# Demand for Higher Education to 2020 and beyond

1. This is the fourth report on demand for higher education that HEPI has published since 2003, updated each year in the light of the most recent information. Last year's report extended the review to 2020. This year's takes a first look beyond, to 2030. The purpose of the report is not to provide firm projections – any such projections are almost certain to prove wrong. Rather it is to discuss the influences and uncertainties surrounding future HE demand, and to illustrate the impact of some of these on future numbers.

2. There are two influences on higher education demand - changes in the population from whom students are drawn, and the ability and willingness of this population to participate in higher education. This report looks at each in turn. It then looks specifically at demand from part-time and mature students, and concludes with a brief section that draws the various strands together.

## Part I: Demography

3. The increasing demand for higher education in recent years has been influenced largely by increases in the 18 to 30-year-old population - 67 per cent of full-time higher education first degree entrants are under 21, and 85 per cent are under 30. These are still the groups that dominate higher education entry, and nothing has changed in this respect in the recent past. Figure 1 below shows the way the 18-20 year old population has changed and how it will change in the next 25 years or so<sup>1</sup>. Between 2006-07 and 2010-11 the 18-20 year-old population will continue to increase – by just 2 per cent – and consequently higher education demand is set to continue to grow for at least three more years. After peaking in 2010-11, the number within this age group will begin to decline

<sup>&</sup>lt;sup>1</sup> Bearing in mind that the further ahead that is surveyed the more tentative the population estimates become: indeed most of the population covered by the last 5 years or so of the projection had not yet been born when the projection was made.

significantly for the following decade – by more than 12 per cent between 2010-11 and 2020-21.



Figure 1: 18-20 year olds from 2006-7 to 2028-29

Source: ONS and Government Actuary's Department (2005 based projections, published in August 2006), adjusted by DfES for academic years.

4. During the four years beyond 2020-21 the 18-20 population will increase by 6.7 per cent, and then from 2024-25 will flatten out, well below the 2010-11 peak. The changes to 2020-21 were discussed in last year's report. This year the population for the decade beyond 2020-21 is shown. This is significant because 2020-21 is the final year in more than a decade of decline, and although numbers pick up again, they level out again well below the earlier peak of 2010-11.

5. So, looking forward 25 years, there will be a significant reduction in the population that comprises the main client group for higher education. However, a significant decline in this population does not necessarily equate to a decline in the demand for higher education. The experience of the late 1980s and early 1990s is witness to this, when the young population declined substantially, but higher education numbers increased by over 50 per cent. This is discussed further in paragraph 10 below.

6. Although the most important, the 18-21-year-old population is not the only age group that is relevant to higher education participation. Figure 2, below, shows the changes in three different age cohorts - 18 to 20, 21 to 24 and 25 to 29. All three experience a steady increase in numbers from 2006 until early in the next decade. At this point, the 18 to 20 and 21 to 24 age groups begin to decline and continue to do so until the early 2020s. On the other hand, the 25 to 29-year-old age group will continue to see a steady increase, by 8.6 per cent, from 2010 to 2017 before that too begins to decline.



Figure 2: Changes in different age cohorts 2007 to 2030

7. Table 3, below, sets out the change in full-time numbers that will occur over the next two decades, as a result of the demographic changes discussed above, and assuming all other influences on demand remain unchanged - most notably school achievement and participation rates. Subsequent sections factor in these other features.

Source: ONS population estimates and GAD projections

		%	Resulting	%	Resulting	%	Resulting
	Estimated	population	change in	population	change in	population	change in
	student	change	numbers	change	numbers	change	numbers
Age	numbers in	2006-07 to					
cohort	2006-07	2010-11	2010-11	2020-21	2020-21	2024-25	2024-25
<21	663000	1.7	11271	-11.7	-77571	-5.8	-38454
21-24	122000	6.9	8418	0.5	610	-4.4	-5368
25-29	50000	7.2	3600	13.1	6550	8.5	4250
30+	89000	2.2	1958	10.7	9523	14.3	12727
Total	924000		25247		-60888		-26845

Table 3: Changes in full time numbers due to demography

Source: Calculated from HEFCE HESES 2006, applying the previous year's age split to the HESES population

8. If the population changes were simply reflected proportionately in student demand, then student numbers would increase by 25,000 between now and 2010-11, decrease by more than 60,000 between now and 2020-21, and finally increase a little; but by 2024-25 would still be some 25,000 below today's levels. This would be a real rollercoaster that would present serious management challenges. However, the future is unlikely to be as turbulent as demographics alone might suggest.

# Factoring in socio-economic effects

9. Figure 4 below, which provides a historical overview of the 18 to 21year-old population over 62 years to 2030, clearly illustrates the third and possibly fourth-generation babyboomers, each with a less marked impact than the previous one.





Source: DfES from ONS population estimates and GAD projections

10. Figure 4 also shows clearly that the population was actually on the decrease in the late 1980s and early 1990s when demand for higher education increased dramatically. The reason it did so was in part because of increased school staying on and educational attainment following the introduction of the GCSE, and in part because the decline in births was concentrated among the social groups that participated least in higher education. The Government of the day did not adequately take account of these factors, predicting that the demand for higher education would rise and fall much more closely in line with demography, and developed a policy that it described as " tunneling through the hump", so called because it planned to break the link between growing demand and the number of places provided, anticipating that any such increase would be redundant after the population peak. A similar phenomenon is at work today as we look forward to a similar population decrease, though the effect is much less marked.

11. Prior (school) educational attainment is the dominant determinant of participation in higher education, and because of differential achievement at school according to social class, the social class of the father at birth is a useful proxy for this. Figure 5 below shows the profiles of the 18-year-old population, differentiated by the socio-economic group of the father at the time of the child's birth. In interpreting this graph it needs to be

borne in mind that anyone born in 1986 was 18 in 2004 and anyone born in 2001 will be 18 in 2019<sup>2</sup>. It will be seen from Figure 5 that the number of births in the highest social groups has been maintained over this period, and the number of births in the lowest social groups has declined substantially. In detail, between 2004 and 2019 the 18-year old population in socio-economic group I will grow by about 3 per cent and in socio-economic group II by 20 per cent, whereas in social group III it falls by 14 per cent, in IIIm by 29 percent, in IV by 12 per cent and in V by 37 per cent.



Figure 5: 18 year olds by father's social class at birth

Source: Derived from data supplied by Office for National Statistics (ONS)<sup>3</sup>

12. So, as in the previous period of population decline, the future decline in the 18 to 21-year-old population is likely to be in the groups least likely to participate in higher education. On the other hand the social groups that account for two thirds of the higher education population will not see any decline, and indeed will see a slight increase. Figure 6 below shows the very different rates of higher education participation by the different social groups over time.

<sup>&</sup>lt;sup>2</sup> The series stops in 2019, because after 2001 the social class definitions changed.

 $<sup>^3</sup>$  Two thirds of 18-year olds and one third of 19-year olds born 18 and 19 years earlier are included in these totals.

Figure 6: Age Participation Index by Social Class for the period 1940 to 2000



Source: DfES<sup>4</sup>

13. The calculations of Table 3, which showed the raw effects of demography on demand over the next period can now be amended to take account of the differences in births by social class. Table 7 shows the raw figures (reproduced from Table 3) and the revised figures that take account of this. In this calculation it has been assumed that the differences in births between socio-economic groups will only affect the 18-20-year-old student population. This is a reasonable assumption for the purpose of producing high level projections, as these students represent such a high proportion of the entrants to higher education; and parents' social class is unlikely to play such an important role in the propensity to participate in HE of older students. However, it needs to be noted that this assumption probably understates the effect of social class

<sup>&</sup>lt;sup>4</sup> This chart is reproduced from a DfES report that proposed a new measure of participation by social class, based on the new definitions of class since 2001 (*Full-time Young Participation by Socio-Economic Class: A New Widening Participation Measure in Higher Education* – DfES March 2007. (Available from http://www.dfes.gov.uk/rsgateway/DB/RRP/u015163/index.shtml)). That report highlighted significant shortcomings in the above measure after 1990 and suggested the participation gap is likely to have narrowed. However, although the definitions are different, and a new method may be adopted in future to measure differences in participation, the fact of an apparent significant difference remains.

changes on participation, and that the impact of the demographic decline is therefore likely to be even more attenuated than is shown here.

		% population	Change in	Effective %	
	Estimated	change by	student numbers	population change	Change in numbers
	student	2020-21	by 2020-21	by 2020-21, taking	by 2020-21, taking
	numbers in	calculated in	calculated in	account of the	account of the 'Social
Age cohort	2006-07	Table 3	Table 3	'Social Class Effect'	Class Effect'
<21	663000	-11.7	-77571	-6	-39780
21-24	122000	0.5	610	0.5	610
25-29	50000	13.1	6550	13.1	6550
30+	89000	10.7	9523	10.7	9523
Total	924000		-60176		-23097

Table 7: C	hanges in	full time	numbers	due to	demography,	taking	account
<u>of social cl</u>	ass chance	<u>les</u>				-	

14. It will be seen that the effect on higher education numbers of the decline in the 18-20 population will be substantially dampened as a result of the differential births by social class. However, this effect is not as marked as that discussed in last year's report, largely because the DfES study referred to above reports rather higher participation by Social Classes IIIm, IV and V than previously, and rather lower participation by Social Classes I, II and IIIn. Those changes have been taken into account in the revised calculations.

15. The same DfES study also reports substantial movement between social classes in the decade after the 1991 census. Using data from the Labour Force Survey it establishes that the gap between the proportion of the population in the highest three social groups and the lowest three has grown by two thirds in a decade (i.e. that there are more people in the highest groups and fewer people in the lowest). Figure 8 below is reproduced from the DfES report referred to above, and shows the changing social class makeup of the population.





Source: DfES: Full-time Young Participation by Socio-Economic Class: A new widening participation measure in higher education, based on analysis of data from the Labour Force Survey.

16. As a result of the changes in birth rates, but also perhaps because of general upward social mobility, the proportion of the population in the highest social categories I-IIIn is increasing rapidly, compared to those in the lowest groups. In 1992 56 per cent of the population were in the highest three categories and 44 per cent in the lowest three. In 2000 this ratio had changed to 61 per cent and 39 per cent. This change in the social makeup of the population has not been taken into account in the calculation above of the social class effect, but it will have the effect of dampening even further the raw effects of demography. On the other hand, bearing in mind that social class is defined only by the nature of the employment of the highest earner in a family - and it is not clear why the changing job structure of the economy should necessarily affect the performance of students at school - it will be interesting to see if the change in the social makeup of the population is reflected in improved school attainment.

9

## **Part II: Participation**

## <u>A levels</u>

17. Part I of this report has considered the impact of demography on higher education demand. Part II looks at the factors that determine eligibility and willingness to participate in higher education, beginning with the most important indicator - the proportion of the population taking A levels. The proportion of young people taking GCE A levels is the major factor in influencing the numbers that go on to higher education. The Department for Education and Skills has estimated that 84 per cent of those with 5 GCSEs grades A-C who take GCE A levels go on to study in higher education<sup>5.</sup> The other major (though far smaller) group that goes on to higher education is those with vocational A levels (VCE A levels, previously known as Advanced GNVQ), of whom about 51 percent are estimated to enter higher education.

18. Figure 9 below shows the pattern of participation in GCE A-level in the 13 years since 1994. Overall, the proportion of the 17-year-old population achieving two A levels increased steadily, from 24.6 percent in 1994 to 34.2 percent in 2002, when the increase stalled. Although the 2006 level was above that of the previous year, it was barely different from 2002. There is no evidence here that achievement at the key point in the supply chain is improving in a way that suggests that participation will increase in the future.

<sup>&</sup>lt;sup>5</sup> DfES private communication, calculation derived from Cohort 11 of the Youth Cohort Study.





Source: DfES Statistical First Release SFR 02/2007

19. In last year's report we highlighted the significant gender difference in participation at A-level. This is relevant for two reasons. First, it is a matter of concern in itself that boys appear to be underperforming to such a great extent; and second, the fact that boys participate so much less than girls suggests that there is substantial scope for their numbers to increase, if and when boys begin to participate to the same extent as girls. Figure 10 below repeats the graph shown in last year's report, with a further year's information. It will be seen that the difference in performance between boys and girls shows no sign of narrowing - indeed, it has worsened somewhat in the last year.

Figure 10: A level participation by gender



Source: DfES, private communication

20. However, data provided by DfES from Sweep 4 of Cohort 11 of the Youth Cohort Survey suggests that the differences are not amplified in HE application, post-Level 3. According to these data, 83 per cent of men and 85 per cent of women (84 per cent altogether) of those with academic Level 3 qualifications, and 49 per cent of men and 44 per cent of women (46 per cent altogether) of those with vocational Level 3 qualifications, are in HE by 19<sup>6.</sup>

21. There is, therefore, no indication as yet that school performance is improving in a way that will allow us to conclude that there is going to be a substantial improvement in A-level performance, and so in higher education participation. It is profoundly to be hoped that the various government initiatives intended to achieve this - Aimhigher and Educational Maintenance Allowances, for example - will have this effect, but there is no sign of that at present.

<sup>&</sup>lt;sup>6</sup> These figures relate to all those taking A levels, whereas the figures given above of A level participation rates of 84 per cent and 51 per cent for GCE and VCE A levels respectively related only to those with 5 GCSEs Grades A-C.

22. It cannot be emphasized too strongly that it is differential school achievement that determines differential participation in higher education. Social class is not the issue here - the disparity of entry to higher education simply reflects differences in school achievement. The more direct relationship is between school achievement and social class. Figure 11 below shows GCSE attainment by social class as measured in 2000. It is likely that the pattern will not be different today.



Figure 11: GCSE attainment by social class

Source: Table B from Youth Cohort Survey of 16 year-olds (2000)

23. On the other hand, Figure 12 below shows that grade for grade there was little difference in HE participation among those from different social groups who obtained A levels.





Source: DfES. Calculated from Youth Cohort Study data

24. This is why it is possible to say that social class differences in higher education participation will not be resolved by the higher education sector. Of course higher education institutions have a part to play in raising the aspirations of school pupils, and making themselves attractive and accessible to the widest range of people who might benefit. But widened participation will not be achieved until the disparity of achievement at school is addressed successfully. If it is, then the indications are that class will not be a barrier to participation in higher education. And that in turn would have major implications for higher about increasing demand from the lowest-participating social groups.

#### Other level three qualifications

25. Figure 13 below suggests that there has been an encouraging increase in young people with Level 3 NVQs and VRQs<sup>7</sup>. However, care is needed in reading too much into these increases. Almost all the growth

<sup>&</sup>lt;sup>7</sup> NVQs are the National Vocational Qualifications, and VRQs are Vocationally Related Qualifications. Both are work-related, and generally pursued in employment.

comes from VRQ level 3s, whose numbers are shown as rising from 14,000 in 2004 to 36,000 in 2005 and 44,000 in 2006<sup>8</sup>. However, much of this apparent increase was as a result of improved data collection and coverage, and the underlying increase was smaller. Moreover, in terms of numbers these are much less significant than those with GCE and VCE A levels, and in terms of preparation for higher education, they are even less significant, for the good reasons set out in the HEPI report on vocational routes to higher education<sup>9.</sup> Figure 14 shows both the absolute numbers of young people taking Level 3 NVQs and VRQs, and the numbers entering higher education with these qualifications, and compares these with GCE and VCE A levels.





Source: DfES - SFR06/2007 and SFR05/05

<sup>&</sup>lt;sup>8</sup> DfES Statistical First Release 06/2007

<sup>&</sup>lt;sup>9</sup> Vocational A levels and university entry: Is there Parity of Esteem? (HEPI, 2007)

Figure 14: Qualification on entry to HE



Source: HESA

26. Essentially, NVQs and VRQs are taken by those with the weakest performance at GCSE, and are intended to provide employment-related skills in their own right, and not to prepare pupils for higher education. Things may change with the introduction of the new Level 3 diplomas, but for the time being, the only Level 3 qualifications that are significant in terms of participation in higher education are GCE and VCE A levels.

27. Nevertheless, increases in the number of young people taking vocational qualifications at level 3 are possible. Despite the earlier proviso concerning data coverage, there almost certainly have been increases recently in the numbers taking NVQs and VRQs at level 3, and although only a small proportion (probably about one third) of those go on to higher education, any future increase in vocational level 3 numbers will lead to increases in higher education participation. The Government is clearly keen to increase the number of young people with vocational qualifications at level 3 as well as the number of these that go on to higher education, and if they succeed then the result will be increased HE numbers. By way of illustration, if the number of young people with VRQs were 50 per cent higher than those shown in Figure 13 above, then the number of higher education entrants would be 7,000 or so higher, implying an increase in total numbers of 20,000 or so.

#### The impact of school attainment at 16

28. Figure 15 below illustrates the increase in the proportions of the relevant population taking GCSE, taking A levels and participating in higher education.



Figure 15: Relationship between GCSE, A level and HE participation

29. The proportion of the 15 plus population achieving five or more GCSEs at grades A-C has increased from 45 per cent in 1995 to 60 per cent in 2006 - a rise of 33 per cent. However, this substantial and encouraging increase has not been matched by anything like the same increase in the proportions taking A levels nor in those going to higher education. Figure 15 above shows how the trend lines have diverged. The conclusion reached last year is repeated with a further year's statistics: improved performance at Level 2 does not necessarily lead to improved performance at Level 3. Large numbers of pupils are leaving school after GCSE, and others are staying on in education, but not taking the qualifications that prepare them for higher education.

30. Figure 16 below shows that while the proportion of pupils obtaining 5 GCSEs grades A-C has increased, the proportion of those taking GCSEs has not – it is simply that more have been succeeding. The implications of this for eventual demand in HE have not been explored here, but this

Source: DfES – SFRs 01/2007, 02/2007 and 10/2007<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> Note, GCSE figures relate to proportion of population aged 15, A levels to population aged 17 and HE participation to population aged 18. The figures for A level and HE participation relate to one and two years later than the year in which they are plotted here, in order to show more clearly the relationship with GCSE attainment.

may go some way towards explaining the trend discussed above in relation to Figure 15, which showed that increasing success at GCSE did not appear to be translating into increased A level success (whether vocational or academic) or HE entry. It could be that 'new' GCSE successes have more in common with those who previously failed to achieve 5 A-C passes.



Figure 16: Changes in participation at GCSE over time



31. The reason why the discussion of level 3 success is important is that in order to participate at level 4 and beyond, potential students for the most part need to have succeeded at level 3. At present, about 10 per cent of those aged 16+, 24 per cent aged 17+ and over 40 per cent of those aged 18+ do not participate in any form of education and training. The Government has recently announced plans to require all young people to participate in education and training of some form until the age of 18. This is highly likely to impact participation in higher education to some extent, if only because it is likely to increase the number of young people with a level 3 qualification.

32. It will be apparent from the preceding discussion that how significant for higher education participation any increased participation at level 3 will be will depend on the nature of the level 3 qualifications taken. If the majority of the increased participation is in NVQ/VRQ-type qualifications

(as is likely if the majority of the increased numbers are in work) then that will have some impact, but it will be limited. If on the other hand there is a significantly increased take-up of VCE, and even more so GCE, A levels, then that will impact significantly. On the face of it, the former seems the more likely outcome: those who do not participate in further study already (whether full-time or part-time) tend to be those with the weakest GCSE grades, and those with the least strong GCSE grades are the ones that tend to take NVQs and VRQs rather than A levels.

33. A big question in the future will be how young people respond to the new 16+ diplomas that the Government has announced will be introduced from September 2007. If these have the effect of attracting significant numbers of additional young people, and if the diplomas prove to be a more popular route to higher education than vocational qualifications have been in the past, then the impact could be significant. It is too early to tell whether that will be so, and the Secretary of State himself has acknowledged the uncertainty that surrounds this<sup>11</sup>. The impact of the new diplomas will need to be closely monitored - they could do for participation in education post-16 what the introduction of GCSEs did in the late 1980s and 1990s, in which case their impact on demand for higher education could be considerable.

#### Recent increases in participation

34. Each year, the Government calculates a Higher Education Initial Participation Rate (HEIPR), which measures participation in higher education - both full-time and part-time - by the under-30s. It is this index that is the basis of the DfES' Public Service Agreement target, that by 2010 we should be working towards 50 per cent of the under-30 population participating in higher education<sup>12</sup>. The HEIPR was created in 1999-2000, and in the years since then it has stood as follows:

<sup>&</sup>lt;sup>11</sup> Speaking to the conference of the Association of School and College Leaders on 9 March 2007 he was reported as saying "It's a huge challenge, I accept that. This could go horribly wrong, particularly as we are keeping A levels and GCSEs...[The decision to retain A levels and GCSEs] does mean that there is a danger of the diplomas becoming, if you like, the secondary modern compared to the grammar." http://news.bbc.co.uk/1/hi/education/6435563.stm

<sup>&</sup>lt;sup>12</sup> Although the target was originally that 50 per cent of the age group should have participated in HE by 2010, the target has now changed, and is to increase participation in HE towards 50 per cent of those aged 18 – 30 by 2010.

	1999-	2000-	2001-	2002-	2003-	2004-	2005-
	2000	01	02	03	04	05	06
% HEIPR	39.3	39.7	40.2	41.2	40.3	41.3	42.8

Table 17: Changes in the Higher Initial Education Participation Rate

Source: DfES SFR 10/2007

35. The 2005-06 jump in the HEIPR was a one-off, and reflects the large increase in full-time young students entering university in that year, in order to avoid the new fee arrangements. The 2006-07 HEIPR, when that is calculated, will show a large decline. Even ignoring 2005-06, however, the HEIPR increased by two percentage points between 1999-2000 and 2004-05. Within the HEIPR calculations, the DfES calculates separately the participation rate of the under-21s, and it also calculates full-time and part-time participation separately.

36. Nearly half of the increase in the HEIPR has occurred among full-time under 21-year-old students, despite the lack of increase in young people taking A levels. It is possible only to speculate about what is driving this, since the necessary data are not routinely collected, but it could be that although the number of pupils with A levels is not increasing, there has been an increase in the proportion of those with A levels who go to higher education. As referenced above, about 84 per cent of those with GCE and 51 per cent of those with VCE A levels were estimated in 2002-03 to go on to higher education. That leaves ample scope for an increase in higher education participation even without any increase in the numbers taking A levels, and it is possible that this lies behind the recent increases in the HEIPR. However, such an explanation also suggests that, without reductions in the standards required for admission, the scope for further increases in student numbers from this source is limited.

37. Whether or not the recent increases represent a trend cannot yet be stated confidently - and in any case an increase in the proportion of those under 21 with A levels who go on to higher education will reduce the population from which older students can in due course be recruited. A very crude extrapolation of the recent increases would raise the HEIPR to 47 per cent by 2020 - still well short of the the DfES Public Service

20

Agreement target. However, even a more cautious asumption of half this increase would imply a student number total in 2020 that is 50,000 higher than continuation of an unchanged HEIPR of 42 per cent.

#### Part III: Mature, part-time and EU demand

38. The discussion so far has concentrated on full-time young students and the drivers that determine the extent to which they participate in higher education. It is apparent that, unless there is an unexpected increase in participation, full time numbers could well be slightly lower 20 years from now. However, the Government's aspirations are likely to be for a large growth in student numbers. The Leitch report, commissioned by the Government, has suggested that if the Government meets its target of 50 per cent of young people below the age of 30 participating in higher education<sup>13</sup>, then this alone will lead to an increase in the 19-65 population educated to level 4 (higher education) from 29 per cent to 40 per cent by 2020<sup>14</sup>.

39. However, Leitch goes further and argues that an aspirational target would be that approaching 45 per cent of the working population should be educated to this level by 2020. If, as seems apparent from the analysis of this report, neither the 40 per cent nor the 45 per cent figures are likely to be achieved through increases in full-time young students, achievement of these aspirations would require substantial increases in other groups – in particular part-time and mature students in employment. The number of such students at present is far smaller than the young full-time group, but that itself may offer a greater scope for increase.

40. Figure 18 below shows that both the absolute numbers and the rate of growth of part-time students fall well short of those of full-time students. It will take the sort of radical changes in behaviour by employers and employees that the Leitch report envisages to achieve the sort of increases required, and it remains to be seen if that is achieved.

<sup>&</sup>lt;sup>13</sup> The Government's target in fact no longer speaks of achieving 50 per cent participation, but rather of 'working towards' 50 per cent.

<sup>&</sup>lt;sup>14</sup> In part this calculation relies on retirnements from the workforce without higher level qualifications being replaced by newly qualified graduates.

### Figure 18: Growth in full-time and part-time undergraduates



Source HEFCE – HESES 2006 Survey – includes all HEFCE fundable and nonfundable, and TDA-funded students

41. Nevertheless, part time numbers can be expected to increase naturally, even without the effect of policy changes. The decline in the young population has a smaller impact on part-time numbers, and the increase in the older populations a greater impact. Although the increases are not sufficient to offset the decline in full time numbers, they are significant, as is shown in Table 19 below.

Age Cohort	Estimated nos in 2006-07 (FTEs)	% Population change to 2010-11	Resulting student number changes to 2010-11 (FTEs)	% Population change to 2020-21	Resulting student number changes to 2020-21 (FTEs)	% Population change to 2024-2025	Resulting student number changes to 2024-25 (FTEs)
<21	12,000	1.7	200	-11.7	-1390	-5.8	-670
21-24	24,000	6.9	1650	0.5	120	-4.4	-1050
25-29	30,000	7.2	2150	13.1	3920	8.5	2540
30+	130,000	2.2	2850	11.5	13950	14.3	18640
Total	196,000		6850		16600		19450

Table 19: Changes in part time numbers due to demography

42. As far as mature students are concerned, no separate projection is made of demand, mainly because the great majority of mature students in higher education are part-time, and part-time demand has been discussed

above. Figure 20 below shows that there has been barely any change recently in the proportion of part-time entrants who are 30 and over.



Figure 20: Proportion of part-time undergraduate entrants aged 30+

43. However, the Government clearly believes that there is growth potential among mature and part-time students who are in employment. In 2006, the then Acting Chief Executive of HEFCE wrote to the Heads of English HEIs :

"HEFCE's grant letter from the Secretary of State in January this year (2006) called on HEFCE to lead radical change in higher education (HE) by incentivising and funding provision which is partly or wholly designed, funded or provided by employers. HE Minister Bill Rammell's address to the HEFCE annual conference in April emphasized the strength of the Government's interest in this agenda, in particular in encouraging growth in undergraduate student places that are co-funded by employers."

HEFCE Circular Letter 06/2006

44. Government policy is clearly that much of the future growth in higher education should come from students who are in employment and should be directed at developing skills which are immediately and directly required by employers. However, it is far from clear how much demand there will be for such provision, and HEFCE has, in its invitation to

Source: HESA Student volumes 1996-97 to 2005-06

universities to bid for additional student numbers, wisely started in a modest way, inviting bids for just 5,000 such places. It is not clear at present whether the Government's policy in this respect is based on market research and evidence of demand. For the time being it would be unwise to base student number projections on this policy, but if there does turn out to be a latent demand from employers for higher education courses to increase the skills of their employees, then this could impact significantly on higher education numbers.

#### EU Students

45. The UK accepts more students from other EU countries than any other member state. In 2005-06 nearly 60,000 EU undergraduate students attended UK universities, and according to UCAS the number of applicants for 2007 entry is currently showing a 15.5 per cent increase over the equivalent period in 2006. These increase are in part – but not only – the result of very substantial increases in numbers from the Accession states of 2004 and from Bulgaria and Romania, which acceded in January 2007.

46. In 2004<sup>15</sup> HEPI suggested that that year's EU enlargement would add up to 16,000 undergraduate and 9,000 postgraduate students by 2010-11. The rates of increase are slowing – more than 136 per cent increase in the first year, 58 per cent in the second and 30 per cent last year - but the growth to 2006 already means that that forecast is almost certain to be met and probably exceeded; and in addition, demand from Bulgaria and Romania is showing the same pattern (UCAS reports applications increased by 180 per cent and 185 per cent respectively).

47. The success of our universities in recruiting EU students is twoedged. On the one hand, they represent a valuable source of students – often highly gifted and motivated, as may be imagined of students who choose to study in a foreign country. On the other hand, demographic changes in other EU countries will lead to declines in the young population

<sup>&</sup>lt;sup>15</sup> Projecting Demand for UK Higher Education from the Accession Countries (HEPI, 2004)

often even more substantial than in this country – in the EU as a whole the number of young people in the age cohort from which university entrants are drawn will reduce by over 20 per cent between now and 2020: although there will be variations, no EU state is exempt from the overall trend, and all will need to achieve significant increases in participation if they are to offset demographic decline. Universities in those countries will undoubtedly fight for survival by seeking to hold on to their nationals, and induce them not to travel abroad to study.

48. It is, therefore, highly unlikely that increased demand from EU students will help offset any reduced demand from home students after 2010-11. Indeed, if English universities succeed in holding on to their present numbers, this would represent a relative increase of about 20 per cent, and is probably the most optimistic outcome that can be anticipated.

## **Part V: Projections**

49. Last year's report provided detailed calculations of likely future demand, and there is no reason to repeat those. The external environment, and the factors that feed into higher education demand are much as they were last year – A level uptake has not increased, gender differences remain as marked as before, and demographic changes are as reported previously (which is not surprising given that the population concerned has already been born). The one thing that has changed slightly is our understanding of the social class changes in the population, and the resulting changes are not sufficient to impact greatly on the conclusions of last year.

50. So alternative projections are again offered. The base projection takes as its starting point that there will be no improvements in the drivers of participation, and can be regarded as somewhat pessimistic. On this basis:

 By 2020-21 there will be a reduction of over 23,000 full time and growth of about 14,000 FTE part-time students – a decline of less than 10,000 FTEs altogether – compared to 2006-07 numbers. Although that may seem effectively a 'no change' situation

25

compared to 2006-07, numbers will continue to grow between now and 2010-11, as a result of the demographic growth of 18-20 year olds. So between the peak in 2010-11 and 2020-21 there will be a reduction of over 50,000 full time students and an increase of less than 13,000 FTE part-time students – a reduction of over 35,000 FTEs altogether

There is little on the downside likely to lead to demand lower than that described here. The main unknown in the future is the possibility that student fees will increase. Experience with the introduction of fees in 1998 and their increase in 2006 suggests that fees at present levels do not impact the inclination of students to participate in higher education. That does not mean, however, that if there were a large-scale and significant increase in fees there would be no impact, but such a development is unlikely. What is far more likely is that each university will set fees at a level that does not impact demand for that university. Some may well set much higher fees if permitted to do so, without reducing intakes. Many - probably most - will maintain fees at around their current levels. Overall demand is unlikely to be affected by changes in fees, so this projection should be regarded as the minimum likely over the next 15 years or so. The uncertainties are almost all on the upside.

51. The main developments that may confound these projections on the upside are:

 Significant improvements in school performance of pupils from those groups that have hitherto underperformed – the lower social groups, and boys in particular. These are the targets of a considerable amount of government-inspired activity, and although the results of these measures so far have been disappointing, eventual success is by no means to be ruled out. If so, then that will of course herald major and wide-ranging social change more generally, and the implications will be felt far beyond our universities

26

- The new requirement for all young people aged 16-18 to participate in some form of education and training. This will give rise to more people with a level 3 qualifications. However, it is unlikely that this will impact greatly on higher education demand
- The effect of the new 16+ level 3 diploma remains to be seen.
  Introduction of Curriculum 2000 in the late 1990s and even more so the introduction of GCSEs in the late 1980s had the effect of encouraging additional young people to stay on at school and obtain level 3 qualifications, and impacted significantly on higher education demand. If the new diploma has a similar effect then this will increase demand for higher education beyond that shown here.
  The effect of the new diplomas will need to be monitored
- Associated with the above, a large increase in the number of young people taking vocational qualifications, and an increase in the proportion of those doing so that go on to HE. At present because of the small proportion of those with NVQs and VRQs who progress to higher education, even if there were a large increase in the number of such students, the impact on HE participation would be modest
- An increase in the proportion of those with A levels who go to university, and a consequent continuing improvement in the HEIPR to 47 per cent
- A major increase in participation by part-time and mature students. These are the targets of the most recent government initiatives in higher education, which aim to encourage employers to be much more active in seeking to upskill their employees, and to encourage universities to respond to the anticipated demand from employers. It is too early yet to say if the Government's aspirations here will yield fruit, but if so then this too could potentially give rise to substantial additional demand.

52. These are all optimistic and highly uncertain developments. It is very unlikely that all of them will come about, but it would be unwise to assume that none will do so. For the purpose of comparison with the base

projection, if the recent increase in the HEIPR becomes a trend, and we achieve a HEIPR participation rate of 45 per cent by 2020, then this would imply an increase of 15,000 or so students between the population peak in 2010-11 and 2020-21. And since such an improvement in the HEIPR would very likely come about by improved participation by the social groups that do not fully participate at present and/or an improvement in the participation of boys, this is a reasonable basis for illustrating an alternative projection to set against the base projection shown above.

53. So looking forward to 2020, overall numbers in higher education might reduce from a high in 2010-11 by 35,000 if the lower projection comes about or they might increase in that period by as much as 15,000 on the alternative scenario.