated with low skills and low status occupations and is extremely unevenly distributed across different sectors of business and industry (Ashton and Green 1996).

VET professionals themselves have been the poor relations within the UK's education and the business communities. DFEE statistics indicate that approximately 40% of staff working in the Further Education sector do not hold teaching qualifications (Young et al 1995), and the national picture for company-based or freelance trainers is similarly bleak. Historically, UK employers have not viewed training as sufficiently central to business success for it to be a major component of their corporate strategy (Coopers and Lybrand 1997); it is not surprising that the professional development of trainers has been a low priority (Keep 1994). Changing this state of affairs will be a daunting task which in some ways is getting worse. Throughout the early 1990s many UK companies were converting company training centres into independent business units, 'casualising' their VET workforce, and encouraging them to accept 'portfolio' careers (Training Tomorrow 1997).

3. Economic and Technological Change and VET policy

Since the mid 1980's, a number of social, economic and technological developments, global as well as European, are slowly forcing a reassessment of strategic significance of VET in the UK. It is beginning to be recognised that quality VET is important, both for the 'human' resources of organisations and the economic future of the country as a whole (EU 1996). At the global level, these developments include massive changes in the nature of workplaces, the increasing salience of knowledge in more and more types of work, and the growing recognition that all workplaces need to become 'environments for learning'. These issues have been extensively debated in industrial and political sociology, political economy (Piore and Sabel 1984,

Kern and Schumann 1985, Wood 198?) and management sciences (Drucker 1993). Furthermore, extensive debates are now emerging within sociology of organisations (Easterby-Smith and Burgoyne 1997), and the management literature about the impact of new technology upon the spatial and temporal organisation of work (Castells 1989 and 1996), the nature of manufacturing systems (Warner et al 1990), the professional identity of employees (Casey 1996), and in-company human resource development (Nyhan 1993, Tapscott 1995).

At the European level, we can note two significant developments. First, there has been the increasing role of the EU in VET through CEDEFOP and cross national projects within the Leonardo da Vinci programme such as EUROPROF, which is stimulating trans-European discussions about the role of VET and VET professionals within modern economies (Heidegger 1996). Second, the growing number of international companies that operate in a number of EU countries has helped to stimulate interest in international comparisons; this has meant that the possibility of 'policy borrowing' has at least been on the agenda of politicians, policymakers and VET researchers as never before.

At the national level in the UK, the combination of the collapse of the labour market for unqualified school leavers in the late 1970's and 1980's, the expansion of participation in fulltime education, and the government policy of using qualifications to drive VET policy and force the upskilling of both young people and those in work, have begun to bring the issue of a national VET strategy into the arena of public debate (IPPR 1990, NCE 1994), HMSO 1994; 1995; 1996). However, in the absence of a tradition of VET professionalism and research and with a government which has been inclined to view professional expertise, especially in education, as a form of anti-market restrictive practice, these new demands have had little impact on the provision of VET (Young et al 1995). The resulting void has been partly filled by a narrow competence-based system of vocational qualifications (NVQs) and a school based version that are neither academic nor vocational (GNVQs) (Spours 1997). The NVQ structure is too rigid to respond to the variety of needs of the range of workplaces and NVQs have only been taken up by a small minority of private sector employers (Robinson 1996, Senker 199x). NVQs are based upon a behaviourist view of competence as workplace performance and appear to be operational only in relation to low level skills (Hodkinson 199x). It is not surprising that they have been accepted at best halfheartedly by students, employees and the VET professional community alike; the only substantial take up has been in state agencies where government has been in a position to make them a requirement.

Section 2 - Forces for Change?

1. New demands on VET professionals

The extensive European research sponsored by the CEDEFOP programme is supported in its findings by the small amount of UK-based VET research; both point to five broad types of new demand confronting VET professionals

(Guile and Young 1995, Young et al 1995, d'Iribarne 1989, Danau 1991)². Firstly, there are the problems they face in promoting the acquisition of skills and knowledge by students, trainees and employees with a very wide diversity of learning needs and attitudes. This requires VET professionals to develop expertise in resource-based learning, modular curriculum design, and the potential of the new information technology as well as keeping up to date in their own vocational specialisms. Secondly, the responsibilities of VET professionals are no longer limited to the area, or location (e.g. workshop) of their specialist expertise; they need to know how to collaborate with other specialists (for example, those concerned with guidance, counselling and assessment), and with those working in different organisations than their own. Thirdly, VET professionals are increasingly called on to support their students/trainees in developing 'core skills, or 'key qualifications'; this requires them to be able to apply theoretical knowledge in new situations and to diagnose and solve problems in workplaces. Fourthly VET professionals are having to devise ways of helping their students/trainees to develop what Engestrom has referred to as poly-contextual skills (Engestrom 1995) - the ability to move confidently between groups with different kinds of expertise. This means that VET professionals themselves also have to develop 'poly-contextual' pedagogic skills and be able to move across boundaries that have traditionally divided different kinds of specialist teachers and trainers. Fifthly, VET professionals are increasingly faced with the wider challenge of:

'making contributions to developing the corporate identity of the college, company or training provider (that they work for) and assisting them to develop as Learning Organisations' (Guile and Young (1996)

Together, these demands point to quite new roles for the VET professional, and have radical implications for their training and professional development. The next part of this section looks at some of the factors that might be involved in promoting or impeding such changes.

2. Converging and diverging forces

Whether the new demands on VET professionals in the UK outlined in the previous section are resisted or become the basis for a new and broader role for the VET professional, will depend partly on the VET professional community itself, partly on the policies of the new Labour Government and partly on the approach to human resource development (HRD) of UK employers and trade unions. If a new government follows in the path of its predecessor and sees VET (and education more generally) as primarily a market good that employers, students or trainees buy if they see it as giving them a competitive advantage, little will change; the fragmentation and low status of VET and the VET professional community will continue. Similarly, it is possible, even if the government develops new policies that give a more

² The research has tended to focus on the demands on VET professionals working in technical colleges and other specialist VET centres, not those based in workplaces. In England, there has been a serious neglect of research on the impact of changes in work organisation on work based training itself. Our argument in this paper, however, is that the demands on workplaces and colleges are converging.

strategic role to VET, for the business community to fail to see beyond the profits still to be made by UK companies in producing low value added products using low wage, low skilled labour with little need for VET. Without a real change in priorities by both government and the private sector, dealing with the crisis of low levels of skills and knowledge in the UK workforce will be postponed yet again. On the other hand should a new government view VET as a 'public good' (Streek 1987) and pursue policies designed to achieve a 'high skill' (Finegold 1991) and a 'high added value product and service economy' (Keep 1995), investment in the training and development of VET professionals will be of paramount importance. Certainly, the Labour Party's commitment to the idea of a 'University for Industry' is a positive step in shifting the incentives for both companies and educational providers to invest in HRD. However, implementing the idea of the 'University for Industry' will be dependent on two further factors, the implications of which it is far from clear have been grasped by the new government. They are, firstly, the implications of establishing a telematic infrastructure capable of delivering on-line education and training to every work-site and home in the country and secondly, the need for a radical re-structuring of the UK's qualification system and mechanism for funding further education.

The new government inherits a somewhat 'poisoned chalice' as regards both the initial training and further professional development of VET professionals. The current pattern in the UK mirrors closely that of the provision of VET itself that has already been described (i.e. it is uneven and fragmented); furthermore, there are signs that it too could become trapped in the competence dogma of NVQs (Young et al 1995). The Further Education Development Agency (FEDA) is in the process of 'mapping' occupational tasks in the Further Education sector with a view of making all qualifications for those working in the sector competence-based. Since colleges became independent corporations, many have now established centres for the assessment and verification of NVQs, as potential sources of income generation. It follows, that whatever their professional views of NVQs, colleges may come to depend on them, both as sources of income and as a framework for the training of their own staff.

There are, however, other developments which offer at least the possibility of an alternative to the narrowness of the NVQ approach and, which could, at least potentially, provide the basis for the kind of approach to the professional development of VET professionals that we advocate in this paper. In the late 1980's, following on the success of its earlier Technical and Vocational Initiative (TVEI) in schools and colleges, what was then the Employment Department of the government (since merged into the Department for Education and Employment) established an Enterprise in Higher Education (EHE) programme and a Work Based Learning in Higher Education Programme. Both have led to a raising of the profile of Human Resource Development in colleges and universities as well as, in some cases, amongst the employers linked to them (Winter and Maisch 1996), and their role, especially the universities, in VET. Together with the signs of a shift towards interdisciplinary knowledge, at least in the new universities (Gibbons et al 1994), these initiatives have raised new questions about the relationships colleges and universities as VET providers, and private sector employers,

and between the different types of learning that are possible in workplaces and in colleges and universities. A second development has been the attempt by NCVQ, supported by some universities, to use their competence model to replace more traditional approaches to professional education. This has had two important, if unintended outcomes. In opposition to the NVQ approach, there has been a call for a return to older traditions of liberal professionalism, albeit in its contemporary Habermasian form (Barnett 1995). On the other hand, there have also been a variety of attempts to develop a modern definition of professionalism (Eraut 1996, Winter and Maisch 1996, Guile and Lucas 1996, Young et al, Young and Spours). It is to these latter attempts that we turn in the next section of the paper.

Section 3 - A new concept of the VET professional

1. Introduction

The previous section referred to five new types of demand on the VET professionals of the future. We argued that VET professionals would need a new basis for relating their specialist vocational knowledge to the needs of learners, a new approach to relating theoretical ideas to their practical application, new ways of collaborating with other specialists and with those in other organisations and new ways of relating their work to the overall purposes of their organisation, whether a company, a college or a training provider. We conceptualise the shifts in role involved in terms of the distinction between *insular* and *connective* specialisation as ways of describing both the knowledge base and the relationships that typify the VET professional. In this section of the paper we will develop this distinction in terms of its implications for the VET curriculum, VET pedagogy and approaches to learning, the potential of new learning technologies for supporting and enhancing VET pedagogy and approaches to learning, and finally, for the concept of the VET professional of the future and his or her initial and continuing education. In the final section we will consider a political and economic scenario in the UK that might provide the conditions in which such a new approach to VET might be developed.

2. New knowledge and skill needs and their implications for the VET curriculum

In the last decade, a number of skill audits have been carried out by UK and EU research institutes concerning the future of work and the associated skill requirements (Rajan, IES, CEDEFOP); these audits have drawn similar conclusions to broader based global analyses (Reich 1991) and have highlighted three important trends. Firstly, they have demonstrated a shift away from classifying occupations either on the basis of a set of technical specifications or a concept of occupational field. This body of research points to the emergence of a more systemic approach to occupational roles that combines 'occupational' and 'organisational' capability' (Prospect Centre 1993) and of more generic types of occupation that might be found in any number of sectors or fields (Reich 1991). Secondly they describe the new

forms of work becoming available that are firstly requiring people with conceptual skills and knowledge as well as the ability to apply knowledge in specific situations, and secondly requiring people to accept responsibility for managing work processes and assume responsibility for the outcomes of such processes (Hayes 1997). Thirdly, they point to the increasing use of information technology within workplaces, the expectation by senior managers that all employees are 'IT' literate and the extent to which existing managerial hierarchies have to be challenged if the investment in IT is to be productive (Zuboff 1988) .

If occupational skill demands are going to require higher level conceptual understanding, then it follows that the demands on VET professionals will also be of a higher level (Guile and Young 1996). Moreover, in an economic context where occupations sometimes disappear during the period which it takes for people to become qualified, it no longer makes sense for the VET curriculum to be based on the tasks associated with specific occupations or even groups of occupations if they are treated as existing relatively separately from each other. These changes in occupational structure have led to various attempts to make VET provision more flexible through the modularisation of the curriculum; the most well known example Scotland (Lasonen 1996). However, modularisation is not like an innovation in the content of the curriculum - e.g. the introduction of electronics. If modularisation is to lead to more than a fragmentation of learning, a structural change in the relationship between different VET and general education specialists is needed.

Although modularisation as a strategy for increasing flexibility applies to both the college-based and the workplace curriculum, much of the focus of research has, as in other areas, been on the college and therefore on the implications for VET professionals based in colleges. The following discussion draws on UK based research (Young 1995, Hodgson and Spours 1997), though there is increasing evidence of similar developments in other EU countries³

The key characteristic of a *modular* in contrast to a traditional or *non-modular* curriculum is the reduced length of units of study. This means that students are no longer forced to make once and for all decisions prior to entering a programme. In a modular curriculum, students, in discussion with their tutors, make decisions about their curriculum as they progress through the programme and in relation to their learning needs. Learning needs of students are increasingly likely to change during the period in which they are studying, partly because students may face specific learning barriers, partly through changes in their aspirations, and partly through signals from the labour market that some opportunities are diminishing and others, requiring different combinations of skill and knowledge, are opening. Modular curriculum supports the opportunity for a student to develop a personal curriculum over time. However, if a modular curriculum is really to support student choice in enhancing her or his own learning, considerable guidance responsibilities are placed on VET professionals. This will require new expertise; for example, they will require knowledge of different labour

³ For an up to date series of papers on the topic of modularisation, see the special edition of the CEDEFOP Journal **Vocational Training** (No.7 January -April 1996/1) on *Pedagogic Innovation*.

markets and curriculum specialisms. Furthermore, unless VET professionals have an understanding of the curriculum as a whole and its changing context, the flexibility offered by modular courses could fragment and lead to a fall in standards of learning as it has in the USA. This need to understand the relationship between their specialism and the curriculum as a whole, as well as the ways that students can bring modules together into a coherent curriculum is the first way in which a shift in the VET curriculum and in the role of VET professionals from being *insular* specialists (e.g. as teachers of metalwork) to becoming *connective* specialist is expressed. As *connective specialists*, VET professionals will need to retain their specialist skills and knowledge (in fields such as metalwork or electronics) but they will also need to know how their specialism relates to other specialisms and the curriculum as a whole as well as its links with an increasingly fluid and changing occupational structure.

3. Changing pedagogies- from transmission and experience to 'collaborative apprenticeship learning'

Traditional VET pedagogy involved a combination of learning by doing (or, as it was often known, 'sitting by Nellie!'), and the relatively mechanical transmission of specialist technical knowledge. Neither process demanded any special pedagogic skills on the part of the VET professional. It has only been since the 1970's in England that it has been compulsory for graduates to be trained if they wanted to become school teachers; it is, therefore, not perhaps surprising, that training of technical teachers has never been compulsory and has been limited to a one year course of study for certificates which do not give automatic access to higher degree study to those who hold them.

Recent White Papers (DTI 1994, 1995, 1996) suggest that the UK government has, at least in part, accepted the argument that a workforce capable of becoming lifelong learners is needed to respond to global economic and technological changes. One consequence of this has been the creation of the Modern Apprenticeship scheme which is designed to attract young people "with relatively high attainments at 16+" into employment-based training schemes. However, what the scheme fails to make explicit is the new kinds of skills and knowledge that qualified employees in the future are going to need. Nor are the staff development implications for colleges or companies, of recruiting high attaining pupils on to work based schemes been considered, or how VET pedagogy may need to change if the modern apprentices are to acquire new 'intellective skills' (Zuboff 1988). The White Papers make no reference to how VET professionals can be helped to make the shift from a pedagogy based upon knowledge transmission and 'learning by doing' to a more collaborative approach to apprenticeship learning. Within the context of this paper we can only offer a brief indication of what may be involved in affecting such a shift.

We would argue that though the idea of apprenticeship, with its focus on learning through work is useful, the traditional model is inadequate and needs to be re-conceptualised as a broader-based 'social theory of learning'. Our approach is derived from recent developments in 'activity theory' (Lave

1989, Lave and Wenger 1991, Engestrom 1993, 1995). Lave and Engestrom have extended Vygotsky's concept of the 'zone of proximal development' (Vygotsky 1981) from its usual role in providing a pedagogic underpinning to teacher/pupil learning relationships, so that it embraces the social and material dimensions of learning.

Lave and Wenger have identified what they define as a 'societal' perspective on the 'zone of proximal development'. They have two main concerns. Firstly, they identify how social structures and social relationships influence the process of learning over time. Secondly, they identify the importance of relationships between the contexts of learning- what they refer to as 'communities of practice'. They see opportunities for learning taking place through what they describe as 'legitimate peripheral participation' within such communities, and through access to the human and technological resources that support learning. Engestrom, on the other hand, concentrates on reconceptualising workplace activity as a learning context. He shows that it is inadequate to rely solely upon expert definitions of what is to be learnt and suggests that learners need to be encouraged to identify the contradictions or puzzles that exist within existing bodies of knowledge and working practices. In this way learning is no longer just picking up existing knowledge but creating new knowledge.

Taken together the work of Lave and Engestrom opens up the possibility of a new approach to learning that is as applicable to classrooms as to workplaces. Such an approach takes account of the interactional context of any learning, the material and social context of work, the value and importance of different forms of domain knowledge and the potential of technology as a resource for learning. The challenge posed for VET professionals is how to use such an approach to develop and improve their pedagogic practice and their relationships with colleagues, students and trainees. Some of the issues that such an approach raises are:

- how to provide opportunities for learners to relate scientific and everyday concepts while diagnosing workplace problems and developing innovative practices;
- how to assist learners to find ways of becoming part of new 'communities of practice'. These may be physically located in workshop or factory or distributed through internet connections;
- how to assist learners to develop skills in 'boundary crossing' between areas of expertise that are mediated by different 'communities of practice'.

4. The potential of telematics for enhancing VET pedagogy and learning

Understanding the potential of telematics- the combination of telecommunication networks and computer technology -is crucial for the VET professional of the future for two reasons. The first has already been referred to briefly- the ever extending role of IT in workplaces, and therefore the need

for IT literacy to be a part of any VET programme. The second reason is the potential of telematics for transforming access to, the location of, and the overall process of education and training. This has been widely noted within the EU (Eraut 1991, Nyhan 1991). Moreover, extensive research has been conducted on the relationship between telematics and (i) the design and delivery of vocational training (Fagniers 1991), and (ii) the training of trainers (Danau 1991, Leclercq 1991). Nevertheless, research within this field up to date has failed to address the specific potential of telematics in supporting the shifts in pedagogy that we have argued are necessary for VET professionals.

Two weaknesses have been a feature of the research on the role of telematics in VET. Firstly, it has failed to fully appreciate the difference between 'old' media technologies (such as TV, radio and video), which are one way **broadcasting** media, and the 'new' technology of telematics which is an **interactive** medium. In other words, telematics has the capacity to support enquiry, dialogue and collaborationⁱⁱⁱ between those working on different sites, in different organisations and even in different countries. Secondly, research on VET and telematics has developed within a pre-existing distance learning paradigm. This means that it has taken over a set of ideas found in adult education (for example, andragogy, self-directed learning, individualised methods of tuition and facilitating learners) which are still trapped within a notion of learning as the individual acquisition of skills and knowledge. It follows that, although VET research has stressed the need for a change from traditional transmission models to more open and facilitatory styles of **assisting learners**, it has done this within an individualistic model of learning. One consequence of this has been a failure to exploit the potential telematics for approaching learning as a **collective process**^{iv}

To exploit this potential of telematics, VET professionals will need to extend their specialist knowledge and skill to using it to promote 'learning conversations' amongst trainees, apprentices and employees on different sites and with different experiences as a way of helping them participate in existing 'communities of practice' and building new ones.

5. The VET professional of the future as a connective specialist

In earlier work (Young and Guile 1994; Young and Spours 1995) we identified the key features of the 'professional of the future' and the conditions which would be necessary if such a model is to be realised. This brings together the analysis the VET professional in the previous sections of this paper. We found it useful to distinguish between those characteristics of traditional professional occupations (the first four listed below) and which we can refer to as indices of 'insular specialisation' and those characteristics that are additional to those associated with the traditional professional and relate to the new circumstances facing VET professionals; we refer to the latter four features as emerging characteristics of the VET Professional as a 'connective specialist' (Young 1993).

The seven characteristics of the VET professional of the future are described in more detail in the papers referred to. Here, we list them as:

Traditional features of Professional occupations

- (i) **technical competence** - the specialist skills and knowledge associated with any sector or category of work
- (ii) **underpinning knowledge** - the theoretical knowledge that enables the VET professional to relate specific problems in her/his field to the wider political, economic and cultural context
- (iii) **practical experience** - the actual experience of tackling real problems under all the constraints of time and resources
- (iv) **ethic of responsibility** - for their work, their colleagues and their organisation

Additional Features of the Professional of the Future

- (v) **research and innovation capacity** - not just associated with R and D departments or universities but with all VET professionals
- (vi) **customer/client awareness** - an explicit concern with new markets and new learner needs
- (vii) **flexibility** - as expressed in the development of 'polycontextual' and 'boundary-crossing' skills and the ability to contribute to an organisation's strategic needs
- (viii) **telematic-based learning** - making decisions about whether to use telematic media, and which telematic media and under what conditions to use them as a resource for learning.

The infrastructure for VET in the UK at present is as we indicated in the first part of this paper, far from conducive to the kind or model of a VET professional we have outlined. A strategy for developing such an infrastructure would, we have argued, need to be based on three principles as follows:

- ∑ **developing new forms of institutional collaboration** - between VET providers (universities and colleges and training organisations) and industrial, service and commercial organisations
- ∑ **developing common criteria for skill and knowledge development** - these could then be applied both to initial training and the further professional development of VET professionals
- ∑ **theoretical enhancement of programmes** - strategies would need to be developed for enabling students/trainees/employees to create theoretical models for identifying alternative solutions to problems

Section 4 -A scenario for the VET Professional of the future

In the previous section we argued that the conditions for the emergence of the VET professional of the future are, in most aspects, absent in the UK context. However, a recent report by The Commission on Public Policy and

British Business produced the Report **Promoting Prosperity: A Business Agenda for Britain** (IPPR, 1997), was published which offers a step by step approach towards creating such conditions. The Commission consisted of the Chairman or Chief Executive of nine major UK based companies together with four universitybased researchers and the General Secretary of the Trades Union Council. It identifies human resources as one key component of any strategy for improving UK business performance, and makes specific recommendations for:

- the reform of qualifications
- mandatory traineeships for all 16-19 year olds
- increasing the funding flexibility of local Training and Enterprise Councils to facilitate the promotion of improved employee training
- elimination of funding biases which act as disincentives to adult learning
- a 'business angel' approach to training for managers in small and medium enterprises (SMEs)
- promoting the use of advanced information networks in adult education and training.

These recommendations, together with the more strategic approach to business performance on the part of companies that the Commission calls for, would, if put into effect by the new government, transform the context in which VET could develop in the UK. The report makes no explicit reference to VET professionals. However, none of the proposals would have their intended outcomes without the kind of transformation of the role and practice of VET professionals that has been suggested in this paper. Unlike nearly all reports on education and training in the UK in the last decade which have either come from the education profession or from government, **Promoting Prosperity** is a private sector voice marking the end of polarities between market competition and government regulation and between private and public investment. It sees 'light but clear' regulation as supporting business competitiveness and public investment, especially in education and training, as compensating for when markets fail rather than as an end in itself. The report challenges many vested interests, both in the public and private sectors, and will take a determined new government to bring into effect. It is however, a possible scenario within which the new possibilities for VET professionals discussed in this paper, might be realised.

Footnote 3. It must be acknowledged, however, that the implications of these audits stand in stark contrast to the policy adopted by the UK's NCVQ programme for mapping occupational standards (see the special edition of the British Journal for Education and Work 1996).

ⁱA new Labour government with a large majority was elected for a five year term on May 1st 1997

ⁱⁱ

ⁱⁱⁱ the significance of the new possibilities offered by telematics is that they encourage collaboration within 'communities of practice' (Lave 1993) that are not necessarily located on one site.

^{iv} Many would agree with Lave (Lave 1996) and Engestrom (1995) who argue that all human learning beyond that based on low level reflexes is fundamentally 'social' in nature.