Finding Our Way: Vocational Education in England

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Summary

Charles Clarke has recently described England as having "a weak offer for those who want a vocational orientation to their studies".

This discussion paper analyzes the weaknesses of vocational education in this country and suggests how to remedy them.

Vocational education should be about progression, both to skilled employment and to further levels of education. If those aims can be achieved it has an important part to play. There are strengths in our system, with around 30 per cent of 16 year olds opting for full-time vocational programmes in school or college, quite apart from the numbers entering apprenticeships. And there is a large vocational presence in higher education, including the professions.

But vocational education has suffered a chequered history, being subject to many different initiatives over the years, each of which has had rather different purposes in mind. This overlay of initiatives, courses, qualifications and indeed philosophies has resulted in:

- a confusing plethora of qualifications, with no image in the minds of young people, parents and employers about what vocational education involves;
- high degrees of non-completion with switching between the many different courses and a dropping off of participation at 17;
- poor linkages both between the various types of vocational courses on offer, and between them and vocational offerings in higher education. A third of vocational students are on courses which could not lead to higher education, either directly or through further related course, even if someone excelled on it;

• poor linkages to the labour market, not helped by the fact that the industry bodies who are meant to set standards have been reorganized five times in the last thirty years, and twice in the last five years alone.

Other countries offer us models of how to constitute programmes of full-time vocational education. These are common on the Continent, even in countries which have a strong apprenticeship tradition. There is no single recipe, but the lessons for us are:

- trying, as we seem to be, to offer vocational courses *both* as pathways in their own right *and* as options which can be mixed with academic subjects is unlikely to succeed;
- linkages with both higher education and apprenticeship is both possible and desirable;
- vocational education can be a respectable option, and certainly is not seen abroad as it sometimes is here – as an alternative to academic subjects for those who are struggling at school;
- the quest for 'parity of esteem' between academic and vocational subjects is a wild goose chase. Far from raising the reputation of vocational courses it is likely to distort them and make them pale imitations of academic studies, with little purpose of their own.

The right way forward is to develop substantial national vocational programmes, perhaps 15 to 30 in all, each culminating in an award at level 3, the first point at which vocational education has a demonstrable pay-off in the labour market. These programmes would:

- be designed through genuine working partnerships between industry, awarding bodies, higher education and vocational teachers;
- include a rich mixture of relevant physical and social science subjects to enable general education to be continued in a natural manner;
- give access to the large array of vocational subjects already present within higher education;
- through specialist options within them enable students to gain credits towards Advanced Modern Apprenticeships, or for Foundation Apprenticeships for young people who did not want, or who could not manage, a full level 3 programme;

• include an introductory stage for young people with weaker GCSEs who needed to build up their skills and mesh in with preparatory programmes for those under 16 who wanted to sample a number of vocational options before committing themselves.

These vocational programmes would build on the structures and courses that already exist, but – by gathering them together – make them much more coherent. They would reflect the best of successful practice abroad, where vocational studies are more esteemed than here and produce better results. And they would be consistent with emerging proposals for an 'English baccalaureate', providing the specialized vocational variants that are envisaged under this system.

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Introduction

This paper concerns vocational education. By this term we mean a system of education which has, as its subject-matter, knowledge used within certain trades, occupations or professions. As part of our contention is that confusion about the nature and purpose of vocational learning has inhibited the development of a strong tradition of vocational education in England, it will be as well to set out as soon as we can what vocational education is <u>not</u>:

- though it will help people to practice a trade, occupation or profession, and may be a necessary condition for their doing so, vocational education does not of itself ensure proficiency. Very often perhaps always a period of practical training geared to the development of skills and experience will be needed. It may well be sensible to combine vocational education with on-the-job training and experiential learning, as is done in traditional models of apprenticeship and of professional formation; but the fact that someone who has completed a course of vocational education is not yet proficient in their occupation does not mean that the course has failed in its purpose rather that something more is needed;
- much is said about the skills of 'employability': the art of working in teams, communication at work, personal flexibility, ability to solve problems and so on. It is questionable, in our view, whether such attributes can sensibly be the principal focus of a course of study. They can, however, be fostered through educational courses, including but by no means confined to courses of vocational education. But in discussing vocational education we are not talking primarily about 'key skills' of this type.

What then are the characteristics of vocational education that we <u>are</u> talking about? The following features will help in delineating the field:

- vocational education is organized into courses which take place in institutions, whether as part of the public education system, private training colleges or establishments maintained by the professions concerned;
- a course of vocational education applies to a single, or a cognate and distinct group of, occupations or professions;
- though it may not be confined to this, any course of vocational education will aim to impart knowledge necessary or helpful in the practice of the occupations concerned. That knowledge may well not be confined to the occupation in question (e.g. maths for engineers).

In this paper we want to review the case for having vocational education as an important component of secondary education for young people. We shall review experience in England and look at models from abroad. Finally we shall make some proposals, building on what already exists in this country, which we believe would substantially improve the experience and outcomes for those who take a vocational route at 16 - half of our young people.

The Case for Vocational Education

The cases for academic education on the one hand, and for a full training for places in the labour market on the other are well accepted. Academic subjects are held to be valuable in their own right – they encompass truths about the physical world, society and human experience. Quite apart from any 'training of the mind' that they might foster, most would accept that everyone should know something about the physical and social sciences, mathematics, literature and our past and surroundings. A common basis in these subjects leads to a civilized society, and advanced knowledge and research in them leads to progress. And as far as training is concerned, it clearly stands to reason that people who practice trades and professions will benefit both themselves and their customers if they are proficient in what they do.

The case for vocational education is admittedly not so straightforward. It cannot be claimed that a study of each occupation is a necessary part of a person's education, and neither - as we have seen - will a course of vocational education ensure occupational proficiency. On the other hand it is plain that vocational education can take a person part of the way towards mastering material that will be needed if they are to practice a given occupation effectively. This must be useful. And secondly – given the right circumstances – study of the knowledge relevant to a particular occupation can be educative itself. Thus the case for including vocational education within an education curriculum stems from its ability both to assist in preparing for an occupation and to fulfil educational aims. We make no claim that it fully prepares for an occupation (dedicated training or apprenticeship might do this more thoroughly or more quickly); and it might be that the study of more academic or æsthetic subjects would serve educational aims better. But the ability of vocational education to perform both functions places it in a unique position. It need not lay claim to being a superlative means of either preparing people for jobs or developing cultural appreciation or scientific knowledge since its ability to do both to some degree means that it has a respectable place in the education and training firmament.

The idea that vocational education can be valuable educationally perhaps needs some justification.¹ First, there seems no reason to suppose that the application and intelligence needed to master vocational topics is of itself less than that of other objects of learning. Of course, vocational areas differ greatly in their intellectual demands and in the degree to which the knowledge that is applied in them is formalized. But we can observe that vocational knowledge is frequently characterized by formal and distinctive working methods and by a hierarchy of expertise with authoritative figures and bodies at the 'top' of the trade or profession – two features that also characterize academic disciplines. Second, occupations are frequently closely linked to particular academic disciplines, requiring both a working knowledge of these, and further study in order to master the adaptation of these disciplines necessary for them to contribute to the occupation in question. For example, psychology is relevant to management, maths and physics play a distinctive part in the practice of engineering, economics informs occupations concerned with finance, and biology is obviously relevant to health and social care occupations. Beyond this, it is possible to

¹ Though concern amongst educationalists about the introduction of vocational topics is probably not as acute as it was in the 1980s when Holt (1987) declared of the Technical and Vocational Education Initiative that "... there is a very real risk that, in the name of economic recovery, forms of schooling will be introduced which not only suppress personal growth but intrusively monitor and constrain it."

represent the study of vocational areas as educationally valuable, quite apart from their similarity to, or inclusion of, academic disciplines. The American educator, John Dewey, conceived 'industrial education' as "... schooling in which the traditional education is reorganized to utilize the subject matter - active, scientific, and social of the present day environment." (1917) and talked of:

"... industrial intelligence - a knowledge of the conditions and processes of present manufacturing, transportation and commerce so that the individual may be able to make his own choices, and his own adjustments, and be master, so far as in him lies, of his own economic fate." (1940)

Thus vocational education has a perfectly respectable part to play in a system of education, not only because – at its best – it is a happy marriage of preparation for working life and cultural and scientific development, but also because it is valuable in itself. There are, however, certain corollaries to all this. If vocational education is to play its proper role it will need:

- to have a clear relationship with established occupations, trades or professions and with their entry and initial training arrangements so as to be able to offer the prospect of progression into the labour market;
- to consist of educationally respectable material, such that attainment in vocational education can lead to progress to higher levels of education.

From time to time these requirements may pull against each other; some compromise between them is likely to be needed, for example in terms of rather more 'theoretical' material being included than those in industry consider to be strictly necessary, or – from the other point of view – practical experience outside the classroom being incorporated as part of the course requirements. A successful system of vocational education is built in a climate where both educationalists and those from industry and commerce respect the traditions and aims of the other 'side', and believe that compromise and accommodation will results in a more robust result than programmes which reflect only one set of aims.

Vocational Education in England

Vocational education has been an increasingly common choice amongst young people in England;, as the following graph shows:



Source: Participation in education and training of 16 to 18 year olds, D/ES 2002. Work-based training is part-time only and includes both government-supported and employer funded training. Those in employment without training, those purely on part-time courses, and those without employment, education or training are not shown.

Whereas fifteen years ago only one in every eight 17 and 18 year old was in full-time vocational education, today more than one in four pursues this option. As can be seen, vocational education accounted for a great deal of the increase in full-time staying-on rates that took place 10 years ago, even eating into the academic stream through supplanting GCSE re-takes. Considerably fewer young people aged 16 and 17 have entered work-based training, which has been supplanted by vocational education in terms of popularity by this age group². If we add the numbers doing work-based training, whether funded by the state or

 $^{^2}$ Though, of course, many join apprenticeships later. A half of advanced modern apprentices are aged 19 or over.

privately by employers to those doing vocational education we find that more 16 and 17 year olds are pursuing a vocational education or training option than are undertaking academic studies.

Vocational education is therefore a large and growing feature of upper secondary education. Before looking at how it developed it is worth registering the fact that vocational education is also a very important feature of higher education. As well as the established professions such as medicine and law which in many ways helped to shape the concept of the present-day university, higher education has always had a strong vocational content spreading across a wide variety of occupations. This is perhaps not surprising given that the 'next stop' for the vast majority of those leaving it will be the abour market. Statistics of first and subdegrees from the Higher Education Statistics Agency (HESA, 2002, Table 13) show that nearly 50% of first degrees and some 70% of sub-degree qualifications were in vocational subjects.³ The evolution of vocational higher education in the UK has involved settlements with particular professions whereby universities provide complementary professional education, the absorption of specific vocational institutions such as teacher training colleges and the development of courses relevant to new and expanding occupations such as management, marketing and also computing. It would seem likely that the prevalence of vocational courses within higher education will increase with the government's commitment to attracting 50% of the those under 30 into higher studies by 2010 – indeed it will be likely to increase particularly fast as vocational education is disproportionately represented amongst the sub-degree courses which are a particular object for expansion.

Vocational education at secondary level – a brief history

The development of vocational education at upper secondary level has been a mixture of 'hands off' evolution interspersed with very directive policy direction.

The failure to develop the 'technical schools' envisaged in the Butler 1944 Education Act has been well chronicled (*e.g.* Sanderson, 1994), but by the 1960s a pattern of day-release

³ 2000-01 figures. HESA subject categories were assigned by the authors as vocational or not. Clearly it is impossible to be sure that all those undertaking a particular subject are doing so *purely* for vocational purposes, but the subject areas counted as vocational are those which would be unlikely to be taken unless a student had at least some initial inclination to work in the field concerned. Ambiguous areas such as media studies were not classified as vocational, as was the case with all 'combined studies'. Prominent categories within the vocational total were: Subjects Allied to Medicine (14.9% of all higher education awards at first degree and below), Business and Administrative Studies (14%), Engineering & Technology (8.2%), Computer Science (6%), and Education (5.6%).

courses, complementary to apprenticeships had been established in further education colleges, encouraged by a number of the Industrial Training Boards set up under the 1964 Industrial Training Act. These courses - typically provided by City & Guilds of London Institute (CGLI) in the craft construction, engineering and manufacturing industries concentrated on the theory underpinning the trades in question, and tended to be fairly occupationally specific. Similar day release courses were provided in the 1970s by the Business Education Council and its parallel Technician Education Council (merged into the Business & Technician Education Council - BTEC - in 1983). BTEC courses tended to cover rather broader vocational areas than CGLI, with explicit elements of general education and were designed around a principle of progression from secondary to sub-degree level where their HNC had become established for technician level employment. BTEC also developed full-time courses on the same pattern, classified as Diplomas rather than the parttime Certificates, so by the end of the 1980s they could offer a system of substantial full-time vocational education courses ranging from the First (level 2 equivalent in the national qualifications framework), through the advanced level National Diploma, to the Higher National Diploma (HND), all offered in colleges of further education, and – in the case of the HND – also at polytechnics. The other major body offering vocational education courses was the Royal Society of Arts Examinations Board (RSA) probably most widely used for secretarial and office-related courses, taught in further education colleges, but also in private secretarial schools. In the late 1980s RSA developed a very widely taken Computer Literacy and Information Technology (CLAIT) qualification. All of these qualifications still exist, and are taken by adults as well as young people.

Though durable, these courses did not add up to a unified system of vocational education. The offerings of each body differed substantially in design principles and size. Their original designs rather presumed that their students would be undertaking their studies while in related work – an assumption in the case of young people which was increasingly untrue. Though each body had a system of progression within their system, these did not equate with each other, or – with the exception of BTEC – have any real purchase within higher education. Moreover each had a different system of consulting with industry over the content of their qualifications, with differently constituted panels and advisory committees with varying levels of influence over the qualifications themselves. Particularly with the phasing out of many Industrial Training Boards in the 1980s the degree to which these qualifications had recognition with employers became rather obscure. They also had different conventions on assessment, with BTECs adopting the principle of 'validation', that

is to say central approval and subsequent inspection of locally designed assessment instruments, and – to a degree – of syllabus variations. CGLI and RSA relied largely on centrally designed and marked tests.

As well as this enduring stratum of 'traditional' course-based qualifications of different types, a number of government initiatives impacted on vocational education in the 1980s and early 1990s:

- The Technical & Vocational Employment Initiative (TVEI) was announced in 1982. Originally, in its 'pilot' phase it was intended to develop dedicated pathways of largely vocational education for non-academic, but far from 'problem' young people – according to David Young, the chairman of the Manpower Service Commission which was charged with introducing it – for the "the 15 to 85 percentiles of the ability range" (quoted in Chitty, 1989). Programmes would stretch from 14 until 18, thus erecting a distinctly vocational track. However, after its national extension in 1986, TVEI took on a much more general and diffuse aspect aiming according to its 'Focus Statement' (Employment Department, 1992) to relate "everything that is learned in schools and colleges to the world of work", "improving skills and qualifications for all", fostering work experience and "practical learning methods", as well as careers guidance and records of achievement for all. There had been a clear drift from the original vision of erecting a distinctive vocational stream to a much more general infusion of employment-related aspects into a largely general curriculum.
- The introduction of the Certificate of Pre-Vocational Education (CPVE) in 1985 recognized a trend, with high unemployment, of young people who might have progressed to apprenticeships, staying on at school and college for a year after the end of their compulsory education, rather than enter the entirely work-based Youth Training Scheme. Aimed at introducing students to the skills that would be needed in employment and an understanding of the world of work, the CPVE was an early example of a governmental orchestration of a national post-16 syllabus, requiring the three vocational examining bodies to act jointly.
- The development of National Vocational Qualifications (NVQs) followed a review of vocational qualifications (MSC/DES, 1985). NVQs were not originally intended to apply in any very particular manner to vocational education as opposed to work-based training – indeed they were conceived as something of an antidote to classroom

teaching. The NVQ point of view rendered vocational education courses and their attendant qualifications as having a merely contributory role to overall occupational competence. However, NVQs did become taught in full-time courses in further education colleges, and moreover their underlying philosophy of a syllabus based on standards of performance (outcomes) and an assessment regime typically consisting of observations and recording of performance at work or in simulations of it, became a template for the next phase of qualifications development. In addition the NVQ initiative brought national recognition to a considerable number of specialized bodies concerned with the awarding of certificates in particular sectors of industry.

Going further than the CPVE, General National Vocational Qualifications (GNVQs) • were introduced at three levels (Foundation, Intermediate and Advanced), through the offices of the three main vocational awarding bodies. Drawing on the BTEC models of size, breadth of occupational content, and principal progression stages (though without an HND equivalent), GNVQs were clearly meant to supplant them, and did so in a number of areas (Wolf, 1997). The GNVQs were intended for the "many young people [who] want to keep their career options open", and so were not ready to embark on specific NVQs. But the new GNVQs were also "... to be related to the NVQ framework, to make it easier for people to progress quickly to occupationally specific qualifications" (DES etc, 1991). However early on in their implementation it became apparent that "there were serious doubts ... as to whether existing and planned GNVQs can provide satisfactory substitutes for the many quite specialised vocational qualifications which currently are offered in further education... and which have not been, and will not be, converted into NVQs" (FEU et al, 1994). Moreover, GNVQs went through a number of transmogrifications within a short space of time. A pre-launch decision to introduce grading resulted in grading criteria unrelated to any particular units within the qualification, which subsequently proved troublesome. External testing originally consisted of a rather sporadic suite of multiple-choice tests which were rationalized after an extensive review in 1995. Key skills in number, communication and information technology, originally an integral part of the award were 'de-coupled' in 1999, and a half size (6 unit) award at advanced level, rechristened 'vocational A-level', was brought in at the same time, though the facility to take the 12 unit version still remained. There are plans to merge the intermediate and foundation levels with the 'GNVQ Part One' (itself introduced in 1995) resulting in

"new GCSEs in vocational subjects" (DfES, 2002), though for the time being the intermediate and foundation versions will remain.

- an entirely different, and largely unintended, spur to the creation of vocational qualifications came with the establishment of the Further Education Funding Council which in 1993 took over the funding of colleges from local education authorities. In the case of vocational courses the FEFC was limited in terms of what it could fund to a list of 'approved' qualifications *and to courses which led to them* (Schedule 2(d) of the 1992 Further & Higher Education Act). The FEFC determined that these contributory courses should themselves carry a certificate, to aid accountability and performance measurement. This gave rise, understandably, to the conversion of previously uncertificated courses into awards through vehicles such as validation by the Open College Network and other new awarding bodies, thus adding a further layer to the 'qualifications jungle'.
- a rather different strand of policy affecting vocational education has been the development of vocational options in the 14-16 phase, particularly for the least able or those who are 'disaffected'. Thus in 1996 the D/EE reported that "Too many young people find school boring, particularly in the final compulsory years... The additional stimulation of learning some basic skills in a work setting may be just what these people need to reawaken their interest and motivation." (DfEE, 1996). It suggested that approaches such as developing key skills and studying for vocational qualifications "can also help promote behavioural qualities such as punctuality and good attendance." This paved the way for the introduction of expanded vocational education and training for some at lower secondary level. At first this was at the margins of the requirements of Key Stage 4 of the National Curriculum, but subsequently 'disapplication' became a frequently used method of creating the space for these kind of work-related and vocational options. In 2001/2 one third of schools used the facility to exempt pupils from up to two national curriculum subjects, affecting 5% of all pupils "most commonly ... to provide for an extended period of work-related learning." (DfES, 2002). Conscious that in practice disapplication is "widely perceived as remedial" and that "work-related learning has been seen as an inferior alternative to general study", the DfES proposes that the new GCSEs in vocational subjects will be relevant particularly for this age group, and that financial support will be made available to support 14-16 year olds "study at a college or with a

training provider for one or two days a week throughout Key Stage 4."

• Responding to recommendations from a Skills Task Force that there should be "separate assessment of underpinning knowledge and understanding through related vocational qualifications" (DfEE:2000) the government has announced that modern apprenticeships will include 'technical certificates', being taught part-time courses concentrating on the theory behind the apprenticeship trade, very much on the model of the City and Guilds courses mentioned above (and perhaps 're-absorbing' some of them into the governmentally recognized constellation).

One might have expected the industry sectors, in whose name many of these reforms were undertaken, to have exercised some discipline on the system in order both to regulate the training that young entrants received, and to ensure that the system was comprehensible to employers. However the education and training bodies representing industry and commerce have themselves been subject to reform during much of this period. Over the past 40 years there have been the following major system changes:

- 1964 Establishment of 23 Industrial Training Boards.
- 1973 Establishment of Manpower Services Commission with considerable changes to powers of ITBs.
- 1981 Majority of ITBs abolished. Replaced by voluntary Industry Training Organisations (c 150).
- 1986 Development of 'lead bodies' (including ITOs) to define NVQ standards.
- 1997 Recognition of National Training Organisations (c 75) to replace ITOs, lead bodies and Occupational Skills Councils.
- Abolition of NTOs and replacement by Sector Skills Councils (c 25), still in train.

The large variation in the numbers of these bodies has meant not only that the changes have affected their personnel and governance, but also that the very definitions of the sectors which they act for has changed at each re-structuring. Whole sets of relationships have had to be rebuilt, and sectoral knowledge re-cast. It is instructive that the sectors which have most obviously kept their size, shape, and basic central operational staff, namely the Engineering & Marine Training Association (successor body to the Engineering Industry Training Board), and the Construction Industry Training Board (one of only two remaining ITBs), have succeeded both in maintaining some continuity of vocational education qualifications, and in working effectively to influence the newer offerings.

Current features

This turbulent history has therefore resulted in a very wide range of courses, awards, institutions and – importantly – different rationales for vocational education. What is noticeable is that each initiative, while purporting to supplant and rationalize the previous 'jungle' has in fact tended to add to it. Unwin (1999) has commented that:

"this on-going lack of stability in the system creates anxiety and often cynicism amongst all the stakeholders (young people, parents, employers, and education and training providers) who struggle to make judgements about the relative value of the different qualifications in post-compulsory education and training and the employment marketplace."

The most prominent feature of our vocational education system, therefore, is the bewildering variety of different approaches. The menu for 14-19 year olds currently includes:

- work-related courses at 14-16, some bearing qualifications, others on a largely experiential basis (largely resulting from a perception that vocational education is appropriate for those who find mainstream academic courses unattractive or just too difficult);
- 'new GCSEs in vocational subjects' beginning this year (resulting from a desire to place vocational education courses in a relationship of 'parity of esteem' with general ones);
- intermediate and foundation GNVQs (resulting from a worry that replacing these with vocational GCSEs, which was the original intention, might cut off options for some students);
- Key Skills offered as part of all post-16 curricula (resulting from a belief that a general preparation for work in the form of 'employability' skills was the best approach and could be fostered in any subject context);
- vocational A-levels in both single and double form, and also in AS variants (resulting from a desire to promote parity of esteem by following an A-level format while keeping the option of 'large' courses equivalent to two A-levels open);

- BTEC First and National Diplomas and Certificates (the qualifications which GNVQs were meant to replace before they were nearly replaced by vocational A-levels);
- technical certificates (resulting from a desire to introduce elements of theoretical knowledge into apprenticeships, but also – no doubt – available for full-time students);
- 'traditional' CGLI and RSA awards (which, together with modified versions of the BTEC Certificates, may be counted as technical certificates);
- NVQs taught on a full-time basis in colleges (resulting from the desire for a comprehensive desire for competence-based qualifications moderated by a realization that not all young people had access to the workplace and that the workplace was not always the most efficient location to teach and assess competence);
- a range of other taught courses with varied provenance ranging from the Certificate in Ear Piercing offered by the Vocational Training Charitable Trust, through the Awarding Body Consortium's Certificate in Cake Decoration to the Certificate in Employment Skills awarded by the Northern Council for Further Education.

In all there are 2015 different vocational qualifications approved for use by those under 18.⁴ Of these some 1000 are NVQs which are not intended for full-time delivery in college (even though some are delivered in this way), and a further 200 are key skills qualifications. Leaving these aside we have 42 Vocational A-levels, 39 of which can be taken as a double award and 12 of which can be taken in the half award format of an AS. There are 27 GCSEs in vocational subjects, with 77 GNVQs at Foundation and Intermediate levels. In addition there are 130 qualifications classed as General/Vocationally Relevant and 441 as Vocationally Related. These latter are offered by a total of 45 different awarding bodies. It would be fair to say that not only all sectors, but also virtually all lengths of course and styles of assessment are represented.

One of the effects of this fragmentation of qualifications is that it is easy for young people to enter the wrong one, not just in terms of the occupation in question, but also in terms of level of difficulty and style of learning. Payne (2001) found very high levels of non-

⁴ See the very useful website at <u>www.dfes.gov.uk/section96</u> which gives all nationally accredited qualifications by awarding body, level, category and whether approved for young people or not.

completion of post-16 qualifications⁵, but in many cases apparently unsuccessful students had switched to a different qualification and had successfully completed this (sometimes moving up a level, rather than down):

	% terminated	of which %
	early or	successfully
	failed	completing a different
		qualification
GNVQ Advanced	43	}
GNVQ Intermediate	41	26
BTEC First	44	}
BTEC National	34	31
City & Guilds	72	34
RSA	58	35
NVQ (full time)
education)	49	}
NVQ (work-based)	38	10

It would seem therefore that up to a third of those who do not complete a vocational qualification are in fact capable of completing a different one. One could, of course, criticize poor advice, but frankly with the range of different qualifications on offer it may be difficult for even the most experienced advisor to work out what would be best for a student. Our view is that it is the fragmented nature of the vocational offer which stands in the way of better course completion for two reasons:

- the plethora of courses itself militates against informed choice;
- with many small courses not linked to each other it is much easier to make a wrong choice than with a more substantial course where one has the time to cover fundamentals and work one's way through options leading to progressive specialization.

⁵ Payne used a rigorous definition of success, using the Youth Cohort Study to follow up whether students entering post-compulsory study at 16 in 1996 had achieved the qualifications they set off studying by the time of the second sweep of the survey two years later in 1998. The figures shown count those still working towards their original qualifications as successes, though in her report Payne classes these as unsuccessful. Our more charitable interpretation probably gives a more consistent account as some of the qualifications (*e.g.* GNVQ advanced, BTEC National and NVQ 3s in work-based training often take longer than 2 years to complete).

A further feature is the 'fall off' after 17 on the vocational route as illustrated by D/ES regular statistics for 2001:

Age		16	17
A-level		38.0	33.9
Full time vocational education	Level 2	18.1	8.3
	Level 3	12.1	14.9
	Total	30.2	23.2

% of age group

The A-level reduction is four percentage points: on the face of it the vocational reduction is nearly double that at seven percentage points. But when we look in more detail we see a massive ten point reduction at level 2, offset by a *rise* for level 3 vocational courses. Clearly some people are progressing from one year level 2 courses to level 3 at 17. But clearly also, large numbers are leaving the one year level 2 courses at 17 and not progressing any further. This raises the question as to whether it is sensible to present self-contained one year level 2 courses, particularly if they are not clearly linked to potential successors at level 3.

Both BTEC Nationals and GNVQs offer the prospect of entry to higher education. According to UCAS (2000, Table 7.1) the proportion of higher education entrants holding these qualifications was:

	HND	Degree
BTEC	16%	7%
Advanced		
GNVQ	23%	6%

The rates of entry to HND courses are healthy. But given the fact that, as we have seen, nearly 50% of first degree courses are vocational in nature, one might conceive that there is greater potential for penetration into the realms of higher education by these 'top notch' secondary vocational education qualifications. But no other vocational qualifications carry much prospect of higher education entry so, more importantly, we should note that a third of 16 year old full-time vocational students are on courses which could not lead either directly, or indirectly through later linked courses, to higher education *even if they excelled at them*.

A further, and very damaging, feature of the fragmented and turbulent vocational scene is that employers have little confidence – or indeed knowledge – of the awards whose main purpose is to prepare young people for entry to their businesses. Except for certain professional qualifications such as nurses and accountants, a scan of job advertisements rarely if ever reveals reference to recognized vocational qualifications. This is understandable when we reflect on how frequently English qualifications have been subject to change of name, change of awarding body, and so on. This lack of recognition means that issues about esteem become more acute and vocational education which does not result in higher education becomes something of a temporary 'waiting room' before a young person pitches into the labour market, with nothing very solid to his or her name. In other countries qualifications has not changed for periods of more than fifty years, leading to common recognition and valuing by students. It is worth examining how these matters are tackled overseas.

Experience Overseas

Many countries value vocational education and have it firmly established as part of their secondary education systems. Amongst advanced countries with strong traditions of preparing young people for work we can broadly distinguish three groups:

- countries where considerable numbers of young people enter *apprenticeships* instead of undertaking full-time upper secondary education. These include Germany, Switzerland and Austria, as well as – on a rather different model involving a more prominent role for colleges – Denmark. But most advanced countries have, or are trying to revive, an apprenticeship track of some kind;
- countries where vocational topics appear as *optional courses* within a largely elective, and otherwise general, secondary curriculum. The most obvious cases are the USA and Canada. The facility to 'mix and match' academic and vocational courses within upper secondary curriculum applies in principle also in Sweden and Finland though this facility is not used greatly in those countries;
- countries which have a sizeable and fairly discrete stream of *full-time vocational*

education. The classical cases are Sweden, Finland and France, where distinct three year programmes are laid down for occupational areas – in Sweden's case 14 national vocational programmes, and in France 30 versions of the *Bac Pro*. But many countries have full-time vocational routes – even in Germany, entry to health-related occupations is generally through full-time *Berufsfachschulen*;

Vocational education takes on a rather different form in each case. Under an apprenticeship system, vocational education courses tend to play a complementary role to instruction in workplace skills, concentrating on relevant theory and often encompassing continuing general education not necessarily related to the apprenticeship occupation.⁶ Under a system where vocational courses appear as options within a wider curriculum, they can be of a wide variety, ranging from broad familiarization and general work skills, to discrete courses in particular trades. There is an attraction in making such courses practical in nature, often including short spells of work experience or workshop practice, in order to contrast with an otherwise knowledge-orientated and classroom-based general curriculum; there is no need to cover general subjects within the vocational courses, as these are catered for elsewhere. Under a system of full-time vocational education on the other hand, courses are typically organized into a whole self-standing programme incorporating general education; the groupings tend to be fairly broad, but admit of progressive specialization (*e.g.* in Sweden there are some 30 'branches' of specialization within the national programmes).

It is difficult to generalize, but certain points can be made from an examination of foreign practice:

• many vocational education programmes have an explicit linkage with higher education. In Sweden and Finland the national 3 year programmes carry a guarantee of entry to higher education. Germany's *Fachsoberschulen* are clearly linked to the polytechnic *Fachhochschulen*. In France the *Bac Pro* is pitched in design and name to mirror the awards that give entry to higher education. And in the USA special *Tech Prep* programmes are articulated to allow credits during secondary education to count towards associate degrees. In most cases attainment in vocational education does not give *general* admission to higher education, but rather leads to courses in a cognate

⁶ In Germany it is in fact compulsory for apprentices to continue general education on a part-time basis until the age of 18.

vocational area. In this way there is a 'ladder' of vocational education in particular occupations, taking in upper secondary, sub-degree higher education and (particularly where there is a professional level to the occupation concerned) first degree and post-graduate stages. The OECD (2000) has pointed to the importance of providing "...institutionalised bridges between vocational education and tertiary education and ensur[ing] that significant proportions of students and apprentices do take this pathway" in order to preserve the attractiveness of vocational education at secondary level;

- partly to allow higher education entry, and partly for its own sake, vocational education frequently encompasses **continued study of general subjects**. Thus around half of the time allocation of the *Bac Pro* is taken by general subjects which include French, a foreign language, history/geography, art, civics, maths, physics and personal education. In the German part-time *Berufsschulen* a third of the available curriculum time is taken up with German, social studies, economics, religion and sport; and Sweden's national vocational programmes also devote around one-third of their time to general subjects;
- in all cases it seems apparent that vocational education is seen as less prestigious than purely academic study. In some countries there is deliberate and open allocation between vocational and academic streams according to ability. In the Netherlands decisions on whether a child will undertake an academic or a vocational path are taken as early as 12 when pupils enter the pre-vocational *VMBO* track as opposed to the clearly university-bound *VWO* or somewhat less demanding *HAVO*. Though there are some opportunities to switch later on, young Germans who are not accepted in a *Gymnasium* at the same age are effectively destined for apprenticeship or vocational education at 16. The French and Finnish systems divide pupils into vocational and academic institutions at the upper secondary stage, very largely on the basis of ability. Though both in Sweden and in the USA vocational topics classify on the face of it equally with academic subjects, there is little doubt as to which are most desirable;
- running slightly counter to the clear distinction drawn between academic and vocational subjects, we should note that *some* vocational topics have effectively entered the academic stream. Thus there are *Fachgymnasien* in Germany which teach certain vocational subjects to the level of the otherwise academic *Abitur*.

Similarly in Denmark the *HTX* and *HHF* qualifications in technical and commercial affairs respectively classify as general education. The French *Bac Tec*, taught in the same *lycées* as the *Baccalauréat Général*, has specialisms which include business studies and applied medical and social sciences. But these examples tend to apply only to particular occupational areas – especially commerce and engineering – and they do not substitute for vocational courses in the same disciplines which are the recognized means of entering the occupation concerned;

- though of rather lesser prestige than purely academic education, mainstream vocational education is **not seen as appropriate for pupils who are struggling at school or who are 'at risk'**. Indeed many countries take particular care to handle such students in special programmes as a means to 're-insert' them in mainstream education, whether academic or vocational. Thus in Sweden pupils who have not gained the necessary basic qualifications at 16 are placed on 'individual programmes' with the aim of joining a national programme within a year, and in Denmark the *EGU* allows the less able and undecided to sample different occupations before embarking on a recognized vocational programme. The OECD thematic review endorsed this practice recommending that countries should:
- "design vocational education and training programmes for less successful young people as part of safety nets rather than as ordinary vocational programmes, and make sure that safety net programmes prepare young people for participation in mainstream vocational education and training";
- apprenticeship and full-time vocational education seem to be able to sit alongside each other, though it seems helpful to **articulate the qualifications between the two systems.** As well as the distinctive tracks in Germany according to the occupation being studied for, both the Netherlands and France have sizeable apprenticeship and vocational education routes. In recent years both countries have aligned the qualifications attainable in the work- and college-based pathways so that in the Netherlands both groups can aim for *MBO* certificates, and in France the *Bac Pro* and more junior *BEP* and *CEP* certificates can be gained either full-time or part-time as part of an apprenticeship;
- conversely it may not be so possible to offer vocational education both as a distinct programme and also as optional courses within a broad system of general education.
 As we have mentioned, both Finland and Sweden offer students, in theory, the ability

to mix vocational and academic options, but in neither country is this greatly used. In Finland only 6% of vocational students enter for the academic matriculation examinations and fewer students doing general subjects opt to take vocational studies in parallel (though substantial numbers of those who have achieved a general school leaving certificate undertake a vocational qualification after they have left school).⁷ In the USA there is concern that vocational education is being marginalized within the elective system. Though most high school students take one credit classified as vocational, the numbers devoting any substantial time to vocational education are small (about a quarter take three or more credits and only 12% describe themselves as being on a vocational track). As we have noted *Tech Prep* aims to counter this by offering a fuller and more prescribed vocational programme linked to higher education.

In England we can recognize many of the features that are apparent overseas. We have apprenticeship, admittedly at a lower incidence than Germany and Denmark, but at larger volumes than France, Finland and the USA. We have a clearly university-bound A-level track paralleling the German *Abitur*, Danish *Gymnasiet* or French *Bac Général*. We also have full-time substantial vocational education programmes, in the shape of the BTEC First and National the intermediate GNVQ, and the facility to take a double vocational A-level (previously advanced GNVQ). Lest it be thought that 'doing a bit of everything' is necessarily a bad thing, we might take heart from the OECD pronouncement that:

"Countries in which young people are evenly spread over all three of the principal pathways [apprenticeship, school-based vocational and general education], rather than concentrated in one or two, appear to have advantages in achieving good transition outcomes. In these instances young people can be offered wider choices."

However we might note that we would seem to be relatively singular in the following respects:

⁷ 'Country notes' on Finland and Sweden forming part of the OECD review *From Initial Education to Working Life: Making Transitions Work,* (OECD: 2000).

- attempting to promote vocational education *both* as a distinct and substantial pathway, *and* as a 'mix and match' facility interspersed with academic options;
- having little articulation, in terms of well laid out progression routes, between fulltime vocational education and, on the one hand, apprenticeships and, on the other, higher education;
- having such a considerable array of vocational education qualifications with so little articulation between them;
- seeing vocational education not just as for those of less than the highest academic ability, but also for those who are struggling with any kind of schooling;
- refraining from including general education within vocational options, but rather relying on the relatively novel 'key skills' to perform a function which combines inculcating both wide 'integrative' skills and continuing education in maths and English⁸;
- viewing lack of parity of esteem both as a major problem and its achievement as an attainable goal.

Where Should We Be Going?

We should not ignore our advantages. In England we have – as we have just noted – all three of the pathways frequently found in other countries, and in some kind of reasonable balance. We have a large and possibly still growing track of full-time vocational education at secondary level. At the top of the tree, at advanced level, we have two substantial vocational awards which appear to carry the prospect of offering entry to higher education. But we are hampered by a lack of consensus as to what the purposes of vocational education are, and this has resulted over the past twenty years in a large number of only partially compatible initiatives, leaving us with a large array of awards which do not link one with another. Before we go on to chart a way forward we need to sort out the purposes of vocational education.

The competing versions of the purpose of vocational education might be characterized as:

⁸ Both the USA and Australia have rather similar lists of generic competences in the form the *SCANS* and *Meyer* competences respectively, but these are not formally included in vocational programmes.

- a) vocational education is for the young person who finds difficulty with 'proper' school work and who therefore has a 'practical' rather than 'academic' cast of mind. The sooner that this can be identified and the young person concerned started on vocational options, the better. This type of attitude infects the movement to offer vocational options at 14;
- b) vocational education is an entitlement for all young people, and is best ensured by offering exposure to work experience, careers education and the development of personal and employability skills to all ability groups, matched with fruitful relations between schools and local businesses. This was the approach of the later stages of TVEI, and lives on in key skills, records of achievement and 'active citizenship';
- c) each young person should have a vocational option available to take as part of their mainstream general studies, on a 'mix and match' basis. Thus parity of esteem with academic qualifications is essential. Moves to re-form GNVQs in the A-level image are a clear manifestation of this version;
- d) vocational education is a substantive pathway for young people not able or wishing to undertake the highest levels of academic study. It should be based on the concrete disciplines which occupations represent, but should also encompass continuing general studies. This strand is represented by the early TVEI notions, the BTEC and the Advanced GNVQ before reformation.

We favour the last interpretation. Though the others certainly should not be dismissed, and may be able to be catered for to a degree in the system that we envisage, they are - in our view - not durable for the following very practical reasons:

- the idea that vocational education should be 'the answer' to disaffection and problems at school ((a) above) runs the risk of tarring this type of education with the brush of 'problem kids' in the eyes of the many perfectly well-adjusted young people at the age of 14. Their attitude to undertaking this type of education themselves at a rather later age is bound to be adversely affected by their observations of its use earlier in their school careers. Moreover, if vocational education, as it should, comprises elements of general education then this type of disaffection is unlikely to ameliorated;
- while schools and colleges should no doubt inculcate a wide range of civic and employment-related qualities, and there is no reason why businesses should not play a

constructive role in doing this, such principles are not substantial enough foundation on which to base an entire curriculum. The issue remains, particularly post-16, as to what precisely our non-A-level students will *study*, which will be complemented by such desirable activities as are instanced in (b);

without, of course, ruling out the possibility of academic students taking the occasional vocational subject, and certainly not the latter, we doubt that (c) is a sufficiently robust organizing principle for vocational education. It will tend to chop up vocational options into units which are too small to carry conviction other than as part of a more general academic curriculum. Hodgson and Spours (2001), reporting on their tracking of the roll-out of *Curriculum 2000* which first featured the new vocational A-levels say "are not convinced that A-level type blocks can serve as vocational qualifications – they can only act as contributors to a proper vocational grouped award"⁹. As we noted earlier, the Americans have developed the more substantial and targeted *Tech Prep* strand precisely to escape from low status, low take-up vocational options.

We now go on to chart the nature of a more substantial vocational education track. Before we do so, though, it is worth setting out the essential design parameters:

- any vocational education track must offer the prospect (though by no means the guarantee) of entry into higher education. This is a firm lesson from the OECD study of international practice, and is probably necessary if the government's target of 50% participation in higher education is to be met;
- similarly any such track must articulate clearly with labour market requirements and particularly with apprenticeship;
- a vocational education track should lead students to attainment consistent with Advanced or level 3 in our qualifications framework. Evidence, not only from the UK but from all industrialized countries, shows quite conclusively that the probability of unemployment is considerably lower for those with an ISCED level 3 qualification than for those without. And the evidence seems clear that it is only at level 3 that most students of vocational programmes begin to enjoy the prospect of significant

⁹ It is interesting to note that there were 30% more entries for the double award vocational A-level than for the single awards (the same size as an academic A-level).

increases in earnings as a result of their studies (McIntosh, 2002) Obviously this would also help in promoting access to higher education;

- as a result, any recognized attainment points lower than level 3 should be kept to a minimum and lead if possible to further avenues of education and training. Otherwise we shall encourage young people to leave the system with a level of attainment which is of little external value;
- the track must include continuing elements of general education. This is a clear lesson from foreign practice, is likely to be valued by employers, is probably essential in order to promote access to higher education and is important if those taking a vocational education pathway at a relatively early age are not to cut themselves off too soon from re-entering general education.

A Way Forward

National vocational programmes

If this vision is to be realized we need, as the centrepiece of the system a substantial vocational programme at level 3. This programme would:

- cover as its core vocational knowledge, and such skills as are teachable within a fulltime off-the-job environment, relating to a broad occupational area, in the manner of GNVQs, BTECs and the Swedish national programmes. Experience abroad would indicate that there might be 15-30 variants in all;
- embrace relevant academic knowledge interpreted in a generous manner rather than only that which was strictly relevant to jobs that trainees would be initially likely to undertake, for example aspects of sociology and psychology might feature in an award in retail, maths and science in engineering awards, economics in business and administration, biology in health care *etc*. The aim would be to cover two or three such 'subjects' as part of each programme. While a number of other countries have an unrelated strand of continuing general education common to all vocational education programmes, we think it will be better for general education to be cast, so far as possible, in a manner related to the vocational discipline being studied;

• take as a minimum two years to complete, with the elements described above taking at least two thirds of available curriculum time over those two years.

These programmes would be drawn up by joint curriculum groups convened by designated awarding bodies, and comprising representatives of the industries in question (to ensure compatibility with their recruitment criteria and articulation with apprenticeships in their sectors), teachers of cognate higher education programmes (to ensure articulation with their programmes) and relevant secondary vocational teachers (to ensure that the programmes were deliverable). National accreditation by the Qualifications & Curriculum Authority would be geared to ensuring that the different occupational programmes were of the same type of standard, that there had been genuine agreement between the parties, that sufficient academic material had been included, and – importantly – to ensure that there was not proliferation of different titles.¹⁰

Assessment for the award would be a mixture of examinations (for the main related academic subjects and for knowledge of the vocational area) and of teacher assessments for necessary skills. Though examinations might be staggered through the programme (*e.g.* taken at the end of the related academic courses which would not necessarily all culminate at the end of the programme), there would not be public certificates to mark intermediate levels of attainment.

Further requirements for the award, though not necessarily part of the programme itself, would be:

- a minimum attainment at level 2 in maths and English, whether through GCSEs at C or above, or through Key Skill units (these could of course be gained before entry to the programme, and one would expect, in many cases, the programme to go further than this requirement in at least one of these subjects through its integral requirement for academic studies);
- a substantial period of work experience perhaps three months relevant to the area in question, including a project based on it, *or* a specialized taught option.

¹⁰ After the initial programmes had been drawn up in the more obvious areas, a strong case would need to be made for further programmes, based on firm evidence of demand in both higher education and the labour market, and on the prestige of the groups that wanted to design a new programme. In general, demands for new

This last feature would result in a choice towards the end of the programme. The intention would be that those who wanted to enter higher education (where they would have the opportunity to specialize further in their chosen field) would be well advised to undertake relevant work experience as part of their upper secondary programme, while those who were going to enter work, whether through an apprenticeship or directly, would clearly have less need of work experience at this point (because it would follow in any case) and would take a specialized taught option; this might very well be a course covering the ground of the relevant 'technical certificate' which is needed as part of an Advanced Modern Apprenticeship (AMA). In this way graduates of the national programmes could enter an AMA with both the required key skills and the necessary specialized technical knowledge, leaving only the work-based requirements of employment and an NVQ to be gained. This route would thus lead naturally into the 'accelerated option' for the AMA suggested by Sir John Cassels in his report on modern apprenticeships (MAAC, 2001).



Figure 1: The Advanced Programme

areas should be accommodated by opening up further specialized options within the limited range of national vocational programmes, rather than by constructing an entire new programme.

Preparatory programmes

Students with strong GCSEs at 16 (four or five at C+ including maths and English) who were committed to studying a vocational area might move straight on to such a programme, completing at 18. However, if the experience of other countries is anything to go by it is more likely that students with weaker grades at 16 would form the bulk of entrants. They would be best advised to undertake a preparatory programme at the intermediate level, both to begin to become accustomed to the vocational knowledge and related academic disciplines, and to gain the higher grades of maths and English that they will need to qualify for the advanced award (and probably also in order to tackle the material in the advanced level programme); they could do this through something approximating to the current key skills at level 2, or by re-taking the GCSEs concerned. So, for most of the national vocational programme's entrants, there would be a one year introductory programme, taking 3 years to achieve the advanced award.

Because of their evident transfer value, we see merit in maths and English at level 2 being certificated by means of separate qualifications rather than being subsumed in the syllabus of the main vocational award. However we would not envisage that a public examination would be taken by young people at the point that they completed this introductory programme. It might well be that the institutions running these programmes would want to set assessments to motivate young people to learn and to give them recognition, as well as to satisfy themselves that students were ready to move into the advanced stage of the programme, but there would be no merit in awarding a public qualification at this stage; it would be costly to do so, and it might give the impression to young people that they had reached a recognized end point of their education and training.

Though the expectation would be that the majority would continue with the advanced level programme, we accept that some will either not wish to enter the next stage or might not be capable of doing so. It is important, therefore that there is a recognized exit point which leads to a different form of development. For such young people the obvious route would be to take a Foundation Modern Apprenticeship. They could start on this while in full-time education by taking the 'technical certificate' required for a given apprenticeship, followed by an apprenticeship contract with an employer with whom they would undertake the relevant work-based NVQ. They would then have the possibility of going on to the Advanced Modern Apprenticeship, achieving the important level 3 through the work-based route. This gradual transition from full-time education to apprenticeship is very much what

the Cassels committee had in mind in their recommendation for a 'programme-led apprenticeship'.



Figure 2: Introductory programme and link to foundation apprenticeship

It would be possible for vocationally committed young people to undertake such a programme before they were 16, probably taking maths and English GCSE rather than key skills. However we would expect that this would be comparatively rare; in other countries young people tend not to focus on a vocational area at such a young age.¹¹ Instead we would see a preparatory programme with an opportunity to sample two or three vocational areas, combined with taking a limited range of conventional GCSEs. Again, the programme could lead to a foundation apprenticeship in the selected occupational area, as well as to the advanced programme.

¹¹ Very broad vocational areas are selected in the final year of the Dutch lower secondary *VMBO* and in France there are arrangements for young people recognized as having difficulty with conventional *collège* classes to begin vocational options early.





It may be said that this pattern of vocational programme is little different to what exists currently. Indeed one could construct a programme on the model of - say - Figure 2 by recommending a BTEC First or Intermediate GNVQ accompanied by Key Skills followed by a double award vocational A-level, perhaps supplemented by two academic AS awards. This may be true, and the fact that programmes such as we have described could to a large degree be assembled from existing components¹² is an advantage, since it will be easier go forward using familiar concepts. But there are several reasons why we do not think it would be sufficient just to have a 'loose' system where it is left to individual students to put together programmes:

¹² Given the number of components we have got, it would be surprising if they could not!

- we doubt that there is sufficient careers advice in schools and colleges to cope with devising individualized programmes for everyone;
- there is bound to be an element of irritating overlap, or damaging lack of articulation, in courses coming from different stables;
- both industry and higher education will find it very difficult to engage with a large number of different awards;
- multiple awards 'stitched together' to create a coherent programme will nevertheless tend to be over-assessed (because each award needs its own assessment) and will give young people the impression that the gaining of each award is sufficient in itself, leading to wasteful early exits from the system.

Corollaries

In this final section we deal with some of the implications of our proposals.

Vocational options within A-level programmes

The 'large' vocational programmes which we recommend would not leave much scope for those taking academic A-levels to combine these with a vocational topic. Though we have doubts, based on experience abroad, as to the numbers that will 'mix and match' in any serious fashion, it would be unfortunate to deny this possibility. We believe it would be sensible to retain the vocational A-level 'single awards' to give this facility. They would not be a part of our national vocational programmes, and a single vocational A-level would be unlikely to offer entry to higher education in its own right, but they will be valuable for those who wish to explore a vocational topic from within a multiple A-level programme, whether out of interest, or with a view to undertaking a vocational subject in higher education. There would be parallels here with the *Fachgymnasien* in Germany, the French *Bac Tec* and the Danish *HHX* and *HTX* programmes, all of which present vocational material in a recognized academic setting. But in all cases there are other, larger, vocational programmes.

Work related education for disadvantaged or disaffected young people

We see our vocational programmes – through the two preparatory routes¹³ – being suitable for all but perhaps the bottom 10% of the ability range. We have noted that other countries tend not to use their mainstream vocational education programmes to cater for young people with real learning or behavioural difficulties. Nevertheless exposure to work and vocational material can help motivate such young people, and there is a strong case for using work-related activities in an individualized manner in programmes such as the 'Entry to Employment' development recommended by the Cassels committee or similar initiatives pre-16. But the aim of such vehicles – like their equivalents in other countries – should be to re-insert their students into mainstream options of academic, full-time vocational, or apprenticeship programmes, rather than to try to maintain that one of these is uniquely able to deal with young people with problems.

Availability of vocational programmes in schools

All countries offering a range of vocational programmes outside the workplace struggle to offer the full range in each locality, particularly where they wish to keep upper secondary education distinct from continuing education and training for adults. France, Sweden and Germany have institutions specializing in vocational courses for young people, while in the Netherlands and Australia young people taking serious vocational programmes in upper secondary education attend large all-age colleges. In this country the picture varies. We have colleges of further education and tertiary colleges which tend to deal with all ages and have a good range of vocational facilities, large VIth forms and VIth form colleges which historically majored on A-levels but which can now offer a reasonable range of the more popular GNVQ courses, and smaller VIth forms which can only offer a very restricted range of courses outside A-levels, and sometimes not many of these. Although this inheritance of institutions may not be ideal, there is not an obvious alternative arrangement, certainly in the short to medium term, and no clear pointers from abroad. We now have the Learning & Skills Council which can act as an overall planning agent across all the post-16 institutions,

¹³ For the slower learners it would be possible to combine the two preparatory modules -ie if a good, intermediate level, grade at C or above was not gained in the vocational GCSE relevant to the occupational area selected, then a student could do the introductory programme detailed in Figure 2.

and clarity about a manageable number of programmes to be offered – which our proposals would give – should make that planning task easier.

In practice we think most school VIth forms would be able to offer vocational programmes relevant to the service sector, certainly the large business and administration area. Larger VIth forms and VIth form colleges would no doubt be able to offer the more popular manufacturing and engineering programmes too. Construction (which needs considerable facilities) and more specialized options might need in practice to be constrained to colleges of further education. But a right answer will need to be found for each area. The important thing is that there is proper planning with the aim of offering all programmes in each area, even though this may mean using a range of different institutions, and that once choices have been made, they are backed up with the necessary investment in equipment and the training of staff.

Industry institutions

It is of the utmost importance that the voice of industry – unions as well as employers – is brought to bear on the construction of vocational programmes. Industry should not be the sole driving force (we argued earlier that higher education as well as upper secondary teachers and lecturers should have an equal voice in design). But industry needs not only to ensure that the programmes so far as possible meet labour market needs, but also – quite essentially – articulate with other education and training activities, such as apprenticeships, higher education courses and avenues into relevant professions. Industry representatives therefore, while not dominant in designing individual courses, do need to 'hold the ring' over how the programmes contribute to skill formation in a given sector.

We must recognize this as a significant gap in the institutional infrastructure in this country. We have noted the numerous re-organizations that industry training organizations have gone through – there is another underway just now. It is very important that this should be the last re-arranging of the deck chairs for a very considerable time, and that the new Sector Skills Councils are given every support in getting to know their sectors in depth, including the related professions and linkages with higher education.

An English 'bac'

We believe these proposals are consistent with the ideas being put for an English baccalaureate qualification, comprising courses of study of all types in the 14-19 phase. Those proposals include scope for 'specialist' bacs in vocational areas, and we believe that the model we have set out would fulfil the primary requirement for substantive and coherent programmes leading to awards at level 3. There are, however, two features of the English bac model which need some discussion in the context of the proposed national vocational programmes.

First, it is envisaged that the bac would be awarded at Foundation, Intermediate and Advanced level. We have proposed the primary award of national vocational programmes to be at level 3 (Advanced), and only envisage an Intermediate (level 2) award through apprenticeship. We do not envisage that national vocational programmes would admit of Foundation awards (level 1). The reason we are not attracted to awards at lower levels for these programmes is that the evidence is very strong that vocational awards below level 3 carry very little by way of return to those gaining them, and we have seen that most other countries with strong pathways of vocational education major on level 3. A lower level route involving the Foundation apprenticeship seems to us to be sensible given that not all students will be capable of the level 3, and involving apprenticeship at least guarantees some real prospect of settlement in a skilled role in the labour market, which a level 2 award based purely on performance in school and college does not. Two points, though, need to be made:

though (apart from the route via apprenticeship) there would not be intermediate or foundation versions of the national vocational programmes, nevertheless it is plain that young people on these programmes would need to study at the intermediate level before going on to more advanced material. There would be no reason why this intermediate 'stage' should not be delineated as such in terms of the syllabus being studied, if that were helpful to provide articulation with a more general bac system. Neither would there be any objection to students being told that they had passed through the foundation or intermediate stages if that was thought helpful to aid motivation, and to provide teachers with benchmarks of progress; indeed there could be recommended assessments to mark these stages. But the formal award of national certificates, with the concomitant external assessments, would not – in our view – add

value, but rather add unnecessarily to the burden of assessment, and give students the impression that they had gained something of value when they had not;

 it may well be that courses of a vocational nature would be sensible components for a bac at the Foundation level, for those students who could not realistically aspire to an apprenticeship. However such a leaving certificate needs to be justified in its own terms (perhaps by reference to attaining employment, even of an unskilled nature, and operating as an informed citizen), and its design is likely to be very different from that of the vocational programmes we have proposed.

The second feature of the English bac which is germane is the idea of 'integrative' studies – a project, investigation or experience which would cut across subject boundaries, require students to interact with the 'real world' and to exercise skills of innovation, team working and self-direction which cannot easily be taught or assessed on a disciplinary basis. We consider that the national vocational programmes would lend themselves to including projects of this kind. Work experience itself – if properly structured – can be a rich source of integrative projects and certainly exercises the wider skills. But there is no reason to confine projects involving work experience to students of the vocational programmes; students on general bacs might well find them attractive. By the same token vocational students could 'step outside' their programmes to participate on integrative studies with those in their school or college taking other bac versions. There would be many attractions in mixing students from different programmes in this manner.

Parity of esteem

It will no doubt be objected that these proposals erect a distinctive vocational track and do nothing to promote parity between vocational and academic studies. We would make three points:

- issues of parity of esteem are far less acid in higher education, where vocational topics have a long and prestigious pedigree. Opening up opportunities for vocational students to access higher education, which is one of the main aims of our proposals will do more for parity than anything else;
- there are considerable dangers in resorting to devices to make vocational programmes

'equivalent' to academic ones – mimicking academic content, delivery and assessment conventions, losing touch with labour market realities, cutting off opportunities for the less able students – and little prospect that they will in any case be successful.

our own history and international experience would seem to indicate that there is an inevitable difference in kudos between general and vocational studies in upper secondary education. Most countries accept this, and attempt – in many cases successfully – to increase the esteem with which vocational studies are held. Vocational programmes may not be regarded as highly as academic ones, but they are nevertheless esteemed, which is what matters.

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