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**NATIONAL VOCATIONAL QUALIFICATIONS IN THE UNITED
KINGDOM: A RESEARCH BASED CRITIQUE**

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Abstract

This article evaluates the British system of NVQs, focusing on their capacity to increase skill levels. It reviews the way NVQs were designed and argues that they are ill-equipped to encourage knowledge and skills, partly because they simply replicate the weaknesses which currently exist in the labour market and partly because of the focus on observed workplace behaviours. NVQs were intended to be 'employer-led' and the assumptions underpinning their design are unitarist. In contrast, the German apprenticeship system is developed and implemented by pluralist consortia and results in qualifications that are far better equipped to support skill levels.

Despite the apparent consensus that increasing skill levels benefit individuals, organisations and the economy as a whole there has long been overwhelming evidence of reported skills' shortages in Britain (Penn, 1999). Until very recently the majority of young people left the education system at the first moment they could legally do so, most without any formal qualifications (Keep, 1994); and no national system of vocational education and training existed to remedy this deficit by developing skills in the workplace. As a result, as Finegold and Soskice (1988) argue, the British labour market can be described as a 'low-skills equilibrium'. This is a matter for some concern. Not only does the existence of low-skilled and poorly paid work create a demand for cheap, low-margin products (and, through this, more low-skilled, poorly paid 'jobs'), but also, large numbers of unskilled workers make it difficult to deploy what skills there are effectively. Even in workplaces where training is provided skilled employees might find their time taken up with remedial problem solving for their unskilled colleagues, a process as frustrating for them as it is costly for their employers (Steedman *et al.*, 1991).

One of the official vehicles for increasing skills in the workplace is the system of National Vocational Qualifications (NVQs). In an area characterised by numerous short-lived interventions (Keep, 1987) these awards have been notable for their longevity (although their relative importance has declined substantially, see, for example PIU, 2001). Official funding, originally provided as seed-corn monies to develop and market the qualifications, has been maintained (DfEE, 1995, 1996a, 1996b) and other initiatives, such as Investors in People, Modern Apprenticeships and National Traineeships, are intended to be achieved through, or lead towards, NVQs.

Bodies such as the Training and Enterprise Councils (TECs) and, latterly, Local Learning and Skills Councils (LLSCs) are required to market the qualifications and can subsidise provision; while official measures of workforce achievements describe qualifications in terms of NVQs 'or equivalent'. NVQs are effectively seen as both a means of up-skilling the working population and the way that those skills can be measured.

Yet as Steiger (1993) argues, qualifications are not themselves skills but a *proxy* for skill. They are a convenient and readily understood form of shorthand included in almost every definition of skill (see, among others, Gaillie, 1991; Noon and Blyton, 1997; Rolfe, 1990; Francis and Penn, 1994). They can help employers identify suitable employees, provide individuals with portable credentials and give occupational groups bargaining power, but each of these advantages stems from the skills that qualifications are assumed to certify not the simple fact that qualifications exist. Accordingly, as Steedman (1993) argues, the principal measure of NVQs' success should be their capacity to increase the skill levels of those in work rather than the number of certificates issued.

It is that capacity that this article seeks to assess. Given the centrality of NVQs to official interventions this is an important evaluation. Here it will be argued that, not only have NVQs not succeeded in raising skill levels but that the reasons for this failure are structural and lie within the design of the qualifications themselves. Firstly, NVQs were designed to be 'employer-led' (Jessup, 1991), to accurately describe the level of competence needed in the workplace (Debling, 1989; Mitchell, 1989). Yet this assumes that the current system of work design and skill utilisation is

optimal. In a labour market characterised by low skills, qualifications based on the current situation may simply reflect and reproduce existing weaknesses. The second reason for failure is because NVQs focus only on behaviour (Jessup, 1991; Fletcher, 1991) and, as a result, do not encompass the skills and knowledge needed in employment.

This article draws together much of the research that has been conducted into NVQs in order to provide an evidence based critique of official policy. A great deal of this work is qualitative and explores the way that NVQs are experienced or tests the notion of behavioural competences. This is extremely valuable, not least because it would be difficult to gauge the impact of any qualification without knowing exactly what working towards that qualification involved. However qualitative work can only provide a partial view. It illuminates processes and has significant explanatory power but, by definition, cannot provide any information on how extensive the practices it reviews are, or how widespread this impact is. Generalisations based on qualitative research are inductive, those on quantitative work, enumerative; both are necessary for a thorough review. Unfortunately there are few robust quantitative studies of NVQs and their impact. Indeed, Beaumont (1995), in his assessment of the qualifications, complained at the 'dearth' of information. Some good work has been conducted since and that is included in this discussion, but information is still limited and the studies that exist report problems with datasets (see, for example, Robinson, 1996).

Finally, this article concludes with an international comparator, in order to provide a foil for the discussion. The German apprenticeship system differs from NVQs both in

the way it is designed and in what the qualifications themselves involve. Apprenticeship in Germany leads to a series of qualifications that are drawn up by all the various parties to the employment relationship. It combines technical and academic knowledge with practical hands-on experience and it is argued that such a process is a far more effective model for developing skills than one that is focused on workplace behaviours.

NVQs: background and qualifications

The original remit of the National Council for Vocational Qualifications (NCVQ) was to construct a framework based on existing awards, ensure that all vocational qualifications met certain stated criteria and accredit them in a way that was nationally recognised (Raggatt and Williams, 1999). There is little doubt that this was badly needed. Qualifications help the labour market to function efficiently, enabling employers and employees to find one another. Clearly, to do this effectively, certificates need to be readily recognised. Yet the provision and assessment of vocational education and training in Britain is (and was) fragmented. Qualifications have been variously designed and propagated by occupational bodies, professional organisations, specialist examining institutes, trade unions, employers, colleges and universities (among others). They vary in form, content and skill-levels and, while some have gained a wide currency, many others have not. Some indication of the proliferation of certificates can be gauged by the fact that in 1990 there were 279 secretarial qualifications offered by 11 examination boards at 5 different levels (Employment Department, 1992 cited in Keep, 1994:311). This wealth of provision was not replicated across all areas of the economy with the result that, while some

occupations boasted so many qualifications that the idea of choice was rendered almost meaningless, others had none. A readily understood overarching national framework was badly needed.

However, the NCVQ interpreted its remit as overseeing the development of one particular type of award, the NVQ, and ensuring that this dominated provision. The ‘revolutionary’ (Burke, 1989) feature of these new qualifications was the way that they were structured. Instead of prescribing a course of instruction, laying down a syllabus or specifying a minimum period of work and study, NVQs simply described the behaviours that a competent worker should display in any given job (Debling, 1989). This description was the pivotal part of the new system. Aware that they were devising qualifications for a market that generally lacked them, the developers of NVQs were anxious to recognise competence independently of the way such competence had been acquired. By detailing ‘competences’ and ‘standards’ in the form of behaviours which could be observed in the workplace they hoped to ensure that workers who were already skilled (through years of experience on the job) could gain the qualifications as readily as those who embarked on a training course (Jessup, 1991). Essentially NVQs provided a form of assessment which, it was assumed, would stimulate appropriate training (Fletcher, 1991).

This was a radical departure from existing practice. The demands of the workplace and demonstrations of competence in work are key features in most forms of vocational education and training but rarely had they been the sole means of assessment, though their attraction is easy to see. Qualifications rarely measure workplace performance directly. Most aim to improve it by increasing candidates’

knowledge or technical competence but the prospect of somehow certifying workplace performance itself is enticing. Nor is this a new debate. Indeed, over the last century there have been various attempts by utilitarian vocationalists to capture and certify *only* those skills that are immediately useful for work (see Hyland, 1994 for a fuller discussion of this and an exploration of the development of NVQs).

The NVQ system rated achievements at five different levels (with level one being the simplest and level five the most advanced) and this framework was intended to cover work-based qualifications for everyone from apprentice to board director. Large numbers of NVQs were developed with impressive speed. By 1992 NVQs had been designed for occupations that covered 80 per cent of the workforce (Raggatt and Williams, 1999). While this achievement was laudable, the National Council for Vocational Qualifications had not, as originally intended, provided the means to accredit existing qualifications. Rather, they anticipated that all qualifications could and should be re-cast into NVQ-format. It was hoped that the NVQ framework would become well understood and easily recognisable by dominating provision rather than because it rated existing qualifications in relation to one another (Fennell, 1993).

Gaining qualifications and increasing skills

Clearly, eliminating diversity in qualifications would make the system both simpler and easier to understand (assuming that NVQs did, as intended, come to dominate provision). However, as noted above, qualifications are only a proxy for skill. NVQs had succeeded in providing qualifications for the majority of jobs and occupations but the success of these qualifications should be gauged on the extent to which they

supported, facilitated and encouraged increases in skills. This success was limited. In occupations where NVQs had replaced (or provided an alternative to) existing qualifications their system of specifying behavioural ‘competences’ proved less effective at conveying and assessing technical skills and knowledge than the qualifications they replaced in almost every instance. Senker (1996) observed that NVQ level 3 in engineering covered only two-thirds of the requirements of the traditional apprenticeship. Since an NVQ could be achieved after two years, while the ‘full apprenticeship’ typically took three and a half to four years this estimate probably errs on the side of generosity. Other studies note the lowering of standards in construction (Callendar, 1992), hairdressing (Raggatt, 1994; *Dispatches* Channel 4, 1993), management (Grugulis, 1997), and electrical engineering (Smithers, 1993). While in retailing, an area that had traditionally lacked formal qualifications, NVQs have been unfavourably compared to qualifications available in France (Jarvis and Prais, 1989).

Work done by Smithers (1993), which contrasts the old City and Guilds plumbing certificate with the plumbing NVQ provides a dramatic illustration of the differences between the two qualifications. The City and Guilds qualification not only required a higher level of practical, technical expertise, it also tested knowledge of physics, electronics, maths, technical drawing and technology. The background to technology included physical qualities, electricity and magnetism, forces, pressure, heat, thermal movement, energy, principles of tool construction and materials technology, concepts in chemistry, applied chemistry and materials for industry. The NVQ which replaced it specified none of these (Smithers, 1993; see table one for a comparison of NVQs, City and Guilds qualifications and vocational qualifications in the Netherlands and

Germany). NVQ candidates and tutors could, if they chose, add a syllabus, textbooks, knowledge of theory and additional practical training to the NVQ. But there was nothing in the NVQ itself to suggest that such supplementary material was either desirable or necessary. Further, as Steedman and Hawkins (1993) argue, this presupposes levels of expertise and motivation on the part of candidates which are extremely unlikely to occur in practice.

INSERT TABLE 1 ABOUT HERE

This finding is reproduced across numerous studies and occupations (Raggatt, 1994). Not only are NVQs narrower than other qualifications they are also complicated and difficult to understand. Each qualification consists of lists of ‘competences’ or ‘standards’. These are intended to describe observable workplace behaviour but they are written in a specialist language that has little general currency or comprehensibility. This ‘NVQ-speak’ is described, even in official reviews, as complex, confusing, difficult to understand or relate to work and inappropriate, criticisms that are extended to the guidance provided with it (Beaumont, 1995; DfEE, 1995, 1996a, 1996b). Such a use of language, coupled with NVQs’ emphasis on the workplace, means that candidates are required to demonstrate competence in particular ways. These ways need to be conveyed and studies suggest that teaching candidates the administrative demands of the NVQ system (how evidence should be presented and ‘portfolios’ assembled) is time consuming. As a result, teaching time is taken up with administrative necessities rather than substantive occupationally relevant knowledge (Hyland and Weller 1994; Grugulis, 1997; Fuller and Unwin, 2001). Nor do NVQs increase individuals’ autonomy and discretion. The

specification of NVQ ‘standards’ effectively achieves a Taylorist separation of conception and execution with the NVQs’ designers deciding which actions constitute competent performance and candidates simply demonstrating that they can perform actions.

Given these conclusions, it is not surprising that gaining an NVQ has little human capital advantage (Becker, 1964). Even at higher levels these qualifications attract low returns with the most significant gains of 6 per cent going to men with NVQ levels 3 – 5 (see table two). It should be stressed that the link between investments in human capital and the returns available is an unequal one (though see Dearden, 1999). Qualifications may serve a signal function and some of the gains may accrue because award holders are deemed to be of higher ability than non-award holders (Harmon and Walker, 2001; Walker and Zhu, 2001). As a result, credentials designed (at least in part) for the less able are likely to attract more limited returns. However, this same argument can be made of any vocational qualification, yet as table two shows, some (such as HNDs/HNCs) succeed in improving earnings. This is because, as well as signalling ability, qualifications can certify the possession of skills and NVQs have a negligible impact here.

INSERT TABLE 2 ABOUT HERE

It may be that these results under-state the returns available to NVQ award holders. According to Robinson (1996) Labour Force Survey data tends to exaggerate both the number and level of NVQs awarded. In spring 1995 924,000 individuals reported holding NVQs, despite the fact that only 885,000 had been issued. This figure

included 64,000 people claiming to hold NVQs at levels 4 and 5 (just over 40,000 awarded); 161,000 claiming level 3 (98,000 awards); but 178,000 with level 1 and 380,000 with level 2 (real figures 233,000 and 514,000 respectively). It may be that this confusion arose because NVQs were comparatively new qualifications at the time, that it was a consequence of the proxy answers used in the survey in which one member of the household answers for the others, or a conscious exaggeration on the part of respondents. Whatever the reason, it is possible that this confusion affects the calculations of the returns available.

While the data from the Labour Force Survey may exaggerate NVQ awards, material published by the Qualifications and Curriculum Authority (QCA) details the number and levels of certificates issued (though unfortunately does not extend beyond this to consider the people to whom they are issued). The vast majority of NVQs awarded are at the lowest level of achievement. According to official figures, more than 70 per cent of NVQs issued were at levels 1 and 2 while less than 3 per cent were at levels 4 and 5 (DfEE, 2000:7 – 8; DfEE, 2001). On the positive side, it may be that this, coupled with the reduction in skills and knowledge required has served to bring qualifications within the reach of more people. Access to certification is an important consideration and, with this qualification, as with others (Payne, 1991; Steedman, 1991; Heyes and Stuart, 1996) success provides a welcome boost to confidence. Merrick (1998) quotes a room attendant in a leisure complex who maintained that gaining an NVQ at level 1 provided them with motivation to work, while research conducted in a hospital trust (Grugulis and Bevitt, 2002) refers to one worker who was “thrilled to bits” at her success in gaining a qualification. In general, however, people working towards NVQs tend to be comparatively (rather than the most)

educationally disadvantaged with the majority holding GCSEs above or below grade C. Despite the grade inflation observed by Robinson (1996) there was little increase in achievement levels and less than a quarter of award holders had an NVQ that was higher than their existing qualifications (see also LaValle and Blake, 2001).

So, the way that NVQs are designed limits the skills that can be demonstrated and most NVQs awarded are at the lowest levels of achievement but this has had a limited effect on access to qualifications because most of the people enrolled on NVQs already hold higher awards. More worryingly, few of those who gain these qualifications add to their skills or knowledge. As Munro and Rainbird (2001) point out, NVQs simply certificate what staff are already doing; their studies of low-skilled workers in the NHS, almost all of whom had either completed or were working towards an NVQ at level 2, reveal that it was very unusual to come across any worker who did not already possess all the skills required. A finding which may serve to explain why many employees feel annoyed or patronised by the tasks they are required to complete for their qualifications (Grugulis and Bevitt, 2002). It seems, as Smithers (1993) argued, that the qualifications introduced are simply ones that candidates can cope with rather than ones that increase their skills.

From the point of view of extending individuals' skill levels this does not look encouraging. Technical knowledge is neglected, partly because the complexities of NVQ assessment leave little time for trainers to impart it, partly because it is not explicitly specified in the qualifications, and partly because the focus on disaggregated behaviours of the NVQ standards make it difficult to include anything beyond narrowly defined tasks. Set against this, the acquisition of certificates may be

valued by those who have few qualifications. NVQs may have little effect on skill levels but they are open access.

Assessment and ‘employer-led’ skills

Nor does the evidence suggest that the disadvantages experienced by individuals are offset by the benefits which accrue to employers. Indeed, outside the (fluid boundaries of) the public sector, the armed services and retailing there is little interest in NVQs (Spilsbury *et al.*, 1995; Matlay, 2000). According to official figures, 18 per cent of employers aware of NVQs (and just over 16 per cent of all employers) used these qualifications with one or more of their employees (DfEE, 2000a). The 2001 figures, which exclude the smallest firms, raise this figure to 34 per cent (DfES, 2002). Most employers see the NVQ process as cumbersome and bureaucratic (Beaumont, 1995) with little relevance to ‘real’ work.

There is some evidence to support these criticisms. NVQs make their claim to relevance on the basis that they describe the actions which should be performed in any given occupation. Yet, as Senker (1996) argues, neither in theory nor in practice is work organised on a sectoral basis. Jobs may be and are designed in a different way from company to company and even from person to person. The employment contract is incomplete since attempting to specify exactly what employees should do is likely to be dysfunctional. While it is clearly a valuable and useful exercise to consider the function of work, explore the aims of an occupation and review the rationale for particular tasks (not least because these processes may help to inform decision making), such broad conclusions are probably beyond behaviourally specific

‘competences’. These simply list actions and assume that anything which ‘underlies’ these actions (including motivation, knowledge and choice) can be ‘inferred’ through observation alone. Paradoxically, it seems that the concern to make these qualifications ‘relevant’ has resulted in their exclusive preoccupation with behaviours and actions (which are not centrally dictated) in place of more broadly constituted skills and knowledge (which might be of interest to a whole occupational sector or industry).

In NVQs, emphasis is taken from the overall meaning and function of work to the minutiae of its application. So the managers in Grugulis’s (2000) study gained units towards their qualification for arranging their offices in an ergonomic way (with the computer, filing cabinet and telephone all within easy reach) or ordering name badges for staff rather than the more substantive managerial tasks (developing IT systems and negotiating pay rates) that each was involved in because the first set of actions, though trivial, met the wording of the standards while the second set, though important and substantive, did not.

Appropriate standards of performance are not immediately apparent to assessors working from NVQ performance criteria. Wolf (1995:25) provides a (dramatic) illustration of this by reproducing element 9.1 *Obtain and evaluate information to aid decision making* from the MCI’s NVQ level 5 for senior managers which is intended to describe high level, complex work (table three). These behaviours, ostensibly drawn from the activities of managers could as easily be used to describe the responsibilities of the porter at an office reception desk. It is far easier to assess work

when the assessors are also supplied with exemplars, set texts and guidance (Wolf and Silver 1986; Eraut and Cole, 1993).

INSERT TABLE 3 ABOUT HERE

It seems that listing behaviours in this way does not help either employees or employers assess the significance of actions. It does, however, provide a multiplicity of criteria for assessors to gauge competence against. Eraut *et al.* (1996) estimate that even the lowest level NVQ involves something like one thousand separate assessment decisions. Since, in the NVQ system, the ultimate test of ‘competence’ is whether a candidate has met the letter of the standards, examples of disingenuous casuistry and innocent ignorance are not hard to find. Small wonder then that this study concluded that making assessment decisions coherent was an impossible task.

There is little to suggest that these bureaucratic audits either ensure quality (in the sense of providing that the candidate is capable at the task on which they are being assessed) or provide the basis for meaningful and consistent judgements. Moreover it is extremely probable that it explains much of the reluctance of businesses, particularly SMEs (Matlay, 2000) to deliver NVQs. It may be attractive to attempt to reduce every act of every workman to a science (Taylor, 1949) but this form of rationality is spurious and distorts work processes and the workplace far more than it illuminates (Doray, 1988; Popham, 1984; Barnett, 1994). Qualifications based on such assumptions can provide little room for individual growth and few links to the meaning of work.

Alternative models of qualification

This is not to argue that it is not possible to design an effective system of vocational education and training. It is, as other nations have demonstrated. French firms are legally obliged to invest a proportion of turnover in training employees and in Singapore co-operation between the state and large employers has succeeded in dramatically up-skilling a large proportion of the workforce over the last decade (Ashton *et al.*, 2001). But these systems are based on very different assumptions to those which characterise NVQs. Given the dramatically different effects of the various national systems it is probably worth considering this in more detail and drawing out these assumptions. The highly regarded German apprenticeship system is one of the best known routes to achieving vocational qualifications and provides a useful foil for this discussion. Full apprenticeships last three years and little attempt is made during this period to specify workplace actions and behaviours. Rather, candidates are taught technical skills in the classroom which are subsequently developed through participation in a series of problem-solving activities, graded in terms of difficulty. Care is taken to ensure that apprentices are exposed to a full range of different work situations with central training centres supplementing workplace experience and providing additional workplace settings for trainees to learn in; an arrangement which gives smaller employers the capacity to offer high level training. Technical training is supplemented with knowledge of work control and design (manufacturing qualifications involve familiarity with costs, design and planning, and administration and production) and, in addition to this, all apprentices are required to continue to participate in further education for the duration of their vocational studies

(Lane, 1989; Marsden and Ryan, 1995; Streeck *et al.*, 1987; though see also Culpepper, 1999).

Clearly apprentices are one small section of the workforce and, to a certain extent, it is disingenuous to compare a system of apprenticeship training with vocational qualifications which set out to provide certification for everyone in employment. But the purpose of this comparison is not to confine vocational awards to those at the start of their careers, rather it hopes to demonstrate that it is possible to design qualifications that are rigorous, include both academic and technical skills and enjoy high status. If policymakers and practitioners are seeking models to base vocational qualifications on, this combination of technical input, academic input and guided experience might provide a robust basis for increasing skills. Interestingly, Modern Apprenticeships in Britain include some examples of excellent training in the traditional industries (Fuller and Unwin, 2001). Recent official revisions have incorporated a compulsory technical certificate into both the Modern Apprenticeship and the Foundation Modern Apprenticeship to equip candidates with theoretical and technical knowledge, with NVQs as optional ‘extras’ (DfEE, 2000b; DfES, 2001). When the initiative was launched, it was the technical certificate that was considered an optional extra.

The German system is made possible by the sharing of costs between the various parties to the employment relationship. Apprentices are paid comparatively low wages (and, in contrast to Britain since 1970, there is little pressure on employers to raise apprenticeship pay, Marsden and Ryan, 1995). Moreover funding is provided by both employers and the state; each of whom has a voice, together with the relevant

trade unions, in the design of qualifications. But state and union involvement are not magic formulae. In Britain the NVQ system was devised by civil servants (Burke, 1989) and state funded (DfEE, 1995, 1996a, 1996b; Wolf, 1996). Trade unions were both consulted and involved in this process. Nor is this an isolated example. Lafer's (2002) account of low-level training in the USA shows state intervention that does not improve skills. Rather, the key distinguishing feature of the German model is that industrial training in Germany is seen as a valuable societal resource to be pursued in the public interest; as training for citizenship beyond the narrow economic interest of individual firms (Green, 1998; Lane, 1989). Because the emphasis is on a working lifetime, rather than the current job, the skills developed are more robust. The state, or industry bodies, or trade unions, can provide this long term focus but only when these are the skills that are valued and only when they deliberately set out to do so. If policymakers feel, as in the USA, that the only 'skills' lacking are self-confidence and self-esteem then vocational training will take the form of the confidence building workshops described by Lafer (2002). If policymakers feel, as with NVQs that qualifications should be immediately (and only) relevant to the current job then the 'skills' developed will, by definition, be narrower than those encouraged in Germany. Fundamentally, the differences between these various systems are the product of differing assumptions about which skills are necessary or desirable.

Discussion and Conclusions

NVQs never did come to dominate vocational qualifications. By 1999 - 2000, according to official figures, they accounted for just under 47 per cent of vocational qualifications awarded (DfEE, 2001). However, since this percentage only includes

certificates issued by the largest three awarding bodies as ‘other vocational qualifications’ and since (as noted above) the system of awards in Britain is fragmented, it almost certainly overstates the proportion of NVQs. Robinson (1996), using more reliable (if now rather dated) figures, calculated that NVQs accounted for only 35 per cent of vocational qualifications. It is not, as surveys have made clear, that employers do not know about NVQs, it is that they do not consider them useful (Spilsbury *et al.*, 1995).

This is not to argue that the NVQ system has had no successes. Some 3.3 million qualifications had been awarded by the summer of 2001 (<http://www.qca.org.uk>), many for occupations which had no means of accreditation prior to the launch of this system. Yet many of the advantages claimed for NVQs (table four) are simply the advantages that any national qualifications framework would offer, and few were achieved in practice. Progression, an understandable structure and occupational relevance do not depend on ‘competences’. Equally, some of the disadvantages, such as bureaucracy and cost, are not restricted to this type of system. The key element, as this article has made clear, is the structure of the qualifications themselves. Here, while NVQs’ practical emphasis and flexibility are welcomed, the practice of listing behaviours distorts real, complex ‘performance’ as well as focusing attention on the NVQ audit mechanisms rather than the meaning of the task being audited or the way that task fits with work design and organisational structure.

INSERT TABLE 4 ABOUT HERE

Most NVQs issued are at levels one and two, the most basic standards of achievement. In part this is because, as Raggatt and Williams (1999) pointed out, these qualifications were successfully resisted by professional bodies, but it is also because NVQs are not designed in a way that effectively supports skill development and that problem is most glaringly apparent at higher levels (Grugulis, 2000). NVQs are concerned only with assessment and auditing behaviours (Fletcher, 1991). Since they are also time and resource intensive they detract attention from skill building to skill audits (though see Brown, 2001).

Certification that is (whether by accident or design) concentrated at the lowest levels of achievement does have certain advantages, not least the inclusion of people with few or no previous qualifications. This is a welcome development. It should be an aim of any qualifications system to encourage participation. But certification is not valuable for its own sake, if it were then qualifications might as easily be distributed on street corners. Rather, counting the number of awards issued is of interest because of what these awards are assumed to certify. Vocational qualifications might provide people with new skills or develop their existing ones; they might convey information and encourage the development of knowledge about a particular occupation; succeeding in this process could increase candidates' confidence; and qualifications might facilitate access to other jobs or lead to further progress in the education system. Following Steedman (1993), NVQs should be judged, not on the numbers of certificates that are issued in their name, but on the extent to which these certificates have raised the skill levels of people in work. On this criterion NVQs cannot be said to have succeeded, nor is it possible to see how they could do so since they are designed to eliminate knowledge and focus on behaviours exhibited in the current job.

As Grimshaw *et al.* (2002) argue, such a qualification is, at best, appropriate only for horizontal movement within a limited job grade (see also Munro and Rainbird, 2001). An opportunity to increase the skills of those most disadvantaged in the labour market has been missed and NVQs effectively put a ceiling on progress rather than acting as a springboard to further attainment.

Many of the system's problems stem from the notion that it should be 'employer led' and the belief that employers' experience with managing and designing work might be extended to managing and designing qualifications. Yet this presupposes that work is currently designed in the optimum way, a conclusion that researchers have cast doubt on (Clarke and Hermann, 2001; Keep and Mayhew 1996; Lloyd and Payne 2001). In the British labour market, unskilled work is common and managers are likely to be comparatively poorly educated and trained (Bosworth, 1999). There is no strong tradition of vocational education and training and many organisations have little idea of how training might be effectively implemented (Edwards *et al.*, 2001). In such an environment, a system based on current behaviours is more likely to replicate existing weaknesses than fundamentally up-skill. Lower level awards were growing in importance before the introduction of these qualifications (Steedman, 1993; Raggatt and Williams, 1999); and this trend was probably exacerbated by NVQs. As Penn (1999) points out, employers generally respond only to short-term skills needs, usually in an *ad hoc* way. Few, if any, plan skills formation and development over more than two years. There have always been pockets of excellence (Keep, 1989) but these have rarely influenced general practice. Given this, it may be appropriate to question the centrality of employers in the current vocational

training system (Keep and Mayhew, 1996). It is, as Armstrong (1987) argues, rather like expecting those responsible for communicating a disease to heal it.

NVQ design also assumes that employers can and do articulate the demands of work in such a way as to satisfy not only their own interests but also those of employees. This is a highly unitarist interpretation. It is also inaccurate, particularly with reference to skills. The workplace is a contested terrain (Edwards, 1979) and the immediate and short term needs of an individual employer may not be what is best for workers, nor the state nor even (as the results here have suggested) for the individual employers themselves.

Clearly, the nature of the British labour market raises issues that go beyond the design and evaluation of a particular set of qualifications and may well be beyond the capacity of any supply side intervention, however well designed, to 'solve'. Clearly too, employers have a legitimate interest in the design and implementation of vocational qualifications but they are not the only interested parties and their interests should not be allowed to override those of other stakeholders. It is one thing to observe that, left to themselves, employers are unlikely to develop broad-based skills in their employees. It is quite another to develop a system of qualifications that neglects those broad-based skills entirely.

However, if we confine our attention to the design and implementation of robust and rigorous vocational qualifications, then the problem is far from being insoluble. Granted, it is unlikely that amendments to the current system will be fruitful, but there are other models of skill development and certification which are worthy of attention.

NVQs were designed by civil servants in consultation with employers and were intended to meet the needs of employers. Vocational qualifications in Germany are designed by employers' associations, regional governments, trade unions and educationalists and this system owes its success to the expertise of all. British policymakers would be well advised to call a halt to their current costly and revolutionary experiment and divert some of the extensive state subsidy NVQs have received to creating and supporting a more robust system of vocational qualifications.

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Table 1: Characteristics of different vocational education and training systems

	NVQs	City and Guilds	Germany	Netherlands
Academic syllabus	Not specified	Yes	Yes	Yes
Academic testing	Not specified	Yes	Yes	Yes
Technical syllabus	Not specified	Yes	Yes	Yes
Technical testing	Not specified	Yes	Yes	Yes
Practical syllabus	Not specified	Yes	Yes	Yes
Practical testing	Yes	Yes	Yes	Yes
Qualifications based	Yes	Yes	Yes	Yes

Source: Smithers (1993)

Table 2: Wage premium (%) from obtaining qualifications, Labour Force Survey

	Men	Women
CSEs / lower GCSEs	9	5
‘O’ level / higher GCSEs	21	19
‘A’ level	17	19
First degree	28	25
Higher degree	8	18
Professional qualifications	35	41
Nursing	13	21
Teaching	Nil	27
Level 1 – 2 NVQs	Nil	Nil
BTEC First	Nil	Nil
Level 3 – 5 NVQs	6	5
RSA Higher	4	12
C&G Craft	7	Nil
C&G Advanced	7	Nil
ONC/ONC BTEC National	10	8
HND/HNC	15	9

Notes:

1. The wage premiums are additive, so, for example, a man with ‘O’ levels/higher GCSEs and ‘A’ levels and a first degree will earn 66% more than a man with no qualifications
2. Lower level NVQs and the BTEC First have a significantly positive effect on *employment* rates for women, but not for men
3. Controls for age, ethnicity, region, firm size, public/private sector

Source: Dearden *et al.* (2000) cited in Machin and Vignoles (2001:8)

Table 3: Management, level 5 element 3.2

Element 9.1 Obtain and evaluate information to aid decision making	
(a)	Information requirements are identified accurately and re-evaluated at suitable intervals
(b)	Information is sought on all relevant factors affecting current or potential operations
(c)	Information is relevant and is collected in time to be of use
(d)	A variety of sources of information are regularly reviewed for usefulness, reliability and cost
(e)	Opportunities are taken to establish and maintain contacts with those who may provide useful information
(f)	Methods of obtaining information are periodically evaluated and improved where necessary
(g)	When normal information routes are blocked, alternative methods are tried
(h)	Information is organised into a suitable form to aid decision making
(i)	Conclusions drawn from relevant information are based on reasoned argument and appropriate evidence

Source: MCI (1991)

Table 4: The advantages and disadvantages of NVQs

ADVANTAGES AND DISADVANTAGES OF NVQs	
<i>Not specific to NVQs</i>	<i>NVQ-specific</i>
National qualifications framework	Emphasis only on observed behaviour (no academic or technical elements)
Vocational qualifications for all occupations	Little relationship to complexities of 'real' work
Opportunities for progression	Narrow definition of 'performance'
Relevant to employment	Lack of consistency in assessment
Open access	Grading problems (can / cannot structure and no possibility for merit / distinction)
<hr/>	
<i>NVQ-specific</i>	<i>Not specific to NVQs</i>
	Lower standards
Assessment independent of mode of study	Undiscriminating
<hr/>	
Performance based	
Greater practical emphasis	Expensive
Flexible pace of study and assessment	Tendency to use single shot testing
No student failures*	Bureaucratic

* Response from hairdressing tutors in further education colleges to Hyland and Weller (1994). Contrast this with the extremely high non-completion rates noted elsewhere (Houston, 1995).

Source: adapted from Hyland (1994: p. 36)