EXPANDING HIGHER EDUCATION IN THE U.K: FROM 'SYSTEM SLOWDOWN' TO 'SYSTEM ACCELERATION'.

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Abstract

This paper sets out to explore the implications of current patterns of participation and attainment, particularly among 16-19 year olds, for the further expansion of higher education in the UK. It uses a range of recent statistics on participation and attainment to describe what is termed 'system slowdown'. It then goes on to explore a basis for 'system acceleration' through the development of five possible routes into higher education both for 16-19 year olds and for adults. We conclude the paper by looking briefly at a number of inter-related strategies the Government could adopt to encourage 'system acceleration'. We suggest that unless the Government is prepared to consider policy changes of this type, it is unlikely to reach the higher education participation target it has set itself and may also jeopardise the basis for a sustainable lifelong learning system for the 21st century.

Introduction

Recent research in the UK suggests that participation in higher education secures national economic benefits, improves personal economic life-chances and spreads wider social benefits (Bynner & Egerton 1999). In the light of these types of benefits from increased participation in higher education, the current Labour Government in this country actively supports the further expansion of higher education and the Prime Minister has said that he would like to see 50 per cent of young learners - those under 30 years of age - participating in higher education (DfEE 1999a).[1] More recently the Chancellor of the Exchequer, Gordon Brown, has indicated that to reach such a target might take a decade (Brown 1999); a position which he confirmed in his Budget statement to the House of Commons this summer (Brown 2000).

The current level of higher education participation for this age group is estimated to be 41 per cent (DfEE 1999a). To reach the new target would, therefore, require a substantial increase in higher education participation over the next ten years. It will require a growth in participation which has not been seen since the late 1980s and early 1990s when rises in 16-18 participation and attainment fuelled a rapid increase in higher education participation. During the mid to late 1990s, however, participation and attainment rates for 16-18 year olds have slowed and, in some cases, plateaued. A similar trend now also appears to be taking place in higher education participation rates for 18-21 year olds (UCAS 1999).

[1] Statistics for higher education participation relate to the UK, hence the scope of the title of the article. However, statistics related to 16-19 participation and achievement relate to England and Wales or, in some cases, to England only. Sources listed in the References will provide specific details of scope.

In its economic forecasting publication (DfEE 1999b), the Government outlined its plans to fund more higher education places in the period up to 2001. However, less has been said about how the supply of students will be generated to underpin this expansion. If the new higher education target is to be met, without compromising entry standards, there will be a need to address the slow down in participation of 16-19 year olds and to stimulate demand for higher education places from older learners.

This paper suggests that achieving these aims will mean more than simply increasing the supply of higher education places and diversifying the nature of higher education provision. It will require a more strategic range of both education and labour market policies to support the development of a more effective and connective mixed education and training system for the 21st century.

Historical trends in participation and achievement - the problem of 'system slowdown'

Statistics on participation and attainment among 16-19 year olds suggest that the post-compulsory education and training system in the UK has, over the last five years, moved into a distinctive new phase which we term 'system slowdown'. This describes a situation in which there is little or no growth in many of the major participation and attainment indicators for 16-19 year old.

This period of system slowdown started in 1994 with the peaking of participation rates in full-time education at 16, following several years of strong growth. In the years since, this plateauing trend has moved to full-time participation rates at 17 and 18 years and more recently to higher education participation rates and to participation and qualification completion rates in the work-based route. The phenomenon also affects attainment rates in 16-19 qualifications, though to a lesser extent. The historical significance of this current trend can best be understood when compared with earlier phases of participation and attainment in the mid-1980s and the early 1990s.

Phase 1: A low participation system (1983-1987)

After rises in all forms of education and training of 16-19 year olds in the late 1970s and early 1980s, as a result of the shrinking of the youth labour market, both part-time and full-time participation rates began to peak in the mid-1980s. Finegold & Soskice (1988) reflected on the 'plateauing period' of the mid-1980s when developing their seminal 'low skills equilibrium' thesis which described an inter-locking set of system factors that resulted in low levels of education and training outputs in the UK. The education and training system at this time was also described as a 'low participation' system (Raffe 1992). The major features of this low skills and low participation system were low rates of participation in full-time education at 16+ (below 50 per cent) compared with other OECD countries (OECD 1996); relatively high levels of participation (25 per cent) in unemployment related work-based training, such as the Youth Training Scheme (YTS) and static attainment rates in the 16-19 age group (Spours 1995).

Phase 2: Emergence of a 'full-time' education and training system (1987-1994)

The post-16 education and training system broke out of this static pattern in the late 1980s due to the convergence of a range of factors, the most influential of which was the implementation of the GCSE examination (Gray *et al.* 1993, Payne 1999). In the period 1987-1994, staying-on rates in full-time education at 16 rose from 49 per cent to 72 per cent (DfEE 1999c). A similar dramatic rise took place in the attainment rates at GCSE and A Level, though at about half the rate of participation growth (Spours 1995). As Figure 1 shows, higher education participation tracked this trend with the doubling of participation in higher education amongst the 18-21 year old age - from about 15 per cent to over 30 per cent (NCIHE 1997). During the period in which the post-16 education and training system moved decisively in the direction of full-time participation, there was a rapid decline in the numbers of 16-19 year olds directly entering the youth labour - from about 20 per cent to under 10 per cent (Steedman and Green 1997).

Phase 3: Post-16 education and training system slowdown (1995 - present)

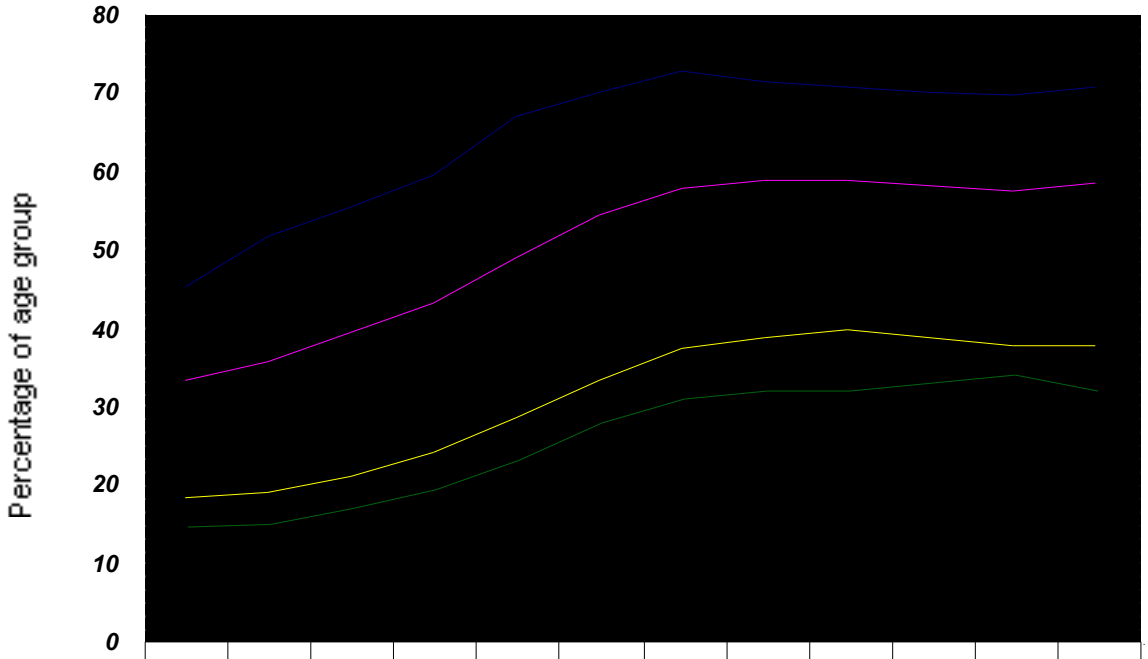
By 1995, rapid rises in participation in full-time education among 16-19 year olds began to plateau out, although at a higher level than in the mid-1980s. We will argue that this phase can be described as 'system slowdown', due to the fact that the plateauing phenomenon which started in the mid-1990s is now, to varying degrees, affecting participation and attainment indicators across all aspects of education and training related to the 16-19 age group. This slowdown trend includes the plateauing of participation in full-time education at 16, 17 and 18; the slowing of growth in attainment at GCSE and A Level; the stubborn persistence of low successful completion rates in broad vocational qualifications, such as GNVQ; the slowing of growth in Modern Apprenticeships, together with unexpectedly poor completion rates and, very recently, the plateauing of participation by 18 to 21 year olds in higher education. Before going on to look at the necessary conditions for a phase of 'system acceleration', it is important to examine more closely the dynamics of 'system slowdown', in order to evaluate its potential impact on future education and training policy.

Dimensions of system slowdown

Participation in full-time education by 16-19 year olds

As Figure 1 shows, participation rates in full-time education at 16, 17 and 18 years have plateaued in the mid-late 1990s. This trend first started at 16+ in 1994 and then spread to 17+ and 18+ by 1996. The 17+ full-time participation trend is particularly significant because it is an important indication of those taking two-year advanced level qualifications and who are thus eligible to enter higher education.

Figure 1: Participation in full-time education by 16-21year olds



	87/8	88/9	89/90	90/1	91/2	92/3	93/4	94/5	95/6	96/7	97/8	98/9
16 years	45.1	51.5	55	59.3	66.6	69.9	72.4	71	70.4	69.7	69.3	70.5
17 years	33.1	35.5	39.2	42.8	48.8	54.1	57.5	58.7	58.4	57.9	57.2	58.2
18 years	17.9	18.7	20.9	23.7	28.3	33.1	37	38.5	39.4	38.4	37.6	37.3
Under 21 - HE	14.6	15.1	17.1	19.3	23.3	27.8	31	32	32	33	34	32

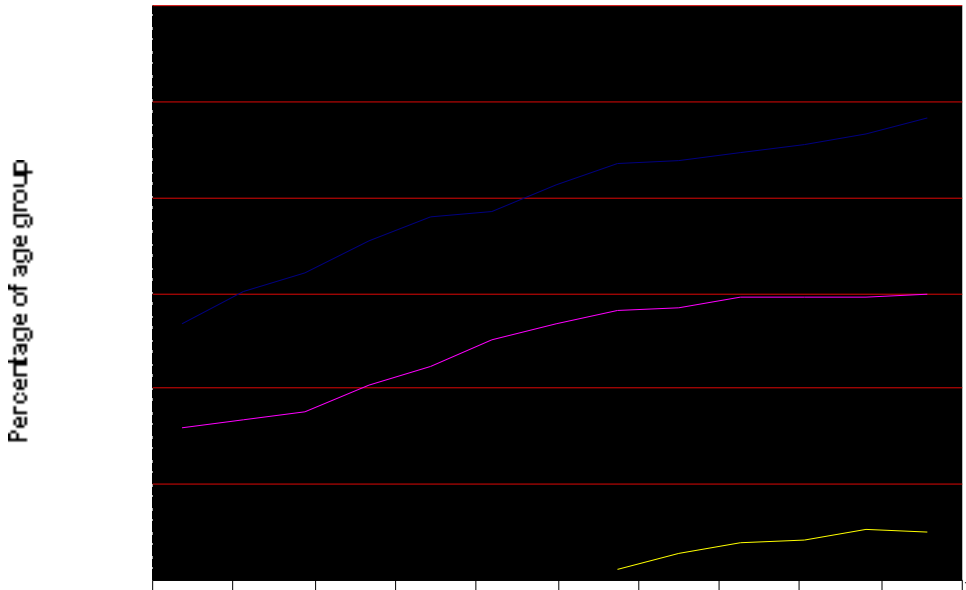
Source: DfEE (1999c) Statistical Release SFR13/1999

Recent data suggest that there has been a modest revival of participation in full-time education at 16 and 17 years with an increase of about one per cent in 1998/9 (DfEE 1999c). Furthermore, the DfEE has projected that between 1998 and 2001, participation in full-time education at 16 will rise by four percentage points and by five points at 17+ as a result of the impact of the Government's widening participation measures (DfEE 1999b). However, small rises in 16+ and 17+ participation as a result of widening participation measures are unlikely significantly to affect the higher education participation rate in the near future because students entering the system are likely to be on Level 2 rather than on Level 3 courses. Moreover, progression rates of learners taking post-16 Level 2 qualifications and subsequently entering Level 3 courses have been found to be as low as 10 per cent (Ainley *et al.* 1999). Some encouragement, nevertheless, can be taken from an underlying drift towards participation leading to Level 3 qualifications during the late-1990s, but this is on a much more modest scale than in the late 1980s.

Attainment of qualifications by 16-19 year olds

The pattern of growth in qualifications attainment, which supports progression in the general education route through to advanced level and higher education, broadly follows the pattern of participation in full-time education. As Figure 2 demonstrates, attainment of five or more GCSE A*-C grades has, in the mid to late 1990s, grown at under half of the annual rate by which it increased in the late 1980s and early 1990s. This decelerating trend has been even more pronounced at A Level, where there has not been any significant increase in the proportion of the cohort achieving two or more A Levels over the last five years.

Figure 2: Proportion of cohort attaining 5 GCSEs A-C grades, 2 or more A Levels or an Advanced GNVQ*



	86/7	87/8	89/90	90/1	91/2	93/4	94/5	95/6	96/7	98/9
5 A-Cs	26.4	29.9	35.2	37.8	38.3	43.3	43.4	44.5	45.1	47.9
2 or more A Levels	15.7	16.6	20.2	22	24.8	28	28.1	29.4	29.2	29.6
Advanced GNVQ						0.8	2.4	3.7	4	4.7

Source: DfEE (1999d) First Statistical Release SFR 35/1999 and DfEE Statistical Service

Attainment outputs from broad vocational advanced level qualifications have also failed to increase over the recent period. While participation in Advanced GNVQ for 16-19 year olds has grown steadily during the l990s (from five per cent to about 8.5 per cent of the cohort), its effect on overall attainment levels has been compromised by very poor successful completion rates. These have remained firmly depressed at 50 per cent during the mid-to-late 1990s, though by 1999 they had risen to 58 per cent (JCGAB 1999). Nevertheless, despite the recent improvement in the effectiveness of the award, the overall impact of Advanced GNVQs on participation rates in higher education remains limited. UCAS statistics on university applications suggest that applicants holding Advanced GNVQ awards contribute about seven per cent annually to higher education participation figures (UCAS 1999).

Successful completion rates in other technical and vocational advanced level qualifications such as BTEC National Diploma are better (Spours 1995), but the proportion of 16-19 year olds taking these qualifications has declined during the mid to late 1990s due to the growth of Advanced GNVQs. BTEC National and its equivalent Scottish qualifications contribute about five per cent to higher education participation in England and Wales (UCAS 1999). The only significant advance in vocational attainment has been in the award of NVQ Level 3 qualifications - up from 56,000 in 1995 to 112,000 in 1998 (DfEE 1999b). However, NVQs are qualifications used in work-based training and do not currently offer access to higher education.

If, however, the potential outputs of all vocational qualifications at Level 3 are totalled together, they represent a sizeable block. Vocational qualifications at Level 3 do not fulfil their potential for access to higher education in a number of respects. In addition to the problem of successful completion, at present NVQs are not broad enough to satisfy higher education entry requirements and those vocational qualifications that do offer access to higher education are relatively invisible, because they are divided into different types, each of which is recognised by only small groups of specialist admissions tutors. It is possible that the position will change from 2002 because of the introduction of the *Qualifying for Success* reforms (DfEE 1997). We will return to this point later in the paper.

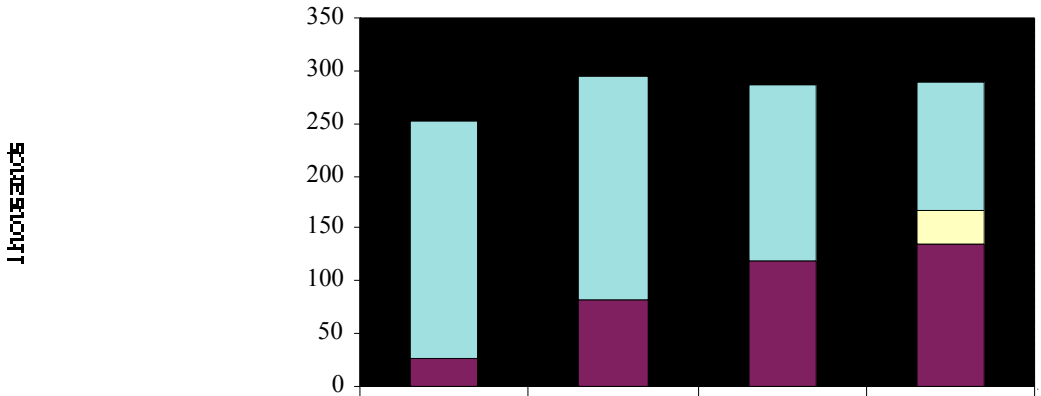
The work-based route

When assessing the performance of the education and training system as a whole, it is important to take into consideration recent participation trends in the work-based route, that is work-based programmes for 16-19 year olds. Since 1995, and the inception of Modern Apprenticeships (MAs), there has been a concerted attempt by both the previous and present governments to increase the effectiveness and outputs of work-based training. Measures include the introduction of MAs with opportunities to qualify to Level 3, National Traineeships with qualification up to Level 2 and, more recently, the 'Right to Learn' initiative for those in work but not in recognised training programmes and who wish to achieve a Level 2 qualification.

Recent statistics suggest, however, that the plateauing trend affecting participation in full-time education in the mid-1990s, may be spreading to the work-based route in the late 1990s (DfEE 1999e). Overall, participation in work-based training has ceased to grow over the last three years (see Figure 3), though the quality of its internal composition continues to improve. Participation in programmes leading to recognised qualifications at Levels 2 and 3 have increased whilst other forms of training, such as Youth Training (YT), have declined sharply (see Figure 4). However, the number of young people starting MAs has, during the last year, begun to peak. Moreover, qualifications completion rates in MAs are a cause for concern. In 1998/9, 55 per cent of Modern Apprentices gained a full qualification but only 35 per cent gained a full Level 3 qualification (DfEE 1999e). While these outputs are an improvement on YT they are, nevertheless, disappointing given that one of the main aim of MAs was to qualify young people in the work-based route at Level 3.

These figures suggest that the work-based route may be reaching its capacity under current policy conditions and they provide the rationale for the Government embarking on measures to improve the situation (DfEE 1999f). This situation also calls into question the potential success of policies advocating a rapid growth of the apprenticeship system to try to emulate the fabled German Dual System (Steedman 1998).

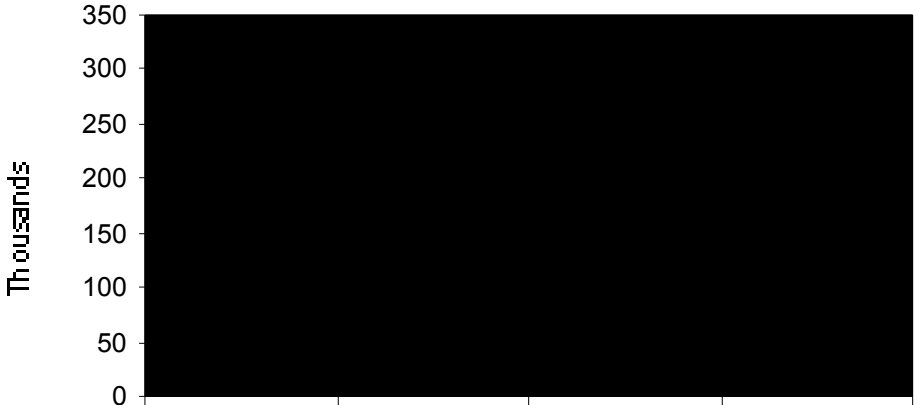
Figure 3: Participation of 16-19 year olds in work-based training



	95/6	96/7	97/8	98/9
Other Training	224.2	212.7	166	121.3
National Traineeships			0.9	31.7
Modern Apprenticeships	27.8	81.9	118.8	135.7

Source: DfEE (1999e) SFR 46/99

Figure 4: 16-19 year olds starting on the work-based route



	95/6	96/7	97/8	98/9
Other Training	268.1	257.3	199.6	131.5
NTs			0.9	41.9
MAs	28.4	75.6	87.7	87.4

Source: DfEE (1999e) SFR 46/99

The youth labour market and changing patterns of participation

Despite major changes in the youth labour market since the mid-1970s, notably a rapid decline in full-time jobs for school-leavers, high levels of economic activity among 16-19 year olds remain a distinctive characteristic of the English labour market (Employment Department 1995). Moreover, after several years of rapidly declining entry to the youth labour market by 16 year olds in the late 1980s and early 1990s, there has recently been a slight rise in the numbers of 16 year olds moving directly from school into full-time jobs (DfEE 1999c).

More potentially far-reaching changes, however, have been taking place within the casualised and part-time youth labour market. The Government's Labour Force Survey indicates a steady increase in economic activity among 16 and 17 year olds in full-time education. The official figure of those working rose from 25 to 31 per cent between 1992 and 1997 (DfEE 1998). Recent local research, however, suggests that the proportion of 17 and 18 year olds in full-time education but also working part-time could, in fact, be as high as 75 to 80 per cent (FEDA 1999, Hodgson & Spours 2000a). Many young people involved in full-time education are also working long hours and have patterns of work potentially disruptive to their studies. Current research suggests that working more than 10 hours part-time may adversely affect the achievement of A Level grades (Howard 1998, ALIS 1999). Local studies suggest that upward of 30 per cent of the A Level and Advanced GNVQ population who are working may be in this position (FEDA 1999, Hodgson & Spours 2000a). A Level or GNVQ grades are a determinant of whether a young person wishes or is able to enter higher education and high hours of part-time work may therefore be deterring a section of young people from actively considering the higher education option.

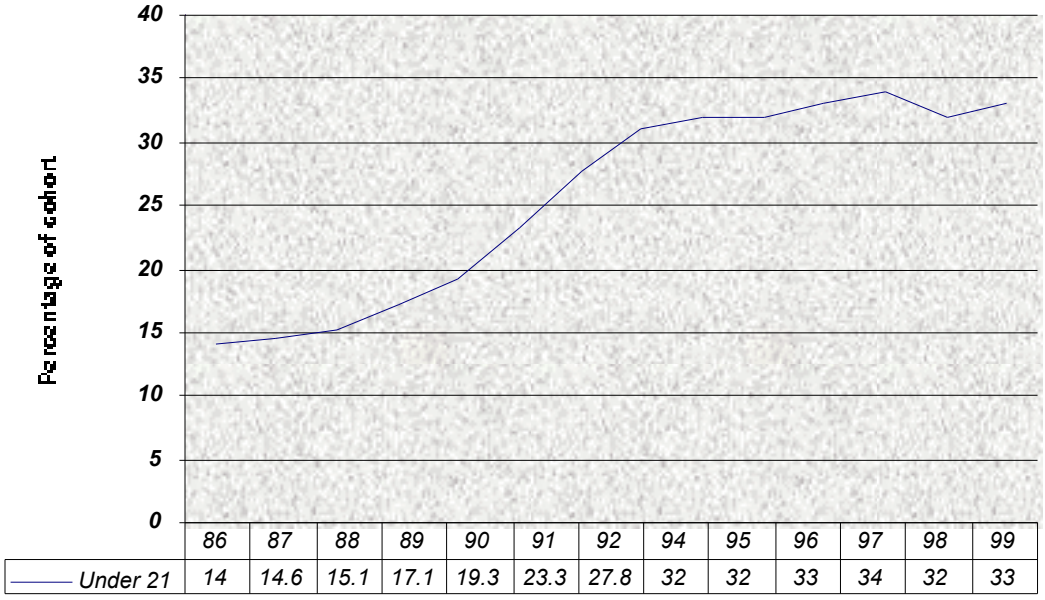
These trends suggest that there may be a relationship between a youth labour market which is no longer declining and is changing internally and the plateauing of the participation rate in full-time education at 16, 17 and 18. We would speculate that within a plateauing context, relatively small movements in labour market trends can have an important effect on the 'culture of participation'. By this, we refer to the way that young people and their parents make decisions about participation in education and training. We suggest later that these kinds of marginal labour market trends, together with issues such as fees in higher education, might disproportionately affect the 'fragile' or 'wavering' stayers-on who come from family backgrounds where it has not been the tradition to continue in full-time education after the age of 16.

The relationship between the labour market and participation in education and training is a complex and evolving one. Our research in South Gloucestershire on patterns of part-time work among 16-19 year olds in full-time education, for example, indicates that many young people are prepared to remain in education post-16 (and more so higher education) so long as they are also able to work part-time to earn money (Hodgson & Spours 2000a). It could be argued, therefore, that the labour market's ability to absorb large amounts of part-time (rather than full-time) 16-19 year old workers is actually helping to sustain participation rates in full-time education. However, there may well be a trade-off in terms of the quality of participation, with high numbers of hours of part-time employment having an adverse affect on achievement rates in advanced level qualifications. In addition, the fact that young people become used to earning quite substantial sums during their period of initial post-compulsory education may be making them and their families more reluctant to make the financial sacrifices required to enter higher education. The policy implications of this trend will be discussed further later in this paper.

Higher education participation trends

Participation in higher education has grown dramatically in the last 30 years - from five per cent of the 18-21 year old age group in the early 1960s to about 33 per cent in the late 1990s – with the steepest climb being in the late 1980s and early 1990s (see Figure 5).

Figure 5: Participation in higher education by 18-21 year olds

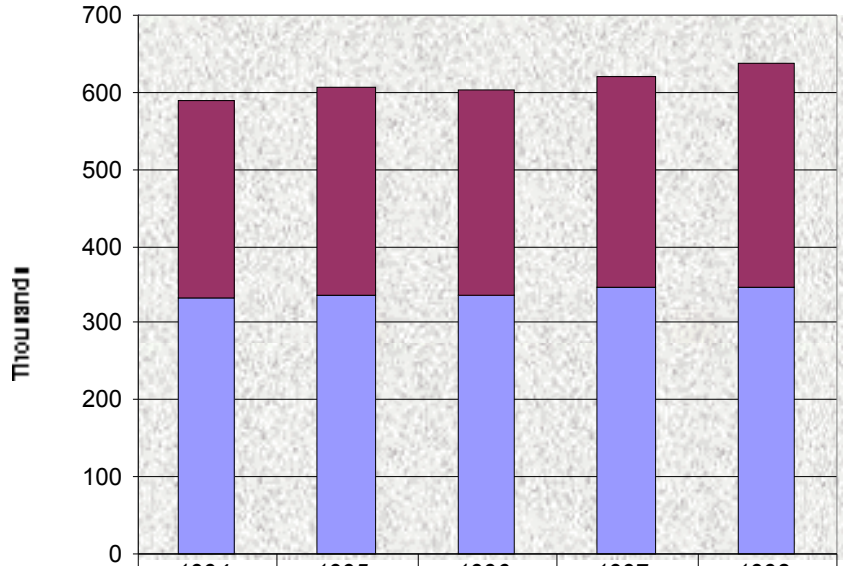


	86	87	88	89	90	91	92	94	95	96	97	98	99
Under 21	14	14.6	15.1	17.1	19.3	23.3	27.8	32	32	33	34	32	33

Source: DfEE (1999) Departmental Report (Annex Q); HESA (2000) SFR 38

The expansion period, based mainly on the full-time participation of 18-21 year olds, brought about important changes in the composition of higher education students. There was a dramatic increase in the number of females involved in higher education - by 1996 they constituted 51 per cent of participants compared to 26 per cent in 1962. (NCIHE 1997). Moreover, many ethnic minority groups have become more than proportionately represented in higher education, although the majority of these students are concentrated in the 1992 universities. However, there has been a much slower change in the social composition of higher education. Despite the doubling of the proportion of entrants from semi-skilled and unskilled socio-economic groups, the general social composition of higher education remains largely unchanged (NCIHE 1997). This may be allied to the fact that there has been much less change in the balance between full-time and part-time students during the expansion period (HESA 1999).

Figure 6: Age-related participation in higher education



	1994	1995	1996	1997	1998
Over 25	254	270	268	274	291
Under 25	334	336	336	347	348

Source: HESA (1999) Press Release PR 29

In many respects, participation growth trends in higher education reflect those for 16-19 year olds. The period between 1987–94 was one of rapid growth while the years since have seen a gradual deceleration. This has been most marked since 1997/8.

Overall, there has been a steady increase in participation in higher education of about eight per cent during the last five years, though at a much slower rate than in the late 1980s and early 1990s. The source of recent growth has been mainly in the over-25 years age group, part-time participation and in sub-degree provision (illustrated in Figure 6). However, during 1997/8 there was a 11 per cent decline in applications from the older age group being accepted for degrees, compared to a one per cent rise for the under 21 age group. UCAS data shows that university applications from the under 21 year old age group continued to rise steadily during what we have described as the 'slowdown phase'. However, since 1997, the situation has been marked by a broadly plateauing trend (HESA 1999, 2000). The peaking trend in home applications for degrees in 1998 is spread across all social groups but is most marked in the 'unskilled' category (UCAS 1999). Moreover, there has been a steady decline in participation in Higher National Diploma (HND) and Higher National Certificate (HNC) provision, particularly in higher education institutions, although this has not been so great in further education colleges (DfEE 2000). HND provision suffered a four percentage point decline in accepted applications in 1997/8 which was most marked in relation to the older age group. On the other hand, the area of greatest expansion during the mid to late 1990s has been in part-time undergraduate provision other than HNDs and, more specifically, in qualifications related to a wide range of health care professions (HESA 1999).

The reasons for the slowdown in higher education growth and its associated trends are open to debate. UCAS (1999) states that the absence of detailed qualitative and quantitative analysis means that the intensification of slowdown in higher education participation cannot currently be ascribed to the introduction of fees. It argues that data for 1997-1999 will have to be studied before changes in the pattern of behaviour can be attributed to external factors. However, there is strong anecdotal evidence from local studies that fear of accumulating debt, possibly fuelled by the effects of negative equity in the property market experienced in the early to mid 1990s, will disproportionately affect those social groups which have not traditionally entered higher education (Hodgson & Spours 2000a). Further evidence is now emerging as a gap is opening up between the rate of applications for higher education places in England and in Scotland. North of the border, where fees have been abolished, there has been a strong surge in applications to higher education, whereas in England, which has retained higher education fees, applications remains static (UCAS 2000).

Added to this, there is some suggestion that an expanded higher education sector, which has led to a measure of 'qualifications inflation', may have caused some to question the financial returns from higher education. This is despite the fact that longitudinal studies show that higher education graduates are three to four times more likely to attain professional or managerial jobs than non-graduates with A Levels (Bynner & Egerton 1999).

Conversely, it may be the case that members of certain social groups feel that they can make sufficient economic progress by not going to higher education and that there are greater economic rewards to be found by entering a buoyant labour market as soon as possible. This points to the significance of part-time work in relation to higher education participation. On the one hand, casualised work may economically sustain participation in both advanced level and higher education. On the other hand, early involvement in the labour market may diminish the demand for university places amongst the young. The lure of a higher number of hours of part-time paid employment with its greater financial rewards may be reducing the ability and the desire among some 16-19 year olds to attain the grades necessary to enter a university of their choice. We have termed these young people 'higher education waverers' (Hodgson & Spours 2000a). Many young people now seek a 'gap' year in order to earn money and teachers speculate that some of these will not proceed to higher education following a year off. There is also evidence that some employers (particularly in the retail sector) select potential management recruits from within their pool of 16-19 year old part-time employees. This may be having an effect on the number of potential higher education aspirants, as young people choose to enter the labour market rather than to further their studies.

While external factors may be contributing to the slowdown in applications to higher education, factors internal to the education and training system may also be playing a part. We have argued earlier that a prime factor may be the fact that the plateauing of participation and attainment among 16-19 year olds means that there is a reduced supply of potential higher education applicants from this age group. As Figure 7 illustrates, the 'anatomy' of and context for participation and attainment are very different in the late 1990s when compared with those of the late 1980s.

Figure 7: Factors affecting participation and attainment for 16-19 year olds (1987-1999)

	1987-1993	1994-1999
Labour market and economic activity	Economic activity of 16-19 year olds increases by 5 per cent in late 1980s, then declines sharply (by 10 per cent) in early 1990s	Slight increase in economic activity rate of 16-19 year olds from 64 to 68 per cent and an increase in the numbers of those working part-time while studying
The effects of qualifications reform on participation, attainment and progression	Introduction of GCSE has a significant effect on participation and attainment in A Levels Slight increase in participation and attainment in broad vocational qualifications (e.g. BTEC National and First Diplomas) No noticeable effect of NVQs on participation or attainment	Slowing of GCSE attainment rises (with the 5 A*-C grade boundary increasingly seen as a demotivator) and polarising patterns of attainment Slowdown in participation and attainment at A Level GNVQ largely replaces other broad vocational provision - persistent problems of completion rates Slight impact of NVQs on participation and attainment
Higher education	Expansion of higher education is a major factor in stimulating post-16 participation rates	Higher education participation growth slows and by 1998 applications from under-21 year olds begin to decline
Work –based route	Work-based route remains marginalised	Attention is beginning to focus on the need for a high quality work-based route with introduction of MAs and NTs
Culture of participation and the cohort effect	Staying-on culture begins to reach a 'critical mass' and starts to affect a wider range of young people	Emerging evidence of changing attitudes towards participation in higher education, partlcularly as a result of fees for higher education

In view of the existence of a 'slowdown period' the Government will have to decide how it will provide the demand for higher education previously built on increased participation and attainment by 16-19 year olds. Will it seek to reform 14-19 education and training so that more students can attain advanced level qualifications, or will it look to adults for the desired growth in higher education application? The next section of the paper considers a range of possible options open to the Government by analysing the potential for growth in participation, attainment and progression in five routes to higher education.

Five routes to higher education expansion

Given the slowdown in the rate of participation in full-time education and attainment among the 16-19 age group, the major question is how the growth in participation in higher education can be increased without resorting to the lowering of higher education entry criteria. The next section of this paper examines this question across five areas – the general education route for 16-19 year olds, broad vocational qualifications for 16-19 year olds; apprenticeship and the work-base route; part-time study for 20-30 year old employees and a range of widening participation initiatives focusing on disadvantaged groups.

Route 1: Progression into higher education via the advanced general route at 18+

The growth of participation in higher education in the late 1980s and early 1990s was based on strong rises in both A Level participation and attainment. As Figures 1 and 2 show, the 16+ participation, A Level attainment and higher education participation trends track each other very closely. They all grew significantly in the period 1988-94 and they all show a plateauing pattern since 1995.

The general education track, through A Level attainment, has traditionally provided more than two thirds of the learners progressing into degree courses in higher education (UCAS 1999). However, the proportion of learners entering higher education with A Levels has begun to decline, particularly in relation to HNDs. Moreover, current attainment trends in GCSE and A Level suggest that, for the moment at least, this route may not expand its throughput to higher education. Participation in A Levels by 16 and 17 year olds has peaked at 35 per cent and the numbers gaining two or more A Levels remain static at just over 29 per cent (DfEE 1999c, 1999d). Moreover, recent modest rises in the proportion of the cohort gaining five or more good GCSE grades does not seem to be feeding through to advanced level.

At this point it is difficult to say whether the Government's qualifications reforms at advanced level, outlined in *Qualifying for Success* (DfEE 1997), will increase advanced level achievement sufficiently to make a difference to higher education participation. We will see the first sign of the impact of the reforms at the end of two years when students starting their advanced level programmes in September 2000 will have gained both ASs and A2s. The new AS may provide a more gradual slope of progression between GCSE and advanced level qualifications with opportunities to gain advanced level credit at the end of the first year. If so, more students might progress to a full A Level. However, the A2 may be more difficult than the current A Level. The overall effects of the reforms may be improved breadth in student programmes of study but not sufficiently improved grades to make a difference in participation rates to higher education. With a policy focus on both breadth and standards, the overall effect of the reforms on levels of attainment may, therefore, be neutral (Hodgson & Spours 2000b).

Route 2: Improved progression from full-time vocational education qualifications

Currently, broad vocational qualifications, such as GNVQ Advanced and BTEC awards at national level and higher, provide about 12 per cent of those entering higher education courses (UCAS 1999). However, the number of students from broad vocational courses progressing to higher education has grown by only three per cent during the period 1994-98. There could be a number of reasons for this very modest progress. First, despite the steady growth in participation

in Advanced Level GNVQs, the size of the cohort taking broad vocational qualifications remains relatively small, constituting under a third of those studying at advanced level (DfEE 1999c). Moreover, the growth in Advanced GNVQs has largely been at the expense of participation in other traditional full-time vocational qualifications (FEDA, IOE, Nuffield 1997). Second, completion rates of a full Advanced GNVQ have remained rooted at 50 per cent throughout the mid to late 1990s, though they have recently risen to 58 per cent in 1998/9 (JCGAB 1999). Third, the relatively rapid growth in the award of NVQ Level 3 has had little impact on higher education progression because it is seen principally as a training award associated with the workplace. rather than as a means of progression to further study.

Over the next five years or so, it may be possible to improve completion rates in Advanced Level GNVQ (e.g. from 58 to 70 per cent) so that they become comparable with those enjoyed by other general vocational qualifications such as BTEC National Diploma. The *Qualifying for Success* reforms usher in smaller GNVQ blocks, the detachment of key skills, the introduction of new assessment approaches and five rather than three grades, all of which bring broad vocational qualifications closer to their general education counterparts. (In fact, GNVQs will now be known as Vocational A Levels). Evidence from retention projects in further education colleges (Spours 1997), however, suggests that full-time vocational courses which are more vocationally-focused and which are recognised by 'good' employers (e.g. BTEC National and NNEB courses), have relatively higher completion rates. Moreover, there is mounting concern among teachers of GNVQ programmes that the new style broad vocational qualifications will be more difficult for learners to achieve because of their external assessment requirements (Hodgson & Spours 2000b).

If students on broad vocational programmes successfully complete their qualifications (and these are increasingly likely to be a mixture of general and general vocational), past evidence suggests they are as likely to progress to higher education as A Level students, though with a tendency to enter the 1992 universities (Spours 1995). Improved successful completion rates could eventually expand the proportion of 19 year olds eligible for entry to higher education by about two percentage points annually, which would be a decisive contribution to the higher education target. The impact of the new vocational A Levels brought in by the *Qualifying for Success* reforms still remains to be seen, however.

Route 3: Progression from Modern Apprenticeships into higher education courses

Another way of expanding participation in higher education is to increase the numbers of those progressing from the work-based route and Modern Apprenticeship (MA) schemes into higher level qualifications. The Government sees MAs, which aim to provide work-based training leading to attainment at Level 3, as providing a route to higher education as well as competence in the workplace. If this were to become established then work-based training would be able to attract better-qualified trainees to the work-based route.

MA schemes have expanded rapidly since their introduction in 1995 (see Figure 3). However, this growth is now beginning to tail off (see Figure 4). The effect of MAs has been to increase the possibility of qualification for 16—19 year olds within the work-based route and MAs now account for 45 per cent of all participants in work-based training for this age group. At present, there are no firm destination statistics for MAs, but the following factors suggest that, so far, they have made a negligible impact on higher education participation:

- learners on MAs constitute only eight per cent of the total 16-19 cohort, roughly the same proportion as those taking Advanced GNVQs in full-time education;

- only about five per cent of Modern Apprentices stated that they planned to go to university - this compared with 70 per cent of a comparitor sample of A Level and GNVQ students. Those most likely to want to progress were those with good GCSE grades (Coleman & Williams 1998);

- the proportion of Modern Apprentices who said they would like to go on to higher education doubles to 10 per cent if future study were associated with higher level work-related qualifications (Coleman & Williams 1998);

- in a local study (Sheffield TEC), the proportion of Modern Apprentices who would consider a higher education course rose to 49 per cent when the options were explained to them and when they were informed about the possibility of flexible part-time modes of study (Sanderson 1999);

- a high proportion of employers (between 45 and 70 per cent in two studies) indicated that they were prepared to support their Modern Apprentices in further study in higher education (Economic Research Service Ltd 1998);

- higher education institutions tend not to accept young people with only an NVQ Level 3 and prefer those with BTEC or broader general vocational awards;

- there is a wide variation in the capacity of different MA frameworks currently to support progression into higher education - only a minority tend to be proactive in this area (e.g. Engineering, Business Administration, Construction and IT) (Sanderson 1999).

Accounts of local progression projects suggest that the practical problems of encouraging Modern Apprentices to progress to higher education may be greater than indicated by surveys of apprentices and employers. Several TEC-sponsored programmes to promote entry to higher education have been developed in a number of areas (e.g. Coventry, Dudley, Leeds, Rotherham and South Yorkshire), but these have resulted in very few Modern Apprentices entering higher education courses. The problem is illustrated by the case of the four TECs in the South Yorkshire area. Forty-eight Modern Apprentices were targeted out of a total of 200 who were finishing their programmes. Eventually 15 apprentices registered for Open University courses and, of these, only three passed the initial stage to progress onto further study. These were apprentices with high levels of personal motivation and strong employer support (Sanderson 1999).

If MA schemes are to provide more than a trickle of applicants for higher education, local MA progression projects suggest that a range of measures have to be initiated (Marque Associates 1999). However, these measures have to be seen in the context of deep-seated barriers within the work-based route. Many smaller employers are fearful that if they support their apprentices to undertake higher level study, they will move elsewhere and many trainees do not see the need for further qualification. In the light of these problems, a realistic target for progression to higher education might be 10 per cent of those graduating from MAs. This would constitute about one per cent of the 16-21 year old age group.

Route 4: Expanding Level 4 provision and the role of Foundation Degrees

In July 2000, HEFCE invited partnerships of higher education institutions, employers and further education colleges to bid to develop Foundation Degrees to start in 2001/2002. It is suggested that Foundation Degrees should be designed *"to supply highly qualified graduates to address the shortage of people with intermediate level skills within a wide variety of professional areas determined by employer demand"* (HEFCE 2000:2). It is intended that the Foundation Degree will be completed in two years or an equivalent period part-time. Students will also have an opportunity to complete an honours degree by additional study of no more than one and a third years of full-time study or an equivalent period part-time. In the first year, the Government hopes that 2000 students will take up these new courses.

Evidence from surveys of Modern Apprentices (Marque Associates 1999) and of sixth formers (Hodgson & Spours 2000a) suggests that many young people would consider higher education study if they could, at the same time, earn money. There is, therefore, enormous potential for increased demand for higher education through part-time study at sub-degree (Level 4) and degree level. This would seem to support the Government's emphasis on involving employers in the design of the Foundation Degree. However, we would argue that there is a need for employers to be involved in more than simply the design of the degree. In addition, Government has to provide incentives for employers to demand the degree either through financial inducements or regulatory measures related to licence to practice. It is important that employers actively support their workforce to undertake higher level study of this type and for many employers this would mean a significant cultural shift.

Currently, this approach is not taking place and as a result, as higher education participation statistics demonstrate, the vocational part-time route is not a popular one and is even in decline relative to academic university degrees (DfEE 2000). The reason for this situation may be that vocational degrees have taken over many of the functions of HNDs/HNCs (Young 1999) and there may be a lack of clarity as to their value in a rapidly changing employment market. Nevertheless, the National Skills Task Force sees the development of Level 4 provision as completing a ladder of progression within the work-based route and making 'intermediate level' qualification more attractive (DfEE 1999g).

The Government, quite rightly, sees scope for the development of this route to higher education and in the short term it appears to be the most likely to be able to carry us towards the new national target for higher education participation. However, the main issue will be to reverse the recent downward trend in HND-related qualifications and there is a debate taking place as to how this might be brought about. Some see the main factor being the provision of opportunities to up-grade higher qualification to full degree standard (DfEE 2000). Others see possibilities in ensuring that the Foundation Degree is made accessible by its promotion in further colleges and the possible remission of higher education fees (IOE 1999). In addition to these approaches, our research suggests that the crucial issue is to secure employer recognition and active involvement by linking the new degree to entry to certain types of skilled jobs. As we pointed out earlier in the paper, the area of greatest expansion of part-time work-related degrees has been in qualifications related to health care professions (HESA 1999). Those designing the Foundation Degree would do well to learn lessons from this experience.

Route 5: Widening participation initiatives

Widening participation in higher education has constituted a strong strand of Government policy since 1997 when New Labour came to power (Hodgson & Spours 1999), though widening participation in higher education was also a policy of the previous administration (HEFCE 1996). One of the first tasks facing the new Secretary of State for Education and Employment was to respond to the recommendations in this area set out in the Report of the National Committee of Inquiry into Higher Education (NCIHE 1997). The Higher Education Funding Council for England (HEFCE) was thus given the task of devising funding mechanisms which would increase the number of students from those groups which had traditionally been under-represented in higher education entering and successfully completing this level of study. HEFCE's response has been a range of measures involving both changes to the funding formula for individual students, as well as special funding programmes to support regional partnership and innovative development work. This involves allocating an additional £9 millions between 1999-2001 for providing pathways for disadvantaged groups (HEFCE 1999).

It is too early yet to estimate the exact effect this will have on participation levels in higher education because the targeting of learners from disadvantaged backgrounds is likely to take time to show results. Moreover, it will be difficult to quantify exactly which learners have entered higher education as a result of specific measures to widen participation, particularly as the funding relates to all age groups. In 1998, access provision accounted for only four per cent of those accepted onto degree courses and two per cent of those accepted onto HND provision (UCAS 1999). There will have to be a dramatic change in this situation if widening participation measures are actively to contribute towards the new push for an increase in the numbers entering higher education. Past evidence of this sort suggests that the effect of the initiatives may have to be measured in single percentage points. However, the more recent measures in this area may prove to be more effective in the longer term since they will encourage higher education providers to reconsider all aspects of their publicity, access, learning, delivery and support processes rather than simply to focus on specific initiatives or programmes.

Creating the conditions for 'system acceleration'

Our analysis of current attainment and participation trends of 16-19 year olds and participation patterns in higher education suggests that it will not be easy to reach the Government's new higher education target by 2005. There is an assumption that the main contribution will have to come from those in work in the 20 to 30 year old age group and this is obviously the aim of the new Foundation Degree initiative. However, this is demanding a great deal of this area of policy, particularly in the light of recent downward participation trends in HNCs and HNDs. We would argue that if the Government's target is to be reached, it will have to undertake a more radical and longer-term strategic examination of a range of provision across all five routes to higher education, so that they all contribute to a new phase of system acceleration. In this final section, we want to focus particularly on what this might mean in relation to three routeways – the general, the broad vocational and the work-based route.

Expanding progression through the general route

Since the 1991 White Paper (DES/ED/WO 1991), the general policy assumption has been that further expansion of participation and attainment cannot come through the general (academic) route without risking a dilution of standards. The current Labour Administration, while wanting

to see wider access to standards, shares this anxiety. It has, therefore, concentrated its attention on broadening advanced level programmes of study and creating more flexibility at Key Stage 4 so that disaffected and underachieving students can undertake vocational education programmes (Hodgson & Spours 1999).

In the longer term, however, it is possible to see greater progression through the general route if more learners could be encouraged to continue their studies beyond 16. To achieve this, the education profession has long argued for the formation of a coherent, progression-orientated and modular 14+ qualifications system (e.g. Finegold *et al.* 1990, NCE 1995, Labour Party 1996, Hodgson & Spours 1997, Hodgson & Spours 1999). First and foremost, the aim of such a system would be to overcome the GCSE 5 A*-C barrier which potentially demoralises over half the cohort who fail to reach this standard by 16. There are a whole number of reforms which could be undertaken to create a more flexible ladder from 14+ to encourage a larger number of the cohort to continue in some form of education and training after the age of 16. These might include the creation of vocational GCSEs; creating more modular and credit-based qualifications; making AS a genuine stepping stone between GCSE and A Level; bringing AS levels down into Year 11; constructing three rather than two-year post-16 programmes to bring slower learners up to advanced level; ensuring that any credit gained in full-time education could be transported to the work-based route and, ultimately, the development of a graduation/overarching certification system which recognises breadth of study as well as depth and is not so strictly age-bound as current qualifications for this age group.

This, we would argue is essentially a longer-term strategy to encourage participation in higher education beyond the 50 per cent mark and to take us towards levels enjoyed by other higher performing advanced industrial countries.

Rationalising the broad vocational route

The broad thrust of policy related to reforming the broad vocational route during the 1980s and 1990s has focused on the creation of more vocational provision producing a plethora of qualifications, most of which do not achieve a high public profile. The vocational route needs to be rationalised so that it develops clear and acceptable qualifications which meet the needs of employers and provide progression to further study. Over the last two decades, this role has best been met by traditional vocational qualifications, such as BTEC National Diplomas, which offered both breadth and depth of study and became respected by employers and higher education admission tutors alike.

The development of clear products in the vocational route could and should be connected with the development of overarching certification. If the various qualifications in the vocational route were connected by the development of a high-profile advanced level diploma which was accepted in higher education and which led straight into HND-type provision, it is possible that half the young people in this route could progress to higher education either full or part-time. This could double the current throughput of the vocational route as a whole and, in the process, encourage its expansion by making it more attractive to high achievers. This is one of the measures with most potential to aid the achievement of the Government's higher education participation target.

Progression from the work-based route for 16-19 year olds and qualification in the workplace

The work-based route can make a contribution to raising the level of higher education participation if a number of reforms are put into place. First, there should be an expectation that MAs lead to higher study. This is more likely if Modern Apprentices study for qualifications which are already accepted by universities (e.g. BTEC National). Second, the newly-formed Foundation Degrees, which in many cases will have a sharp vocational focus and can be taken on a part-time basis, could provide a more high profile routeway for Modern Apprentices. Some argue that the part-time work-based route is even more relevant for those over 30 years of age (Fuller 2000). Third, there needs to be the widespread formation of a higher level of apprenticeship focusing on part-time higher education study while in work. This is already the case, in effect, in jobs allied to the medical profession and could be a model to be copied more widely. In addition, and at a local level, the newly established Learning and Skills Councils (LSCs) could, in co-operation with National Training Organisations (NTOs), which are responsible for the MA frameworks, develop progression routes into higher education in collaboration with further education colleges. Finally, employers could be offered financial incentives and public recognition (e.g. through Investors in People) to support their Modern Apprentice graduates to continue to study and the apprentices themselves could be offered individual learning accounts (ILAs). If these conditions were created, it is possible to see the majority of Modern Apprentices completing a Level 3 qualification (which is currently not the case) with a significant proportion of these going on to take up part-time higher education courses. These reforms would also stimulate demand for qualifications from adults in the workplace.

Towards a high-quality, effective and connective mixed education and training system for the future

What this paper attempts to highlight is that the Government's current policies for increasing participation in higher education, which focus on providing a new type of degree and widening participation supported by further and higher education partnerships, will not be enough on their own to bring about a significant expansion in higher education participation. Our statistical work suggests that simply expanding the supply of higher education places and increasing their accessibility by new forms of provision ignores two very important factors – the supply of qualified applicants from the younger age group and the current lack of employer demand for higher level skills affecting adult learners.

The type of 'system slowdown' we have highlighted in this paper requires a more strategic approach to education and training policy to increase higher education participation. The position in the UK at the beginning of the 21st Century is not the same as it was at the end of the 1980s and the beginning of the 1990s when a significant expansion of participation in higher education took place as a result of learner demand.

We have indicated that creating effective demand for the further expansion of higher education in an era of system slowdown can be brought about through reforms in at least three areas – the general qualifications track, broad vocational qualifications and the work-based route – in order to break down barriers and to align more closely all aspects of education and training from 14+. It is also important to provide effective and high quality part-time higher education provision for adults, particularly for those already in work. At the same time, employer voluntarism will have to be addressed. New demands for occupational standards will have to emerge and employers and learners will need to be offered incentives to reach these. This points to a more

interventionist approach to the labour market by Government than has so far been demonstrated (Hodgson & Spours 1999).

These policies pose the question of the future direction of development of the education and training system in this country. We do not have an effective full-time education system 16-19 (as is the case in France or Sweden) nor do we have a reputable apprenticeship system (as does Germany or Austria). As we have described at length in this paper, we have a fragmented 'mixed system' with a variety of routes, each of which under-perform and which are, to varying degrees, disconnected one from another. Our answer is the creation of a more connective system based on qualifications reform underpinned by collaborative institutional arrangements and stronger incentives and frameworks related to education and, in particular, to the workplace.

The last strong phase of higher education expansion in the late 1980s and early 1990s was demand-led as a whole cohort of students, encouraged by unprecedented examination success, sought to participation in university education. In the mid-1990s, however, growth in 16-19 attainment and participation slowed dramatically and this plateauing trend fed through eventually to higher education participation rates. The Government's new target for higher education expansion is rooted in this more difficult context.

Because of this we have argued that it is important to focus on constructing a supply of students over the next decade by systematically reforming all the routeways feeding higher education and also to focus on the role of employers. If this was to take place along the lines suggested in this paper, with the emphasis on learners gradually accumulating evidence of achievement within a more unified qualifications system and supported by labour market and progression incentives, the new target could be reached.

These comprehensive set of measures outlined to boost progression routes will take time to take effect. Nevertheless, the virtue of a 'progression-oriented and system reform' approach is that it could produce a steady but sustainable growth in higher education participation of 'younger learners' and, at the same time, underpin the Government's flagship policy in this area – the Foundation Degree initiative. By focusing on the different dimensions of system improvement rather than simply depending on new initiatives, such an approach may also place the wider education and training system in a stronger position to support genuine lifelong learning in the future.

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