

Calculation of a new Adult HE area-based measure – September 2020

Rationale

The Office for Students (OfS) has historically published a measure called Adult HE which estimates the proportion of the adult population that holds a higher education qualification in a geographical area. All residents aged 16 and over are included in the definition of an 'adult'. The measure was calculated based on the population of census area statistics wards (CAS wards). All CAS wards were split between five quintiles based on the proportion of adults with a higher education qualification in the area. However, this calculation was based on 2001 census data and 2001 CAS wards.

We have updated the Adult HE measure using the 2011 census data on higher education which is publicly available. This data is more up to date and as such is more in line with the other area-based measures published by the OfS.

To avoid confusion, the two Adult HE measures are referred to as Adult HE 2001 and Adult HE 2011 in this document and in the postcode look-up excel file.

Execution

The Adult HE 2011 measure is based on Middle layer Super Output Areas (MSOAs), unlike Adult HE 2001 which was based on CAS wards. This is because the 2011 census data is available at an MSOA level and also allows alignment with our POLAR4 and TUNDRA MSOA measures.

Similarly to POLAR4, 'MSOA' stands for different geographical units across the four nations:

- MSOA 2011 in England and Wales
- Intermediate Zone 2001 in Scotland
- Super Output Area (SOA) 2011 in Northern Ireland.

More information about geographical units can be found on the ONS website:

<https://www.ons.gov.uk/methodology/geography/geographicalproducts/postcodeproducts>.

The 2011 census data on adult education is available in different formats for the four nations which had to be combined for this analysis. Descriptions of the available data can be found below:

- For England and Wales, MSOA-level data was downloaded from <https://www.nomisweb.co.uk/census/2011/ks501ew>. The Adult HE rate for each MSOA is

calculated by dividing the number of adults who hold a Level 4 qualification or above by the total number of adults in the area, as stated in the table.

- For Scotland, the data can be accessed at: <https://www.scotlandscensus.gov.uk/ods-web/data-warehouse.html#standarddatatab>. However, the data was available at a Data Zone level only, and not at an Intermediate Zone level (which is considered the equivalent of an MSOA in England and Wales). Hence, a lookup between Data Zones and Intermediate Zones (available at <https://www2.gov.scot/Topics/Statistics/sns/SNSRef/odpplookup>) was used and the data was manually condensed to an MSOA level. The Adult HE rate was calculated in the same way as the rate in England and Wales.
- In Northern Ireland, there is only one level of Super Output Area (SOA) and it is used as the basis for the Adult HE rate calculation. The data can be accessed at: <https://www.ninis2.nisra.gov.uk/public/PivotGrid.aspx?ds=7109&lh=44&yn=2011&sk=136&sn=Census%202011&yearfilter=2037>.

The data for four nations was combined in order to rank MSOAs across the UK consistently. There are 9,326 MSOAs in the UK and they were split between five quintiles of roughly equal population size based on their Adult HE participation rate. Grouping is based on unrounded rates. The rates available in the data file are rounded, hence areas can have the same rounded participation rate but be in different quintiles. Table 1 below displays the number of MSOAs, the total population, and the minimum, maximum, mean and median Adult HE rates for each Adult HE 2011 quintile.

Table 1: Summary Statistics for Adult HE 2011 Quintiles

Adult HE 2011 Quintile	Number of MSOAs	Population	Min Adult HE rate	Max Adult HE rate	Mean Adult HE rate	Median Adult HE rate
1	2,027	10,261,310	4.3%	17.0%	13.2%	13.6%
2	1,923	10,260,770	17.0%	22.7%	19.8%	19.8%
3	1,852	10,261,065	22.7%	28.4%	25.5%	25.4%
4	1,793	10,257,990	28.4%	35.9%	31.9%	31.7%
5	1,731	10,266,260	35.9%	71.4%	44.5%	42.2%

A zoomable map of Adult HE 2011 across areas can be found at:

www.officeforstudents.org.uk/data-and-analysis/young-participation-by-area/map-of-participation-in-higher-education/

A look-up between MSOAs, Adult HE 2011 rates and associated quintiles can be found at:

www.officeforstudents.org.uk/data-and-analysis/young-participation-by-area/get-the-area-based-measures-data/