

vocational higher education does it meet employers' needs?

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Contents

Introduction	1
Mapping provision	2
Employer perceptions of the value of vocational higher education	6
Employer perceptions of the value of vocational higher education in workforce development	9
The role of professional bodies	12
The role of foundation degrees	12
Student perceptions of employer needs	13
Conclusions	16
References and data sources	18

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Introduction

A team led by Brenda Little at the Centre for Higher Education Research and Information at the Open University (OU) conducted the research for this study.

This bulletin reports on a study of vocational higher education undertaken against a backdrop of government policies on education that seek to redress the balance between academic and vocational routes to high-level qualifications and an emerging skills strategy that aims to create a demand-led approach to skills training.

Alongside these policy drivers, recent reports from the National Skills Task Force had identified a growing professionalisation of the workforce with a concomitant shift within intermediate-level occupations from craft to associate professional and higher technician employment. These and other reports (eg LSC 2003) noted that demand for vocational skills at intermediate levels varied by industrial sector and region, but the size and nature of skill shortage problems was not clear and was subject to different opinions.

Nevertheless, the government's recent White Paper on the future of higher education stressed that more work-related and employer-focused higher education should be developed to meet the prevailing skills gap at associate professional and higher technician levels. Actions should also be taken to help mature students already in the workforce to develop their skills at this level.

This six-month study, commissioned by the Learning and Skills Development Agency (LSDA), with funding support from the Learning and Skills Council (LSC), the Council for Industry and Higher Education (CIHE), the Higher Education Funding Council for England (HEFCE) and the Department for Education and Skills (DfES), sought to investigate the role and significance of vocational, sub-degree higher education in meeting the needs of the economy and employers. The study, which was limited to England, aimed to collate employers' views on the:

- value of vocational higher education (HE)
- relative merits of such provision in higher education institutions (HEIs) and further education colleges (FECs).

The study also aimed to consider the role of assessment and accreditation of existing workforce skills at NVQ Levels 3 and 4 in meeting employer and employee skill needs and in meeting the government's target for increasing and widening participation in higher education.

In addition to investigating employer perceptions, the study sought to provide a comprehensive map of vocational HE provision in England using existing data sources, and to consider how this provision might help to achieve government targets for HE participation. The mapping exercise explored an area of HE provision that has received much less research attention than first-degree provision.

Finally, interviews with a limited number of careers advisers and teaching staff in HEIs and FECs introduced a provider perspective and group discussions with students and employees focused on users' perceptions of employers' needs and preferences in terms of skills and qualifications.

Mapping provision

Mapping provision first required a choice of qualifications to focus on. There is no perfect match between qualification level and occupational level, and studies continue to investigate the shifting links between occupational skills mix and qualifications. However, the Standard Occupational Classification (1999) notes that associate professional and higher technician occupations normally require an associated high-level vocational qualification covering a body of knowledge acquired through post-compulsory education but not at degree level.

The study therefore focuses primarily on sub-degree HE qualifications (Level 4 in the Qualifications and Curriculum Authority, QCA, National Qualifications Framework) and other qualifications accredited at NVQ Levels 4 and 5. First degree study was generally excluded (though occasionally referred to for comparative purposes).

The statistics cover England but where separate country information is not disaggregated 'all UK' is shown. The data is standardised on 2001/02, which is the most recent year with an optimal amount of data.

The overall size and nature of sub-degree provision is shown in Table 1.

The main points on the student population are as follows.

- Nearly half a million students are studying sub-degree level programmes in HEIs in England, with a further 130,000 enrolments in FECs.
- In the higher education sector, they represent almost two-fifths (38%) of all undergraduates, while in FECs in the learning and skills sector they represent just 3% of total enrolments (but a higher proportion in certain, mainly large colleges). In the HE sector they are much more likely to be at post-1992 universities.
- Most of the higher education in the learning and skills sector is at sub-degree level, while in the HE sector sub-degree provision accounts for less than one-third of overall provision.
- Most sub-degree students (over 70%) in both sectors are studying part-time or other distance/open learning modes. Only the DipHE and HND students are mainly full-time.
- This area is characterised by the variety of types of qualifications in both sectors. Over 200,000 of the sub-degree students in the HE sector are on programmes leading to 'institutional undergraduate credits, which may count towards u/g [undergraduate] or p/g [postgraduate] qualifications' (HESA 2002). This includes around 95,000 OU students plus other students, many of whom are also on distance learning programmes. The rest, 230,000, are on a variety of programmes at HEIs leading directly to a HND, HNC, DipHE, CertHE, professional or other qualification at undergraduate level. In the learning and skills sector, a wide range of qualification groups is evident also. Just under half of the total enrolments (around 60,000) are taking NVQ and other qualifications (which fall under the heading of non-prescribed higher education).
- Relatively few (just under 3000) were on the new foundation degrees at HEIs, plus 200 at FECs in 2001/02, and so comparatively little separate analysis has been done of them.
- Overall, HNC/HND numbers have been declining for much of the last decade, but DipHE/CertHE have been growing (partly because of new nursing contracts in HEIs).

Table 1 Enrolments on qualification programmes by type of institution, 2001/02

Qualification	HEIs	FECs
Dip HE	52,699	1465
Cert HE	22,986	—
HND	37,309	27,411
HNC	13,149	31,156
NVQ	—	23,554
C&G	—	2340
Foundation degrees	2791	211
Post-degree diploma/certificates at undergraduate level	1564	—
Foundation courses at HE level	3587	—
Undergraduate credits (includes CAT schemes)	228,657	—
Other u/g qualifications	99,780	45,578
All sub-degree	462,522	131,715
Degree	757,403	16,217
Total undergraduate level	1,219,925	147,932

Source: HESA 2002; ISR 2001/02

Subject of study

- Apart from 'subjects allied to medicine' which form a large part of sub-degree provision (mostly nursing but also some care and other health-related areas), the main subjects are business, computer science, engineering and social, political and economic studies. The subject distribution in sub-degree provision is more concentrated in fewer areas than first-degree provision but the pattern varies considerably according to qualification type.

Student profiles

- There are also different gender, age and ethnic patterns between sub-degree and first degree, and between different sub-degree qualifications (caused to some extent by the subject pattern). In particular, there are many older students, ie over 30, in both HE and learning and skills sectors, and variations in the ethnic make-up of different qualification groups (see Figure 1).

- Around 135,000 students qualify annually with sub-degree qualifications, 73,000 from HEIs and 62,000 from FECs. However, the latter is an estimate based on numbers completing qualification aims, rather than qualifiers as such, and there are no overall estimates produced on qualified output at sub-degree level.
- The largest group of awards from HEIs are DipHEs (mainly nursing qualifications). In FECs, HNDs, HNCs and NVQs are the main qualification groups but there are many other awards. Again, the subject profiles of qualifiers vary according to qualification type.
- There are also a few NVQs awarded at Levels 4 and 5 each year outside the HE and learning and skills sectors. Around half of the total of 16,000 are assessed by FE colleges, half by private training providers and employers.

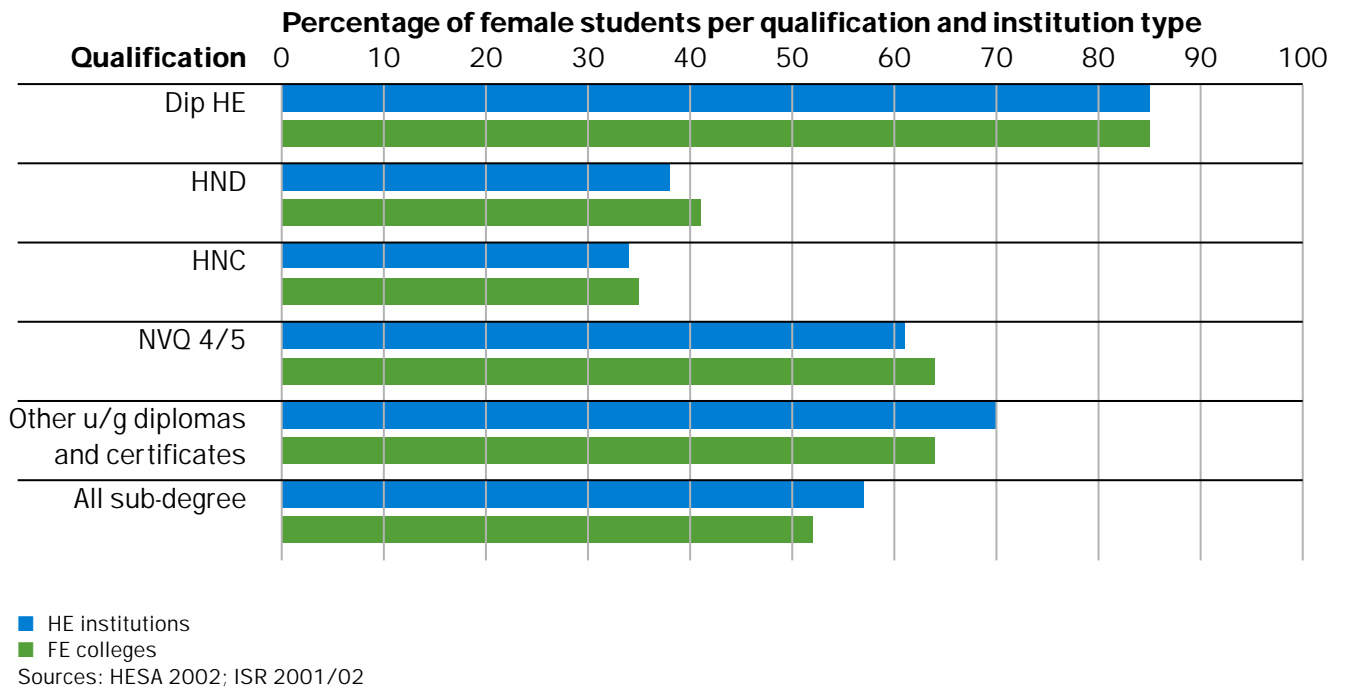
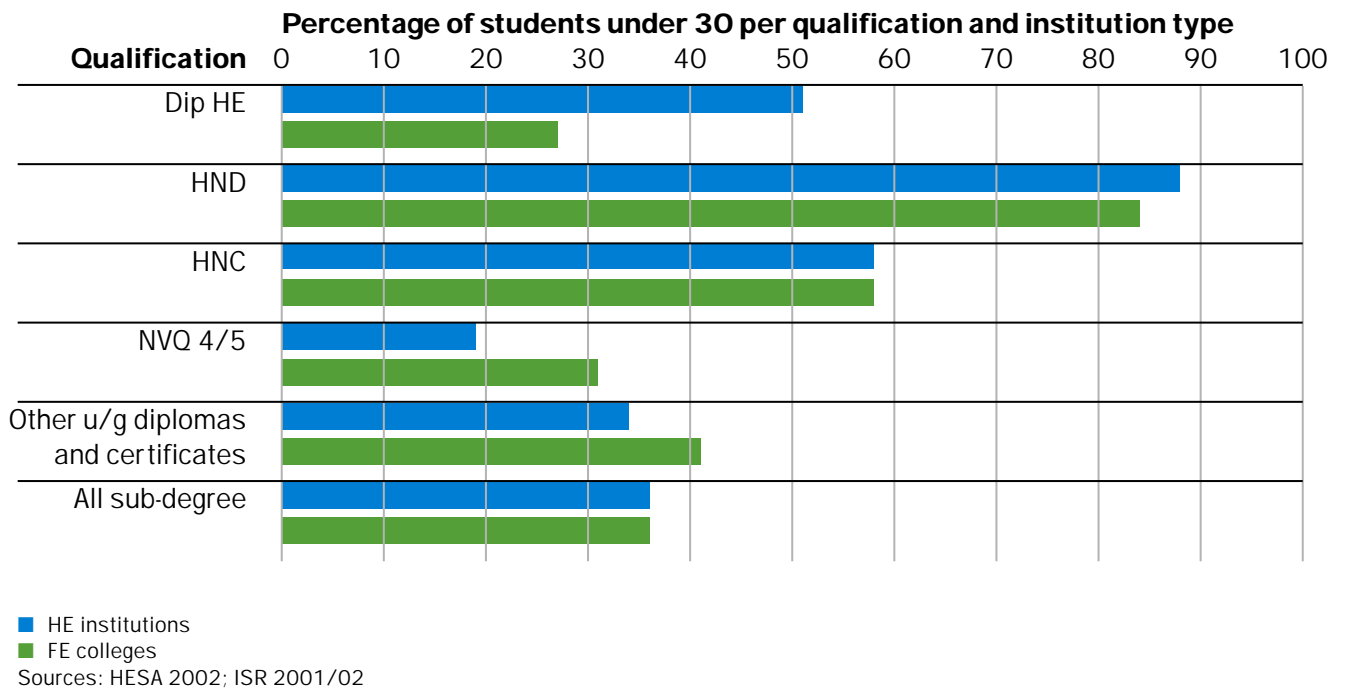
Figure 1a Gender patterns in sub-degree qualifications, 2001/02**Figure 1b Age patterns in sub-degree qualifications, 2001/02**

Figure 1c Ethnic patterns in sub-degree qualifications, 2001/02

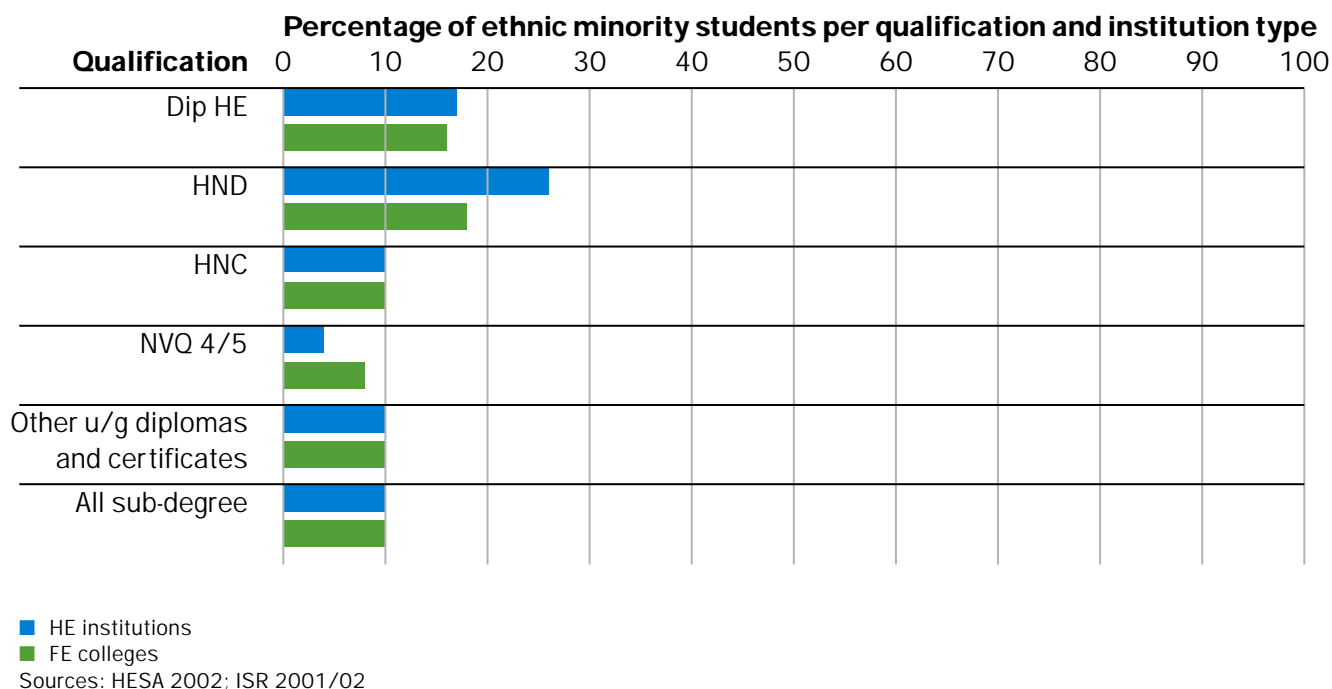
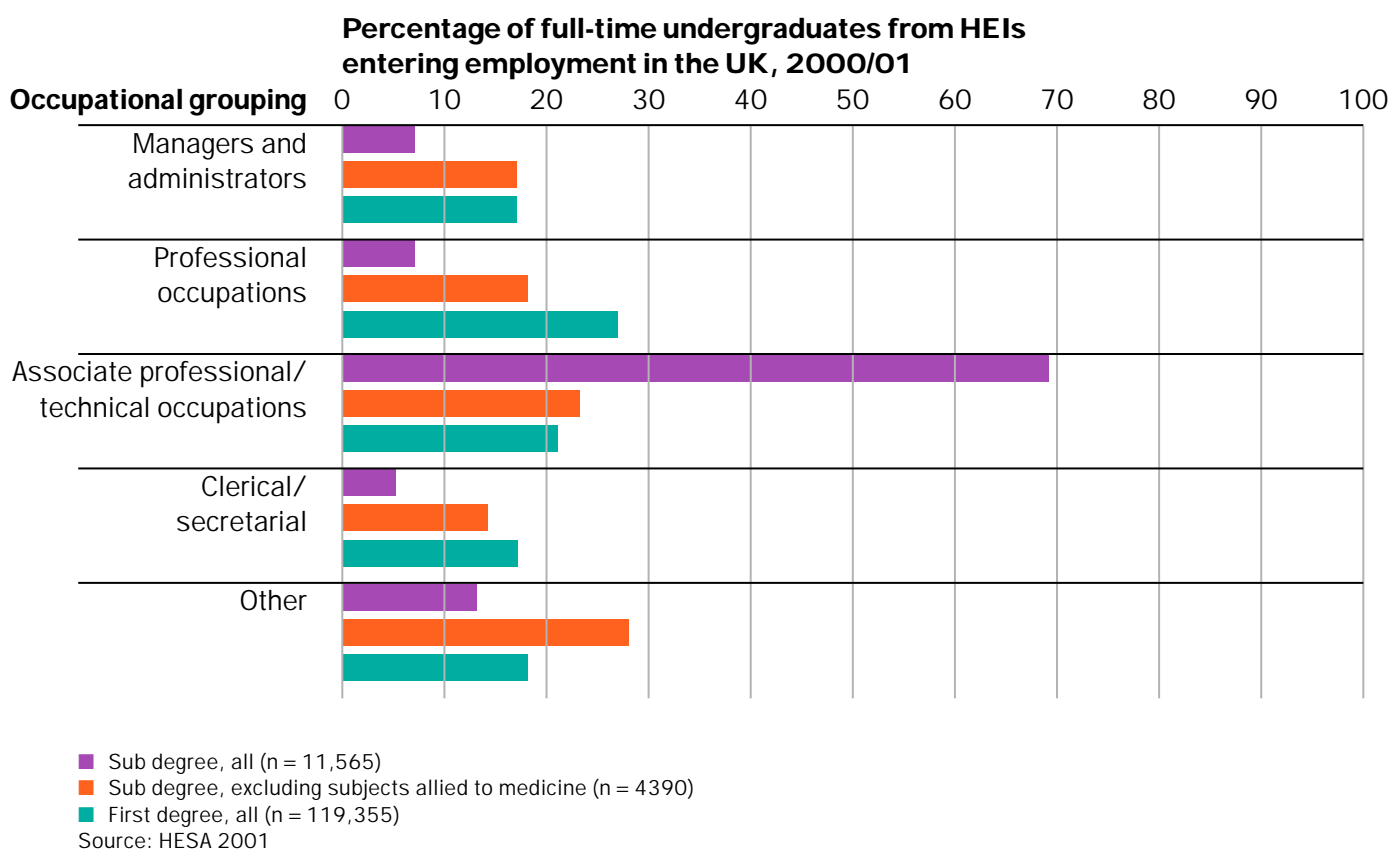


Figure 2 Breakdown of employment destination by occupational level



Employment destinations

- Reliable employment destination information is only available for full-time qualifiers from HE institutions, and so only covers a small part of the total provision. In fact, HESA first destinations data for 2000/01 shows there was a total of just over 20,000 full-time qualifiers with sub-degree qualifications with a known destination (UK domiciled only). Around half of the sub-degree output went into employment while a third continued in education (mostly transferring to degree study). Unemployment is very low, indicating a generally high level of demand.
- But this destination pattern varies considerably by subject, and in some (business studies, computer science and engineering) the main exit route is a first degree. This may suggest a weaker employer demand for this type of qualification.
- The occupational pattern of those entering employment from full-time study differs between degree and sub-degree qualifiers, in that those with sub-degrees tend to enter lower level jobs than first degree graduates. However, the effect of the large number of nursing students in the sub-degree total tends to distort the figures and when removed, the occupational pattern of degree and sub-degree output looks more similar. This suggests a substitution effect. Figure 2 shows the breakdown of employment destination, by occupational level for sub-degrees and first degrees.

Qualifications of the workforce

- In the employed workforce, sub-degree qualifications are outnumbered over three to one by degree qualifications. However, sub-degree qualifications are more prevalent in some sectors, especially industrial sectors and some service sectors such as hotels/restaurants, than others indicating a different demand pattern (historically) in some employment areas than others.

The mapping work also highlighted some important gaps and deficiencies in the data available, which has limited the scope of the analysis. Student and qualifier data from the two sectors needs to be aligned. Aggregate data from FECs on destinations of 'completers' and data from both sectors on demand for part-time study needs to be improved.

Employer perceptions of the value of vocational higher education

The study focused on a few employment sectors – computing/IT, construction, engineering, hospitality/leisure management and general business. Many of these sectors are highly fragmented, made up largely of small and medium-sized enterprises (SMEs). Despite considerable efforts to draw on the direct experiences and practices of SMEs, the study contains mainly the views of relevant personnel in large companies, sector-wide representative bodies and professional bodies (as appropriate). In all, interviews were undertaken with 28 employers, 12 industry-wide representative bodies and six professional bodies.

The findings of this study are not representative of each of the sectors overall (given the limited number of interviews) but they do illustrate some of the main determinants of similarities and differences between employment sectors. As such they provide pointers towards issues policy-makers need to address in trying to meet the skills needs of different parts of the economy in associate professional and higher technician jobs.

The value of vocational HE qualifications in staff recruitment

In construction and engineering particularly vocational HE qualifications (at sub-degree level) continue to be valued in their own right. In engineering (broadly defined) people with an HND are employed at the interface between design and manufacturing, or manufacturing and customer support, where their combination of high level engineering knowledge and practical skills is required. Employers like the qualification because of its familiarity; they often, especially in SMEs, hold it themselves (as do many managing directors of large firms). HNDs are also perceived to have recognised national standards. Some employers in these sectors described those with an HNC/HND as having better practical and technical skills than graduates but graduates as having a broader perspective.

In other areas (like computing and business) vocational HE qualifications seem to be less valued by employers as a direct route into employment. In computing and IT employers are critical of HE provision generally, finding it insufficiently responsive to their skills requirements. However, this sector is very diverse and so has many different requirements; moreover the speed of technological advances inevitably makes it difficult for educational providers to keep up to date. Employers do continue to seek graduate recruits in preference to those with HNDs partly because they place more emphasis on business awareness and personal skills in addition to technical skills. But, at the same time, employers tend to be less critical of HNDs and SME employers commented that HND holders were more able (than graduates) to 'hit the ground running'.

A move away from specific qualifications?

In the general area of business, there was some evidence of large employers trying to move away from relying on specific HE qualifications (whether sub-degree or first degree) to indicate an individual's possession of certain skills and attributes. One company decided that their graduate recruitment programme had resulted in artificial development programmes that did not necessarily meet their business needs (and could lead to graduates' disillusionment and disappointment). They were moving to a wider recruitment initiative to draw in young people from additional sources and focus more on the jobs and roles currently available. In this way, they hoped to tailor their recruitment, selection and induction much more to role and career path. At the same time, entry into the company's 'accelerated management development programme' remained open to anyone within the company who is (in their terms) an 'exceptional achiever', regardless of their qualification on entry.

A major financial services company continues to recruit a few graduates annually but its general recruitment policy has moved away from particular qualifications and evidence of technical skills to behavioural and analytical skills and then training and developing recruits within the company.

A major retailing organisation (which has recently ceased to run its graduate training programme, partly because of high drop-out rates) regularly seeks to balance recruitment to supervisory or management posts between internal promotion and external 'hires', with the latter selected primarily on the basis of proven relevant work experience.

The value of experience

In sectors where employers have traditionally placed more (or at least equal) weight on prior relevant experience than on qualifications (eg the hospitality sector) employers seem to equate qualifications at sub-degree level with those at first degree level. Employers' main aim is to attract people with vocational skills and experience so HNDs are popular, and some more specialist degrees are preferred to others.

Although employers in this area are proud that in their companies 'someone can grow from chef to CEO', they also realise that some graduate recruitment is essential for longer-term success. All the companies interviewed as part of this study were operating graduate recruitment schemes. These schemes invited HND holders to apply as well as those with first degrees but there was some (albeit limited) evidence that following selection processes, graduates' first jobs were generally in management, whereas HND recruits would be allocated supervisory roles.

Professionalisation and niche markets

Growing professionalisation in certain sectors of employment (eg the 'care' sector broadly defined) is now creating a new demand for education and training programmes leading to vocational HE qualifications – for example, the Early-Years, sector-endorsed foundation degree; the NVQ Level 4 in care management). Some of this demand stems directly from government legislation and in some cases the new provision is backed up by significant government investment.

In other 'niche' areas of employment demand and provision are being driven by employers seeking new types of education and training programmes to develop the appropriate set of high-level vocational skills now required in their industry.

Views of small businesses

SMEs looking to fill posts requiring associate professional/higher technician skills tend to try to recruit suitably qualified people with some work experience. Small businesses in particular perceive a gap between qualifications and practical application in a business setting, and it is the latter they seek on recruitment.

Those working at the leading edge of new technologies sometimes find that the knowledge and skills signified by academic qualifications (be they HND or first degree) rapidly become out of date, though they acknowledge that such qualifications do give an indication of an individual's capacity to update their own knowledge and skills.

But small businesses do not necessarily understand what set of practical skills and knowledge, academic knowledge and general skills any specific qualification signifies. It seems to small businesses that newly qualified individuals are often unable to explain how their set of skills could be of value to the business, and such businesses do not have specialised recruitment units that could help individuals articulate the relevance of their skills to the business. In consequence, these businesses tend to recruit people qualified to the same level as the current owner or manager.

A preference for particular providers of vocational higher education?

Employers sometimes made comparisons between job applicants who held a first degree and those who held a sub-degree qualification (eg HND) but when asked if they had a preference for 'where' such applicants had studied for their qualification – an HEI or FEC – indicated they did not. Rather, employers would explain why they preferred degree holders from some particular institutions rather than others. Such preferences tended to be based, for example, on knowledge of particular university departments, of particular degree programmes, and previous track records (within the company) of recruits from particular universities.

Vocational higher education as a progression route

The mapping showed that programmes leading to vocational higher education below first-degree level continue to serve as progression routes to honours degrees. Discussions with providers indicated that progression routes are regularly promoted as such by FECs and HEIs. But there is a perception among employers and providers that recent policy drives to increase participation in higher education may have shifted attention away from the specific value of intermediate levels of higher education (eg HNC/HNDs and DipHE) as end-points in themselves. Thus students are encouraged to progress to a first degree, and so sub-degree level output is overshadowed by first degree output. There may also be financial benefits for HEIs in encouraging such progression.

Although these opportunities might be welcome in terms of widening participation and progression within higher education, they may diminish (in both students' and employers' eyes) the status and value of the intermediate, sub-degree qualification.

Discussions with course tutors about progression routes also raised a separate issue about the nature of the curriculum for the intermediate award. Some tutors suggested that in seeking to ease progression from HND to degree, the HND curriculum may have been developed in a way that enhances articulation between the two programmes, and so may have become less work-related and more academic. It was not possible to pursue this further within the scope of this study.

Job opportunities for those with vocational HE qualifications

This study demonstrated some lack of awareness in colleges of labour market opportunities for, and the labour market outcomes of, their full-time HE students. At this level of provision, colleges seemed to have only weak links with employers, perhaps because (in certain areas at least) a high proportion of students progress to further study, rather than seeking employment. Also, careers services in HE institutions did not seem to pay as much attention to employment routes for full-time non-graduates as for their full-time graduates.

From an employer's perspective there is generally a much bigger choice of potential recruits among degree holders than among people qualified to sub-degree level. Of course, the continuing economic recession may well depress demand for certain high level skills; for example, in computing/IT a downturn in demand coupled with a plentiful supply of new graduates and experienced professionals means employers in this sector currently have a large pool of suitably qualified people from which to recruit.

In contrast, the construction industry (like to a lesser extent engineering) is currently facing skills shortages in higher level skills. The decline in take-up of HE programmes in the general construction area (apart from architecture) means that employers do not have an abundant supply of suitably qualified applicants (either HND or degree holders) from which to recruit at associate professional and higher technician levels.

Employer perceptions of the value of vocational higher education in workforce development

In both construction and engineering there has been a strong tradition of apprenticeships (combining college-based study and on-the-job training) providing the main route to craft and technician level jobs, from which a proportion progress to associate professional and higher technician jobs. But in each industry there are some problems with the current system of Modern Apprenticeships (MAs). A lack of training places (in engineering) is creating a shortfall in the numbers entering the sector via this route, and hence a shortfall in numbers progressing to higher technician jobs, and supervisory and managerial roles. Further, the MA route is steered by the funding available, but currently the funding is age-related (and ceases altogether for those aged 25 or over). The framework and related funding cover education and training up to and including Level 3 in the National Qualifications Framework, but many employers would like some of their staff to progress to vocational higher education (ie Level 4) while still on the Advanced Modern Apprenticeships. In construction, the transient nature of the work on major construction projects (where specific craft and technical skills may be required for a fairly limited time within the life span of the whole project) coupled with the paucity of provision outside major conurbations creates some difficulties in using the MA framework. That said, major contractors do sponsor employees (recruited as school leavers on their management trainee schemes) to study for HNCs on a day-release basis. In this way employees can integrate their workplace experiences and their concurrent further education and training.

Outside these employment sectors, there is much less tradition of apprenticeships, and so employers are much less likely to develop employees' skills and capabilities to higher levels using an 'apprenticeship plus part-time study' route.

In computing/IT employers make little use of college and/or HEI provision for workforce development. Rather, courses leading to specific vendor qualifications (proprietary certificates) play an important role in determining employer (and employee) options for specialised technical updating and application skills development. Such courses tend to be run in-company, by a private training provider or via the supplier. Public sector providers are now offering some of these courses (particularly in computing/IT programmes being developed under the auspices of the New Technology Institutes), although there are funding issues.

In the general area of business employees seeking to develop their knowledge and skills in accounting and finance tended to follow externally provided accounting technician courses, and were supported by their employer to do so. Those qualified to this level often take on some of the tasks and responsibilities previously undertaken by chartered accountants; the latter may well be responsible for taking a more strategic view of the financial aspects of the business. Employees following a less specialised programme (eg HND Business) did not seem to be supported by their employers to the same extent.

External or internal provision for workforce development?

There was some evidence of large employers increasingly relying primarily on their own internally developed and delivered training and development programmes, with possibly some specific input from private training providers or educational institutions as appropriate.

It was not only the general supervisory or management training and development programmes that were being undertaken in-house, but other areas (eg specialised programmes relating to aspects of financial services). Where external input was included, employers spoke of developing links with a 'preferred supplier' for specific aspects but not necessarily a single preferred supplier; rather the employer might develop over a sustained period of time good relationships with several different education and training suppliers. Employers consider this 'preferred supplier' model helps to maintain quality and standards, with customer and supplier each being clear about expectations and requirements.

Within a single large employer, however, there is not necessarily a 'hard-and-fast' rule about using internal or external provision. Many decisions are based on whether current external courses meet employers' needs.

Moreover, some employers see value in measuring internal programmes against an external reference point; others do not. Where internal courses for higher level skills move away from the company's specific practices and processes and take on a more 'generic' aspect, the case for referencing against similar external provision might be revisited.

Continuing workforce development for small businesses

The training needs of small businesses that are part of a supply chain will be governed to an extent by the larger company's (or industry's) training needs. But generally, it seems that although small business owners and managers may be adept at innovation and change technically (since in a sense that is how they started their business) they may be less inclined to anticipate training and development needs for the medium term.

This study showed that even where SMEs were planning for the medium term, problems with lack of training places and funding restrictions in relation to Modern Apprenticeships (referred to earlier) affected the scope for development for higher technician and associate professional jobs. We also found some evidence of employers not making full use of available sources of funding for training and development.

Funding was not the only issue facing SMEs. This study found SMEs that were highly critical of external training for high-level technical skills: employers spoke of insufficient hands-on experience, inappropriate content and insufficient assessment of learners' progress.

There was also criticism that the government-initiated Small Business Services were not the most helpful in objectively identifying small businesses' specific development needs; there were other and better avenues for obtaining impartial advice.

Accreditation of workforce development in terms of National Vocational Qualifications

In certain sectors of employment (eg construction) there is currently a client–industry-led drive towards a fully qualified and competent workforce – the aim being (among other things) that within two years all managers, supervisors and higher technicians will be accredited to at least NVQ Level 4 (or equivalent). For those without formal qualifications at HE level (Level 4) this industry-led initiative will continue to drive demand for external accreditation of higher level workforce training and development linked to NVQs.

In other areas (eg the care sector) government legislation means that by June 2005 all those working as managers in registered residential care homes will have to be accredited to at least NVQ Level 4 in management. Within the short term at least, employer demand for advanced vocational awards in this area will be high.

Despite these specific examples, and although many professional bodies have worked with QCA to have specific NVQs accepted as part of the National Qualifications Framework, it seems that such external mapping and benchmarking is often of secondary importance to employers. Rather it is the link to professional membership routes (if any) that counts. Where employers were using the NVQ system to upskill their workforce they saw the accreditation process as providing a benchmark for technician and management roles for the future.

In general, employers indicated that they found the process of accreditation for NVQs bureaucratic and cumbersome, even though they acknowledged there were some very useful NVQs at higher levels (eg for supervisors and managers).

There was also limited evidence that UK occupational standards and NVQs may be failing to keep up with specific areas of technology (for example circuit board operations within electronics).

The role of professional bodies

In some of the employment sectors chosen for this study (eg computing/IT and hospitality) the role of professional bodies in shaping employers' recruitment and workforce development practices was limited. In other areas (particularly construction and engineering), the extent to which vocational HE qualifications as defined in this study meet (part of) the membership requirements for full professional chartered status plays a significant role in determining employers' recruitment and workforce development practices. In both construction and engineering, overall membership rates are heavily biased towards full chartered status (eg chartered engineer or the member grade of the Institute of Building), whereas the employment situation is arguably weighted more towards the technician role. Some employers were critical of the actions of professional bodies in raising the academic requirements for full chartered status partly to enhance the status of their profession in relation to other professions, as it can be seen as diminishing the perceived value of intermediate, sub-degree qualifications.

However, there are some (albeit limited) signs of an emerging renewed emphasis on chartered technician status (related to sub-degree qualifications and non-accredited degree programmes), which might affect employers' recruitment and training practices.

The role of foundation degrees

There is currently a government drive to expand provision of work-related and employer-focused higher education through foundation degrees. The government sees such programmes as helping to meet the current skills gap at associate professional and higher technician levels. A number of sector-wide bodies have already set up national groups (or are planning to do so) to take forward the development of such programmes, linked to occupational standards frameworks. Professional bodies are also beginning to identify where the foundation degree will 'fit' within their routes to membership.

This study suggested that some providers considered that the involvement of sector-wide bodies was important in representing general employer needs (including the needs of SMEs) rather than linking the new foundation degrees too closely to the needs of any one particular employer (and arguably the vagaries of their specific business needs). The alignment to occupational standards was seen as important in making explicit the standards of the new programmes; in retaining the work focus of the programme; and in enhancing employers' understanding of the skills and competencies developed through such a programme.

But the study also found that employers were confused about the intended role and purpose of this provision at sub-degree level; especially as they were aware that the term 'foundation' was already used in a number of different contexts within higher education, for example, foundation level/year 0 courses or foundation year (in art and design). Moreover, for some, the term 'foundation' implied a general base of knowledge and skills on which an individual might build more specialised learning at a later stage.

In sectors where existing programmes leading to HNC/HND were felt to fulfil a valuable role, were well understood and delivered to a national standard (eg construction and engineering), employers could see no obvious need to introduce new awards. Some employers and course tutors also expressed concern about the extent to which employers would be willing and able to provide opportunities for guided work experience for students or employees on foundation degree programmes.

Despite this, employers anticipated that foundation degrees might become an important vehicle for developing the skills and knowledge of those already in the workplace. But funding and work patterns were likely to be barriers to those already in the workplace, and more emphasis might need to be placed on flexible modes of study and responsive support packages to overcome such barriers.

For recruitment purposes, employers welcomed in principle HE programmes focused more on work-related skills, but noted that for companies to 'buy in' to any new qualification, they would need to be clear how it was significantly different from existing qualifications.

Employers were also aware of developments at lower levels of education aimed at parity of esteem between academic and vocational education. But it was unclear whether such developments would significantly affect young people's (and their advisers) choices of subsequent options in relation to further vocationally biased education and training. Many employers saw the foundation degree as a logical addition to the existing Modern Apprenticeship framework, but it was not clear whether it would be able to fulfil this role: as noted earlier, student funding issues could be crucial to the success of this role.

Thus it is as yet unclear whether these new programmes will attract a 'new' type of student to higher education or whether they will attract those who previously would have done another sub-degree programme (eg HND).

Student perceptions of employer needs

Attempts to understand the demand and supply of a specific level of qualification often omit the student dimension. The demand for vocational higher education is driven by a complex relationship between the expectations and strategies of students, employers and providers, and the latter are influenced, at least to some extent, by governmental policies.

Thus it seemed that students' and employees' points of view and concerns about their qualification might offer a useful counterpoint to employers' views. This led to focus group discussions in universities and colleges in three regions: Staffordshire, Yorkshire and London. Some 65 students were interviewed in 11 focus groups; the students were located in five colleges and two universities. As noted earlier, a few course tutors, careers advisers and (in the case of colleges) HE coordinators were also interviewed.

A complex and fragmented picture

The students' narratives reflected the high fragmentation of the vocational HE field, with its intermediate status as the highest common factor. However, perceptions of future prospects and of employers' preferences were linked to the type of course taken and the current 'professional' status of the students.

The student voices were captured for information and to compensate for the current lack of data; they are not intended to be representative of the vocational HE student population.

The extent and nature of employer support for studies

In some ways, the extent and nature of employer support reflect the value employers place on particular forms of study. The respondents who were currently employed were often not on formal staff training programmes but studying to further their own career within or outside an organisation, rather than responding to its immediate business needs. At one extreme, students on generic programmes (such as HNC/HND in business) enjoyed little or no support from employers and were more likely to link their education and training to a possible change of job.

At the other extreme students on specialised or more vocational courses appeared to receive less ambiguous support from their employers as these programmes had been recommended or imposed by the employer or were mandatory (through state or sectoral requirement).

Between these extremes lies a wide range of student opinions on the level of support from employers. Some students, especially those employed in small businesses where the employer might view such skills and knowledge upgrading (at the company's expense) as threatening the business stability and its capacity to retain that employee, deliberately let their employers remain unaware of their education and training plans in anticipation of the employer saying 'no'.

Employer support can also be gauged in terms of how much interest the employer maintains in the programme being followed.

Student/employee career ambitions and plans for further education

Where a full-time vocational HE programme was clearly part of a degree track the students interviewed tended not to have immediate career ambitions and/or clear ideas of the type of job they might eventually do. They were keen to undertake further learning, but it was not exclusively related to job opportunities.

Students on vocational programmes that seemed to lead to captive job niches tended to value the professional content of their course and its immediate applicability to the 'real' world much more. These students, generally older, linked any prospect of topping up their qualification to the specific requirements of their sector, or their company. Where students already had considerable workplace experience of relevance to their current programme of study, there was criticism that assessment of prior experiential learning was not being used to the advantage of learners.

University or college policy on progression opportunities may be as influential as the employers' expectations and support in students' decisions to progress beyond a sub-degree qualification. Perhaps not surprisingly, students in the university-based focus groups tended to show much more awareness of direct and alternative routes to further study, and express much more faith in honours degrees than those whose course, taken in a college, was more integrated in their day-to-day professional tasks than in their own personal and educational development plans.

Student perceptions of employer preferences

Here again there were variations by type of programme and particular employment sector. Those on full-time programmes believed employers did not value sub-degrees and tended to recruit people with degrees. It is worth noting that students who thought that qualifications were used as screening devices for recruitment purposes were more likely to be on a progression track towards a degree.

Those studying part time (particularly those studying during the evenings) thought employers would value the level of commitment evidenced by their desire and willingness to study while holding down a full-time job.

Concerns about the lack of visibility of sub-degrees on the job market were expressed, stressing again the problem of identity of this level of qualification. Those on a foundation degree considered the label 'degree' was increasing their programme's attractiveness. In contrast, students following an HNC in business thought the 'certificate' award was compared unfavourably (by employers) with the 'diploma' award, even though the students considered their certificate programme was at a similar level to the diploma programme.

Signals from employers, the labour market and educational institutions about vocational HE qualifications were in some cases contradictory, generating confusion in students.

Whether confident or pessimistic about the value of their qualification, students following courses unrelated to their current jobs appeared quite poorly informed of the immediate prospects offered by the qualification they were pursuing, which indicated a less direct link between their studies and a professional strategy.

Perceptions of the importance of having the 'right' qualifications

This is probably the key point of students' perceptions. They can be cruelly realistic, particularly about the confused views of some employers on post-16 vocational education and their 'blind' preferences for degrees (in some sectors), or about instances of snobbery among degree-level employees in their company. Students' narratives also reflect personal trajectories, retrospectively justified. Very few of them felt they had made the wrong choice, although it is likely some did not choose this particular route to gain a more vocationally oriented education. Degrees of satisfaction reflected short-term strategies rather than informed anticipation of labour market requirements.

Conclusions

Vocational higher education is highly fragmented and heterogeneous, and it continues to serve a number of different but arguably overlapping functions. In certain employment sectors, the value of vocational higher education is determined largely by the extent to which the professional body recognises the vocational qualification within its own framework of routes to professional membership.

Thus vocational higher education continues to serve as an alternative route to professional membership, other than a first degree. It provides 'niche' qualifications, meeting specific employer demands in specific sectors and areas. It has a role as a workplace high-level qualification to improve professional practice. It provides opportunities for individuals as employees to develop new skills and knowledge not necessarily related to their current workplace role; as such it provides a possible route to career change. Finally a new role can be discerned – a work-based route through higher education, attracting new groups of learners; these 'new' groups may result from government legislation, or government or employer policies to professionalise the workforce. This new role also arises from employer demands for different skills sets suitable for associate professional and higher technician-level occupations in particular industries.

Employers place different values on advanced vocational awards. Some indicate a preference for those with vocational HE qualifications (eg HND) since they tend to have better technical and practical skills and are less theoretical in their approach. Others continue to prefer to recruit graduates, particularly where greater business awareness, a broader perspective and personal skills are required in addition to technical skills. This study does not consider whether it is the nature of the degree and HND programmes themselves (including the fact that the degree will be at least one year longer than the HND programme) or whether the nature of the student intake to the different programmes that results in these views: it is probably due to a complex mix of factors. Moreover, there is generally a much bigger choice of potential recruits among degree holders than among people qualified to sub-degree level.

As noted above, the government is now seeking greater parity of esteem between vocational and academic programmes and qualifications, and to expand provision of work-related and employer-focused higher education through the relatively new foundation degree qualification. Within its skills strategy, government is also seeking to stimulate a demand-led approach to skills training.

Findings from this study suggest a number of key issues relating to these policy drives should be addressed to ensure their success.

- Employers need much clearer information about the distinct roles and levels of the current range of HE qualifications and of any new ones proposed.
- Educational providers need greater knowledge of employer needs for associate professional/higher technician skills in their locality and business sector, and to engage with employers to ensure provision meets their needs.
- Employers need to see a strong business case for using external education and training provision at associate professional/higher technician level (rather than in-house provision) and for using external referencing and benchmarking.
- Employers do not necessarily make hard-and-fast distinctions between different types of providers. Instead they make choices on grounds of appropriateness to specific needs and costs; they tend to use a 'preferred supplier' model, which they see as maintaining quality and standards.
- The role of professional bodies in certain sectors is crucial in shaping employers' recruitment and continuing workforce development activities. Some actions taken by professional bodies to raise the academic requirements for chartered status might in fact damage the standing of more vocational education and training programmes (which arguably might better reflect the needs of the industry).

Recommendations for data collection

- The available funding and current funding mechanisms for post-16 work-based programmes (both age-related and educational level-related) limit the extent to which employers can use them to progress employees to higher levels of skills and knowledge linked to associate professional/higher technician jobs.
- There should be more emphasis further down the education system on advising young people about the range of further education and training opportunities available; the continuing emphasis on first degrees does not fit well with a policy of parity of esteem between academic and vocational qualifications.
- In terms of the proposed expansion of work-related and employer-focused higher education, employers will need to become much more aware of the distinctiveness of the new foundation degree (in relation to existing provision) and the output standards of such provision before they will necessarily 'sign up' to the new award. There is a danger that without strong labour market signals students may seek to progress from the new foundation degree straight to an honours degree programme, and foundation degrees will fail to establish their distinctiveness and their own status in the labour market (especially an HE labour market that continues to be dominated by the Bachelors degree, see also Robertson 2002). There is also a danger that the need to establish a progression route beyond the foundation degree may distort the nature of the foundation degree programme. If a distinguishing feature of such expanded provision is sustained employer involvement in design and delivery, that involvement might be best effected through sector skills-endorsed task forces. Moreover, aligning the programme to occupational standards would help to make output standards explicit.

None of the new developments in vocational higher education should limit an individual's opportunities to engage in high-level, work-related education and training not specifically related to their current workplace situation.

The current method of reporting student data on such a large and heterogeneous collection of qualifications as a single entity 'other undergraduate' is not helpful. In future, student data should be reported at a much more disaggregated level and the current separate reporting systems (for the HE sector and the learning and skills sector) should be made more compatible. Further, the qualification coding system currently used in the ISR needs to be overhauled and made more user friendly (see Clark 2002).

The whole area of demand for qualifications both from students and from employers at this 'other undergraduate' level is under-researched. For example, there is no national database on student progression from Level 3 to Level 4 (in particular through the work-based or FE route to HE study). Further, to gain an adequate and comprehensive picture of employer demand for different qualifications and provider sectors, data on qualifications gained and destinations of students at Level 4 in FECs should be collected in a standardised way.

We welcome the Higher Education Statistics Agency (HESA) initiative to extend the collection of first destinations data to cover part-time students in HE institutions. We recommend that the initiative be extended to cover FECs. Data on part-time students studying at this level should also include an indication of where such students are employed while in study.

References and data sources

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