

THE VOCATIONAL ROUTE INTO HIGHER EDUCATION

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Foreword

The fieldwork for the present study was conducted in 1988 and 1989. At that time the National Council for Vocational Qualifications had only just been established and it was beginning to put in place its framework of NVQs. It was also having to negotiate its somewhat delicate relationship with bodies like the Business and Technician Education Council whose awards it would eventually accredit. Kenneth Baker had yet to make his famous 'Cinderella speech' (to the Association of Colleges of Further and Higher Education in February 1989) in which he promised that "Poor old FE, 'Cinderella of the education service' (would go) to the ball".

The government in its 1987 White Paper had expressed a wish to see higher education take positive steps to increase admissions through vocational qualifications like BTEC awards. But little was known about what vocational qualifications could mean in terms of progress to HE. The National Council for Vocational Qualifications recognising this gap commissioned the Education and Employment team in the School of Education, University of Manchester to map the vocational route.

Since 1989 the scene has changed rapidly. It is now widely recognised that the English education system essentially provides for only a minority of young people. Both main political parties are seeking to staunch the loss of talent by giving greater prominence to vocational qualifications. In a white Paper due soon the government is expected to announce a vocational pathway equivalent to A-levels. In its recent policy document the Labour party says that it would create a single post-16 qualification for both academic and vocational qualifications. Both parties argue that vocational qualifications must have 'parity of esteem' (a phrase popular at the time of the 1944 Education Act). But this may be hard to achieve.

The value of the present report is in describing the situation as it exists. It is a baseline from which any new policies must start. Neither the Government nor the Opposition has a tabula rasa. They have to start with what is already there. What this is, the following pages describe.

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As always, my colleague Dr Pamela Robinson helped to see the project through, and invaluable back-up was provided by other members of the Education and Employment team: Clare Mangam, Penny Stafford, Pauline Zientek and Barbara Roberts. Anne Moores patiently turned my scribble into typescript.

Alan Smithers

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Summary

As the political parties become increasingly conscious of the loss of talent from the English educational system they are each looking towards a better system of vocational awards as the solution. The present report maps the existing alternative pathway to A-levels showing from where any new policies have to take us forward.

As things are, students tend to find their way on to the vocational route by coming in 'the second band' at GCSE, getting 1-4 A-Cs or five or more D-Gs, rather than the 5+ A-Cs that would have taken them on to A-levels. But they also preferred to go on to FE because the courses were seen as more practical and work-related, and they thought they would be treated more as adults. Pupils from 11-16 schools, necessarily having to make a choice at 16, were more likely to go on to FE than those from 11-18 schools. The six years to 1989 has seen a doubling of the numbers of students on the full-time BTEC National award, the Diploma, most of whom were aged 18 or under and had entered straight from school, so that it is clearly already emerging as an alternative to A-levels.

Students in FE were mainly taking vocational courses to obtain the qualification and improve their job prospects. Progression was usually seen in terms of taking a BTEC Higher award, and that was a view encouraged by the colleges. However, about a quarter were hoping to study for a degree, particularly if, as in subjects like Building and Computing, a degree was seen as essential for full professional status.

About two-fifths of the National Diploma and ten per cent of the National Certificate students were hoping to study for a degree full-time, but a further twenty per cent of the Certificate students were interested in taking a degree part-time. There was a similar full-time/part-time split when considering continuing in FE so that separate mode-of-study channels appear to open up post-16.

Applications from those with BTEC awards have increased in universities from 3.0 per cent of the total in 1978 to 4.8 per cent in 1989. In polytechnics the proportion rose from 7.8 per cent in 1986 to 10.0 per cent in 1989. In 1989, 4.4 per cent were admitted to the universities and 10.5 per cent to the polytechnics. Interestingly, the proportion actually accepted in the universities has been consistently lower than the proportion of applications, but in the polytechnics it has been consistently higher (better than even chance compared to A-level applicants). This may be because the competition for places in the universities is more severe or because the polytechnics are more vocationally-oriented. In the universities, 'Architecture, Building and Planning', 'Engineering and Technology' and 'Business and Administration' attracted most applications from among those with vocational qualifications, with Combined Social Studies featuring strongly in the polytechnics.

Admissions tutors in HE reported three difficulties with vocational qualifications as a basis for entering higher education – lack of information, variability in standards, and deficiencies in content. But the striking thing about the survey of admissions tutors was how little regard the role seemed to be and how they seemed to have had it imposed upon them.

Entry via vocational qualifications does widen access to higher education up to a point. It brings in more young people from skilled manual backgrounds – social class III M, somewhat older students, but, because of the subjects involved, tends to swing the sex ratio back towards men.

Some students entering higher education on vocational qualifications do very well and the route does open up opportunities for some very able students who might not otherwise have qualified, but the general run of performance is below that of A-level entrants. Nearly one in five (17.1 per cent) dropped out. The difference in performance between the vocationally qualified and A-level entrants holds from Building and Mechanical Engineering to English, and for both sexes, and for sandwich and full-time students. In detailed studies in four institutions we found a relationship between A-level score and degree performance with, apart from the proportion of firsts, vocational entrants doing rather less well than those with poor A-levels.

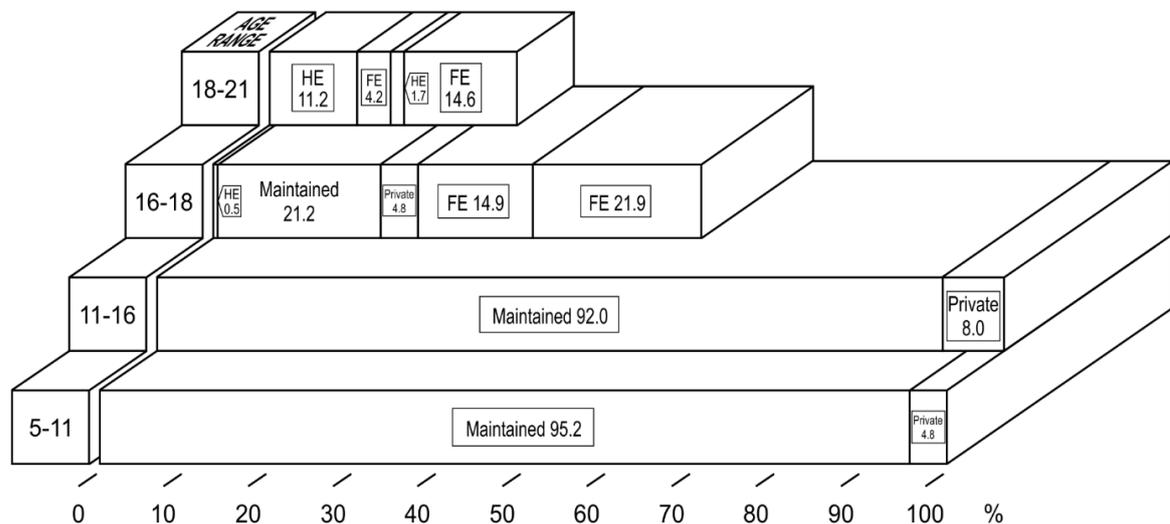
The report supports the development of interconnecting academic and vocational pathways, particularly if they depend on progress by performance, that is, on success, as in the driving test and graded tests in music. But it identifies a number of issues that will have to be faced.

It concludes that the vocational route, if it can be made to work, will empower young people by giving them marketable skills and make the country more competitive by making better use of its human resources. There will, however, have to be a major culture change.

I. Introduction

- 1.1 The English education system is essentially geared to the development of academic abilities, and it serves to the full only a restricted cross-section of the population. As presently constituted, it provides a privileged track to higher education for those who do well in GCSE and A-level.
- 1.2 In Figure 1.1, we show the education system, as we have done before (Smithers and Robinson, 1989), as a series of steps. The first two represent the theoretical position to the end of compulsory schooling (though, in practice truancy is a major problem), but at age 16 comes a dramatic parting of the ways. Only about a quarter remain at school, 15 per cent move on to further education full-time and 22 per cent part-time, but approaching 40 per cent seem lost to systematic education and training at that stage (though some may find their way back later).

Figure 1.1: Participation in Education



Source: Education Statistics for the United Kingdom (1988. London: HMSO)

- 1.3 The 15 per cent of school leavers who obtain two A-levels, the basic qualification for higher education, make up the bulk of the entrants to universities (91.0% in 1988) and polytechnics (70.5%). As we shall be seeing in Chapter VIII, these students have a distinctive profile in terms of age, sex, social class; and the subjects they prefer to study are not always the ones the country would perhaps wish them to. The narrowness of the system is increasingly being questioned both in terms of fulfilling individuals and serving society.
- 1.4 The government would like to see some widening of access. In its 1987 white Paper, *Higher Education: Meeting the Challenge*, it asked the higher education institutions to take positive steps to increase admissions both through vocational qualifications, like the BTEC award, and of mature entrants through access courses and special schemes.

1.5 We know something about mature entrants from *The Progress of Mature Students* (Smithers and Griffin, 1986), and it is clear that, if carefully selected, they can do very well. But what of those with vocational qualifications? How did they come to take these qualifications in the first place? Where are they hoping to get to? What is the response of higher education? And how well do they do there if they get in? In this report commissioned by the National Council for Vocational Qualifications we offer some answers.

1.6 The NCVQ was established in 1986 to bring some order to the great diversity of vocational qualifications. It has sought to do this by establishing a framework of levels of achievement (initially four, extended to five) and occupational areas. The NVQ structure enables it to:

- recognise competence at different levels so that the awards (NCVQ itself is concerned with accrediting or hall-marking) of bodies like BTEC, CGLI and RSA can be brought together on a common scale, and new awards can be developed of appropriate standard;
- establish some kind of equivalence between vocational and academic qualifications with NVQ levels 2-4 being held to be of the same standing as GCSE, A-levels and two-year higher education courses respectively, with the new level 5 embracing degrees;
- facilitate transfer both within and between the occupational areas so that individuals can move through the system in any direction to achieve their potential.

It is explicitly recognised therefore that NVQs are not just about registering competence, but are also intended to be a means of progression, including to higher education.

1.7 Some entry to HE already takes place on the basis of vocational qualifications. In 1988 the NCVQ commissioned the Education and Employment team at Manchester University to map this vocational route. Specifically, we were asked:

- to provide a quantitative description of vocationally-qualified students in HE by type of institution, field of study, and type of course (full or part-time);
- to survey students on BTEC courses at a representative sample of further education institutions to ascertain the demand for higher education and perceptions of its role in career development;
- to survey the admissions procedures in a selection of subject areas across a range of institutions in order to identify any potential barriers to the admission of students on the basis of vocational qualifications;
- to study the entry characteristics of students admitted with vocational qualifications in terms of age, sex, social class;

- to assess the performance of students with vocational qualifications in higher education in first-year and final degree examinations.
- 1.8 In a study lasting two years, existing information has been reviewed and re-analysed, and new data collected by the following means:
- A survey of 4,159 students on BTEC National Diploma and Certificate, and Higher National Certificate courses in the fields of business studies, building, mechanical and production engineering, science, (biology and chemistry) and computer studies (chosen as those likely to feed into the selected higher education courses) in a national (England and Wales) sample of ten FE colleges.
 - Interviews with a sub-sample of 100 of the students.
 - Interviews with 73 admissions tutors (68 for full-time and 5 for part-time courses) in business and management studies, building, mechanical engineering, biology, chemistry, computer science, law and English (chosen to vary widely in the proportion admitted on the basis of vocational qualifications) in a stratified sample of 6 universities, 4 polytechnics and 8 colleges (some of which only had one of the selected subjects).
 - Analyses commissioned from the Universities' Statistical Record showing the social origins and performance in degree examinations for the eight selected subjects for the period 1982-87 of those entering on the basis of vocational qualifications (N=3371) and A-levels (N=70,112). Similar data were requested from the Council for National Academic Awards, but, in the event, it was only able to supply the results for 1984 and only of males - 505 entering on vocational qualifications and 2,393 on A-levels.
 - Detailed examination of the academic student records of entrants to the eight subjects in the period 1979-84 in two universities and two polytechnics (N=5,459).
- 1.9 In the chapters which follow we track students through the various stages of the vocational route. We first ask in Chapter II what brings them to FE rather than staying on at school and, in Chapter III, where they see themselves as going. In Chapter IV we look at higher education within FE - the Higher National awards.
- 1.10 Some students wish to move on to universities and polytechnics and in Chapter V we look at this growing demand. In Chapter VI we consider the response of HE to applications to its full-time courses and, in Chapter VII, its part-time courses. In Chapter VIII, we compare the characteristics of those entering on the basis of vocational qualifications with those of the other entrants - what part vocational qualifications might play in widening access. In Chapter IX, we ask how well do the vocational entrants do in comparison with those entering the same subjects by other routes. In our final chapter, Chapter X, we tease out the issues suggested by the data.

II. Progress to FE

- 2.1 The reasons why people find their way to FE instead of staying on at school are many and various. Each of our hundred interviewees had his or her own story. In the boxes below we present just four. Peter did not pass any exams at school and really had no choice but to leave, Joseph came to the end of his 11-16 school and could have gone to a sixth form college or FE college, Ingrid and Jonathan had good exam passes, but Ingrid felt she had outgrown school and Jonathan wanted to start work.

PETER

Peter left school at sixteen without having passed any exams. He did not like school and disliked being treated as a child. He began a youth training scheme. But he soon decided to leave and managed to find himself a job as an apprentice electrician. After a while he left this as well and then worked in an office for a short period. Still not having settled he changed his job once again this time going to work for a tool making company. While he was in this job he was given a chance to do a BTEC National Certificate in Mechanical and Production Engineering on day-release. He decided to take it as he thought he would get on better at college than he had done at school, believing that he would be treated more like an adult in the college environment.

He is now in the second year of his National Certificate course, and next year he is hoping to start a Higher National Course, probably in computer controlled machinery. He has no plans to go on to a degree. In any case, having got married last year, he says he has too many bills to pay to be able to afford to give up work and go off to university or polytechnic. He believes that actual practical work experience is more useful than going to college to get a degree, besides which if he got a degree he would be over-qualified for his job.

JOSEPH

Joseph is in the second year of a full-time National Diploma in Building Studies at a College of Technology and Arts. He left his 11-16 secondary modern school last year having obtained four passes at GCE O level and two subjects at CSE grade one. He initially thought about taking A-levels at college but decided that the BTEC course would give him better background knowledge of the building industry.

In the long term he would like to work as a quantity surveyor for which he will need a degree. He would like to do a sandwich course at a local polytechnic.

He does not foresee any major problems in getting a place on a degree course, but has slight worries that he may experience some difficulties in coping with the mathematics when undertaking studies at that level.

INGRID

Ingrid, who is 17 years old, is a full-time student at a College of Technology studying for a BTEC National Diploma in Computer Studies. She left school last year having obtained seven passes in GCE O levels. She decided against staying on in the sixth form to take her A-levels as she felt she had outgrown school and thought "the atmosphere was unreal". She found out about the BTEC course by attending a careers evening held at her school.

In the future she would like to work as a systems manager in a computer network or as a software manual author, but realises she will need to acquire higher qualifications after she completes her BTEC Diploma if she is going to succeed in her chosen career.

She has received very little careers advice since she started her course at the college and is unsure whether she should continue her studies by taking a Higher National Diploma or to apply to do a computer science degree at polytechnic. She believes that the big computer companies, who pay better salaries, look for a degree when recruiting employees. However, she is unsure if her qualifications will be good enough to secure her a place on a degree course.

JONATHAN

Jonathan is 23 years old, and is working for a London borough as a neighbourhood housing officer. He left school at the age of 16 having passed nine of the 12 O levels he sat. Although his good performance at GCE O level meant he could have continued on to A-levels, he decided that he wanted to get a job, and did just that.

His first job was in an insurance company, and he did a variety of office jobs before starting in local government. He is currently in the second year of a BTEC National Certificate in Public Administration. He had discovered about the course through the training officer at work and also from colleagues in his office who had previously taken it. He applied for day-release, which was granted, and then registered at the local FE College.

Jonathan decided to study for further qualifications as he believed that to get promotion you have to have academic or professional qualifications. He plumped for the BTEC course rather than taking academic qualifications like A-levels, since he could see the relevance of a vocational course to his work. He does not think he will use his BTEC qualification to gain a place on a degree course in higher education, and certainly would not consider studying full-time on a grant, but wishes to be able to remain at college on day-release. He would like to go on to do the professional examinations of the Institute of Housing, which he believes would further his career prospects in local government housing.

2.2 How typical are these four students? Two, Joseph and Ingrid, are taking Business and Technician Education Council (BTEC) National Diplomas and two, Peter and Jonathan, National Certificates, and this is because the survey was designed to focus on these courses (along with the Higher National Certificate which we will be considering in Chapter IV). Students in FE can take a whole variety of courses, including A-levels (a quarter of all candidates aged 20 or under in 1989), a range of vocational qualifications, and access courses, but it was decided to concentrate on BTEC qualifications as the major vocational route (see Chapter VIII) into higher education.

BTEC Awards

2.3 BTEC National Diplomas and Certificates are nationally recognised qualifications for technicians and for those in business and commercial occupations who undertake work of comparable responsibility. Successful completion at an appropriate level meets the basic entry requirements for degree courses and courses leading to a Higher National Certificate/Diploma. They build on a long tradition of vocational qualifications, from the ONC/D and HNC/D awards established over 50 years ago, and the newer awards of BEC and TEC, and form part of the BTEC structure of qualifications shown in Figure 2.1. BTEC National Diplomas and Certificates will eventually be assimilated into the NVQ framework.

Figure 2.1: BTEC Qualifications Structure

Course Leading to	Years		Normal Entry Requirements
	Part Time	Full Time	
First Certificate	1		* minimum age 16
First Diploma	2	1	* completion of compulsory secondary education * potential to benefit from and obtain qualification
National Certificate	2		* minimum age 16
National Diploma	3	2	* completion of compulsory secondary education * potential to benefit from and obtain qualification * appropriate attainment in one or more of following: - 4 passes in GCE O level or Grade 1 CSE* - CPVE Certification - BTEC First Cert/Diploma
Higher National Certificate	2		* minimum age 18
Higher National Diploma	3	2	* potential to benefit from and obtain qualification * appropriate attainment in one or more of following: - at least one pass at GCE A-level plus supporting GCE O levels* - BTEC National Cert/Dip - on or off the job training

* Now stated in terms of GCSE passes.

Gender

- 2.4 Three of our four exemplars are male and this is slightly unfair in terms of both the distribution of BTEC National awards of which 67.8 per cent of the certificates and 54.1 per cent of the diplomas in 1988-9 went to men, and to the overall sample of which 40.3 per cent were women. But, as we can see from Table 2.1, the gender ratio depends on subject. Ingrid was studying computer studies which was slightly unusual since the overall ratio here was three men to one woman. It would have been much more unusual if she had been taking building or mechanical engineering where 90 per cent or more of the students were men. Some of the colleges are trying to correct this imbalance by introducing ‘Women in Construction’ courses, for example. By far the most popular field for women was business and related studies (including business, finance, travel and leisure studies) where they outnumbered the men by 3 to 2. The science technician courses – in this case biology and chemistry – were also relatively popular with female students, with them making up half the intake.

Table 2.1: Subject and Gender

Subject Area	Per Cent of Subject		Per Cent of Gender	
	m (N=1865)	f (N=1258)	m (N=1865)	f (N=1258)
Business Studies (N=1707)	36.4	81.7	39.8	60.2
Building (N=654)	31.5	5.3	89.8	10.2
Computer Studies (N=326)	12.8	7.1	72.7	27.3
Mech and Prod Engineering (N=322)	16.5	1.1	95.6	4.3
Science (N=114)	2.9	4.8	47.4	52.6

School Attainment

- 2.5 Jonathan and Ingrid had good O levels, Joseph a mixture of GCEs and CSEs which would have taken him on to A-levels, but Peter had passed no exams. Table 2.2 shows that about two-fifths of our sample of National Certificate students and slightly more of the Diploma students had the equivalent of five or more O levels and could presumably have stayed in the academic stream if they had wanted. However it is evident from the qualification profile shown in Table 2.2 that BTEC National courses were drawing much more widely across the ability range than A-levels.

Table 2.2: O Level/GCSE/CSE Passes at School

Passes	National Diploma (N=1367)	National Certificate (N=1773)
5+ Good ¹	44.3	41.2
4 Good	8.5	9.2
1-3 Good	32.2	29.4
Other	9.7	13.9
None	5.3	6.3

1. O-level passes, CSE grade 1, GCSE grades A-C.

- 2.6 This is borne out by the national statistics of Table 2.3, which show that vocational courses in FE recruit mainly from among those with one to four GCSEs at A-C, or five or more at D-G.
- 2.7 In our sample just over half the students did not meet the National award entry requirement of 4 O levels or GCSE grades A-C. About one in seven (15.3 per cent of the Diploma and 12.3 per cent of the Certificate students) was qualified by a BTEC First award. But even allowing for the small number with the Certificate of Pre-Vocational Education, this still left 29.7 per cent of the Diploma students and 36.6 per cent of the Certificate students without the stated admission requirements. Exceptionally, BTEC permits the admission of students to courses, whose qualifications fall short of those listed as the normal entry requirements, but who have compensatory attributes, such as work experience, and in the case of students over 19 years this is left to the discretion of the college principal. It seems that the provision for exceptional entry was being extensively used.

Table 2.3: Destinations of 16 Year-Olds by GCSE Result, 1989

Destination	% 5 or more A-C	%1-4 A-C	%5 or more D-G	%1-4 D-G	%No Graded Result	%All
School	69.2	28.7	14.3	8.7	6.1	35.0
FE						
A-level	11.3	4.1	0.5	0.2	0.0	5.0
GCSE	0.3	2.8	1.8	1.2	0.5	1.4
VQ	7.5	17.9	12.8	6.0	1.9	10.8
YTS	2.0	12.7	23.7	26.1	17.8	13.3
Employment	5.3	20.5	27.7	30.4	27.1	18.6
Other, NK	4.4	13.3	19.2	27.4	46.6	15.8
Number*	203.1	175.8	112.5	81.7	46.6	619.8

* Thousands

Source Material: DES Statistical Bulletin, 1/91

Alternative to A-Levels

- 2.8 Some of the students had tried A-levels but either had *not liked* them or *not been able to do* them:

I started doing A-levels at school and I was not enjoying it at all so I swapped, and this was just something that interested me. I went through all the prospectuses and I chose this course. It sounded like what I wanted to do and would help me get a job. I went back in September to start my A-levels and I came here in the November. The atmosphere at school didn't seem to suit me when I went back, I didn't feel part of it. The work, although I had done it at O level, didn't seem to interest me at A-level, it seemed too condensed and involved and everything and I didn't like it.

(ND, Business and Finance)

I started to do an A-level course but left after about four weeks. I decided not to continue on the course because it was pretty difficult and also I took the wrong A-levels – because of the stupid system where you choose your A-levels before you take your O levels. I failed the O's which I took at A-level and passed all the rest, but I thought, well, it's best to leave.

(HNC, Building)

I went into the sixth form but I didn't like it so I left school and decided I just wanted to do day release. I felt on the science side of things you get the experience as well, if you are working; A-level would not give you that experience.

(HNC, Chemistry)

2.9 But for some it had been the *attraction of BTEC*:

Well, the school didn't do the course for one - I have always been interested in Building, and it sounded a good course from the prospectus. I am more into the practical side of things than learning out of text books all the time, and I wasn't keen to stay on at school because I don't class myself as an academic type, you know. Also A-levels depend on one exam, whereas BTEC has continuous assessment, with one or two final exams.

(ND, Building)

I felt that BTEC offered a better syllabus in relation to work rather than A-levels. I thought that the spread of the syllabus reflected somebody who designed it had a feeling that it was going to be used in industry rather than academia.

(NC, Computer Studies)

This course is directly relevant to my work. Academic qualifications like A-levels don't give you the understanding you need for your day-to-day work.

(NC, Public Administration)

Previous Experience

- 2.10 That the National Diploma, particularly, is, in some sense, an alternative to A-levels is brought out by Table 2.4 which shows that about three-fifths of the students had started the course straight from school, and another fifth after some preparatory work in FE.

Table 2.4: Before FE Course

Before FE Course	%National Diploma (N=1358)	%National Certificate (N=1769)
School	58.7	23.2
FE College	22.0	9.5
Employment, full-time	10.9	59.1
Employment, part-time	2.1	2.1
Unemployed	3.1	2.0
Other	3.2	4.0

Age

2.11 This is supported by the age of the students. Table 2.5 shows that about three-quarters of the Diploma students were under 18. The Certificate students, on the other hand, were more likely to have come via work and to be older.

Table 2.5: Age and Gender

Age	%National Diploma		%National Certificate	
	Male (N=7600)	Female (N=559)	Male (N=1034)	Female (N=659)
18 or under	73.4	73.5	50.9	37.9
19-20	13.4	14.3	25.0	22.8
21-24	8.8	8.4	14.2	20.2
25-29	2.8	2.3	5.4	9.7
30 or over	1.6	1.4	4.4	9.4

School Attended

2.12 The view of the National Diploma as an alternative pathway is strengthened by the analysis of schools attended shown in Table 2.6. Students, like Peter and Joseph, from 11-16 schools, the comprehensives to 16 and secondary moderns (included as 'other' in Table 2.6), were particularly likely to go to FE, presumably because they had to make a definite choice at the end of compulsory schooling as to where to go next.

Table 2.6: School Attended

Type of School	%National Diploma (N=1334)	%National Certificate (N=1740)	%School Leavers ¹
Comprehensive to 16	35.9	41.5	24.7
Comprehensive to 18	40.7	34.8	54.4
Sixth Form College	0.7	0.5	5.6
Grammar	3.9	6.0	2.8
Other ²	14.3	15.3	6.2
Independent	4.4	1.9	6.2

1. From Statistics of Education: School Leavers, GCSE and GCE, 1988, London: DES.

2. Includes secondary modern and technical schools.

Mode of Study

- 2.13 Not all students in FE have come straight from school. Jonathan was 22 before starting his National Certificate in Public Administration. Like many other older students he preferred to study part-time. Table 2.7 shows that less than a quarter of the students aged 25 or over were pursuing full-time courses. There were proportionately more women in the older group and for them part-time study during the day was the main mode of study.

Table 2.7: Mode of Study by Age and Gender

Mode of Study	%21 or under		%25 or over	
	Male (N=1524)	Female (N=961)	Male (N=134)	Female (N=147)
Full-time	45.3	53.0	26.1	17.0
Block release	0.4	0.6	0.0	1.4
Day/Evening	39.0	19.4	31.3	16.3
Day only	12.5	22.8	17.9	40.8
Evening only	2.7	4.3	24.6	24.5

Conclusion

- 2.14 Peter, Joseph, Ingrid and Jonathan are therefore fairly typical of BTEC National students in FE colleges, but they are only four out of the 100 students we interviewed. In the interview sample as a whole just over half (53%) said they had chosen FE because they were fed up with school or wanted a change from academic study (including those who had tried A-levels already quoted), and just under half (47%) put forward positive reasons like wanting a job, to do a BTEC course, and to further a career.

Fed Up with School

You get fed up with the same sort of teachers at school. I mean you leave school and you meet a fresh load of people who are going to take you through the course, and they can just take you for what you are. Again, you know, a fresh start. Whereas teachers at school have seen you come through from a lower level and they probably have fixed ideas about you, and they tend to push you this way or the other, whereas it's your own decision.

(NC, Mech Eng)

Basically I was fed up with school. Actually I was going to join the RAF straight from school. I had already sent all the forms in etc., but I decided against that and decided to go into design and whatever, so basically that was why I didn't stay at school, at college you are treated as an equal.

(ND, Engineering)

I didn't want to stay on at school, FULL STOP. I didn't like school. I disliked the way they treated you, and I thought going to a college I would be better off as they treat you more like adults, and now in

the third year it is just starting to show that they do actually treat you like an adult.

(NC, Mech and Prod Eng)

Improve Job Prospects

I am taking the course mainly because to actually progress or get promotion you have to have academic or professional qualifications, also I wanted a better understanding of what was actually going on within my working environment.

(NC, Public Admin)

In the interview (for the job) they suggested this course may be helpful and asked would I be prepared to do it. I said yes I would. When I actually got to work my manager was a bit dubious about letting me go on this course, he seemed to think I may leave the job, but I insisted that I would like to start now. He said, have a few years' work and then see if you would like to do it, but I said I would prefer to do it this year. I would like to get on in my job and I think this will help me.

(NC, Science)

My employer automatically sent me here – it was compulsory. It is really a starting point from which to go on to do HNC.

(NC, Science)

- 2.15 Adolescence is a time for experimenting and it is clear that a number of the young people, like Peter, did not know exactly where they were heading when they left school. One of the strengths of FE is that it is there and for all ages. If the first path you go down turns out not to be the one for you then there are others:

When I left school I went into the Civil Service for a couple of years. I found that incredibly boring, so I started working in construction, just on site, labouring and things, bricklaying, stuff like that. Then I got bored with that and at the time, I wanted to do a course like this, but I was offered another job which took me travelling quite a lot, so I opted for that for the next five or six years. When I got bored with that I went a step back, if you know what I mean, to come here to college to do this course.

(NC, Building)

It is to the part played by vocational qualifications in the plans and aspirations of the people taking them that we turn in our next chapter.

III. Plans and Aspirations

3.1 People do what they do partly as a result of pushes from the past and partly on hopes for the future. we have already seen in Chapter II that when students were giving their reasons for taking BTEC courses some emphasized the desire to get away from school and others what it could mean for their prospects.

Qualification as End in Itself

3.2 Although in this report our main concern is with progress to further study, it must be borne in mind that, in the first place, vocational qualifications are an end in themselves. This is certainly how the students saw it. As Table 3.1 shows, the chief reason they gave for taking a BTEC National course was to gain a qualification, closely followed by the belief that it would improve their chances of getting a better job.

Table 3.1: Reasons for Choosing BTEC Course

%Reason ¹	National Diploma (N=1243)	National Certificate (N=1510)
Gain a professional qualification	73.3	74.0
Improve chances of better job	61.7	54.2
Get promotion in current job	2.0	38.2
Sounded interesting	17.1	3.6
Suggested by careers adviser or teacher	13.0	5.7
Suggested by family	5.6	1.9
Followed friends	1.1	0.5

1. One person could give several reasons so percentages do not sum to '100'.

Job Aspirations

3.3 The nature of those job aspirations is indicated in Table 3.2 It can be seen they are mainly course-related, but not invariably so. This is particularly the case in mechanical engineering where only 44 per cent were planning to try for a job in the immediate area and 36 per cent were hoping to use the qualification to move out, perhaps into management. (This echoes the swing against engineering which we have reported elsewhere, Smithers and Robinson, 1989).

Table 3.2: Job Desired After Course in Relation to Job Before Course¹

Subject Area ²	Before			After		
	Subject Related	Other	Not Working	Subject Related	Other	Not Stated
%Building (N=449)	19.3	27.4	53.3	61.6	25.0	13.4
%Computer Studies (N=409)	6.1	35.7	58.2	70.4	13.7	15.9
%Mech and Prod Eng (N=490)	14.5	25.9	59.6	43.7	36.1	20.2
%Science (N=173)	33.5	17.9	48.6	41.0	32.4	26.6

1. Includes HNC students.

2. Business Studies jobs too diverse to categorise in this way.

3. In contrast, students were mainly taking computer studies courses in the hope of moving into the field - only six per cent already held jobs there, but 70 per cent were wanting to. As we shall be seeing (Table 3.6), the computer studies students were among those most inclined to take a degree, but computer science admissions tutors in universities (see Chapter VI) were among those most likely to express reservations about the suitability of BTEC as an entry qualification.

Table 3.3: Intentions on Completion of Course

Intention	%National Diploma (N=1269)	%National Certificate (N=1633)
Find a Job	54.5	5.6
Return to Job	2.1	29.0
Get a Better Job	6.1	38.3
FE ft	13.3	3.4
FE pt	7.6	47.5
Higher Diploma	32.9	13.0
Degree	35.9	13.3

1. Do not add to '100' since more than one response could be given.

Intentions on Completion

- 3.4 Table 3.3 underlines job prospects as the major reason for taking a BTEC National course, but it also brings out the fact that many students realised that for what they were wanting to do the National award would not be enough:

This course is a good grounding and it gets you started in a job, but to get promotion and other things, like money, you need more qualifications, more knowledge of building. I could do a HND or HNC or a degree, but I am not happy about a degree. (PROBE: why?) Too much work and not enough practical elements in it.

(ND, Building)

HE Aspirations

- 3.5 In general, the Certificate students were more likely to be thinking in terms of continuing in FE to take a Higher National Certificate, while the Diploma students were more ready to contemplate moving on to a polytechnic or university. In fact, some students saw the Diploma as a stepping stone to higher education and as a preferable alternative to A-levels in this respect:

I just see practical experience as well as getting a qualification as what I wanted to go for, the experience of going to work which doing A-levels could not have given me. It is probably a longer way round of doing it, because from A-levels you can go straight into a polytechnic. But I think I prefer this way round. It can only be to my advantage. If I had just done the A-levels and then polytechnic, I could not have gone back into a factory at the level I am at now.

(NC, Engineering)

This course is really a stepping stone. When I came first of all I thought I could skip this first couple of years to tell you the truth. But I think you have to do it. When I finish this I will either do the HNC or if I can get into a polytechnic or something like that. If I can find a way of doing that and also supporting myself because I don't know if I would get a grant, I will do a degree. This is my ultimate, or well my next big step. After that I want to do structural engineering.

(NC, Building)

Mode of Study

- 3.6 Interestingly, as Table 3.4 shows, the Diploma or Certificate tends to set the pattern for future aspirations, with those studying full-time in FE thinking of studying full-time in HE, and those part time, part-time. It seems as if separate channels are established with the choice of Diploma or Certificate in FE. As we saw in Chapter II, the Diploma students tended to be younger, and while over a quarter (26.4%) of those aged 21 or under were hoping to take a degree full-time, only about ten per cent of those aged 25 or over were thinking of doing so.

Table 3.4: Aspiration and Mode of Study

%Aspiration	National Diploma (N=1,349)	National Certificate (N=1,732)
Degree full-time	41.5	10.5
Degree part-time	5.1	21.4
Higher Diploma full-time	24.3	3.6
Higher Diploma part-time	8.7	30.6
Continue in FE	1.0	11.0
None	19.4	23.0

Full Professional Status

- 3.7 An important factor affecting students' intentions will be the perceived importance of a degree or higher diploma for full professional status. Table 3.5 shows that students in building were most likely to see a degree or professional diploma as essential to the job they were aiming for and this accords with practice. Computer studies students also saw a degree as important, but, as with Ingrid in Chapter II, they are not always sure about the relative merits of a degree or higher diploma. Table 3.6 shows that the building and computer studies students were also the more likely to be aiming for higher education. In contrast, many of the science and engineering technicians seemed to be working to a particular level and this is consistent with the view of employers that the National Certificate is the normal end-point (Dean, 1985). The science and engineering students were also the less likely to be thinking of going on to HE. A number of the students were waiting to see what their marks were like. Although only about a third expressed their intention of going on to a degree or higher diploma in HE, two-thirds said they might consider it if their results were good enough.

Table 3.5: Importance of Degree of Professional Diploma for Job Desired

% Rating	Business Studies (N=1670)	Building (N=650)	Computer Studies (N=320)	Mech Eng (N=319)	Science (N=115)
Essential	17.6	41.1	24.4	18.2	27.0
Important	56.1	45.1	53.1	63.0	57.4
Helpful	12.0	5.5	4.1	8.8	7.8
Not Relevant	13.9	8.0	18.1	9.1	7.8
Disadvantage	0.4	0.3	0.3	0.9	0.0

TABLE 3.6: Intentions on Completion by Subject

%Intentions ¹	Business Studies (N=1580)	Building (N=597)	Computer Studies (N=314)	Mech Eng (N=298)	Science (N=113)
Find a Job	30.2	15.1	50.3	13.4	15.9
Return to Job	15.0	18.8	8.0	32.9	25.7
Get a Better Job	28.5	14.9	20.4	23.5	25.7
FE ft	7.5	7.2	12.1	6.4	6.2
FE pt	27.8	38.5	10.8	41.3	39.8
Higher Diploma	18.2	32.3	25.8	14.4	21.2
Degree	21.1	25.3	32.8	20.1	22.1

1. Percentages do not add to '100' since more than one response could be given.

Entry Qualification for HE

- 3.8 The great majority (87.7%) of the students realised that their National awards could be used as an entry qualification for higher education. But less than half (49.2%) said they knew how to apply to university or polytechnic or college of higher education. Apart from not necessarily wanting to lose their students too soon to HE, this seems to be because many staff leave it to the students to take the initiative:

Really I think the college has left it up to us to find out ourselves. The actual careers service within the college makes itself known to us, but we aren't forced to go and have a meeting with them. But if we need advice we can go to them, so really it's been up to us.

(ND, Computing)

Staff provide information, tell you how to fill in your PCAS forms, what to put down. But they don't pressurise you and say you must fill in a PCAS form. It's totally up to you.

(ND, Building)

They suggest polytechnics really rather than universities. I think possibly because it's pretty hard to get the grades you need to get into university. You need about three distinctions – or is it merits, I'm not sure.

(ND, Computing)

As far as I know there is the actual course for the degree that I am after which is production and mechanical engineering, but because we have not actually been told about these courses I don't know a lot about them. It will be the end of next year that I'll start looking into it.

(NC, Mech Eng)

- 3.9 Some of those students thinking of going on to HE were worried that admissions tutors would see BTEC qualifications as a second-class alternative to A-levels:

Universities look down on the BTEC, sort of regard it on a par with the YTS really, instead of being on a par with A-levels. In actual fact it is the other way round BTEC is slightly harder than A-levels.

(NC, Science)

The problem with the BTEC course is its very hard to get into university. It's a bit like CSE grade 1 and O levels, although people say they are the same they treat them differently. If you've got somebody who's got the equivalent to say myself with BTEC grades then they are more likely to go for the A-level student. But it's a lot easier to get into polytechnics – they are more vocational than academically geared.

(ND, Building)

- 3.10 Others did not think they would be at much of a disadvantage:

I mean as long as I don't apply to somewhere like Oxford or Bath where they ask for very high grades, BTEC from what I can see seems to get you into most places. I have been told it is worth about eight points, which I mean – most of the polytechnics are under that. I can't see that it will be any disadvantage against A-levels. (PROBE: why do you say that?) A-levels I think are more structured for people who can learn parrot fashion. I can't do that and I cannot sit down with a book, you know, three weeks before an exam and cram it all in then go into the exam and then spiel it all out. But with continual assessment you have got to work all year, so I think you learn much more that way.

(NC, Computing)

- 3.11 A few of the students thought they would need a Higher National award to move on to HE. But, in fact, are Higher National awards higher or further education? It is to this ambiguity that we turn next.

IV. HE Within FE

- 4.1 The distinction between HE and FE is blurred. BTEC Higher National awards span the sectors. Higher National Certificates are mainly taught in FE, but Higher National Diplomas are commonly offered in polytechnics alongside degree courses, with transfer possible in both directions. The Higher National awards are sometimes counted in higher education statistics and sometimes not. On the UNESCO educational-qualifications scale they are set at level 5 and within the NVQ framework at level 4. They are usually referred to as 'sub-degree courses' although, as Kenneth Baker pointed out when he was Secretary of State for Education, this is unflattering and 'associate degree' might be better.
- 4.2 When asked about higher education, many of our sample of students on BTEC National courses replied in terms of an HNC or HND at the same FE college. Indeed, at one of the colleges in our survey one of the tutors expressed some concern that our questionnaire might alert students to the possibility of moving on to university or polytechnic, and thereby threaten his numbers (and the college's income). The view tends to be encouraged that the HNC or HND is a natural progression from the National award:

In the first year most of the tutors seemed set on the idea we were going to do an HND - come back here and do an HND in the same course. When we are doing a certain piece of work they say we won't go so deep into this section; you will see more of it when you come back for your HND next year.

(ND, Building)

- 4.3 In order to understand how it is that students come to be studying for the higher awards it is useful to look at particular people, and in the boxes below we present the stories of Melanie and Stuart.

MELANIE

Melanie is 22 years old and is currently on the first year of a Higher National Certificate in Public Administration on day-release at a College of Technology and Arts. She attended a comprehensive school where she passed O levels in mathematics (C), English language (C), English literature (C) and computer studies (C), and also gained a grade one in CSE geography. She stayed on in the sixth form to study for A-levels which she unfortunately failed.

After this disappointment, Melanie found herself a job with the City Council as a clerical assistant. She was offered the opportunity to go to college on day-release to learn shorthand, typing and word processing, and after two years of day-release she passed RSA and Pitman's examinations. Her employers then encouraged her to continue at college to take a BTEC National Certificate in Public Administration which she successfully completed last year. It was then suggested to her that she might like to go on to do a HNC. She agreed, believing that it would improve her chances of getting a better job.

MELANIE (continued)

Although Melanie is aware that her BTEC qualifications could be used as an entry qualification for university or polytechnic, she has decided against the idea. While there was a time when she felt she would like to go to university, she now feels she is used to working and earning money and also believes she would find it difficult to fit in as she would be older than most of the other students who would be straight from school. She does not believe a degree would make much difference to her job prospects.

- 4.4 Melanie failed her A-levels and took a job with a local authority where she is now steadily improving her qualifications, but does not see the need for a degree; Stuart left school early but with good academic qualifications to take an apprenticeship and hopes to use the Higher National award as a stepping-stone for a degree.

STUART

Stuart is 21 years old and is employed as an apprentice technician by the Ministry of Defence, which is sponsoring him to do a BTEC Higher National Certificate in Mechanical and Production Engineering on block release at a College of Further Education.

He was educated at an independent school where he sat nine O levels of which he passed seven including religious education (A), maths (B), physics (B), chemistry (C), technical drawing (C), English language (C), and additional maths (C). He then started studying for A-levels in the sixth form, but left after the first year of the course in order to get an apprenticeship. If he had stayed on at school to complete his A-levels he would have been nineteen and too old for an apprenticeship.

After joining the MOD he initially went to college to do a National Certificate and having successfully completed this after two years he continued his BTEC studies by enrolling for the HNC. He was required to undertake these BTEC courses as part of his apprenticeship

When he has completed his HNC, Stuart is hoping to get a place at university to take a degree in mechanical engineering, which he believes will enable him to get a better job in the future. He is particularly keen to go into research and development work, for which graduate status is a necessity. Although he suspects that the more academic universities give preference to applicants with A-levels he does not see why this should be the case. He believes BTEC students have got "just as much ability", as well as the advantage of "more general knowledge of physically working mechanically engineering wise".

- 4.5 In terms of her qualifications Melanie is more like other HNC students than Stuart. In our sample of 1,019 HNC students only 173 had obtained even one A-level at school although another 49 had obtained at least one A-level at college. It was more usual for students to have entered on the basis of a National award (for entry requirements see Figure 2.1) with 295 having first obtained a National Certificate and 217 a National Diploma. Forty-three students started in further education by taking a First Certificate or Diploma and had progressed to a National award before embarking on a HNC.
- 4.6 This still leaves 285 (28.0%) many of whom seem to have been admitted under the provisions for exceptional entry. How this can come about we can see from Fred's story.

FRED (45, HNC Business and Finance)

I have always been good at accounts and figures, but I have been in jobs where it has not been wanted. I mean the biggest trouble was that during the seventies most of the better paid jobs were for using no skills and no intelligence at all. I worked for the Gas Board digging holes and I earned far more money there than being a cashier in the office. Unfortunately once you have been a manual worker like that people don't want to know you anymore. I have done all sorts of other things as well – bus driving, and I have had two very long periods of unemployment.

It is more difficult to get a job the older you get and the longer you have been out of work. You then get to a stage where you become unemployable as it were. I would like to work in accounts again, I mean I have always been good at it and I never lost it through all that time I have been in manual work. It is very, very difficult to prove yourself to someone. I mean they want younger people now working on computers. Since I have come out of offices all the modern technology has come in. They tend to think silly old fossil you don't know what you are doing, you are frightened to death by all this new technology, which I suppose is quite logical in a way. I can understand it, but it is very, very frustrating.

I am unemployed at present. I did a course last year, an Access course basically for people who are unemployed, and I got through that. Afterwards I wrote for about 40 jobs in six weeks and I got 28 replies but only one interview, so for all the good intentions it really didn't amount to anything.

So I came back on the next stage of the Access course. But that folded up because there was only three of us, so we had no choice really. We were told that if we wanted to stop on and do something we could do the HNC or the BTEC National. The tutors that we had last year told us that we had done far in excess of the BTEC National and we would be better off doing the HNC. We had a good long chat. It took us more or less all morning to decide what we were going to do and we decided the HNC.

FRED (continued)

I hope it will lead to a job. When we came on the Access course they told us that we would have two years then an automatic interview to the Poly. I said then I did not want it. I don't want to go on to do higher education. I'm not interested, because by the time I finish I will be much too old anyway. I'm too old to get a job now. The way things are going I will be much too old then, and if I do get a job, after say 10 or 15 years of a nice bit of job satisfaction, it will be time to retire.

- 4.7 Twenty per cent (210) of our HNC sample, like Fred, had been out of school ten years or longer. In terms of their other characteristics the HNC students resembled the National Certificate students described in Chapter II. They came from the same type of school, with the same pattern of qualifications and were mainly in employment studying by the part-time route. In fact, they were more or less the same people two or more years on.
- 4.8 But, even so, a number, like Stuart, were wanting to use the HNC as a springboard to HE. Of the sample of 1,019, 14.4 per cent wanted to study for a degree full-time and twice that, 29.3 per cent, part-time. However, more of the HNC students thought they had gone as far as they wanted – 28.0 per cent compared to the 23.0 per cent of National Certificate and 19.4 per cent of National Diploma students (cf. Table 3.4).

Aiming for degree

After the HNC I will do a degree. If I just have an HNC, people look and well I could be a bit dodgy. But if you have got your degree and letters after your name! More people actually look for that nowadays in industry than anything else, because if you do a degree there are all these institutes for mechanical engineers which give you letters and what have you. It looks good on contracts.

(HNC, Mech Prod Eng)

Not going further

I would not think so because it seems a long time to be on one course. I think it will be five years now. I think it's another four-year course I'd have to do – a long time – nine years.

(HNC, Building)

- 4.9 As with those taking BTEC National courses, there was some concern that the qualification would not be readily acceptable to HE. Whether or not this is true, we will explore in the next chapters.

We have been told there are double standards for BTEC students as opposed to A-level students. They set a higher standard for BTEC. The more academic universities are more likely to take A-level students. (Told this by a lecturer at college who teaches both A-level and BTEC).

(HNC, Mech Eng)

4.10 The HNC then is the end point for some and the bridge to higher education for others. As an award it is too often lumped with other BTECs and its standing is not fully recognised. With Kenneth Baker, we feel that sub-degree or NVQ 4 is not very encouraging, and support the idea that the higher status of the Higher National awards be made explicit in a title like 'associate degree'.

V. Demand for HE

- 5.1 BTEC awards and other vocational qualifications at NVQ level 3 or higher are recognised qualifications for entrance to degree courses. Many students take vocational courses to obtain the qualification itself but, as we saw in Chapters II and IV, about 40 per cent of National Diploma students, ten per cent of National Certificate and 15 per cent of Higher National Certificate students were wanting to go on to higher education to take degrees by full-time study. What does this do to demand for higher education overall and what are their chances of getting in?
- 5.2 Table 5.1 shows the numbers of BTEC awards since 1983 in thousands. Over the seven years, the number of certificates has held steady. But the output of National Diplomas has doubled and, given the wish of 40 per cent or more of the students to go on to higher education, it is perhaps fair to see this as emerging as a practically-based alternative to A-levels.

Table 5.1: BTEC Awards (Thousands)

Year	National Certificate	National Diploma	Higher NC	Higher ND
1983	33.0	17.7	16.7	6.1
1984	30.0	20.2	17.8	9.2
1985	33.6	24.1	19.0	12.8
1986	33.6	26.2	18.7	14.5
1987	32.8	26.6	18.9	15.2
1988	28.9	26.2	18.2	13.8
1989	31.7	34.5	17.7	14.4

Source: Annual Reports 1983/4 to 1988/9, Business and Technician Education Council, London: BTEC.

- 5.3 Many of these students are in Business and Finance which, as we can see from Table 5.2, in 1989, comprised over a third (35.4%) of all National Diploma awards. Business and Finance was also the leading field for National Certificate awards (38.5%), but for part-time courses overall it was Engineering – 37.9 per cent of National Certificate awards and 52.5 per cent of Higher National Certificate awards. This is consistent with the role of the BTEC in technician training. But relatively few of the Engineering students were taking Diplomas, who were the more likely to be applying to higher education. It is not clear therefore what contribution vocational qualifications can make towards reducing the shortfall in demand for engineering places in higher education, and, if they did, what this would mean for the supply of technicians.

Table 5.2: BTEC Awards by Subject Area, 1989 (Thousands)

Subject Area	National Certificate	National Diploma	Higher NC	Higher ND
Business and Finance	12.2	12.2	2.2	2.7
Construction	3.9	1.7	3.2	1.0
Computing and Information Systems	1.6	2.0	0.9	2.0
Engineering	12.0	4.8	9.3	3.3
Science and Caring	2.2	1.7	2.0	1.0

Source: Annual Reports 1983/4 and 1988/9, Business and Technician Education Council, London: BTEC.

5.4 In Table 5.3 the outputs in 1987-88, of BTEC awards and academic qualifications from schools (it must be remembered that about 15 per cent of the age cohort take them under FE regulations) are compared. Against the 108,000 awarded two or more A-levels in school, 87,000 obtained BTEC National or Higher National awards. Using the ratios found in our survey for those interested in progressing to degree courses, this suggests BTEC awards could contribute 23,000 applicants towards the demand for HE places, or about a quarter of that of those with A-levels. In fact, as we shall be seeing, it is considerably lower.

Table 5.3: Awards, 1987-88 (Thousands)

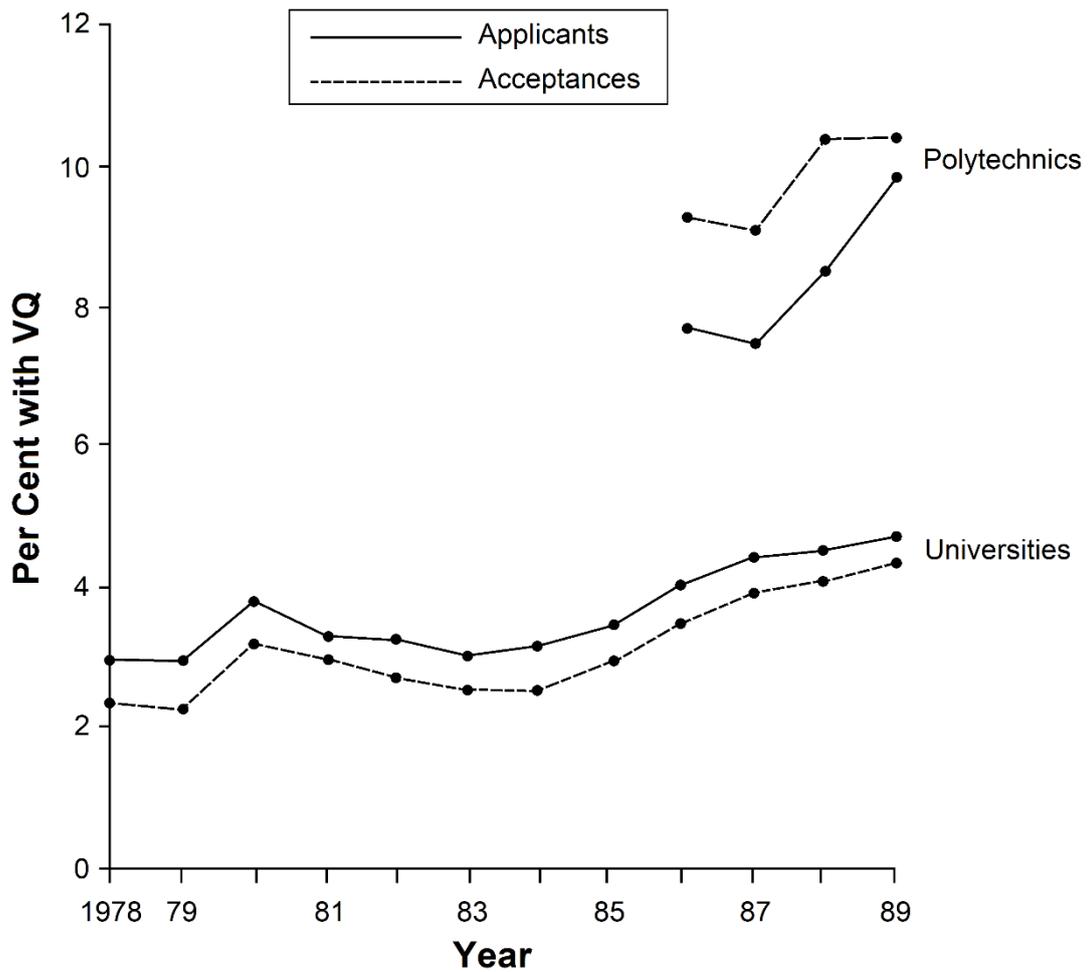
Qualifications	Male	Female	Total
BTEC Nat.Cert.	20.7	8.2	28.9
BTEC Nat.Dip.	14.7	11.4	26.1
BTEC Higher NC	14.7	3.5	18.2
BTEC Higher ND	8.5	5.3	13.8
A-levels ¹	57.0	51.0	108.0

1. Two or more A-levels

Source: Annual Reports 1987/8, Business and Technician Education Council, London: BTEC, and Education Statistics for the United Kingdom, 1989 Edition, London: HMSO.

5.5 How much of that demand is realised and how successful the applicants are we can see in Figure 5.1. Demand for places in both universities and polytechnics (and colleges) has grown steadily over the periods for which we were able to obtain statistics. In universities the number of candidates with vocational qualifications has increased from 3,860 in 1978 to 8,191 in 1989, increasing as a proportion of all home applicants from 3.0 per cent to 4.8 per cent. In polytechnics and colleges served by PCAS the number of applicants has gone up from 9,570 in 1986 to 15,220 in 1989 (partly as a result of more colleges coming within the ambit of PCAS), but rising as a proportion from 7.8 per cent to 10.0 per cent. Interestingly, as Figure 5.1 brings out, consistently over the years, those with vocational qualifications form a *smaller proportion of acceptances than of applicants in universities and a larger proportion in polytechnics*. In other words BTEC candidates have a less than even chance of getting into university, and a more than even chance of a place in a polytechnic. Why this should be is not clear, but it bears out the view of students in FE.

Figure 5.1: Applicants & Acceptances on Vocational Qualifications



Source: UCCA and PCAS Annual Reports

Table 5.4: HE Acceptances on Vocational Qualifications, 1988-9

Subject Group	VQ as % of All Acceptances	
	Universities	Polytechnics and Colleges
Architecture, Building and Planning	13.5	18.6
Engineering & Technology	12.5	33.0
Business & Administration	8.7	11.3
Agriculture & Related Subjects	5.4	6.0
Comb. Sciences	5.0	10.0
Mathematical Sciences	4.9	14.2
Comb. Soc. Studies	4.4	29.7
Biological Sciences	4.4	4.1
Topics Allied to Medicine	4.3	7.4
Sci. Comb. Soc. Stud. or Arts	4.3	6.3
Mass Communication and Documentation	3.4	5.6
Other	3.4	4.9
Physical Sciences	2.9	4.8
Social Sciences	2.6	5.1
Education	2.2	6.5
Soc. Stud. Comb. Arts	2.1	14.2
Combined Arts	2.0	3.3
Creative Arts	1.9	3.1
Humanities	1.6	2.1
Medicine & Dentistry	1.1	-
Languages & Related Studies	0.9	1.3
All	4.4	10.5

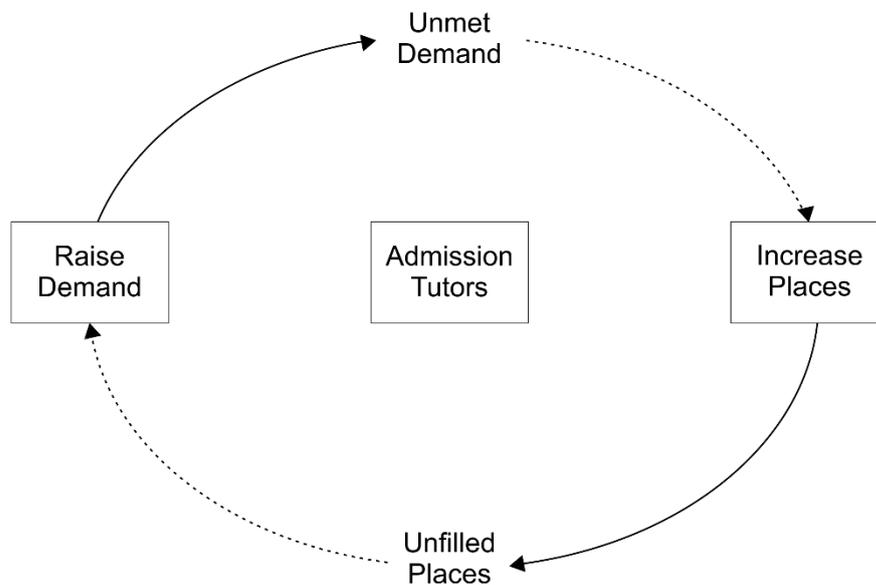
Source: Statistical Supplement to the Twenty-Seventh Annual Report 1988-89, Cheltenham: UCCA. Statistical Supplement 1988-89, Cheltenham: PCAS.

5.6 The subjects to which the would-be students with vocational qualifications are applying are shown in Table 5.4. Architecture, Building and Planning, Engineering and Technology (particularly in the polytechnics) and Business and Administration emerge as the main fields, along with, in polytechnics, Mathematical Sciences (which is mainly computer science) and some of the combined courses. A detailed study of eight subjects across the range from Building to English has been made to see how the admissions tutors respond, what the characteristics of the entrants are, and how well do they do. This is reported in the chapters which follow.

VI. Response of HE

- 6.1 Admissions tutors are the guardians of the narrow gate to higher education. As Figure 6.1 indicates theirs is the key role in juggling applicants and places to bring them into balance. Some departments in some institutions have many more applicants than places and here the admissions tutor's role is mainly one of rationing, sharing out a scarce resource appropriately. But there are also departments with too few applicants and here the tutor will be mainly concerned with marketing the courses and recruiting. Who are these admissions tutors and how do they come to occupy that key role for the life chances of the applicants and the health of their departments?

Figure 6.1: Increasing Participation



The Post of Admissions Tutor

- 6.2 Our interviews with 68 admissions tutors of full-time courses across a range of eight subjects – business and management studies, building, mechanical engineering, biology, chemistry, computer science, law and English – in a stratified sample of six universities, four polytechnics and eight colleges began by exploring how they came to be admissions tutors.
- 6.3 In universities, being admissions tutor is often seen as a burden, adding little to career prospects, but in polytechnics it could be regarded as a useful step on the way to achieving some seniority. In universities, most admissions tutors seem to be volunteers or to have had the role thrust upon them, perhaps on a rotational basis:

It used to be rotated quite a lot. No-one seemed to want to do it. In my previous job I ended up being admissions tutor. This was for an HND computing course at a polytechnic. I actually found I quite enjoyed it. So, after I'd been here one year, and people were being

allocated jobs for the following year, I seem to remember volunteering, and everybody thought I was crackers.

(Computer Science, Univ)

Under the present university system it's considered to be rather a burden in the sense that promotion, if that's what is of prime interest, is determined by one's performance in the research area. If you're doing other things other than research, such as being admissions tutor, then it means there's less time for research so it's not a particularly popular job. I was told when I took it on that it would probably be for the order of six years but in practice it will probably be until I, if I do, make a song and dance about it, and the head of department can find somebody else to do it. So it's not likely to be less than six years.

(Mech Eng, Univ)

There are some of my colleagues who have not and never will be admissions tutors but broadly it works on a rotational basis and I think nowadays most of us are in the post for about four years and we run a two-year overlap with the new person coming in.

(Law, Univ)

6.4 There were some in polytechnics and colleges who saw it in the same terms.

How long an admissions tutor? Five years – no it's not rotating, unfortunately. Once you've got it, you're stuck with it – nobody else wants to do it!

(Law, College)

Well, there are two of us actually who do the job. My other half was doing it and, given the burdens of it, was heading for a breakdown, so I volunteered myself. Actually, it was strategic because I thought something else was ending at the time. I thought, well, I may as well be seen to be doing it as something else. But it doesn't rotate. I suspect we are in it now until we drop possibly. So it tends to be once you start it you keep it.

(Building Studies, Poly)

6.5 Others saw it as a step up the ladder:

I think it's perceived to be an important job that needs to be done and therefore people are kind of expected to do it really. I think it can enhance your status or whatever. I clearly wouldn't have become deputy course leader if I hadn't been admissions tutor – I think.

(Building Studies, Poly)

6.6 But it is nevertheless disturbing that such an important role should come as an imposition to many, and one wonders what can be done to make it more attractive. Clearly the lives of many people and the quality of higher education

are considerably affected by admissions tutors, and their responsibilities should be marked in some way, perhaps in terms of some financial reward and/or credit towards promotion. On the other hand, it could be argued that it is its own reward:

I took it on because I gave up being head of department and I felt I ought to do a job in the department and I offered to do admissions. Partly because I was interested in it and partly because everybody said it was such an awful job. I actually find it very interesting. It's very easy to do. In a way, it isn't such a chore as people make out. And it seems to be one ought to be interested in the job and take it on quite willingly. There are many worse jobs one could do.

(Biology, Univ)

Knowledge of Entry Qualifications

- 6.7 With the range of eligible entry qualifications to HE increasing all the time and many admissions tutors' posts being rotated every few years, we were interested to see how familiar admissions tutors were with vocational qualifications. Since the courses considered had a vocational-qualifications-entry ranging from 27 per cent in building studies to 0.2 per cent in English, it is not surprising that the tutors' knowledge should also vary widely, nor that one English admissions tutor should ask: "Can you tell me what you mean by BTEC?"
- 6.8 The admissions tutors did, however, make a number of practical points about how NCVQ and BTEC could help them be better informed:

I think BTEC needs to sell itself better. In fact, the whole vocational scene is a mess, if you don't mind me putting it bluntly. Even the initials for the organisations are hopeless. I can't remember them. I mean CNA and UCCA I can remember. But what is it? NCVQ? It's impossible.

(Biology, Univ)

I think what I would like to see is more information sent to people like me by whoever operates the BTEC courses. That would be useful to me: to know exactly what is supposed to be in the units. Every time we get an applicant I ask him to send me syllabuses. They usually send me something photocopied, which varies from college to college. I don't know how much individual control teachers and colleges have over what's in the units.

(Chemistry, Univ)

What is difficult is the absence of information, and it is incredibly difficult trying to get information about vocational qualifications of any form. Your funding body – you might make a plea: that what we actually need is information about the relative merits of the various qualifications.

(Business Studies, Univ)

Selection on Basis of Vocational Qualifications

- 6.9 Admissions tutors seemed to look more carefully at BTEC applicants than A-level applicants, and frequently they were called for interview when those with academic qualifications were not. In the ‘rationing departments’ some tutors expressed a clear preference for A-levels:

Generally I think I'd have to be honest and say I prefer A-level applicants because they'd be easier (a) in getting them here but (b) in knowing what to expect once they arrive.

(Law, Univ)

- 6.10 Other departments admitted they didn't have much choice:

We are in the situation, of course, as most mechanical engineering degree courses that we can't really afford to pick and choose so I think that we have to take a gamble on occasions anyway.

(Mech Eng, Univ)

- 6.11 The extra care taken in selecting BTEC candidates stemmed partly from doubts about their *abilities*:

Over the years, our experience with BTEC students has been mixed, to say the least, I can think of one or two students who have done reasonably well here. I think one has gone away with a 2.1. But, by and large, the proportion of disaster stories with BTEC entrants has been much higher than with A-level students. So we took a policy decision that it was better to be cruel early on, rather than get them here, and then the bad news comes.

(Business Studies, Univ)

Originally we were offering something like level 3 and we found that students were really making very heavy work of the course so we are now not interested in anything under level 4, unless we are talking about someone with three distinctions at level 3.

(Chemistry, Univ)

- 6.12 Some tutors *look back beyond the BTEC* to see how well the applicant did at school:

Well I think the question of BTEC people is really quite complex. Sometimes people have taken the BTEC qualification because they've been warned that they're not going to get A-levels, in which case it may be that no matter how good their grades are, we may not wish to take them. If you go back a step, most of them do actually do O levels before they do BTEC. Sometimes their O levels are very, very poor indeed. Sometimes their O levels are really quite good, and in a sense, I suppose we look more carefully at the O levels of the BTEC people than we do at those of the A-level people, because I'm afraid that we are asking the question, does this look like someone who was told he wasn't going to get A-levels.

(Computer Science, Poly)

- 6.13 Another reason why tutors said they looked closely at BTEC applications was the *variation* they had found *between courses*:

BTEC courses are self-monitored aren't they by the colleges and that can lead to differences of standard I think.

(Law, College)

Over a period of time you get to know the sources from where the students come. There is probably more variation in BTECs coming from different institutions than there is from A-level applicants from different schools.

(Chemistry, Univ)

- 6.14 Particular concern was frequently expressed at the *standard in mathematics* in the BTEC:

We particularly notice that they have problems with maths. Although a good pass in BTEC maths of 70-80 per cent, or a distinction, is supposed to be equivalent to an A-level pass, we still find that the BTEC people are struggling on the maths aspects of the course, and we have to lay on special courses, remedial courses, and put many BTECs on them.

(Building, Univ)

The BTEC level 4 mathematics syllabuses are reasonable, or suggest reasonable preparation for our degree course, but the method of examination is not so rigorous as you would get with an A-level syllabus. It's on the basis that there's a proportion of course work whereas for A-level there isn't and it's possible for a student to carry out assignments in mathematics and obtain quite satisfactory course work marks and yet not understand particularly what's been going on.

(Mech Eng Univ)

They tend to be weaker at maths and stats, and often, in a BTEC course, even though it will have quantitative elements, they are able to get through the course without having to really get to grips with them.

(Business Studies, Poly)

- 6.15 But the admissions tutors also saw vocationally-qualified applicants as having a number of important advantages. They were seen as being highly motivated, experienced, independent and mature.

Highly motivated

Because they've come up the hard way – they've perhaps got O level chemistry, left school and spent the last ten years doing the BTEC 1, 2 and 3 – they've been at it a long time. They realise they're ten years older than the average undergraduate, they want to get on and get a degree, so those are their two strengths – they're highly motivated and very good in the lab.

(Chemistry, Univ)

Experienced

I mean I think that the BTEC student comes on the course with a rather more practical view point of engineering at the beginning whereas the A-level student may not have seen a lathe.

(Mech Eng, Univ)

The BTEC students know a lot about the construction industry already which means teaching is a lot easier because if I talk about things they know what you're talking about, whereas a lot of the other students who come from school have maybe not had such an experience.

(Building Studies, Poly)

Independent

On the other hand BTEC students tend to be more capable of working on their own, because that's been the environment they've come through. So it's quite possible that although an A-level student might be brighter, they actually can't cope with a different work environment.

(Business Studies, Poly)

Mature

Some of the BTEC students are quite good at discussion and they are quite aware, but remember, the BTEC students aren't 18 year olds – they're mature students so they have some of the characteristics of mature students.

(Business Studies, Univ)

Adaptations

- 6.16 The tutors were asked if courses had been modified at all to make them more accessible to vocationally-qualified students. The changes most frequently mentioned were extra help in maths and other basic knowledge:

We do actually offer, in fact call them remedial lectures, it's probably not a very good description because they are not necessarily remedial and they're not actually like lectures, but there is a member of staff who makes a time available each week for people who feel that their mathematics is not up to the normal standard to go along there and bring up certain problems and the member of staff will go through the problems with them. It's not specifically for BTEC students, but when the case for providing this time was made BTEC students were used as a particularly common example.

(Mech Eng, Univ)

They have to have maths but we do two different maths courses: one for people with A-level and one for people with O level maths – so it's streamed and the BTEC people fit in perfectly well with the O-level group.

(Biology, Univ)

When they start the course, literally in the first week, we give them a maths test. Based on the outcome of that test they go into one of two streams. One proceeds with the normal maths course, the other is called A-levelling-up course. Many BTEC students find themselves in that. So they get more maths, and generally speaking it works reasonably well.

(Mech Eng, Poly)

Radical Change

There was some recognition that BTEC and degrees often involve different styles of learning and assessment. But the general mood was that it was the students who would have to change and stand or fall by their achievements.

The approach to BTEC is entirely different to the approach to A-level and degree. A degree in a large sense is a continuation of A-level isn't it? It's all very academic, whereas the BTEC approach, although requiring an absorption or an acquisition of certain information, is more practical and the difference might be a problem.

(Law, College)

- 6.17 A few lecturers, however, realised that the hiatus raised fundamental questions about the purpose of higher education and its approach to learning:

My impression from the small numbers of BTEC students we have is that they don't really like our courses because they're too dry. Maybe we could improve the courses from everyone's point of view by trying to make the utility of them more apparent through case studies or whatever, but we shy away from that because preparing case material is incredibly time-consuming and you really do need to have the contact with industry, which is something that polys do with sandwich courses much more effectively.

(Computer Science, Univ)

- 6.18 The role of higher education in society is increasingly being questioned, and it could be that entry on the basis of vocational qualifications could be one of the catalysts for change:

My own view is that we need to reorganize our whole teaching style anyway. I think we've got to look at our teaching style and also we need to look at, and rethink, how we make up deficiencies in people's education, because students are coming in now with such a diversity of qualifications. I don't just mean BTEC or International Baccalaureate or whatever, but in terms also of

looking at their A-level profile. It's quite clear, for instance, that there's an increasing proportion of students coming in with two sciences and an arts subject. In a sense they are voting with their feet. They want to broaden sixth-form education. I think any university which says it doesn't have to do this needs its head examined.

(Biology, Univ)

VII. Part-Time HE

- 7.1 In Chapter VI we have been looking at admissions to full-time degree courses where there is often stiff competition and those applying with vocational qualifications come up against well-qualified school-leavers. But many students in polytechnics and colleges, if not in universities, take their degrees by part-time study. Table 7.1 shows that, in the subjects we are focusing on, part-time students in 1989-90 comprised from twelve per cent to a quarter of first-year enrolments. Growth in numbers has kept ahead of the full-time intake, except in English. Since many of the vocationally-qualified will already have experienced the part-time mode of study, it is possible that the response of HE here will differ from that for full-time courses. We were able to explore this through interviews with ten admissions tutors to part-time degree courses - five who looked after both the full and part-time courses, and five just the part-time.

Table 7.1: Part-Time First Year Enrolments on CNA A First Degree Courses

Subject	1980-81			1989-90			% Inc PT 80-89
	PT	Total	%PT	PT	Total	%PT	
Building	65	546	11.9	279	1,586	17.6	329.2
Mech. Eng.	156	1,552	10.1	198	1,491	13.3	26.9
Bus. & Man. Studies	573	5,183	11.1	1,528	9,057	16.9	166.7
Comp. Sci/Stud.	200	3,072	6.5	470	3,997	11.8	135.0
Chemistry	138	736	18.8	362	1,408	25.7	162.3
Biological Sci.	183	1,054	17.4	302	1,752	17.2	65.0
Law	470	2,605	18.0	983	4,435	22.2	109.1
English	62	424	14.6	66	458	14.4	6.5

Source: CNA A Annual Reports

Variety of Applicants

- 7.2 The admissions process does seem to be different if only because those with vocational qualifications and non-standard mature entrants tend to be in the majority:

You are looking at mature people who are actually out in industry and probably did a HNC (not the BTEC scheme) and realize that they need a degree to progress in their profession.

(Mech Eng, Poly)

Our applicants include those with HNC, HND, accountancy qualifications, Diploma in Management Services, Diploma in Works Management, Teaching Certificate. We get a number of teachers who find themselves lacking a degree and perhaps doing Business Studies or Economics. We get a number of people say from Health Service admin, or that sort of area, local government, a huge variety.

(Bus Stud, Poly)

There has certainly been an increase of very highly qualified graduates who want to change profession. We have a number of graduate professionals such as doctors, dentists, etc. Moving away from graduates, I think the biggest increase has been in people in professions such as nursing and an increase in people with surveying qualifications who see the value of a combined surveying/law qualification. The number of non-standard entrants coming up through higher education foundation courses has remained very, very small with only two or three applicants a year. The numbers who do BTEC are pretty constant and we also get a number of ladies in their 40s who now want to do law. They tend to have no formal qualifications but typically come from very middle class backgrounds.

(Law, Poly)

Rationing or Recruitment

- 7.3 But again a lot depends on whether the department is having to ration or recruit:

We've also seen a dramatic increase in the number of applicants which means the nature of the job has changed. Whereas in the past there wasn't any selection, we're now selecting between various qualities in the applicants.

(Law, Poly)

The demand and the supply of places is fairly well matched, therefore we have no system of rules.

(Mech Eng, Poly)

The number of places available can, however, be more flexible than with full-time courses:

At the very last minute we increased it to 55. I had indicated before the summer that we had no further places, then because of numbers and an increase in staffing resources I decided to take another 10 so I simply offered places to people who applied at the very last minute.

(Law, Poly)

- 7.4 When choices do have to be made then this has to be across an even wider variety of entrance qualifications than for full-time courses:

When we are looking at the application forms we don't have any criteria like A-levels that we can measure; therefore to some extent it is an obstacle course.

(Bus Stud, Poly)

The basic requirement for the part-time degree is an ONC in business studies. In fact, the admissions requirements are very variable, because we've taken people with degrees in this, that and the other at one end and, at the other, we take people with no qualifications whatsoever.

(Bus Stud, Poly)

They are interviewed quite separately by myself and the director. We do it jointly and obviously take a fair amount of care over whether we think they are suitable or not, and have the potential to benefit from the course.

(English, College)

Some students whom we might regard as slightly sub-standard we may recruit on the basis that their company will provide all the necessary incentives for them to achieve a better academic performance.

(Mech Eng, Poly)

Disadvantages of BTEC

- 7.5 Nevertheless although the character of the intake is very different the same clash between BTEC and degree styles of learning and assessment, as was noted for full-time courses, emerged:

Intellectual turbulence as they come off doing BTEC style with BTEC speech. They're aware of it and you can talk to them about it.

(Bus Stud, Poly)

A BTEC student has by the very nature of the course learned to handle packages of information. The need in the degree is clearly to maintain a width of knowledge and be able to demonstrate that knowledge in the traditional situation of a sessional exam. And that is the problem as I see it. The BTEC system represents face-tests in lots of cases and the knowledge, the carry-over and the continuing interchange of that knowledge is not always present in the student who comes to us.

(Mech Eng, Poly)

- 7.6 BTEC students could also face other problems:

If I was being dramatic, the first year can represent a traumatic experience for a vocational student. The difference in the presentation of the lecture material, the need for more self-sufficiency, the need to keep all these subjects at a high intensity all the 32 weeks of the course represents a very severe challenge on the basis that some of the students are deeply committed in their jobs, they're also husbands and parents, and they have problems of deciding the balance of their activities in life.

(Mech Eng, Poly)

Advantages of BTEC

- 7.7 But their strengths were also recognised:

We find that this adds an extra dimension to the lecture. They've been in industry, they understand the language of engineering and although they may not be A-level qualified which is theoretically qualified, they're qualified in life and can understand the language and the problems because they've actually been in industry.

(Mech Eng, Poly)

Interconnections between Higher National and Degree

- 7.8 In some institutions BTEC Higher National awards are taught alongside degree courses, and even together with them, with students transferring in both directions:

They're doing a BTEC and a degree simultaneously which theoretically should not be possible but the idea is to keep the mathematics so thoroughly on the boil that they will be fully versed and ready for year 2, and that has worked.

(Mech Eng, Poly)

The people who come in year 1 are subject to a 33 per cent wastage – so if we can feed in some students who've got a better chance of survival that sort of boosts our numbers quite happily.

(Bus Stud, Poly)

Value of Part-Time Degree

- 7.9 Part-time degree courses have an openness and flexibility which is not always possible with their full-time equivalents and, in most cases, students are likely to be readily admitted on the basis of vocational qualifications. But several admissions tutors expressed concern at the value of the part-time degree to the person, particularly in terms of being accepted as a graduate. Since the employer already knows Joe Bloggs, Joe Bloggs B.Sc. may not seem any different:

There's a perpetual problem with the vocational student: that is to do with his or her future. Why do they attend these degree courses? The real worry relates to them being able to project their image within a company having got the degree and be seen to be that much better.

(Mech Eng, Poly)

VIII. Widening Access

- 8.1 The admissions tutors we spoke to, particularly those of full-time courses (Chapter VI), tended to use ‘vocational qualification’ and BTEC synonymously – which, in admittedly early days, may pose something of an identity problem for the NCVQ. We were very interested therefore to see what qualifications those would-be students who battled through the admissions process actually held. We were able to do this because two universities and two polytechnics (none of them in Manchester incidentally) gave us access to student academic records so we were able to see on what qualifications they had been admitted and how well they did on their courses. It has to be remembered, however, that these four institutions may not be representative.
- 8.2 In working through the files we found 930 out of 5,459 students admitted to those institutions in selected subjects (see Tables 9.2 and 9.3 for the list) held between them 965 vocational qualifications. The nature of these vocational qualifications is shown in Table 8.1.

Table 8.1: Types of Vocational Qualification of Degree Entrants¹

Vocational Qualification	HE Entrants		
	N	%VQ	%All Entrants
BTEC ² National	602	63.4	10.9
BTEC ² Higher	113	11.9	2.1
City and Guilds	33	3.5	0.6
RSA	13	1.4	0.2
Diplomas of Professional Institutions	94	9.9	1.7
Teachers’ Certificates	22	2.3	0.4
Other ³	88	9.3	1.6

1. Students could have more than one type of qualification.

2. Includes ONC/D, BEC/TEC etc.

3. Occupational training/qualifications such as nursing, police.

- 8.3 About three-quarters were BTEC awards so it is not surprising that the admissions tutors should call them first to mind. Of the rest, about ten per cent were diplomas of professional institutes and ten per cent were occupational qualifications like those of nurses and the police. Only a very small proportion were City and Guilds and RSA, and this raises the question of why so few when awards of these bodies are also eligible for recognition at NVQ level 3. It is likely that either the subjects or the content are more geared to being a final qualification. With BTEC awards comprising three-quarters of vocationally-qualified entries, statistics based on just these need to be raised by a third to fully reflect recruitment by the vocational route.
- 8.4 The characteristics of those gaining entry are also interesting from another point of view. As we saw, in Chapter I, higher education recruits from a relatively restricted range of the population in terms of social characteristics, and one of the arguments for developing the vocational route is to widen access. We have

been able to examine its effects on social class and sex from special analyses we commissioned from the Universities' Statistical Record for those graduating in the years 1982-87.

Social Class

- 8.5 The relationship between university admissions and social class is shown in Table 8.2. Two out of three entrants come from social classes I and II, the professional and managerial groups, and only 1 in 200 from social class V, unskilled manual workers, even though it comprised eight per cent of the population.

Table 8.2: Social Class of University Entrants

Social Class	1971 Census	Per Cent by Mode of Entry		
		A-level	VQs	Non-Standard Mature
I	3.6	22.4	14.4	1.5
II	17.2	46.3	33.5	22.8
IIIN	21.8	12.1	13.1	44.3
IIIM	27.5	17.2	36.0	13.3
IV	21.9	1.6	2.5	10.5
V	7.9	0.4	0.5	7.6

Source: Smithers and Griffin (1986) *The Progress of Mature Students*, Manchester: JMB; 1971 Census from OPCS; A-level and Vocational Qualifications from Special Analyses Commissioned from USR.

- 8.6 The vocational route does broaden the base somewhat, but really only as far as the children of skilled manual workers (social class IIIM) and this relates in part to the subjects they were taking. Again, only 1 in 200 was from social class V. For comparison, Table 8.2 also shows non-standard mature entrants (here assigned to a social class on the basis of their own occupation). Although there were relatively few from social class I since many in that group will already hold degrees, non-manual workers, particularly clerks, cashiers and secretaries, were again over-represented.

Gender

- 8.7 Table 8.3 shows that more men go to university, although the prospects for women by the A-level and non-standard mature routes are steadily improving. Between 1982 and 1987 the proportion of female A-level entrants among the graduates rose from 41.6 per cent to 44.0 per cent and the proportion of women non-standard mature entrants from 35.1 per cent to 49.2 per cent. With vocational qualifications, however, largely as a result of the subjects involved, like building and engineering, there is a preponderance of men.

Table 8.3: Gender of Uni Entrants

Gender	Per Cent by Mode of Entry		
	A-level	VQs	Non-Standard Mature
Male	57.5	80.1	57.8
Female	42.5	19.8	42.2

Source: Smithers and Griffin (1986) and Special Analyses.

Age

- 8.8 The ages of entry of the various groups of students, obtained from the academic records of the four institutions for the years 1979-84, are shown in Table 8.4. Just over a quarter of the vocationally-qualified (27.1%) were of the same age as most A-level entrants, and had entered directly on completing full-time studies in FE. Most were, however, somewhat older and over ten per cent (11.5%) were 35 or over - compared to the fifth (22.2%) of non-standard entrants of this age. Vocational qualifications do therefore provide a route for older students into higher education.

Table 8.4: Age on Entry

Age	Per Cent by Mode of Entry		
	A-level	VQs	Non-Standard Mature
18/19	81.6	27.1	13.9
20-24	15.8	38.1	26.0
25-34	2.3	23.2	38.0
35+	0.4	11.5	22.2

Source: analyses of records of two universities and two polytechnics of entrants for years 1979-84.

Conclusion

- 8.9 The vocational route then does add to the opportunities for students to go on to higher education. It also increases the pool of recruitment for the shortage subjects like engineering and technology. However, new and different students taught by old methods may have difficulty (as was foreshadowed in some of the admissions tutors' comments) and we have to ask: how well do they do in HE?

IX. Performance in HE

9.1 The performance of BTEC students in higher education was analysed through data commissioned from the Universities' Statistical Record. Table 9.1 shows the information from the USR for eight selected subjects (listed in Table 9.2) for the period 1982-87. Some students entering on vocational qualifications do very well and the route does open up opportunities for some very able students who might not otherwise have been qualified to enter HE, but the general run of performance is below that of the A-level entrants. Moreover, nearly 1 in 5 (17.1%) drops out. Even if those leaving are excluded, the degree results of the vocationally-qualified tend to be less good, though the proportion of 'firsts' is about the same as for A-level entrants (7.9%).

Table 9.1: Selected University Degree Results 1982-87

	Degree Class					Fail	Drop out
	1	2i	2ii	3	Other		
VQs (N=3371)	6.6	24.2	31.9	10.0	8.6	1.6	17.1
A-levels (N=70,112)	7.4	36.0	36.6	8.1	4.1	0.8	7.0

Source: Universities Statistical Record

9.2 These findings accord with the experience of admissions tutors:

BTECs are a bit skewed to the lower side compared with the A-level entrants. But I know we have had BTEC applicants who have got 'firsts', but I think overall they have tended to be 2.2s or 3rds.

(Mech Eng, Univ)

BTECs are erratic. If someone flunks out very badly, there's a better chance that they're going to be a BTEC entry rather than an A-level entry – but you can't tell what a student is going to be like in terms of ability when they actually arrive, so they're risky. Some of the best students have been BTEC and some of the biggest disasters have also been BTEC, so in that sense it's a bit awkward.

(Bus Stud, Univ)

9.3 The difference in performance between BTEC and A-level entrants emerges across all eight subjects selected for study (Tables 9.2), and for both sexes, though it is less marked for female students (Table 9.3). Admissions tutors frequently told us that entrants on vocational qualifications were at an early advantage in terms of their knowledge of industry and ability to apply their subjects, but Table 9.4 shows that again on sandwich courses the degree exam performance of the A-level entrants was better. In our detailed study of four institutions we were able to compare the project marks of the two types of entrant in some subjects, and, even here, the A-level entrants tended to score higher.

Table 9.2: Degree Results for Selected Subjects by Entry Qualification

Course	Degree Class					Fail	Drop out
	1	2i	2ii	3	Other		
Biology							
VQ (N=245)	6.9	35.9	33.1	8.2	2.9	0.8	12.2
AL (N=7850)	6.3	40.4	36.6	6.8	2.1	0.5	7.3
Building Studies							
VQ (N=286)	3.1	21.7	43.4	6.3	5.6	1.4	18.5
AL (N=783)	6.3	33.7	37.4	6.3	4.0	0.6	11.7
Bus & Management Studies							
VQ (N=423)	3.3	29.1	40.4	5.7	6.9	0.7	13.9
AL (N=5480)	4.0	39.0	42.2	4.5	3.0	0.7	6.6
Chemistry							
VQ (N=373)	12.6	22.0	29.5	13.7	8.0	0.8	13.4
AL (N=12,210)	13.3	298.0	26.9	15.5	5.2	1.1	9.0
Computer Studies							
VQ (N=282)	7.8	20.9	20.9	8.5	9.6	0.4	31.9
AL (N=6588)	8.6	28.2	32.0	14.3	6.0	1.3	9.6
English							
VQ (N=36)	5.5	36.1	38.9	2.8	5.5	0	11.1
AL (N=14,793)	6.3	40.0	39.5	3.7	4.9	0.3	5.2
Law							
VQ (N=336)	2.4	26.8	37.8	6.8	12.2	1.8	12.2
AL (N=15,301)	4.0	42.2	43.6	3.9	1.8	0.4	4.0
Mechanical Engineering							
VQ (N=1390)	7.3	21.4	28.1	12.7	9.9	2.5	18.1
AL (N=7107)	9.4	26.2	32.2	5.2	6.8	1.9	10.7

Table 9.3: Degree Results by Gender

	Degree Class					Fail	Drop out
	1	2i	2ii	3	Other		
Males							
VQ (N=2,703)	6.7	23.2	31.3	10.6	8.9	1.8	17.5
AL (N=42,860)	8.5	33.5	34.5	9.9	4.8	1.1	7.7
Females							
VQ (N=668)	6.0	28.1	34.3	7.8	7.2	0.9	15.7
AL (N=27,262)	5.7	39.9	40.0	5.3	3.0	0.3	5.8

9.4 The results presented have been for universities. It would have been extremely interesting to see if the pattern held also in polytechnics, which admit more BTEC students and are more explicitly vocational in their goals. Unfortunately, although the data were sought (with even the offer of going to pick them up by hand), the only results the CNA A Database (at Brighton at the time) was able to supply us with were for those graduating in 1984, and then only for men, with

no information on 'fail' or 'drop-out' (which in polytechnics tended to be higher).

Table 9.4: Degree Results on Sandwich and Full-Time Courses

	Degree Class					Fail	Drop out
	1	2i	2ii	3	Other		
Sandwich							
VQ (N=667)	5.1	25.9	36.6	8.2	4.2	0.6	19.3
AL (N=5086)	8.5	36.6	33.6	7.7	3.6	0.5	9.4
Full-Time							
VQ (N=2,704)	6.9	23.7	30.8	10.5	9.7	1.8	16.6
AL (N=65,026)	7.3	35.9	36.9	8.2	4.1	0.8	6.8

- 9.5 The data of Table 9.5 although superficially similar are therefore not strictly comparable. The high proportion of the vocationally-qualified obtaining Ordinary degrees ('other') could have been because they were on Ordinary courses rather than because of poor performance on an Honours course. When 'other degrees' are taken out of Table 9.6, the vocationally-qualified in polytechnics tend to obtain higher proportions of both 'firsts' (6.3 against 3.6 per cent) and 'thirds' (15.3 against 10.9 per cent). But these are data only for one year in the mid-eighties and are restricted in other ways so they need confirming.

Table 9.5: Performance on Selected CNA A Degree Courses, 1984 (Males Only)

	Degree Class				
	1	2i	2ii	3	Other
Vocational Qualifications (N=505)	4.4	21.4	32.3	10.5	31.4
A-levels (N=2,393)	3.0	24.7	47.4	9.2	15.7

Source: CNA A

- 9.6 They are supported, however, by our interviews with admissions tutors:

Some BTEC people miss the traditional educational net and are very good indeed. But there's a big tail at the other end who may struggle on degree courses. The centre is under-represented.

(Comp Sci, Poly)

- 9.7 From the academic records of four institutions, two universities and two polytechnics (none in Manchester), of entrants for the years 1979-84 expected to graduate three or four years later, we were able to look in detail at the relationship between A-level score and degree performance. Contrary to some of the rhetoric, when A-level scores are grouped into those equivalent to three Bs or above, three Ds or below, and those in between, quite a strong relationship emerges, with. As Table 9.6 shows, those with the better A-levels generally getting the better degrees. Moreover, only about one per cent of the high scorers failed to complete compared to 13.4 per cent of the low scorers

Table 9.6: Degree Class by Entry Qualification

	Degree Class					Wastage ¹
	1	2i	2ii	3	Other	
A-levels						
High Score (N=739)	10.7	46.0	34.9	6.6	0.7	1.1
Medium (N=1744)	4.3	32.9	48.3	9.4	2.8	2.3
Low Score (N=755)	3.0	24.6	38.5	11.1	9.3	13.4
VQs (N=651)	6.9	23.7	29.6	6.9	10.6	22.3

Source: Academic records of four institutions, two universities and two polytechnics, for entrants for years 1979-84.

- 9.8 We have obtained a similar result in another study across higher education institutions (Robinson and Smithers, 1991), and have suggested that the talking down of the relationship between A-levels and degree performance comes from the inappropriate use of the correlation coefficient (Smithers and Robinson 1989). A very thin slice of the ability range (those passing two or more A-levels) is compared with an even thinner slice (those graduating), whereas the correlation coefficient is only meaningful if the full extent of a variable can be expressed. It would, in fact, be surprising if there were no relationship between A-levels and degree examinations given that they tend to be two of a kind. (Though it is sometimes maintained they are not and, moreover, the individuals taking the exams are at least three years older and possibly wiser).
- 9.9 In terms of the proportion of 'firsts', those with vocational qualifications come somewhere between those with 'good' and 'medium' A-levels, but for the other classes they are rather below those with poor A-level scores. This bears out what the admissions tutors were saying about a bimodal distribution.
- 9.10 Overall students entering on vocational qualifications tend to do less well than the A-level entrants. Perhaps this is not surprising if we consider how it is that the students came to be entering by this route in the first place. Usually they had left school at 16 and obtained their qualifications in FE. They had left school either because they did not like it or because they were not very good at it. (Admissions tutors often looked back to O levels to try to work out which.) We can speculate that success on their vocational courses had encouraged them to take degrees, but having battled their way through the admissions procedures, judging by the high drop-out rates, some were dismayed to find that they were back in the academic environment that they had rejected at 16.
- 9.11 The modes of teaching and examining on vocational courses tend to be very different from those in universities. The apparent failure of the vocationally-qualified students could therefore, in fact, be the failure of the higher education system to respond adequately to them. It may be that we need better methods of tuition, more appropriate ways of identifying and assessing talent and different goals for at least some of our institutions of higher education.

X. Issues

- 10.1 Vocational qualifications are increasingly being seen as the answer to the considerable loss of talent from the English educational system. They are prominent in the proposals of both main political parties which have expressed the hope that ‘parity of esteem’ will be achieved with academic qualifications. But this would involve a major culture change.

The Second Route

- 10.2 The present findings demonstrate that although vocational qualifications are emerging as an alternative to A-levels, with a doubling of the numbers on the BTEC National Diploma in the six years to 1989, they are clearly ‘the second route’. Students passing five or more GCSEs at A-C, tend to stay on at school to study for A-levels, while the best of the rest, those with 1-4 GCSEs at A-C or five or more at D-G, if they don’t try again at school, tend to go on to FE to take vocational qualifications.
- 10.3 Success at GCSE is not the only factor in choice post-16. We have seen that some young people prefer to train for vocational qualifications because they regard them as more useful, and others associate school with being a child and believe they will be treated more as adults in FE. Pupils from 11-16 schools, who necessarily have to choose somewhere else at age 16, are more likely to go on to FE than those in 11-18 schools.
- 10.4 Nevertheless there is a long history of vocational qualifications being a second choice and we would ask in the new arrangements proposed for education post-16 and possibly post-14:

Is it intended that vocational qualifications should be taken by students across the whole ability spectrum from the most to the least academically able?

If so,

How are vocational qualifications to be made attractive to the whole ability range?

If not,

How is equivalence of status for vocational qualifications to be achieved?

- 10.5 Our own view is that talk of ‘parity of esteem’ fudges the issue: vocational qualifications should stand or fall on their own merits. A-levels are taken by the most academically able students at present because they open the door to higher education and subsequent employment opportunities. If the vocational courses that are to be created mean something and lead somewhere then young people will want to take them and their status is assured. If, however, vocational qualifications are seen merely as a way of boosting staying-on rates so that these look more respectable in international terms, and of occupying those that cannot

do A-levels, then no amount of rhetoric will give them equivalence. More important than their standing vis-a-vis A-levels is whether or not they are needed, and they clearly are: both in terms of enabling young people to fulfil themselves and of improving the quality of life through better workmanship.

Vocational Qualifications

- 10.6 There is a great variety of vocational qualifications with hundreds of different awards. The National Council for Vocational Qualifications was established in 1986 as an accrediting body to bring some order and create a framework. It has adopted a distinctive approach, placing the emphasis on the development of specific competencies defined by lead-bodies of employers and closely work-related. This has resulted in a somewhat uneasy relationship with the Business and Technician Education Council which has not only established a clear identity in its own right but also places more weight on general education. Adapting its awards to fit the NCVQ framework would mean considerable revision of its courses. For the NCVQ's part it has the problem of securing its position as separate from, and superordinate to, BTEC and getting across the full range of awards that it accredits.
- 10.7 The future would seem to lie with NCVQ in that it is able to grant or withhold recognition, but the proposal for vocational qualifications in schools may give the upper hand to the more general BTEC-type awards. This raises in acute form:

How specific or general should vocational qualifications be?

If they are too specific there is the danger that they will be too closely tied to the here-and-now and obsolescent technologies, if too general that they will not give the mastery that will empower people and give them marketable skills.

Ladders of Achievement

- 10.8 A related problem is whether a particular qualification is primarily intended to be an end in itself or to identify potential for progression to further education or higher education:

What is the appropriate balance between signifying work-related competence and identifying potential for progression?

- 10.9 At present, our survey suggests that vocational courses are mainly seen, by those taking them, as a means to a qualification and of improving job prospects. Those looking towards further study tended to be mainly thinking of a higher award in FE, or less frequently, a degree at polytechnic. The desire to take a degree was related to its perceived importance in career terms.
- 10.10 Vocational qualifications in schools are likely to be less job-related This raises the question:

Are the new general vocational qualifications intended to lead mainly to employment or to create a broader pathway into higher education?

A broader pathway into HE might help to improve the supply of graduate engineers and technologists. Elsewhere (Smithers, 1990), we have shown that if 'engineering and technology' seeks to recruit solely from among those with maths and physics at A-level then it is looking for about half of all the available output in the UK against stiff competition from fields such as medicine, the sciences and maths themselves, and other subjects like architecture, economics and business studies. A vocational route could substantially increase the pool of available entrants.

- 10.11 But a vocational ladder is not without its problems. As it develops, it is likely that more workers at the craft and technician levels would seek to take degrees. Employers tend to be somewhat ambivalent about this:

Many industrial companies in this area said that they were loath to release the higher technician type person to come on a degree course because they said he would be over-qualified in terms of the academic level.

(Mech Eng, Poly)

- 10.12 Although the UK is short of graduate engineers and technologists, it is even further behind its industrial competitors at the support levels (Prais, 1988) The Engineering Industry Training Board in its Industry Profile (1989) cites projections from the University of Warwick's Institute for Employment Research suggesting that the current output of technicians will not be sufficient to meet demand, especially given the already high wastage rates. There is the danger that greater ease of progression to higher education will tend to denude the technician grades even further. This raises the question:

How is the structure of vocational qualifications to deliver appropriate numbers at the different levels?

- 10.13 The NVQ framework does appear to offer the opportunity of progress by performance so that credit for what is passed can be banked towards a qualification which itself may be used as the stepping off point for the next stage. Young people should therefore be able to progress as far and as fast as their abilities will carry them. But it will work successfully from the country's point of view only if sufficient young people can be brought through to occupy the craft and technician levels. Alternatively, we may have to come to revise our view of the support levels and see them increasingly as a temporary phase on the way to graduate status.

Progress to HE

- 10.14 If vocational qualifications are to form an equivalent interlocking pathway with academic qualifications, then it is logical that they too should lead to higher education, especially where full professional status depends on a degree. The government has asked NCVQ to extend its NVQ ladder beyond Level 4 (the equivalent of Higher National awards) to take in degrees and professional qualifications.

10.15 The present study shows that the proportion of students entering higher education on the basis of vocational qualifications is still small but is steadily increasing. In 1989, it had reached 4.4 per cent of university and 10.5 per cent of polytechnic admissions. In universities, the proportion accepted has been consistently below that applying, but in polytechnics it has been consistently higher. In other words, compared to those offering A-levels, vocationally-qualified applicants had a less than even chance of being admitted to universities and a better than even chance of getting into a polytechnic. This may be because competition to get into universities is more severe or that vocational qualifications are more in tune with the goals of polytechnics.

Admissions Tutors

10.16 Admissions tutors are the gatekeepers of higher education. Although their task may differ somewhat depending on how popular their department is – rationing scarce places or seeking to fill those available – they occupy a key role for the life chances of applicants and the health of higher education. It is surprising therefore to find, as we did in Chapter VI, how little regarded the role is and how the occupants tend to have it thrust upon them. Being an admissions tutor seems to do little for one’s career prospects, especially in the universities. As the pool of potential applicants and the variety of eligible entry qualifications increases, the role is likely to become even more demanding. One wonders therefore:

What can be done to make the role of admissions tutor more attractive?

Should the key role of admissions tutor be more explicitly recognised in better training, more incentives and improved career prospects?

10.17 The admissions tutors in our study reported three difficulties with vocational qualifications as they are now as a basis for entering higher education – lack of information, variability in standards, and deficiencies in content.

10.18 The admissions tutors felt that they were generally under-informed about vocational awards and, echoing Kenneth Baker when he was Secretary of State for Education and Science, wished they could have more memorable titles. ‘Technical baccalaureate’ does sound more attractive than NVQ3, and labelling NVQ4 as ‘associate degree’ would help to resolve the ambiguity which now surrounds Higher National awards. Are they, or are they not, to be regarded as higher education? Higher National courses might find it much easier to recruit if they were not classified as ‘sub-degrees’. Two issues would then appear to arise:

How can admissions tutors become better informed about vocational qualifications?

How can NVQs be made more memorable and attractive-sounding; what should their titles be?

10.19 Another aspect of not knowing enough about vocational qualifications for the admissions tutors was the variability in content and standards they detected in

apparently the same course between different FE colleges. This led them to treat each vocational applicant on an ad hominem basis, usually involving an interview, unlike the A-level applicants who were screened on predicted grades. The admissions tutors felt that they needed fuller information on each applicant (the National Record of Vocational Achievement should help here) and more guidance on how to interpret what an award actually meant. The comments of the admissions tutors lead us to ask:

How is the comparability of standards of vocational qualifications to be ensured given the variability noted between colleges and that so much is likely to rest on individual assessment in the work place?

- 10.20 A third problem which admissions tutors experienced was that the BTEC and other vocational qualifications were found often to be poor preparation for degree studies (which, of course, they are not primarily intended to be) They drew attention to a number of deficiencies, particularly with regard to the maths content. This takes us back to the question:

To what extent are vocational qualifications intended to be about work-related competence and to what extent a preparation for further study?

- 10.21 Admissions tutors were particularly stringent when a student was interested in being admitted straight to the second-year of a degree course on the basis of a Higher National award, and although, in theory, it is possible, they generally tended to advise against it. The exception was in polytechnics where degrees and HNDs are taught alongside each other and sometimes together, with transfer in both directions. If the status of Level 4 awards could be resolved this would seem to point to a much more flexible form of higher education:

Are Higher National awards, or NVQ4s, to be regarded primarily as further or higher education, and what can be done to establish their status?

- 10.22 An aim for increasing the flow of the vocationally-qualified into HE is to widen access. Vocational qualifications do extend entry up to a point: they bring in more young people from skilled manual backgrounds (social class IIIIM), somewhat older students, but, in view of the subjects involved, tend to swing the sex ratio back towards men. But entry by vocational qualifications does little to increase admissions from social classes IV and V which are still severely under-represented.

- 10.23 However, as we have argued elsewhere (Smithers and Robinson, 1989), we think the issue less one of uniform representation by social groups than of putting in place a further and higher education system to give everyone a chance to fully develop their talents to the good of society and, a not unimportant corollary, provide the incentives to make it attractive to do so. A properly developed system of qualifications would define the channels. It is sometimes assumed that widening access is of itself 'a good thing', but it has to be asked

What are the specific purposes of widening access?

More graduates of any kind may not be the answer, and mass higher education must surely have regard to the kinds and levels of achievement.

Failure of Students or Failure of HE

- 10.24 Some vocational entrants to higher education do outstandingly well, but the general run is below that of A-level entrants. This may be because they are less able (a number after all did not do very well in school exams and that was how they got on to the vocational route in the first place), or because of the different modes of learning and assessment in HE, particularly in the universities. Behind this lies the question:

How relevant are examination achievements to life?

Those who do well in A-levels tend to do well in degree examinations since they are essentially two of a kind. But how much do either have to do with the outside world, and is it important that they should? The time may have come, especially as we are seeking to develop alternative pathways, to ask:

Are the achievements that currently constitute higher education really the most appropriate ones for fulfilling individuals and serving society?

- 10.25 It is likely that expansion of the vocational route into higher education will need different methods of teaching and assessment. Part-time HE is likely to come more to the fore, because as we saw in Chapter III, full-time and part-time studies post-16 open up as separate channels in which the participants, by and large, wish to remain. But, more fundamentally, it is likely that the goals of at least some of our institutions of higher education will have to be reappraised.

Prospects

- 10.26 In trying to draw out the issues in relation to the vocational route into higher education, we have adopted the accepted distinction between 'the academic' and 'the vocational'. But as you seek to define these categories, they tend to recede before you. Much of what is regarded as 'academic' is, in fact, vocational, law, medicine and engineering for example; and what is explicitly vocational may in fact be the basis of a general education, a BTEC award in science for example. When the label 'academic' is applied, it usually refers to what in the past has been taught in schools and universities and comes under the examination boards. 'Vocational', on the other hand, is what has been mainly taught in FE and is examined by bodies like BTEC, the Royal Society of Arts, or City and Guilds.
- 10.27 There may be less of a difference than is commonly supposed, and if the National Council for Vocational Qualifications and the examination boards work closely together it should be possible to devise an interlocking system of qualifications which, in time, will bridge what increasingly seems an arbitrary divide.

- 10.28 The issue is less one of ‘the academic’ and ‘the vocational’ than of the narrowness of the range of talents that the educational system currently recognises. The system of qualifications, as it is now, does not do enough to identify and reward those who can do things, make things, or who are good with people. But reducing the waste of talent is now firmly on the agenda of all political parties.
- 10.29 There is, however, another crucial weakness in the English educational system which is that it runs on failure, maintaining high standards through the relatively low effective pass rates at GCSE and A-level. The challenge that remains is to devise a system that runs on success. ‘Progress by performance’ could be the answer here so that qualifications are obtained by successfully completing a graded series of tests, as in music, instead of everything depending on a final high hurdle. The National Council for Vocational Qualifications has already adopted such a model and it will be for the examination boards to see if GCSE and A-level can be similarly structured.
- 10.30 The value of vocational qualifications will ultimately depend on what they mean in terms of life chances. Any system of awards which emerges must be clearly articulated with education and employment opportunities. That is the real concern, not ‘parity of esteem’; what doors will the new qualifications open, what will be the tangible advantages of holding them? An appropriate system of qualifications is essential both to empower people and improve the quality of life for us all.

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