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Minimalist Reductionism in the English VET Curriculum: The Case of Competence-Based Education and Training

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Introduction: Origins of Competence-Based Education and Training

The story of how competence-based education and training (CBET) was introduced into vocational education and training (VET) in England through the establishment of the former National Council for Vocational Qualifications (NCVQ) in 1986 has been told by many commentators in the field (Burke, 1995; Bates, 1998) including myself (Hyland, 1994). The foundations for a major overhaul of VET were established with the publication of *A New Training Initiative* by the then Department of Employment, though this itself can be viewed as a continuation of earlier training programmes designed to deal with massive youth unemployment in the 1970s and 1980s. From the very start, accountability in terms of ‘outputs…the standards that need to be achieved at the end of the learning programme’ (Jessup, 1990, p.18) was predominant. There was an insistence that at the heart of the initiative lie standards of a new kind, and it was the pursuit of such standards – based on competence outputs constructed through the functional analysis methodology of CBET – which was to provide the driving force for the development of national vocational qualifications (NVQs).

Following the publication of the White Paper *Working Together – Education and Training* (DOE/DES, 1986), the NCVQ was established with a remit to design and implement a new national framework of vocational qualifications with the aim of securing national standards of vocational competence throughout all occupational sectors. From the outset, the key aims of the NCVQ were to ‘improve vocational qualifications by basing them on standards of competence required in employment’ and to establish an NVQ framework which is comprehensible and comprehensive and facilitates access, progression and continued learning’ (NCVQ, 1989, p.2). The NCVQ was not itself an awarding body but undertook to accredit or hallmark qualifications awarded by other bodies such as City and Guilds, the Royal Society of Arts and the Business and Technology Education Council insisting that it would ‘only accredit qualifications which met employment needs’ (ibid., p.3).
All NVQs had to consist of ‘an agreed statement of competence, which should be determined or endorsed by a lead body with responsibility for defining, maintaining and improving national standards of performance in the sectors of employment where the competence is practised’ (NCVQ, 1991, p.1). Eleven occupational sectors were identified and these generated over 180 lead bodies. The agreed statement of competence in each occupational sphere ‘should be derived from an analysis of the functions within the area of competence to which it relates’ and had to be linked to ‘performance criteria’ which ‘identify only the essential aspects of performance necessary for competence’, in addition to ‘range statements’ which ‘express the various circumstances in which the competence must be applied’ (ibid., pp.2-3).

This process of functional analysis used by lead bodies to determine competence involved the identification of the ‘expectations in employment as a whole…breaking the work role for a particular area into purposes and functions’ (Mitchell, 1989, p.58). The end result was the identification of ‘key purposes’ for all the various occupational sectors, accompanied by ‘units and elements’ linked to relevant performance criteria and range statements (see Fig. 1 below).

*Business Admin Unit here*

**Fig. 1: Example of NVQ Units and Elements**
Source: Hyland, 1994, p.7

In addition to all this, there was a precisely defined hierarchy of five levels of competence (see Fig. 2 below), from basic, routine tasks at level 1 to advanced management and supervisory functions at level 5.

*Hierarchy eg. Here*

**Fig. 2: The NVQ Framework and Levels**
Source: Hyland, 1994, p.7
After the NCVQ framework was given official government endorsement as a model for future education and training reform in the 1991 White Paper *Education and Training for the 21st Century*, there was an increasing tendency – now codified in all official statements about qualifications pathways and levels – to use the five NCVQ levels to indicate some kind of equivalence between NVQs and other vocational and academic qualifications. This resulted in the three-track system – with the broad vocationalism of general NVQs (GNVQs) introduced in 1992 forming a middle track between A-levels/degrees and occupationally-specific NVQs– illustrated in Fig. 3 below.

*Three-track eg here*

Fig. 3: The Three-Track Qualifications Framework
Source: Hyland, 1999, p.90

A Critique of the UK CBET System
Following a number of critical reviews and reports about the work of the NCVQ throughout the 1990s (Smithers, 1993; Beaumont, 1996;), the NCVQ was abolished in 1997 and subsumed under the overarching Qualifications and Curriculum Authority (QCA). In my own critique, I argued that NVQs – and indeed all programmes and qualifications supported by CBET functional analysis – were ‘logically and conceptually confused, epistemologically ambiguous, and based on largely discredited behaviourist learning principles’ (Hyland, 1994, p.x). This conclusion was supported by philosophical argument, policy analysis and empirical research, and it would be useful to summarise the principal shortcomings of NVQs and the CBET approach which underpins them under the following headings.

*Inherent flaws and weaknesses*

The replacement of traditional VET programmes with NVQs has led to widespread deskilling of occupational roles, a loss of significant theoretical content and a systematic narrowing and delimiting of vocational focus in fields such as construction, plumbing and electrical installation, and in hairdressing, catering and business studies (Hyland, 1999). Perhaps this was to be expected from a system which – according to its proponents – is concerned only with the assessment of competence in the workplace and has ‘nothing whatsoever to do with training or learning programmes’ (Fletcher, 1991, p.26). Raggat’s (1994) survey of a wide range of
NVQs offered in FE colleges concluded that staff considered the approach to be far too ‘minimalist’ with a content which was ‘too narrow, concerned only with the performance of simple tasks’ (p.66).

The major Beaumont (1996) review of NVQs – despite the fact that it was accused by one of its more critical members, Alan Smithers, of soft-pedalling in order to hide fundamental problems and shortcomings – still could not disguise the fact that ‘there was a lack of clarity about who [NVQs] are aimed at or what they relate to’ and that the ‘existence of concerns about consistency is enough in itself to threaten the credibility of NVQs’ (Beaumont, 1996, pp.2,36,38). More importantly, the many problems and anomalies subsumed under the innocuous and superficial label of ‘language’ problems in Beaumont were, for the most part, not superficial but quite serious defects inherent in the CBET system of functional analysis and its behaviourist underpinnings. As Ashworth (1992) concluded, the NCVQ system was seeking to implement an approach based on learning outcomes which was ‘normally inappropriate to the description of human action or to the facilitation of the training of human beings’ (p.16). On a more practical level, Grugulis (2002) has argued that NVQs are almost always less effective in transmitting and assessing technical skills and knowledge than the qualifications they replace, and Oates (2004) suggests that occupational knowledge and practice cannot be adequately described by a series of technical statements of competence.

**Employer and Industry Involvement**

A number of surveys in the 1990s indicated that employers – who are supposed to be the key players in the NCVQ system which prides itself on employer-defined standards – are ignorant or indifferent about NVQs or, where they have experience of them, see many faults with CBET. A national survey by the Further Education Funding Council (FEFC) revealed a ‘widespread lack of knowledge about NVQs, particularly in small firms, and an unwillingness on the part of many of them to become involved in workplace training and assessment’ (FEFC,1994, p.22), and similar findings were reported in a 1995 study by the Institute of Employment. As Smithers (1996) commented, the ‘more employers know about NVQs the less they like them’ (p.2). Key factors in the low take-up of NVQs were reported in a survey by the National Foundation for Educational research (NFER) in which ‘the time and cost involved’ and ‘their perceived lack of credibility or commercial advantage’ (Nichols, 1998, p.36) were highlighted. Similarly, in the 1995 Ernst and Young evaluation of Modern Apprenticeships it was noted that one of the problems of encouraging employers to join the scheme was the difficulty of having to convince them of the benefits of NVQs (Hyland,1999). More recent DfES research has indicated that –
even amongst those employers who have been persuaded to use NVQs – there are still complaints about the bureaucratic nature of the system and its lack of fit with current business needs. There is a special difficulty also with small employers – accounting for 90% of all firms and around 35% of the total workforce – who overwhelmingly view the NVQ system as being irrelevant to their requirements (Winch and Hyland, 2007). The most recent survey of employer perceptions of NVQs (Roe, Wiseman and Costello, 2006) painted a ‘fairly negative picture’ since ‘fewer than half (45%) of all employers in England have any useful understanding of NVQ’ (p.75). The researchers go on to observe:

Nor has NVQ achieved its original objectives to supplant existing qualifications and to become the major system by which vocational skills are certificated in England...It appears that not only has NVQ not, as intended, reduced the immense array of existing qualifications, but has added its own substantial complexity to that array...When it came to employer evaluations of NVQ, some further evidence of employers’ more frequent preferences for non-NVQ qualifications came through. More employers would prefer candidates for recruitment to have a non-NVQ vocational qualification or an academic qualification than an NVQ. (ibid.,p.75).

How are we to understand such findings against the background of the original claim that NVQs were designed to be employer-led at all stages? There is, in fact, little evidence to support the claims about the ‘employer-led’ nature of competence standards and criteria of assessment. The occupational standards tend to be devised by certain approved private consultancies, and the so-called employer representatives on Industry Lead Bodies tend to be made up of training and personnel managers plus a ‘wide sprinkling of consultants, some of whom have a long history of involvement in the Employment Dept and its quangos’ (Field, 1995, p.37). Moreover, comparisons between different occupational groups in Britain, France and Germany (Prais, 1995) have shown that NVQs are too narrow in scope and too concerned with lower level, task-based activities to raise the general level of workforce skills. The vast majority of NVQs have been awarded at level 2 (DfES, 2006, p.3) – the equivalent of 5 GCSE grades at A-C – and there is still a dearth of intermediate technician qualifications at level 3 and above in areas of skills shortage. The Beaumont Report (1996) revealed that 90% of firms surveyed would only give credence to NVQs awarded by other employers – rather than by colleges or private training providers – yet the most recent statistics show that 82% of awards are made through the FE and private training routes (DfES, 2006, p.4).

Problems of Assessment

There never has been much evidence to demonstrate the superiority of CBET over other systems of assessment (Tuxworth, 1989). What needs to be added to the difficulties experienced over the last twenty years with NVQs is the growing body of
evidence which indicates the vulnerability of the system to abuse and impropriety (Bell, 1996). In a 1993 Employment Department (ED) report on NVQ implementation, a number of ‘assessment difficulties’ were noted including ‘the cost, the amount of paperwork involved, practical difficulties of assessment in the workplace, and problems about the reliability of assessments’ (ED, 1993, p.35). Similar problems of consistency were noted in the Beaumont review and reflected increased emphasis placed on requirements for ‘sufficiency of evidence’ in workplace assessments. Difficulties in ensuring reliability is a particular problem for CBET systems since they are based unashamedly on criterion-referencing with a primary emphasis on content validity. Such strategies are characterised by ever-increasing demands for specification of content and prescriptive procedures: As Wolf (1995) observes, the more systems are based on extremely demanding and rigid requirements – as has happened with NVQs – the more likely it becomes that factors which are technically extraneous to assessment will in fact preclude effective and high-quality assessment from taking place (p.125).

In the more recent survey of employers’ use and perceptions of NVQs, the researchers concluded that the ‘attempt to specify competence in terms of extensive lists of behaviours leads to confusion, ambiguity and unreliability’ (Roe, Wiseman and Costello, 2006, p.6). The cost of adopting such approaches – influenced by Jessup’s (1991) call for NCVQ assessments to ‘just forget reliability altogether and concentrate on validity’ (p.191) – has been high indeed, and paid for by the many assessment anomalies and the correspondingly poor regard in which the qualifications are held.

In addition to such technical problems, the combination of a post-school funding regime based predominantly on outputs linked to the award of qualifications with an NVQ system defined in terms of outcomes – described by Hodkinson (1997) as a ‘lethal cocktail’ (p.7) – resulted in assessment abuses on a large scale. A University of Sussex survey of NVQ assessment practices reported that almost 40% of assessors admitting passing sub-standard students, and this has been accompanied by as number of cases involving the award of certificates to ‘bogus’ students (Hyland, 1999). The 1997 report of the Public Accounts Committee noted that ‘incorrect’ payments from the DfEE to NVQ providers had totalled £8.6 million in 1995/96, a figure which the education human rights charity Article 26 described as merely the tip of the corruption iceberg (Bell, 1996). Although it has to be said that assessment and monitoring has been tightened up in recent years following a number of government reviews – and also that anomalies can occur with any type of examination system –
the peculiar nature of exclusively outcomes-based criterion-referencing strategies makes them extremely vulnerable in this respect.

Not only have CBET and NVQs failed to remedy the perennial difficulties of English VET, the NCVQ experiment has, arguably, served to downgrade the status of vocational studies by giving certain kinds of vocational training (as YTS did in the 1970s) a very bad name. NVQs are, of course, still part of the UK VET system though the original aims of covering the whole of the workforce with competence-based occupational standards have been abandoned with the demise of the NCVQ. It was, perhaps, unrealistic anyway to expect that a system which was, after all, designed solely for workplace assessment to have anything more than a 'niche' place in the national system. NVQs cover no more than 10-20% of occupationally-related qualifications (with only 12% of the workforce holding an NVQ and 16% of employers in England using NVQs; Roe, Wiseman and Costello, 2006, pp.13,75) and most learners in PCET – around three-quarters of all learners in the sector (DfES, 2006) – are doing GNVQ programmes of broad vocationalism. In addition, almost a million vocational awards made in 2004/5 fell outside the National Qualification Framework (NQF) of G/NVQs and Vocational Certificates of Education (vocational GCSEs/A levels), amounting to around half of all vocational qualifications (ibid., p.1).

The fact that the NVQ system persists – and, indeed, has been exported to other countries – can be explained by the aggressive marketing and commercialism of the international market for pre-packaged VET commodities (Hyland, 1998, 2006) combined with powerful political pressures concerned with face-saving (given the massive public investment in NVQs) and the irresistible appeal of apparently quick and easy solutions to difficult educational and economic problems. It was, for instance, obviously a rich mixture of largely non-educational and political vested interests which inspired the major project reported by Arguelles and Gonczi (2000) involving the mapping of the impact of CBET on educational systems in Mexico, Australia, New Zealand, Costa Rica, France and South Africa. The upshot of this massive public investment (with World Bank support) is summed up by Gonczi in the remarkably frank conclusion that:

Industrial survival in the competitive workplace depends on innovative solutions to improvement which is the antithesis of prescribed procedures (as laid out in competency standards). We are left with the conclusion that the foundation of the CBET system is shaky at best (p.26, emphasis added).
Summary and Conclusion

The obsession with minimalist performance statements and competences in recent VET reform programmes in the UK can be explained in terms of a mistaken reductionism motivated by the desire to find quick and easy solutions to long-standing and complex problems. However, both NVQs and CBET are ill-founded, imprecise and are anti-educational in their conceptions of knowledge, theory and work-based learning. What is required to solve the perennial problems of VET is a genuinely national system of VET provision – involving the state partnerships of government, employers and unions characteristic of the French and German systems (Green 1999) – VET programmes grounded in relevant knowledge, theory and values, and a qualifications framework in which vocational and academic tracks have parity of status and esteem in terms of overall planning and funding. It is to be hoped that the new VET plans for England – including the phasing out of GNVQs and the introduction of vocational diplomas which are not competence-based but incorporate well-founded work-based learning (Winch & Hyland, 2007) – will help to solve some of the perennial problems in this crucial sphere of educational provision.

References


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Nichols, A. (1998), 'Too much fuss and bother?', *Times Educational Supplement*, June 19


Raggatt, P. (1994), 'Implementing NVQs in colleges: progress, perceptions and issues', *Journal of Further and Higher Education*, 16(1), 59-74


Table 1.2 Business Administration (Administrative) NVQ Level 2

UNIT: RECEPTION
ELEMENTS:
1. Receive and direct visitors

Notes:
Underpinning skills and knowledge: structure, location and responsibilities of people in organisation; policy and procedures of organisation on greeting visitors, security, safety and emergency; messaging procedure; telephone system and operation; effective use of information sources; dealing with difficult/aggresive visitors (e.g. recognise and react appropriately to physical communication signals); car parking arrangements available to visitors; effective communication (oral and written)

Range:
Routine and non-routine visitors must be dealt with. Contingencies must be dealt with: callers without appointment (with both urgent and non-urgent requirements), callers who are late/early for appointments, callers who require baggage or other effects to be cared for during visit, receipt of deliveries, emergency situations

Performance Criteria:
1. All visitors are greeted promptly and courteously.
2. Visitors' names and needs are identified.
3. Visitors are only given disclosable information.
4. Visitors are directed and/or escorted in accordance with organisation policy.
5. Reasons for any delay/non-availability are explained politely.
6. All records are up to date, legible and accurate.
7. Messages are accurately recorded and passed on promptly to correct location.
8. Security and safety procedures are followed at all times.

Fig. 1

Table 1.3 The NVQ framework

The following definitions of the NVQ levels provide a general guide and are not intended to be prescriptive.

Level 1: competence in the performance of a range of varied work activities, most of which may be routine and predictable.

Level 2: competence in a significant range of varied work activities, performed in a variety of contexts. Some of the activities are complex and non-routine, and there is some individual responsibility or autonomy. Collaboration with others, perhaps through membership of a work group or team, may often be a requirement.

Level 3: competence in a broad range of varied work activities performed in a wide variety of contexts and most of which are complex and non-routine. There is considerable responsibility and autonomy, and control or guidance of others is often required.

Level 4: competence in a broad range of complex, technical or professional work activities performed in a wide variety of contexts and with a substantial degree of personal responsibility and autonomy. Responsibility for the work of others and the allocation of resources is often present.

Level 5: competence which involves the application of a significant range of fundamental principles and complex techniques across a wide and often unpredictable variety of contexts. Very substantial personal autonomy and often significant responsibility for the work of others and for the allocation of substantial resources feature strongly, as do personal accountabilities for analysis and diagnosis, design, planning, execution and evaluation.

Fig. 2

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<th>Higher Degree</th>
<th>(GNVQ5)</th>
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<td>Degrees</td>
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<td>A/AS</td>
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