## Office for OfS Students

# Differences in equality of opportunity 

## Summary of published data

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## Summary

1. This document provides a summary of data published by the Office for Students (OfS), the Department for Education (DfE) and UCAS that relates to equality of opportunity in higher education. This was part of the evidence that was used to inform the assessment of which groups were at risk nationally when developing the Equality of Opportunity Risk Register (EORR). ${ }^{1}$

## How does the evidence in this report relate to the Equality of Opportunity Risk Register?

2. The EORR identifies sector-wide risks that may affect a student's opportunity to access and succeed in higher education. These risks could result in differences in outcomes between students. Therefore observed differences between student groups reported at sector level have been used to identify student groups for consideration as being most likely to be impacted by the risks in the EORR.
3. These are described in the EORR as indications of the risks, not the risks themselves. Risks may not always lead to a difference in outcomes, and some differences may not be caused by a risk. There is no assessment in this report of whether the differences observed are linked to the risks. All differences in the data sources summarised are reported.

## What does this report cover?

4. In this report student groups have been identified where there are persistent differences in their outcomes, using the methodology described at Annex B. In broad terms, we have assessed differences in student outcomes for a given student group compared with the same outcome observed for other students, to establish where there was potential for the group in question to have had an improved outcome.
5. This is based on published data, most of which shows student outcomes for different student groups in univariate form. ${ }^{2}$ This means that the analysis in this report generally focusses on single factors, without consideration of whether other factors might be associated with the different outcomes of these students. We recognise that an individual student's outcomes can be influenced by the combination of personal and other background characteristics they possess, and where data evidence has been published that explores the potential impact of other factors, it is referenced.
[^0]
## What is not included in this summary?

6. Some of the student groups we consider in this report contain small numbers of students, even when considered across the sector as a whole. Where student outcome measures are calculated in respect of small student populations, we recognise that they can be susceptible to higher levels of statistical uncertainty. ${ }^{3}$ Statistical uncertainty associated with the size of the student group has not been assessed when identifying the differences shown in this report. We consider that for the purposes of identifying sector-wide risks to equality of opportunity it is important that small groups are given careful consideration through inclusion in this analysis.
7. In addition, readers should note that a persistent (across up to six years) difference of one percentage point between the student group and other students has been used as a cut-off for reporting. We recognise that this means that there could be student groups not reported here who do have differences in outcomes.

## Other notes

8. The student characteristics reported are based on published data and their scope and definitions will vary across the lifecycle because of differences in data collections, data definitions and data reporting. Original sources are referenced and these are the best sources of information about these details. These differences mean that not all characteristics are available for consideration at each stage.
9. Wherever possible we have used data from the most recent six years. This means that some of the years used relate to years affected by the coronavirus pandemic. No assessment has been made of whether this changed the differences reported. Looking at within-year differences, and then summarising these across a number of years to look at persistent differences, should minimise the impact of changes related to the pandemic. Most of the source data releases contain notes on the impact of the pandemic to the statistics.
[^1]
## Data evidence of differences in outcomes

10. This section summarises the information reported for each of the student outcome measures. When referring to students this is in respect of UK domiciled full-time undergraduate students. School data is sourced from the Department for Education (DfE) and usually refers to pupils in state-funded schools in England. UCAS admissions data is reported mostly for England domiciled 18-year-olds.
11. The differences between outcomes measures for student groups are reported as percentage point differences, alongside information about the size of the group. The size of the group provides context to the size of the difference. For example, a small difference in outcomes of say 1 percentage point, could have the potential to affect a large number of students if the student group is large.
12. A description of the measures and information regarding the sources of data are found in Annex A, and a description of the methodology applied to the published data to create the summaries is found in Annex $B$.
13. The outcomes in the following sections follow the student lifecycle. They start with pre-higher education, first the differences reported by DfE in Key Stage 4 (KS4) attainment, then differences in application to higher education through UCAS, and then differences in access to higher education reported by DfE. They then move to on-course outcome measures of continuation, completion and degree outcomes, finishing with a section on progression outcomes.

## Key Stage 4 attainment

14. Differences in attainment of pupils start in primary school and can continue through life. Key Stage 4 (KS4) is when most pupils take GCSEs and other Level 2 qualifications, and is the last point in the school lifecycle when most of a cohort of pupils take similar assessments. DfE publishes the KS4 performance statistical release which focuses on the GCSE results of pupils attending state-funded schools in England. ${ }^{4}$ This release includes information about attainment for several pupil characteristics.
15. The DfE publication includes a range of measures relating to attainment. We have selected one of their headline measures, the percentage of pupils achieving grades 5 or above in English and mathematics GCSEs. As a proportion of a population, this aligns with the other measures in this report.
16. Table 1 summarises the pupil groups with persistent differences in KS4 attainment based on the DfE statistical release. The student characteristics used are recorded in the National Pupil Database and have definitions and descriptions relevant to that data source. ${ }^{5}$
17. To help understand the size of the differences between different pupil groups we have grouped them into bands. The ranges of these bands were determined by finding points on the range of

[^2]differences where there was a separation so that no student group had a value exactly at a cutoff. These bands are only provided as a guide to the size of the difference. For KS4 attainment, the approximate size of the difference is grouped into three bands:
a. More than 30 percentage points.
b. Between 18 and 30 percentage points.
c. Between 1 and 18 percentage points.
18. These bands refer to the maximum of the two average differences calculated for the pupil group (see Annex B). ${ }^{6}$ Some student groups will have differences for single years that fall outside of this range.
19. Similarly, we band the size of the student group as a guide. The approximate size of the group is assigned to one of three bands:
a. Less than 5 per cent of KS4 pupils.
b. Between 5 per cent and up to 25 per cent of KS4 pupils.
c. More than 25 per cent of KS4 pupils.
20. These bands refer to the average number of KS4 pupils per year with this characteristic across the years in the time series as a percentage of the average KS4 population in English statefunded schools.

Table 1: KS4 pupils with greatest difference in KS4 attainment (percentage of pupils attaining grade 5 or above in English and mathematics GCSE)

| Pupil group | Approximate size of <br> difference (KS4 attainment) | Approximate size of group |
| :--- | :--- | :--- |
| Pupils with a Special <br> Educational Need (SEN) <br> primary need of severe <br> learning difficulty, profound <br> and multiple learning difficulty <br> and moderate learning <br> difficulty | More than 30 percentage <br> points | Each group fewer than 5 per <br> cent of pupils |
| 'Gypsy / Roma', and 'Traveller <br> of Irish Heritage' (ethnic <br> group) | More than 30 percentage <br> points | Fewer than 5 per cent of <br> pupils |
| Pupils with a SEN primary <br> need of speech, language <br> and communications | More than 30 percentage |  |
| points | Fewer than 5 per cent of |  |
| pupils |  |  |$|$

[^3]| Pupil group | Approximate size of difference (KS4 attainment) | Approximate size of group |
| :---: | :---: | :---: |
| Pupils with a SEN primary need of social, emotional and mental health | More than 30 percentage points | Fewer than 5 per cent of pupils |
| Pupils with a SEN primary need of SEN support but not specialist assessment of type of need | More than 30 percentage points | Fewer than 5 per cent of pupils |
| Pupils with a SEN primary need of specific learning difficulties | Between 18 and 30 percentage points | Fewer than 5 per cent of pupils |
| Pupils with a SEN primary need of other difficulty/disability | Between 18 and 30 percentage points | Fewer than 5 per cent of pupils |
| Pupils with status of disadvantaged ${ }^{7}$ | Between 18 and 30 percentage points | More than 25 per cent of pupils |
| Pupils with a SEN primary need of autistic spectrum disorder | Between 18 and 30 percentage points | Fewer than 5 per cent of pupils |
| Pupils eligible for free school meals | Between 18 and 30 percentage points | Between 5 and 25 per cent of pupils |
| Pupils with a SEN primary need of physical disability | Between 18 and 30 percentage points | Fewer than 5 per cent of pupils |
| Pupils with a SEN primary need of multi-sensory impairment | Between 18 and 30 percentage points | Fewer than 5 per cent of pupils |
| Black - Caribbean, Mixed white and black Caribbean (ethnicity) | Between 10 and 18 percentage points | Each group fewer than 5 per cent of pupils |
| Pupils with a SEN primary need of hearing impairment or visual impairment | Between 10 and 18 percentage points | Each group fewer than 5 per cent of pupils |
| Black - any other background (ethnicity) | Between 1 and 10 percentage points | Fewer than 5 per cent of pupils |
| Male pupils | Between 1 and 10 percentage points | More than 25 per cent of pupils |

[^4]| Pupil group | Approximate size of <br> difference (KS4 attainment) | Approximate size of group |
| :--- | :--- | :--- |
| White - British pupils <br> (ethnicity) | Between 1 and 10 percentage <br> points | More than 25 per cent of <br> pupils |

21. The DfE publication also includes data on the Progress 8 scores for pupils. Progress 8 aims to capture the progress a pupil makes from the end of Key Stage 2 (KS2) to the end of KS4. It compares pupils' achievement with the national average of all pupils who had a similar starting point (or 'prior attainment'). The groups in Table 1 all have negative Progress 8 scores for 2020-21, meaning that these groups achieved less than expected by the end of KS4 compared with other pupils who had similar attainment at KS2.

## Admissions to higher education

22. The UCAS undergraduate admissions service is the route by which most people apply to and enter full-time higher education in the UK. UCAS releases data about each of the important decision points in the application process. In order to gain a place to study in higher education, a prospective student must first apply, then receive an offer, then that offer must be converted into an accepted place (this is a combination of the applicant wanting the place and meeting any conditions of the offer).
23. To compare the outcomes of different student groups we need to be able to understand differences relative to the population size of the group. For English 18-year-olds, UCAS publishes the proportion of the population that apply to full-time undergraduate courses (application rates) by sex, participation of local areas (POLAR4) and Index of Multiple Deprivation (IMD 2019). ${ }^{8}$ In a different publication there are application rates to larger higher education providers by ethnic group for UK 18 -year-olds. ${ }^{9}$ The proportion of applicants who receive an offer (offer rate) is included in the same publication by sex, ethnic group and POLAR4, and for age group is published in the June deadline data release. The proportion of applicants who are recorded with a place at the end of the admissions cycle (accepted conditional on application) is reported by age group, disability status, ethnic group, IMD, POLAR4 and sex. ${ }^{10}$
24. There are several other groups reported but often these are not student characteristics and generally refer to the qualifications that they held or were taking when they applied. There are many cases where the UCAS publications include combinations of student characteristics, particularly by sex and age group. As with the rest of this report we have not reported combinations of characteristics.

[^5]25. The proportion of the 18 -year-old population who are recorded with a place at the end of the admissions cycle is also reported, but a similar metric is covered by the DfE publication in the Access section that follows. We have not summarised the UCAS data on these proportions in this document.
26. Table 2 shows the measures that are published and for which student characteristics. Also shown is the student population used in each case.

Table 2: Admissions data published by UCAS

| Student characteristic | Proportion of the 18-year-old population applying (application rate) | Proportion of all applications with an offer (offer rate) | Proportion of all applicants who were accepted (acceptance rate) |
| :---: | :---: | :---: | :---: |
| Age group | N/A | Yes (England) | Yes (England all ages) |
| Disability status | No source of population data | Not published | Yes (England all ages) |
| Ethnic group | Yes* (UK 18) | Yes* (UK 18) | Yes (England all ages) |
| IMD | Yes (England 18) | Not published | Yes (England all ages) |
| POLAR4 | Yes (England 18) | Yes* (UK 18) | Yes (England all ages) |
| Sex | Yes (England 18) | Yes (England all ages) | Yes (England all ages) |

*These statistics are available in the UCAS undergraduate reports by sex, area background and ethnic group data release. The other application rates are available in the June deadline data release and the other acceptance rates are available in the end of cycle data release.

## Applying to higher education

27. Table 3 summarises the student groups with persistent differences in applying to higher education based on the reported proportion of the 18 -year-old population applying by the June deadline. For ethnicity this is 18 -year-olds in the UK; for the other characteristics it is 18 -yearolds in England. This data is summarised from the UCAS undergraduate June 2022 deadline data release and the UCAS undergraduate reports by sex, area background and ethnic group data release. ${ }^{11}$
28. To help understand the size of the differences between different student groups we have grouped them into bands. The ranges of these bands were determined by finding points on the range of differences where there was a separation so that no student group had a value exactly at the cut-off. These bands are only provided as a guide to the size of the difference. For application to higher education, the approximate size of the difference is grouped into three bands:

[^6]a. More than 13 percentage points.
b. Between 8 and 13 percentage points.
c. Between 1 and 8 percentage points.
29. These bands refer to the maximum of the two average differences calculated for the student group (see Annex B). Some student groups will have differences for single years that fall outside of this range.
30. Similarly, we band the size of the student group as a guide. The approximate size of the group is assigned to one of three bands:
a. Less than 5 per cent of English 18-year-olds.
b. Between 5 per cent and up to 25 per cent of English 18 -year-olds.
c. More than 25 per cent of English 18-year-olds.
31. These bands refer to the average number of English 18-year-olds per year with this characteristic across the years in the time series, as a percentage of the average English 18-year-old population.

Table 3: 18-year-olds with greatest risk to applying to higher education

| Student group | Approximate size of <br> difference (application to <br> higher education) | Approximate size of group |
| :--- | :--- | :--- |
| 18-year-olds from POLAR4 <br> quintile 1 areas | More than 13 percentage <br> points | Between 5 and 25 percent of <br> the 18-year-old population |
| 18 -year-olds from IMD 2019 <br> quintile 1 areas | More than 13 percentage <br> points | Between 5 and 25 percent of <br> the 18-year-old population |
| 18-year-old males | Between 8 and 13 percentage <br> points | More than 25 per cent of the <br> 18 -year-old population |
| 18 -year-olds with ethnic group <br> white (ethnicity 5 groups) | Between 8 and 13 percentage <br> points | More than 25 per cent of the <br> 18 -year-old population |
| 18 -year-olds from POLAR4 <br> quintile 1 areas | Between 8 and 13 percentage <br> points | Between 5 and 25 percent of <br> the 18-year-old population |
| 18 -year-olds from IMD 2019 <br> quintile 1 areas | Between 8 and 13 percentage <br> points | Between 5 and 25 percent of <br> the 18 -year-old population |
| 18 -year-olds from POLAR4 <br> quintile 1 areas | Between 1 and 8 percentage <br> points | Between 5 and 25 percent of <br> the 18 -year-old population |

32. The application rates of white 18 -year-olds are lower than for other ethnic groups and they also comprise a very high proportion of the population. This means that for other student groups the comparison that we are making with other students is unlikely to show a difference because the
average is dominated by white 18 -year-olds. Examining the underlying rates suggests that 18-year-olds with mixed ethnic group also have consistently lower application rates than all other groups apart from white 18-year-olds.
33. We recognise that decisions to apply to full-time higher education at age 18 can be influenced by the combination of personal and other background characteristics. For example, it could be associated with their school attainment, other opportunities local to them or what they want to study.

## Offer rates

34. Table 4 summarises the student groups with persistent differences in offer rates when applying to higher education based on the reported proportion of main scheme applications who receive offers in the UCAS data. Ethnicity and POLAR4 are based on applications by UK domiciled 18-year-olds. Age and sex are based on applications by English domiciled applicants of all ages. This data is summarised from the UCAS undergraduate end of cycle 2022 data release and the UCAS undergraduate reports by sex, area background and ethnic group data release. ${ }^{12}$
35. To help understand the size of the differences between different student groups we have grouped them into bands. The ranges of these bands were determined by finding points on the range of differences where there was a separation so that no student group had a value exactly at the cut-off. These bands are only provided as a guide to the size of the difference. For offer rates, the approximate size of the difference is grouped into three bands:
a. More than 20 percentage points.
b. Between 4 and 20 percentage points.
c. Between 1 and 4 percentage points.
36. These bands refer to the maximum of the two average differences calculated for the student group (see Annex B). Some student groups will have differences for single years that fall outside of this range.
37. Similarly, we band the size of the student group as a guide. The approximate size of the group is assigned to one of three bands:
a. Less than 5 per cent of applications from UK 18-year-olds.
b. Between 5 per cent and up to 25 per cent of applications from UK 18-year-olds.
c. More than 25 per cent of applications from UK 18-year-olds.

[^7]d. These bands refer to the average number of applications from UK 18-year-olds per year with this characteristic across the years in the time series as a percentage of the average number of applications from UK 18-year-olds.

Table 4: Student characteristics with greatest risk to receiving an offer conditional on applying to higher education

| Student group | Approximate size of <br> difference (offer rate) | Approximate size of group |
| :--- | :--- | :--- |
| Age groups 35 and over, 30 <br> to 24,25 to 29 and 21 to 24 <br> (gap increases with age) | More than 20 percentage <br> points | The first three groups each <br> make fewer than 5 per cent of <br> applications, the last group <br> make between 5 and 25 per <br> cent of applications |
| Age 20 and age group 17 and <br> under | Between 4 and 20 percentage <br> points | The first group makes <br> between 5 and 25 per cent of <br> applications, the second <br> group makes fewer than 5 per <br> cent of applications |
| Other, black and Asian ethnic <br> groups (ethnicity 5 groups) | Between 4 and 20 percentage <br> points | The first group makes fewer <br> than 5 per cent of <br> applications, the second and <br> third groups each make <br> between 5 and 25 per cent of <br> applications |
| Female applicants | Between 4 and 20 percentage <br> points | More than 25 per cent of <br> applications |
| Applicants age 19 | Between 1 and 4 percentage <br> points | Between 5 and 25 per cent of <br> applications. |

38. In the UCAS undergraduate reports by sex, area background and ethnic group the difference between the offer rate and the average offer rate is reported. ${ }^{13}$ The report describes these statistics as follows:
'The average offer rate is the offer rate that you might expect if the predicted grades and subject choice of applicants were the only factors that influenced whether an applicant was made an offer by the provider. The percentage point differences between offer rate and average offer rate can be compared to the expected range of statistical variation resulting from the calculation of the average offer. When the value of the percentage point difference lies outside the range of random variability the offer rate can be considered to be different from the average offer rate.'

[^8]39. The report also notes that student groups that are a large proportion of applications will contribute heavily to the average over rate and this will limit the usefulness of the average offer rate statistic because the average offer rate will mainly reflect the patterns for the group.
40. In 2022, 18-year-old students from the black ethnic group and the ethnic group described as other ( 5 groups of ethnicity, Asian, black, mixed, white and other) received fewer offers than the average offer rate.
41. Male applicants were on the borderline of the limit of statistical variation for being indicated that they received fewer offers than the average offer rate. This is in contrast to the offer rates with no context where female applicants have persistently lower offer rates.
42. Although no single POLAR4 quintile met the criteria of lying outside the range of random variability, the offer rates for quintiles 1 and 2 were very close to being higher than the average offer rate. This is a reversal of the pattern observed in 2018 and earlier years.

## Acceptance rates

43. Table 5 summarises the student groups with persistent differences when applying to higher education based on the reported proportion of main scheme applicants that are accepted to study in the UCAS data. This data is summarised from the UCAS undergraduate end of cycle 2022 data release. ${ }^{14}$
44. To help understand the size of the differences between different student groups we have grouped them into bands. The ranges of these bands were determined by finding points on the range of differences where there was a separation so that no student group had a value exactly at the cut-off. These bands are only provided as a guide to the size of the difference. For offer rates, the approximate size of the difference is grouped into three bands:
a. More than 11 percentage points.
b. Between 7 and 11 percentage points.
c. Between 1 and 7 percentage points.
45. These bands refer to the maximum of the two average differences calculated for the student group (see Annex B). Some student groups will have differences for single years that fall outside of this range.
46. Similarly, we band the size of the student group as a guide. The approximate size of the group is assigned to one of three bands:
a. Less than 5 per cent of applicants.
b. Between 5 per cent and up to 25 per cent of applicants.
c. More than 25 per cent of applicants.

[^9]d. These bands refer to the average number of applications from UK 18-year-olds per year with this characteristic across the years in the time series as a percentage of the average number of applications from UK 18-year-olds.

Table 5: Applicants with greatest risk to being accepted to study

| Student group | Approximate size of <br> difference (offer rate) | Approximate size of group |
| :--- | :--- | :--- |
| Age groups $25-29,30-34$ <br> and 35 and over (gap <br> increases with age) | More than 11 percentage <br> points | Each group fewer than 5 per <br> cent of applicants |
| Applicants with ethnic group <br> of black (ethnicity 5 groups) | More than 11 percentage <br> points | Between 5 and 25 per cent of <br> applicants |
| Age groups $21-24$ and 17 <br> and under | Between 7 and 11 percentage <br> points | The first group between 5 and <br> 25 per cent of applicants and <br> the second fewer than 5 per <br> cent of applicants |
| Applicants with ethnic group <br> of Asian or other (ethnicity 5 <br> groups) | Between 7 and 11 percentage <br> points | The first group between 5 and <br> 25 per cent of applicants and <br> the second fewer than 5 per <br> cent of applicants |
| Applicants from IMD quintiles <br> 1 or 2 | Between 1 and 7 percentage <br> points | Each group between 5 and 25 <br> per cent of applicants |

47. We recognise that acceptance rates can be influenced by the combination of personal and other background characteristics. For example, it could be associated with the competitive nature of the subject chosen, changes to applicants' plans due to alternative options or even the number of applications that an applicant makes.

## Access

48. The access to higher education measures in the OfS's access and participation dashboard report the profile of entrants to higher education. ${ }^{15}$ They express the number of entrants with a particular attribute as a percentage of all entrants. For example, they report the percentage of entrants who were female.
49. Where possible, the access measures are referenced to the UK population of 18-year-olds who possess the same attribute. This means that it is possible to compare the percentage of 18-year-old entrants with a particular attribute with the overall percentage of people in the UK population of 18 -year-olds who possess that attribute. In the spring 2023 release of the dashboard these population estimates were not included. This is because the ONS are currently in the process of reviewing and reconciling their published mid-year population

[^10]estimates methodology in the light of data from the 2021 census. ${ }^{16}$ This means that we need an alternative source of similar information used to measure access to higher education.
50. The OfS's association between characteristics of students (ABCS) methodology for access uses an alternative approach that tracks outcomes of school cohorts using linked administrative data. ${ }^{17}$ ABCS access identifies six characteristics that are related to access to higher education, three personal characteristics and three area-based measures.
51. The DfE publication 'Widening participation in higher education' uses a similar methodology to the ABCS methodology to report the proportion of a school cohort that enters higher education by the age of $19 .{ }^{18}$ This publication looks at cohorts of school pupils at KS4 in state-funded schools in England and, through linking of administrative records measures, the proportion that enters higher education by age 19.
52. The table below summarises the student groups with persistent differences in access to higher education based on the DfE data. The student characteristics used are recorded in the National Pupil Database and have definitions and descriptions relevant to that data source. ${ }^{19}$
53. To help understand the size of the differences between different student groups we have used bands. The ranges of these bands were determined by finding points on the range of differences where there was a separation so that no student group had a value exactly at the cut-off. These bands are only provided as a guide to the size of the difference. For access, the approximate size of the difference is grouped into three bands:
a. More than 25 percentage points.
b. Between 15 and 25 percentage points.
c. Between 1 and 15 percentage points.
54. These bands refer to the maximum of the two average differences calculated for the student group (see Annex B). Some student groups will have differences for single years that fall outside of this range.
55. Similarly, we band the size of the student group as a guide. The approximate size of the group is assigned to one of three bands:
a. Less than 5 per cent of KS4 pupils.
b. Between 5 per cent and up to 25 per cent of KS4 pupils.
c. More than 25 per cent of KS4 pupils.

[^11]56. These bands refer to the average number of KS4 pupils per year with this characteristic across the years in the time series as a percentage of the average KS4 population in English statefunded schools.

Table 6: KS4 pupils with greatest risk to access to higher education

| Student group | Approximate size of <br> difference (access) | Approximate size of group |
| :--- | :--- | :--- |
| 'Gypsy / Roma', and 'Traveller <br> of Irish Heritage' (ethnic <br> group) | More than 25 percentage <br> points | Less than 5 per cent of pupils |
| All Special Educational Needs | More than 25 percentage <br> points | Between 5 and 25 per cent of <br> pupils |
| Children in need ${ }^{20}$ | More than 25 percentage <br> points | Less than 5 per cent of pupils <br> Looked after continuously for <br> 12 months or more 21More than 25 percentage <br> points |
| White pupils (ethnic group) | Between 15 and 25 <br> percentage points | Less than 5 per cent of pupils than 25 per cent of <br> pupils |
| Pupils living in POLAR4 <br> quintile 1 areas | Between 15 and 25 <br> percentage points | Between 5 and 25 per cent of <br> pupils |
| Pupils eligible for free school <br> meals (FSM) | Between 15 and 25 <br> percentage points | Between 5 and 25 per cent of <br> pupils |
| Pupils with English as their <br> first language | Between 15 and 25 <br> percentage points | More than 25 per cent of <br> pupils |
| Male pupils | Between 1 and 15 percentage <br> points | More than 25 per cent of <br> pupils |
| Mixed - white and black <br> Caribbean pupils | Between 1 and 15 percentage <br> points | Less than 5 per cent of pupils |

57. From the ABCS publication we also find that there are differences in access to higher education for three other area-based measures. These are:
a. Pupils from Income Deprivation Affecting Children Index (IDACI) quintile 1 areas,

[^12]b. Pupils from Index of Multiple Deprivation (IMD) quintile 1 areas.
c. Students from TUNDRA quintile 1 areas (this, like POLAR4, is an area-based measure of participation in higher education).
58. The DfE publication also includes assessment of access for combinations of sex, FSM and ethnicity. These align with the ABCS access quintiles. Some of the key observations from this analysis are:
a. White male pupils have lower access outcomes regardless of FSM status, but white male pupils who were eligible for FSM have much lower access outcomes than white male pupils who were not eligible.
b. White females who were eligible for FSM have lower than average access outcomes.
c. Male pupils in the following ethnic groups have lower than average access outcomes (in both cases pupils who were also eligible for FSM has much lower outcomes):
i. Mixed - white and black Caribbean
ii. Black or black British - Caribbean
59. The DfE publication also includes information about how access to higher education varies by region of England. This shows that access to higher education is much higher for pupils living in London compared with other areas of the country. This effect is so large that, in aggregate, pupils who are eligible for FSM living in London are more likely to enter higher education by 19 than pupils living outside of London who were not eligible for FSM.

## Continuation

60. The continuation measure used is the proportion of entrants who were observed to be continuing in the study of a higher education qualification (or who have gained a qualification) one year and 15 days after they started their course. This data is summarised from the OfS student characteristics: student outcomes data release. ${ }^{22}$
61. To help understand the size of the differences between different student groups we have used bands. The ranges of these bands were determined by finding points on the range of differences where there was a separation so that no student group had a value exactly at the cut-off. These bands are only provided as a guide to the size of the difference. For continuation, the approximate size of the difference is grouped into three bands:
a. More than 6.5 percentage points.
b. Between 3.5 and 6.5 percentage points.
c. Between 1 and 3.5 percentage points.

[^13]62. These bands refer to the maximum of the two average differences calculated for the student group (see Annex B). Some student groups will have differences for single years that fall outside of this range.
63. Similarly, we band the size of the student group as a guide. The approximate size of the group is assigned to one of three bands:
a. Less than 5 per cent of students.
b. Between 5 per cent and up to 25 per cent of students.
c. More than 25 per cent of students.
64. These bands refer to the average number of students per year in this group across the years in the time series as a percentage of the average UK domiciled full-time undergraduate entrant population.

Table 7: Student groups with greatest risk to continuation

| Student group | Approximate size of difference (continuation) | Approximate size of group |
| :---: | :---: | :---: |
| Gypsy or Traveller students (ethnicity 15 groups) | More than 6.5 percentage points | Less than 5 per cent of students |
| Mature students (age 21 and over) | More than 6.5 percentage points | More than 25 per cent of students |
| Students estranged from their families | More than 6.5 percentage points | Less than 5 per cent of students |
| Black or black British Caribbean and Black or black British - Other (ethnicity 15 groups) | More than 6.5 percentage points | Less than 5 per cent of students |
| Socioeconomic background of never worked or long-term unemployed | Between 3.5 and 6.5 percentage points | Less than 5 per cent of students |
| Care experienced | Between 3.5 and 6.5 percentage points | Less than 5 per cent of students |
| Eligible for free school meals at KS4 | Between 3.5 and 6.5 percentage points | Between 5 and 25 per cent of students |
| Students reporting a Household Residual Income of $£ 0$ (independent or dependent) | Between 3.5 and 6.5 percentage points | Between 5 and 25 per cent of students |
| Students from Income Deprivation Affecting Children Index (IDACI) quintile 1 areas | Between 3.5 and 6.5 percentage points | Between 5 and 25 per cent of students |


| Student group | Approximate size of <br> difference (continuation) | Approximate size of group |
| :--- | :--- | :--- |
| Students from Index of <br> Multiple Deprivation (IMD) <br> quintile 1 areas | Between 3.5 and 6.5 <br> percentage points | Between 5 and 25 per cent of <br> students |
| Students reporting their <br> gender identity not the same <br> as the sex registered at birth | Between 3.5 and 6.5 <br> percentage points | Less than 5 per cent of <br> students |
| Asian or Asian British - <br> Bangladeshi students and <br> Black or Black British - <br> African students (ethnicity 15 <br> groups) | Between 3.5 and 6.5 <br> percentage points | Less than 5 per cent of <br> students and between 5 and <br> 25 per cent of students <br> respectively |
| Students with sexual <br> orientation reported as Other <br> (not identifying as <br> heterosexual and not <br> identifying as lesbian, gay or <br> bisexual) | Between 3.5 and 6.5 <br> percentage points | Less than 5 per cent of <br> students |
| Students reporting a religion <br> or belief of Spiritual | Between 3.5 and 6.5 <br> percentage points | Less than 5 per cent of <br> students |
| Students who report that a <br> higher education qualification <br> was not held by parent(s) | Between 3.5 and 6.5 <br> percentage points | More than 25 per cent of <br> students |
| Students reporting a mental <br> health condition (disability) | Between 1 and 3.5 <br> percentage points | Less than 5 per cent of <br> students |
| Mixed (ethnicity) and Other <br> (ethnicity 5 groups) | Between 1 and 3.5 <br> percentage points | Between 5 and 25 per cent of <br> students (Mixed) and less |
| percentage points cent of |  |  |
| than 5 per cent of students |  |  |
| (Other) |  |  |


| Student group | Approximate size of <br> difference (continuation) | Approximate size of group |
| :--- | :--- | :--- |
| Students reporting a <br> Household Residual Income <br> of £1-£25,000 and dependentBetween 1 and 3.5 <br> percentage points | More than 25 per cent of <br> students |  |
| Students reporting a social or <br> communication impairment <br> (disability) | Between 1 and 3.5 <br> percentage points (in 5 out of <br> 6 years) | Less than 5 per cent of <br> students |

65. We recognise that continuation can be influenced by the combination of personal and other background characteristics. For example, an entrant's likelihood to continue with study could be associated with their entry qualifications or the subject that they are studying.
66. The exploring student outcomes dashboard published to support our setting of numerical thresholds for regulation of student outcomes showed the results of a regression analysis that sought to identify factors associated with differences in continuation, completion and progression outcomes, and to better understand the extent to which these differences can be accounted for by other underlying differences in student characteristics. ${ }^{23}$ Where differences in student outcomes reduce after controlling for other factors, this should not be interpreted as them being explained or excused by other underlying differences in student characteristics. Rather, these cases simply indicate where multiple characteristics may be relevant in determining a student's outcome.
67. Students in ABCS full-time continuation quintile 1 have worse outcomes than other students. This is by definition because ABCS identifies the combination of characteristics that are associated with the biggest difference in outcomes. ABCS quintile 1 is not included in the table because it is not a single characteristic, but more information is available in the ABCS dashboards. ${ }^{24}$

## Completion

68. The completion measure used is the proportion of entrants that were observed to have gained a higher education qualification (or were continuing in the study of a qualification) four years and 15 days after they started their course. This data is summarised from the OfS student characteristics: student outcomes data release. ${ }^{25}$
69. To help understand the size of the differences between different student groups we have used bands. The ranges of these bands were determined by finding points on the range of differences where there was a separation so that no student group had a value exactly at the

[^14]cut-off. These bands are only provided as a guide to the size of the difference. The approximate size of the difference for completion is grouped into three bands:
a. More than 8.5 percentage points.
b. Between 4.2 and 8.5 percentage points.
c. Between 1 and 4.2 percentage points.
70. These bands refer to the maximum of the two average differences calculated for the student group (see Annex B). Some student groups will have differences for single years that fall outside of this range.
71. Similarly, we band the size of the student group as a guide. The approximate size of the group is assigned to one of three bands:
a. Less than 5 per cent of students.
b. Between 5 per cent and up to 25 per cent of students.
c. More than 25 per cent of students.
72. These bands refer to the average number of students per year in this group across the years in the time series as a percentage of the average UK domiciled full-time undergraduate entrant population.

Table 8: Student groups with greatest risk to completion

| Student group | Approximate size of <br> difference (completion) | Approximate size of group |
| :--- | :--- | :--- |
| Students estranged from their <br> families | More than 8.5 percentage <br> points | Less than 5 per cent of <br> students |
| Gypsy or Traveller students <br> (ethnicity 15 groups) | More than 8.5 percentage <br> points | Less than 5 per cent of <br> students |
| Mature students (age 21 and <br> over) | More than 8.5 percentage <br> points | Between 5 and 25 per cent of <br> students |
| Black or black British - <br> Caribbean and Black or black <br> British - Other (ethnicity) | More than 8.5 percentage <br> points | Less than 5 per cent of <br> students |
| Care experienced | More than 8.5 percentage <br> points | Less than 5 per cent of <br> students |
| Socioeconomic background <br> of never worked or long-term <br> unemployed | Between 4.2 and 8.5 <br> percentage points | Less than 5 per cent of <br> students |
| Students reporting a <br> Household Residual Income | Between 4.2 and 8.5 <br> percentage points | Between 5 and 25 per cent of <br> students |


| Student group | Approximate size of difference (completion) | Approximate size of group |
| :---: | :---: | :---: |
| of $£ 0$ (independent or dependent) |  |  |
| Students reporting a mental health condition (disability) | Between 4.2 and 8.5 percentage points | Less than 5 per cent of students |
| Students from Income Deprivation Affecting Children Index (IDACI) quintile 1 areas | Between 4.2 and 8.5 percentage points | Between 5 and 25 per cent of students |
| Students from Index of Multiple Deprivation (IMD) quintile 1 areas | Between 4.2 and 8.5 percentage points | Between 5 and 25 per cent of students |
| Eligible for free school meals at KS4 | Between 4.2 and 8.5 percentage points | Between 5 and 25 per cent of students |
| Students with sexual orientation reported as Other (not identifying as heterosexual and not identifying as lesbian, gay or bisexual) | Between 4.2 and 8.5 percentage points | Less than 5 per cent of students |
| Mixed - white and black Caribbean, Mixed white and black African, black or black British - African students, Asian or Asian British Bangladeshi (ethnicity 15 groups) | Between 4.2 and 8.5 percentage points | Less than 5 per cent (the first two groups and the last group) and the third group between 5 and 25 per cent. |
| Male students | Between 4.2 and 8.5 percentage points | More than 25 per cent of students |
| Students with a background socioeconomic status of Routine occupations or Semiroutine occupations | Between 4.2 and 8.5 percentage points | Between 5 and 25 per cent of students |
| Students from TUNDRA quintile 1 areas | Between 4.2 and 8.5 percentage points | Between 5 and 25 per cent of students |
| Students who report that a higher education qualification was not held by parent(s) | Between 1 and 4.2 percentage points | More than 25 per cent of students |
| Students reporting a social or communication impairment (disability) | Between 1 and 4.2 percentage points | Less than 5 per cent of students |


| Student group | Approximate size of <br> difference (completion) | Approximate size of group |
| :--- | :--- | :--- |
| Students reporting multiple or <br> other impairments (disability) | Between 1 and 4.2 <br> percentage points | Less than 5 per cent of <br> students |
| Other (ethnicity 5 groups) | Between 1 and 4.2 <br> percentage points | Less than 5 per cent of <br> students |
| Students reporting a <br> Household Residual Income <br> of $£ 1-£ 25,000$ and <br> dependent | Between 1 and 4.2 <br> percentage points | Between 5 and 25 per cent of <br> students |
| Students reporting sensory, <br> medical or physical <br> impairments (disability) | Between 1 and 4.2 <br> percentage points | Less than 5 per cent of <br> students |
| Students reporting a sexual <br> orientation of lesbian, gay or <br> bisexual | Between 1 and 4.2 <br> percentage points | Less than 5 per cent of <br> students |
| Mixed - other or Asian or <br> Asian British - Pakistani <br> (ethnicity 15 groups) | Between 1 and 4.2 <br> percentage points | Less than 5 per cent of <br> students |

73. We recognise that completion can be influenced by the combination of personal and other background characteristics. For example, an entrant's likelihood to complete their study could be associated with their entry qualifications or the subject that they are studying.
74. The exploring student outcomes dashboard published to support our setting of numerical thresholds for regulation of student outcomes showed the results of a regression analysis that sought to identify factors associated with differences in continuation, completion and progression outcomes, and to better understand the extent to which these differences can be accounted for by other underlying differences in student characteristics. ${ }^{26}$ Where differences in student outcomes reduce after controlling for other factors, this should not be interpreted as them being explained or excused by other underlying differences in student characteristics. Rather, these cases simply indicate where multiple characteristics may be relevant in determining a student's outcome.
75. Students in ABCS full-time completion quintile 1 have worse outcomes than other students. This is by definition because ABCS identifies the combination of characteristics that are associated with the biggest difference in outcomes. ABCS quintile 1 is not included in the table because it is not a single characteristic, but more information is available in the ABCS dashboards. ${ }^{27}$
[^15]
## Degree outcomes (attainment)

76. The degree outcomes measure used is the proportion of qualifiers from higher education that achieve a first or upper-second classification of a first degree. This data is summarised from the OfS student characteristics: student outcomes data release. ${ }^{28}$
77. To help understand the size of the differences between different student groups we have used bands. The ranges of these bands were determined by finding points on the range of differences where there was a separation so that no student group had a value exactly at the cut-off. These bands are only provided as a guide to the size of the difference. The approximate size of the difference for degree outcomes is grouped into four bands:
a. More than 13.5 percentage points.
b. Between 10 and 13.5 percentage points.
c. Between 5 and 10 percentage points.
d. Between 1 and 5 percentage points.
78. These bands refer to the maximum of the two average differences calculated for the student group (see Annex B). Some student groups will have differences for single years that fall outside of this range.
79. Similarly, we band the size of the student group as a guide. The approximate size of the group is assigned to one of three bands:
a. Less than 5 per cent of students.
b. Between 5 per cent and up to 25 per cent of students.
c. More than 25 per cent of students.
80. These bands refer to the average number of students per year in this group across the years in the time series as a percentage of the average UK domiciled full-time qualifiers population.

Table 9: Student groups with greatest risk to degree outcomes

| Student group | Approximate size of <br> difference (degree <br> outcomes) | Approximate size of group |
| :--- | :--- | :--- |
| Black students (ethnicity 5 <br> groups and all disaggregated <br> ethnicity 15 groups) | More than 13.5 percentage <br> points | Between 5 and 25 per cent of <br> students (in the black ethnic <br> group as a whole, <br> disaggregated groups are <br> smaller) |

[^16]| Student group | Approximate size of difference (degree outcomes) | Approximate size of group |
| :---: | :---: | :---: |
| Mature students aged 41-50 and 51 and over, i.e. all aged 41 and over | More than 13.5 percentage points | Less than 5 per cent of students |
| Socioeconomic background of never worked or long-term unemployed (young students have biggest gap, mature students are in 5 to 10 pp difference) | More than 13.5 percentage points | Less than 5 per cent of students |
| Gypsy or Traveller students (ethnicity 15 groups) | More than 13.5 percentage points | Less than 5 per cent of students |
| Students estranged from their families | Between 10 and 13.5 percentage points | Less than 5 per cent of students |
| Students from Index of Multiple Deprivation (IMD) quintile 1 areas | Between 10 and 13.5 percentage points | Between 5 and 25 per cent of students |
| Eligible for free school meals at KS4 | Between 10 and 13.5 percentage points | Between 5 and 25 per cent of students |
| Care experienced | Between 10 and 13.5 percentage points | Less than 5 per cent of students |
| Students from 'Income Deprivation Affecting Children Index (IDACI) quintile 1 areas | Between 10 and 13.5 percentage points | Between 5 and 25 per cent of students |
| Students reporting a religion or belief of Muslim | Between 10 and 13.5 percentage points | Between 5 and 25 per cent of students |
| Asian or Asian British - <br> Pakistani, or Asian or Asian <br> British - Bangladeshi <br> (ethnicity 15 groups) | Between 10 and 13.5 percentage points | Less than 5 per cent of students for each group |
| Students reporting a Household Residual Income of $£ 0$ (dependent) | Between 5 and 10 percentage points | Less than 5 per cent of students |
| Mature students aged 21 to 25,26 to 30 and 31 to 40 , ie all students aged 21 to 40 | Between 5 and 10 percentage points | Between 5 and 25 per cent of students |
| Other (ethnicity 5 groups) | Between 5 and 10 percentage points | Less than 5 per cent of students |


| Student group | Approximate size of difference (degree outcomes) | Approximate size of group |
| :---: | :---: | :---: |
| Asian or Asian British - other, mixed - white and black African (ethnicity 15 groups) | Between 5 and 10 percentage points | Less than 5 per cent of students for each group |
| Students with sexual orientation reported as Other (not identifying as heterosexual and not identifying as lesbian, gay or bisexual) | Between 5 and 10 percentage points | Less than 5 per cent of students |
| Students with a background socioeconomic status of Routine occupations (all students) or Semi-routine occupations (young students, mature students the difference is between 1 and 5 percentage points) | Between 5 and 10 percentage points | Between 5 and 25 per cent of students |
| Students reporting their gender identity not the same as the sex registered at birth | Between 5 and 10 percentage points | Less than 5 per cent of students |
| Students who report that a higher education qualification was not held by parent(s) | Between 5 and 10 percentage points | More than 25 per cent of students |
| Students reporting a social or communication impairment (disability) | Between 5 and 10 percentage points | Less than 5 per cent of students |
| Students from TUNDRA quintile 1 areas | Between 5 and 10 percentage points | Between 5 and 25 per cent of students |
| Students from Adult HE quintile 1 areas ( 2011 census data) | Between 5 and 10 percentage points | Less than 5 per cent of students |
| Students reporting a Household Residual Income of $£ 1-£ 25,000$ and dependent | Between 5 and 10 percentage points | Between 5 and 25 per cent of students |
| Students reporting a religion or belief of Buddhist | Between 1 and 5 percentage points | Less than 5 per cent of students |
| Mixed - white and black Caribbean, mixed - other (ethnicity 15 groups) | Between 1 and 5 percentage points | Less than 5 per cent of students |


| Student group | Approximate size of difference (degree outcomes) | Approximate size of group |
| :---: | :---: | :---: |
| Male students | Between 1 and 5 percentage points | More than 25 per cent of students |
| Students reporting a Household Residual Income of $£ 0$ (independent) | Between 1 and 5 percentage points | Between 5 and 25 per cent of students |
| Students with a background socioeconomic status of Small employers and own account workers (young students) | Between 1 and 5 percentage points | Between 5 and 25 per cent of students |
| Students reporting a religion or belief of Christian | Between 1 and 5 percentage points | More than 25 per cent of students |
| Students reporting cognitive or learning difficulties (disability) | Between 1 and 5 percentage points | Between 5 and 25 per cent of students |
| Students reporting a religion or belief of Sikh | Between 1 and 5 percentage points | Less than 5 per cent of students |
| Students with a background socioeconomic status of Lower supervisory and technical occupations (young students) | Between 1 and 5 percentage points | Less than 5 per cent of students |

81. We recognise that degree outcomes can be influenced by the combination of personal and other background characteristics. For example, the likelihood of qualifying with a first or upper second class degree could be associated with entry qualifications or the subject studied. We publish degree outcomes (attainment) by entry qualifications and subject to help understand how these are related. ${ }^{29}$

## Progression

82. The progression measure used is the proportion of qualifiers that identify managerial or professional employment, further study or other positive outcomes among the activities that they were undertaking at the Graduate Outcomes survey census date, 15 months after they left

[^17]higher education. This data is summarised from the OfS student characteristics: student outcomes data release. ${ }^{30}$
83. To help understand the size of the differences between different student groups we have used bands. The ranges of these bands were determined by finding points on the range of differences where there was a separation so that no student group had a value exactly at the cut-off. These bands are only provided as a guide to the size of the difference. The approximate size of the difference for progression is grouped into three bands:
a. More than 9 percentage points.
b. Between 4.5 and 9 percentage points.
c. Between 1 and 4.5 percentage points.
84. These bands refer to the maximum of the two average differences calculated for the student group (see Annex B). Some student groups will have differences for single years that fall outside of this range.
85. Similarly, we band the size of the student group as a guide. The approximate size of the group is assigned to one of three bands:
a. Less than 5 per cent of students.
b. Between 5 per cent and up to 25 per cent of students.
c. More than 25 per cent of students.
86. These bands refer to the average number of students per year in this group across the years in the time series as a percentage of the average UK domiciled full-time undergraduate graduate population.

Table 10: Student groups with greatest risk to progression

|  | Student group | Approximate size of <br> difference (progression) |
| :--- | :--- | :--- | Approximate size of group

[^18]| Student group | Approximate size of difference (progression) | Approximate size of group |
| :---: | :---: | :---: |
| Socioeconomic background of never worked or long-term unemployed | More than 9 percentage points | Less than 5 per cent of students |
| Socioeconomic background of Routine occupations (mature students). Also for young students, where the difference is between 4.5 and 9 percentage points. | More than 9 percentage points | Less than 5 per cent of students |
| Students with sexual orientation reported as Other (not identifying as heterosexual and not identifying as lesbian, gay or bisexual) | More than 9 percentage points | Less than 5 per cent of students |
| Black or black British - other, black or black British Caribbean and Asian or Asian British - Pakistani (ethnicity 15 groups) | Between 4.5 and 9 percentage points | Less than 5 per cent of students in each group |
| Eligible for free school meals at KS4 | Between 4.5 and 9 percentage points | Between 5 and 25 per cent of students |
| Students from Index of Multiple Deprivation (IMD) quintile 1 areas | Between 4.5 and 9 percentage points | Between 5 and 25 per cent of students |
| Students reporting a religion or belief of Muslim | Between 4.5 and 9 percentage points | Between 5 and 25 per cent of students |
| Students from 'Income Deprivation Affecting Children Index (IDACI) quintile 1 areas | Between 4.5 and 9 percentage points | Between 5 and 25 per cent of students |
| Mature students 51 years and over | Between 4.5 and 9 percentage points | Less than 5 per cent of students |
| Socioeconomic background of Semi-routine occupations (young students) | Between 4.5 and 9 percentage points | Between 5 and 25 per cent of students |
| Students from TUNDRA quintile 1 areas | Between 4.5 and 9 percentage points | Between 5 and 25 per cent of students |
| Socioeconomic background of lower supervisory and technical occupations (mature students), or small employers | Between 4.5 and 9 percentage points | Less than 5 per cent of students |


| Student group | Approximate size of difference (progression) | Approximate size of group |
| :---: | :---: | :---: |
| and own account workers (mature students) |  |  |
| Students reporting a mental health condition (disability) | Between 4.5 and 9 percentage points | Between 5 and 25 per cent of students |
| Students who report that a higher education qualification was not held by parent(s) | Between 4.5 and 9 percentage points | More than 25 per cent of students |
| Care experienced students | Between 1 and 4.5 percentage points | Less than 5 per cent of students |
| Students reporting a Household Residual Income of $£ 0$ (independent and dependent students), income of $£ 1$ to $£ 25,000$ (dependent students) | Between 1 and 4.5 percentage points | Less than 5 per cent of students, and between 5 and 25 per cent of students for the second group. |
| Students reporting a sexual orientation of lesbian, gay or bisexual | Between 1 and 4.5 percentage points | Less than 5 per cent of students |
| Asian or Asian British - other, black or black British African, mixed - white and black African | Between 1 and 4.5 percentage points | Less than 5 per cent of students for the first and last group, and between 5 and 25 per cent of students for the second group. |
| Students estranged from their families | Between 1 and 4.5 percentage points | Less than 5 per cent of students |
| Socioeconomic background of lower supervisory and technical occupations, or small employers and own account workers, or intermediate occupations (young students) | Between 1 and 4.5 percentage points | Less than 5 per cent of students, and between 5 and 25 per cent of students for the second and third group. |
| Other (ethnicity 5 groups) | Between 1 and 4.5 percentage points | Less than 5 per cent of students |
| Students reporting their gender identity not the same as the sex registered at birth | Between 1 and 4.5 percentage points | Less than 5 per cent of students |
| Students reporting multiple or other impairments (disability) | Between 1 and 4.5 percentage points | Less than 5 per cent of students |

87. We recognise that progression can be influenced by the combination of personal and other background characteristics. For example, a graduate's likelihood to progress to highly skilled employment, further study or other positive outcomes could be associated with their degree classification or the subject that they studied.
88. The exploring student outcomes dashboard published to support our setting of numerical thresholds for regulation of student outcomes showed the results of a regression analysis that sought to identify factors associated with differences in continuation, completion and progression outcomes, and to better understand the extent to which these differences can be accounted for by other underlying differences in student characteristics. ${ }^{31}$ Where differences in student outcomes reduce after controlling for other factors, this should not be interpreted as them being explained or excused by other underlying differences in student characteristics. Rather, these cases simply indicate where multiple characteristics may be relevant in determining a student's outcome.
89. Students in ABCS full-time progression quintile 1 have worse outcomes than other students. This is by definition because ABCS identifies the combination of characteristics that are associated with the biggest difference in outcomes. ABCS quintile 1 is not included in the table because it is not a single characteristic, but more information is available in the ABCS dashboards. ${ }^{32}$
90. Geographical context for different groups of students is reported in the OfS geography of employment publication. ${ }^{33}$ The methodology described by that publication considers the geographical distributions associated with students' post-study destinations, based on a measure that is consistent with the progression measure used by the OfS in our regulation of student outcomes and access and participation and in the Teaching Excellence Framework. It finds that areas with the highest proportions of graduates working in professional and managerial employment were mostly in the south of England, but with a number of areas across the rest of the country with similar levels of this type of employment among graduates. These areas generally coincide with metropolitan areas, and include London and Bristol.
[^19]
## Annex A: Measures and sources of data

1. The risks in the Equality of Opportunity Risk Register (EORR) cover three areas of the student life cycle, and the outcomes summarised in this document relate to these areas. The areas and outcome measures are as follows:
a. Pre-higher education:
i. Key Stage 4 (KS4) attainment.
ii. The proportion of the 18 -year-old population that apply to full-time undergraduate higher education through UCAS.
iii. The proportion of applications made by the June deadline that receive an offer through UCAS.
iv. The proportion of applicants that applies by the June deadline that are accepted to study through UCAS.
v. The proportion of the young population that enter higher education by age 19.
b. On course:
i. Continuation indicator - the proportion of entrants that were observed to be continuing in the study of a higher education qualification (or that have gained a qualification) one year and 15 days after they started their course (two years and 15 days for part-time students).
ii. Completion indicator - the proportion of entrants that were observed to have gained a higher education qualification (or were continuing in the study of a qualification) four years and 15 days after they started their course (six years and 15 days for part-time students).
iii. Degree outcomes indicator - the proportion of qualifiers from higher education that achieve a first or upper-second classification of a first degree.
c. Progression:
i. Progression indicator - the proportion of qualifiers that identify managerial or professional employment, further study or other positive outcomes among the activities that they were undertaking at the Graduate Outcomes survey census date, 15 months after they left higher education.
2. The measures used in the pre-higher education stage are focussed on progression from school to higher education and are mostly published by DfE and UCAS. In all cases the measures are population-based rates of success. This enables comparisons between student groups to not be affected by the size of a student group.
3. Access to higher education is summarised from the data in the DfE 'Widening participation in higher education' publication. ${ }^{34}$ This release includes estimates of state-funded pupils' progression to higher education by age 19 according to their personal characteristics (and the area-based measure POLAR) at age 15. More information about the methodology and the characteristics used can be found in the DfE publication.
4. We have also considered measures in the OfS access and participation dashboard and in the OfS associations between characteristics of students (ABCS) access publication. ${ }^{35}$
5. The definitions of continuation, completion, degree outcomes and progression measures used throughout this document are consistent with those used by the OfS in our regulation of student outcomes and access and participation and in the Teaching Excellence Framework. ${ }^{36}$ The data for these measures have mostly been drawn from the OfS student characteristics: student outcomes publication to enable consideration of the widest possible set of student characteristics. ${ }^{37}$ Definitions of the student characteristics used in the release can be found in the report that accompanies the dashboards. ${ }^{38}$
6. For progression measures, we have also considered the OfS geography of employment publication. ${ }^{39}$ The methodology described by that publication considers the geographical distributions associated with students' post-study destinations, based on a measure that is consistent with the progression measure used by the OfS in our regulation of student outcomes and access and participation and in the Teaching Excellence Framework.
7. This publication includes some characteristics with small numbers of students. We would be unlikely to publish data for individual providers for these characteristics because the numbers of students would be unlikely to meet our threshold for publishing for data protection reasons. However, there is enough information at the sector level to assess the outcomes for these groups.
[^20]
## Annex B: Methodology

1. The tables in the report contain an assessment of the student groups with the greatest differences in outcomes. In broad terms, we have assessed differences in student outcomes for a given student group compared with the same outcome observed for other students, to establish where there was potential for the group in question to have had an improved outcome.
2. The method used to summarise differences has been made as follows:
a. Generally, outcomes measures for UK domiciled full-time undergraduate students were considered. Access to higher education was considered for Key Stage 4 pupils in English state-funded and special schools.
b. Two differences in outcome were calculated for each measure:
i. The difference between the outcome for the student group and the outcome for all students (including the group in question).
ii. The difference between the outcome for the student group and the outcome for all other students (excluding the group in question).
c. The mean (average), minimum and maximum of these differences were calculated across up to six of the most recent years. Outcomes for some characteristics were only available for fewer than six years.
d. If the minimum of both differences was greater than one percentage point, this meant that in all years with data the difference between this group and other students, for both methods, was at least one percentage point. In other words there was potential for at least one per cent of the group to have had an improved outcome. The uncertainty in these measures has not been assessed.
e. Also flagged for consideration were characteristics where:
i. Only one of the minimum differences was greater than one percentage point in case the two measures were different in a relevant way.
ii. At least one of the average differences was greater than one percentage point in case there were some unusual years in the time series of up to six years.
iii. At least one of the max differences was greater than one percentage point in case something was emerging as a difference.
f. Most of these were found to be characteristics where the estimated difference was not consistently above zero and if this was the case they have not been added to the tables in this report.
g. Also calculated was the proportion of years where the difference was greater than one percentage point, the number of years with data and the average size of the student group in terms of the proportion of all students.
h. Characteristics were grouped into bands using the maximum of the two average differences. These bands create some differentiation in the tables between characteristics, for example, between characteristics where the difference is only one percentage point and characteristics where the difference is, say, 10 percentage points. The ranges of these bands were determined by finding points on the range of differences where there was a separation so that no student group had a value exactly at the cut-off. Table B1 shows the bands used for the different outcome measures.
i. Consideration was made of whether the difference was small, but the student group is large and therefore improvements in outcomes have the potential to affect a large number of students.

Table B1: Bands used for the different outcome measures

| Measure | Greatest differences | Next group | Next group (KS4 attainment and degree outcomes only) | Smallest differences |
| :---: | :---: | :---: | :---: | :---: |
| KS4 attainment | More than 30 percentage points | Between 18 and 30 percentage points | Between 10 and 18 percentage points | Between 1 and 10 percentage points |
| Application | More than 13 percentage points | Between 8 and 13 percentage points |  | Between 1 and 8 percentage points |
| Offers | More than 20 percentage points | Between 4 and 20 percentage points |  | Between 1 and 4 percentage points |
| Accepted conditional on applying | More than 11 percentage points | Between 7 and 11 percentage points |  | Between 1 and 7 percentage points |
| Access | More than 25 percentage points | Between 15 and 25 percentage points |  | Between 1 and 15 percentage points |
| Continuation | More than 6.5 percentage points | Between 3.5 and 6.5 percentage points |  | Between 1 and 3.5 percentage points |
| Completion | More than 8.5 percentage points | Between 4.2 and 8.5 percentage points |  | Between 1 and 4.2 percentage points |
| Degree outcomes | More than 13.5 percentage points | Between 10 and 13.5 percentage points | Between 5 and 10 percentage points | Between 1 and 5 percentage points |
| Progression | More than 9 percentage points | Between 4.5 and 9 percentage points |  | Between 1 and 4.5 percentage points |

3. The size of the student group with a specific characteristic is important to understand. Larger groups will tend to be represented in the majority of providers and small differences in their outcomes can affect large numbers of students. They also could hide differences at a disaggregated level. For example on average students reporting a disability have completion indicators around 2-3 percentage points lower than students who do not report a disability, but at the disaggregated level students reporting a mental health condition have completion indicators 7-8 percentage points lower than all other students. Smaller groups may not be represented at all providers and are often too small to report at provider level, but they can have some of the greatest differences in their outcomes.
4. To aid understanding of the different student characteristics and provide context to the differences we band the size of the student group. The approximate size of the group is assigned to one of three bands:
a. Less than 5 per cent of the relevant population of students.
b. Between 5 per cent and up to 25 per cent of the relevant population of students.
c. More than 25 per cent of the relevant population of students.
5. Where there is an ABCS measure, i.e. access, full-time continuation, full-time completion and full-time progression, students in quintile 1 will have worse outcomes than other students. This is by definition because ABCS identifies the combination of characteristics that are associated with the biggest difference in outcomes. ABCS quintile 1 is not included in the tables because it is not a single characteristic. The ABCS dashboards are an important source of information about the combinations of characteristics that have poorer outcomes. ${ }^{40}$
6. In ABCS full-time continuation, full-time completion and full-time progression there is a characteristic called 'Local or distance learner'. Local learners are identified by comparing home travel to work area with study travel to work area, calculated from home postcode and study postcode respectively. Local learners are those whose home address is in the same travel to work area as their provider. Distance learners are those who are not in attendance at the provider for their course, that is they are studying at a distance from the provider. Students in these groups tend to have poorer outcomes, but these are not characteristics of the student in the same way that personal characteristics are and distance learning is a characteristic of the type of study. Often students identified in these groups also have other characteristics that are associated with poorer outcomes such as being mature students and they will be identified through this route.
[^21]
## OGL

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www.nationalarchives.gov.uk/doc/open-government-licence/version/3/


[^0]:    ${ }^{1}$ See www.officeforstudents.org.uk/eorr/.
    ${ }^{2}$ Univariate form means that each split indicator is one-dimensional and will report the outcomes or experiences of students categorised on the basis of a single characteristic or attribute. For example, we will create split indicators that report on male students and, separately, split indicators that report on disabled students. Split indicators would be multivariate in form if they were calculated at a more granular level to refer to the intersection of various characteristics (in the example given here, if they reported on disabled male students).

[^1]:    ${ }^{3}$ The concept of statistical uncertainty is described in our 'Description and definition of student outcome and experience measures' document at www.officeforstudents.org.uk/publications/description-and-definition-of-student-outcome-and-experience-measures/.

[^2]:    ${ }^{4}$ See https://explore-education-statistics.service.gov.uk/find-statistics/key-stage-4-performance-revised/2021-22.
    ${ }^{5}$ See https://find-npd-data.education.gov.uk/.

[^3]:    ${ }^{6}$ Averages in this document refer to the mean.

[^4]:    ${ }^{7}$ Pupils are defined as disadvantaged if they are known to have been eligible for free school meals at any point in the past six years (from year 6 to year 11), if they are recorded as having been looked after for at least one day or if they are recorded as having been adopted from care.

[^5]:    ${ }^{8}$ See https://www.ucas.com/data-and-analysis/undergraduate-statistics-and-reports/ucas-undergraduate-releases/applicant-releases-2022-cycle/2022-cycle-applicant-figures-30-june-deadline.
    ${ }^{9}$ See https://www.ucas.com/data-and-analysis/undergraduate-statistics-and-reports/ucas-undergraduate-sector-level-end-cycle-data-resources-2022/2022-entry-ucas-undergraduate-reports-sex-area-background-and-ethnic-group.
    ${ }^{10}$ See https://www.ucas.com/data-and-analysis/undergraduate-statistics-and-reports/ucas-undergraduate-end-cycle-data-resources-2022.

[^6]:    ${ }^{11}$ See the June deadline statistics: https://www.ucas.com/data-and-analysis/undergraduate-statistics-and-reports/ucas-undergraduate-releases/applicant-releases-2022-cycle/2022-cycle-applicant-figures-30-junedeadline; and the reports by sex, area background and ethnic group: https://www.ucas.com/data-and-analysis/undergraduate-statistics-and-reports/ucas-undergraduate-sector-level-end-cycle-data-resources-2022/2022-entry-ucas-undergraduate-reports-sex-area-background-and-ethnic-group.

[^7]:    ${ }^{12}$ See the end of cycle data resources https://www.ucas.com/data-and-analysis/undergraduate-statistics-and-reports/ucas-undergraduate-end-cycle-data-resources-2022 and the reports by sex, area background and ethnic group https://www.ucas.com/data-and-analysis/undergraduate-statistics-and-reports/ucas-undergraduate-sector-level-end-cycle-data-resources-2022/2022-entry-ucas-undergraduate-reports-sex-area-background-and-ethnic-group.

[^8]:    ${ }^{13}$ See https://www.ucas.com/data-and-analysis/undergraduate-statistics-and-reports/ucas-undergraduate-sector-level-end-cycle-data-resources-2022/2022-entry-ucas-undergraduate-reports-sex-area-background-and-ethnic-group.

[^9]:    ${ }^{14}$ See https://www.ucas.com/data-and-analysis/undergraduate-statistics-and-reports/ucas-undergraduate-end-cycle-data-resources-2022.

[^10]:    ${ }^{15}$ See www.officeforstudents.org.uk/data-and-analysis/access-and-participation-data-dashboard/.

[^11]:    ${ }^{16}$ See
    https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/articles /reconciliationofmidyearpopulationestimateswithcensus2021englandandwales/2023-02-28.
    ${ }^{17}$ See www.officeforstudents.org.uk/data-and-analysis/associations-between-characteristics-of-students/.
    ${ }^{18}$ See https://www.gov.uk/government/collections/widening-participation-in-higher-education.
    ${ }^{19}$ See https://find-npd-data.education.gov.uk/.

[^12]:    ${ }^{20}$ A child in need is defined under the Children Act 1989 as a child who is unlikely to reach or maintain a satisfactory level of health or development, or their health or development will be significantly impaired without the provision of services, or the child is disabled.
    ${ }^{21}$ Looked after children are a subset of care experienced learners. They are also a subset of Children in Need. A child is looked after by a local authority under the Children Act 1989 if they fall into one of the following: is provided with accommodation, for a continuous period of more than 24 hours [Children Act 1989, Section 20 \& 21]; is subject to a care order [Children Act 1989, Part IV]; or is subject to a placement order. In the DfE publication pupils are in this category if they were looked after continuously for 12 months or more at 31 March in their KS4 year.

[^13]:    ${ }^{22}$ See www.officeforstudents.org.uk/data-and-analysis/student-characteristics-data/outcomes-datadashboard/.

[^14]:    ${ }^{23}$ See our report and data dashboard at www.officeforstudents.org.uk/publications/exploring-studentoutcomes/.
    ${ }^{24}$ See www.officeforstudents.org.uk/data-and-analysis/associations-between-characteristics-of-students/continuing-in-full-time-higher-education/.
    ${ }^{25}$ See www.officeforstudents.org.uk/data-and-analysis/student-characteristics-data/outcomes-datadashboard/.

[^15]:    ${ }^{26}$ See our report and data dashboard at www.officeforstudents.org.uk/publications/exploring-studentoutcomes/.
    ${ }^{27}$ See www.officeforstudents.org.uk/data-and-analysis/associations-between-characteristics-of-students/continuing-in-full-time-higher-education/.

[^16]:    ${ }^{28}$ See www.officeforstudents.org.uk/data-and-analysis/student-characteristics-data/outcomes-datadashboard/.

[^17]:    ${ }^{29}$ See www.officeforstudents.org.uk/data-and-analysis/student-characteristics-data/entry-qualification-and-subject-data-dashboard/.

[^18]:    ${ }^{30}$ See www.officeforstudents.org.uk/data-and-analysis/student-characteristics-data/outcomes-datadashboard/.

[^19]:    ${ }^{31}$ See our report and data dashboard at www.officeforstudents.org.uk/publications/exploring-studentoutcomes/.
    ${ }^{32}$ See www.officeforstudents.org.uk/data-and-analysis/associations-between-characteristics-of-students/progressing-from-full-time-higher-education/.
    ${ }^{33}$ See www.officeforstudents.org.uk/publications/a-geography-of-employment/.

[^20]:    ${ }^{34}$ See www.gov.uk/government/statistics/widening-participation-in-higher-education-2022.
    ${ }^{35}$ See the access and participation dashboard www.officeforstudents.org.uk/data-and-analysis/access-and-participation-data-dashboard/ and ABCS access www.officeforstudents.org.uk/data-and-analysis/associations-between-characteristics-of-students/access-to-higher-education/.
    ${ }^{36}$ These definitions can be found in the 'Description and definition of student outcome and experience measures' document available at: www.officeforstudents.org.uk/publications/description-and-definition-of-student-outcome-and-experience-measures/.
    ${ }^{37}$ See www.officeforstudents.org.uk/data-and-analysis/student-characteristics-data/outcomes-datadashboard/.
    ${ }^{38}$ See www.officeforstudents.org.uk/publications/student-characteristics-data-student-outcomes/.
    ${ }^{39}$ See www.officeforstudents.org.uk/publications/a-geography-of-employment/.

[^21]:    ${ }^{40}$ See www.officeforstudents.org.uk/data-and-analysis/associations-between-characteristics-of-students/.

