COMPETENCE-BASED EDUCATION AND TRAINING: THE BRITISH EXPERIENCE

Issues Paper 3
ISSUES PAPER 3

COMPETENCE BASED EDUCATION AND TRAINING:
THE BRITISH EXPERIENCE

Karen Evans

Department of Educational Studies
University of Surrey
INTRODUCTION

Karen Evans is Professor of Educational Studies at the University of Surrey in the United Kingdom. She recently visited Australia at the invitation of the Royal Melbourne Institute of Technology where she was Visiting Fellow to the Youth Work teaching unit within the Faculty of Social Science and Communication.

Professor Evans' research interests have focussed on post-compulsory education and training, with particular reference to the relationships between education, training and employment. Her most recent work has involved comparative studies of the experience of transition from school to the skilled workforce, particularly in the United Kingdom and Germany. These studies provide some insight into the use of competencies in education and training, particularly the increasing emphasis in Britain and other countries on generic, rather than specific, competencies.

Given the significance of this area of research to the vocational education and training agenda, the Quality and Change Management Division of the Office of Training and Further Education invited Professor Evans to present a seminar on 16 August 1995. This paper is published with the aim of bringing the discussion to a wider audience.

Note

This paper is the third issues paper published by the Office of Training and Further Education. The Office does not necessarily endorse the views presented, but supports their public expression.
1.0 INTRODUCTION

Britain has, in the last decade, embarked on a bold experiment with Competence-based education and training, in setting up its framework of National Vocational Qualifications (NVQs) resting on ‘competence’ as the key feature. This experiment has attracted much interest around the world. More than ten years after the first steps were taken, through a national review of vocational qualifications and the establishment of the National Council for Vocational Qualifications (NCVQ) to co-ordinate them, there has been mounting pressure for a fundamental reappraisal of the framework and its appropriateness for the changing world of work. NVQs are here to stay but evidence has been mounting that some fundamental changes of approach are needed. A review launched in 1995 by the Government goes some way to meeting the concerns although many believe the scope of this review is too limited, focusing as it does on the ‘top 100’ NVQs. Its brief is to focus on:

- breadth of definitions and approaches to competence in use;
- assessment of knowledge and understanding; and
- quality assurance and cost effectiveness of assessment procedures.

1.1 Stages in development of the British system

Stage 1: 1981-86

The ‘New Training Initiative’ launched a three pronged approach to improving the quality and quantity of training in Britain.

This involved:
- guarantees of one-year vocational preparation for all school leavers;
- new kinds of occupational standards and move away from time serving in vocational training; and
- wider access for adults to education and training for employment.

Government schemes, particularly Youth Training Schemes, were used as test-beds for development of these ‘new kinds of standards’. As work-based funded programmes operating under Government guidelines, these were regarded ‘soft’ areas in which new approaches could be piloted without the prospect of significant resistance or industrial relations issues arising. Standards trialed were based on work-based performance and ‘standard tasks’ derived from analysis of the key functions.
Stage 2: 1987-1990

The National Council for Vocational Qualifications was established with the purposes of rationalising the 'jungle' of vocational qualifications (which had proliferated under the entrepreneurial examining and validating bodies such as City and Guilds, BTEC, etc) around these 'new standards'. A five level framework was designed (Figure 1), with the intention that individuals could progress to levels up to postgraduate equivalent by any mode of learning, including work-based learning in the workplace. Underlying this agenda was a set of values which favoured 'work-driven' over 'education-driven' approaches, as reflected in the 'Fundamental Criteria' set out in Table 2.

![Figure 1: NVQ framework](image)

In 1986 the government initiated the definition of national standards for employment and a system of national vocational qualifications by establishing the National Council for Vocational Qualifications. To be accredited as an NVQ, a qualification must be:

- based on national standards required for performance in employment, and take proper account of future needs with particular regard to technology, markets and employment patterns;
- based on assessment of the outcomes of learning, arrived at independently of any particular mode, duration or location of learning;
• awarded on the basis of valid and reliable assessments made in such a way as to ensure that performance to the national standard can be achieved at work;
• free from barriers which restrict access and progression, and available to all those who are able to reach the required standard by whatever means;
• free from overt or covert discriminatory practices with regard to gender, age, race or creed and designed to pay due regard to the special needs of individuals.

Stage 3: 1991-94

The Framework of ‘NVQs’ (National Vocational Qualifications) was extended to include GNVQs (General National Vocational Qualifications) to fill the gap and meet the demand for a more generic approach to vocational preparation, based in full-time education. The hypothetical model of vocational qualifications and their academic equivalents, as seen by the NCVQ, is given in Figure 2.

Figure 2: Model of vocational qualifications and their academic equivalents as seen by NCVQ
Stage 4: 1994 –

Increased resources have been given to the development and marketing NVQs, tied to meeting of national education and training targets. The latter have been framed in terms of the proportion of the population to reach specified levels by certain ages, and also the terms of lifetime learning targets. National targets for the year 2000 are:

• by age 19, 85% of young people to achieve GCSEs at grade C or above, an Intermediate GNVQ or an NVQ Level 2;
• in 1994, 43% of 16 year olds had reached the 5 GCSE/NVQ 2 target; with 63 per cent of 19 year olds reaching the target;
• by age 21, 60% of young people to achieve 2 GCE A Levels, an Advanced GNVQ or an NVQ Level 3;
• in 1994, 41% had reached the A Level/NVQ 3 target by twenty-one.

A massive programme of implementation is now underway, with evidence mounting of inherent weaknesses in the approach, and of practical difficulties in its implementation. The issues arising can be considered under three headings.

• practical issues;
• conceptual issues; and
• quality assurance and accountability issues.

These are discussed below.

2.0 PRACTICAL ISSUES

Practical issues associated with implementation are:

• access and participation;

• ability of employers to deliver work-based assessments to standards;

• complexity and consistency; and

• proliferation of awarding bodies.

2.1 Access and participation

It is estimated by the NCVQ that 85% of the workforce will have ‘access’ to National Vocational Qualifications in 1995. This estimate is based on the number of occupational areas in which awards are available. It does not reflect actual take up, which is at very low levels. It is doubly misleading as many awards have been developed at high cost in areas in which there is, to date, little demand, many employers preferring to use existing and established training programmes instead. It has also been estimated that in 1995 two million people are ‘working towards’ National Vocational Qualifications, approximately 8% of the workforce. Again, the figure is misleading as initial indications are that many of these may complete only units of programmes, and will not progress to the achievement of the full vocational guidelines.
2.2 Ability of employers to deliver work-based assessments to standards

The complexity of NVQs is a central issue for employers. The 'area of competence' is broken down into numerous elements, which require assessment to work-place occupational standards defined by 'Lead Bodies'. They are accompanied by 'performance criteria', 'range statements' and 'knowledge specifications'. Employers have to be committed to this process to accommodate NVQs, sustain them and meet the requirements for assessment. Obviously larger firms are in a better position to be able to do this than smaller firms. Recent figures show that 44% of firms with more than 500 employers are using National Vocational Qualifications in one form or another, although many of these are confined to particular occupational areas, and large employers are as vocal as others in their complaints about the burden of assessment involved. Only 6% of firms with less than 50 employees are using NVQs. These tend to be the companies which previously have also been poor trainers and whose needs were meant to be addressed by the new national system. It has also been found that small employers find they are unable to provide significant parts of programmes because they basically do not have the relevant areas of activity in which trainees need to be assessed, and it is often too burdensome for them to arrange such experiences for trainees. Recent research by Phil Hodkinson on the operation of training credits with young trainees has illustrated this point.

2.3 Complexity and consistency

The difficulties encountered by employers have been compounded by the large amounts of paper work involved in the administration of NVQs. Any approach which assesses performance of numerous disaggregated tasks tends to generate mountains of paperwork, and engages numerous assessors and verifiers. Accompanying bureaucracy has become a major disincentive in the NVQ system. The language surrounding the operation of the scheme has also become something of a barrier. Commonality of language and descriptors and the reduction of jobs into standard tasks and functions does not, in practice, achieve consistency of standards between providers in the way often claimed. The ways in which tasks are interpreted and implemented in different sectors and different types of organisation are widely variable. Tasks and standards are not going to be interpreted in the same way in the corner shop as they are in a major international store, nor in the privately owned local garage in the same way as in a multinational company. Multinationals will necessarily be looking to international standards, and there is growing scepticism about whether the approaches of NVQs can deliver 'world class' standards in their present form.

2.4 Proliferation of awarding bodies

Despite the intention to simplify and reduce the 'jungle' of awards the result to date has been a proliferating jungle of awarding bodies. While levels of awards have been simplified and it should be now possible to equate any given award with a level within the framework, in fact the number of bodies which can award these NVQs has multiplied to an alarming extent. This combined with the lack of consistency of standards means that the initial, central objective of this policy, namely the simplification and establishment of common standards and easily understood qualifications, has not been realised and in fact has been receding. The response of NCVQ to these practical concerns has tended to be framed in terms of the need for better marketing and communications.
If the awards are marketed more effectively to employers, it is argued, they will be more readily understood and the barriers to their take up will be reduced. Nine years after the introduction of NVQs, this is not credible, and it is now increasingly recognised that the issues here are ones of substance rather than of presentation and that they will not be resolved without a fundamental review of the framework and approach.

3.0 CONCEPTUAL ISSUES

Conceptual issues that have emerged include:
- equating competence with performance;
- the relationship between learning and performance: process and outcomes;
- assessment of knowledge and understanding;
- the place of core skills;
- three tracks or a unified system?
- do the qualifications prepare for the jobs of the future or reflect the jobs of the past?
- higher level NVQs in Higher Education and the professions.

3.1 Equating competence with performance

There are different ways of approaching competence. The approaches adopted by the National Vocational Qualification framework are behaviourist approaches which are based on functional analysis, or the breaking down of jobs into functions and tasks. An alternative approach might be to identify generic competences, that is broad clusters of abilities which are conceptually linked in some way and which are called upon in performance of roles and activities. The behavioural approach is, by its nature, reductionist and becomes very elaborate. Disaggregating the elements of performance of a job into its parts makes the assumption that these can be reintegrated into a statement of competence in the performance of whole jobs and roles. While this may be the case at the most basic level there is a growing recognition that this does not and cannot apply at the levels of more complex jobs and roles. An attempt has been made to deal with this by defining new kinds of competences relating, for example, to ability to deal with complicated framework even more complex. This reflects a wider problem with the NVQ system, in that having started at the most 'simple' level, it has had to become more and more elaborate and introduce more and more extensions in order to deal with the features of roles and jobs up higher levels of the framework. It could be argued that the appropriate starting place for the framework would have been a set of generic competences which could encompass the whole rather than trying to build up the framework from the most simple level of performance of tasks and basic occupations.

3.2 Relationship between learning and performance: process and outcomes

The NVQ framework is predicated on the notion that it is the outcomes of learning which determine the qualification, these will be credited irrespective of the learning which has taken place. It doesn't matter how or where you learn it - if you can do it then you should be credited with it.
While there are benefits in recognising the outcomes of learning in a way which is not dependent on a particular mode and duration of attendance, process and outcome in learning are intimately linked and cannot be divorced without negative effects and consequences. There are links between any activity, the context in which it is undertaken and the skill or concept being learned. There should be an entitlement for all learners to a certain quality of learning process, and this will be reflected in outcomes. For example, minimum training times cannot ensure that the trainee or learner requires depth of understanding and experience, not only of the specific tasks but also of the social environment and expectations of the roles. While time serving had many wasteful and inappropriate aspects, the apprentice did learn from the ‘master’ and from experienced workmates the expectations and relations of the workplace and pride in the work of the craftsman. This is beginning to be recognised in the development of the modern apprenticeship which itself acknowledges the need to add to the basic NVQ occupational standards, a supporting, broader curriculum incorporating additional areas of knowledge and core skills as essential parts of the programme.

3.3 Assessment of knowledge and understanding

It is a feature of the NVQ framework that underpinning knowledge is inferred from competent performance and has not been the subject of a separate assessment. This too is an impediment to the acceptance of NVQs at the level of professional qualifications and higher education, where the knowledge base is extremely important. Employer bodies and providers have a concern that the approaches are not effective in developing or verifying the existence of an integrated understanding of underlying principles. Any programme which does not develop understanding of underlying principles runs into two problems. First of all the qualifications are not future oriented. If there is inadequate knowledge of underlying principles there is limited capacity to transfer learning in changing contexts. A twin and related problem is that of safety, one uppermost in the minds presumably, of the Electrical Contractors when presenting their concerns about NVQs to Alan Smithers in the 1994 Channel 4 documentary ‘All Our Future’. A worker faced with an unusual situation or set of circumstances needs to be able to make decisions as to how to operate with reference to underlying principles. There is a real danger that approaches which seek to infer the understanding of principles by assessment of the performance of disaggregated tasks will miss the point. The NVQ framework in Britain contrasts dramatically with the approaches now being taken in Germany which are seeking to develop problem-solving capabilities through work-based learning. By developing broad capabilities, training and qualifications can become genuinely flexible and future oriented. They are not tied to performance of specific tasks in jobs whose content is, in any case, rapidly changing and, in some cases, becomes quickly obsolete.

3.4 The place of core skills

Core skills also have an implicit and inferred status in the present framework of competent performance. They occupy an ambiguous place as they are not separately assessed as they are in GNVQs. If it is the core skills that are to give these qualifications their future orientation, their place in the programme needs to be much strengthened. Means of assessing the core skills need to be established in a way which give them status and credibility in the eyes of the trainees and the various users of the qualifications.
3.5 Three tracks or a unified system, post-16

As Figure 2 on page 4 shows, the NVQs are part of a triple track system in which each of the tracks is failing in its own way. The A levels are failing by being over-specialised, the General National Vocational Qualifications by lacking rigour, clear definition and therefore recognition; the NVQs by their narrowly reductionist approach and over complexity. Debates on education over the last few years have tended to focus on the sterile issue of parity of esteem and ways in which the tracks can be 'linked' rather than radically rethinking the framework. The recent review by Sir Ron Dearing is concluding that the tracks need to be developed in ways which rectify their weaknesses, with some encouragement being given to combining teaching and learning at the first year level to see whether these can be unified in some way. Many commentators believe that a more radical, unified credit-based system is required. What we need is a new blue print, not further tinkering with the existing tracks. An approach which seeks to unify from the bottom up without an overarching policy commitment is not likely to succeed.

3.6 Towards higher level NVQs in higher education and the professions

The Government has moved recently to extend the GNVQ qualification into Higher Education, issuing a consultation paper ‘GNVQs at Higher Levels’ to Universities. The GNVQ qualification is different from the work-based NVQ in its emphasis on general occupational competences and core skills and is subject to fewer criticisms than the work-based NVQs. It does, however, have poor completion rates and there are significant difficulties over lack of a recognisable curriculum and lack of rigour in assessments, as research and evidence presented to Ron Dearing’s review has identified. Despite this, the paper assumes that the ‘same fundamental features which have made GNVQs, at lower levels, successful will be carried forward to the Higher levels’. Universities are now engaged in consultation, but approaching the proposals with considerable reservations. Higher Education acceptance is being looked to as a means of ‘shoring up’ and endorsing the existing framework, which evidence already suggests is not working satisfactorily. The document is also unclear on what the distinctive and different features of Higher level GNVQs will be, given the already widespread uses of credit-based programmes, multi-disciplinary studies and encouragement of personal skills development in vocationally-oriented Higher Education. If the difference lies in the further promulgation of the behavioural competence approach, incorporation into Higher Education will meet much resistance. If professional bodies are to be invited to take the lead in defining the standards, the resistance will be greater still, since fundamental issues of control of the university curriculum are at stake.

4.0 QUALITY ASSURANCE AND ACCOUNTABILITY ISSUES

Quality assurance and accountability issues include:

• pressure on examining bodies and providers to accept NCVQ ideology;
• quality of the assessment process;
• national education and training targets (NETT) payment by results and the self-financing nature of the NCVQ; and
• accountability of the NCVQ itself.
The NCVQ has gone substantially beyond the remit of rationalising vocational qualifications as identified by the original 'Review of Vocational Qualifications' in the 1980s. It has done so by imposing a particular model of training predicated upon the Government's ideologically-driven preferences for 'employer' driven' as opposed to 'education' driven' approaches and practices (see Training for Skill Ownership, IMS, 1982). It is, therefore, ironic that educators and employers are now apparently more united than ever in their calls for broader approaches which recognise that investment in higher levels of general education and flexible, practical intelligence are the way forward. The Times 'Higher', on 17 October, 1995, reports continuing 'severe criticism from the business community'. Dominic Cadbury, Chairman of the Confederation of British Industry's Education Committee said that 'the NVQ remains too costly, too bureaucratic and too much geared to larger employers who have the resources to turn it to their advantage'. A report by the Employment Policy Institute, in the same week, shows again that employers do not want people with narrowly based vocational qualifications, and are 'better served by improved general education of the workforce than by a proliferation of narrow vocational qualifications'.

There are serious doubts about the quality of the work-based assessment process itself, as well as the nature of the qualifications, with spurious objectivity and the scope for compromised standards when providers (and ultimately NCVQ) are paid by results. This suggests that the huge edifice of verifiers is not working well in ensuring standards.

CONCLUDING REMARKS

In its proposals for establishing the National Council for Vocational Qualifications in 1986, the Government stated that the creation of a new framework of National Vocational Qualifications would be 'fully evaluated to ensure that value for money is obtained'. No such thorough evaluation has taken place yet. It is long overdue.

Far from securing value for money, it is now clear to many researchers in Britain, as it is to many people in industry, education and training who have spoken frankly about the matter, than an enormous quantity of counter-productive bureaucratic procedures has been introduced into the country's education and training system. The model the NCVQ has been seeking to impose throughout the education and training system was untried and untested. There is now a considerable volume of research and analysis which demonstrates that major changes need to be made.

At the crucial craft level (level 3) the take-up of NVQs has been very slow, despite the fact that government funds are available through Training and Enterprise Councils for training only to NVQ specifications. Several surveys have shown the failure to acquire NVQs cannot be attributed solely or even mainly to poor marketing. The most important reasons for low take-up are that NVQs do not meet either employers' or employees' needs. There is widespread concern about the relevance, presentation, flexibility, transferability and value added offered by NVQs. Employers are irritated by the amount of jargon and bureaucracy involved. While some employers train only for their immediate needs, many others agree with a recent House of Commons Trade and Industry Report, and with trades unionists and researchers, that NVQs should require a broader approach to career training, including more general educational attainment, and are concerned to ensure that knowledge and understanding should be tested properly.
Supported by the Government training subsidies, the NCVQ is attempting to control the whole training system by qualifications. Driven by the rush to meet targets, implementation has been hurried and piloting inadequate. Output-related funding is tending to undermine the establishment of high and consistent standards of education and training, and tending to give vocational qualifications a bad name.

An independent evaluation group has been established to review the 100 most used NVQ and SVQ qualifications. This is to be welcomed. However, the scope of this review is too narrow to deal with the fundamental problems. For example, a large number of NVQs in addition to the ‘top 100’ have been developed at considerable public expense, and these are hardly being used at all.

Accordingly, we are calling on the Government to build on the current review of the ‘top 100’ by commissioning a fundamental and independent evaluation of the principles and practices involved in the whole NVQ system. The aim should be to make recommendations for a major programme of reform to deal with the many inadequacies which have been identified by employers and confirmed by numerous research studies and enquiries.

An assessment based on information currently available suggests that the following is the ‘way ahead’.

1. **A more holistic approach**
   i.e., integrating knowledge, understanding and skill, combining analysis with synthesis and recognising that there is a place for judgements about overall performance.

2. **Approaches acceptable to both higher education and the professions**
   i.e., recognising the inappropriateness of narrowly-defined competence-based approaches at Higher Education and Professional levels which need to be replaced with future-orientated approaches designed to develop underlying capabilities and capacities to operate in changing contexts. Higher level NVQs need to reflect the complexities of professional knowledge and roles.

3. **Explicit attention to processes as well as outcomes, and entitlement to minimum training times**
   i.e., there needs to be attention and entitlement to quality learning processes if outcomes, particularly the broader learning outcomes, are to be consistently achieved and sustained.

4. **Simplification of programme requirements**
   i.e., course/programme requirements need to be clearly and simply stated, with assessment simplified in synoptic forms and made independent of pressures arising from ‘payment by results’

5. **Reduction and rationalisation of occupational lead bodies, reconstitution of the NCVQ and much strengthened educational representation**
   i.e., to counter ideological imposition of models, language and procedures without appropriate consultation and evaluation.