Part 2: Analysis of the progression of A-Level geography entrants to higher education

Report for the Royal Geographical Society

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education datalab

Contents

1. Introduction

This report forms half of the written output from a piece of work carried out for the Royal Geographical Society, analysing the characteristics of undergraduate geography students, and the progression of A-Level geography students to higher education. In this particular report, we look at the progression of A-Level geography students to higher education, during the period 2003/04-2016/17.[1]

There are two main sections: an examination of how likely different groups of students were to progress to study geography at university; and an analysis of the subjects studied by those A-Level geography students who did progress to university, but chose not to study geography.

A separate document is available which describes the methodology followed and definitions used.

Acknowledgments

This publication includes analysis of the Department for Education National Pupil Database, linked to the HESA student record. Inferences or conclusions derived from the NPD or the HESA student record in this publication are the responsibility of FFT Education Datalab and not the Department for Education or HESA.

Navigation

Titles used in sections 3 of this report, and the title of section 4, correspond to worksheets in the Excel document provided showing all of the results of this project. This workbook also includes charts showing trends in progression. Sections 3 and 4 of this report are best read as an accompaniment to these charts.

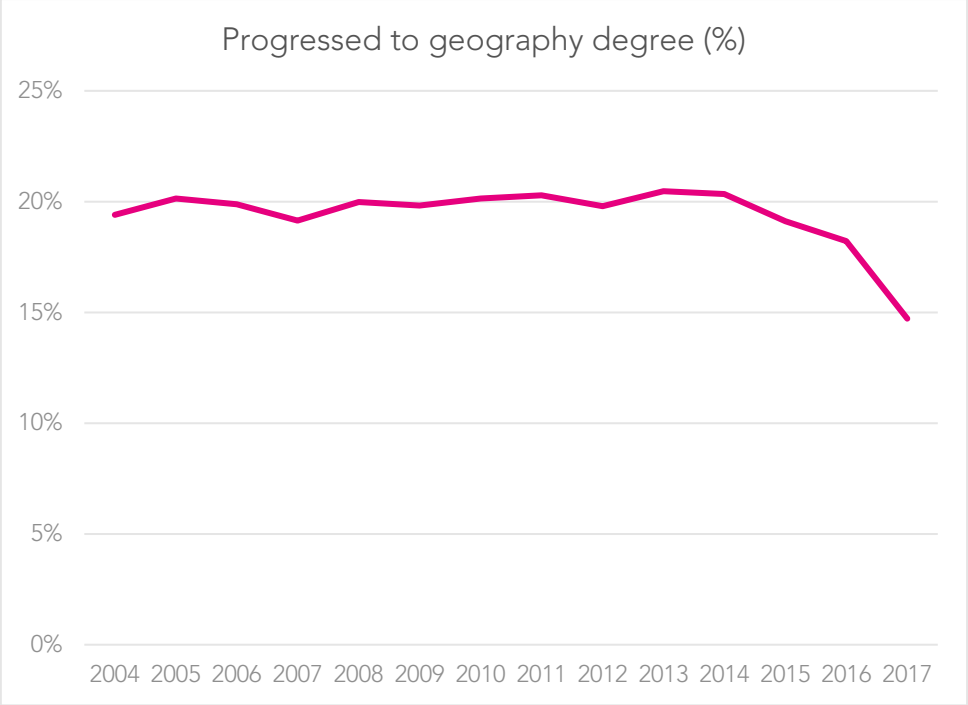
2. Summary

Over the period from 2004 to 2015, the number of A-Level geography students progressing to study geography at university[2] has increased from 5,713 to 6,421. This trend generally echoes trends in the number of students studying geography at A-Level; the proportion of students progressing has remained fairly consistent, at around 19-20%.

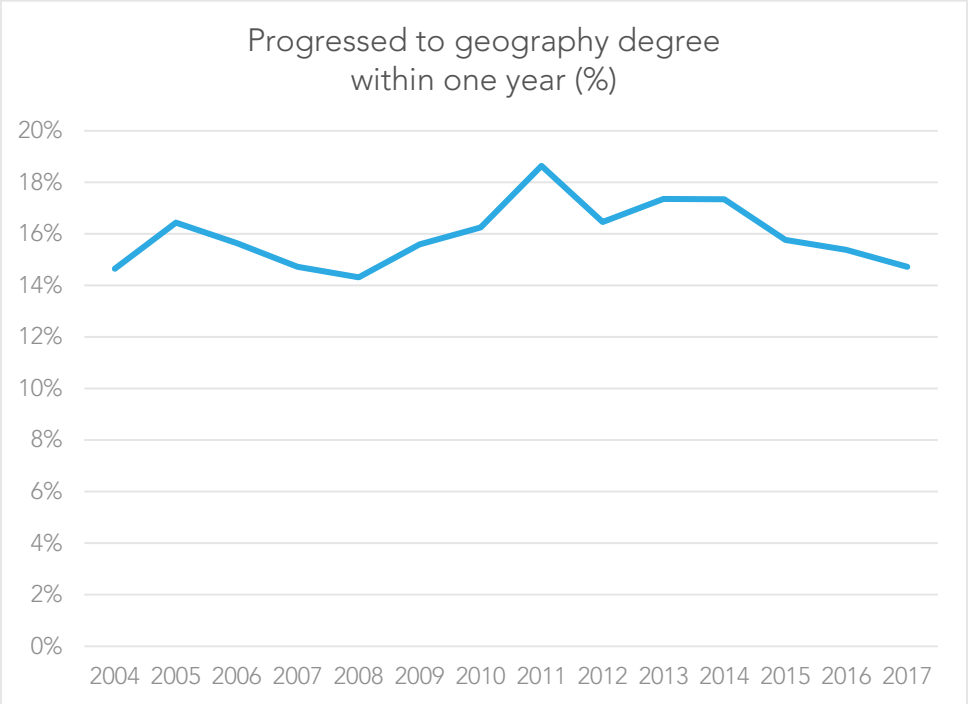
In the graph overleaf, we can see a dip in the proportion progressing to a geography degree in 2016 and 2017. However, this dip can be at least partly explained because a significant number of students take a year between completing A-Levels and progressing to university. As the most recent HESA data available is from 2018, our analysis does not capture any students who had not progressed to university by that year.

[1] Throughout this report, years refer to the year in which the academic year finished – that is, 2010 refers to 2009/10, for example. In the accompanying Excel document, the year shown is the year in which students took their geography A-Level.

[2] The number of students who progressed to a geography degree in a particular year is defined as the number of students who began a degree in the relevant year.

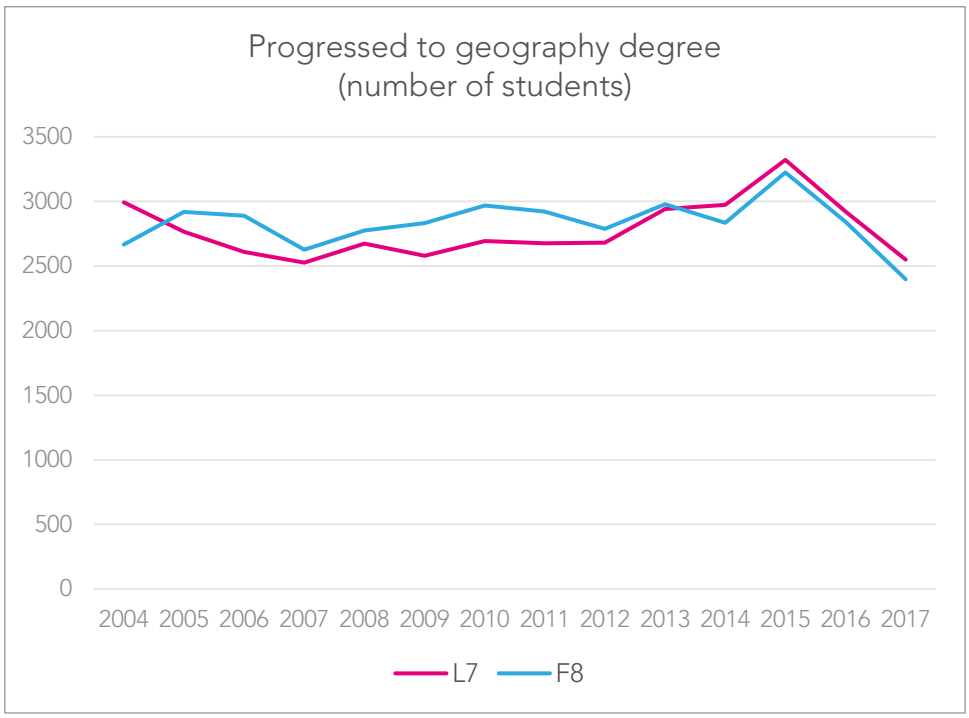


The second graph, below, only includes those students who went on to take a geography degree within a year of completing their A-Levels. Here, we still see a small fall in 2016 and 2017, but it is much less dramatic than that seen in the first graph. We also see a spike in 2011. This is probably the result of reforms to higher education spending in 2012.



We also looked at rates of progression broken down by type of geography degree: those categorised by the Joint Academic Coding System (JACS) as either: physical geographical sciences (JACS code: F8) and human and social geography (JACS code: L7). Throughout this report, we will refer to these degree types using their JACS codes.

Between 2004 and 2013, more students progressed to F8 degrees than L7, but since 2013 this has reversed.



2.1 Years covered by this report

As outlined in the introduction, this report covers students who took their A-Levels during the period from 2003/04-2016/17. The accompanying spreadsheet includes figures from all years during this period. However, as described above, we would expect that some students will take a year between completing their A-Levels and beginning a degree. For this reason, we will tend to treat the students who completed their A-Levels in 2016 as the most recent cohort.

The graphs in the accompanying spreadsheet generally omit the final year of data. This is done in order to avoid giving a misleading picture of the trend in progression. However, the graphs are fully editable and these years of data can be included if required.

2.2 A note on A-Level numbers

The number of A-Level students shown in this report is slightly different to that shown in our companion report on entries and attainment at A-Level geography. This is because our earlier report included only those students who took A-Levels at the end of Key Stage 5. This is the standard method for measuring trends in entry numbers, and allows us to link the trends in entry numbers to trends in the overall student population for each year.

In this report, as we are not interested in linking A-Level numbers to the overall Key Stage 5 population, we were able to use a slightly broader method, which is more appropriate when looking at progression to degree; we included all students who took an A-Level in geography in any given year. This means that the entry numbers used in this report are slightly higher than those in the earlier report, as they also include resits and early entries.

2.3 Data suppression

There are some restrictions placed on the publication of data and statistics from the National Pupil Database. In particular, data based on ten or fewer individuals is 'suppressed': the exact number, and any statistics based on that number, cannot be published. This is to avoid possible disclosure of information on individuals.

In this report and the accompanying Excel document, any numbers of ten or fewer have been replaced with a range. In most cases, this was not sufficient, as the number could still have been calculated from data provided. To avoid this issue, we have also replaced one or more other values in the data with a range. Where percentages or charts have been produced based on suppressed data, we have used the mid-point of the range; this is clearly noted in the Excel document whenever it has occurred. Suppression has been applied to data in the ethnicity section and in the section on other subjects at degree level.

3. Progression to geography at degree level

3.1 Gender

A higher proportion of female students than male students went on to study geography at degree level. This was true of every year considered in this report. Of those students who took geography A-Level in 2016, for example, 20% of female students had begun a geography degree by 2018, compared to 16% of male students. Between 2005 and 2007 the progression rate for male students fell and the gender gap in progression rate increased. Since then, the gender gap has remained fairly consistent.

This picture looks rather different if we consider F8 students and L7 students separately. Female students of A-Level geography were consistently more likely to progress to an L7 degree, with a gender gap of between 2-4 percentage points in every year we looked at. However, for F8 degrees, the gender gap is generally much smaller and inconsistent in direction; in some years, more male students progressed to this type of degree, and in other years, more female students. However, in every year since 2013, a higher proportion of female students have progressed than male.

3.2 Ethnicity

White students had consistently higher rates of progression than students from black, Asian and minority ethnic (BAME) groups. Of those who took A-Levels in 2016, 18% of white students progressed to geography at university by 2018, compared to 14% of BAME students.

When broken down by degree type, differences by ethnic group are less clear when looking at progression to L7 degrees, but we see consistently higher progression for white students to F8 degrees.

Looking at the progression of different ethnic groups in more detail presents a challenge; for a number of years between 2004 and 2009, the number of students from some ethnic groups progressing is so low that we were required to suppress the data (see section 2.2 for more information on data suppression requirements). However, looking at the data from 2010 onwards, we can see that students from a mixed background tended to progress at the same rate, or higher, than that of white students, while students from black and Asian backgrounds were generally less likely to progress. Again, this pattern was much clearer for progression to F8 degrees than to L7 degrees.

Progression rates for students in the 'other' ethnic group varied rather more than other groups from year to year - this is because of the relatively low numbers of students in this group who took A-Level geography, only 329 in 2016, for example.

3.3 Region

There was some variation in progression to geography degree by region[3]. In every year that we considered, a higher proportion progressed from London than any other region. In 2016, 21% of A-Level geography students from London had progressed to a geography degree by 2018, compared to 18% of students overall. The North West also tended to have a higher progression rate than other regions. Of the remaining regions, none had consistently higher or lower progression rates than others.

However, when broken down by degree type a different pattern emerged. While London students were more likely to progress to an L7 degree, they were not more likely to progress to an F8 degree than those from other regions. Similarly, students from the North West tended to be more likely to progress to an F8 degree, but not to an L7 degree.

3.4 School type

Generally, students from independent schools were the most likely to progress to a geography degree, with 21% of those who took A-Levels in 2016 having progressed by 2018. Those from selective state schools were next most likely, most years closely followed by those from non-selective state schools and sixth form colleges. Those from FE colleges were least likely; only 17% of those who took A-Level in 2016 progressed.

The same pattern was clear when looking at progression to L7 degrees. However, for F8 degrees there were less differences by school type and, if anything, students from independent schools were slightly less likely to progress to this type of degree.

3.5 Other A-Level subject choice

Students who took an A-Level in business alongside geography were the least likely to progress; 13% of those who took geography A-Level in 2016 had progressed to a geography degree by 2018, compared to 18% overall. Those who took physical education were also rather less likely to progress (16%), as were those who took chemistry and physics (15% and 14%). Students who studied economics, history or English more likely than others, at 20%, 21% and 21% respectively for those who took A-Levels in 2016.

As might be expected, there are some differences when we look at the different degree types. Students with an A-Level in maths, physics, biology or chemistry were particularly likely to progress to studying an F8 degree, at 10%, 10%, 12% and 10% of 2016 geography A-Level students, compared to an overall rate of 9%. Those who took business or economics at A-Level were less likely to progress (both 6%).

Looking at L7 degrees, students who studied economics at A-Level were most likely to progress (14% of 2016 A-Level students), followed by those who studied history or English (13% and 12%). This compares to an overall rate of 9%. Least likely to progress were those who took science A-Levels, particularly physics and chemistry (both 5%). Students who took PE and business were also less likely to progress (both 7%).

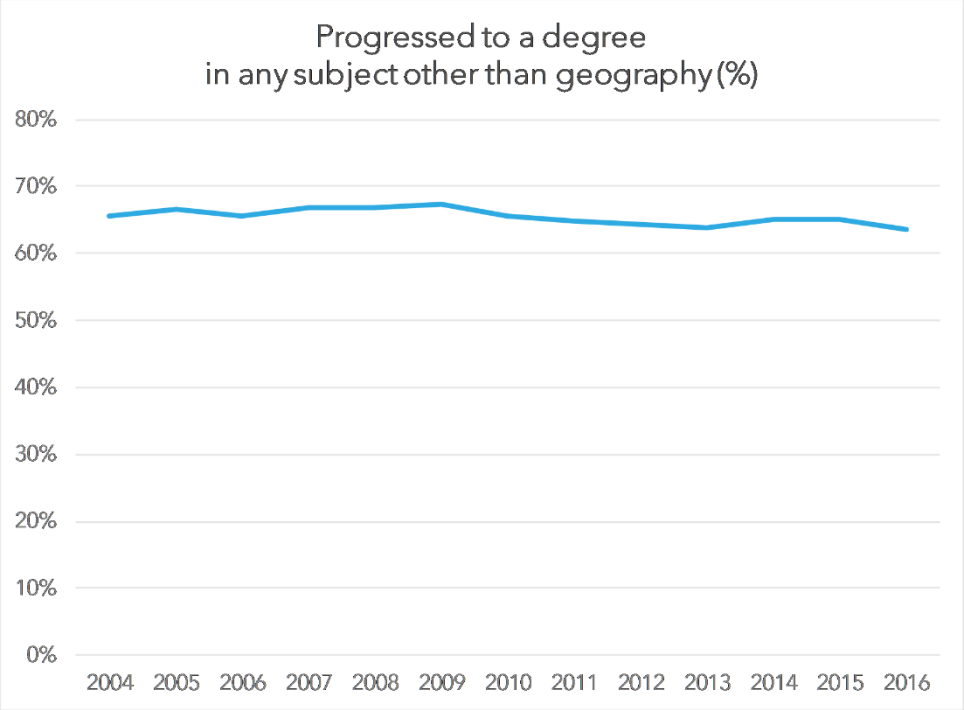
[3] Region here refers to the Government Office Region in which a student's school or college was located. See the methodology document for more details.

4. Progression to other subjects at degree level

As we have already seen, around 18-20% of A-Level geography students went on to take a geography degree in the period covered by this report. In this section, we'll look at A-Level geography students who went on to study at university, but did not chose geography as their subject.

4.1 Overview

Around two thirds of A-Level geography students went on to study subjects other than geography at degree level.

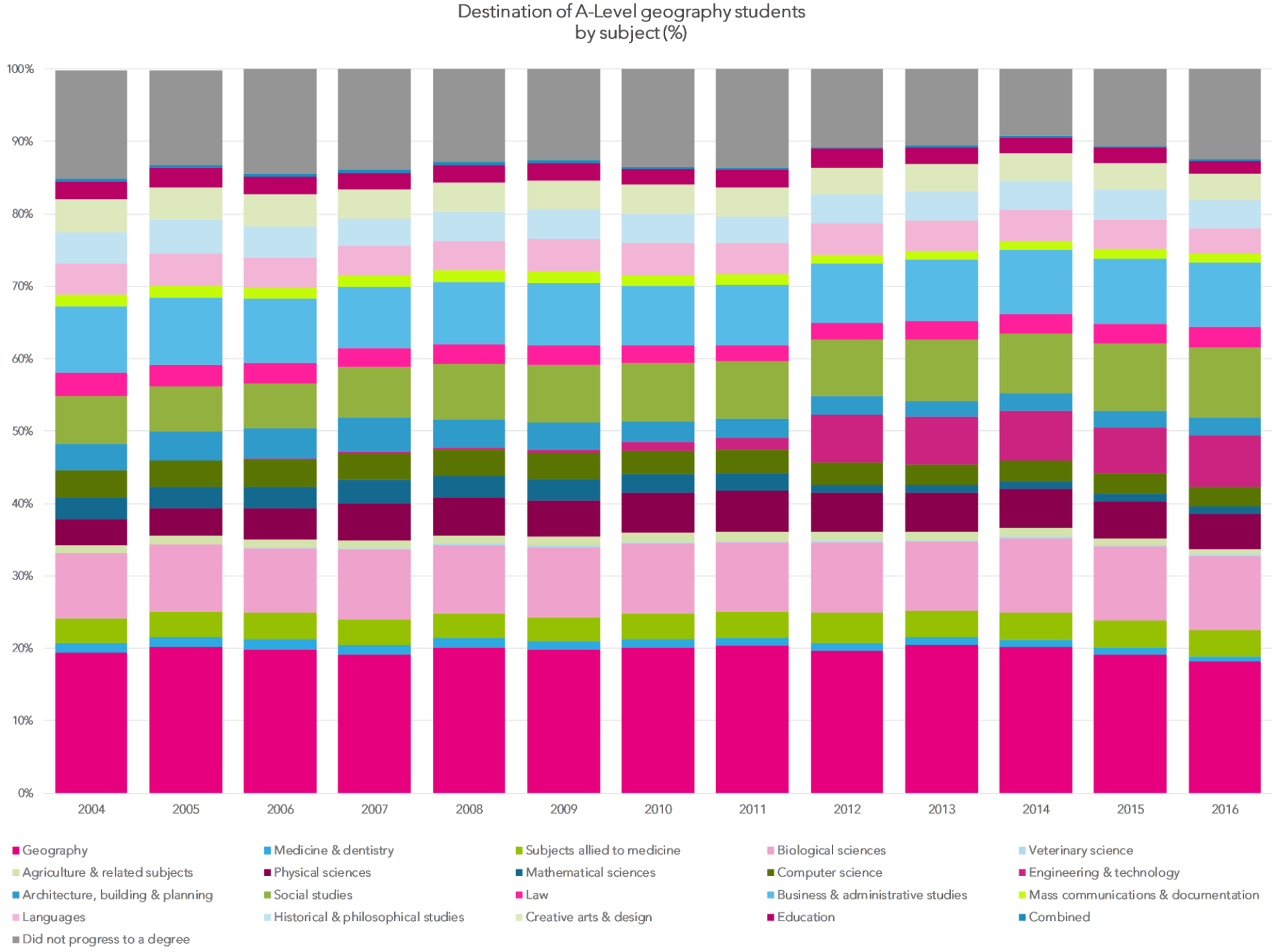


This was less consistent year-on-year than the proportion of students who went on to study geography. It was at its highest in 2009, but then fell every year until 2014.

The chart overleaf gives an overview of the destinations of A-Level geography students from 2004-2016. The degree subjects used here are those defined by JACS.

4.1 Popular alternative subjects

Geography A-Level students went on to study a broad range of subjects at university. Biological sciences were the most popular, with 10% of students who took A-Level geography in 2016 progressing to a degree in that area by 2018. Social studies (other than human and social geography) were also very popular, with 10% of 2016 geography A-Level students progressing to study in this area by 2018, as were business and administrative studies, with 9% progressing.


Destination of A-Level geography students by subject (%)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
Geography
Medicine & dentistry
Subjects allied to medicine
Biological sciences
Veterinary science
Agriculture & related subjects
Physical sciences
Mathematical sciences
Computer science
Engineering & technology
Architecture, building & planning
Social studies
Law
Business & administrative studies
Mass communications & documentation
Languages
Historical & philosophical studies
Creative arts & design
Education
Combined
Did not progress to a degree