Re-visiting the NVQ Debate: 'Bad' Qualifications, Expansive Learning Environments and Prospects for Upskilling Workers

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Editor's Foreword

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Abstract

NVQs have endured nearly two decades of criticism on philosophic and practical grounds. This paper uses qualitative evidence to report the impact of this qualification for groups of lower grade staff working in the healthcare sector and finds beneficial effects on acquisition of knowledge and skills, personal attributes and pay and career progression. It analyses the reasons for the apparent success of the qualification and argues that this lies in specific features of the workplaces concerned which were partly fulfilling criteria for an 'expansive' orientation to workforce development. These included provision of multiple sources of organisational support for learners, careful design and quality monitoring of associated learning interventions and alignment of development for individual and organisational goals leading to opportunities for career progression. This consequently led to higher than usual exposure to learning interventions for NVQ participants and more reported 'learning' taking place. It concludes by considering the prospects for the NVQ, what we can learn from these settings about effective skills development strategies and the prospects for replication of these outcomes in the wider economy.

Introduction

While research is mostly commendatory on the role of occupational and vocational qualifications in improving returns to individuals, National Vocational Qualifications have long been vilified on multiple grounds. A recent review describes the reception they have received as 'a mainly hostile critique and frequently scathing academic commentary' (Roe et al, 2006:14). In common parlance, NVQ has received the ultimate damnation as the butt of jokes – simply an acronym designating the holder as 'not very qualified'. Despite its lowly reputation however, there seems little prospect that the government will either further reform or abandon the qualification as references to it continue in education policy documents (e.g. Leitch, 2006). Perhaps at the risk of accusations of heresy in the eyes of education policy commentators, it is worth therefore asking the question of whether, and under what circumstances, NVQs could ever be regarded as a useful qualification for employers and employees.

This paper specifically re-examines the role of NVQs in workforce development. Its origin lies in a recent research project into innovative skills development initiatives within the English public healthcare sector which found that a large proportion of learning interventions took the form of NVQs and confounded expectations because employers' and learners' responses to the qualifications were far more enthusiastic and far less negative than literature would suggest is normal. The care sector often emerges as an exceptional case in which a particular set of factors stimulate the adoption of NVQs (see Wolf et al., 2006 for a discussion). However, previous studies in the sector have suggested that learners' and employers' experience of NVQs shares similar negative aspects common across the economy (Cooke et al., 2000). This paper argues that reasons for the relatively positive picture portrayed in its data lie in the organisational contexts in which NVQs were being deployed as a method of learning and that this can have a significant influence on their outcomes. In so doing, it draws attention to the role of the workplace as a site for learning, which, while recognised in the broader skills literature, has been somewhat neglected in the debate on the value of NVQs. It justifies this by using the 'expansive-restrictive' learning continuum framework (Fuller and Unwin, 2004; 2006) which provides a useful typology of features of workforce development strategies to explain why employees may derive more or less beneficial outcomes of learning in

different settings. Analysing the factors which produce a coalition of positive influences leads into a debate about the prospects for fostering effective skills development and the role of institutional influences in improving employer approaches to learning and development of their workforces.

So what's wrong with NVQs (again)?

Launched in 1986 with intent to provide a comprehensive, flexible framework of qualifications certifying occupational competence with national coverage and currency, it is commonly accepted that the NVQ system has never reached the potential that its proponents believed it could attain. By 1996 a national review was proposing modifications, a number of which were adopted (Beaumont, 1996). Acute and incisive criticism of NVQs is abundant and can be summarised as being of three types: that concerned with their *content,* the associated *process* of acquiring one or the *outcomes* accruing from attaining the award.

The content of NVQs is denigrated by critics who point firstly to the dangers of taking a functional analysis approach to assessing competence in an occupation by decomposing a job into ever smaller tasks in the interests of defining units of competence which are amenable to measurement (Wolf, 1995). Secondly, Grugulis in particular, has written persuasively about the failure of the NVQ to impart knowledge and underpinning theory as textbooks, syllabi, teaching materials and tuition are optional (2003:461). Roe et al. counter the argument somewhat by reporting that in their survey of over 1500 employers, 77% of respondents believed formal training (albeit of unspecified length) had to be undertaken to pass an NVQ (2006:29) and only 2% of employers had attempted to use NVQs without providing accompanying training (p.42). There is certainly evidence that learners in science-based occupations struggle to accumulate as much technical knowledge as those with alternative vocational qualifications, such as City and Guilds (Senker, 1996; Gospel and Fuller, 1998). This illustrates the risks of a qualifications system which does not prescribe how learners should reach specified standards. But in a rare (partial) defence of NVQs, West (2003) argues that NVQs are intended to separate outcomes from the means of their achievement and that national occupational syllabi would be inflexible and impractical. If NVQs were never intended to achieve the latter, it

is curious that so much time has been devoted to debating the (absent) content. In the interests of improving the volume of knowledge acquired by learners, the debate might be more profitably focussed on whether and why the sponsors of NVQs do or do not equip learners adequately with the requisite knowledge and theory to demonstrate occupational competence and the circumstances which might enable this. The findings and analysis in this paper are intended to contribute to this discussion.

Attacks on the process of undertaking an NVQ revolve around the impenetrable language of assessment (Grugulis, 2003), time-consuming nature of portfolio production (Swailes and Roodhouse, 2003) and consistency of assessment processes. An output-based funding system for college-based programmes in the 1990s raised concerns about quality and reliability of the awards, which placed pressure on employers to take responsibility for assessment and exacerbated the problem of a shortage of qualified assessors in workplaces, a particular problem for smaller employers. These difficulties have undoubtedly served to deter some employers from using NVQs, contributing to their image problem and weakening the currency of the qualification.

This reflects the last major criticism of NVQs, which is perhaps the most worrying. Notwithstanding problems with content or assessment, if NVQs produce valuable outcomes for workers and employers leading to popularity, their use could be justifiable. The proportion of NVQs awarded relative to alternative vocational qualifications is small and only 12% of the population hold one (Unwin et al., 2004). The distribution of NVQ awards is also uneven across occupations; West (2003) discusses the concentration of NVQs among lower skilled jobs and it is true there is a preponderance in service sector industries with lower pay and no history of professional qualifications. Sargeant (2000) argues that regulatory influences, absence of an alternative qualifications framework and evidence of skills shortages have stimulated some market demand for NVQs in the care sector. While recognising the role of qualifications in benchmarking service standards, their primary purpose is arguably to certify that the holders have acquired skills and/or knowledge through the process of gaining them. As such, the acid test for NVQs is whether benefits associated with increased skills accrue to employees and their employers.

Experiential accounts of employer and employee reception of the qualification have been, at best, mixed. Reasons for employer disaffection concentrate on time-consuming and bureaucratic assessment and too much, too little or otherwise inappropriate content (Swailes and Roodhouse, 2003; Sims and Golden, 1998). Analyses of employee views tend at most to be lukewarm, with notable contempt among students of NVQs in management and administration (Grugulis, 1997; Rainbird et al., 1999). Rainbird et al. (2004a:47-48) show that health care assistants attaining an NVQ 3 found the process of proving their competence 'empowering' and improved their status in relation to nurses and Sargeant (2000) argued that NVQs help employees understand appropriate standards of care. However, other studies in similar settings show that pride in achieving a qualification and/or improved self-confidence are the most frequently cited outcomes of NVQs among individuals in low skilled jobs (e.g. Grugulis and Bevitt, 2002). Like Munro and Rainbird (2001), they also emphasised the lack of skills and/or knowledge that interviewees claimed to have gained, in contrast to Roe et al. (2006) who show that 81% of employers surveyed with workers who had acquired NVQs reported 'more skilled staff' as a primary benefit. The main thrust of Grugulis' article (2003:463) is that holding NVQs yields little human capital advantage, which Wolf et al. (2006:550) find true for most occupational and vocational qualifications taken by most adult learners. (The exceptions are important and we return to those later.) More fundamentally though, current analyses of returns to NVQs have not investigated its value as a 'through put' qualification. Measuring the benefits that holding an NVQ might confer through affording access to a higher level alternative qualification might be worthwhile, but this requires tracking the career trajectories of individual award holders. It is also harder for statistical evidence to assess the broader impact of NVQs for learners in terms of 'distance travelled' through crude measures of earnings, especially for new entrants to the labour market from socially disadvantaged groups.

NVQs and 'expansive' learning environments: Skills Escalator projects as test cases

To investigate whether NVQs can ever have positive effects and demonstrate the significance of the workplace as the major influence on how the qualifications are used, it is worth selecting illustrative cases (Yin, 1993) where optimal conditions for making the

best use of NVQs are most likely to be found. These workplaces are likely to constitute 'expansive' learning environments, following the work of Fuller and Unwin (2004; 2006). The authors generate a flexible range of criteria incorporating pedagogical and socio-cultural aspects of learning and the organisation of work processes and structures whose presence or absence explains how the quality of learning experiences for workers is improved or diminished in any given organisational context. Considerations include the type and extent of learning and career opportunities, quality of emotional and practical support for learners, appropriate job design and alignment of individual and organisational objectives. No detailed empirical analysis of the relationship between use of NVQs and the creation of an expansive learning environment has been located, although Fuller and Unwin (2004:141) suggest that the adoption of NVQs in one of their case sites offering expansive learning opportunities is unexpected and anomalous compared to the normative use of the qualification.

There are a number of reasons why NHS workplaces could make suitable test cases as expansive learning sites for use of NVQs. Recent government policy developments in the UK public health care sector have arguably sought to foster employer interest in creating expansive learning environments under the auspices of the 'Skills Escalator' concept. This embodies an ideal vision of workforce development and derives from *HR in the NHS Plan* as one of the four pillars of a much wider set of reforms aimed at attracting more staff and enabling new ways of work organisation to make better use of the talents and skills of the workforce (Department of Health, 2002). With the intention of offering a 'model career', the Skills Escalator advocates the benefits of offering learning opportunities to all current and potential staff to develop their skills and career regardless of their previous level of education (Department of Health, 2002). Potential benefits for employers were envisaged as reduced skills shortages through easier recruitment, more functional flexibility among staff in expanded roles and associated cost savings. For employees, skills acquisition should lead to a job (if new recruits), followed by enhanced responsibility and access to career opportunities. This vision is consistent with expansive learning principles, although its language is cautious and makes career progress contingent on 'job openings that may occur' (Department of Health, 2002:19). The structure of the Skills Escalator and likely associated learning

opportunities is illustrated diagrammatically in Table 1 and it will be seen that NVQs are explicitly listed as appropriate qualifications for two of the steps on the escalator.

Table 1: The Skills Escalator Approach

Learner Category	Learning Opportunities
Socially excluded individuals	6 month pre-employment orientation programmes involving employability and essential skills training
The unemployed	6 month placements in 'starter' jobs
Jobs/ roles requiring fewer skills and less experience	NVQs 1-3, NHS Learning Accounts, learning needs identified through appraisal and PDP
Skilled roles	NVQs 3-5, HNC/HND, Modern Apprenticeships, (Foundation) degrees, learning needs identified through appraisal and PDP
Qualified professional roles	Postgraduate specialist training through diplomas or Masters, mentoring, secondments, learning needs identified through appraisal, PDP and CPD
More advanced skills and roles	As above, role development encouraged in line with service priorities/ personal career choices
'Consultant' roles	Flexible 'portfolio careers' informed by robust appraisal, CPD and PDP

Source: *Working Together, Learning Together* (adapted from Department of Health, 2001: 18)

In addition to setting out some guidance intended to inspire creative use of workforce development, the NHS has a relatively good record on workplace learning and other features of its employment practices lend support for the suitability of its organisations for seeking evidence of optimal use of NVQs. Annual spending on education and training in the NHS was over £2.5 billion in 2001 (Department of Health, 2001: i) and rose to £4 billion four years later (Department of Health, 2005a: 4). The National Employer Skills Survey 2004 noted that health care and other public sector employers 'show the highest levels of training engagement', being more likely to train the majority of their staff, to

have organised job-specific training and to have scheduled training away from the workplace (Learning and Skills Council, 2005:92). This is endorsed by the experience of employees themselves; data analysed by Skills for Health from the Labour Force Survey 2001/2 showed that workers in the health and social care sector reported being much more likely to receive training in the past four weeks than other industries (2003:11) and data from the Employer Skills Survey indicated that staff were more likely to experience all categories of training from induction to management development, except IT, than any other sector (ibidem). However, the NHS is similar to other parts of the economy in sharing longstanding inequities between the opportunities open to professional versus ancillary and auxiliary staff as noted in a critical report by the Audit Commission (2001:41). In recognition of neglected development of non-professionally qualified staff, the NHS Plan (Department of Health, 2000) made a commitment to all staff without a professional qualification that they would have access to a Learning Account of £150 per year, or dedicated training to NVQ Level 2/3.

In the context of these interventions, the research project from which this paper's data is drawn was commissioned by the Department of Health to evaluate NHS Trusts' experiments in developing the skills of staff through use of the Skills Escalator concept[1]. Two national telephone surveys of 24 semi-structured telephone interviews with staff responsible for promoting NVQs and Learning Accounts at regional level in Strategic Health Authorities and a further 24 semi-structured telephone interviews with staff responsible for managing learning and development at a local level within a variety of healthcare organisations across England informed the selection and collection of case study material (see McBride et al, 2005). From seven case studies completed across a range of NHS trusts, four have been selected for more detailed analysis where NVQs were used more intensively in support of Skills Escalator activity. These are a PCT and 3 Acute Trusts on which contextual information is presented in Table 2.

[1] The project team consisted of Anne McBride, Annette Cox, Stephen Mustchin, Marilyn Carroll, Paula Hyde, Kieran Walshe and Helen Woolnough at Manchester Business School, and Elena Antonacopoulou at Liverpool University Management School. This paper represents the views of the author and not necessarily those of the Department of Health.

Table 2: Case site information

	Inner City Acute	Midlands PCT	Suburban Acute	Outer City Acute
Location	South East City	Midlands City	North West	South East City
Local rate of unemployment	7.5%	5.2%	2.6%	6.5%
Employees	2000	3800	3200	4500
No. of sites	4 reducing to 3 in 2006.	4 main hospital sites and 33 small residential units	1 main site	2 main sites, 1 smaller one, a walk-in unit and an urgent treatment centre
No. of beds	424	608 in main hospitals	625	810 in main hospitals, 946 in total
Performance rating	2-star	2-star	3-star	1-star
Financial balance	Surplus £13,000 (2005/6)	Surplus £320,000 (2005/6)	Deficit £285,000 (2004/5)	Deficit £24 m (2005/6)

A wide range of interviewees participated numbering around 20-40 people connected to each organisation. The numbers interviewed depended on the number and scale of Skills Escalator activities in operation at each Trust. Interviewees included: managers responsible for developing and delivering learning opportunities; line managers; participants and non-participants in learning from professional groups, and staff whose training needs had previously been overlooked (including ancillary staff, healthcare assistants and administrative and clerical staff) and trade union representatives. Trust documentation relating to learning policies and practices was collected and some non-participant observation of learning interventions also took place. Interviews were transcribed and analysed on the basis of which process individual detailed case studies of each Trust were written using a common thematic template for all cases. Major findings were validated through a series of four workshops held with NHS managers including some from case organisations during March-May 2006.

NVQ use in healthcare settings: pockets of popularity

There has been a 73% increase in the proportion of NHS employees whose highest qualification is an S/NVQ between 1999 and 2004, amounting to 53,000 staff (Skills for Health, 2005:74). Across the whole economy, the proportion of employees whose highest qualification is an S/NVQ grew faster than those holding any other type of qualification between 1999 and 2004, with an increase of 41%. Within our case site organisations, Table 3 illustrates the scope of NVQ activity and size of likely target group.

Table 3: NVQ take-up by target group across the case sites

	Inner City Acute	**Midlands PCT**	**Suburban Acute**	**Outer City Acute**
Numbers of NVQs funded in 2004/5	162	106 (averaged for 2003-6)	115 (averaged for 2002-5)	45
Number of staff in non-professionally qualified occupations (see text for definition)	1092	2243	1600	2094

The overall picture shows low levels of NVQ take-up but there are multiple problems in obtaining accurate statistics which mean that care is needed in interpretation. Trusts were unable to state the numbers of staff without NVQs in particular occupations, which means that the only way of estimating numbers of staff who may be eligible for NVQs is to identify the number of staff without a professional qualification i.e. clinical and non-clinical support staff. The occupational groupings in the NHS Staff Survey unfortunately combine staff in functions such as IT, HR and some other management occupations, who are more likely to pursue alternative professional and occupational qualifications, together with estates and facilities staff (who are more likely to take NVQs) in an 'infrastructure support' category. This is likely to cause exaggeration of the numbers of staff for whom NVQ is an appropriate qualification. Inner City and Outer City have contracted out cleaning and facilities functions to a private firm, so these staff do not appear in the figures in Table 3, but the Trusts are making NVQs available to these groups. Conversely, Suburban had increased staff numbers by taking all estates, catering

and domestic services back in-house shortly before fieldwork. NVQ provision to meet the needs of these groups was being accredited, but staff had not yet enrolled, so the potential for NVQ take-up is likely to be greater than figures illustrate. Most critically, there is no way of knowing what proportion of staff already hold NVQs. If we accept that the way in which the statistics are collected is likely to lead to overestimation of the numbers of staff likely to be the 'target group' for NVQs, and underestimate the proportion who already hold an NVQ, it is likely that the penetration of NVQs in most of the Trusts' workforces is underestimated and the potential for NVQ expansion is not reflected in the data for Suburban Acute. More detailed analysis at the cases indicated that NVQs were targeted among particular groups to support Skills Escalator projects shown through four illustrative vignettes below.

The NVQ role in Skills Escalator projects

Ancillary staff at Inner City Acute

The most concentrated pocket of NVQ activity in this Trust centred on ancillary staff working as hospital cleaners employed by a private contractor. The trust was located in an inner city setting with some of the highest scores for indicators of socio-economic deprivation in England, including high unemployment, and had suffered adverse comment in the local media for its poor reputation for cleanliness and infection control. As a result, recruiting clinical staff, including auxiliary workers, was difficult. The Trust took a number of steps to solve these problems, in which NVQs were significant. Under the service agreement with the cleaning contractor, all 100 cleaners were required to undertake NVQ Level 1 in cleaning and they were reported to be completing the qualification in no more than nine months. External funding neighbourhood regeneration budgets provided 'backfill' costs of employing replacement staff while cleaners were out of the workplace. This enabled additional tuition to be provided in communication skills, teamworking, infection control, manual handling and patient care to supplement tutorial support for NVQ portfolio building. The intention was to improve hygiene standards and create a pool of likely recruits for housekeeping and health care assistant roles. Twelve people had taken part so far in the supplementary learning activities and the Trust wished to increase this number to approximately thirty per year. Twenty-five new housekeeping

roles were created which occupied an intermediate step on the career ladder between domestic and HCA. The purpose was to assist with keeping the patient environment tidy and tending to patients' non-clinical needs such as providing cold drinks and ordering food and six of the first wave of ten positions were filled by domestics. In the past two years, around twelve domestics each year had left the contractor to work for Inner City in housekeeping and healthcare assistant roles. Housekeepers were able to pursue NVQs at Level Two or Three in Care, Infection Control and Customer Care and again supplementary learning opportunities were provided in the form of a nine month programme accredited by the Open College Network and delivered by the local FE college. Eighteen housekeepers so far were taking part. Both managers and staff interviewed recognised the currency of NVQs as passports to accessing professional training in nursing and midwifery.

Learning Disabilities Support Workers and Nursing at Midlands PCT

The Learning Disabilities directorate at Midlands operated thirty residential care homes spread across a city location staffed with around 100 community nursing and 300 support worker posts. It suffered from a perpetual shortage of nurses and support workers because of the specialised nature of the service and the limited number of people who have the aptitude and interest to work with clients with a learning disability. Service managers were conscious that plenty of alternative employment opportunities were available but that unemployment rates were higher among people from black and minority ethnic groups who were also under-represented compared to the ethnic diversity of their client group. They established a partnership agreement with a local voluntary organisation which worked as a recruitment broker for black and minority ethnic groups to deliver a pre-employment programme, supplying trainee care workers on one year work placements in Trust care homes, at the end of which they could apply to the Trust for a permanent job. During their training all support workers were required to take NVQ Level 2 in Care. This was partly driven by legislation from the National Care Standards Framework which required 50% of staff working in care homes to gain the qualification by the end of 2005. To plug the shortage of qualified nurses, the Trust then secured funding from the Strategic Health Authority to offer NVQ Level 3 to any member of staff

who wanted to complete it and develop a secondment programme to nurse training. Seventy support workers had taken advantage of these opportunities and subsequently enrolled in nurse training in the past three years, of which eight came from the pre-employment programme. Overall 150 people had participated in the pre-employment scheme, from which an additional forty-five had obtained jobs as support workers for the Trust (and a further fifty were working in other local health and social care roles for other organisations).

Converting Ancillary Workers to Health Care Assistants at Suburban Acute

The opening of a new day surgery unit at Suburban prompted re-organisation of work for the operating department involving a substitution of roles. The operating theatre orderly role was essentially that of a porter, which involved fetching and carrying supplies and cleaning the theatres between operations and at the end of the day. Staff costing analysis conducted by a clinician manager revealed it was inefficient and expensive. Although pay was low on the ancillary scale at National Minimum Wage levels, the orderlies did not have the caring skills needed to make them useful team members in pre- and post-operative processing of patients. Turnover and vacancy rates were also extremely high with an average tenure of approximately six months before employees quit. Fifteen new Health Care Assistant posts replaced the orderly role. They were filled by the remaining existing staff and new recruits for vacant positions for which no previous experience of care work was required. Achieving NVQ2 in Care was expected of HCAs for the purpose of validating competence and all staff were enrolled on the programme. New HCAs took rotation placements of around 5-6 months across theatres, wards and recovery areas supported by a mixture of learning interventions, including on and off-the-job training, clinical supervision and a competency framework to ensure they became multi-functional. They were then eligible to progress to NVQ3 which was encouraged for staff working in these areas. A nurse secondment programme for HCAs with about 10-15 places each year was available across the Trust and always oversubscribed. Each successful candidate was offered a bridging package of study skills tuition to develop their research and academic writing skills in addition to those gained from reporting their competence when compiling NVQ portfolios.

Specialist HCAs in Minor Surgery and Moving Administrative Staff to Clinical Outpatient Assessments Roles at Outer City Acute

A pioneering diagnostic and treatment facility for elective minor and intermediate procedures designed around patient pathways to provide excellent quality of care had opened at Outer City as part of a PFI building programme in the late 1990s. The intention was to maximise efficiency in service delivery through multi-disciplinary teamworking, innovations in working time and more productive use of the six theatres. Thirteen HCA posts were established for the centre, underpinned by a defined set of clinical protocols, a competency framework and NVQ Level 3 in Care. Eight of the current group had already gained the qualification and five were working towards it. Once fully competent, they were able to work at relatively high skill levels as senior assistants to doctors for minor procedures without support from nurses. The role enlargement was inspiring staff to further progression: four HCAs from the centre had gained places on the nurse secondment programme and were currently in training.

More recently, Outer City had created the new role of Clinical Care Coordinator in the outpatient department of a new emergency care and diagnostic building funded through the PFI. The original objective was to enhance the patient experience by ensuring that new arrivals saw one member of staff for the initial registration and sampling processes, rather than waiting to be passed from administrative to clinical staff. As the Trust began to suffer from a large financial deficit, the scheme was also appealing for its potential as a cost saving measure. The former administrators gained an expanded role taking on some clinical tasks including observations, urine analysis and blood pressure measurements. Seventy-two posts were involved in the move and the first batch of twenty employees had completed their NVQ 3 in Care. This was obtained through an eight month programme incorporating an inhouse competency-based training programme and a half day release once a week for supervised ward experience and mentoring to gain clinical skills. The Trust had also conducted literacy and numeracy assessments on all the participating staff, and found twenty who did not reach the appropriate standard. Support was provided for all these staff in the form of a ‘Skills for Life’ programme based on day release once a week for tutoring at the local FE college. Although the new service was only just being implemented at the time of fieldwork, staff who had completed the

training reported increased aspirations towards clinical careers. Managers reported some initial resistance from staff who were apprehensive about taking on clinical roles, but they and the transferring employees were later surprised by the aptitude that many working in the new roles were showing for clinical work.

Explaining NVQ use in expansive workforce development strategies

It is clear from the vignettes above that the process of obtaining NVQs was instrumental in stimulating both interest in and actual career progression. The explanation of why this use of NVQs deviates from that typically portrayed in the critical literature lies in some features of the workplaces which fit the expansive dimension of the 'expansive-restrictive' learning continuum and are shown in Table 4 below[2].

Table 4: Features of expansive workforce development strategies (based on factors extracted from Fuller and Unwin, 2006, Figure 2.2, pp.40-41)

Organizational recognition of and support for learners	Trusts invested in infrastructure to develop appropriate learning interventions, significant support provided by tutors, assessors and mentors
Managers as facilitators of workforce and individual development	Learning managers and line managers promoting learning opportunities including NVQs and encouraging/cajoling employees to undertake and complete them
Alignment of individual and organisational goals	Coincidence of organisational needs and latent talent pools in internal and external labour market
Vision of workplace learning: progression for career	Emphasised by managers, dependent on alignment between individual and organisational goals
Chances to learn new skills/jobs	Built into career structures and through creation of new roles – learners reported acquisition of new knowledge and skills through learning interventions supporting NVQs
Access to wide range of qualifications and learning interventions	NVQ a vehicle for assessment and validation of learning, underpinned by a wide range of associated learning interventions incorporating formal courses, mentoring, clinical supervision

[2] This analysis also raises the question of which criteria from the long list in the expansive-restrictive learning framework are more or less important in different organisational contexts, facing different contextual pressures, but this is beyond the scope of this paper.

Organizational recognition of and support for learners

A major characteristic of the approach to workforce development which delivered rich learning experiences was the quality of support that participants received. Managers were rigorous in policing the quality of tuition. Dedicated NVQ co-ordinators at each Trust sourced appropriate internal and external tuition for both NVQ content and assessment processes, as required. They then created formal and informal partnerships with learning providers, usually FE colleges and local universities, to secure high quality learning provision. Significant effort went into monitoring learning providers to ensure learning content and delivery fitted with the needs of learners and the Trust itself, and managers were quick to take action if provider standards were felt to be slipping. Inner City had had to negotiate with providers to address problems in this area and Suburbs were fiercely proud of the levels of competence they expected staff to reach. Indeed, when they felt quality standards of one firm failed to match organisational expectations, they sought alternative provision. In this way, managers were beginning to establish 'communities of trust' needed to build the credibility of the standard, which Young (2000:58) criticises as being absent from the NVQ national output-based qualifications framework. Midlands PCT were particularly successful in this, judging from the language of a manager there, who described her interactions with the FE college as 'an extremely good working relationship…I mean they're like an extended family really, you know. It works very, very well' (Learning Co-ordinator, Midlands PCT). The role of Trust managers as tough negotiators, brokers and contract managers was intrinsic to securing learning opportunities which met organisational needs and provided a good learning experience for participants.

As a result of these efforts, learners reported good experiences of tutor helpfulness in clarifying understanding of information delivered formally, the availability of NVQ assessors and their willingness to help with NVQ processes. An HCA from Suburban reported lots of assistance being available both to clarify understanding during formal tutoring and back in the workplace:

> it was all on hand you see, you know, we were all able to go over things quite easily. If you weren't sure obviously you would go through it again. (HCA 4, Suburban Acute)

A Support Worker at Midlands PCT revealed that she used her NVQ assessor for portfolio compilation:

> my assessor does mine… I'm crap at folders so I just said to her "You do that." (Support Worker 2, Midlands PCT)

Another described an assessor as: 'a good support isn't she, she's there whenever you need her, she's got your mobile number and she always gets back to you whatever time you phone' (Support Worker 1, Midlands PCT).

Secondly, NVQ participants stressed the value they attached to high quality support they received from mentors, peers and learning or line managers. For staff new to roles involving direct patient contact, they particularly appreciated the work of mentors as these quotes from an HCA and clinic care co-ordinator show:

> I found it very good because obviously each actual ward or each area is a completely new area so we were taken on, you had a mentor. (HCA 4, Suburban Acute)

> Once you got on the ward you would be assigned to a like professional, trained person who would show you know throughout every procedure you're doing…So it's a very rounded sort of training, you weren't just dumped on the ward to get on with it. (Clinic Care Co-ordinator 1, Outer City Acute)

Managers as facilitators of workforce and individual development

Learning managers who brokered training also worked with clinical managers to define learning needs for each role. Strong working relationships between service managers and learning and development staff were instrumental in developing the learning interventions including use of NVQs to support service delivery needs. The most direct and critical support that NVQ participants received came from managers and was found in evidence of supportive career development and appraisal processes. In many cases managers were often instrumental in directly and indirectly persuading staff to take part through open encouragement and subtle cajoling. Managers also helped employees through the learning process and supported them if it became difficult. In locations where staff appeared to be progressing well on NVQs, managers reported staff feedback which welcomed their availability and encouragement. Midlands PCT ran a career development clinic several times a year supported by managers which saw up to thirty employees. At Inner City Acute, the cleaning supervisor employed by the external contractor was

supporting her staff through the training programme. This resulted in increased turnover as staff gained jobs within the Trust but the manager reported that she felt it was 'helping the community' and that 'everybody has to have a chance' of progression (Domestic Supervisor, Inner City Acute). Staff at Suburban Acute felt well informed about learning and development opportunities. An HCA reported that managers realised she had no NVQ in the new operating department, pushed her to undertake it and although she was 50, were encouraging her through it:

> I got a letter from Sister in recovery today, she said, "Oh you've got a workshop meeting, do you want to go on that?" and so they push you. They give you a photocopy, "Here we are…put your name down in the book.."…you get certain staff that say, "Come on, shift your bum, you can go on this, put it in your NVQ file, it'll do you good." (HCA 3, Suburban Acute)

Domestics at Inner City Acute were benefiting from encouragement from colleagues without direct mentoring responsibilities for them. One cleaning offices had mentioned her interest in progressing into a housekeeping role to a manager who told her to 'go for it' (Ward Housekeeper 1, Inner City Acute). Another working on a gynaecology ward had aspirations to progress into midwifery. She recounted an incident where she had assisted staff while cleaning a ward area for a woman who wanted a photograph of her stillborn child. The staff noticed her interest and aptitude in dealing with a sensitive situation:

> the staff, sometimes, when they are doing something like part of nursing and you want to help, they said "What are you doing there? Why don't you come and join us?...You're very good at this." (Domestic Assistant 2, Inner City Acute)

Career structures to align individual development and organisational goals and workplace learning for career progression

The concentration of Skills Escalator projects and NVQ use around particular job ladders and workplaces within case sites illustrates that managers were engaged in some element of human resource planning. Trusts are ostensibly required to offer learning opportunities across their whole workforces to achieve the Department of Health goal of all Trusts meeting 'Improving Working Lives Practice Plus' by March 2006. This requires that all staff have 'equal access to training and development opportunities and are encouraged to develop new skills in line with Skills Escalator principles' (2004:32). However, the

targeted use of NVQs for Skills Escalator projects appears notably driven by coincidence of individual and organisational needs, be these recruitment at Inner City, Midlands and Suburban or improved service delivery and cost savings at Outer City. Enabling workplace learning for career progression is therefore dependent on the existence of appropriate structures and at Inner and Outer City and Suburban Acute, tied to the creation of new roles in Housekeeping and HCA specialisms. Nevertheless, these innovations were taking place in a context conducive to personal career development as a majority of managers were endorsing the goal of supplying learning opportunities which met individual needs. Twenty-four out of thirty-three managers interviewed across the case sites believed that the purpose of the Skills Escalator projects was to advance personal and individual development, in contrast to a smaller number who believed that organisational efficiency alone was the goal.

Access to wide range of qualifications and learning interventions and chances to learn new skills/jobs

Participant experiences of NVQs show that as a result of the conditions described above, they were engaged in substantive and expansive learning opportunities. When questioned about their experience of NVQs, the immediate response of learners was not to lament the drudgery of portfolio production with little tuition being provided or being forced to sit through courses to teach them skills in which they were already competent. Instead, they talked of all the learning interventions in which they were participating to gain the qualification and the utility of the knowledge and skills they had acquired.

A housekeeper at Inner City with 15 years experience as a domestic talked of learning about customer care, the hospital environment and supervising domestics to improve infection control during her NVQs in Cleaning 1 and Customer Care 2 and how it had inspired her career ambitions:

> I think it's useful, you know. They are opening your mind… the good thing about it is you've gone forward and you've learnt, you've learnt a lot…to be honest I think I'm going to do this to go and do nursing. (Ward Housekeeper 1, Inner City Acute)

A domestic reported a similar experience and hoped to become a midwife:

> the NVQ really tells you the infection control, bed control and anything that goes in the hospital, given this MRSA thing that's going round. Doing NVQ

> makes you aware of so many things that you are not aware of before. (Domestic 1, Inner City Acute)

A trainee nurse who had started work in the Archway Programme at Midlands PCT and completed NVQs 2 and 3 praised both the range of topics covered including washing/dressing patients, food and hygiene and health and safety and reflected on the beneficial mix of theory and practical learning on and off the job:

> the minute I started understanding, the thing is you will sit in the classroom and you do theory and say "why am I doing this" it doesn't add up, but when you go out there into the world of work and you have the hands on training then it comes back to you, 'oh this is why I learnt this in college." (Trainee Nurse 1, Midlands PCT)

Support workers had a range of often specialist training available to them, tailored to the relevant client group. Examples of learning opportunities we came across which staff had taken included techniques to diffuse aggression, massage therapy and courses on working with autistic service users or those with acquired brain injuries. An HCA from the new day surgery unit at Suburban Acute reflected that:

> I think I have built up quite a knowledge of theatre work…we had a rolling half day this morning, we did a manual handling course…on using the MEA machine in theatres. (HCA2, Suburban Acute)

A new clinic care co-ordinator at Outer City recalled the new skills she had gained through her training and regarded the NVQ simply as the assessment element of a broader learning process:

> all the blood pressure, all the observations, which I found was fantastic. Then I did my ECG training as well. Then I did bloods as well…then you're assessed on it by the NVQ. (Clinic Care Co-ordinator 2, Outer City Acute)

It is evident from these descriptions that learners were not experiencing the usual delivery of NVQs portrayed in much of the critical literature, involving little actual learning or very basic information confined to 'common sense' (Cooke et al., 2000). If the employees involved were all new to their roles, enthusiasm for even limited learning provision to help them become competent is comprehensible, but our interviewees were a mixture of recent recruits and employees with long service and there was no noticeable variation in their responses. Learning interventions associated with NVQs were expanding their understanding of their work and/or enabling them to undertake unfamiliar

tasks. Interventions were knowledge-based, involved time allocated for off-the-job learning and a broad range of learning activities, enabling staff to gain new roles.

Conclusions

In revisiting the debate about the value of NVQs, this paper has illustrated their potential for producing rather more positive outcomes than previous evidence has provided. Employees were *learning* in the process of gaining them and NVQs were successfully acting as a 'throughput' qualification, providing access to higher level roles and qualifications. This process was driven by the expansive approaches to workforce development adopted by the workplaces in which NVQs were being used. It also illustrates the dynamic relationship between organisational context and approach to learning/workforce development (Fuller and Unwin, 2003:127) which explains why what may seem unprepossessing qualifications can be beneficial. This in turn calls for more investigation of the role of the workplace in adult learners' experience of vocational qualifications.

To conclude the assessment of these case sites' use of NVQs in conjunction with Skills Escalator projects, it is necessary to address three issues: i) the extent to which the data is representative and generalisable, ii) prospects for and limits to future expansion of this type of NVQ use within and beyond the organisations discussed, iii) the implications of the Skills Escalator experiment with NVQs for the debate about how to achieve a 'high skills economy'. In considering the first issue, it is not claimed that all participants in NVQs across the case sites had an equally good experience. In particular, data from the project reported elsewhere (McBride et al., 2006) shows that staff in other roles, especially at managerial levels, reported similarly negative views of the qualification to those found by Grugulis (2000). Nor even did staff enrolled in the same type and level of NVQs at different sites or departments within the same organisation necessarily fare as well.

Evidence in support of potential expansion of NVQs is apparent in their value in conferring eligibility to access professional clinical qualifications but there is no suggestion that NVQs could or should ever supplant these by expanding upwards beyond what West calls the 'heartland' of NVQ Levels 2 and 3 (2003:21) in health or any other

sector. Yet at these levels within health and social care settings, it seems that NVQs have increased in use and gained currency as a mark of professional competence. This has been stimulated by regulatory intervention in social care work, pump priming of funding with individual entitlements to NVQs for 'non-qualified' staff and concern on the part of the organisations to assure service standards, given the high stakes associated with the service being provided. Institutional support conducive to the promotion of competence-based learning such as NVQs is continuing from the Sector Skills Council - Skills for Health. It is seeking to convert employers and learning providers to organising and delivering work and learning in the sector based on proof of competence (as opposed to qualifications) (Skills for Health, 2006), and is engaged in the dauntingly ambitious task of mapping nationally portable definitions and standards of competence. It is conceivable that elements of clinical roles might be amenable to this implied type of functional analysis; giving an injection and taking blood are tangible observable activities for which the difference between correct and incorrect practice may be relatively easy to distinguish. For these elements, NVQs are seemingly suitable for assessing competence in lower skilled jobs. However, mapping 'softer' competencies involving communicating and empathising with patients where emotional interaction is less predictable than physical, may be much harder to standardise.

Extending the provision of NVQs and any other vocational learning opportunities is contingent upon both supply and demand factors. The National Employer Training Programme will continue funding to support individuals acquiring a Level 2 qualification, but the more important question is whether there is an employer appetite within and beyond the health sector for roles requiring higher level skills and to fund learning opportunities for employees to acquire them. The case vignettes show that creative linking of NVQs to job ladders and opportunities for career progression were concentrated in organisational and occupational niches. Trusts were not promoting cross-occupational career routes for ancillary staff into administrative or professional management occupations. A number of managers interviewed later questioned what progression was realistically available for staff not seeking clinical roles. Staff numbers benefiting from the opportunities presented were often, but not exclusively, relatively small in proportion to the size of each Trust's workforce. As far as prospects for the

expansion of NVQs is concerned, this depends on the relative balance of job creation in HCA type roles equivalent to NVQ Level 2-3 and more senior hybrid 'practitioner', specialist and practitioner roles. The underpinning qualifications structure being established for the latter is based on Foundation Degrees, rather than NVQs, so prospects for NVQ expansion at this level are unlikely, but expansion of staff numbers at lower levels might create significant demand for NVQ provision.

Relative demand for different types of qualifications points us to the debate around the UK's (lack of) progress to becoming a high skills economy. It is worth considering whether there are any lessons to be learned from the Skills Escalator experiments with NVQs that have implications for this debate in terms of skills research and policy. Fuller and Unwin themselves recognise that while an expansive learning environment should improve quality and range of learning, it will not necessarily change the nature of work activity (2006, p.37). Employer demand for skills in the quest to improve organisational performance drives the creation of new roles and redesign of existing ones and there is a long history of commentary which points to overstatement of UK demand for skills relative to supply (Finegold and Soskice, 1988; Keep and Mayhew, 1999; Keep et al., 2006). Within the healthcare sector, planned expansion of Assistant and Advanced Practitioner roles enabling staff to take on delegated tasks from professional staff and these do offer some potential for pulling employees up the organisational hierarchy. Further stimulus to the adoption of these roles comes from widely reported financial constraints on NHS trusts. This could lead to a drive to remodel the profile of the healthcare workforce in line with the policy aspirations for the Skills Escalator reported by a senior policymaker, who described an element of its purpose as devolving tasks to 'the person who is a) safe to do the task but b) the most economically efficient to do so…the work is being…done safely, but it's being done more cost-effectively' (senior policy maker, Interview 2). Thus clinical tasks may be passed down the occupational hierarchy to more cost-effective lower graded staff. This was already evident in the experiments with new roles for service efficiency at Suburban Acute and Outer City which were in financial deficit. Plans in Skills for Health's Sector Skills Agreement (SSA) also include building 'natural progression' into entry level roles and research into provision of a guaranteed minimum quantity of protected learning time

(Skills for Health, 2006), but it is unclear what the incentives and sanctions are to encourage employer compliance with the SSA.

More fundamentally, the difficulty of (re)designing roles is unappreciated and underestimated. Hyde et al. (2004) have shown the difficulties of the process of role and service redesign. Management capacity in terms of expertise and opportunity is a pre-requisite. The process requires high levels of management skills in both reconceptualising work processes and managing change processes, which is a significant challenge to both the leadership skills and resources of operational managers and HR staff. Keep et al. (2006) point out the lack of public policy debate on appropriate work design. Parker et al. (2001) review work in the area and provide a helpful but huge contingency model of influences, processes and outcomes. However, they largely equate work redesign to introducing teamworking, rather than how individual jobs are constructed, concluding that managers currently attempting to redesign work will feel 'inadequately prepared' (p.433) by current theory. The competence-based workforce planning espoused by Skills for Health suggests a fragmented approach to job design. It is not clear what, if any principles, are being followed to ensure that a list of aggregated competencies adds up to something that constitutes a meaningful job. There is also some evidence already, that unless the new roles are sustainable and fully embedded within recognised career trajectories, they may not appeal to employees seeking the security of an established career path (Currie et al., 2007). There has been some experimentation with similar assistant/support roles in other parts of the public sector including social care, policing and teaching, though in the latter case, assistant roles are augmenting, rather than replacing qualified roles (Bach et al., 2006). Growth of these new roles in other sectors appears under-researched.

The extent to which there is demand for hybrid roles at the associate/technical level is thrown into question by qualitative and quantitative research that raises doubts about the extent to which there is actually sustainable demand for high levels of skills. Rainbird et al. (2004b) give the example of vital but relatively monotonous, low-skilled work in surgical instrument sterilisation which is difficult to automate, thus sustaining the need for people to do low-skilled jobs. In 2005, 39% of the NHS workforce were in 'non-qualified' roles including healthcare support, estates and facilities, a figure which has

reduced only marginally from 41% in 2005, despite a large expansion in the nursing workforce (figures calculated from Department of Health, 2005b). Skills for Health also assesses the current greatest proportion of skills shortages in the sector as lying in lower skilled 'personal services' occupations at 42% (2006:61). Future predictions are much harder to make, due in part to deficiencies in data on the current labour force (Skills for Health, 2005), but evidence suggests that the largest absolute number of new jobs created between 2004 and 2014 in the healthcare sector will be in personal service occupations, rather than higher skilled work, with a combined total of over 300,000 recruits required to replace leavers and fill new roles (Dickerson et al., 2006, p.199). Across the rest of the economy, the picture is similar. Employment growth is predicted for managers and associate professionals, but still higher growth is anticipated in lower skilled personal service roles (Dickerson et al., 2006, p.199).

The challenge therefore is to develop ways of propelling employees through a career trajectory, maintain a supply of labour to lower skilled roles while offering longer-term opportunities for employees to progress beyond them. Coats (2005) argues the need to instigate a public debate about quality of work and jobs, connecting this to working time and health at work issues. Delbridge et al. (2006) suggest a dual approach of 'hard' regulation and 'soft' funding of voluntary organisations and sectoral fora to help firms innovate and develop higher quality work in pursuit of improved productivity. Alternatively Keep et al. (2006) discuss the possibility of a role for Regional Development Agencies but points to difficulties in their geographical focus and requirement to meet multiple goals. Currently, Sector Skills Councils are perhaps the most obvious space in which to generate a debate between employers, social partners and policy makers about competitiveness and skills. From an institutional perspective, Skills for Health is comparatively well embedded with longstanding employer organisations and relationships with social partners. Notwithstanding its limitations, it is therefore relatively well placed to stimulate the development of quality work within healthcare. Other SSCs (e.g. Asset Skills) have a less coherent industry 'footprint', and are working with employers who have a lower level of engagement with training and development, 'low road' competitive strategies, a less qualified and mostly disenfranchised workforce and a less well embedded qualifications infrastructure. This means that any journey

towards a high skills economy is likely to be an uneven and path dependent one, requiring support differentiated by sector. As such this account of Skills Escalator projects experimentation with NVQs perhaps offers fragments of promising practices for inspiration, but given the enabling factors needed and likely barriers identified, we can have few expectations that healthcare or any other sector will help the UK to develop into a high skills economy quickly.

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References

Audit Commission (2001) *Hidden Talents: Education, Training and Development for Healthcare Staff in NHS Trusts*. Audit Commission: London.

Bach, S., Kessler, I. and Heron, P. (2006) 'Changing job boundaries and workforce reform: the case of teaching assistants', *Industrial Relations Journal*, 37:1, 2–21.

Beaumont, G. (1996) *Review of 100 NVQs and SVQs*. London: NCVQ/SCOTVEQ.

Coats, D. (2005): *An Agenda for Work: The Work Foundation's challenge to policy makers*, Provocation Series Volume 1 Number 2. London: The Work Foundation.

Cooke, P., Cockrill, A., Scott, P., Fitz, J. and Davies, B. (2000) 'Working and learning in Britain and Germany: findings of a regional study', in Coffield, F. (ed.) *Differing Visions of a Learning Society: Research Findings Volume 1*. Bristol: The Policy Press, pp.199-230.

Currie, G. , Finn , R. and Martin, G. (2007): 'Institutions and Networks: Human Resource Problems and Solutions', EWERC Seminar, Manchester Business School, 21 February.

Delbridge, R., Edwards, P., Forth, J., Miskell, P., Payne, J. (2006) *The Organisation of Productivity:*
Re-thinking Skills and Work Organisation. London: AIM Research.

Department of Health (2000). *The NHS Plan*. London: Department of Health.

Department of Health (2001) *Working Together, Learning Together: A Framework for Lifelong Learning for the NHS.* London: Department of Health.

Department of Health (2002) *HR in the NHS Plan: more staff working differently*. London: Department of Health.

Department of Health (2004). *Improving Working Lives: Practice Plus National Audit Instrument*. London: Department of Health.

Department of Health (2005a) *National Framework to Support Local Workforce Strategy Development: A guide for HR Directors in the NHS*. London: Department of Health.

Department of Health (2005b) *NHS Hospital and Community Health Services Non-Medical staff in England:1995-2005*. London: Department of Health.

Dickerson, A., Homenidou, K. and Wilson, R. (2006) *Working Futures 2004-2014: Sectoral Report.* Sector Skills Development Agency/Institute for Employment Research: Coventry.

Finegold, D. and Soskice, S. (1988). 'The Failure of Training in Britain: Analysis and Prescription', *Oxford Review of Economic Policy*, 4: 21–53.

Fuller, A. and Unwin, L. (2004) 'Expansive learning environments: integrating organizational and personal development', in Rainbird, H., Fuller, A. and Munro, A. (eds.) *Workplace Learning in Context*, Routledge: London, pp.126-144.

Fuller, A. and Unwin, L. (2006) 'Expansive and restrictive learning environments' in Evans, K., Hodkinson, P., Rainbird, H. and Unwin, L. (eds.) *Improving Workplace Learning*, Routledge: London.

Gospel, H. and Fuller A.(1998) 'The modern apprenticeship: new wine in old bottles?', *Human Resource Management Journal*, 8, 1: 5–22.

Grugulis, I. (2000) 'The management NVQ: a critique of the myth of relevance', *Journal of Vocational Education and Training*, 52, 79-99.

Grugulis, I. (2003) 'The contribution of NVQs to the growth of skills in the UK', *British Journal of Industrial Relations*, 41, 3: 457-475.

Grugulis, I. and Beavitt, S. (2002) 'The impact of the Investors in People award: a case study of a hospital trust', *Human Resource Management Journal*, 12: 44–60.

Hyde, P., McBride, A., Young, R. and Walshe, K. (2004) *A catalyst for change? The national evaluation of the Changing Workforce Programme*. Report to Department of Health. Manchester Centre for Healthcare Management, Manchester.

Keep, E. and Mayhew, K. (1999). 'The assessment: knowledge, skills and competitiveness', *Oxford Review of Economic Policy*, 15: 1-15.

Keep, E., Mayhew, K. And Payne, J. (2006) 'From skills revolution to productivity miracle - not as easy as it sounds?', *Oxford Review of Economic Policy*, 22, 4: 539-559.

Learning and Skills Council (2005): *National Employer Skills Survey 2004 – Main Report*. London: LSC.

Leitch, S. (2006) *Prosperity for all in the global economy - world class skills.* The Stationery Office: London.

McBride, A., Cox, A., Mustchin, S., Carroll, M., Hyde, P., Antonacopoulou, E., Walshe, K. and Woolnough, H. (2006) *Developing Skills in the NHS.* Report to the Department of Health. Manchester: Manchester Business School.

McBride, A., Mustchin, S., Hyde, P., Cox, A., Walshe, K., Antonacopoulou, E. (2004) *Mapping the progress of Skills Escalator Activities: Early Results from a Survey of Learning Account and NVQ Managers in Strategic Health Authorities*, Report to the Department of Health. Manchester Business School: Manchester.

McBride, A., Mustchin, S., Cox, A., Hyde, P., Antonacopoulou, E., Walshe, K. (2005) *Mapping the progress of Skills Escalator Activities: Early Results from a Survey of Learning and Development Professionals within NHS Trusts*. Manchester: Manchester Business School.

Parker, S., Wall, T. and Cordery, J. (2001) 'Future work design research and practice: towards an elaborated model of work design', *Journal of Occupational and Organizational Psychology*, 74: 413-440.

Rainbird, H., Munro, A. and Holly, L. (2004a): 'The employment relationship and workplace learning', in Rainbird, H., Fuller, A. and Munro, A. (eds.) *Workplace Learning in Context*, Routledge: London, pp.38-53.

Rainbird, H., Munro, A. and Holly, L. (2004b) 'Exploring the concept of employer demand for skills and qualifications: case studies from the public sector', in C. Warhurst, E. Keep and I. Grugulis (eds.) *The Skills That Matter*. Palgrave: Basingstoke, pp.91-108.

Roe, P., Wiseman, J. and Costello, M. (2006): *Perceptions and Use of NVQs: A Survey of Employers in England*, Research Report 714, Department for Education and Skills: London.

Sargeant, A. V. (2000) An exploratory study of the effects of progression towards National Vocational Qualifications on the occupational knowledge and care practice of social care workers, *Social Work Education*, 19, 6: 639-66.

Senker, P. (1996) 'The development and implementation of National Vocation Qualifications:
an engineering case study', *New Technology, Work and Employment*, 11, 2: 83-95.

Skills for Health (2005) *Skills Needs Appraisal - Annexes to Full Report.* London: Skills for Health.

Skills for Health (2006) *Sector Skills Agreement for Health (England)- SSA Collaborative Action Plan Framework.* Bristol: Skills for Health.

Sims, D. and Golden, S. (1998) *A Study of Employers' Use of NVQs and SVQs Across Industrial Sectors,* Research Report 51. Nottingham: Department for Education and Employment.

Swailes, S. and Roodhouse, S. (2003) 'Structural barriers to the take-up of higher level NVQs', *Journal of Vocational Education and Training,* 55, 1: 85-105.

Unwin, L., Fuller, A., Turbin, J., and Young, M. (2004) *What determines the impact of Vocational Qualifications? A Literature Review*, Research Report 522, London: DfES.

West, J. (2004) *Dreams and Nightmares: The NVQ Experience*, CLMS Working Paper No. 45, Centre for Labour Market Studies, Leicester.

Wolf, A. (1995) *Competence-Based Assessment*. Buckingham: Open University Press.

Young, M. (2002) 'Contrasting approaches to the role of qualifications in the promotion of lifelong learning', in Evans, K., Hodkinson, P. and Unwin, L. (eds.) *Working To Learn: transforming learning the workplace*. Kogan Page: London, pp.44-62.