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Innovation & Skills

**FULL-TIME YOUNG
PARTICIPATION BY SOCIO-
ECONOMIC CLASS**

2010 Update

JULY 2010

Summary

The Full-Time Young Participation by Socio-Economic Class (FYPSEC) measure was introduced in 2007 and shows the proportion of young people from the top three and bottom four socio-economic classes who participate for the first time in full-time higher education, together with the difference (or “gap”) between these two participation rates.

In last year’s publication we announced that, for the 2008/09 academic year only, due to a one-off change in the underlying data, the socio-economic class information can only be reliably compared when limited to students aged 18 and under. Therefore, in order to provide a comparable time series back to 2002/03, figures in this update are based on 18 year olds only and this measure is referred to as “FYPSEC-18”. The original methodology, which focused on 18-20 year olds, is referred to as “FYPSEC.” This change is only relevant to data for the 2008/09 academic year as the question returned to its original wording for 2009/10.

As well as the time series focusing only on 18 year olds, the measure has been revised in line with changes to the underlying data sources (including revised Higher Education Initial Participation Rate (HEIPR) figures¹) and updated with the figures for 2008/09. The time series covers 2002/03 to 2008/09.

As this measure draws from a number of data sources and are therefore subject to some uncertainty and volatility, it should be interpreted carefully. In particular, although the data is provided to a decimal point, not too much should be read into small year-to-year changes of less than one percentage point. It is recommended that the figures are used to provide general trend information (i.e. change over several years) rather than focusing on year-on-year changes.

Following the latest revisions and updates, FYPSEC-18 shows that over the period 2002/03 to 2008/09, full-time young participation for 18 year olds from the bottom four socio-economic classes has increased from 10.5% to 13.7%. Although the participation rate of the top three socio-economic classes appeared to drop earlier in the period, the latest data shows some increases in recent years so that, taken over the period as a whole, there is no clear trend in their participation rate (28.4% in 2002/03 and 27.8% in 2008/09). The participation gap between those from the higher and lower socio-economic classes has consequently narrowed by 3.7 percentage points since 2002/03.

This publication includes an annex which reproduces some of the other published measures of widening participation.

Introduction

1. FYPSEC was first published in a research report in 2007. It initially covered 2002/03 - 2004/05. The time series has been updated annually since the initial publication. In previous years FYPSEC has covered English-domiciled 18-20 year old first time entrants to full-time higher education courses at UK higher education institutions and English further education colleges, who remain on their course for at least 6 months.
2. For the 2008/09 academic year, the wording of the question on which students’ socio-economic class (NS-SEC) is based changed. The question changed from distinguishing between students who were under 21, or 21 and over, to whether or not they were in full-time education. This resulted in a discontinuity between 2008/09 data and earlier years. Figures can only be reliably compared if the scope is limited to students aged 18 and under.

¹ “Participation Rates in Higher Education: Academic Years 2006/07 – 2008/09 (Provisional)”: http://stats.bis.gov.uk/he/Participation_Rates_in_HE_2008-09.pdf

Young people aged 18 are most likely to be in full-time education when applying to HE and report their parent's NS-SEC for both 2007/08 and 2008/09. However, responses made by young people aged 19 and 20 to the 2008/09 NS-SEC question may vary. Some young people may still provide their parent's NS-SEC if they were in full-time education when applying to HE, but other young people would provide their own NS-SEC if they had been working.

3. Therefore, in order to provide a comparable time series back to 2002/03, figures in this update are based on 18 year olds only and this measure is referred to as "FYPSEC-18". The original methodology, which focused on 18-20 year olds, is referred to as "FYPSEC" as normal. More details on the change in the socio-economic class question and future implications can be found in paragraphs 29 to 34.
4. This update focuses only on 18 year olds. FYPSEC-18 consists of three components:
 - The proportion of 18 year olds from the top three socio-economic classes who participate for the first time in full-time higher education;
 - The proportion of 18 year olds from the bottom four socio-economic classes who participate for the first time in full-time higher education;
 - The difference, or "gap" between these two rates.

Latest Figures

5. The FYPSEC-18 time series is shown in Table 1.

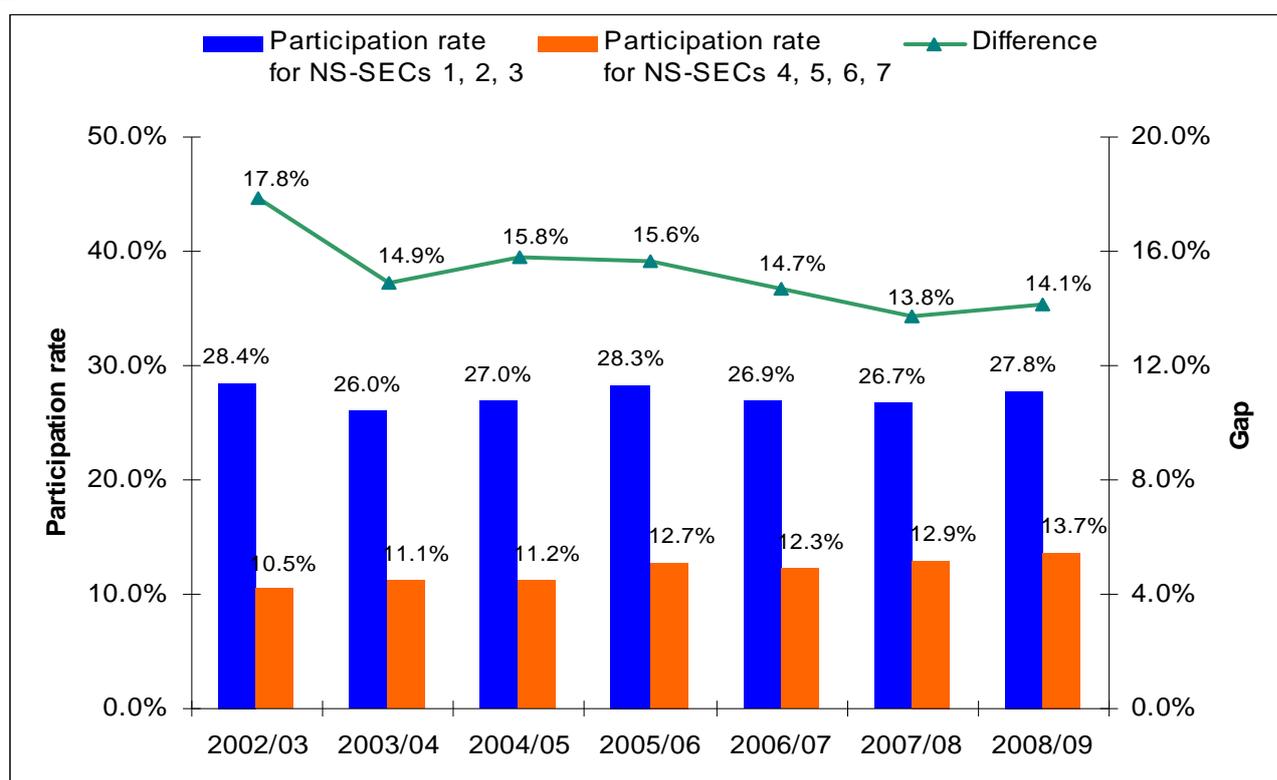
Table 1: Overall FYPSEC-18 figures

	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Participation rate for NS-SECs 1, 2, 3	28.4%	26.0%	27.0%	28.3%	26.9%	26.7%	27.8%
Participation rate for NS-SECs 4, 5, 6, 7	10.5%	11.1%	11.2%	12.7%	12.3%	12.9%	13.7%
Gap (percentage points)	17.8	14.9	15.8	15.6	14.7	13.8	14.1

Note: due to rounding to one decimal place, the change in gap may not appear to correspond to the gaps shown for individual years.

6. Between 2002/03 and 2008/09, the gap has reduced by 3.7 percentage points.
7. The overall FYPSEC-18 figures (both participation rates and their gap) are also illustrated in Figure 1 below:

Figure 1: Chart showing change in 18 year old participation rates and their gap, 2002/03 – 2008/09



8. The male and female FYPSEC-18 time series are shown in Table 2:

Table 2: Male & Female FYPSEC-18 figures

MALE	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Participation rate for NS-SECs 1, 2, 3	25.1%	22.7%	23.7%	24.7%	23.7%	23.5%	24.5%
Participation rate for NS-SECs 4, 5, 6, 7	8.9%	9.3%	9.4%	10.7%	9.9%	10.5%	11.1%
Gap (percentage points)	16.1	13.4	14.4	14.1	13.8	13.0	13.4
FEMALE	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Participation rate for NS-SECs 1, 2, 3	32.0%	29.6%	30.4%	32.2%	30.3%	29.9%	31.3%
Participation rate for NS-SECs 4, 5, 6, 7	12.3%	13.1%	13.1%	14.9%	14.7%	15.4%	16.4%
Gap (percentage points)	19.7	16.5	17.3	17.3	15.6	14.5	14.9

Note: due to rounding to one decimal place, the change in gap may not appear to correspond to the gaps shown for individual years.

9. For males, between 2002/03 and 2008/09, the gap has reduced by 2.7 percentage points.

10. For females, between 2002/03 and 2008/09, the gap has reduced by 4.8 percentage points.

FYPSEC 18 - Methodology

FYPSEC-18 Numerator

11. FYPSEC-18 is based on the students making up the 18 year old full-time component of the Higher Education Initial Participation Rate (HEIPR)². These students are English-domiciled first-time entrants to higher education courses, which are expected to last for at least six months, at UK Higher Education Institutions and English Further Education Colleges, and who remain on their course for at least six months.

12. The number of 18 year old students from each socio-economic class (NS-SEC) is determined. The students fall into three groups:

- (a) Those with known NS-SEC;
- (b) Those with unknown NS-SEC and known home postcode;
- (c) Those with unknown NS-SEC and unknown home postcode.

13. The NS-SEC information on students in group (a) is obtained from the HESA Student Record. NS-SEC break down as follows:

NS-SEC 1	Higher managerial and professional
NS-SEC 2	Lower managerial and professional
NS-SEC 3	Intermediate occupations
NS-SEC 4	Small employers and own account workers
NS-SEC 5	Lower supervisory and technical
NS-SEC 6	Semi-routine occupations
NS-SEC 7	Routine occupations

14. NS-SEC information on students in group (b) is estimated using their home postcode, because there is a relationship between a person's socio-economic class and where they live. Using the home postcode an area-based measure of higher education participation level (Participation Of Local Areas, or POLAR), can be applied to each student. POLAR information is supplied by HEFCE. Initially, using only those students whose NS-SEC and home postcode are known (i.e. group (a) above), the distribution of students from each NS-SEC among the POLAR classifications is determined. The distribution of group (b) among the POLAR classifications is then determined using their home postcode, and the distribution of known NS-SEC applied to these students according to their POLAR classifications. This allocates the students of group (b) among the NS-SECs in a reasonably informed way.

15. Finally, groups (a) and (b) are aggregated and the proportions of all these students who are in each NS-SEC are applied to the students of group (c). Therefore the complete unknowns are allocated to NS-SECs according to the distribution of students with known and estimated NS-SEC.

16. Having obtained the number of 18 year old full-time initial participants in each NS-SEC, the numbers in the top three NS-SECs are summed together, as are the numbers in the lower four NS-SECs.

² "Participation Rates in Higher Education: Academic Years 1999/2000 – 2008/09 (Provisional)" Statistical First Release, published by BIS (2010)
http://stats.bis.gov.uk/he/Participation_Rates_in_HE_2008-09.pdf

FYPSEC-18 Denominator

17. In 2008/09 the NS-SEC of university entrants who are in full-time education is determined by their higher-earning parent's occupation. In order to provide a comparable NS-SEC breakdown for the denominator, Labour Force Survey (LFS) socio-economic class data are used which relate to the Household Representative Persons who are parents within families with 13, 14 or 15 year old children in England. The 13-15 year old proxy is applied because 18 year olds living with parents form a biased cohort (predominantly in full-time education).
18. The number of people in each NS-SEC is converted to a proportion by dividing the number in each NS-SEC by the total number of people with known classification. Therefore those who remain unclassified are assumed to belong to the socio-economic classes in proportion to those whose NS-SEC is recorded. This is not identical to the method used in the numerator, but this assumption is made in the absence of postcode information in the available LFS household datasets.
19. The 18 year old populations of England are taken from the Department for Education academic year population estimates, which are based on Office for National Statistics (ONS) population estimates. The total NS-SEC proportions for the aggregated 13 - 15 year olds are applied to the number of 18 year olds in the population of England, in order to calculate the number of people in each NS-SEC. The numbers in the top three NS-SECs are summed together, as are the numbers in the lower four NS-SECs.

Final calculation

20. The full-time initial participation rate for the top three NS-SECs is determined by dividing the number of initial entrants in the top three NS-SECs by the population in the top three NS-SECs. The same calculation is repeated on the student and population numbers in the bottom four NS-SECs. This then provides overall initial participation rates for 18 year olds, one for NS-SECs 1, 2 and 3, and the other for NS-SECs 4, 5, 6 and 7.

Revisions & updates

21. In addition to limiting the measure to eighteen year olds FYPSEC-18 has been updated with the latest ONS population estimates. As 2008/09 data from all sources has become available, the time series has been updated to include a 2008/09 figure.

Caveats

22. The FYPSEC-18 measure contains a number of weaknesses and as such should be interpreted carefully. It is recommended that the figures are used to provide trend information (i.e. change over several years) rather than focusing on year-on-year changes. Drawing conclusions from figures for individual years is not advised.
23. The measure draws together several data sources, including two administrative sources and sample survey data. Therefore the figures are subject to some uncertainty and volatility.
24. FYPSEC-18 is restricted to 18 year old young full-time entrants so it only provides a limited picture of participation in higher education.
25. Changes to the HEIPR methodology in 2007/08³ will have only a small effect on FYPSEC-18. HE records are checked over previous years to ensure that a young person is a new entrant. For earlier years in the time series, this is carried out over a shorter time frame, so

³ Details of the change in HEIPR methodology can be found in the 2009 Statistical First Release: <http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000839/SFR02-2009webversion1.pdf>

it may not be possible to establish the previous HE history of all young people. However, for 18 year olds, the effect of this is minimised due to the small number of entrants who previously participated in HE.

26. The socio-economic class variable will not always be accurate:

- For the students included in FYPSEC-18, socio-economic class is derived from the student's higher earning parent's occupation, as 18 year olds are most likely to be in full-time education at the time of applying to HE. This is subject to error on the part of the student (i.e. entering the wrong occupation) and on the part of the coding (i.e. wrongly classifying an ambiguous or unfamiliar occupation description).
- The proportion of students with unknown socio-economic class has been increasing over the time series. To some extent the measure accounts for unknowns by estimating socio-economic class based on postcode, as there is a relationship between a person's socio-economic class and where they live. However, while this is a more informed approach than simply assuming the unknown socio-economic class is distributed in the same way as the known socio-economic class, it is obviously still subject to some uncertainty.

27. The coverage of the socio-economic class variable is very poor for part-time students. This is because the occupation information is obtained via the UCAS application form, which is only used by applicants for full-time HE courses.

28. The measure makes use of proxy data for the underlying population. When considering the relevant socio-economic class breakdown of the population, we look at the socio-economic class of the parents of 13, 14 and 15 year olds on the Labour Force Survey instead of parents of 18 year olds. This is because the small number of 18 year olds who are included in the Labour Force Survey with their parents are predominantly those who are in full-time education. Therefore a sample based on these people would be heavily biased towards those who participate in higher education. So 13-15 year olds are used as a proxy for 18 year olds in this case. This removes the problems of bias and small numbers but does introduce some uncertainty in that a parent's occupation (and therefore socio-economic class) could change from the time their child is 13 to the time she is 18.

Changes to the socio-economic class data

29. For applicants to HE via UCAS in the 2008/09 academic year, the wording of the question on which students' socio-economic class is based changed as follows:

- **2007/08 and earlier:**

"If you are under 21, please give the occupation of your parent, step-parent or guardian who earns the most. If he or she is retired or unemployed, give their most recent occupation. If you are 21 or over, please give your own occupation."

- **2008/09:**

"If you are in full-time education, please state the occupation of the highest-earning family member of the household in which you live. If he or she is retired or unemployed, give their most recent occupation. If you are not in full-time education, please state just your own occupation."

30. Between 2007/08 and 2008/09 the question therefore changed from distinguishing between students who were under 21 or 21 and over, to whether or not they were in full-time education. This has caused comparability issues between these years and figures can only be reliably compared if limited to students aged 18 and under

Future changes to FYPSEC

31. From 2009/10 the question returned to the original wording used in 2007/08, so it would be possible to return to an approach of comparing socio-economic class data for students up to and including age 20.
32. For 2009/10, a response option stating “prefer not to say” has been included.
33. For all years, students report the occupation as free text, which is then matched to an occupation code and, subsequently, a socio-economic class. Students’ socio-economic class would be classified as unknown for the following reasons:
 - They do not enter an occupation;
 - They apply the “prefer not to say” response;
 - The occupation they entered could not be matched to an occupation code.
34. The addition of the “prefer not to say” option will impact on the FYPSEC in future years.

ANNEX

PROGRESS ON OTHER WIDENING PARTICIPATION MEASURES

As the FYPSEC measure has been restricted to 18 year olds for 2008/09, this Annex provides a summary of trends in some additional measures of widening participation:

- **Progression to HE by age 19 by Free School Meal receipt** at age 15 for pupils in the maintained sector in England.
- The Higher Education Funding Council for England's (HEFCE) estimates of **Trends in Young Participation in Higher Education in England**.
- **Performance Indicators in Higher Education** which show the proportion of full-time first degree entrants to English institutions who are from state schools, and the proportion from low participation neighbourhoods (LPNs).

The table at the end of this Annex summarises progress on all of these measures since 2002/03. However, it is important to realise that none of these measures are directly comparable, as there are differences in definitions, coverage and data sources. It should also be borne in mind that there are other approaches to measuring gaps in addition to the simple percentage point differences given here⁴.

Progression to Higher Education by Free School Meal Receipt

This measure uses linked National Pupil Database, HESA Student Record and Individualised Learner Record data. It shows the proportion of maintained school pupils in England who progress to UK HEIs by the age of 19, split by whether or not they received Free School Meals at age 15.

This measure has been published at a Local Authority level and on an annual basis via the Communities and Local Government (CLG) hub. The latest figures are for the 2007/08 academic year and were published on 23rd June 2010. These figures use pupils aged 15 in English maintained schools in 2003/04 as a base population and track those who progress to HE at age 18 in 2006/07 or at age 19 in 2007/08.

HEFCE's Trends in Young Participation in Higher Education

HEFCE have an established programme of analysis tracking the proportion of young people from different backgrounds who enter higher education at age 18 or 19 ('young participation'), and periodically report progress on this measure. The latest publication⁵ (January 2010) reports on trends from 1994/95, with provisional results (based upon applications data) up to 2009/2010. The results cover young people from England and UK HEIs.

The starting point for the participation rate is an estimate of the population size of the young cohort at age 15, as they start their final year of compulsory education. The cohort is then allowed three years to undertake their GCSEs and further education before entrants to higher education (typically aged 18) are recorded followed by a further year of entrants (typically aged 19). The young participation rate is then simply the proportion that those HE entrants form of the population of that cohort when it was aged 15. HEFCE reference the cohorts by the two years in which they can enter HE. For example the participation rate for the 2006/07 cohort

⁴ For example odds ratios, showing the relative odds of participating for the two groups

⁵ Full report available at the following link: http://www.hefce.ac.uk/pubs/hefce/2010/10_03/

relates to that group of young people who were aged 15 on 31 August 2003, aged 18 on 31 August 2006, with those who entered HE doing so in academic years 2006/07 or 2007/08.

This young participation rate can then be directly interpreted as the proportion of a particular cohort of young people who enter higher education. The HE entrants in the measure are drawn from a single real cohort of young people followed across academic years – rather than combining young entrants from different cohorts who enter HE in a single academic year (the approach taken for FYPSEC). This makes the participation rate less susceptible to distortions from demographic or behaviour changes (for example, from young people bringing forward their entry to HE to age 18 rather than age 19) that do not reflect a change in the proportion of young people entering HE.

Higher Education Statistics Agency Performance Indicators

HESA has published “Performance Indicators in Higher Education”⁶ since 2002/03, prior to which they were produced by HEFCE.

In addition to data about young peoples’ socio-economic class, which has been affected in the same way as the FYPSEC measure this year, the access PIs provide information about the proportion of entrants who are from state schools and low participation neighbourhoods.

- The indicator for state schools reflects the percentage of young, full-time entrants to first degrees in English Higher Education Institutions who had previously attended a school or college in the state sector.
- The low participation neighbourhood indicator is the percentage of young, full-time entrants to first degree courses in English HEIs whose home area (as denoted by their postcode) is known to have a low proportion of 18 and 19 year-olds in higher education. Those students whose postcode falls within areas which have the lowest proportions (bottom 20%) of HE participation are denoted as being from a low participation neighbourhood (LPN). Please note that the new POLAR2 low participation data is not comparable with the low participation data published prior to 2006/07 (although this earlier data has been included in Table 3 for completeness).

Although these indicators allow us to assess the relative performance of different institutions in attracting students from different backgrounds, they do not allow us (and were not designed) to assess progress on getting more people from less privileged backgrounds into HE. This is because the PIs provide us with the make-up of the student body, and not with the participation rates of students from different backgrounds - i.e. they say nothing about the underlying population.

A further important note is that the figures presented here are for UK-domiciled students in English HEIs.

⁶ Full report available at the following link: <http://www.hesa.ac.uk/index.php/content/category/2/32/141/>

Table 3: Progress on widening participation in higher education – basket of measures

	FYPSEC-18 ¹			Progression to HE by FSM status			HESA Performance Indicators			HEFCE Trends in Young participation ³	
	NS-SEC 1-3	NS-SEC 4-7	Gap	FSM	Other	Gap	State schools	LPNs (POLAR2) ²	LPNs (POLAR) ²	Band 1 area	Band 5 area
2002/03	28.4	10.5	17.8	..	..	..	86.4	.	12.5	14	55
2003/04	26.0	11.1	14.9	..	..	..	86.1	.	13.3	14	54
2004/05	27.0	11.2	15.8	..	..	..	85.9	.	13.1	15	55
2005/06	28.3	12.7	15.6	13	33	20	86.9	.	13.5	15	55
2006/07	26.9	12.3	14.7	14	33	19	87.2	9.6	.	16	55
2007/08	26.7	12.9	13.8	15	33	18	87.4	9.9	.	17	56
2008/09	27.8	13.7	14.1	..	..	..	88.0	10.2	.	18	58

. not applicable

.. not available

¹ FYPSEC-18 numerator - full-time English entrants aged 18 to HE courses. FYPSEC-18 denominator - the NS-SEC breakdowns are estimated from parents of families with 13-15 year olds (Labour Force Survey) and applied to the 18 year old population in the relevant academic year (Office of National Statistics).

² From 1997-98 to 2005/06, Low Participation Neighbourhoods (LPNs) were defined as areas for which the higher education participation rate was less than two-thirds of the UK average rate, based on higher education participation levels in the late 1990's. From 2006/07, the LPN definition was updated to reflect changes in patterns of higher education participation since the 1990's. All wards have been ranked by their young participation rates (according to HEFCE's POLAR2 work, based on higher education participation in the early 2000's) and the bottom 20% of wards have been defined as LPNs.

³ HEFCE produce five-level classifications of neighbourhood classification where young people live based on participation levels in HE and the education level, occupation and income of their parents. Band 1 reflects participation rates for that quintile of young people from the most disadvantaged areas. Band 5 reflects participation rates for that quintile of young people from the most advantaged areas.

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