

CENTRE FOR
VOCATIONAL
EDUCATION
RESEARCH



Post-16 Aspirations and Outcomes: Comparison of the LSYPE Cohorts

Steven McIntosh

Briefing Note 009

June 2019

The Centre for Vocational Education Research (CVER) is an independent research centre funded by the UK Department for Education. CVER brings together four partners: the LSE Centre for Economic Performance; University of Sheffield; National Institute of Economic and Social Research and London Economics.

Any views expressed are those of the authors, and do not represent the views of DfE. For more details on the Centre, go to cver.lse.ac.uk.

Published by:
Centre for Vocational Educational Research
London School of Economics & Political Science
Houghton Street
London WC2A 2AE

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means without the prior permission in writing of the publisher nor be issued to the public or circulated in any form other than that in which it is published.

Requests for permission to reproduce any article or part of the Working Paper should be sent to the editor at the above address.

© S. McIntosh, June 2019



Post-16 Aspirations and Outcomes: Comparison of the LSYPE Cohorts

Steven McIntosh

June 2019

1. Introduction

CVER was commissioned by the Department for Education to undertake research in support of the current Review of Post-18 Education (The Augar Review). This research brief summarises some of the key findings that came out of that research. A fuller description of all the findings can be found in the main DfE research report ([Post-16 aspirations and outcomes: comparisons of cohorts using LSYPE](#)).

The general theme of the analysis is post-16 education, focussing in particular on young people's educational aspirations and routes actually followed through this stage of education. The aim is to look at the aspirations that young people have for their education after the age of 16, and then the routes that they actually take. A particular area of focus is changes over time, given that data on two cohorts of young people are used, observed almost a decade apart. Key factors that could potentially affect aspirations and choices are prior attainment and socio-economic background, and attention will be focussed on these.

To summarise the main findings, the academic route remains the more popular amongst young people aged 16-18, particularly amongst those with higher attainment at GCSE. For a given level of prior attainment, there is also evidence that young people are more likely to aspire to an academic qualification if they are from a more advantaged background. Nevertheless, as overall post-16 participation has increased, the results also show a higher proportion of the later cohort undertaking vocational Level 3 learning, including improved progression rates from Level 2 vocational courses. There is also increased interest in apprenticeships amongst the later cohort, with more young people discussing them as a possible option, for example in school careers discussions, though only limited evidence of increased participation, particularly for Advanced (Level 3) Apprenticeships. Amongst lower level vocational learners, there is only limited evidence of 'churning' between low level courses and the labour market, with a majority who start such a course in Year 12 remaining in education throughout that year.

2. Data

The data used were from two cohorts of respondents to the Longitudinal Study of Young People in England (LSYPE). The LSYPE surveys followed nationally representative samples of the cohorts of young people who took their GCSEs in 2005/6 and 2014/15 respectively. Each cohort were contacted first when they were aged 13/14 in Year 9, and then annually thereafter, until age 19/20 in 2010 for Cohort 1, and so far, until age 17/18 in 2017 for Cohort 2. The first five waves from each cohort were used in the analysis. The surveys provide information on the background characteristics of the individuals and their families, as well as on their current activities in each sweep. In addition, individual identifier codes could be used to match the survey data to administrative data sets such as the National Pupil Database (NPD) that provides information on prior attainment obtained in Key Stage 2 and 3 tests plus GCSEs, and the Individualised Learner Record (ILR), which provides details of qualifications undertaken in post-16 Further Education.

3. Results

3.1 Aspirations for Post-16 Education

The LSYPE surveys ask respondents about their aspirations towards different post-compulsory education routes, an issue that is rarely researched quantitatively due to absence of data. The results show a large majority (around two-thirds) in each cohort aspired to an academic route, with the proportion increasing slightly between cohorts. There was also a significant fall in the proportion not wanting to undertake any post-compulsory education, falling to just 7% in Cohort 2.

Table 1 shows the results of a multivariate regression analysis, where the dependent variable is whether the individuals aspired to an academic rather than a vocational route, conditional on wanting to remain in Further Education. The cohort indicator shows that, controlling for the other factors in the table, there was no significant change either way in the relative aspirations for an academic rather than a vocational education. Predictably, those from a more advantaged background, or with higher prior attainment, were more likely to favour the academic route. Other characteristics associated with this choice included being female, from an ethnic minority group, having English as a second language, and living in London. In a separate equation (not shown in Table 1), interaction terms between the cohort indicator and all the other characteristics were introduced. The coefficients on the interaction terms showed whether particular sub-groups of the population had changed their aspirations towards different routes between the two cohorts, even though in the aggregate there was no change. The coefficients on most of the interaction terms were statistically insignificant, showing no change in aspirations over time. There were some exceptions, though, with young women becoming increasingly more likely than young men over time to aspire to the academic route. Similar changes were observed for some ethnic groups (Mixed and Bangladeshi) relative to whites, and for individuals living in London.

Having examined young people's aspirations, it is of interest to see what they ended up doing, and whether their aspirations were achieved. Most young people did indeed follow the route to which they had aspired, whether that was academic or vocational. Thus, in both cohorts, around three-quarters of those who had planned to follow an academic route did so, with a similar proportion in each cohort having achieved aspirations for the vocational route. Of interest is that, of the minority who originally did not want to continue in education post-16, a large proportion (81% in Cohort 2), ended up pursuing a vocational qualification.

Who were the young people who did not see their aspirations fulfilled? In particular, who were the individuals who wanted to pursue an academic qualification but did not end up doing so? This question is answered in Table 2, with individuals characterised by family background (parental education) and GCSE attainment. The results show that, as expected, those with higher GCSE attainment were more likely to undertake academic qualifications. However, within GCSE attainment groups, individuals who aspired to an academic post-16 education were more likely to pursue one, if they come from an advantaged family background. Over and above GCSE attainment, therefore, coming from an advantaged family background can help a young person achieve their aspirations to follow an academic course.

The LSYPE survey in the early waves also asked the young respondents whether they intended to apply to university. The characteristics associated with such decisions are very similar to those associated with aspiring to an academic route in the immediate post-compulsory period. Thus, prior attainment

is very important. In addition, we again see the importance of family background. Even holding prior attainment constant, young people from an advantaged family background were more likely to say they will apply to university. Considering changes over time between cohorts, there was a growth in the proportion of respondents saying that they will apply to university, though with a decreasing certainty, from 'very likely' to 'likely' in the Wave 4 responses. Amongst subgroups, women became increasingly more likely than men over time to say they will apply to university, while the gaps narrowed between London relative to other regions, and between different GCSE attainment groups.

3.2 Transition Through Post-16 Education

The analysis moved on to consider the qualifications actually taken in Years 12 and 13, dividing the cohorts according to level of GCSE attainment. In both cohorts, a large majority (over 80%) of the highest-achieving GCSE group (7 or more GCSEs at grades A*-C) went on to study for A levels in Year 12. No other GCSE attainment group had a majority taking A levels, with 40% (Cohort 1) and 33% (Cohort 2), of those with 5-6 grades A*-C GCSEs doing so, and very small numbers of any other GCSE group. For these lower attainment groups, Level 3 vocational courses were the most likely route, with around 40% of those in each group with 3-4 A*-C GCSEs, 1-2 A*-C GCSEs and 5+ D-G GCSEs following such a route in Cohort 2. Those with lower attainment were most likely to be studying below Level 2 in Year 12, or having left full-time education altogether.

In Year 13, the most likely outcome for young people was to be following the same route as in Year 12, particularly for A levels, where the vast majority continued across the two years. The one exception was the group who undertook a vocational Level 2 qualification in Year 12, for whom the modal category in Year 13 was following a vocational Level 3 qualification.

In terms of differences between the two cohorts, the main change is that there was significant growth in the proportion of 17 and 18 year olds taking vocational Level 3 qualifications, with this growth in numbers coming both from fewer people not participating in post-compulsory education at all, and also proportionally fewer individuals taking A levels, particularly amongst those outside the top GCSE attainment group (i.e. with fewer than 7 good GCSEs).

Another key message coming out of this analysis is that there was an increase in progression from vocational Level 2 to Level 3 in Years 12 and 13 between the two cohorts. Examining characteristics associated with such progression (conditional on taking Level 2 qualifications in Year 12) revealed that those young people from a more advantaged background were more likely to progress to Level 3, while those with lower GCSE attainment were less likely to progress.

By the end of Year 13, we also looked to see who had applied to university, split by their Year 13 activity. A majority of those taking A levels (70% in Cohort 1 and 71% in Cohort 2) had applied to university, as expected. There were also significant numbers of those taking vocational Level 3 courses in Year 13 applying to university (25% in Cohort 1 and 22% of Cohort 2). All other Year 13 activities saw minimal university applications.

3.3 Types of Post-16 Vocational Qualifications

The next step was to examine vocational qualifications taken in Years 12 and 13 in more detail, looking at the specific type of qualification. At Level 3, in both cohorts, the dominant choice of vocational qualification was BTECs, with little change between cohorts. Over 75% of young people taking Level 3 vocational qualifications were taking BTECs, in both Year 12 and Year 13, and in both Cohort 1 and Cohort 2. At lower levels, particularly at Level 2, there has been an increase in the proportions of young people taking BTECs, up to almost a half of Level 2 vocational learners in Year 12 and over one-third in Year 13. This made BTECs the dominant choice at Level 2 in Year 12, though still just behind City and Guilds in Year 13 at this level. There has been a concurrent fall in the numbers taking NVQs and Key Skills qualifications, as the numbers taking BTECs have increased.

Table 3 reports the results from regression analyses investigating the determinants of choice of qualification, amongst those who have chosen the vocational route. The equations are estimated as separate linear probability models, rather than a multinomial logit for example, because the qualification choices are not mutually exclusive. The first row, showing the coefficients on the Cohort 2 indicator variable, demonstrates the large shift towards BTEC qualifications and away from NVQs and City and Guilds, in the second cohort relative to the first, holding other characteristics in the table constant. As for those characteristics, the main ones associated with choice of vocational qualification, conditional on having chosen the vocational route in the first place, are that BTECs were more likely to be chosen by individuals from ethnic minority groups, individuals from London, and those with intermediate levels of GCSE attainment. NVQs, on the other hand, were more likely to be taken by males, whites, and young people living in Northern England regions. The characteristics most associated with taking City and Guilds qualifications were being from a white ethnic group and having lower GCSE attainment. There seems to be little effect of family background on vocational qualification choice, conditional on these other characteristics and choosing a vocational route in the first place.

3.4 Apprenticeships

Focussing now specifically on apprenticeships, undertaking the same analysis as the previous section shows the characteristics associated with doing an apprenticeship at age 17/18. The numbers doing so were relatively small in the LSYPE cohorts in the years they were observed (most of the growth in apprenticeships has been amongst those aged 19-24 and particularly 25+). Comparing cohorts, the results show a large increase of 15.6 percentage points in the likelihood of undertaking a Level 2 (intermediate) apprenticeship in Year 13, amongst vocational learners, for the later cohort relative to the earlier. There was a much smaller, but still statistically significant, increase of 1.3 percentage points between cohorts in the probability of those who have chosen the vocational route undertaking a Level 3 Apprenticeship in Year 12.

In terms of the young people's characteristics associated with undertaking an apprenticeship, men were more likely than women to do an apprenticeship, particularly at Level 3, as were white ethnic groups compared to most other ethnicities, particularly at Level 2. In terms of prior attainment, those taking a Level 2 Apprenticeship were most likely to have intermediate GCSE attainment, while those taking a Level 3 Apprenticeship were most likely to have high GCSE attainment.

3.5 Churn Between Low Level Vocational Qualifications and the Labour Market

The aim of this section was to determine whether individuals taking lower level vocational qualifications (up to Level 2) make progress, or whether they simply recycle or churn between low-level jobs and qualifications/learning at the same level.

A majority of individuals who began Year 12 in full-time education spent the whole year in full-time education. Table 4 reports descriptive statistics, showing how this remaining proportion varied according to choice of qualification followed in Year 12, for Cohort 1 individuals. The lower learning aims were clearly associated with a higher proportion leaving full-time education within the year, though even here, a majority did remain in full-time education throughout the whole year. Similarly when split by GCSE attainment (not shown in Table 4), a majority of every GCSE group remained in education in Year 12, although those from lower GCSE attainment groups were more likely to have left.

Focussing now on those who left their Year 12 learning aim, the more likely destination was into inactivity rather than into employment. In addition, only a small proportion of leavers, around 1 in 8, subsequently re-joined education again in Year 12. Such re-joiners were mostly individuals who left a low level learning aim, and they were most likely to re-join at the same level as their earlier learning period. These results suggest that churn certainly does exist, though for a minority of learners.

3.6 Subject Choice Amongst University Applicants

The final two topics considered Higher Education and university applications. The first looked at the subjects that young people in the two cohorts were applying for to study at university, amongst those who reported in Wave 5 of the LSYPE (age 17/18) that they had applied to university. In particular, we considered the distinction between STEM and non-STEM subjects. Comparing between cohorts, the clear pattern observed was a rise in the proportion applying for STEM subjects, and a corresponding fall in non-STEM applications. For example, between Cohorts 1 and 2, the proportions applying for Biology (7.7% to 9.9%), physical science (5.7% to 7.0%), Computing (3.7% to 4.8%) and Engineering (4.1% to 6.3%) all increased, while the proportions applying for Languages (7.9% to 5.5%), Humanities (5.8% to 5.4%) and Arts and Design (11.4% to 9.6%) all fell.

Further analysis analysed the characteristics associated with choosing a STEM subject, in a multivariate framework. The results are shown in Table 5. The cohort indicator shows that, holding other factors constant, there was a 7.6 percentage point increase between cohorts in the likelihood of young people choosing a STEM subject when applying to university. Women were significantly less likely to choose a STEM subject than men, as were whites compared to all other ethnic groups except for the Mixed group. There is also evidence that those with higher GCSE attainment were also more likely to choose to study in a STEM field.

3.7 Active-Passive Choice in University Applications

The final analysis used the data available in LSYPE to determine the extent to which young people make active choices about whether they go to university, or whether they passively drift into it without really considering their options. Although there are no direct questions in the LSYPE survey on this

issue, one indicator is the extent to which they consistently said in Waves 1-4 of the survey that they intended to apply to university, with changing their opinion showing perhaps that they were putting more thought into their decision.

The results show that, of those who ended up applying to university, 38% in both cohorts reported that they were 'very likely' to apply in every wave of the survey up to Wave 4, while over 80% in both cohorts consistently said that they were 'very likely' or 'likely' to apply. Where there was a lack of consistency, it was more likely to be in the earlier waves.

We then went on to investigate what might have influenced changes in young people's opinion as to their likelihood of applying, looking at information gathering. The data revealed, however, no evidence that information gathering was the reason behind changed responses to the likelihood of application question. In fact, those who consistently said that they were more likely to apply were also more likely to have acquired information than those who were not consistent in their responses, whether the information source was careers advice, websites, talks with teachers or talks with family. This was the case in Waves 1, 2, and 3. For example, Table 6 reports the share of young people engaging in various information-gathering activities in Year 10, split by cohort, and whether or not they consistently said they would apply to university from ages 14 to 17. The upper panel shows, as stated above, that those who consistently reported that they would apply to university were more likely to have talked about their future, with both teachers/advisers at school and with family. This would suggest that they were still making an active choice, despite the consistency in their proposed actions.

The lower part of Table 6 shows the proportion engaging in discussions about apprenticeships. This reveals that the group who consistently reported that they would apply to university were less likely to have discussed apprenticeships. The young people who consistently said that they would apply to university may therefore have been discussing their future and considering their options (as shown in the upper panel), but may not have been considering a wider range of options such as apprenticeships. One other thing to note in passing about Table 6 is that, overall, there has been an increasing proportion of young people across both cohorts who are discussing their future, including discussions about apprenticeships.

Women were more likely than men to gather information, as were most ethnic minority groups relative to whites. Young people from a more advantaged background were not more likely to gather more information, and if anything the social gradient ran the other way. With respect to prior attainment it was perhaps surprising that it was the candidates around the margin of university application (with 5-6 good GCSE passes) who gathered the least information.

Finally, we looked at the individual characteristics associated with consistency of views on applying to university, in a multivariate context. Controlling for these other characteristics, gathering more information was associated with a *higher* propensity to report a strong likelihood of applying to university (on a consistent basis). Young women were more likely than young men to be confident of applying to university on a consistent basis. Similarly, some ethnic minorities (Indian, Pakistani and Black African) were more likely to be consistent in their application views than whites. With respect to region, consistently reporting being likely to apply to university was significantly lower in some particular regions, namely the North East, West Midlands and South West. Those young people from a more advantaged background were more likely to report being likely to apply to university on a consistent basis, as were those with higher prior attainment.

4. Conclusions

The comparisons of young people's aspirations and activities between two cohorts who took their GCSEs in 2006 and 2015 revealed smaller changes than perhaps might have been expected, given the increase in university tuition fees and the increased focus on vocational options, particularly apprenticeships, during this period. A general conclusion is that there has been no discernible shift away from academic aspirations and towards vocational alternatives over this time period. On the other hand, the research showed a growing proportion taking Vocational Level 3 courses. Furthermore, there was clear evidence of increased rates of progression from Vocational Level 2 to Vocational Level 3 between the cohorts. While the issue of churn (cycling between periods of low level learning, employment and inactivity, then returning to the same level of learning), was still observed, it seemed to effect only a minority of learners. There has also been increased awareness of and discussions about apprenticeships, though not reflected in the numbers of cohort members actually doing one (though the analysis only followed them up to the age of 18, and most of the growth in apprenticeship numbers has come amongst individuals older than this). Another notable finding is the growth between cohorts in the proportion of university applications applying to study STEM subjects.

Two final additional messages to take from the results are the continuing importance of family background, over and above prior attainment. Thus, the analysis showed for example that, holding prior attainment constant, young people from a more advantaged background were more likely to aspire to an academic route in post-compulsory education, and also were more likely to achieve those aspirations. Even within the vocational route, and again holding prior attainment constant, those young people from a more advantaged background were more likely to progress from Level 2 to Level 3.

Finally, the results show the importance of aspirations formed before young people reach the age of 16, since a majority ended up on the route to which they aspired. This points to the continued importance of information and advice being provided to school age children before they have to make key choices.

Tables

Table 1: Determinants of Aspirations for Academic Route, Amongst Pupils Who Want to Continue in Full-Time Education

	Wave 1 (Year 9)	Wave 3 (Year 11)
Cohort2	-0.007 (0.007)	0.008 (0.008)
Female	-0.000 (0.007)	0.020*** (0.007)
<i>Ethnic group (ref group: white)</i>		
Mixed	0.016 (0.017)	0.001 (0.017)
Indian	0.124*** (0.017)	0.197*** (0.017)
Pakistani	0.129*** (0.019)	0.189*** (0.019)
Bangladeshi	0.019 (0.022)	0.151*** (0.023)
Caribbean	-0.018 (0.021)	0.039* (0.021)
African	0.120*** (0.021)	0.206*** (0.021)
Other	0.109*** (0.023)	0.137*** (0.024)
English as second language	0.056*** (0.015)	0.078*** (0.015)
<i>Region (ref group: London)</i>		
North East	-0.016 (0.020)	0.004 (0.020)
North West	-0.096*** (0.014)	-0.088*** (0.014)
Yorkshire and the Humber	-0.041*** (0.015)	-0.067*** (0.015)
East Midlands	-0.019 (0.016)	-0.050*** (0.016)
West Midlands	-0.035** (0.014)	-0.067*** (0.014)
East of England	-0.004 (0.015)	-0.028* (0.015)
South East	-0.052*** (0.014)	-0.034** (0.014)
South West	-0.083*** (0.016)	-0.097*** (0.016)

Parental Ed. (ref group: no quals)

Level 1/2	0.016 (0.013)	0.002 (0.013)
A levels	0.036** (0.015)	0.025* (0.015)
Level4	0.048*** (0.015)	0.051*** (0.015)
Degree	0.111*** (0.015)	0.107*** (0.015)

Parental Occupation (ref group: low skill occupations)

No occupation	0.024 (0.019)	0.048** (0.019)
Intermediate occupations	0.016 (0.010)	0.018* (0.010)
Senior occupations	0.063** (0.010)	0.076*** (0.010)
Talk with teachers	-0.003 (0.008)	0.015* (0.009)
KS2 English marks	0.003*** (0.000)	0.006*** (0.000)
KS2 Maths marks	0.001*** (0.000)	0.003*** (0.000)
Constant	0.378*** (0.022)	0.009 (0.022)
Number of observations	15305	14606
R ²	0.070	0.168

Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 2: Percentage who aspired to academic route in Year 11, who follow academic route in Year 12, by family background and prior attainment

	Highest Parental Education Level				
	No quals	Level 1/2	A Levels	Level 4	Degree
<i>Cohort 1</i>					
7+ A*-C	84.47 (289)	88.45 (609)	91.30 (439)	93.57 (509)	95.40 (780)
5-6 A*-C	55.92 (45)	47.93 (63)	48.43 (24)	76.83 (38)	70.15 (27)
1-4 A*-C	*	16.76 (74)	*	36.78 (38)	*
<i>Cohort 2</i>					
7+ A*-C	85.28 (139)	86.01 (858)	89.01 (498)	89.46 (616)	92.08 (1,504)
5-6 A*-C	40.79 (38)	47.74 (159)	48.31 (80)	49.45 (82)	52.98 (163)
1-4 A*-C	*	15.04 (247)	13.44 (82)	13.90 (83)	33.50 (143)

* fewer than 10 sample members in cell. Numbers in brackets give the base sample behind the percentage in that cell (since each cell gives a percentage of a different sample).

Table 3: Determinants of Qualification Choice, Amongst Vocational Learners

	BTEC year12	BTEC year13	C&G year12	C&G year13	NVQ year12	NVQ year13
Cohort 2	0.079*** (0.014)	0.103*** (0.014)	-0.075*** (0.013)	-0.055*** (0.013)	-0.120*** (0.010)	-0.155*** (0.011)
Female	-0.006 (0.013)	-0.016 (0.013)	-0.010 (0.013)	-0.005 (0.013)	-0.029*** (0.010)	-0.051*** (0.011)
<i>Ethnic group (ref group: white)</i>						
Mixed	0.016 (0.032)	0.091*** (0.032)	-0.049 (0.031)	-0.084*** (0.031)	-0.061*** (0.023)	-0.096*** (0.026)
Indian	0.124*** (0.043)	0.053 (0.040)	-0.157*** (0.041)	-0.121*** (0.039)	-0.081*** (0.030)	-0.082** (0.033)
Pakistani	0.104** (0.042)	0.060 (0.042)	-0.141*** (0.040)	-0.080** (0.041)	-0.090*** (0.030)	-0.080** (0.034)
Bangladeshi	0.053 (0.054)	0.014 (0.052)	-0.149*** (0.052)	-0.116** (0.051)	-0.083** (0.038)	-0.101** (0.043)
Caribbean	0.083** (0.039)	0.106*** (0.039)	-0.096** (0.037)	-0.070* (0.038)	-0.069** (0.028)	-0.062* (0.032)
African	0.108** (0.044)	0.043 (0.042)	-0.066 (0.042)	-0.108*** (0.041)	-0.049 (0.031)	-0.050 (0.034)
Other	0.022 (0.055)	-0.023 (0.055)	0.008 (0.053)	-0.086 (0.053)	-0.057 (0.039)	-0.073 (0.045)
English as 2nd language	-0.068** (0.035)	-0.027 (0.034)	-0.028 (0.033)	-0.037 (0.033)	-0.009 (0.025)	-0.011 (0.028)
<i>Region (ref group: London)</i>						
North East	-0.085** (0.038)	-0.153*** (0.037)	0.019 (0.036)	0.018 (0.036)	0.034 (0.027)	0.080*** (0.031)
North West	-0.092*** (0.027)	-0.079*** (0.027)	-0.015 (0.026)	-0.002 (0.026)	0.032* (0.019)	0.044** (0.022)
Yorkshire and the Humber	-0.078*** (0.030)	-0.103*** (0.030)	0.004 (0.029)	-0.040 (0.029)	0.045** (0.021)	0.056** (0.024)
East Midlands	-0.075** (0.031)	-0.093*** (0.031)	0.022 (0.030)	0.038 (0.030)	0.031 (0.022)	0.067*** (0.025)
West Midlands	-0.019 (0.029)	-0.074*** (0.028)	0.007 (0.028)	0.001 (0.027)	0.003 (0.020)	-0.004 (0.023)
East of England	-0.046 (0.030)	-0.103*** (0.029)	0.014 (0.028)	0.038 (0.028)	0.014 (0.021)	0.007 (0.023)
South East	0.001 (0.028)	-0.053* (0.028)	-0.045* (0.027)	-0.026 (0.027)	-0.004 (0.020)	-0.008 (0.023)
South West	-0.053* (0.032)	-0.086*** (0.031)	0.015 (0.030)	0.043 (0.030)	0.013 (0.022)	0.023 (0.025)

Parental Ed. (ref group: no quals)

Level 1/2	-0.035 (0.023)	-0.059** (0.024)	0.028 (0.022)	0.037 (0.023)	-0.011 (0.016)	0.030 (0.019)
A levels	-0.026 (0.026)	-0.058** (0.027)	0.027 (0.025)	0.007 (0.026)	-0.003 (0.018)	0.045** (0.022)
Level4	-0.032 (0.028)	-0.046 (0.028)	0.016 (0.027)	0.020 (0.027)	0.008 (0.020)	0.033 (0.023)
Degree	-0.014 (0.029)	-0.020 (0.029)	0.028 (0.028)	-0.019 (0.028)	-0.033 (0.020)	0.011 (0.024)

Parental occ. (ref group: low skill occupations)

No occupation	-0.009 (0.036)	-0.001 (0.037)	0.010 (0.035)	0.004 (0.036)	-0.034 (0.026)	0.003 (0.030)
Intermediate occupations	-0.006 (0.017)	0.011 (0.017)	-0.006 (0.017)	0.010 (0.017)	0.003 (0.012)	0.021 (0.014)
Senior occupations	-0.000 (0.018)	-0.009 (0.017)	-0.034** (0.017)	-0.014 (0.017)	-0.004 (0.012)	0.009 (0.014)
Talk with teachers	-0.000 (0.016)	0.020 (0.016)	-0.008 (0.015)	-0.016 (0.015)	0.010 (0.011)	-0.010 (0.013)
KS2 English marks	0.000 (0.001)	-0.000 (0.001)	-0.002*** (0.001)	-0.001** (0.001)	0.000 (0.000)	0.000 (0.001)
KS2 Maths marks	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.001** (0.000)	-0.000 (0.000)	0.000 (0.000)

GCSE attainment (Ref group: 7+ A-C)*

5-6 A*-C	0.020 (0.021)	-0.045** (0.021)	0.033 (0.020)	0.065*** (0.020)	0.034** (0.015)	0.076*** (0.017)
3-4 A*-C	0.116*** (0.023)	-0.006 (0.022)	0.026 (0.023)	0.102*** (0.021)	-0.007 (0.017)	0.047*** (0.018)
1-2 A*-C	0.178*** (0.026)	0.083*** (0.024)	0.088*** (0.025)	0.108*** (0.024)	-0.039** (0.019)	-0.008 (0.020)
5+ D-G	0.134*** (0.032)	0.054* (0.031)	0.118*** (0.031)	0.085*** (0.030)	0.046** (0.023)	0.009 (0.025)
1-4 D-G	0.069 (0.045)	0.010 (0.050)	0.178*** (0.043)	0.238*** (0.048)	0.015 (0.032)	0.045 (0.041)
none	0.222*** (0.074)	0.071 (0.080)	0.094 (0.071)	0.167** (0.078)	0.015 (0.052)	-0.061 (0.066)

Highest aim (ref: group Level 1)

Highest aim Level 2	0.203*** (0.025)	0.162*** (0.034)	-0.001 (0.024)	0.085*** (0.033)	0.153*** (0.017)	0.224*** (0.027)
Highest aim Level 3	0.629*** (0.028)	0.648*** (0.034)	-0.184*** (0.027)	-0.136*** (0.033)	-0.022 (0.020)	-0.007 (0.028)

Constant	0.321*** (0.055)	0.348*** (0.060)	0.577*** (0.053)	0.440*** (0.058)	0.152*** (0.039)	0.145*** (0.049)
Observations	4333	4136	4333	4136	4333	4136
R^2	0.196	0.258	0.167	0.171	0.119	0.161

Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 4: Percentage Remaining in Education Throughout Year 12, by Highest Learning Aim

	Left before end of Year 12	Remain in Education Throughout Year 12	<i>Base</i>
A levels	3.42	96.58	4,700
Vocational Level 3	26.66	73.34	437
Vocational Level 2	34.95	65.05	326
Vocational Below Level 2	30.82	69.18	228

Table 5: Determinants of Applying for a STEM subject at University

Cohort2	0.076*** (0.015)
Female	-0.071*** (0.015)
<i>Ethnic group (ref group: white)</i>	
Mixed	-0.067* (0.037)
Indian	0.084*** (0.029)
Pakistani	0.153*** (0.038)
Bangladeshi	0.098** (0.044)
Caribbean	0.091* (0.050)
African	0.073* (0.040)
Other	0.118*** (0.043)
English as second language	-0.000 (0.028)
<i>Region (ref group: London)</i>	
North East	0.053 (0.039)
North West	0.013 (0.027)
Yorkshire and the Humber	0.067** (0.031)
East Midlands	0.051* (0.030)
West Midlands	0.014 (0.028)
East of England	0.023 (0.029)
South East	0.004 (0.026)
South West	0.011 (0.033)

<i>Parental Ed. (ref group: no quals)</i>	
Level 1/2	-0.003 (0.033)
A levels	0.002 (0.035)
Level4	0.005 (0.035)
Degree	0.002 (0.035)
<i>Parental Occupation (ref group: low skill occupations)</i>	
No occupation	0.038 (0.051)
Intermediate occupations	-0.019 (0.024)
Senior occupations	-0.007 (0.022)
Talk with teachers	-0.016 (0.018)
KS2 English marks	-0.004*** (0.001)
KS2 Maths marks	0.006*** (0.001)
<i>GCSE group (ref: 7+ A*-C)</i>	
5-6 A*-C	-0.104*** (0.033)
3-4 A*-C	-0.039 (0.054)
1-2 A*-C	0.089 (0.122)
5+ D-G	-0.290 (0.481)
A level points	0.001*** (0.000)
Constant	0.100 (0.064)
Observations	4636
R^2	0.068

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 6: Information Received in Year 10 (Wave 2), by Cohort and Whether Consistently Reported being Very Likely to Apply to University

	Cohort 1		Cohort 2	
	Not consistently very likely to apply	Consistently very likely to apply	Not consistently very likely to apply	Consistently very likely to apply
<i>Percentage who talked about future studies in Year 10:</i>				
With teachers	15.39	17.79	18.24***	25.78***
With Family	54.36	60.83	49.47***	69.32***
<i>Percentage who talked about apprenticeships in Year 10:</i>				
With someone at school	8.20	3.20	14.65***	6.19***
With a family member	6.27	4.76	15.07***	10.19***
With someone else	5.84	2.48	3.20***	2.41
<i>Base</i>	<i>2,449</i>	<i>1,552</i>	<i>2,223</i>	<i>1,353</i>

***, **, * Difference between cohorts statistically significant at the 1%, 5% and 10% significance levels.

Chi-squared statistics test for differences in usefulness of information between those with and without consistent responses to views on applying to university. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.