Changes to our statistical publication

November 2018
1. Introduction

We have made some changes to the publication to improve the quality of the statistics and provide a fuller picture of progression to Higher Education. We have also proposed changes to the scope of the publication to include Alternative Providers and changes to the method of calculating the most selective Higher Education institutions.

The changes are detailed under the headings below. Feedback on the changes and proposals for the calculation of the most selective institutions are welcome. Please send any comments, questions or suggestions to the Higher Education Statistics Unit at: HE.statistics@education.gov.uk

2. Changes to matching

The matching algorithm has been reviewed and revised to take account of additional data and make improvements in the quality of the match. These changes have had a limited impact on the figures presented, with the exception of progression from independent schools.

The threshold for accepting a match has been tightened to reduce the likelihood of false matches. False matches are more likely where there is less information on the personal details of students – for example where we have information on name and gender but not the student’s postcode. State-funded schools are required to provide detailed personal details for each student attending but this is not the case for independent schools. There is therefore a higher risk of false matches for students attending independent schools.

The impact of the changes has been to reduce the progression rates previously reported for independent school pupils by around four percentage points in each year. Given that not all the students previously matched will be false matches, comparisons between progression rates for state-funded students and independent students are now likely to underestimate the progression rate gap to a small extent.

The publication has been revised with updated time series and so comparisons over time remain valid.

We will look to make further improvement to the matching algorithm and continue to add new data over time and therefore further revisions to figures may be necessary in future.

3. Changes to base

The tables looking at progression by Free School Meal status now use a slightly different base cohort. Previously an attempt was made to match school census pupils at age 15 to their attainment at Key Stages 2, 3, 4 and 5 before matching to the Higher Education Statistics Agency Student Record and Education and Skills Funding Agency Individualised Learner Record college data.

This made the matching process complicated and increased the chances of false matches. The new method simplifies the process by matching the school census data directly to the HESA Student Record and ILR college data.

Although the new method has reduced the number of matches slightly, this has minimal impact on the progression rates presented.

4. More timely data

The changes to the matching and the simplification of the processing required for the publication has enabled us to produce a publication that now includes 2016/17 progression in addition to the 2015/16 data that was previously planned.

It has also enabled us to make additions to the publication as set out in the sections below.
5. Pupil and institution characteristics

The publication has been expanded to include more detailed information on the characteristics of students progressing to Higher Education and the characteristics of the institutions they attend.

The following pupil characteristics are now included in the experimental statistics section of the publication:

- Gender
- Ethnic Group
- Special Educational Need Status
- First Language
- POLAR Disadvantage

The following additional data is included for institutions:

- Alternative Providers
- Teaching Excellence Framework (TEF) rating

6. Proposed changes to Most Selective Measure

The current “most selective” Higher Education Providers (HEPs) are defined as the top third of HE providers when ranked by mean UCAS tariff score from the top three A level grades of entrants.

This means the threshold for “most selective” can be influenced by changes in the number of institutions. It also means that the overall proportion of HE students attending top third of providers is not always a third. Instead it will depend on the size of those institutions e.g. if they tend to be very large it will be much higher, and if they tend to be very small then it will be much lower. This means that changes in the likelihood of progression can simply be a reflection of changes in the size of the ‘most selective’ providers. The current measure also does not cover all qualifications used to assess entry to HE.

A new measure has been proposed to identify the most selective institutions that aims to remove some of the volatility of the current measure. If adopted the new measure would be calculated for each year of the publication to ensure a consistent time series.

Proposed measure

The new measure is calculated using total UCAS tariff points rather than just the top three A levels. This means that the measure can be calculated based on a wider range of students and the average tariff scores should better reflect the selective status of the institutions attended.

In order to further reduce the volatility of the measure over time, it is proposed that it should be based on the top ranked institutions that a third of students attend rather than the top third of institutions. The aim is to help ensure that the measure provides more comparable figures over time on the likelihood of attending a most selective institution by type of school attended. It also provides a methodology that is more consistent with the measure of High Tariff Providers used by UCAS.

Comparison of measures

Figure 1 below demonstrates how the measures differ. For both methods institutions are first ranked by their average tariff points. Then, for the current measure, the top third of providers are selected, regardless
of the number of students attending them. For the proposed measure, providers are defined as most selective where the sum of students in the top ranked institutions is closest to a third of all students attending HE institutions.

**Figure 1: Calculation of Most Selective Institutions – stylised example**

The table below then summarises the differences between the two measures using 2016/17 as an example.

<table>
<thead>
<tr>
<th>Element</th>
<th>Current Method</th>
<th>Proposed Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure</td>
<td>Top Third of institutions</td>
<td>Highest ranked institutions covering a third of students</td>
</tr>
<tr>
<td>Mean Tariff</td>
<td>Top 3 A levels</td>
<td>Total UCAS points</td>
</tr>
<tr>
<td>% of Students with tariff points</td>
<td>81%</td>
<td>98%</td>
</tr>
<tr>
<td>% of HE students progressing to Most Selective Institutions</td>
<td>40%</td>
<td>33%</td>
</tr>
<tr>
<td>No of Most Selective Institutions</td>
<td>51</td>
<td>36</td>
</tr>
</tbody>
</table>

**Impact of changes**

Under the proposed method the proportion of HE students attending the most selective institutions reduces significantly from 40% to 33% in 2016/17. This reduction is due to the fact that the most selective institutions tend to be bigger than less selective institutions ie. a third of providers is not equivalent to a third
of students. This also means that the number of most selective institutions declines from a third (51 providers) to around a quarter (36 providers) in 2016/17. The number of providers under the current method has been either 51 to 52 in each year. Under the proposed method the number of providers varies from 33 to 42 due to the impact of volatile tariff scores of small providers.

There is also some change in the trends in progression rates observed by type of school attended. The progression rates for non-selective state pupils follow a similar trend under both methods, however there is more variation for pupils from independent schools and selective state-funded schools. This may be due to pupils from non-selective state funded schools being more evenly spread between institutions, regardless of selectivity, whilst pupils from independent and selective state are more concentrated in the most selective institutions and therefore changes in the number of institutions and the number of pupils that attend them are more likely to be seen for these school types.

For the key metric comparing progression rates between independent and state-funded pupils we see that although the gap in progression rates is of a similar magnitude under both measures, the trend observed has varied.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>37.4</td>
<td>38.3</td>
<td>37.8</td>
<td>37.8</td>
<td>37.5</td>
<td>38.7</td>
<td>39.2</td>
<td>39.8</td>
<td>39.0</td>
</tr>
<tr>
<td>Proposed</td>
<td>36.0</td>
<td>36.9</td>
<td>37.4</td>
<td>37.0</td>
<td>36.9</td>
<td>37.1</td>
<td>37.2</td>
<td>38.8</td>
<td>37.5</td>
</tr>
<tr>
<td>Difference</td>
<td>-1.4</td>
<td>-1.4</td>
<td>-0.4</td>
<td>-0.8</td>
<td>-0.6</td>
<td>-1.6</td>
<td>-2.0</td>
<td>-1.0</td>
<td>-1.5</td>
</tr>
</tbody>
</table>

Under the proposed measure the gap was largely steady between 2009/10 and 2014/15 whilst the current method showed an increasing gap between 2012/13 and 2014/15. This is likely to reflect the expansion in the number of students attending the top third of institutions which the proposed measure is not influenced by. Both methods show a reduction in the gap over the past year.

The proposed method allows us to calculate the likelihood of an HE student attending a most selective institution and compare figures consistently across years given the chance of attending a most selective institution is fixed at close to a third of students each year.

Figure 2 demonstrates this with the proposed method showing between 33.0% and 33.7% of HE students attending the most selective institutions over time. The current method is much more volatile, varying from 36.9% to 41.9%.

**Figure 2: Proportion of HE Students attending the Most Selective HE by age 19 by method applied**
Figure 3 shows that HE students who attended selective state and independent schools are more than twice as likely to attend a most selective institution than HE students from non-selective state schools. HE students from independent schools are the most likely to attend most selective providers, with 69.2% of them doing so in 2016/17, compared to 58.4% for those from selective state schools and 25.3% from non-selective state schools. Over the period there has been some increase in the proportion of HE students from independent and selective state schools attending the most selective institutions, however the figure for HE students from non-selective state schools has remained consistently around a quarter.

**Figure 3: Percentage of HE Students entering Most Selective HE by age 19 by school type**

![Graph showing percentage of HE Students entering Most Selective HE by age 19 by school type]

More details of the impact of the proposed changes in methodology can be found in Tables 16ab and 17ab of this release.

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**We plan to use this new measure in future publications as a replacement for the current measure.**

Do you have any views on this change?

Are there alternative measures we should be considering?

Should we include Alternative Providers in the calculation?

Is a measure based on student numbers more useful that one based on the number of providers?

The number of providers in the proposed measure varies between 33 and 42 over time. Does this matter?

Is the top third the right level of selectivity? Would a top 50 providers or similar measure be useful?

Should the measure relate to large providers only or be calculated over several years to reduce volatility?

The calculation is currently based on the cohort who attended KS5 in England at age 17 and matched to HESA data by age 19. Should the calculation be based on all young students at the institution regardless of whether they match to the KS5 data?

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**7. Most Selective – Local Authority Level**

We are also including figures showing progression to the most selective institutions at local authority level for the first time. Figures have previously been released as part of the Social Mobility Index.

**8. Inclusion of Alternative Providers**

Alternative providers (APs) are higher education providers who do not receive recurrent funding from the Funding Councils or other public bodies and who are not further education (FE) colleges.

Data on participation in HE at APs is available from 2014/15 onwards. The inclusion of students in this release will therefore cause a break in the time series. However, as the table below shows, including students in APs increases progression rates by around 0.5% for pupils who attended state-funded schools and special schools and therefore has limited impact on the comparability of progression measures over time.
The AP category will also disappear under the new regulatory framework being introduced under the 2017 Higher Education and Research Act, with registered providers being either approved or approved (fee cap). This would therefore create a degree of continuity.

Table 14: Estimated percentage of pupils from state-funded and special schools by Free School Meal status who entered HE by age 19 (including Alternative Providers)

<table>
<thead>
<tr>
<th>FSM Status</th>
<th>2014/15</th>
<th>2015/16</th>
<th>2016/17</th>
<th>Change due to Alternative Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSM[^1]</td>
<td>24.1%</td>
<td>25.7%</td>
<td>26.1%</td>
<td>0.6% 0.6% 0.5%</td>
</tr>
<tr>
<td>Non-FSM[^1]</td>
<td>41.6%</td>
<td>43.3%</td>
<td>43.8%</td>
<td>0.4% 0.5% 0.5%</td>
</tr>
<tr>
<td>Gap</td>
<td>17.5</td>
<td>17.6</td>
<td>17.7</td>
<td>-0.2 -0.1 0.0</td>
</tr>
<tr>
<td>All</td>
<td>39.2%</td>
<td>40.7%</td>
<td>41.2%</td>
<td>0.4% 0.5% 0.5%</td>
</tr>
</tbody>
</table>

There is a slightly bigger difference when looking at progression from KS5. The table below shows that progression rates are up to 0.8 percentage points higher when APs are included.

Table 15: Estimated percentage of A level and equivalent students who entered HE by age 19 by independent and state school/college (including Alternative Providers)

<table>
<thead>
<tr>
<th>School/college type</th>
<th>2014/15</th>
<th>2015/16</th>
<th>2016/17</th>
<th>Change due to Alternative Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent</td>
<td>81.1%</td>
<td>81.4%</td>
<td>81.4%</td>
<td>0.5% 0.6% 0.7%</td>
</tr>
<tr>
<td>Selective state</td>
<td>89.3%</td>
<td>89.6%</td>
<td>89.4%</td>
<td>0.4% 0.4% 0.5%</td>
</tr>
<tr>
<td>Other state</td>
<td>61.3%</td>
<td>61.8%</td>
<td>62.9%</td>
<td>0.6% 0.7% 0.8%</td>
</tr>
<tr>
<td>Total state</td>
<td>63.3%</td>
<td>63.7%</td>
<td>64.8%</td>
<td>0.6% 0.7% 0.8%</td>
</tr>
<tr>
<td>Total</td>
<td>65.0%</td>
<td>65.3%</td>
<td>66.3%</td>
<td>0.6% 0.7% 0.8%</td>
</tr>
<tr>
<td>Independent/ State Gap (pp)</td>
<td>17.8</td>
<td>17.7</td>
<td>16.6</td>
<td>-0.1 -0.1 -0.1</td>
</tr>
</tbody>
</table>

We are proposing to include APs in future releases to give a more complete picture of progression to HE.
Do you agree they should be included?
Should we show APs as a separate category?
Should APs be included in the calculation of the most selective providers?

9. Changes to Tables

Tables have been reformatted to show time series information more clearly. Some tables have been combined to avoid duplication of figures.

10. Rounding

Progression rates and gaps at national level will now be rounded to 1 decimal place rather than to the nearest whole number.

Counts of students are rounded to the nearest 5. We do not show any figures for groups of fewer than 11 students. We also do not show numbers or percentages relating to outcomes for small numbers of individuals (1’s and 2’s) in the reporting lines. Results are not shown because of the risk of an individual student being identified.