

**REPORT
FROM THE
INSPECTORATE**

**National
Vocational
Qualifications
in the Further
Education
Sector in
England**

National Survey Report

September 1994

**THE
FURTHER
EDUCATION
FUNDING
COUNCIL**

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FUNDING COUNCIL***

The Further Education Funding Council has a statutory duty to ensure that there are satisfactory arrangements to assess the quality of provision in the further education sector in England. It discharges the duty in part through its inspectorate, which inspects and reports on each college in the sector every four years. The Council's inspectorate also assesses and reports on a national basis on specific curriculum areas and advises the Council's quality assessment committee.

College inspections involve both full-time inspectors and registered part-time inspectors who have specialist knowledge and experience in the areas they inspect. Inspection teams normally include at least one member from outside the world of education and a nominated member of staff from the college being inspected.

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CONTENTS

	Paragraph
Glossary	
Summary	
Introduction	1
The scale of NVQ provision	10
The organisation and management of NVQs in further education	14
Teaching and learning	24
Simulated work environments	26
Work placements	34
Resource-based learning	35
Knowledge and understanding	36
Core skills	40
Students with learning difficulties and/or disabilities	45
Assessment and achievement	46
Resources	50
Quality assurance	54
Conclusion	60
Annex: the NVQ framework	
Bibliography	

GLOSSARY

The use of acronyms in this report has been kept to a minimum. Because of their familiarity and frequency of use, the following have been used:

APL	Accreditation of Prior Learning
BTEC	Business and Technology Education Council
C&G	City and Guilds
CBI	Confederation of British Industry
GCE AS/A level	General Certificate of Education Advanced Supplementary/Advanced level
GCSE	General Certificate of Secondary Education
GNVQ	General National Vocational Qualifications
NCVQ	National Council for Vocational Qualifications
NVQ	National Vocational Qualifications
RSA	Royal Society of Arts
SVQ	Scottish Vocational Qualifications
TEC	Training and Enterprise Council
TEED	The Training and Enterprise Directorate, Employment Department

SUMMARY

This report focuses on the provision of National Vocational Qualifications (NVQs) in the further education sector. It does not include any assessment of provision made by private training organisations, or by companies operating in-house training schemes. The inspection evidence is supplemented by statistical and general information from a range of sources such as major awarding bodies, training and enterprise councils, the Further Education Unit and the National Council for Vocational Qualifications (NCVQ).

Over 1,500 NVQ teaching, learning and assessment sessions, involving over 20,000 students, in colleges in the further education sector were inspected during the academic year 1993-94. Overall the quality of the teaching and training observed was of an appropriate standard. The introduction of NVQs has encouraged the development of greater flexibility in learning programmes, which enable students to work on their own. In more than half of the activities, the strengths clearly outweighed any weaknesses. In fewer than 10 per cent the weaknesses outweighed the strengths. Inspectors found no evidence of students in further education sector colleges being certificated as having competences they did not possess. However, there is concern about trainees' understanding of the principles underlying job competences and the poor levels of literacy and/or numeracy of some trainees.

Colleges have made significant efforts to liaise with employers and training and enterprise councils in order to attract custom for NVQs and to meet employers' needs. However, they have been hampered by factors such as: the widespread lack of knowledge of NVQs amongst employers; employers' concerns over the relevance of NVQs; and the inability or unwillingness of small employers in particular to devote resources to work-based training.

Although detailed costings are rarely available, colleges report that there are substantial costs associated with the introduction and implementation of NVQs. These include the costs of: setting up and running simulated work environments; developing learning resources which enable students to work on their own; carrying out assessments; and keeping detailed records of students' progress.

There are difficulties for colleges in finding enough suitable work placements for full-time and unemployed students on NVQ programmes. Colleges have expended considerable time and effort in developing realistic simulated work environments in many vocational areas, but employers remain sceptical about the validity of assessing competence mainly or solely in this way. However, even when students are in employment, assessment is usually carried out by college staff owing to the shortage of trained workplace assessors.

The contribution of NVQs to vocational education and training would be enhanced if NCVQ insisted on greater clarification of the knowledge, understanding and core skills elements of each NVQ before qualifications are accredited. Colleges should identify the full range of education and training needs of students in NVQ programmes and ensure that these are met, where necessary, by additional studies. Employers for their part should become more involved in both training and assessment in the workplace if NVQs are to have vocational credibility.

INTRODUCTION

1 The National Council for Vocational Qualifications (NCVQ) was set up by the Government in 1986 and was charged with devising a common framework for vocational qualifications. The Council's task is to accredit qualifications devised by awarding bodies and to locate these qualifications within the national framework as National Vocational Qualifications (NVQs). The standards upon which NVQs are based are determined by lead bodies - organisations which represent employers and other bodies with specific interests in a particular industry or occupation. There are at present as many as 160 lead bodies and 114 awarding bodies. A statement of agreed practice, the *Common Accord*, has been drawn up between NCVQ and the awarding bodies to promote a common approach to quality assurance in NVQs.

2 Currently there are about 800 NVQs available in 11 occupational areas and at five levels from the most basic (level 1) to the more advanced (level 5). The NVQ framework is described in the annex. The majority of these awards are available within the further education sector, although some NVQs are delivered mainly within companies to their own employees.

3 Each NVQ comprises a number of units of competence, each covering broad aspects of a person's job. These are broken down into more specific job functions known as elements of competence. For each element, candidates are assessed through a demonstration of competence - what they can do - against specified performance criteria. This process must take place under conditions which allow accurate assessment of competence to the standard expected in employment. Evidence should preferably be derived from the workplace, although some flexibility is possible. In some vocational areas, a realistic work environment, simulated by a training provider, is accepted as a substitute; examples are college training restaurants and hairdressing salons. Work placements are used to provide additional evidence of competence. Although achievement of an NVQ unit is based upon demonstration of competence, candidates are also expected to have the necessary background knowledge and understanding.

4 Assessment methods for NVQs include direct observation of a candidate's demonstration of competence, inspection of products, simulations such as skills tests, projects and assignments and also written or oral questioning. People who carry out these assessments are referred to as assessors. Assessment standards should be confirmed through internal verification within each centre offering NVQs. This is a process through which an appropriately-qualified member of staff samples and monitors the assessments carried out by others within the same organisation. In addition, external verifiers from the awarding bodies visit centres to confirm that the assessment and verification procedures are ensuring adequate standards.

5 NVQs are not dependent on any particular mode, duration or location of learning. It is possible for candidates to claim credit for competence acquired previously, including that acquired outside of any formal programme of study, provided appropriate evidence is presented. This process is known as the accreditation of prior learning (APL). Candidates may accumulate credits on a unit by unit basis.

6 The NVQ framework includes General National Vocational Qualifications (GNVQs). These qualifications are intended to prepare candidates for work or further study in broad occupational areas, whereas NVQs accredit occupational competence. A GNVQ covers the skills, knowledge and understanding which support a range of NVQs within an occupational area. GNVQs are the subject of a separate report to be issued by the Further Education Funding Council inspectorate.

7 NVQs form the basis of the National Targets for Education and Training, agreed in 1991 by the government and representatives of business and industry, the trade unions and education. According to the present targets for foundation learning, 80 per cent of young people should have reached NVQ level 2 or equivalent by 1997, and by 2000, 50 per cent of young people should have reached NVQ level 3 or equivalent. With regard to lifetime learning, 50 per cent of the workforce should be aiming for NVQs or units towards them by 1996, and by 2000, 50 per cent of the workforce should be qualified to at least NVQ level 3 or equivalent.

8 The white paper *Competitiveness: Helping Business to Win* (May 1994) states that the government will ensure that NVQs and the equivalent Scottish Vocational Qualifications (SVQs) remain up to date and continue to observe strict standards. All existing NVQs/SVQs are to be reviewed by April 1996. As part of its objective to strengthen work-based training, the government is introducing modern apprenticeships for 16 to 17 year olds, leading to NVQs at level 3. Accelerated modern apprenticeships, for 18 to 19 year olds with advanced level vocational or academic qualifications, will lead to NVQs at level 3 or higher. In addition, over £60 million will be made available to train up to 24,000 key workers in small firms (with under 50 employees) in managerial, supervisory and technical skills so that they can pass on their skills by training others. NVQs will have an important role to play in this development.

9 This report focuses on the provision of NVQs within further education sector colleges. It is based on the findings from 250 inspections of NVQ provision carried out in 98 colleges during session 1993-94. Nine of the 11 areas of competence shown in the annex to this report were inspected; the two areas not inspected were extracting and providing natural resources and transporting. The work of over 20,000 students was observed in 1,500 teaching, learning and assessment sessions. This evidence was supplemented by statistical and general

information from other inspections and from a range of sources such as major awarding bodies, training and enterprise councils and NCVQ. In addition, account was taken of the work of the Further Education Unit which was commissioned to carry out a desk survey to provide a detailed comparison of the content of NVQs and their forerunner qualifications in three vocational areas. The findings of the review of NVQs and SVQs, carried out by the Confederation of British Industry (CBI), *Quality Assessed* (June 1994), were also taken into account.

THE SCALE OF NVQ PROVISION

10 There are now NVQ qualifications available which are suitable for the needs of more than 80 per cent of the working population at levels 1 to 4. The government has set a target of 90 per cent coverage at levels 1 to 5 by the end of 1995.

11 NVQs are offered by three main types of training provider: the further education sector colleges, private training organisations run on a commercial basis and companies operating in-house training schemes.

12 Over 565,000 full NVQ certificates had been awarded by the end of March 1994. (*The NVQ Monitor, Spring/Summer 1994*). NCVQ does not at present have information on the proportion of awards which are made in the further education sector, the private training sector or within companies. There is currently no national database on the numbers of candidates achieving one or more units of competence rather than full awards, nor on modes of attendance or details of different types of candidate. The information held by the awarding bodies varies greatly in its extent and format. Some awarding bodies do not register candidates until they are actually claiming credit for an NVQ unit or units. It is therefore difficult to assess how many candidates are currently working towards NVQs. Only one major awarding body at present is able to provide information on numbers of registered candidates by mode of attendance, within different categories of college and within different regions of the United Kingdom.

13 A survey by the Institute of Manpower Studies, which covered 1506 employers of all sizes and in all sectors of industry, commerce and public service, found that 44 per cent of firms with over 500 employees were using NVQs, SVQs or similar occupational standards. Of firms with fewer than 50 employees, only 6 per cent were using NVQs and SVQs (*National and Scottish Vocational Qualifications: Early Indications of Employers' Take-up and Use*, Institute of Manpower Studies 1993).

ORGANISATION AND MANAGEMENT OF NVQS IN FURTHER EDUCATION

14 Few colleges have an overall policy on NVQs which sets out common arrangements for the accreditation of prior learning, internal verification, the sharing of good practice and the review of external

verifiers' reports. However, most colleges include the development of NVQ provision in their strategic objectives. In many cases this is linked to the development of more flexible provision, which aims to tailor programmes of study to individual needs. This approach makes greater use of prepared learning resources which students use individually, supported by the teacher as necessary. Many NVQ programmes allow students to start or finish at different times, although this is generally confined within the traditional 36-week college year. A few colleges are working towards providing modular programmes which will enable students to choose the units of competence they need, rather than to follow compulsory programmes.

15 Most colleges are energetic in their marketing of vocational courses, including NVQs. Inspectors found examples of innovative marketing of NVQs, including some ingenious ideas such as advertising on the back of car-parking tickets and on the invoices of a construction company. Many colleges make considerable efforts to liaise with employers, for example through awareness-raising events and by involving employers in advisory committees and consortia. Some colleges offer schemes to provide employers with tailor-made programmes incorporating NVQs. For example, one college offers a 42-week full-time course for the employees of a major construction company leading to NVQ level 3 awards. Another college's business centre is providing a programme of NVQs for nearly 500 employees of a major transport operator which combines engineering maintenance to level 3 with some upholstery units from another NVQ: college assessors are on the employer's site for a minimum of 20 hours per week. The same college offers a specially-designed programme to a major food manufacturer. This combines broad-based education and training, through Business and Technology Education Council (BTEC) National Certificate and Higher National Certificate awards in engineering, with competence-based training through full NVQs in both mechanical and electrical engineering.

16 There are many examples of colleges working in partnership with other local organisations. In one college a group of small employers has been brought into an engineering consortium by the college's youth training managing agency. This group is used to ensure a wide range of work placement experiences for students. The same college is developing innovative courses in welding linked to new European standards with a view to placing trainees in local firms equipped to these standards. This is a joint venture between the college's youth training managing agency and the local training and enterprise council (TEC). Relationships between colleges and TECs are generally good and have resulted in some productive partnerships and consortia of colleges and employers. For example, one TEC operates a vocational educational consortium which links employers, colleges and schools. Through this initiative, an NVQ programme at level 1 operates in conjunction with local schools for 14 to 16 year olds in construction subjects, and there is

a link with a special school to give students access to the NVQ for general construction operatives at level 2.

17 Some colleges have been less successful in forming relationships with employers, and particularly with small firms. This causes problems in some vocational areas, such as construction, in obtaining work placements, with a subsequent effect on assessment opportunities. It is attractive for some large employers, such as National Health Service trusts and large commercial companies, to offer NVQs in-house because TEC funding is available and because candidates can be assessed in the workplace without the time and cost of releasing them to attend college. This has contributed to the decline in day release numbers in colleges.

18 TEC funding for youth training and training for work programmes includes an element of outcome-related funding. The Training, Enterprise and Education Directorate (TEED) of the Employment Department provides a proportion of funding to TECs for training and the remainder for outcomes achieved by trainees. Most TECs pay 70 per cent of training costs when a trainee joins a programme and the remaining 30 per cent if the trainee obtains a qualification and/or a job. There are currently some pilot projects being carried out whereby between 75 and 100 per cent of the funding for training for work trainees is outcome-based. On these pilot projects, TEC outcome-related funding can include payments for NVQ units achieved as well as for full NVQs. However, very few training providers take up this opportunity because of the costs of assessment and certification. Outcome-related payment is also made if a trainee leaves a programme for a job without achieving a qualification. For youth training trainees, the emphasis is on qualifications and therefore payment is dependent upon the achievement of NVQs. The proportion of outcome-based funding for youth training trainees is typically 30 or 40 per cent.

19 The use of 'payment by results' on competence-based, internally-assessed programmes has been the subject of some criticism. A report for Channel Four Television, *All Our Futures: Britain's Education Revolution*, states with particular reference to youth training trainees that 'colleges now have a financial incentive to pass their students whatever standards they reach'. There was no evidence in the programmes inspected in the further education sector of students being certificated for competences they had not achieved. In a few instances, some college staff expressed concern about the implications of outcome-related funding and about pressures imposed by managing agents who wish trainees to achieve their NVQ outcomes within a set number of weeks. They see this as compromising the NVQ principle of freedom from time constraints.

20 The achievement element in the Further Education Funding Council's funding methodology is between 8 and 10 per cent of overall funding per student, and 4 to 5 per cent of a typical college's funding in

any one year. Colleges receive achievement funding for both full NVQs and NVQ units where these have been identified as students' primary learning goals. Where the primary learning goals are full NVQs, and a student achieves half or more of the total units towards the NVQ, half the achievement funding units listed in the tariff may be claimed. However, partial achievement of NVQs in the form of units do not count towards a college's contribution to National Targets for Education and Training.

21 There is little evidence that the introduction of NVQs has led to a rationalisation of qualifications offered within colleges. In some cases there has been an increase in the number of awards offered. For example, in some vocational areas, NVQs are now offered alongside traditional qualifications.

22 A number of barriers to increased uptake of NVQs were reported to inspectors. For employers, these include lack of knowledge of NVQs or of any perceived benefits from them; unwillingness to offer workplace assessment or to train supervisors; lack of information on costs; additional costs of assessment; concerns about bureaucratic administrative systems; and difficulties with the terminology of NVQs. Larger companies are more likely to have the infrastructure to deal with NVQs, but may find it more cost-effective to offer them in-house. In the view of colleges many small firms understood and trusted the existing vocational qualifications and preferred the existing part-time training arrangements whereby the college took all responsibility for delivery and assessment. The responses described in the CBI report *Quality Assessed* confirmed most of the barriers described above, and indicated that the barriers to introducing NVQs into small firms are greater than for larger organisations. The biggest barrier to take-up reported in the CBI's report was the lack of perceived relevance to company or individual needs. The CBI report concludes that lead bodies should identify a mandatory core of units for an NVQ, to be achieved by all candidates, with scope for employers to choose additional units to suit their needs and those of their employees. With regard to costs, 58 per cent of larger firms identified this as a barrier to NVQ take-up. The majority of employers questioned by the CBI regarded the NVQ system as more costly than traditional vocational qualifications, with the demands made on assessors' time being the most significant cost. Many employers, however, stated that the benefits to be had from NVQs compensated for the cost.

23 Colleges make considerable efforts to ensure that students have the NVQ framework and concept explained to them before and during enrolment. However, many students admitted that it took some time for the terminology and process of NVQs to be fully understood. Inspectors found that generally students were well-supported by tutorial systems. The tutorials were used for discussions of progress, recording and action-planning, and thus supported the individual assessment process.

TEACHING AND LEARNING

24 Over 1,500 NVQ teaching, learning and assessment sessions have been inspected since the inspectorate began its work in the autumn of 1993. Of these, 56 per cent were deemed to have strengths which outweighed their weaknesses, compared with a figure of 62 per cent for General Certificate of Education Advanced Supplementary and Advanced level (GCE AS/A level) teaching and learning sessions and 47 per cent for General Certificate of Secondary Education (GCSE). About seven per cent of NVQ activities inspected had more weaknesses than strengths.

25 The two most important developments in teaching approaches for NVQs are the use of simulated work environments and resource-based learning facilities. These facilities enable students to work at their own pace, particularly in practical sessions. The introduction of NVQs has been accompanied by a strong trend towards student-centred learning approaches, encouraged by the design of NVQs with their emphasis on flexibility and responsiveness to individual students' needs. Competence is developed through a number of methods, including written and practical projects and assignments, role play and business games, work placements, and training in simulated work environments.

Simulated Work Environments

26 Simulated work environments are an important feature of NVQ delivery. They are designed to re-create as far as possible the conditions of the workplace, so that a candidate's demonstration of competence takes place under the same pressures and with the same facilities as it would in employment. Although there were some instances of inadequate simulated work environments, most were found by inspectors to be effective and some were of very high quality.

27 In catering and hospitality provision in the further education sector, realistic simulated work environments are well-established, frequently offering students experience in a range of commercially-run food and drink outlets within a college. Typical provision would be a reception area, bar, training restaurant and training kitchen. These generally provide good opportunities for the development of skills and the demonstration and assessment of competence. However, in some instances, the tutor's effectiveness was reduced by the pressures of the simulated work environment. For example, one chef lecturer was observed supervising the production of a meal for 42 customers, whilst trying to assess candidates' competence at the same time; another restaurant lecturer was supervising students in two separate rooms during a busy meal service.

28 In other areas of vocational provision, simulated work environments vary in the amount of realistic work pressure they provide. In business administration, a training office is frequently used. In response to the requirements of NVQs, many colleges are developing their model offices to carry out 'real' work such as photocopying and

word-processing for lecturing staff, together with reception duties, telephone enquiries, filing, record-keeping and stock-keeping. For full-time students, work placements are used to provide additional evidence of competence to workplace standards.

29 In construction, job simulation facilities have to meet the criteria set down by the Construction Industry Training Board if the college is to achieve accredited assessment centre status. External sites are provided where students can carry out full-size and modified construction projects, operations and installations. The cost of providing students with the materials to demonstrate competence to the appropriate standards is high in construction. Staff have considerable expertise in re-using materials and, where appropriate, scaling down projects to save resources. However, there is some concern that the need to economise in the workshops may sometimes limit their effectiveness. For example, when a student has to re-use another's foundation work, the opportunity to operate from first principles is lost. The task of providing advice and guidance on standards to individual students in a workshop setting, can be difficult for staff where there are groups of various levels of ability working at the same time.

30 In engineering, there is evidence that simulated work environments are not always adequately equipped to meet the needs of NVQ assessments. Whilst general multi-skills workshops are usually reasonably well equipped, some specialist equipment and facilities are in need of modernisation. In one college, for example, it was not possible to meet the needs of the local TEC with regard to specialist welding techniques because of a lack of the appropriate equipment.

31 In agriculture and horticulture, specialist colleges are usually well-provided with realistic working environments. One college has a farm, kennels, stables, woodlands, a link with a college in Sweden with an extensive commercial forestry operation, and a fresh flower contract with the staff training college of a major public body. However, some colleges need to make greater use of employers' facilities, for example, to deliver hard landscape and larger countryside projects. General further education colleges, offering, for example, horticulture, need to improve the realism of their simulated work environments.

32 Most colleges providing NVQ programmes in hairdressing and beauty therapy have salons which are open to outside clients. Some of these equal or even exceed the quality of many commercial salons, whilst others are less well-equipped or are badly-positioned in the college, making it difficult to attract clients. The actual demonstration and assessment of competence for NVQs in care is not carried out through the use of simulated work environments, but through the workplace, either in employment or work placements.

33 The CBI report, *Quality Assessed* indicated that employers are sceptical of the value of NVQs achieved mainly through simulation. The employers responding to the survey favoured the idea that awarding

bodies should lay down maximum proportions of evidence that are acceptable in simulation form. They recognised that as a result of these limitations they will need to provide a wider range of relevant work experience not only for their own employees but also for college-based students.

Work Placements

34 NVQ programmes are followed by both full-time and part-time students and work placements are found for those students not in employment. It is proving difficult in some areas of the country and in some vocational areas, particularly construction and care, to obtain work placements for such students. The reasons for this include the effects of the recession, competition with other providers of NVQs and the fact that in some industries most employment is provided by small firms which are not able or willing to provide training opportunities. Nevertheless, many colleges succeed in finding interesting and challenging work placements. Examples include painting and decorating activities for construction NVQ students at the Hackney Empire theatre and practical plumbing activities as part of restoration work at the Tower of London. Sometimes the work placements provided are unsuitable. For instance, painting and decorating students have been required to act as labourers to dig holes. Workplace standards are sometimes low, and students on placement do not acquire competences at the level required by the NVQ. There are particular problems in the care sector, in which all assessment must take place in a workplace setting. There is competition between colleges and other training providers such as National Health Service trusts for work placements. One inner city college is a member of a consortium with a local social services department which has 900 employees on NVQ programmes. The college has had difficulty finding work placements in the locality for unemployed people working towards NVQs in the care sector. The supervisory units in some level 3 NVQs make it more difficult to find appropriate work placements.

Resource-based Learning

35 Resource-based learning enables students to work at their own pace with prepared learning materials. The introduction of NVQs has stimulated an increased interest in such learning methods in many colleges, although the time and money required to develop the learning materials have been a barrier in some cases. One college has invested £7000 in materials for catering programmes. Resource-based learning is becoming common in construction courses but a lack of study skills amongst students in craft courses restricts their ability to make best use of the facilities. The approach is less common in engineering and in hairdressing.

Knowledge and Understanding

36 NCVQ's view is that knowledge and understanding are integral elements of competence, and that all trainees should develop the

knowledge and understanding required to underpin competent performance in the workplace. There is evidence of widespread misunderstanding of this view, and NVQs have been criticised for giving insufficient attention to knowledge acquisition. The report for Channel Four Television, *All Our Futures: Britain's Education Revolution*, refers to a 'disregard amounting to disdain for knowledge'.

37 There is evidence from inspections of concern amongst some lecturers and assessors, and a few employers, about trainees' understanding of the principles underlying job competence. This is particularly the case in construction. Employers responding to the survey by the CBI confirmed the need to clarify what knowledge and understanding are essential for each element of competence in NVQs.

38 A study by the Further Education Unit, commissioned by the inspectorate as part of this exercise, compared the requirements of NVQs in brickwork, business administration and hairdressing with the requirements of the vocational qualifications they have replaced. In each case there was an increase in the attention paid to the acquisition of practical skills, but a decrease in the breadth of background knowledge covered. The overall impression gained from the study was that NVQ trainees would be better fitted to carry out immediately the practical tasks required in a particular job, but less able to appreciate the job in its wider context and to react to changing circumstances.

39 The proportion of time devoted to underpinning knowledge and understanding in the NVQ programmes inspected ranged between 15 per cent and 50 per cent, depending on the level and type of programme. Inspectors were generally satisfied with the level and quality of underpinning knowledge in terms of meeting NVQ requirements, although there were a few instances where it was deemed inadequate. There were concerns, however, about access to underpinning knowledge for some of the small proportion of candidates based in the workplace. There are some instances where teaching programmes are providing more than the minimum background knowledge required by NVQs, because teaching staff are not confident that the NVQ standards meet the candidates' needs. It is the practice in some vocational areas to provide access to additional awards. For example, in engineering, City and Guilds of London Institute (C&G) examinations are provided alongside NVQs in order to confirm underpinning knowledge in the eyes of employers. In business administration, it is usual for students to take single-subject examinations of the Royal Society of Arts (RSA) in order to satisfy a perceived continuing demand from employers.

Core Skills

40 NCVQ stated in their Guide to National Vocational Qualifications (March 1991) that fundamental core skills such as problem solving, communication and personal skills will normally be developed as an integral part of occupational competence leading to an NVQ.

Subsequently, core skills units, for which students can gain credit, have been developed in communication, application of number, information technology and personal skills. Separate teaching or assessment of core skills are not seen as necessary by NCVQ, who feel that they should be evident in any demonstration of occupational competence. The core skills units may be used in the future either as a requirement for the award of an NVQ or as additional units to an NVQ, depending on lead bodies' analysis of the core skills requirements of their sector.

41 The comparative analysis by the Further Education Unit, of NVQ awards and the qualifications they replace, considered core skills as part of its terms of reference. It concluded in the two vocational areas where core skills were looked at in detail - business administration and construction - that NVQs represented a narrowing of the core skills content compared with previous qualifications. Business administration NVQs at levels 2 and 3 require the demonstration of communication skills but there is less emphasis on the correct use of English and the development of language skills when compared with the Secretarial Studies Certificate and the Private Secretary's Certificate of the London Chamber of Commerce and Industry. In construction, when NVQs in bricklaying were compared with City and Guilds craft awards in bricklaying, the conclusion was that the NVQs place less emphasis on either numeracy or communication skills. The emphasis throughout is on practical competence.

42 Inspectors found that full-time NVQ programmes in further education colleges often go beyond the minimum requirements of NVQ elements of competence in terms of core skills. Additional sessions are included, designed to broaden the students' experience and provide support for core skills. Examples include sessions in communication, numeracy, information technology and, where relevant, science. Despite this, a number of inspections revealed poor levels of literacy and/or numeracy amongst students which were not always being addressed within their NVQ programmes of study.

43 In some construction craft NVQ programmes, the standard of written coursework accepted by assessors as fulfilling the core skills implicit within the competences is too low, particularly in relation to presentation and structure. Some students on NVQ programmes in catering and hospitality do not always have access to an appropriate level of core skills support. This was a major short-coming in one college where NVQs are delivered almost exclusively in the workplace. Students had only one day per month in college for tutorial and logbook work, which was not sufficient to address weaknesses in core skills. In another college, numeracy skills are tackled through topics such as food costing and there are drop-in facilities for communication skills and information technology, but only students with learning difficulties and/or disabilities have specific core skills support. On hairdressing NVQ programmes, students have insufficient access to information technology, both in

general and as part of reception duties, where the relevant computer equipment and software are often not available.

44 In most colleges additional learning support is available but many students are reluctant to use these facilities. Initial diagnostic testing upon entry, to assess students' skills in literacy and numeracy, is increasingly employed to identify students in need of help. A good example of learning support facilities was observed in one college in relation to engineering NVQs. Some students were referred to a learning support unit located in the college's guidance services, and others were able to refer themselves. Self-referral was popular, partly because of the welcoming and attractive environment offered by the unit. The unit is currently working with motor vehicle staff to develop a vocational workshop to cater for students in need of help with core skills, and is also collaborating with motor vehicle staff in developing technical assignments which include material for City and Guilds Wordpower and Numberpower qualifications. The college is also undertaking large-scale diagnostic testing upon entry, with follow-up support from specialist staff.

Students with Learning Difficulties and/or Disabilities and NVQs

45 Students with learning difficulties and/or disabilities are generally benefiting from the introduction of NVQs in terms of access to vocational qualifications. The absence of a requirement to complete a programme within a certain time is a motivating factor for these students, as is the potential for achieving accreditation for units as well as whole awards. There were a number of examples of such students being integrated into mainstream programmes as well as taking discrete programmes, and achieving both units and full NVQs. In one large agricultural college there are residential and day courses for students with a wide range of learning difficulties, sensory impairments and behavioural problems. All these programmes use NVQs or foundation awards giving progression to NVQ level 1. More could be done in other vocational areas, such as hairdressing, to provide opportunities for students with learning difficulties and/or disabilities to obtain NVQs.

Assessment and Achievement

46 Assessment methods include direct observation of the demonstration of competence, inspection of products, oral and written questioning, written assignments and tests. Assessment is generally carried out by college teaching staff within the college, even for candidates who are in employment. In some industries, such as catering and engineering, colleges have found it difficult to obtain employer co-operation for assessment in the workplace, even where work experience is being provided. Assessment standards, methods and record-keeping were generally found to be satisfactory. Systems of internal verification are not yet universally in place, but those in operation are generally satisfactory. The assessment system is criticised by some college staff

and employers as being too costly, time-consuming and involving too much paperwork. Colleges report that there is a marked reluctance amongst many employers to become involved with the assessment process for their employees on college-based NVQ programmes, and that the number of trained and accredited workplace assessors is small. There are a few instances of innovatory good practice. In one college, the supervisory management section operates a co-accreditation scheme through which employers train and accredit their own work-based assessors, who, in turn, train and accredit employees in a range of occupational areas. The quality of the work-based assessment is assured through the college's internal verification process. In addition, the college has a team of four training co-ordinators who secure work placements, liaise with employers and the TEC.

47 There are few instances of colleges providing a formal service for the assessment and accreditation of prior learning (APL), leading to the achievement of NVQ units. Where these services exist they are mainly supported by funding from training and enterprise councils. One example is an inner city college where the local TEC has provided funds from the work-related further education budget for flexible learning. A unit has been set up which provides a range of services, including accreditation for NVQ units and referral to college NVQ programmes. Clients have included the college's own administrative staff. Work is in hand to develop partnerships with employers to offer an APL service for their employees. Records show that the APL unit is attracting a high proportion of clients from ethnic minority backgrounds. The training and accreditation of college staff to meet the training and development lead body standards for assessors and verifiers are an important feature in the development of the new APL system within the college. In most colleges, APL is an informal process integrated into the system of individual assessment, review and action-planning. Evidence of prior achievement of competence may be used to accredit some elements of competence or to provide supplementary evidence of competence, but not generally to accredit full units. Some students are said to find it easier to follow a training programme rather than to provide evidence of prior achievement.

48 Records of achievement are generally kept of students' progress towards the achievement of NVQs, although these vary in format from documents provided by awarding bodies to locally-designed records of achievement. Some colleges are now using computer-based systems to record students' progress. One labour-saving example of computerised records, in a department of construction studies, requires that information on students' progress is up-dated monthly using appropriate software. The Construction Industry Training Board will accept from the college the records entered directly on computer disk. Teachers still need to monitor students' day-to-day progress and to record assessments and achievement of competence in detail, which is time-consuming. This is done using documentation designed by the

Construction Industry Training Board. Records of the achievement of competences are often displayed in each craft area or work room.

49 There is no evidence to suggest that overall completion or success rates for NVQs are significantly different from those on other vocational qualifications. Some colleges are experiencing difficulties in tracking achievement rates for NVQ students. This is because many college record systems are not yet able to cope with the flexible entry, exit and credit accumulation arrangements which are a feature of NVQ programmes.

RESOURCES

50 Teaching staff in further education are suitably qualified and experienced for the delivery of NVQs. Most colleges have staff development programmes in hand to train and accredit staff to training and development lead body standards for assessors and verifiers.

51 Changes in teaching and learning methods associated with the introduction of NVQs have required considerable development and alterations to college accommodation. Inevitably, some colleges have made more progress than others. In some cases, 'self-help' by staff has been a feature of development, as for example in a catering department where staff decorated the simulated work environment themselves. Accommodation for NVQ programmes is generally satisfactory, although there are examples of inadequate accommodation. Some college hairdressing salons are inappropriately sited, making it difficult to attract clients. In construction, simulated work environments are generally appropriate, largely because they have to conform to the requirements of the Construction Industry Training Board in order for the college to become an accredited centre. In business administration, accommodation is generally good, although there are instances where a 'classroom' feel still predominates and realistic work environments have not been developed. Although much engineering accommodation is good, some workshops are untidy and too small for the groups using them, resulting in cramped working conditions.

52 Physical resources are generally adequate for the delivery of NVQ programmes, apart from some of the larger or more expensive plant and equipment such as up-to-date heavy vehicles for motor vehicle engineering and agriculture.

53 The costs of providing NVQs are generally regarded by colleges as higher than those for previous vocational qualifications, although detailed costings are rarely available. NVQ assessments are based on demonstrations of competence and hence the cost of consumable items has increased. Workplace visits by staff for assessment purposes are expensive in terms of time, as is the necessary record-keeping, although this is often not quantified. The increased requirement on students to take responsibility for their own learning brought about by NVQs has

resource implications. Resource-based learning facilities attached to workshops and simulated work environments require investment of staff time for the development of resources, as well as funds for purchasing open learning materials. There are cost implications for libraries and resource centres arising from the intensive and continuous use of materials, more flexible enrolment patterns and the many new learning materials being published and quickly replaced by new editions to keep up with curriculum changes.

QUALITY ASSURANCE

54 The overall responsibility for the quality of NVQs lies with NCVQ. The process of accreditation of NVQs includes the approval of the quality assurance system being proposed by the awarding body, and procedures for self-monitoring. Awarding bodies are required to demonstrate how they monitor the consistency and quality of assessment. NCVQ requires regular reports which are considered by its accreditation and quality assurance committee.

55 In collaboration with the awarding bodies, NCVQ has devised the *Common Accord*; a document which sets out the necessary assessment and verification processes for NVQs with which the awarding bodies will comply. The main features of the accord are: the introduction of common terminology; certification to national standards for assessors and verifiers; defined quality assurance roles for awarding bodies and organisations offering NVQs; explicit criteria for approving organisations to offer NVQs; and quality assurance and control systems.

56 The centre approval and verification criteria in the accord state that the centre must have an effective system for quality assurance, including effective procedures for internal verification. In fact, internal verification systems are not yet universally in place, although those which do exist in colleges are operating satisfactorily.

57 Most colleges have some form of course review and evaluation which is applied to NVQ programmes in common with others, although these systems are variable in their effectiveness. In one example of thorough practice, a comprehensive master file is kept for each programme, containing copies of programme reviews, action plans, team meeting minutes and data on student successes and retention. Programme teams carry out three programme review and evaluation exercises during the college year. These are collated at college level and an overview report is produced for, amongst others, the quality standards group, which is a sub-committee of the academic board. External verifiers' reports are formally reviewed. Where the students' success rate is between 50 and 70 per cent, programme leaders are required to make a verbal report to the quality standards group. A written report is required if the rate is below 50 per cent. Where internal quality procedures are less well-developed, there is sometimes an over-reliance on the reports of external verifiers.

58 The *Common Accord* states that awarding bodies are responsible for verifying that assessment in an approved centre is carried out systematically, validly and to national standards. This is achieved through external verifiers appointed by the awarding body. Inspections showed that colleges and programme teams do act upon the recommendations of external verifiers, but that there are some inconsistencies in the way external verifiers approach their tasks.

59 Colleges have embarked assiduously on programmes of staff development to accredit teaching staff with training and development lead body assessors' and verifiers' awards. These are mainly achieved through accreditation of prior learning, with candidates building up portfolios of evidence, although some programmes include observation of competence depending on the requirements of the awarding body. There is as yet no clear evidence of the effectiveness of these programmes. Concern has sometimes been expressed by college staff about the comparability of standards between different trainers.

CONCLUSION

60 Building on their long experience of involvement in vocational education and training, colleges in the further education sector are making a substantial and valuable contribution to the delivery of National Vocational Qualifications. They have made considerable investments in developing simulated work environments and in training their staff as assessors and verifiers. Overall, the quality of teaching and training observed was of an appropriate standard, and inspectors found no evidence of candidates being deliberately certificated as having competences they did not possess. They did, however, find considerable variation in the interpretation of what is meant by competence, particularly in relation to the amount of knowledge and understanding, and the level of core skills that are implied by a particular level of occupational competence. The survey also revealed a widespread lack of knowledge about NVQs amongst employers - particularly in small firms, and an unwillingness on the part of many employers to become involved in workplace training and assessment.

61 The contribution of NVQs to vocational education and training would be enhanced if:

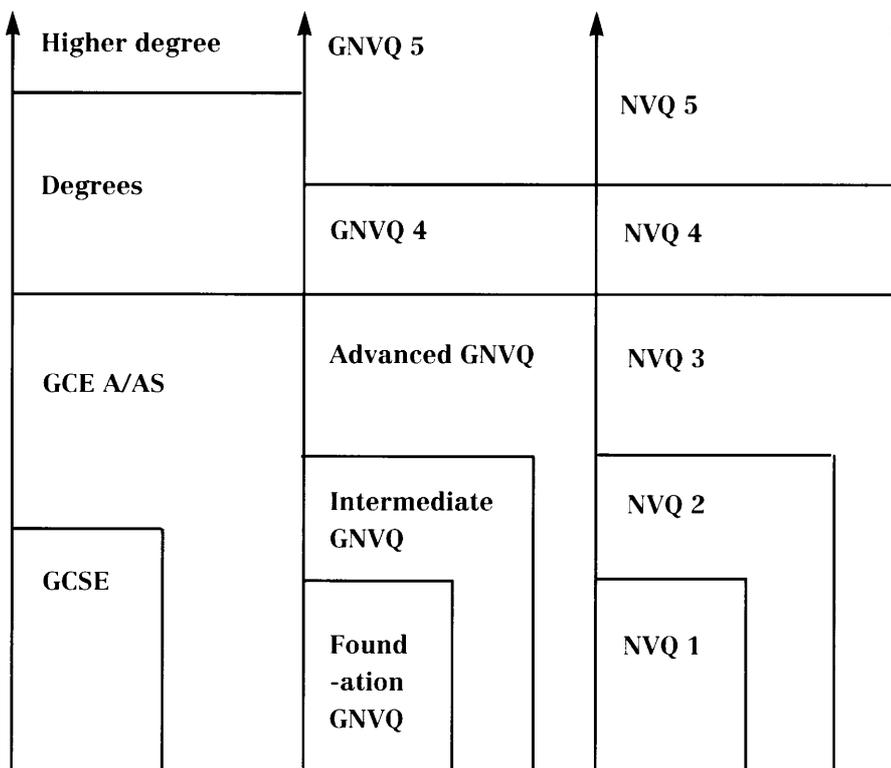
- NCVQ insisted on clarification of the knowledge, understanding and core skills of each NVQ before qualifications are accredited
- employers gave more support to colleges by providing real workplace experience and assessment
- colleges identified the full range of educational needs of students on NVQ programmes and ensured that these are met, where necessary, by additional studies.

ANNEX: THE NVQ FRAMEWORK

The 11 areas of competence covered by NVQs are:

- tending animals, plants and land
- extracting and providing natural resources
- constructing
- engineering
- manufacturing
- transporting
- providing goods and services
- providing health, social care and protective services
- providing business services
- communicating
- developing and extending knowledge and skill.

The relationship between NVQ levels, GNVQ levels and academic qualifications is illustrated in the following diagram:



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