Employability and workforce development - a policy and practise dilemma for higher education

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Abstract

This paper based on the work of Swailes and Roodhouse, funded by Edexcel and commissioned by the University Vocational Awards Council (UVAC) investigates the barriers to the take up of higher level National Vocational Qualifications (NVQs) in Higher Education in the context of graduate employability and workforce development. It also includes an introduction to the history of NVQs as the UK national training system and relationship to the recently introduced foundation degrees. It exposes inconsistencies and contradictions, including the responsibility for funding workforce development in Higher education to deliver this agenda. The failure of the Qualifications and Curriculum Authority (QCA) and the Quality Assurance Agency for Higher Education (QAA) to coordinate their frameworks and respective procedures in the national interest is discussed. The engagement of employers in setting the higher education employability agenda is described and the potential role of National Occupational Standards (NoS) is described. The paper finally addresses the policy implications for engaging higher education in work force development.

Introduction

In higher education, workforce development is often described as work based learning and is increasingly recognised as a field of study. Defining workforce development as workbased learning enables higher education in particular to incorporate the learning people do for, in and through work.1 Carol Costley points out:

> *Some universities have been involved in work based learning for a long time, for example, through placements and sandwich courses. Some universities have structured courses where continuing professional development with the knowledge gained through experience is accepted implicitly. Others use the processes of accrediting prior and experiential learning (APEL) to formally recognise such knowledge.*
> *Learning contracts are becoming familiar instruments. These activities are variously described as work based, work related, placement activities, elective modules, independent study, APEL, reach out, CPD, and work based learning among others. It is worth noting that work based learning in higher education is nearly always part of an existing university programme with its own disciplinary frameworks and approaches to higher education. Learning outcomes and criteria for assessment are therefore within the subject knowledge born of research and scholarly activities that already are embedded in the universities.* (Costley, 2001)

What is difficult to understand is the lack of engagement by higher education in workforce development that is meeting the needs of learning people do for, in and through work. Perhaps Butcher, from the Learning and Teaching Support Network (LTSN) Generic Centre, leading on employability along with ESECT[2] in higher education, has identified the problem.

> *We somehow seem to be incapable of learning from experience. Succeeding generations of employers are still marooned in tedious development project steering committees whose proceedings take place in academic jargon. Frustrated academics are still struggling to secure placements and projects with the very companies who are lambasting the quality of their graduates' work readiness*. (UVAC, 2002)

There is no doubt higher education has been highly successful in developing and delivering entry to work programs that are qualifying people for work at all levels, however, all work based, continuous professional development, retraining, part-time provision, learning diagnostics, assessment and certification remain marginal. Why is this, when the case for the national economic and social demands for a highly skilled national workforce are as strident as ever?

In this context, it is noticeable that initiatives such as NVQs and graduate apprenticeships have failed to become integral components of higher education. Similarly, although considerable effort has been made to develop work based learning, particularly by institutions such as Middlesex University, Anglia Polytechnic University, and other members of the University Vocational Awards Council, it has been achieved through the individual and organisational desire to respond to local and

regional needs, despite the paucity of coincident policy directive from agencies with responsibility for business, skills, education and learning.

Public funding schemes persist in being unsympathetic to this activity however it is defined, and mechanisms to connect business needs with higher education are disorganised and confusing. The NVQ and national occupational standards are the only mechanism we have left to overcome these barriers.

Following several reviews of education and training, National Vocational Qualifications (NVQs) entered the UK's education and training arena in 1986 to respond to an ad hoc vocational qualification landscape built up since 1945 with a typically British approach of adding more qualifications without the rationalisation of existing awards, or reappraisal of the approvals and recognition procedures which were increasingly varied and inconsistent. As a result, it was increasingly failing to deliver a highly skilled workforce in response to global competitiveness and discouraging the unemployed to acquire the contemporary skills employers required.

However, the introduction of a national scheme, NVQ, that brought education and training together, led to passionate and polarised reactions. One opponent claimed that the movement 'was perpetuating a disaster of epic proportions' (Smithers, 1993) and Hyland (1994, p.116) considered NVQs to be behind 'an utterly impoverished and dehumanised approach to vocational education'. Advocates of NVQs such as Hillier (1995) accused academics of running scared and argued that by concentrating on the true skills and knowledge needed to perform jobs the economy would benefit.

With over 3 million NVQs achieved since 1986 it is time to reconsider the value of NVQs, particularly national occupational standards, in the light of the increased emphasis on the role of higher education in workforce development, and graduate employability, resulting from the introduction of mass higher education in the UK.

An historical perspective

The background to the introduction of National Vocational Qualifications (NVQs) in 1986 is succinctly described in an extract from the relevant 1986 Government White Paper, *Working Together, Education and Training,* which focussed its attention on the need to co-ordinate training, education and qualifications for all people to ensure a competent workforce in Britain for the 21st century.

> *Qualifications and high standards are not luxuries; they are necessities, central to securing a competent and adaptable workforce. Economic performance and individual job satisfaction both depend on maintaining and improving standards of performance. This applies from the*

boardroom to the shop floor. It applies as much to adult training and re-training as to young people starting off in life. (Swailes and Roodhouse, 2003)

This recognition that the UK needed to raise levels of competence in the workforce, in order to maintain and enhance global competitiveness and its position as a highly skilled, innovative and technologically advanced nation state, reinforced the requirement to reform an archaic 19th century training and qualification system that had lost touch with the needs of employers. By the 1970s, both the British and US economies faced strong competition from nations using similar production technologies with much lower manufacturing costs, particularly labour. Government concern over declining competitiveness stimulated reviews by the then Manpower Services Commission (MSC, 1981) which underlined the need for a flexible and skilled workforce that could respond to global economic changes. These arguments have continued over the last two decades with the most recent articulation in the New Labour Skills Strategy. (DFES, 2003)

The importance of occupational competence was championed for the first time and qualifications were considered necessary in vocations underrepresented by the education sector. Following the *Review of Vocational Qualifications* (Hargreaves, 1998), it was recognised that there was a need for a coordinated national qualification framework. This was achieved by the creation of sector specific Industry Lead Bodies (ILB) to oversee the production of occupational standards, and the establishment of the National Council for Vocational Qualifications (NCVQ) in 1986 to develop and manage National Vocational Qualifications. The responsibility for the system, including quality assurance, passed from the NCVQ to the Qualifications and Curriculum Authority (QCA) in 1998. [For detailed accounts of the background to NVQs see Franklin (1997) and Hargraves (1998, 2000).]

The principles underpinning NVQ that are often forgotten and rarely referred to by critics of the system are set out below. The National Vocational Qualifications:

- reflect the needs of employers and individuals
- provide qualifications which reflect the achievements of clear standards of competence
- provide more effective career and training routes for individuals
- be less concerned about passing knowledge-based examinations, and more concerned with performance in the workplace
- be accessible to all sections of society without unnecessary barriers
- Identify common areas of competence across sectors and occupations.

These principles were established over 18 years ago for the national training system and they are directly applicable to the current debates in higher education around graduate employability, widening participation, access, and workforce development.

Five levels with descriptors were created in the NVQ framework to capture the competence including the knowledge required to perform basic operations (level 1) up to complex, unpredictable, strategic tasks (level 5). It is suggested by QCA that Level 4 broadly equates with undergraduate level study and level 5 with post graduate study. It was expected over time that all vocational awards would be replaced with NVQs and located in the framework at agreed levels, a national system based on standards drawn by sector specific employer led bodies. (UVAC, 2002)

In this context, two interpretations of 'competence' are worth noting. The NVQ model uses the term in the sense of satisfactory, efficient, acceptable and normal performance in a job as identified through functional analysis (MCI, 1990). Other models distinguish between threshold and superior performance (Boyatzis, 1982; Brown, 1993). The British model is content with the efficient discharge of work, which could be described as sufficiency; however this is open to criticism from higher education for not reflecting high performance in individuals and organisations, the excellence model for workforce development.

An historical, statistical and market overview

The primary source of NVQ data is the QCA as the current regulatory body for these qualifications. (Consequently the data referred to in this section is derived from this source unless otherwise stated.) There are other sources such as awarding bodies but this information is not readily available in the public domain.

In June 2001, there were 776 current NVQ titles with an uneven take up pattern. In the popular area 'Providing Business Services' prior to October 2000, 85 of the 165 available NVQ titles had achieved less than 100 awards each and of these 27 had attracted no awards at all. Industry lead bodies, now replaced with Sector Skills Councils, were encouraged to develop standards of occupational competence and NVQs that met their business needs and in particular employer requirements. This explains the large number of titles approved for the framework by NCVQ/QCA. At levels 4 and 5, 'Providing Business Services' is comfortably the most popular area and almost all the awards at level 5 have been in subjects related to management.

By September 2001 3.5 million NVQ certificates had been awarded, of which 95.1% were at levels 1-3 and well over half of these at level 2. Of the remainder, about 110,000 awards had been achieved at level 4 and 8,200 at level 5 (see Table 1). (These figures count people receiving a full NVQ and thus exclude unit certification.)

Table 1. Cumulative Totals of NVQs Awarded by Level

NVQ level	Number awarded
1	628,979
2	2,007,863
3	682,176
4	109,998
5	8,227
Total	3,488,656

Source: QCA, 31 September 2001

Table 2 describes the numbers of NVQ certificates awarded at each level. Annual increases in the numbers of level 4 awards have risen slowly but steadily to 13,770 in 2000 and 14,395 in 2001. Awards at level 5 have been steady at around 1,000 each year. Awards at levels 4 and 5 (combined) grew steadily from 8,904 in 1996 to 15,353 in 2001.

Table 2. Numbers of NVQ Certificates Awarded by Level, 1996-2001

Level	1996	1997	1998	1999	2000	2001
1	60,400	76,500	70,700	59,900	63,300	49,400
2	213,500	267,400	262,700	253,000	252,000	179,400
3	63,800	90,400	100,200	101,100	109,000	102,600
4	7846	8619	10956	13468	13770	14395
5	1058	1172	1083	858	876	957
Total	346,604	444,091	445,639	428,326	438,946	346,752

Source QCA. Year to 30 September

Table 3 confirms the most popular higher NVQs are in accounting and management. This success can be attributed to the adoption of accounting NVQs as a qualifying route by the Association of Accounting Technicians (AAT), the inclusion of management NVQs in the Institute of Management's professional entry route and the appeal of the generic management qualifications to a range of sectors.

Table 3. The ten most popular higher level NVQs

NVQ Title	Level	Number awarded
Accounting (Accounting practice/industry and commerce public /sector)	4	29,036
Management	4	28,216
Accounting	4	27,360
Management	5	8,052
Training and Development (Learning Development)	4	4,469
Engineering Manufacture	4	2,948
Administration	4	2,336
Training and Development (Human Resource Development)	4	1,575
Care	4	1,026
Managing Transfer Operations (Clinical or special waste)	4	955
TOTAL		105,973

Source: QCA. Cumulative awards to 30 September, 2001. Management level 5 combines the old Management and the new Operations Management and Strategic Management

Forecasts for numbers in employment with higher level qualifications including NVQs (Wilson, 2000) are shown in Table 4. Between 1991 and 1998, the numbers of people in the employed workforce with a post-graduate level qualification grew by 747,000 and is projected to grow by another 465,000 to 2009. The number holding a level 4 qualification (first degree, HND, nursing, teaching) grew by 1.2 million from 1991 to

1998 and is projected to grow by a further 1.6 million to 2009. Given that about 5,500 level 5 and about 70,000 level 4 NVQs were awarded up to the end of 1998, NVQs *per se* had a small share of the market; about 0.7% of postgraduate level qualifications and 5.8% at the sub degree and first degree level between 1991 and 1998.

Table 4. UK employment by highest qualification level (000)

	1991	**1998**	**2004**	**2009**
Higher degrees (including NVQ level 5)	354	1,101	1,321	1,566
First degrees and sub-degree (including NVQ level 4)	4,337	5,549	6,301	7,181

Source Wilson (2000, p.14)

Table 5 illustrates the higher education qualifications obtained in 1999/2000. The award of 13,720 level 4 NVQs in the year to September 2000 represents 4.3% of the total market for level 4 equivalent qualifications (first degrees and sub-degree qualifications) awarded. However, assuming that all NVQ level 4 awards are completed part time, they represent 18.1% of the market for part-time level 4 awards. The 876 NVQ5 awarded in the year to September 2000 represent 1% of all level 5 awards and 1.7% of the part time market for all level 5 awards (post graduate).

Table 5. HE qualifications by level and mode of study, 1999/00

	First degree	**Doctorate**	**Masters degree**	**Other post graduate (e.g. CertEd)**	**Other under graduate (e.g. HND)**
Full time students	212,340	1,490	14,490	24,580	30,030
Part time students	24,190	6,090	21,490	21,810	37,750
Total	236,530	7,580	35,980	46,390	67,780

Source: HESA. Figures exclude awards to students resident overseas

Advocates of NVQs point to over 3 million people in the workforce gaining a qualification over the past 15 years who would not normally consider entering further or higher education. Critics on the other hand can claim that this represents a small proportion of the employed workforce, it is mostly low level and will make little impact on workforce flexibility (Hyland and Matlay, 1998, p.407). However, whichever stance is preferred, the qualifying of at least 3 million people to industrial standards is a major achievement for any country and has significance for the individual.

However, the introduction of the Foundation Degree (HEFCE, DFES, 2000) in higher education, which is expected to incorporate national occupational standards and/or NVQs as well as key skills along with graduate apprenticeships and professional development, is beginning to stimulate a re-evaluation of the NVQ system, particularly the use of national occupational standards in the higher education curriculum.

A brief explanation of the NVQ architecture

QCA has described NVQs as qualifications that reflect the skills, knowledge and understanding an individual possesses in relation to a specific area of work.

In order to make sense of this, NCVQ and subsequently QCA adopted a framework of 11 work areas and five levels of workplace functions. The work areas cover activities such as tending animals, plants and land (the environment); constructing (building, architecture, engineering); manufacturing; providing goods and services; and developing and extending knowledge and skills (which includes museums). These levels have recently been increased to 15 by QCA as part of the current review of vocational qualifications and are included **figure 1.**

Levels are used to form the structure of the national qualification framework (NQF). They are as follows:

Level 1: Competence, which involves the application of knowledge and skills in the performance of a range of varied work activities, most of which may be routine and predictable.

Level 2: Competence, which involves the application of knowledge and skills in a significant range of varied work activities, performed in a variety of contexts. Some of the activities are complex or 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.

Fig 1
to be reset

Level 3: Competence, which involves the application of knowledge and skills in a broad range of varied work activities performed in a wide variety of contexts, 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, which involves the application of knowledge and skills 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 skills and a significant range of fundamental principles 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. (UVAC, 2002)

All NVQs are related to and approved by QCA at one of the five levels. Qualifications are submitted by awarding bodies, such as Edexcel and City and Guilds, for approval by QCA. Higher education Institutions (HEIs), as autonomous awarding bodies, can also seek approval directly from QCA to award NVQs, however those HEIs engaged in this provision have preferred to operate as agents for the Edexcel and City and Guilds. The awarding body to gain this approval for the proposed NVQ must use the standards of competence, developed and drawn up by National Training Organisations, now Sector Skills Councils who are employer led.

The standards of competence require some explanation in the context of the architecture. Standards of competence are derived from the workplace through functional analysis. The standards of competence, which are the bedrock of the system, conform to an approved format that describes what a candidate must do in order to demonstrate competence in the workplace. As a consequence, all standards of competence must:

- Describe the outcomes of activity rather than a list of tasks
- Describe work activities that can be demonstrated
- Be relevant to work, in a range of employment contexts
- Be accessible in terms of the activities they describe.

Each standard, often described as a unit, consists of three discrete components: elements of competence, performance criteria, and a range statement.

The range statement is expected to encapsulate the underpinning knowledge required to demonstrate competence at the different levels. (However, it is apparent that distinct knowledge statements are required, particularly for higher level NVQs.)

Assessment takes place at a time when the candidate is ready (a student-centred approach) to meet the requisite group of standards of competence that form component parts of an NVQ. Performance is judged solely on the criteria specified in the standard of competence. It is an evidence-driven model, with a particular emphasis on the workplace. Evidence is often generated through observation in the workplace, simulation, questioning, and case histories.

The NVQ is an assessment-driven model, and as such places far more emphasis on the assessment of performance against the standards of competence rather than the extent of education and training that might have been undertaken, – the time-served system which is primarily delivered through courses and programs of study carried out in the educational institution concerned, not in the work place. This is the fundamental distinction between the two systems; one an assessment in the workplace model and the other a classroom, time served course driven system. It is the interpretation of this distinction by higher education which causes the friction and misunderstanding between the two systems.

In this respect, Waterhouse (UVAC, Conference proceedings 2002) argues that higher education is bound up in structure and has forgotten the value of universities:

> *Combining knowledge and skills to achieve vocational excellence has been a fundamental part of university life for centuries. It is essentially the everyday business of higher education today, training teachers, lawyers, doctors, engineers, social workers, health and media professionals.*
>
> *The oppositions between theoretical and practical study, between academic and vocational education, are not born of some necessary structures in the ways in which people learn.*
>
> *Still less are they born of some typology of human beings (those who think, and those who do). They are the residuum of institutional structures, which are not only out of date but inhibit our collective learning process. The ultimate value proposition for universities is not that they can teach, nor even that they can sell research, but that they can assess. They accredit learning.*

The relationship of NVQ's to higher education

At first glance, it would seem that a competence-based, work-centred, evidence-driven system has little in common with higher education. However, with an increased government emphasis on lifelong learning, widening participation, access, graduate employability and meeting the skill needs of the economy, Higher Education Institutions (HEIs) have increasingly engaged in competence-based qualifications, particularly linking standards of competence to learning outcomes in their awards.

It is worth noting that 23% of higher education institutions (HEIs) offered NVQs either stand-alone or in combination with other awards (UVAC, 2000).

Local partnerships between HEIs and further education colleges (FECs) have sharpened the interest in competence-based qualifications, for example, of NVQ 4 (higher education level) awards achieved:

- further education and tertiary colleges provide 55%
- private training providers 25%,
- employers 11%, overseas centres 3%
- higher education institutions, 2%.

In the case of NVQ 5 (higher education level):

- further education and tertiary provide 36%,
- private providers 39%, employers 16%
- higher education institutions 8%.

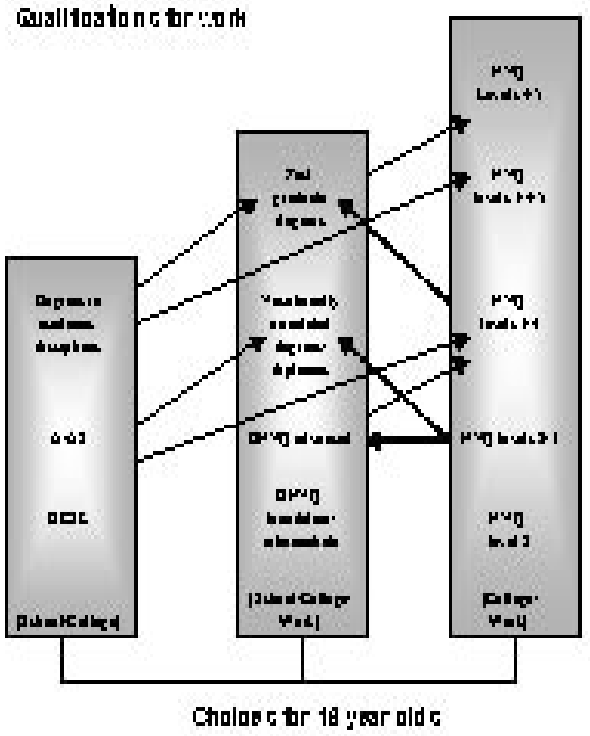
(QCA, coverage 1999/00 academic year).

When levels 4 and 5 are combined, the higher education sector provided only 2.5% of all awards.

The Report of the National Committee of Inquiry into Higher Education (the Dearing Report), attempted, not for the first time, to address these matters by supporting the greater use of key skills and national occupational standards or specific skills as a means of enhancing the responsiveness of higher education to the skills needs of the UK workforce.

Similarly, the QCA qualification relationships framework, NQF, expanded from the NVQ origins to include other vocational qualifications by recognising equivalence to express the potential progression available to the learner; the ladder of learning opportunity is illustrated in figure 2.

Figure 2 QCA Qualifications for work framework



Source: QCA Data News, February 1999

The attempt at reconciling the further and higher education system of qualifications with the training system, NVQ, to establish a genuine progressive and coherent national qualification framework was further developed by QCA through the commissioning of the Open University, Vocational Qualifications Centre (VQC) in April 1998 to develop the design principles for higher-level vocational award inclusion in the NQF. The VQC suggested four types of vocational qualifications. These are:

- **Type A**: higher level national vocational qualifications (NVQ)
- **Type B**: other national standards of occupational competence-based professional qualifications
- **Type C**: vocational/professional preparation qualifications
- **Type D**: vocationally related qualifications (without the design components of General National Vocational Qualifications (GNVQs).

Table 6 Occupational and Vocational Qualifications

#Features/Qualifications	Type A	Type B	Type C	Type C
Nature	job role related	professional role related	specific	general
Purpose	demonstration of job competence	licence to practice/professional recognition	vocational/professional preparation	vocational related education
Progression	specific career	specific career	specific occupational qualifications plus targeted employment options	higher education plus broad employment options
Match to standards	Exact	Exact	close match to relevant standards	limited - relates to more than one set of standards
Work experience/supervised practice	concurrent relevant employment essential	concurrent relevant employment and/or extensive placements	some work experience essential	desirable but not essential
Endorsement by relevant NTO or professional/regulating body	Essential	essential	essential	desirable - but recognises difficult when multiple bodies involved
Development and demonstration of work related skills and competences	essential - main basis for the qualification	essential - related to the specific professional role	essential and should be related to specific vocational/ professional roles	desirable - but could relate to a variety or work roles
Knowledge	extensive job role and job context undermining theory and principles	extensive professional role and professional context plus underpinning theory and principles	narrower vocational/professional field in depth	broad vocational field/applied subject knowledge
Assessment	across full range - mainly work-products, assessment of real work performance and oral/written questions. Aspects requiring assessment in the workplace to	across most of range - includes work-products, assessment of real work performances and oral/written questions, some evidence of capability rather than	must include some work products and/or assessment of performance albeit across limited range plus evidence of capability	typically case-studies, assignements, projects etc.
	be specified by standard setting body	permissible full competence		

The typology is important because it provides a mechanism for the inclusion of vocational qualifications awarded by universities with NVQs and National Occupational Standards in one framework, the NQF. QAA on the other hand continued to develop and establish a parallel structure with level descriptors for higher education awards with little reference to the NQF and the typology. In fact the only qualification that translated into both systems was the Higher National Diploma (HND) which is now in danger of being phased out and replaced by the Foundation Degree.

The New Labour National Skills Task Force (second report, 1999) attempted to make sense of this by introducing another structure which included for the first time, related vocational qualifications, (RVQs) which led to the introduction of Foundation degrees. It was seen by the Task Force as a means of providing the knowledge underpinning for NVQs particularly at the NQF intermediate levels 3 and 4 in response to a perceived skills gap in the national workforce. This is described in Figure 3.

Figure 3 Progression framework for vocational education and training

Level 4	**3 Year Degree**	**NVQ Level 4**
	2 Year Degree/RVQ Level 4	
Level 3	**A/AS Levels** **NVQ Level 3**	**RVQ Level 3**
	Advanced GNVQ	
Level 2	**5 GCSEs/** **NVQ Level 2**	**RVQ Level 2**
	Intermediate GNVQ	
	Key Skills	
Level 1	**Basic Skills and Gateway**	

Source: Second Report of the National Skills Task Force: Delivering Skills for All (1999)]

It is essential that QCA and QAA recognise that structures, procedures and regulations need to relate in order to facilitate a genuine response to workforce development, progression, and widening access. Immediate key issues to be addressed are:

- Flexible and diverse entry routes to level 4 (QCA) or level C (QAA).
- Recognition of the existing work-based qualifications and frameworks such as NVQ and modern apprenticeships.
- Accumulating and crediting experience and learning, locally, regionally and nationally.
- Understanding of needs of employers and constraints on employees.
- Flexible response to needs and the learning of transferable skills.
- Use of national occupational standards as a curriculum tool
- Work experience opportunities
- Coherent partnership funding for work based /related learning in further and higher education
- Standardised data collection

A strengthening of sector body, employer, further and higher education collaboration leads to the delivery of effective, cohesive and transitional learner centred routes to and through higher level qualifications.

However, none of these policy goals can be achieved without compatibility and mutual recognition between the QCA and QAA frameworks, including audit regimes, not least to recognise prior learning and experience. This could potentially lead for the first time to a further and higher education national credit framework. Central to success as mentioned earlier is the greater use and recognition of a common curriculum language, national occupational standards and QCA key skills for vocational and work-based routes into and through higher education. A possible emerging model combining all of these elements is currently being considered by QCA as follows:

Table 7: A revised and integrated National Qualification Framework

Qualification	General		Vocationally related	Occupational
7 D (doctorate) level			Doctorates	Level 5 NVQ
6 M (masters) level			Master degree, Postgraduate certificates & postgraduate diplomas, graduate appprenticeships Key skills	Level 5 NVQ
5 H (honours) level			Bachelors degrees with Honours, graduate certificates & graduate diplomas Key skills	Level 5 NVQ
4 I (intermediate) level			Foundation degrees, ordinary (Bachelors) degrees, diplomas of Higher Education & other higher diplomas Key skills	Level 4 NVQ
4 C (certificate) level			Certificates of Higher Education Key skills	
3 advanced level 2 intermediate level 1 foundation level	A and AS levels, key skills GCSE Grad A*-C GCSE grade D-G	Vocational A level advanced modern apprenticeships (advanced GNVQ) Modern apprenticeships, including key skills Key skills	 Foundation GNVQ	Level 3 NVQ Level 2 NVQ Level 1 NVQ
Entry level		Certificate of education achievement		

(Source: Simon Roodhouse, 2004)

Nevertheless, at present a competence and evidential system remains a minor component of HE provision.

Perceptions rather than reality

The omission of NVQs and NOS as a central workforce development tool in higher education is associated with academic staff perceptions of the national training system built up in the introductory years, combined with a profound misunderstanding of the purpose of the work based assessment model. This poses serious questions for higher education.

The standards

Management standards, one of the NVQ success stories, provide an illustration of the criticisms of NOS.

The management standards suggest that management is generalisable without values and ignores the contingent nature of management including the political culture of organisations (Grugulis, 2000; Loan-Clarke, 1996). It is suggested that the content of standards fosters a 'suffocating' assessment experience 'devoid of critical engagement with the social and political issues which determine much professional activity' (Ecclestone, 1997, p.77). This may explain the low completion rates often observed (Hillier, 1997). Content and style were noted by Beaumont (1995, p.13) and the Employment Department (ED, 1995) found that a majority of employers felt that language and format were inappropriate. Simplification using plain language has not yet been fully implemented and the unfamiliar design and content of standards can be a barrier to acceptance by candidates. Brown (1999) found that stipulations governing assessment and the fear of long completion times impeded the design of tailored development programs. The question for higher education rather than employers is whether it is desirable to have an assessment system built on explicit measurable work focussed standards or, as is often preferred in higher education, interpretable standards determined by the academic staff in the institution who teach the program with no explicit mechanism for measurement that the candidate understands, or no external accountability beyond that of the QAA.

Reputation

Matlay (2000) reasoned that the cumulative effects of negative publicity about NVQs 'were very damaging' to the reputation of the NVQ. The problem of perceived lack of credibility and image was acknowledged following the Beaumont report (NCVQ, 1996). The NVQ added to the qualifications 'jungle' (Williams, 1999). The promised reforms and simplification of vocational training in the UK (NCVQ, 1987, p.5) never happened. In fact this has become significantly worse with the introduction of

Foundation Degrees, key skills, and modern and graduate apprenticeships. Employers were confused with other aspects of NVQ provision, to the extent that the government announced an extensive review of operations (Beaumont, 1995). The need for a review pointed to structural weaknesses in the institutional arrangements for vocational education and training. One factor identified by Beaumont (1995, p.24) is the need for employers and universities to deal with several awarding bodies in order to offer a range of NVQs adding cost and confusion to NVQ programs.

Fuller (1994) proposed that qualifications can be seen as having two important dimensions. 'Use' value (relevance to actual work and tasks) and 'exchange' value (enabling holders to get a better job for instance). The literature suggests that higher NVQs struggle in terms of both use and exchange. Much of this criticism is unsurprising, as successive governments have made little attempt to bring the national education and training systems closer together or support the rationalisation of national qualifications in the interests of clarity. Furthermore it cannot be expected that a new national qualification structure is immediately recognised and loved by employers and employees when it has taken a substantial period of time (at least 40 years) for HNDs to become an established feature on the qualification landscape.

The NVQ infrastructure

Claims that NVQs are employer-led are dismissed by Hyland (1996) in a review of faults in vocational education. Hyland draws on Beaumont's finding that most managers would prefer to recognise NVQs awarded by other employers and recommends that NVQs 'should be returned to the workplace and removed from all courses in schools, colleges and non-workplace training institutions' (1996, p.359). Hyland fails to differentiate between a work based assessment model aimed at workforce development and entry to work courses. Given the universities' historic role in vocational education (e.g. medicine, law, engineering), there seems no overriding reason why they should not be successful in other areas (CVCP, 1995; Randall, 1995) such as social care, health and community justice where NVQs are well embedded as a measure of work competence.

Benefits of higher NVQs

Much has been made of the early criticisms of the NVQ system by higher education and little attention has been paid to the emerging evidence of benefit to learners, particularly those in the work place.

Higher education students

Students entering DMS and MBA programs from a competence route performed just as well as traditional-entry students in a majority of assessments (Taylor, 1996).

Credit rating NVQs in higher education (see ED, 1995; Lloyd-Langton and Portwood, 1994) would underpin this route into and through higher level management awards and NVQ holders report growth in personal confidence (Hillier, 1999). Winterton and Winterton (1997) found that management development based on the MCI's standards leads to improved individual and organisational performance which is what they are expected to do. Higher education needs to consider the implications of alternative routes to and from work with a recognised credit system in response to widening participation and access policies currently being prosecuted by government, that is, engagement with non-traditional entry students.

Successful NVQ candidates

Swailes and Roodhouse confirmed NVQ management candidates had gained the theory underpinning practice and acquired an explicit and measurable benchmark for their performance as a manager. The award is designed to do this. Another benefit included NVQs highlighting various management skills that learners had not previously considered or used and which could be applied in their work. The NVQ portfolio enabled learners to reflect on their work and management skills; reflective learning. This process asked, 'how effective am I as a manager?', and by looking at work practice from different viewpoints it highlighted weaknesses in performance, skills and knowledge. Some learners had gained new jobs as a result of completing their NVQ.

Learners confirmed the NVQ was developmental. It had increased their overall confidence and awareness of other elements of management and personal skills. It also enabled them to acquire skills in how to manage workloads and ways of being efficient as well as the ability to recognise skills they already possessed which were undervalued - critical self-analysis. NVQs gave learners the ability to reflect on self as well as the relationships with other members of staff, while overall communication is improved – this combination has reduced stress. These are powerful arguments for a much maligned system. T his is an effective developmental tool for those in work wanting to improve performance and competiveness and resonates with the claims made for the vocational higher education learning experience.

Standards

In the early years, standards have been criticised for their design; however, they have increasingly important uses beyond qualifications. They help to up skill the workforce and significantly improve human resource management systems and procedures in organisations such as constructing job descriptions, recruitment activities and selection or information management (Hillier, 1999) and inform the content of other qualifications. Standards are increasingly used in the public sector such as the Probation Service to ensure that all staff are meeting measurable work standards as part of public sector service accountability. The use of standards *per*

se and their use as qualifications is diverging, which is generating greater flexibility and use. For example standards are increasingly being used as learning outcomes in higher level awards in HEIs as means of meeting employer expectations. With all their imperfections they are the best tools we have so far to qualify the workforce, engage employers and widen access to higher education.

Higher education attitudes

Swailes and Roodhouse found that since the mid 1990s, delivery of higher NVQs has been curtailed due to lack of demand for higher level NVQs. NVQs have been 'peripheral' to HEI's core activities and their delivery depended upon committed individuals and departments who recognised the value of the qualification for their occupational sector. In the management field, the sector is 'crowded' with qualifications and there is little incentive for NVQs in a free market. Growth in NVQs seems to occur where there are no competing qualifications, for example in advice and guidance.

Lack of demand is partly due to funding restrictions as programs are too expensive without funding, and corporate clients can easily find lower cost private providers. Decreasing demand also stems from the internalisation of NVQ frameworks into organisations that have used them to develop competence in preference to opting for full qualifications. There has been a general lack of promotion by national agencies and ambivalence by DFES to the system, with greater emphasis being given to the higher education silver standard, the Foundation Degree.

Relations with awarding bodies are generally good. There is still a view that NVQs involve too much paperwork and that the associated jargon deters candidates. They are still perceived to be mechanistic, reductionist, tedious to complete and not developmental, but this seems to resonate with the criticisms of continuous course work assessment. Difficulties for students in finding and providing evidence were part of the decision to drop NVQs at some centres. This needs to be placed in the context that most NVQ learners are fully employed and their engagement in gaining the qualification is on a part time basis. It is often overlooked and when it takes 6 years part time to achieve a first degree then the NVQ option is attractive.

Those responsible for marketing underplay the real learning benefits of NVQs and their skill development potential. The poor image of NVQs and their association with low-level qualifications has yet to be overcome.

HEIs involved in NVQs felt that NVQs were beset by 'snobbery' towards the competence movement. Those not providing NVQs felt that the further education sector was the right place for them citing a distinction between vocational and academic awards.

To stimulate take-up, HEIs suggested a more 'user friendly' framework is needed to 'house' NVQs. Better marketing of NVQs by HEIs would make it clearer how enquirers can get good advice. In addition, there should be differentiation between higher and lower NVQs. However, commitment from senior HEI managers is needed to raise the NVQ profile. NVQ provision continues to occur 'opportunistically', with provision delivered through contracting-out or by peripheral departments such as work based learning units and centres or life long learning centres or enterprise units. Stronger links between mainstream courses and NVQs would 'embed' NVQs and closer linkages to structured development programs would be beneficial. The public sector has been the most effective in achieving this.

There are difficulties for HEIs finding assessors for higher NVQs because of the knowledge and competence required; however this could form a new strategic relationship with employers by using staff in work as assessors on behalf on the HEI. There are examples of this approach in the sector (UVAC 2000).

Funding mechanisms for NVQs in universities

Funding is a fundamental issue. Level 3 NVQs have been boosted by linkage to the Modern Apprenticeship Framework and the relative absence of funding for levels 4/5 is a barrier, as are the costs of higher NVQs to employers. The time needed to build a portfolio around normal work activities is problematic for the employee. Taught qualifications and courses, built around regular time slots and delivered in the classroom, are easier to manage and complete for HEIs.

The Higher Education Funding Council for England (HEFCE) is prohibited from funding NVQs since they are not included in the courses defined as eligible for funding by the Education Reform Act 1988. HEFCW (Wales) is reviewing their policy on NVQ funding. The LSC provides funding for higher level NVQs through Work Based Learning if students: are under 25 and do not have a degree; attend an LSC contracted work based learning provider and attempt an NVQ on a list of NVQs approved in the provider's contract with the LSC; and undertake a 'straight' NVQ, i.e., not an NVQ as part of another qualification.

Outside the work based learning context, the LSC funds students on higher level NVQs in further education colleges. Colleges and universities that enrol students in traditional courses, for example degrees, attract a payment from a funding body on a per capita basis. Since the government wants nearly all 16-19 year olds in some form of formal learning (DFES 14 – 19 years Green Paper 2003), and since the 2002 learning targets for young people will not quite be met (DfES, 2002), funding arrangements appear geared towards achieving these objectives. With the adult learning targets more or less achieved, the only support for people who want to complete higher NVQs is available through further education colleges. By placing the onus on the LSC and further education to deliver the skills strategy, there is no financial incentive for higher

education to actively engage; instead it can concentrate on entry to work education courses and research except in the context of progression and widening participation.

Some HEIs have overcome the funding barrier by linking a higher NVQ to an academic award. Students are enrolled in the academic award with the university and with an NVQ awarding body. Because enrolments are for fundable higher education courses, such as Foundation Degrees, universities receive a fee payment. Judicious course design allows students to complete the requirements of both awards with one assessment strategy. The University of Hertfordshire, a post 1992 institution, is committed to meeting the social, economic and learning needs of their local communities and has adopted this approach.

A transferable model: NVQs and the care sector

Wherever possible, the University of Hertfordshire attitude has been to integrate NVQs or units of NVQs with academic qualifications to provide both the skills and knowledge components required for effective continuing professional development.

For example (UVAC 2000), the diploma in higher education has been designed to include the NVQ training and development level 3 award. This is designed to meet the needs of midwives and other health professionals who have a brief to prepare parents for the parenting role. What is important here is the curriculum is based on the training and development national occupational standards of competence, which form the structure for the qualification. However to ensure that the learning is meaningful, those competencies which are generic are contextualised to parent education.

This demonstrates the willingness of the university to respond to the workforce skill needs of the midwives, and adjust learning methodology as well as adapting two qualifications.

The critical component of this approach is the assessment regime. The NVQ system is based on evidence and this is usually compiled in a portfolio which is assessed. With the exception of art and design, this is an unfamiliar assessment tool in universities as the preference has been for written timed examinations sometimes associated with continuous assessment based on written assignments and essays.

A portfolio method of assessment was adopted both for the NVQ and the academic award. This included work products, reflective logs, lesson plans and observation. By adopting such an approach, new demands were placed on the teaching staff with the consequent need for staff development support.

This course has proved particularly successful for those requiring this type of professional development, and students reported new confidence in their role, both in terms of their ability to train groups and individuals as well as their subject expertise. It has also given them a positive view of learning within a university context.

The university has adopted a different approach for medical laboratory scientific officers (MLSO), that focuses on training and supporting MLSO assessors to assess medical laboratory assistants (MLA) in the NVQ laboratory operations level 2. Within these arrangements the university undertakes internal verification. This is a useful example of the application of training and assessment expertise referred to earlier by Waterhouse, which exists in the university for the delivery of NVQs by the university. It is being 'sold on' to assist the Health Trust in the workplace. As a result of this experience the model is being developed to enable MLA's to enter the biomedical degree utilizing NVQs and key skills. This is an unequivocal response by a university to workforce development; however the funding for such work remains problematic.

Conclusion

There is a case for the adoption of National Occupational Standards and NVQ units in higher education programs as a means of incorporating the relevant occupational skills and knowledge required by specific industrial sectors. This incidentally provides a formal and sustained interaction with the sector and its employers through Sector Skills Councils and Expert Bodies. It also provides a common language for both the education and training systems when engaged in the graduate employability debate.

The LSC should be given a key role in workforce development funding of higher education and lead on a greater collaboration between QAA and QCA. Specifically, national policy action for the successful engagement of higher education in workforce development is required, incorporating the following strategies:

- Explicit and closer working between the National Quality Assurance Agencies in the interests of the learner to avoid beauracracy, duplication and repetition.
- Use of existing systems by raising awareness, usefulness and value of NVQS, NOS and Modern Apprenticeship (and equivalents in Wales, Northern Ireland and Scotland) among higher education institutions.
- The development of a national higher education system for the recognition of experiential learning in the workplace.
- Accreditation of a credit/work-based route linking Modern Apprenticeship, Foundation Degrees and Graduate Apprenticeships.
- Improved funding arrangements for part time learning and a new dynamic partnership with employers.
- A national broker and champion of workforce development for employers, employees, further and higher education in partnership with LSC.

Professor David Melville, Chair of the University Vocational Awards Council, has concluded in a recent *Guardian* article, *'GCSEs, A-levels and honours degrees offer near seamless progression routes for those who want them. Is it too much to ask the same of vocational and work-based education?'*

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Endnotes

"Workforce development consists of activities which increase the capacity of individuals to participate effectively in the workforce, thereby improving their productivity and employability. Workforce development has a role to play in raising productivity; increasing social inclusion; and preparing the economy for the future. Source: In Demand: Adult skills for the 21st century, Cabinet Office, 2001

Enhancing Student Employability Co-ordination Team Role of the team (ESECT) will concentrate on the curriculum as the main route to improving employability and will seek to promote an integrated approach that can be made effective for everyone involved. The team will:

- collate information about how HEIs can enhance student employability
- identify ways of effectively using this knowledge in learning, teaching, assessment and curriculum practices
- disseminate information to institutions, Learning and Teaching Support Network subject centres, employers, students, professional associations and other bodies
- help interested parties work with higher education teachers to improve student employability across the curriculum.

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