



END OF CYCLE REPORT 2018

Patterns of equality in England

CHAPTER 8

UCAS



CONTENTS

1. Introduction	3
2. The multiple equality measure (MEM) – slow progress made in reducing MEM equality gap for the fourth consecutive year	4
3. Free school meals (FSM) status – FSM equality gap narrows slightly but remains wider than in 2015	6
4. Ethnic group – Chinese ethnic group entry rate continues to rise rapidly	8
Notes to the report	10
National Pupil Database (NPD)	10
Entry rates	10

1. INTRODUCTION

As an independent charity, UCAS publishes timely data and analysis about demand for, and progression and admission to higher education, to contribute to public debate about education, access, and social mobility.

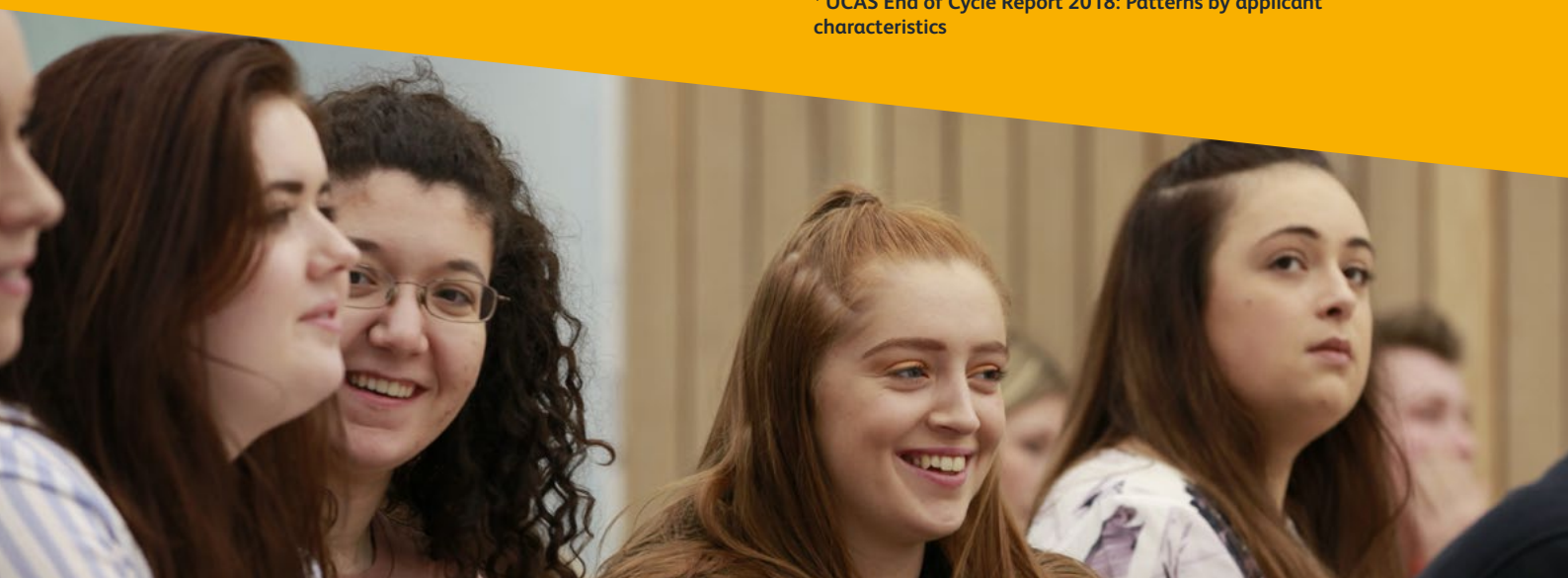
This year, we have published our end of cycle data and analysis in four releases, between 29 November 2018 and 31 January 2019, with the first release published 25 working days after the 2018 cycle closed. Weekly, between 29 November and 13 December, we published a series of detailed analysis reports covering acceptance, offer, and entry rates, alongside differences by applicant background across the entire 2018 cycle. On 13 December, we also published a series of analysis reference tables and data sets for the 2018 cycle. As part of this release, we are publishing end of cycle provider-level application data, together with provider-level data on unconditional offer-making. This release will include analysis of trends in application rates by country, sex, and background, with recent years for comparison, and further analysis of offer-making.

This report is the eighth in a series of eight end of cycle chapters across the four releases, and provides a summary of trends in the 2018 entry rates of English domiciled students by three key equality measures – the multiple equality measure (MEM), ethnic group, and free school meals (FSM) status. Trends in entry rates by POLAR, gender, and Scottish Index of Multiple Deprivation (SIMD) (other key equality measures) were summarised in chapter 4 of the end of cycle release, published on 6 December.¹

This report covers 18 year old England domiciled applicants to full-time undergraduate degree level courses in the UK. Representation of different student groups in higher education (HE) can be assessed by analysis of their entry rates – the proportion of students from these groups who enter HE. The entry rate of 18 year olds is often most useful for assessment of equality, as they comprise the largest single age group who enter HE through UCAS in any given year (53 per cent of all England domiciled acceptances in 2018). Despite a decreasing 18 year old population, and decreasing numbers of 18 year old acceptances, the 18 year old entry rate in England increased again in 2018, with 33.7 per cent of the England 18 year old population entering HE through UCAS, compared to 33.3 per cent in 2017. This indicates that, despite falling numbers of acceptances, when placed in the context of a declining 18 year old population, the demand for HE is still increasing.

Chapter 4 of the End of Cycle Report, referenced above, showed that the equality gap as measured by POLAR4 quintile has narrowed slightly since 2017, and the equality gap as measured by SIMD for Scottish students has also decreased. However, when other measures of disadvantage are considered, including gender, ethnicity and FSM status, little progress appears to have been made over the past year in narrowing the gap between the most and least advantaged students. Hence the equality gap as measured by the MEM, has only decreased slightly over the last year.

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¹ UCAS End of Cycle Report 2018: Patterns by applicant characteristics



2.

THE MULTIPLE EQUALITY MEASURE (MEM) – SLOW PROGRESS MADE IN REDUCING MEM EQUALITY GAP FOR THE FOURTH CONSECUTIVE YEAR

The multiple equality measure is an equality metric for HE, combining the effects of many of the measures currently used in the analysis of equality in HE into a single value. It is based on statistical modelling techniques, using UCAS' data on progression to HE, linked with National Pupil Database (NPD) data on English school student characteristics (POLAR3 quintile, ethnic group, gender, free school meals status, Index of Multiple Deprivation (IMD) and school type) to produce an evidence-based measure of equality at either individual or aggregate-level.²

The MEM takes the form of one to five group value. An individual who is in MEM group one is among the most disadvantaged in terms of their likelihood to enter higher education, based on their set of background characteristics. Conversely, an individual in MEM group five is among the most advantaged.

There were modest increases in entry rates of all MEM groups in 2018, reflecting the small increase in entry rate of England domiciled 18 year olds. The entry rate of students in MEM group one (the most disadvantaged group) increased by 0.9 per cent proportionally to a value of 12.3 per cent in 2018. This was three times the increase seen in the entry rate of students from MEM group five (the most advantaged group), which rose by 0.3 per cent proportionally to 56.3 per cent. MEM group four experienced the largest increase in entry rate of 1.4 per cent.

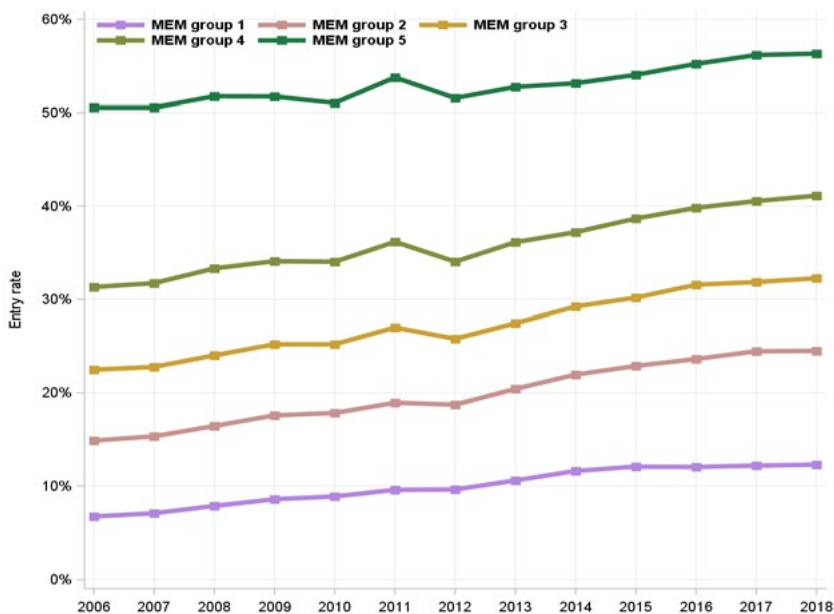


FIGURE 1:

Entry rates for England domiciled 18 year old students by MEM group

² The version of the MEM used in this report contains different equality characteristics to those used in previous end of cycle reports, and as such values in this report are not directly comparable to those in previous years' reports. For more detail on the multiple equality measure, including the equality characteristics included, and the underlying methodology, please see the MEM [summary](#) and [technical](#) reports.

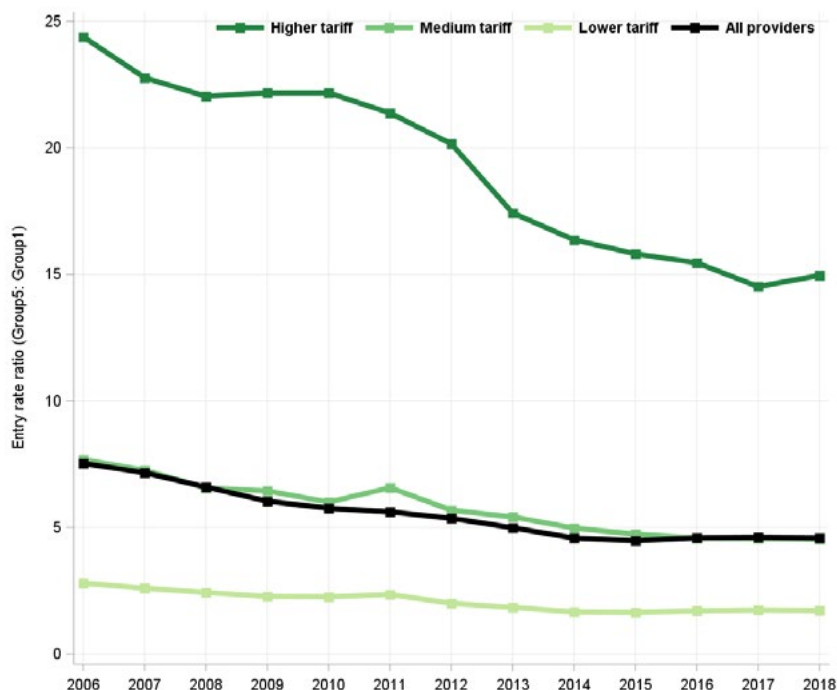
The larger proportional increase in the entry rate of MEM group one compared to MEM group five means that the entry rate gap between these two groups narrowed slightly in 2018, with pupils in group five 4.58 times more likely to enter HE than those in group one in 2018, compared to 4.61 times in 2017. This decrease follows an increase from a similar value in 2016. Despite this small narrowing, for the fourth consecutive year there has been limited progress made in reducing the size of the MEM equality gap, which remains at a similar value to that seen in 2014.

The MEM equality gap differs greatly between providers in different tariff groups.

- > **Higher tariff providers:** The MEM equality gap is most pronounced at higher tariff providers, where in 2018 the most advantaged students were 15.0 times more likely to enter than the most disadvantaged. This is the first year over the period in which the equality gap has widened at this provider group (rising from a value of 14.5 in 2017), and is a consequence of the fact that while both the MEM group one and the MEM group five entry rates to higher tariff providers fell in 2018, the proportional fall in the entry rate for MEM group one was seven times that seen for MEM group five. The entry rate for MEM group two to higher tariff providers also fell in 2018.
- > **Medium tariff providers:** The MEM equality gap at medium tariff providers continued to narrow in 2018, as it has every previous cycle since 2006, with the most advantaged students 4.54 times more likely to enter this provider group than students in MEM group one.
- > **Lower tariff providers:** At lower tariff providers, the proportional increase in the entry rate of MEM group one was over three times that seen for MEM group five in 2018, resulting in a narrowing of the MEM equality gap such that those in MEM group five were 1.72 times more likely to enter HE at this provider group than those in MEM group one.

FIGURE 2:

The ratio between entry rates to higher, medium, and lower tariff providers for MEM group five and MEM group one England domiciled 18 year olds



3.

FREE SCHOOL MEALS (FSM) STATUS – FSM EQUALITY GAP NARROWS SLIGHTLY BUT REMAINS WIDER THAN IN 2015

Free school meals is a means-tested benefit that can serve as an indicator of those from low income families. This section considers the entry rate of former state school students in England who were in receipt of FSM at age 15, as recorded in the National Pupil Database (source: National Pupil Database and School Census, Department for Education) against the entry rate of students who were not in receipt of FSM at the same age.

Each year, between 12.5 and 15.0 per cent of 15 year old state school pupils in England receive FSM. Figure 3 shows the entry rates to HE for those who, while aged 15 years, were in receipt, and not in receipt, of free school meals. Since 2006, those who received FSM have consistently had lower entry rates to HE than those who did not receive FSM. In 2018, the entry rate for students who did not receive FSM increased to 34.1 per cent, from 33.8 per cent in 2017. The entry rate for those who received FSM also increased in 2018, rising to 17.3 per cent from 16.9 per cent in 2017, but remained much lower than those who did not receive FSM.

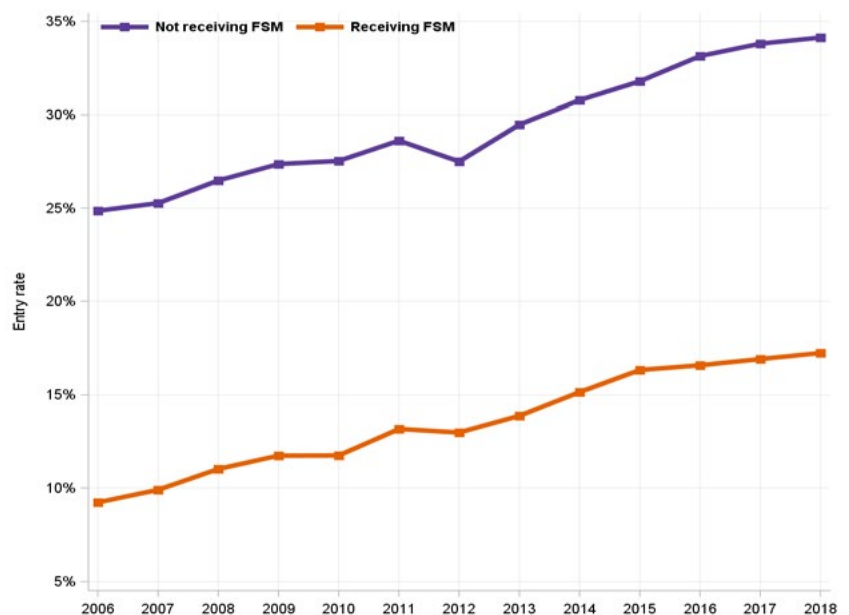


FIGURE 3:

Entry rates for England domiciled 18 year old state school students by free school meals (FSM) status at age 15

The increase in entry rate in 2018 among those who were in receipt of FSM was 1.9 per cent proportionally, around twice the proportional increase seen for those who were not in receipt of FSM. As a consequence, the entry rate gap between these two groups narrowed slightly in 2018, with those not in receipt of FSM 1.98 times more likely to enter HE than those who were in receipt of FSM, compared to a value of 2.0 in 2017. Despite this slight narrowing, the gap remains wider than that seen in 2015, where those not in receipt of FSM were 1.95 times more likely to enter HE than those who were in receipt of FSM.

The gaps in entry rates between students in receipt of FSM and those not in receipt of FSM have decreased across all provider tariff groups since 2006.

- > **Higher tariff providers:** The entry rate gap between students who received FSM and those who did not receive FSM is greatest among higher tariff providers, where students who are not in receipt of FSM are 3.77 times more likely to enter than FSM students – an increase from a value of 3.70 times in 2017. Despite the increase from 2017, the gap has decreased since 2006, when non-FSM students were 5.78 times more likely to enter HE than FSM students.
- > **Medium tariff providers:** For medium tariff providers, the gap narrows to 2.16 times, down from 2.23 times in 2017, and 3.13 in 2006. Medium tariff providers have experienced the largest decrease in the FSM entry rate gap over the last year.
- > **Lower tariff providers:** The entry rate gap is smallest at lower tariff providers, where it falls to 1.35, a decrease from 1.73 in 2006. However, the entry rate gap has not changed since 2017 amongst lower tariff providers.



4. ETHNIC GROUP – CHINESE ETHNIC GROUP ENTRY RATE CONTINUES TO RISE RAPIDLY

Differences exist in the likelihood of entering HE for students in different ethnic groups. In this section, we examine the entry rates to HE for English former state school pupils by their ethnic group, as recorded in the National Pupil Database (source: National Pupil Database and School Census, Department for Education).

Since 2007, former state school pupils recorded as being in the Chinese ethnic group have consistently had the highest entry rate to higher education, while those from the White ethnic group have had the lowest. In 2018, the White ethnic group also had the lowest entry rate to medium and lower tariff providers, while among higher tariff providers it is the Black ethnic group that had the lowest entry rate.

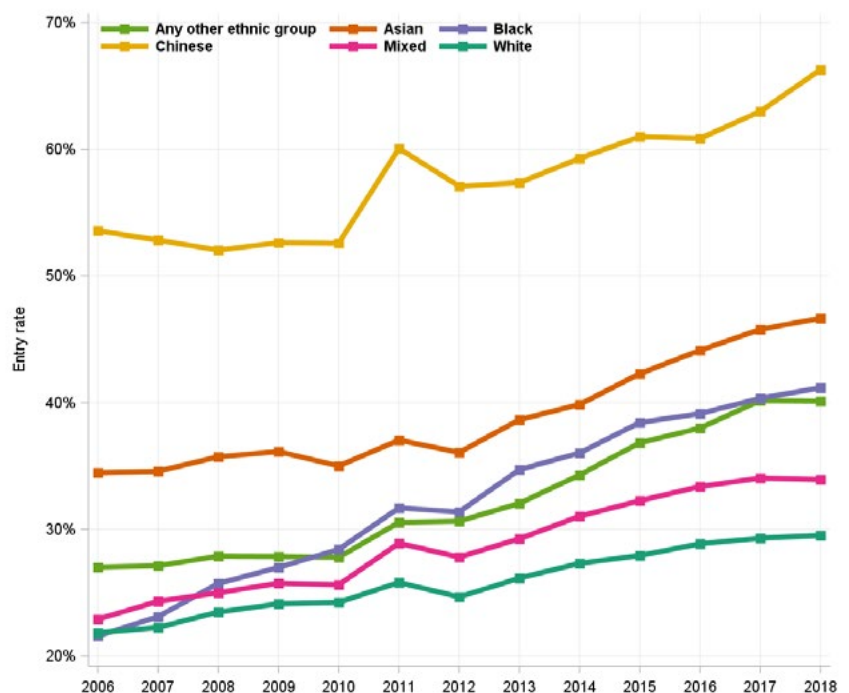
In 2018, the largest proportional increase in entry rate was in the Chinese ethnic group, which rose by 5.2 per cent proportionally from 63.0 per cent in 2017, to 66.3 per cent. The White, Asian, and Black ethnic groups experienced modest increases in entry rates, while those of the Mixed and Any other ethnic group had small falls.

Owing to their large proportional increase in entry rate, the entry rate gap between the Chinese ethnic group and all other ethnic groups increased in 2018, with this ethnic group 1.42 times more likely to enter HE than the Asian ethnic group – the ethnic group with the next highest entry rate – and 2.25 times more likely to enter HE than the White ethnic group – the ethnic group with the lowest entry rate. Since 2006, the entry rate gap between students in the Chinese and White ethnic groups has decreased slightly from a value of 2.45 times, while the gap between students in all other ethnic groups and those in the White ethnic group has increased.

For black students, the entry rate to HE has reached its highest point since 2006, at 41.2 per cent compared to 21.6 per cent in 2006, and is now only lower than the entry rate for students in the Chinese or Asian ethnic groups. However, in 2018 there was only a small increase on the entry rate of 40.3 per cent from 2017, a proportional increase of 2.0 per cent. The relative increase in the entry rate of black students in comparison to that of white students means black students are now 1.39 times more likely to enter HE than white students.

FIGURE 4:

Entry rates for England domiciled 18 year old state school students by ethnic group



Patterns of entry rate behaviour by ethnic group across provider tariff remained similar to those seen in recent years.

- > **Higher tariff providers:** In 2018, the Chinese ethnic group had the highest entry rate to higher tariff providers at 31.2 per cent, while the Black ethnic group had the lowest entry rate at 6.8 per cent. The entry rate gap between these two ethnic groups increased in 2018, with the Chinese ethnic group 4.58 times more likely to enter than those in the Black ethnic group. The high tariff group is the only tariff group where the entry rate for white students is higher than that for black students.
- > **Medium tariff providers:** Among medium tariff providers, the Chinese ethnic group also has the highest entry rate. In 2018, students in this group were 2.1 times more likely to enter these providers than those from the White ethnic group – the ethnic group with the lowest entry rate to medium tariff providers.
- > **Lower tariff providers:** The entry rate gap is narrowest at lower tariff providers, where in 2018 those in the Asian ethnic group – the ethnic group with the highest entry rate to lower tariff providers – were 1.95 times more likely to enter than those from the White ethnic group – a gap that has remained largely unchanged since 2016.



NOTES TO THE REPORT

National Pupil Database (NPD)

All analysis in this report makes use of UCAS data on HE entry, linked to the National Pupil Database (source: National Pupil Database and School Census, Department for Education), which records, among other variables, the FSM status at age 15, and ethnic group, of pupils attending schools in England. For this reason, the coverage of this report is limited to English domiciled students who are present in the National Pupil Database.

FSM status and ethnic group are only reported in the National Pupil Database for those students who attended state schools and, as such, analysis of these characteristics is limited to state school students only. The analysis by MEM group includes those pupils who attended independent schools.

Entry rates

Due to changes in the linking process of UCAS data to the National Pupil Database, entry rate values reported here may differ slightly from those reported in the UCAS End of Cycle Report 2017: Patterns by applicant characteristics. These differences are all below 0.005 percentage points.

For every background student group analysed in this report, the base student population used in the calculation of the entry rate contains 2,000 students or more, while the population accepted to HE through UCAS is greater than 200 students. UCAS is, therefore, confident that the entry rate values reported are statistically valid.

GLOSSARY

Acceptance	An applicant who, at the end of the cycle, has been placed for entry into higher education.
Age	This analysis uses country-specific age definitions that align with the cut-off points for school and college cohorts in the different administrations of the UK. For England and Wales, ages are defined on 31 August, for Northern Ireland on 1 July, and for Scotland on 28 February the following year. Defining ages in this way matches the assignment of children to school cohorts. For applicants outside the UK, a cohort cut-off of 31 August has been used.
Applicant	A person who has made an application in the UCAS system. Counts of applicants include those applying through the main scheme, late applicants direct to Clearing, and Records of Prior Acceptance (RPAs).
Base population estimate	The population estimates are based on Office for National Statistics mid-year estimates, and national population projections (published in June 2015). For 16 to 20 year olds, the estimates are obtained by ageing 15 year olds from the appropriate number of years earlier. This approach avoids the estimates being susceptible to changes in net migration (including overseas students) during these ages. Older ages are obtained from the mid-year estimates, and national population projections without ageing. In both cases, the estimates are adjusted from age at mid-year to age on the country-specific reference dates, using the monthly distribution of births. Analysis of application and entry rates by area-based background are supported through small area population estimates, available from the Office for National Statistics, National Records for Scotland, and the Northern Ireland Statistics Research Agency. These small area population estimates have been revised to be consistent with the national level population estimates.
Cohort	A group of the population all born in the same academic year, who are, for example, all aged 18 on a particular reference date. The cohort entry rate combines the proportion of the 18 year old population who were accepted for entry at age 18, with the proportion of that same population who were accepted for entry at age 19, a year later. These rates have the drawback that they cannot yet be reported for the cohort that was aged 18 in 2018, since they have not yet had the opportunity to apply at age 19.
Domicile	Declared area of permanent residence.
Entry rate	Number of acceptances from a UCAS application cycle divided by the estimated base population.
Entry rate ratio	Also called 'equality gap'. For a particular equality variable (e.g. POLAR4 quintile), this is the ratio of the entry rate of the group that is most likely to enter higher education (the 'advantaged' group in this context), to the entry rate of the group that is least likely to enter higher education (the 'disadvantaged' group in this context). The value of the entry rate ratio indicates how many times more likely the advantaged group is to enter higher education than the disadvantaged group. A value of 1 indicates the disadvantaged group is as likely to enter higher education as the advantaged group, and as such there is no 'equality gap' between the two groups. Examples of equality gaps are the 'POLAR4 equality gap', which is the entry rate ratio of POLAR4 quintile 5 to POLAR4 quintile 1, and the 'gender equality gap', which is the entry rate ratio of women to men.

GLOSSARY

Free school meals (FSM)	Free school meals – a means-tested benefit that can be used as an indicator of low income, which has been sourced from the National Pupil Database (NPD). Changes to the coverage of the free school meal indicator in the School Census for the 2013/14 academic year, affecting those applying in the 2016 cycle aged 18, have made it necessary to adjust identification of the FSM group in the UCAS data. This means that entry rates reported for the FSM and non-FSM groups differ slightly from those in previous end of cycle reports.
HE	Higher education
Higher tariff provider	A provider that belongs to the higher tariff group, from the grouping of providers based on the average levels of attainment of their UK 18 year old accepted applicants (summarised through UCAS Tariff points) in recent cycles. The other two groups are medium tariff providers, and lower tariff providers. Each group of providers accounted for around a third of all UK 18 year old acceptances in recent cycles.
Multiple equality measure (MEM)	<p>The multiple equality measure (MEM) brings together information on several equality dimensions, for which large differences in the probability of progression into higher education exist. These equality dimensions include sex, ethnic group, where people live (using the POLAR3 and IMD classifications), secondary education school type, and income background (as measured by whether a person was in receipt of free school meals [FSM], a means-tested benefit while at school).</p> <p>These equality dimensions are combined using statistical modelling techniques, and a linked data set of pupils in English schools who were aged 18 between 2006 and 2010 (source: National Pupil Database and School Census, Department for Education). The probability of entry to higher education aged 18 is then calculated based on these equality characteristics and their combinations.</p> <p>These probabilities are then used to aggregate pupils into groups, where group 1 contains those least likely to enter higher education ('most disadvantaged' in this context), and group 5 contains those most likely to enter higher education ('most advantaged' in this context). The composition of these groups, and their entry rates, can then be calculated and the trends in these assessed over time.</p>
POLAR4	Developed by the Office for Students (OfS), and classifies small areas across the UK into five groups, according to their level of young participation in HE. Each of these groups represents around 20 per cent of young people, and is ranked from quintile 1 (areas with the lowest young participation rates, considered as the most disadvantaged), to quintile 5 (highest young participation rates, considered most advantaged). POLAR4 is the successor to POLAR3.
Provider	A higher education provider – a university or college.
SIMD	Scottish Index of Multiple Deprivation (SIMD) identifies small area concentrations of multiple deprivation across all of Scotland, providing a relative measure of deprivation among small areas (data zones). In this report, the SIMD 2016 has been used to group areas in each year in the times series, from 2006 to 2016.
UK	United Kingdom. Excludes the Channel Islands and the Isle of Man.

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