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DEPARTMENT OF EDUCATION AND SCIENCE
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TELEPHONE 01-928 9222
FROM THE SECRETARY OF STATE

13/7/84

(DB)

D M Barclay Esq
Private Secretary to the
Prime Minister
10 Downing Street
LONDON SW1

pa.
DMS
13/7

nbpm
OL to see + return please.
DMS
13/7

12 July 1984

Returned
with thanks.
DL
13/7

Dear David,

FUTURE DEMAND FOR HIGHER EDUCATION

The Prime Minister and other members of the Cabinet may like to know that the Department is today publishing its revised projections of demand for higher education in Great Britain. ... A copy of Report on Education 100 setting out these projections ... is enclosed, as is a copy of the related press notice. Sir Keith Joseph will this afternoon be answering an inspired Parliamentary Question drawing attention to the publication, and will also be referring to it in a speech he is giving to the British Academy ... this afternoon. Enclosed is the relevant extract from that speech, and Sir Keith has suggested that the Prime Minister and colleagues may find this helpful as background and in dealing with any queries on the projections.

I am copying this letter to the Private Secretaries to other members of the Cabinet.

Yours,
Elizabeth

MISS HODKINSON
Private Secretary

Demand for higher education in Great Britain 1984-2000

INTRODUCTION

1. Report on Education Number 991 (RE99) was issued in April 1983 as a contribution to the review of provision for higher education beyond 1985-86 which was promised in the White Paper on *The Government's Expenditure Plans 1983-84 to 1985-86* (Cmnd 8789). Since its issue RE99 has attracted considerable comment and criticism from, among others, the Royal Society, the Committee of Vice-Chancellors and Principals, the Royal Statistical Society and the Association of University Teachers, who have issued their own papers on the subject. The projections in RE99 have now been revised to take account of these commentaries and of more recent information that has become available.

2. This Report, which is issued with the agreement of the Scottish Education Department and the Welsh Office, presents the work that has been carried out by the Department of Education and Science. Ministers will be considering their policy for future provision for higher education in the light of these projections and of the advice they will be receiving from the University Grants Committee (UGC) and from the advisory bodies for local authority higher education on the development of higher education into the 1990s. Accordingly, this Report contains no statement of future Government policy.

3. RE99 was criticised for presenting insufficient statistical material. In the space available in a Report on Education it is not feasible to include a detailed description of the rationale for the assumptions that lie behind such projections and the large number of related tables. But for RE100 an associated *Technical Report*² has been prepared for those who wish to examine the supporting material.

REVIEW OF STUDENT NUMBERS IN HIGHER EDUCATION

4. The historical perspective of student numbers on courses of higher education in universities and in public sector establishments of further education in Great Britain was displayed in RE99 and analysed in more detail in a series of DES *Statistical Bulletins*³. This report therefore provides only a brief analysis of past trends. More detail is provided in the Technical Report.

Table 1 Student numbers in higher education

Great Britain	Thousands					
	1970-71	1975-76	1980-81	1981-82	1982-83	1983-84 (prov)
Full-time and sandwich						
Home students						
Postgraduates	..	..	43	43	40	41
First degrees	..	..	354	374	388	} 474
Other advanced	..	..	71	75	79	
Total home students	422	456	468	492	507	515
<i>of which</i>						
Universities	210	230	265	268	265	259
Public sector	212	226	203	223	243	256
Students from abroad	24	48	53	50	46	45
Total full-time and sandwich	446	504	521	542	553	560
Part-time students						
Postgraduates	..	..	40	41	44	..
First degrees	..	..	20	21	24	..
Open University	20	56	68	72	75	..
Other advanced	..	..	161	163	158	..
Total part-time students	161	217	289	296	300	..
<i>of which</i>						
Universities	42	81	100	105	108	..
Public sector	119	136	189	192	192	..
Total all students	607	721	810	838	853	..

1 *Future demand for higher education in Great Britain*

2 *Technical Report to DES Report on Education 100* will be available (price £8) from Dept. of Education and Science, Room 337, Mowden Hall, Staindrop Road, Darlington DL3 9BG.

3 *Statistical Bulletins* 12/80; 6/81; 9/82; 17/83.

Table 2 Institution and type of course attended by home students in higher education

Great Britain	1970-71	1975-76	1980-81	1981-82	1982-83	1983-84 (prov)
Full-time and sandwich						
Total home students (000s)	422	459	468	492	507	515
percentages of which:						
Postgraduates	..	..	9	9	8	8
First degrees	..	..	76	76	76	92
Other advanced courses	..	..	15	15	16	
Universities	50	50	57	55	52	50
Public sector	50	50	43	45	48	50
Part-time students						
Total part-time students (000s)	161	217	289	296	300	..
percentages of which						
Open University	12	26	24	24	25	..
Other universities	14	12	11	11	11	..
Public sector	74	63	65	65	64	..

5. Table 1 shows the numbers of full- and part-time students in higher education for selected years from 1970. The figures for 1983-84 are derived from provisional returns for the universities and for students on advanced further education courses (AFE) in public sector institutions in Great Britain. AFE courses are broadly those which lead to qualifications of a standard above the Advanced level of the General Certificate of Education (A-level) or the Higher Grade of the Scottish Certificate of Education (SCE Highers). The number of home students in full-time and sandwich higher education in 1983-84 was 515,000 of whom 259,000 were in universities and 256,000 in public sector establishments. Including the 45,000 students from abroad there was a total of 560,000 full-time and sandwich students in higher education in Great Britain. Information for part-time students for 1983-84 is not yet available. Table 1 shows that in 1982-83 about one-third of part-time students studied at universities or with the Open University and two-thirds in public sector establishments. Just over half of part-time students were on courses other than those leading to degrees.

6. Table 2 shows in percentage terms the component parts of the total numbers of full-time and of part-time students in higher education by type of course and by institution. In 1983-84, home full-time and sandwich students were divided almost equally between the university and public sectors. A similar division existed in 1970-71 but between these years the university sector increased to reach 57% of the total in 1980-81. In 1982-83 the Open University accounted for a quarter of all part-time higher education students.

DEMAND FOR HIGHER EDUCATION

7. Demand for higher education comes from a number of different groups. Although the dominant entry group consists of young home students, the numbers of mature (21 and over) students are also important. Projections for the different entry groups have been carried out separately for men and women. Assumptions about future numbers of postgraduate students and students from abroad, about the share of places between universities and the public sector (because of the differences in average course length), and about part-time student numbers also have an effect upon projections of total student demand and are dealt with later in this Report.

YOUNG HOME INITIAL ENTRANTS TO FULL-TIME AND SANDWICH COURSES

Participation indices

8. The extent of involvement in higher education of young full-time and sandwich home initial entrants has, since the days of the Robbins Report, been measured by two participation indices. In the past these measures have been termed 'rates', but the use of this word has been criticised on the grounds that it implied that a direct link existed between the numerator and denominator of the 'rate'. The term 'index' is being used in place of 'rate' in future. The Age Participation Index (API) has been redefined as the number of young full-time and sandwich home initial entrants to higher education expressed as a percentage of half the total of 18 and 19 year olds in the population in any one year.

9. The qualified participation index (QPI) (previously the qualified participation rate: QPR) is defined as the number of home initial entrants aged 20 and under to full-time and sandwich higher education regardless of entry qualification in a given year (x 100) divided by the number of students leaving schools and further education establishments in the previous academic year with at least two GCE A-levels (three SCE Highers if Scotland is included in the calculations). The QPI is not a direct measure of the participation in higher education of students with two or more A-levels who finished A-level courses the previous academic year. It is an indirect measure whose use is justified on the grounds that most of the young home students entering higher education do possess these qualifications. For example in 1982-83 over 4 out of 5 such entrants to higher education courses in England had achieved two or more A-level passes. For some non-degree advanced further education courses a lower level of attainment (typically one A-level) is the minimum prescribed. The use of the QPI as the basis for projection implies that the demand for higher education from young entrants with lower levels of entry qualification will change in future in line with changes in the level of demand from those with two or more A-levels. Tables 3 and 4 give the values of the API and QPI for men and women separately since 1970-71.

Demographic trends and social mobility

10. Social class is widely recognised as an influential factor when assessing the likelihood of children staying on at school or further education college gaining qualifications suitable for entry into higher education. Social class is defined by reference to the occupation of the head of the household. In projecting the future number of qualified leavers account has been taken not only of the total number of births but also of the numbers in the various social classes and of the social mobility of parents between the birth of their children and when they reach age 18.

Social class at birth

11. Since the mid-1960s the number of births in England and Wales has fallen by about a third whilst the number occurring to families in social classes I (professional) and II (intermediate occupations — administrators, managers) has risen by about a fifth. As a percentage of all births, those occurring to families in social classes I and II remained fairly constant (about 17%) between 1951 and 1963. Since then the proportion has risen and reached 30% in 1981.

12. But information which became available from the Office of Population Censuses and Surveys (OPCS) at the end of 1983 showed that, contrary to what had been assumed by some

Table 3 Ages of home initial entrants to full-time and sandwich higher education

Great Britain

	1970-71	1975-76	1980-81	1981-82	1982-83	1983-84 (prov)
Men						
Aged under 21 (000s)	57.2	59.7	65.0	68.6	70.2	68.3
as % of average 18-19 year old population	15.0	14.7	14.3	15.1	14.9	14.4
Aged 21-24 (000s)	9.6	8.6	11.0	11.6	11.9	11.9
as % of average 21-24 year old population	0.56	0.56	0.67	0.71	0.71	0.69
Aged 25 and over (000s)	6.5	9.1	8.7	9.6	9.6	9.6
as % of average 25-34 year old population	..	0.24	0.23	0.25	0.25	0.25
Women						
Aged under 21 (000s)	45.4	47.6	48.9	52.1	55.5	54.6
as % of average 18-19 year old population	12.4	12.4	11.2	11.8	12.3	12.1
Aged 21-24 (000s)	3.6	4.9	5.8	6.3	6.6	6.6
as % of average 21-24 year old population	0.21	0.33	0.37	0.39	0.41	0.40
Aged 25 and over (000s)	7.5	9.0	8.2	8.7	9.3	9.3
as % of average 25-34 year old population	..	0.24	0.22	0.23	0.25	0.25
Men and women						
Aged under 21 (000s)	102.6	107.3	113.9	120.7	125.7	122.9
as % of average 18-19 year old population	13.7	13.6	12.8	13.5	13.6	13.2
Aged 21-24 (000s)	13.2	13.5	16.8	17.9	18.5	18.5
as % of average 21-24 year old population	0.38	0.45	0.52	0.55	0.56	0.55
Aged 25 and over (000s)	14.0	18.1	16.9	18.3	18.9	18.9
as % of average 25-34 year old population	..	0.24	0.22	0.24	0.25	0.25

observers, differentials in fertility by social class had not changed greatly between 1961 and 1981. The observed changes in numbers of births by social class match the changes in the total number of women of child-bearing ages in the relevant class. Taking 1961 as 100 the overall rate of births per thousand women aged 15-44 in 1981 was 73. On a similar basis the rate for births to social classes I and II was also 73 for 1981.

13. The changes in the proportion of births in each social class reflect the movements in the occupational structure resulting from a reduction in employment in the manufacturing sector and a growth in employment in the service industries. Different social class labels have been assigned to families because the work the head of the household does has changed (from manual to non-manual). Between 1960 and 1980 the proportions of GB employees in employment moved as follows between the three categories into which such employees are divided:

Agriculture
down 2 percentage points
Production and construction
down 11 percentage points
Services
up 13 percentage points

Social mobility between birth and age 18

14. The social class composition of the 18 year old population will differ from that of the cohort at birth. Mortality and migration have a marginal effect but social mobility by a change in occupation of the head of the household after the birth of the child is the most significant factor. The 1981 Labour Force Survey has been used in association with the relevant birth data for each social class to provide estimates of the social mobility between birth and age 18 of those born in 1963. It is estimated that nearly half (47%) of those aged 18 in social class II in 1981 had entered since birth. The proportion of the cohort in social class I had increased only slightly. There was a substantial net movement out of the manual classes, some 9.5% of the cohort.

15. An estimate of the future changes in the social structure of the population to the turn of the century is, therefore, required. Projections of occupational trends up to 1990 have been produced by the Institute of Employment Research (IER) at Warwick University. In their latest publication, *Review of the Economy and Employment* (Summer 1983), the IER provides a projection of the number of jobs in each of 18 occupational categories in 1990, which can be compared with the 1961 and 1980 occupational structure. Between 1981 and 1990 the IER projects that the growth in non-manual occupations will moderate substantially. There was a 15 percentage point increase in the proportion in non-manual occupations between 1971 and 1980; it is estimated

Table 4 Numbers of qualified leavers and participation indices

Great Britain

	1970-71	1975-76	1980-81	1981-82	1982-83	1983-84 (prov)
Thousands						
Qualified leavers						
Men	58.4	63.5	69.7	72.3	75.0	76.8
Women	44.0	51.8	63.2	65.2	71.2	74.3
Total	102.4	115.3	132.9	137.5	146.2	151.1
of which % of women	43	45	48	47	49	49
Qualified leaver index						
Men	15.3	15.7	15.4	15.9	16.0	16.1
Women	12.0	13.5	14.6	14.8	15.7	16.3
Total	13.7	14.6	15.0	15.4	15.8	16.2
Qualified participation index						
Men	97.9	94.1	93.3	94.9	93.6	89.0
Women	103.2	91.8	77.4	79.9	78.0	73.5
Total	100.2	93.1	85.7	87.8	86.0	81.4
Younger mature entry index						
Aged 21-24						
Men	..	..	11.3	11.6	11.4	11.5
Women	..	..	5.2	5.1	5.0	4.8

that this will be reduced to a 4 percentage point rise over the next decade.

16. Assumptions about the social mobility between birth and age 18 for births occurring between 1964 and 1980 take account of the data available concerning the social mobility of those born in 1963 (see paragraph 14). Assumptions about the mobility occurring between now and the end of the century have been based upon the IER data. Six distinct periods were identified as having differing annual net movements. The post-birth mobility rates for all birth cohorts from 1963 onwards can be calculated by aggregating the appropriate estimates of annual net movements. These post-birth mobility rates were applied to the relevant birth data to provide estimates of 18 year olds by social class from 1981 to 1999. On this basis the proportion of 18 year olds in social classes I and II is projected to rise from 28.5% in 1981 to 34% by 1999.

Projections of qualified leavers

17. A model has been developed to produce projections of qualified leavers from school and further education in England and Wales based on alternative assumptions regarding the propensities of young people in different social classes to achieve two or more A-levels. Two main assumptions have been tested to date. They reflect differences of view as to the likely timing of the influence of social class on pupils' propensities to achieve two or more A-levels by the time they reach 19. Projections have been prepared for males and females separately.

18. The first projection (Variant I) assumes, as regards both males and females, that the mobility of the parents into a higher social class, between the birth of the child and when reaching age 18, has no effect upon the propensity of their offspring to attain two or more A-level passes, and that such mobility in the years before birth has less than full effect. This 'no assimilation' assumption is similar to that on which the earlier work first published in RE97 and later in *Statistical Bulletin 6/83* was based. The differences in the resulting estimates of qualified leavers arise mainly from the greater sophistication of the newly developed model and from the use of more data.

19. The second assumption (Variant II) is that the attainment of children is affected only by their social class at the time of taking A-levels, so social class at birth is assumed not to be directly relevant. This 'full assimilation' assumption is broadly that used in the Royal Society paper in their model A, although the Royal Society assumed higher social mobility in the future.

20. The projection for females follows the same reasoning as that for males, but with one additional adjustment for England to allow for the relative growth

in female attainment compared with males over the last 10 years. The numbers of females attaining two or more A-levels in England in 1970-71 was around three-quarters of the number of males attaining the same qualifications. By 1982-83 the percentage had risen to about 95%. At this level, for females the percentage of the relevant age group achieving two or more A-levels equals that for males. The projections assume a further small increase in England in the number of females attaining two or more A-levels relative to the number of males doing so, reaching 96% in 1986-87, with a constant ratio thereafter. In Scotland and Wales this ratio has been greater than 100 in recent years and is assumed to remain constant in the future.

21. There is evidence, though tentative, that full assimilation to the attainments of the social class entered has not occurred over the past 10 years. The 'no assimilation' assumption appears to give the better fit. This is based on a comparison of actual attainments of males with the estimates given by the variant projections over the past decade. Variant I (ie the 'no assimilation' variant) which counter-intuitively results in slightly higher figures for qualified school leavers as compared with Variant II has therefore been used for the purposes of projecting higher education demand in the remainder of this Report.

22. Table 5 gives the figures for the projected numbers of qualified leavers in Great Britain to the end of the century which follow from the assumptions made for Variants I and II for England and Wales, together with projections of qualified leavers with three or more Scottish Highers prepared by the Scottish Education Department. The figures are shown in graph form in Graph A. The GB variants are labelled I and II according to which variant has been used for England and Wales. The

projection of qualified leavers used for RE99 is also shown on the graph. The difference between the RE99 figure and the Variant I ('no assimilation') line on the graph, rising from around 2,000 in 1984 (RE99 - 148,000) to 5,000 by 1989 (RE99 - 141,000) and remaining at that thereafter, is due to the later base year information for 1982 and 1983, and, to a lesser extent, to the revised information about the number of women achieving two or more A-levels.

Demand from young home initial entrants

23. The concept of a 'demand' for higher education cannot be regarded as absolute. It adjusts to the characteristics of the system available and to the economic and social conditions at the time. Demand for full-time and sandwich higher education for those under 21 may be described in terms of an index of qualified leavers wishing to enter full-time higher education if places are available — the qualified demand index (QDI). In this Report two projections of qualified demand are presented: Variants X and Y.

24. Variant X assumes the continuation of demand at a level consistent with that observed in 1981 (as measured by those actually entering higher education that year). It therefore reflects the propensity to enter higher education at the then current distribution of places between the universities and the public sector, the then current level of student grant, and any other relevant socio-economic conditions. For men it has been assumed that the peak QPI attained in 1981-82 (94.9) best measures that demand. Excluding teacher training entry which has distorted past trends, the women's QPI has remained about 78% of that for men since 1979-80. For Variant X for women it has been assumed that the QDI will continue its long term tendency to catch

Table 5 Projections of qualified leavers

Great Britain	Variant I*		Variant II			
	Qualified leavers (Thousands)		QLI	Qualified leavers (Thousands)		QLI
	Men & women	Women	Men & women	Men & women	Women	Men & women
1980-81 (actual)	132.9	63.2	15.0	132.9	63.2	15.0
1983-84 (prov)	151.1	74.3	16.2	151.1	74.3	16.2
1984-85	149.8	73.9	16.4	149.2	73.6	16.3
1985-86	149.8	74.1	16.7	149.0	73.7	16.6
1986-87	149.1	73.8	16.8	148.1	73.3	16.7
1987-88	147.7	73.1	17.0	146.3	72.4	16.9
1988-89	144.4	71.5	17.0	142.4	70.5	16.8
1989-90	145.8	72.2	17.4	142.9	70.8	17.1
1994-95	119.2	59.0	18.5	113.9	56.4	17.6
1999-2000	130.5	64.6	18.7	123.5	61.2	17.7

* Variant I, 'no assimilation' was used for the final projections.

up with that for men, increasing to 85% of the value for men by 1986-87. This is the level of demand which would have been reached when women's relative A-level achievements equalled those of men (as they almost did in 1982-83) if trends in female demand for higher education had continued without diminution after 1979-80. It has been assumed that the demand for higher education from women will not increase beyond this level.

25. Variant Y assumes the continuation of demand at a level consistent with the entry to higher education that actually occurred in 1983, with the then current level of student grant and other socio-economic conditions, and with a different distribution of places between the universities and the public sector, but adjusted to take account of NAB* plans and university bids to the UGC for extra student intake for 1984-85 and 1985-86. The level of applications to the universities in 1984 (which has some value as a leading indicator of trends in higher education demand) suggests a QDI in that year similar to 1983-84. For this variant, the QDIs for men and for women have been taken to continue at their 1983-84 provisional values of 89.0 and 73.5 respectively.

26. Table 6 gives the projected numbers of young home initial entrants in Great Britain for Variants X and Y. These figures are illustrated in Graph B which also gives the projections made in RE99. Neither Variant X nor Variant Y are presented as limiting bounds. Changes to the structure of higher education, to the level of student grant or in economic conditions could either increase demand above Variant X or reduce it below Variant Y.

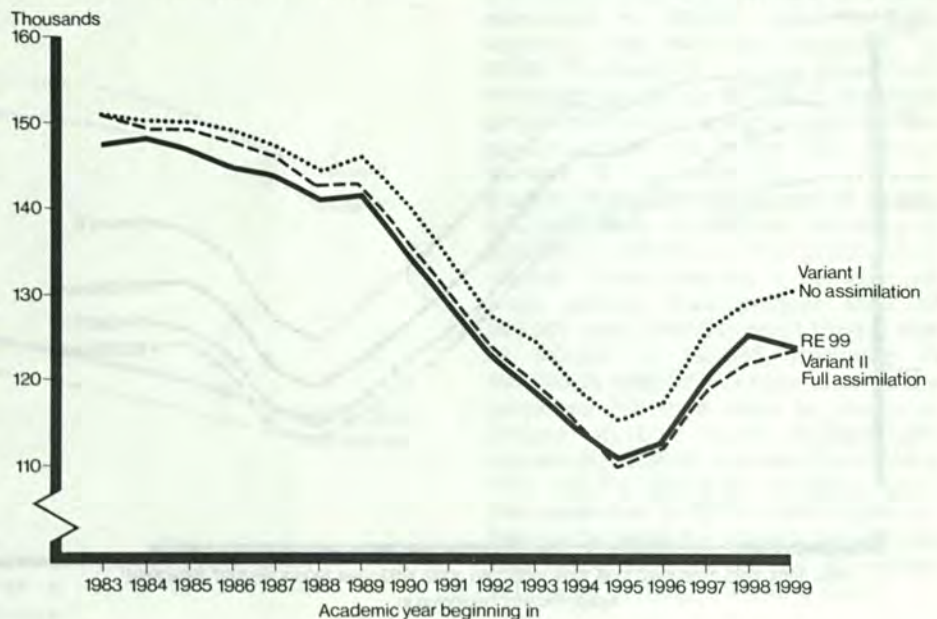
27. The Age Participation Index (API) is slightly different to the age participation rate used in RE99. It is defined in paragraph 8. For Variant X the API is estimated to rise from 14.6 in 1984-85 to 16.1 in 1991-92 and to just under 17 by the end of the century. The QDI for men and women combined moves from 89 in 1984-85 to 90 by 1986-87 and thereafter remains constant. In terms of QDI Variant X represents a slightly higher assumption that the upper bound of RE99, where it was estimated to rise to 89 by 1983-84 (as for Variant X) but to remain at that level thereafter. This increase for Variant X is due to the assumptions made about increasing demand for higher education from women.

28. For Variant Y the API for men and women moves from the combined estimated actual figure of 13.2 in 1983-84 to 15 by 1993-94 and then remains just above this level. The QDI for men and women combined remains at around 81.4, the provisional value of the QPI for 1983-84.

* National Advisory Body for Local Authority Higher Education.

Graph A Qualified leavers

(Great Britain)



MATURE ENTRANTS TO FULL-TIME AND SANDWICH COURSES

29. For this work, full-time and sandwich mature students have been divided into those aged 21-24 (styled 'younger mature') and those aged 25 and over (styled 'older mature').

Younger mature entrants

30. Given that two-thirds of the 21-24 year old entrants to CNA first degree

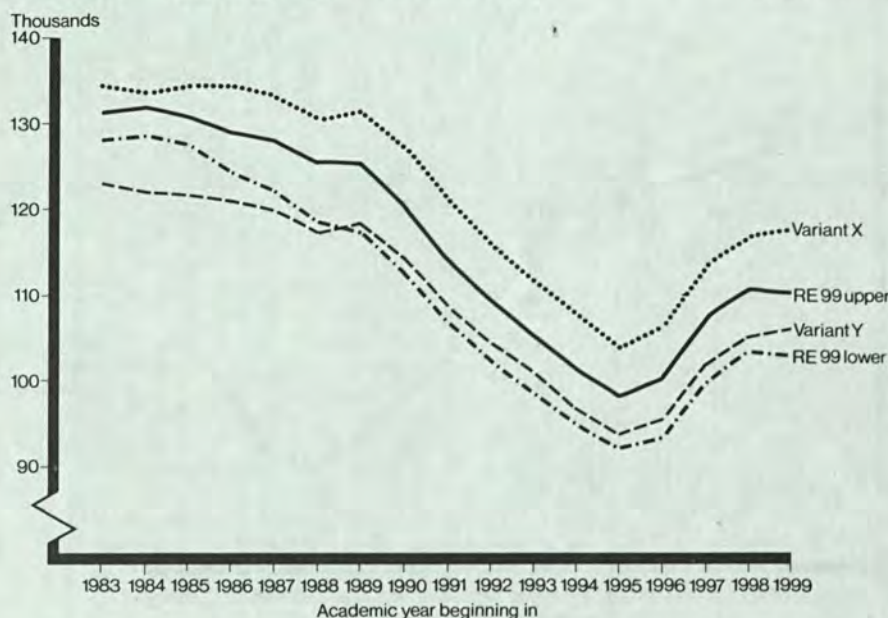
courses possess at least one A-level, it is assumed for the new projections that the client group of those qualified for entry is made up of those in that age range with at least one A-level. Those who have already undergone higher education are excluded. The number of potential entrants is therefore that of those obtaining one or more A-levels from school or further education (or two or more SCE Highers) who did not take up full-time higher education when aged under 21.

Table 6 Demand projections of young home initial entrants

Great Britain	Men			Women			Men and women		
	000s	API	QPI	000s	API	QPI	000s	API	QPI
Variant X									
1980-81	65.0	14.3	93.3	48.9	11.2	77.4	113.9	12.8	85.7
1983-84	72.9	15.3	94.9	61.2	13.4	82.4	134.1	14.4	88.8
1984-85	72.0	15.4	94.9	61.7	13.8	83.5	133.7	14.6	89.3
1985-86	71.8	15.7	94.9	62.7	14.3	84.6	134.5	15.0	89.8
1986-87	71.5	15.8	94.9	63.0	14.5	85.4	134.5	15.2	90.2
1987-88	70.8	16.0	94.9	62.4	14.7	85.4	133.2	15.4	90.2
1988-89	69.2	16.0	94.9	61.1	14.7	85.4	130.2	15.3	90.2
1989-90	69.9	16.3	94.9	61.7	15.1	85.4	131.5	15.7	90.2
1994-95	57.1	17.3	94.9	50.4	15.9	85.4	107.5	16.6	90.2
1999-2000	62.5	17.6	94.9	55.2	16.1	85.4	117.7	16.9	90.2
Variant Y									
1983-84	68.3	14.3	89.0	54.6	12.0	73.5	122.9	13.2	81.4
1984-85	67.5	14.5	89.0	54.3	12.2	73.5	121.9	13.3	81.3
1985-86	67.4	14.7	89.0	54.5	12.4	73.5	121.8	13.6	81.3
1986-87	67.0	14.8	89.0	54.2	12.5	73.5	121.2	13.7	81.3
1987-88	66.4	15.0	89.0	53.7	12.6	73.5	120.1	13.9	81.3
1988-89	64.9	15.0	89.0	52.6	12.7	73.5	117.4	13.8	81.3
1989-90	65.5	15.3	89.0	53.1	13.0	73.5	118.6	14.2	81.3
1994-95	53.6	16.3	89.0	43.4	13.7	73.5	96.9	15.0	81.3
1999-2000	58.6	16.5	89.0	47.5	13.9	73.5	106.1	15.2	81.3

Graph B Home young initial entrants

(Great Britain)



31. The numbers of entrants aged 21-24 (x 100) divided by this number gives a younger mature entry index (YMEI) analogous to the QPI for young entrants. As Table 4 shows, like the QPI, the YMEI reached a peak in 1981-82 and has then declined. The levels for men and women differ. Projections have been constructed by analogy with Variants X and Y for young entrants. Variant X continues the men's YMEI at its 1981-82 peak of 11.6 while that for women rises above its 1981-82 value of 5.1 to reach an assumed 5.5 by 1986-87. Variant Y continues the YMEIs for both men and women at the 1983-84 values of 11.5 and 4.8 respectively.

32. The resulting projections give between 19,000 and 22,000 entrants aged between 21 and 24 in 1989-90, and between 17,000 and 20,000 in 1995-96 compared with (provisionally) 18,500 such entrants in 1983-84.

Older mature entrants

33. As only 46% of entrants to CNA first degree courses aged 25 and over possess A-levels it is less appropriate to relate trends in the numbers of such entrants to those with A-levels. Most of this group are aged between 25 and 34, and for them a population-based participation index — called the older mature participation index (OMPI) — equivalent to the young entrants' API has been calculated based upon the 25-34 age group. This index has not exhibited any consistent trends over time. It declined between 1975-76 and 1980-81: increases in 1981-82 and 1982-83 do not appear to have continued in 1983-84. For these older mature students only one projection has been made for men, holding the men's OMPI at its 1983-84 value. Variant X increases the OMPI for women slightly until

1986-87 whilst Variant Y holds it at its 1983-84 value. Of all the projections those for this group are the most uncertain, particularly as nearly 40% of entrants to higher education aged 25 and over hold qualifications below five O-levels or equivalent. The above assumptions lead to figures for both variants of about 21,000 entrants aged 25 and over by 1989-90 and about 22,000 by 1994-95, compared with nearly 19,000 in 1983-84.

34. The projections of mature students of both age groups are set out in Table 7 and compared with those in RE 99 in Graph C.

HOME POSTGRADUATES

35. To complete the tally of full-time and sandwich students, assumptions for full-time postgraduate students and for students from abroad are necessary. In 1983-84 the ratio of university postgraduate numbers to undergraduate numbers was 13:100, while that in the public sector was 4.5:100. It has been assumed that these ratios will also apply in the future. It should be noted that the assumed university share of undergraduate entrants (see paragraph 37) affects the numbers so projected.

STUDENTS FROM ABROAD

36. Students in higher education who pay fees at the overseas rate together with those domiciled in other European Community countries have been assumed to remain constant at their 1983-84 level of 45,000. It has been assumed that increases in student numbers from European Community countries and those countries covered by Government assistance schemes will be counter-balanced by further falls in numbers from other foreign countries.

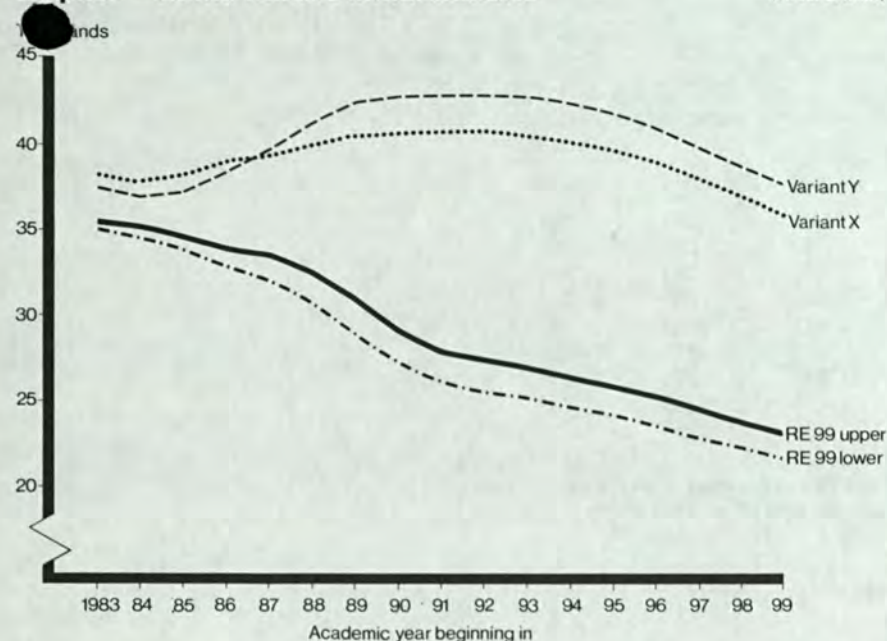
DEMAND FOR FULL-TIME AND SANDWICH PLACES

37. Having forecast the total numbers of young and mature entrants to non-postgraduate full-time and sandwich

Table 7 Demand projections of mature home initial entrants

Great Britain	Thousands				
	All ages			Aged 21-24	Aged 25 & over
	Men	Women	Total	Men & women	Men & women
Variant X					
1980-81	19.7	14.0	33.7	16.8	16.9
1983-84	21.6	16.6	38.3	19.3	18.9
1984-85	20.9	16.9	37.8	18.7	19.1
1985-86	20.7	17.4	38.2	18.8	19.4
1986-87	20.8	18.1	38.9	19.1	19.8
1987-88	20.9	18.4	39.3	19.2	20.1
1988-89	21.4	18.6	40.0	19.5	20.5
1989-90	21.6	18.8	40.4	19.4	21.0
1994-95	21.7	18.7	40.4	18.1	22.3
1999-2000	19.3	16.6	35.9	15.2	20.7
Variant Y					
1983-84	21.5	16.0	37.5	18.5	18.9
1984-85	20.8	16.1	36.9	17.9	19.0
1985-86	20.8	16.3	37.1	17.9	19.2
1986-87	21.4	17.0	38.3	18.9	19.4
1987-88	22.0	17.6	39.6	19.9	19.8
1988-89	23.0	18.2	41.2	21.1	20.2
1989-90	23.6	18.8	42.4	21.8	20.6
1994-95	23.5	18.9	42.5	20.6	21.9
1999-2000	20.9	17.0	37.8	17.3	20.5

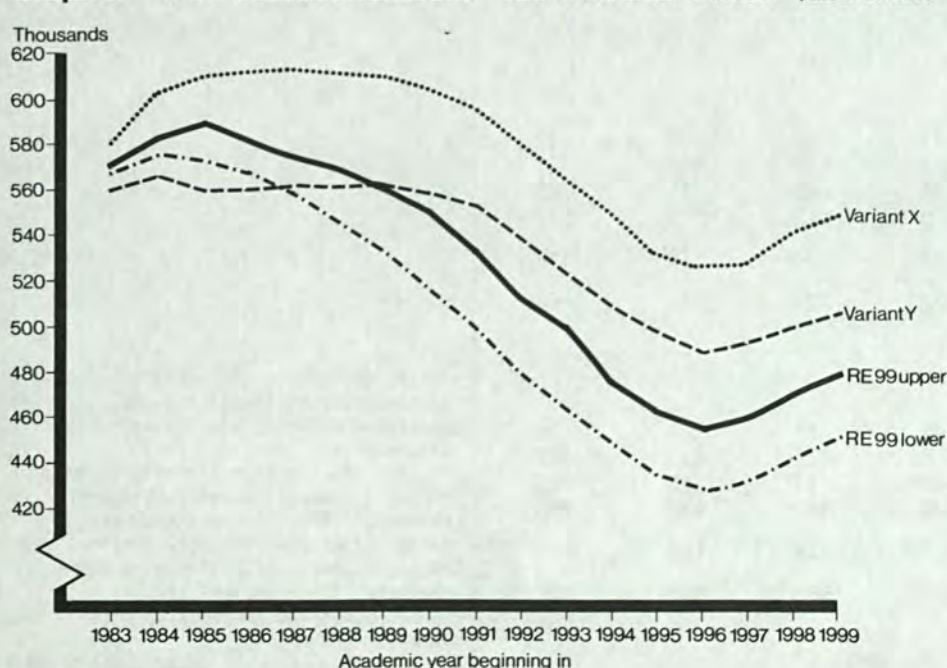
Graph C Home mature initial entrants



courses (by aggregating the series of Variants X and the series of Variants Y described in paragraphs 23-34) a conversion is then made to total numbers of such students using an 'effective length of course' factor. Because course lengths are on average longer in the universities than in the public sector (about 3.2 years compared with 2.8) at this stage it is necessary to make an assumption about the distribution of student members between the sectors. Variant X assumes that the universities' share for each type of entrant (young and mature) throughout the period of projection will be the same as it was in

1979-80 (ie before restraints on university numbers were imposed). Variant Y assumes the shares as in 1983-84. Postgraduate numbers and students from abroad are then added to give the total projected numbers of full-time and sandwich students. These total figures for Variants X and Y are given in Graph D and in Table 8 which also gives the division of numbers between universities and the public sector. These assumptions are adopted only to allow illustrative figures to be calculated. They are not a statement of policy on the future distribution of student numbers between sectors.

Graph D Total student numbers - full time & sandwich (Great Britain)



38. Graph D indicates that the new projections produce numbers in higher education by 1990-91 higher in both variants than the high projection in RE99. The trend of the new projections thereafter is similar to that of the RE99 projections, but at a higher level, but the picture is different in the 1980s. Under Variant X full-time and sandwich student demand is projected to rise to 615,000 places in 1987-88, declining to 606,000 in 1990-91 and then to 525,000 in 1996-97. Under Variant Y numbers remain around their present level of 560,000 until 1990-91, apart from a rise to 565,000 in 1984-85, declining to 489,000 by 1996-97. For both variants the projected fall from peak to trough is around 15-16% (some 77,000-90,000 places). By 1996-97, Variants X and Y are 15% and 7% above the upper bound of the projection in RE99; most of the difference between the present projections and those in RE99 is due to revised estimates of mature student entry.

39. In 1983-84 total full-time and sandwich numbers were 560,000, of whom 470,000 were home students excluding postgraduates. Under Variant Y both total student numbers and home students excluding postgraduates are expected to remain broadly steady to 1990-91. But the composition of home students excluding postgraduates will change: in 1983-84 under a quarter of such students had been 21 or over on entry, but by 1996-97 the projections suggest that the proportion of mature students will have risen to about 30% under Variant Y and to about 27% under Variant X.

PART-TIME STUDENTS

40. In 1982-83 there were some 300,000 part-time students in higher education, including 74,000 in the Open University (OU). They are of widely different ages. In 1982-83 21% of part-time students other than those in the OU were aged under 21 while 53% were 25 and over. It is thus more difficult to construct a satisfactory index of participation than for full-time students.

41. Table 1 shows that the number of part-time students increased from 217,000 to 289,000 between 1975-76 and 1980-81 but since then has shown only slight growth. For the future OU numbers are assumed to be constant. For other courses participation indices have been calculated against the population aged 18-34. These rose from 1.25% in 1976-77 to 1.64% in 1980-81 and to 1.68% in 1983-84. This small rate of increase since 1980-81 has been projected into the future to give an index of 1.73% in 1988-89. The projected numbers of part-time students are given in Table 9 in terms of student numbers and of their equivalent in terms of full-time places.

Table 8 Projections of full-time and sandwich students

Great Britain							Thousands
Year	Variant X			Variant Y			
	Total	Universities	Public Sector	Total	Universities	Public Sector	
1983-84 (prov)	560*	291*	269*	560	291	269	
1984-85	604	354	250	565	284	281	
1985-86	611	359	252	560	280	280	
1986-87	614	361	253	559	280	280	
1987-88	615	362	253	561	280	281	
1988-89	613	360	253	561	279	282	
1989-90	612	359	253	562	278	284	
1994-95	549	318	231	510	248	261	
1996-97	525	303	222	489	238	251	
1999-2000	549	320	228	508	250	258	

* The provisional 1983-84 student numbers reflect the QPIs observed in that year, and are therefore not consistent with Variant X student numbers for 1984-85 which start from assumed 1983-84 QPIs higher than the QPIs which actually occurred — see paragraph 24.

Table 9 Projections of part-time students

Great Britain			
	Numbers (thousands) Excluding Open University	Participation Index	Full-time equivalents (thousands) Including Open University*
1980-81	220.4	1.64	111.0
1983-84	229.4	1.68	117.1
1984-85	232.8	1.69	118.3
1985-86	236.3	1.70	119.6
1986-87	240.2	1.71	121.0
1987-88	243.7	1.72	122.2
1988-89	246.8	1.73	123.4
1989-90	248.2	1.73	123.9
1994-95	240.4	1.73	121.1
1999-2000	221.7	1.73	114.4

* Conversion factor of 35.8% was used for part-time students other than Open University students. This is a weighted average of the part-time day and evening only factors. Open University constant fte 35.0, 1983-84 - 1999-2000; 32.1, 1980-81

Table 10 Projections of total higher education student demand

Great Britain					Thousands
	1983-84 (prov)	1989-90	1996-97	1999-2000	
Variant X					
Full-time and sandwich					
Home postgraduates	41	48	40	42	
Home other students	474	519	440	461	
Students from abroad	45	45	45	45	
Total	560*	612	525	549	
Part-time (ftes)¹	117	124	118	114	
Total full- and part-time	677	736	644	663	
Variant Y					
Full-time and sandwich					
Home postgraduates	41	40	34	36	
Home other students	474	477	410	427	
Students from abroad	45	45	45	45	
Total	560	562	489	508	
Part-time (ftes)¹	117	124	118	114	
Total full- and part-time	677	686	607	622	

* see footnote to Table 8

¹ In full-time equivalent terms (including Open University)

TOTAL STUDENT DEMAND

42. Table 10 brings together the various elements of total full-time and part-time demand.

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EXTRACT FROM A SPEECH BY THE SECRETARY OF STATE FOR EDUCATION
AND SCIENCE DELIVERED TO THE BRITISH ACADEMY ON 12 JULY 1984

1. [Mr Chairman] I am grateful to you and to the British Academy for inviting me to address your Annual General Meeting. I was pleased to accept not because I have any major statements to make about the future of higher education, but because I welcome the opportunity to meet and talk to a gathering exclusively concerned say with the arts and the humanities.
2. I do not intend to talk to you today primarily about policy matters. But as there is a certain interest in these matters at present, and as the Department has only today published its revised projections of demand for higher education, it may be of some interest if I say a few words first about those projections and, more generally, about where we go from here.
3. Between 1982 and 1995 the 18 year old population of Great Britain will fall from about 940,000 to about 640,000, a fall of over 32%. The Department's Report on Education (ROE) 99, published in April last year, was our first attempt to assess the likely effects of that demographic fall on future demand for higher education. The Department had no hesitation in concluding that demand for higher education from qualified applicants was likely to be more buoyant than might be assumed from a simple view of the decline in the size of the 18-20 year old age group. The fall in demand might nevertheless approach 20%, and even that potential fall was daunting to contemplate in terms of the planning problems involved and, of course, in terms of its implications for the future of institutions. And in a system of higher education which is largely publicly funded the necessary adjustments to falling demand would not be brought about by the market forces.
4. ROE 99 was, as I have said, a first attempt to quantify the likely scale of the problem, and the conclusions of that

attempt were offered for discussion. A variety of comments and criticisms were made in response, both about the technical statistical methodology, and about the assumptions and approaches that underlay the projections. Many of these comments were helpful and constructive: others had at least an air of special pleading about them. But all the comments that were received were considered carefully and in response to them the Department has refined some of the technical aspects of the production of the projections and revised some of the assumptions that underlay them. In the light of these changes and of the most recent data the Department has produced the revised projections of demand that are set out in Report on Education 100, and explained at great length in the supporting Technical Report [which, I am told, should carry a Government health warning for its possible effects on those without professional training in statistics.]

5. The outcome of these revisions is a forecast that the fall in demand for higher education will be no greater than 13% when various factors affecting demand are held steady, and that any fall will not start to show itself before 1990.

6. Even these revised projections may not still some critics. But their attention now should be directed very much towards the policy implications of the projections, rather than the technicalities. There may well be matters of judgment about some of the assumptions that underlie the projections, where professionals can only agree to differ: no one, for example, can do more than make a judgment about the kind of social mobility - eg. the drift away from manual work - which we shall experience in the rest of the century, or about the rate at which women's participation in higher education will improve. The problems posed by declining demand will still have to be faced even if the timescale is a shade less urgent. It is nevertheless important that we should keep up the momentum, in the development of policy because we all know how long it takes to decide and to implement change,

especially in higher education with its sophisticated but time-consuming system of decision-making.

7. Demand for higher education is not the only issue that needs to be considered, although the prospect of some decline in demand will serve to sharpen our consideration of many other issues. Such other issues include:

- the maintenance of quality in higher education: this is for me an imperative - the issue is how to ensure that it is achieved, as it is with my next concern;
- the protection of the research capability at a time of constrained resources - in the humanities as much as in the sciences;
- the need to secure the supply of skilled manpower;
- the balance of provision between the sectors of higher education;
- future provision for continuing education;
- the arrangements for the management and funding of higher education through the UGC and the NAB;
- future arrangements for student support; and
- the continuing search for greater economy and effectiveness throughout higher education.

8. On these and other matters the UGC and the NAB are now considering the responses to their strategy review exercises - in which many of you will have been involved. I expect to receive advice from the UGC and the NAB in the course of the Summer and early Autumn. That advice will of course be published,

and will, I am sure, be widely discussed. But rather than have a further intermediate round of consultations in which you and your colleagues all tell me what you have already told the UGC and the NAB, what I propose to do on receipt of the advice from the UGC and the NAB is to formulate my own preliminary views on the various key issues that arise, and to bring forward my own proposals by about the turn of the year.

9. So we face a prospect of continuing debate about various aspects of the future of higher education; I hope not only an informed debate, but a debate informed by a shared concern for the future of higher education in this country.



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PRESS NOTICE

113/84

NOT FOR USE BEFORE
1530 THURSDAY 12 JULY 1984

NEW PROJECTIONS ON DEMAND FOR HIGHER EDUCATION INTO THE 1990s

Demand for higher education places in Great Britain from qualified home students is likely to remain at least at its current level until the end of the decade, says a Report on Education* published today by the Department of Education and Science.

Mainly because of possible increased demand from those aged over-20 demand for higher education will not fall as fast or as far as had previously been projected.

The new projections update those in Report on Education 99, which was published by the Department in April last year as a contribution to the public debate on the development of higher education into the 1990s.

The latest figures take account of further work by the Department's statisticians as well as detailed comments from interested bodies on the earlier projections.

An associated priced Technical Report** presents in detail supporting information for the projections.

The new projections take account of:

- substantial upward revisions to mature student numbers;

* Report on Education 100 "Demand for Higher Education in Great Britain 1984-2000", obtainable free from DES, Publications Despatch Centre, Honeypot Lane, Stanmore, Middlesex HA7 1AZ.

** Technical Report to DES Report on Education 100, obtainable price £8 from DES, Room 337, Mowden Hall, Staindrop Road, Darlington DL3 9BG.

- the most recent information available about A-level achievement in schools and colleges;
- refined assumptions and methodology concerning the effect of social class differences in birth trends on future numbers of qualified school and college leavers;
- further work on different trends in qualified demand as between men and women.

A principal conclusion of Report on Education 99 was that "demand for higher education from qualified applicants is likely to be more bouyant than might be assumed from a simple view of the decline in the size of the 18-20 year old age group. However, if the number of higher education places currently available were to be maintained, the supply of places would, sooner or later, exceed demand".

The new projections support this conclusion, but also suggest that total qualified demand for higher education before 1990 is unlikely to fall below the current level.

While there may be a small decrease in the number of young qualified applicants as the size of the age group falls, there is now expected to be at least an equivalent increase in demand from mature candidates.

In 1990-91 the upper variant (Variant X) of these projections is 10 per cent above the upper bound of those contained in Report on Education 99, and the lower variant (Variant Y) is two per cent above that bound. By 1996-97 the respective percentages are 15 per cent and seven per cent.

The total of student numbers for 1996-97 implied by the upper bound of Report on Education 99 was 456,000 as compared with 525,000 under Variant X of the present report, while the lower bound of Report on Education 99 implied 429,000 students as compared with 489,000 under Variant Y.

The proportional fall in total student numbers implied by the revised projections from peak to trough years is about 15 per cent under both variants. Variant X implies that by 1996-97 student numbers will be six per cent less than estimated actual numbers in 1983-84 and Variant Y implies 13 per cent less.

Much of the difference between the projections in the two reports results from revised assumptions about the numbers of those aged over-20 likely to wish to enter full-time higher education in future years.

It is estimated that there were about 37,000 mature home initial entrants to higher education in the current academic year. The lower bound of Report on Education 99 assumed that by 1990-91 the number of such entrants would fall to about 27,400; both variants of the new projections assume that in that year there will be over 40,000.

Ministers will be considering their policy for future provision for higher education in the light of these projections and of the advice they will be receiving from the University Grants Committee and from the advisory bodies for local authority higher education on the development of higher education into the 1990s.

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