

Analysis of GCSE progression to A-Level

Report for the Royal Geographical Society

Philip Nye
Dave Thomson

November 2019

1. Introduction

This report forms an addendum to work completed for the Royal Geographical Society analysing entries into, and attainment in, GCSE and A-Level geography for the period 2009/10-2017/18¹.

This additional analysis considers progress from Key Stage 4 to (Key Stage 5) A-Level geography – focusing in particular on those who could, but do not, take A-Level geography.

Acknowledgments

This publication includes analysis of the Department for Education [National Pupil Database](#). Inferences or conclusions derived from the NPD in this publication are the responsibility of FFT Education Datalab and not the Department for Education.

2. Approach

Despite the increase in recent years in pupils taking GCSE geography, the number of A-Level entrants has changed little. We looked to see whether the propensity to enter A-Level geography varies by pupil characteristics and geography. Are some groups of pupils less likely to progress to A-Level geography? Are there any geography cold spots in England?

To do this, we looked at the cohort of pupils that completed Key Stage 4 in 2015 and observed whether they had entered A-Level geography in the following three years (up to the end of 2018). Using logistic regression, we modelled the probability of each pupil entering A-Level geography based on Key Stage 4 attainment (both overall and in GCSE geography), gender and type of school attended (independent or state).

Averaging the modelled probabilities for a particular group of pupils (e.g. disadvantaged pupils) gives us the percentage of pupils expected to enter geography on the basis of Key Stage 4 attainment, gender and type of school attended. We then compared this expected percentage with the actual percentage who entered. If the actual percentage is higher, this suggests that the group is more likely to enter A-Level geography than would be expected given their prior attainment, gender and type of school attended.

We performed this comparison of actual and expected percentages for a range of pupil characteristics, school types and area types, and by local authority district.

3. Results

Analysis of actual and expected geography A-Level entry rates by pupil characteristics, school types, and area types can be found in [rgs_ks4progression.xlsx](#).

Where school characteristics are considered, these are the schools which pupils completed Key Stage 4 in, as opposed to where they may be studying for Key Stage 5.

Definitions are as per the original GCSE analysis. An additional metric, referred to as area demographics, has also been considered here. This relate to [the ONS's 2011 residential-based area classification supergroups](#).

¹ Throughout this report, years refer to year in which the academic year finished – that is, 2010 refers to 2009/10, for example.

A Tableau packaged workbook, viewable in Tableau Reader, [rgs_ks4progression.twbx](#), gives a map comparing actual and expected entry rates at local authority district-level. Data underlying this map can be found in [rgs_ks4progression_districtlevel.xlsx](#).

Key results are as follows:

- fewer disadvantaged pupils entered A-Level geography than expected: 2.0% of disadvantaged pupils in the cohort would have been expected to based on prior attainment, gender and the type of school attended but only 1.4% did so;
- apart from white pupils, fewer pupils of all (known) ethnicities entered A-Level geography than expected. The greatest disparities existed for Asian/Asian British and Chinese pupils, where 1.6 percentage points (p.p.) fewer pupils entered than would have been expected (entry rates of 3.5% versus an expectation of 5.1%, and 6.7% versus 8.3%, respectively). These were the greatest disparities observed across this piece of analysis in percentage point terms;
- gaps in entry rates by area type were relatively small, with only those living in 'urban major conurbations' less likely to enter A-Level geography than expected;
- larger gaps were seen in the analysis by area demographics – ranging from 0.9p.p. more students than expected taking A-Level geography in areas with a 'countryside living' demographic (7.7% of all students, versus an expectation of 6.8%) to 0.9p.p. fewer students than expected taking A-Level geography in areas with a 'multicultural living' demographic (2.6% versus 3.5%);
- those in coastal areas and government opportunity areas are slightly less likely to take A-Level geography than would be expected given their prior attainment, gender and the type of school they attend;
- when schools are placed into quintiles based on the percentage of their pupils eligible for free school meals, schools in the two quintiles with the lowest FSM-eligibility rates saw more pupils take A-Level geography than expected, with the most disadvantaged schools at the other end of the scale – 0.7p.p. fewer pupils took A-Level geography than expected (1.6% versus 2.3%);
- converter academies – which generally started as high-performing community schools – are the only type of school that sees more pupils take A-Level geography than expected, when schools are considered by governance type;
- finally, there is a correlation between school inspection ratings and the gap between expected and actual entry rates. Pupils who completed KS4 at schools rated *good* or better were more likely than expected to take geography A-Level, with those who had attended schools rated *requires improvement* or *inadequate* were less likely than expected to take the qualification. In total, 0.4p.p. more of those at *outstanding* schools took geography A-Level than expected once prior attainment, gender and school type had been taken into account (7.6% versus 7.2%), while a gap of the same magnitude but the opposite sign was present for those who had attended *inadequate* schools (2.0% versus 2.4%).