

# Looking deeper at destinations

Higher quality careers provision leads to positive student destinations

# Looking deeper at destinations

# Higher quality careers provision leads to positive student destinations

### **Publication info:**

Percy, C. (2024). Technical note: Looking deeper at destinations. London: The Careers & Enterprise Company.

## Contents

Summary	4
Introduction	5
Key findings	6
Methodology	8
Appendix 1: Further technical detail on post-18 destinations	10
Appendix 2: Further technical detail on post-16 destinations	16
Data citations	20
Endnotes	21

3

### Summary

In January 2023, The Careers & Enterprise Company published a technical note finding that schools who achieved higher Gatsby Benchmark scores in 2016/17, 2017/18 and 2018/19 typically reported that more students had positive sustained destinations post-16.<sup>1</sup> It was found that on average, each additional benchmark fully achieved was associated with a 1.1% decline in the proportion not in confirmed education, employment and training (EET)<sup>2</sup>, controlling for a range of school-level characteristics.

This new report builds on that research, examining whether the positive link between higher benchmark scores and student outcomes holds true when tested against additional data. The findings show that this link is not only present but even stronger in two new datasets relating to student-level post-16 EET rates and providerlevel post-18 EET rates. Our holistic interpretation of our destinations-related analyses suggests a potential 0.5%pt to 3.5%pts improvement in EET rates for schools implementing the full suite of Gatsby Benchmark provisions, compared to schools with no career guidance provision.<sup>3</sup>

The report also delves into specific types of post-18 destinations, addressing individual pathways (such as FE or HE), the potential effects of disadvantage, and the observation of a "flattening off" of gains towards the top end of benchmark achievement (e.g. six to eight benchmarks). In relation to post-18 destinations, the report identifies the strongest relationships for specific routes, favouring increased education. This is particularly true among schools with traditionally lower rates of students progressing to higher education. In other words, students are particularly more likely to progress into higher education in schools where this route is less common. Improved student tracking and a reduction in unknown destinations also contribute to the positive outcomes. Concurrently, our examination of student-level post-16 destinations using the Millennium Cohort Study (MCS) dataset finds tentative evidence of a stronger positive relationship with EET outcomes than that previously found in our analysis of school-level post-16 destinations.

The report highlights the importance of students engaging with careers advice, as it strongly correlates with their current and future plans, reinforcing the importance of effective career guidance. The report considers potential future research directions, including analysing post-18 destinations over different years and exploring additional datasets.

### Introduction

In January 2023, The Careers & Enterprise Company published a technical note<sup>4</sup> finding that schools who reported higher Gatsby Benchmark scores in 2016/17, 2017/18 and 2018/19 typically reported that more students had positive sustained destinations post-16. Please refer to the 2023 note for more details on the policy context for the research.

Following that research, we identified three aims for future research on destinations:

- to test whether the statistical relationship between non-EET outcomes and Gatsby Benchmarks identified for the 2016/17, 2017/18 and 2018/19 cohorts could be observed in relation to post-18 destinations and the Millennium Cohort Study datasets.
- to test whether the relationship is stronger for schools serving more economically disadvantaged student cohorts, in line with our previous findings.
- to explore methodological limitations and possible analytical options for further research on destinations data.

## Key findings

- Providers with the strongest career provision in our dataset showed a 1.2%pt improvement in post-18 EET rates, compared to providers at the low end of provision in the dataset.<sup>5</sup>
- 2. This positive relationship appears to be stronger for providers serving the most economically disadvantaged quarter of students. The small sample sizes suggest taking this result with caution until it can be tested on other academic years.
- **3.** Millennium Cohort Study students in institutions achieving a full Gatsby Benchmark score were 3.7%pts less likely to be NEET than their peers in schools with no Gatsby-style provision.<sup>6</sup>

### **Provider-level post-18 destinations**

The Department for Education (DfE) annually shares data on what students are doing six months after they finish Year 13. Many schools and colleges also assess their careers provision using the <u>Compass tool</u>, which measures performance against the <u>Gatsby Benchmarks</u>. By combining these datasets and factoring in other variables, we can understand how career guidance relates to the paths students choose after they leave school.<sup>7</sup>

On average, students from schools and colleges meeting all eight Gatsby Benchmarks have lower rates of not being in education, employment, or training (NEET) after age 18 compared to those at schools with lower quality career provision. For example, non-EET rates drop from 15.1% to 13.9% when comparing high and low performing schools in our sample. If we imagine a school with no career guidance at all, the improvement is even larger, at 3.4%pts.<sup>8</sup>

As schools get closer to achieving perfect Gatsby Benchmark scores (around 80-85%), the impact on non-EET rates starts to level off. This suggests that focusing on improving career guidance might yield greater gains to schools starting their career provision journey. However, we need to test this in other groups of students and understand the reasons behind it before we can draw firm conclusions. Improving careers provision seems to encourage more students to pursue further education, particularly higher education. However, there is a slight decrease in the likelihood of students going directly into work and sustaining that destination for at least six months. Trying something new after the age of 18, even if it seemed to be the right choice at the time, often doesn't lead to sustained success immediately. Just like in adult work, where entrepreneurship carries more risk than employment, career pathways after school also have varying degrees of risk. Good career guidance doesn't, and shouldn't, steer young people away from riskier options, but rather exposes them to information and experiences, helping them understand and explore alternative pathways and their risk. Short-term sustained destination data, while helpful for high-level analysis, cannot fully capture such nuance.

As in previous studies, we measured the relationship among the quarter of providers with the most economically disadvantaged cohort of young people,<sup>9</sup> and observed an even stronger relationship between career guidance and post-18 outcomes. For students attending schools achieving all eight Gatsby Benchmarks, there was an improvement in non-EET rates to 19.7%, compared with 22.9% for those with little careers provision.<sup>10,11</sup>

#### Student-level post-16 destinations

The Millennium Cohort Study (MCS) follows young people mostly born between 2000 and 2002, with key data when they were between 14 and 17 years old. With support from UCL and the UK Data Service, we analysed Gatsby Benchmark achievement from 2017/18 and 2018/19 against the schools young people attended at age 14. In our 2023 note using school-level data, we found a 0.6%pt improvement in EET rate for institutions with a 100% benchmark score.<sup>12</sup> However, when we looked at individual student data in the MCS, we found a much larger 3.7%pts improvement if their Key Stage 4 schools had fully implemented Gatsby Benchmark provision. On average, students in schools with full Gatsby- style careers guidance had a 97.6% EET rate compared to 93.9% for similar students in schools with no careers provision.<sup>13</sup> It is essential to note that the small number of students not in EET means that these findings are indicative only. For the same reason, we were not able to analyse specific groups such as economically disadvantaged students.14

Although the MCS survey did not cover all aspects of Gatsby Benchmark provision, it did ask students around age 17 if they had previously had advice from careers advisers about their post-16 options. Our analysis shows that the future plans of such students were often more strongly motivated by careers thinking. For instance, students' current education activities at age 17 were more likely to have been informed by future job preferences<sup>15</sup> and their intentions regarding university were more likely to be strongly informed by careers thinking.<sup>16</sup>

### Methodology

#### **Provider level post-18 destinations**

The provider level post-18 destinations analysis follows the same broad structure as the school-level post-16 destinations analysis that has been analysed in two CEC publications (Percy & Tanner, 2021; Percy, 2023).

The unit of analysis is individual institutions in England – schools, colleges, etc. – which have both:

- (i) destinations data available in DfE's published sustained EET data (i.e., the destination in the first year after completing the equivalent of Year 13, if sustained).<sup>17</sup>
- (ii) Compass data available on the quality of their careers provision in terms of self-reported Gatsby Benchmark achievement (average benchmark score as the primary variable of interest).

This first analysis on post-18 data is based on the cohort who were in Year 13 in the 2018/19 academic year, being the most recent year for which we have Gatsby Benchmark data, destinations data, and Key Stage 5 examination results data when this research was initiated in summer 2023. The publication of providerlevel academic results was paused during the Covid-19 pandemic, limiting the availability of control variables for later years. In future analysis, we hope to extend this approach to other academic years, subject to suitable control variable approaches.

The analytical regression technique is a generalised linear model, using robust standard errors and finite population correction<sup>18</sup>, with a logit link function and a binomially distributed dependent variable to model the outcomes of interest as a percentage, e.g. percentage of the institution's cohort in sustained EET the year after completing Year 13.

#### Student-level post-16 destinations

The two survey waves from the Millennium Cohort Study (MCS) of greatest relevance to this research are the Wave 6 and Wave 7 surveys, taking place when the respondents were approximately aged 14 and 17 respectively.

Our intention is to understand the school-level careers provision that respondents would have experienced during Key Stage 4. As such, we matched Gatsby Benchmark data on the 2017/18 and 2018/19 academic years to the school attended during the Wave 6 survey (via the URN identifier, accessed as secure data via special permission from the data owners). All analyses use probability weighted data with weights developed by the MCS team, with cluster-robust standard errors clustered by the school the student was in at Wave 6.

The destinations analysis is implemented via a logistic regression, with the binary outcome variable identifying respondents in Education, Employment, or Training (EET) as of their Wave 7 survey. A positive EET status is recorded for any positive answer to questions on whether the respondent is currently going to school or college (including being on study leave), doing an apprenticeship, doing any kind of traineeship/training course, or having a paid job. If all responses are negative or students chose not to answer, it is coded as zero. If the data are missing for all these questions, the respondents are excluded from the analysis.

Students' intentions to go to university in Wave 7 are analysed by logistic regression. Respondents were asked both "What is the main reason why you might or will go to university?" and "What is the main reason why you might not or will NOT go to university?". Most respondents who were eligible in terms of expected grades provided an answer to both questions. Those not anticipating meeting grade requirements for university are excluded from the analysis. If either answer was directly related to careers, then we define the intentions as strongly informed by careers thinking, recognising that careers may well be a secondary consideration for many of the remaining respondents. Answer options classified as directly related to careers were:

- To gain qualifications to get a better job / pursue the career I want
- I would prefer to get a job / start a career
- Going to university will not help me in my future career
- Apprenticeship might be a better option
- I have an apprenticeship / already started

Students' level of careers motivation for their current activities in Wave 7 is analysed by linear regression. The dependent variable is "How much has what you are currently studying or training for been informed by the job you want to do in the future?" (1=A lot; 2= A little; 3 = Not a lot; 4 = Not at all).

#### Limitations and further research

Both studies are observational in nature and the sample sizes are smaller than would be desirable for such complex relationships and effect size scale. Nonetheless, these combined results, along with our previous research, provide useful insights into the likely effect of career provisions and the benefits of achieving Gatsby benchmarks on both post-18 and post-16 destinations.

For the post-18 destinations analysis, the most accessible high priority analysis would be to extend the modelling to additional academic years. As Compass+ usage increases, it also becomes possible to analyse student-level destinations, prior intentions/interests, and changing levels of career interests via the Future Skills Questionnaire. It would also be valuable to model students' journeys from lower to upper secondary education in more detail with administrative data. For instance, a student-level analysis powered by the National Pupil Database could identify which education providers students were in during Key Stage 3, Key Stage 4, and 16-18, to be merged with data on Gatsby Benchmark provision at each stage, reflecting the importance of pre-16 careers provision on the choice of 16-18 study and its subsequent translation into post-18 outcomes.

For the longitudinal student-level analysis, one potentially valuable next step would be re-examining the dataset in 2026, once the next wave of survey data is released (corresponding to when most survey respondents were 23 years old). However, the sample limitations would remain, such that results would want to be triangulated with other findings to increase confidence in their conclusions.

### Appendix 1: Further technical detail on post-18 destinations

#### **Control variables**

Control variables for the age 16-18 phase of education are chosen to reflect the same control variables as used in the published post-16 analysis, with a build-up in three stages:

- Core control variables:
  - Cohort size (+ squared term)
  - CEC provider type
  - Region of England
  - Rurality level (entered as dummy variables)
  - Ofsted grade (entered as dummy variables, incl. missing as a category)
  - Whether has KS4 provision (defined has having a statutory lower bound on allowed age range as 14 or below)
  - Whether boys-only
  - Whether girls-only
  - Whether selective intake
  - Whether is in an Opportunity Area
  - Percentage of students eligible for Free School Meals (FSM) as of their Year 11 status\*
  - Unemployment rate in LA district (2018/19)\*
  - Jobs density in LA district (2018/19)\*
- Academic control variables\*:
  - Percentile ranking by weighted average academic grades and value-added scores, weighted by pathways available for 2018/19
  - Approximate proportion of cohort taking at least one exam in each of five different pathways in 2018/19: Level 2 vocational qualifications, academic qualifications, applied general qualifications, T Levels, and tech certificates.<sup>19</sup>

- Extra controls:
  - 10x additional squared terms for \*'ed variables above
  - Categorical dummy variables for DfE establishment types (e.g. Free Schools, Academy Converters, Sponsor-led, Studio schools, UTC etc.)

The headline results are based on the core and academic variables combined, maintaining the correspondence with the post-16 analysis.

The academic controls are the result of several intermediate calculations, noting that not all institutions have results in all pathways (due to non-participation or data suppression due to too few students taking those exams in a given institution). The goal is to create a single metric for that institution's academic achievement and a single metric for its value-added scores, averaged across all the pathways for which data are available. We first calculate each institution's percentile position in the average points score across all entries in that qualification pathway type, for each pathway type for which that institution has data.<sup>20</sup> Those percentile positions are then averaged, weighted according to the proportion of students with at least one exam entry in each pathway.<sup>21</sup>

For instance, consider a college where 25% of the cohort took Level 3 academic exams, with average results 8%ile highest across all institutions with Level 3 academic results, and where 80% of the cohort took applied general exams, with average results at the median. In other words, 5% of the cohort had an at least one exam in both pathways. Assuming no other pathway entries, the weighted percentile score for academic achievement for that college would be 0.4 or 40%ile [0.25x8 + 0.80x50] / [0.25 + 0.80].

#### **Outlier** analysis

The two target variables are highly left-skewed, raising questions about outlier influence on the results. As an initial exploration, we applied two outlier exclusion techniques on the main models.

The first technique, removing Cook's Distance outliers using the common 4/N heuristic, made no material difference to the significance or effect size of the results, removing only one sample from model (1) and (5) and none from (4) (see model numbering in the results table).

The second technique was to remove the most extreme low-end value providers on both benchmark score and EET rate, being a provider with 37% EET rate in three models analysed and two providers with benchmark scores of 11% for (1) and (4).

Examining these providers qualitatively supports the case for exclusion and points towards potential checks in future analysis. The low EET rate provider had a cohort of only 19 students, which would result in a highly unstable EET rate outcome and points towards the potential case for weighting providers by cohort size in future analysis.

One of the low benchmark score providers had a 60% higher score in the previous year, a very unusual trend in the data where most providers improve over time. 2018/19 was also their most recent year using Compass through to 2022/23, perhaps indicating low engagement or low confidence with the tool's reflection of their approach. The second low score provider was using Compass for the first time at the start of that academic year (September) and the low score potentially contributed to a dramatic change in approach. The next score in 2019/20 saw a sharp increase from 11% to 60%. These results suggest operationalising an average measure of benchmark performance over time, especially for dated scores relative to an outcome of interest, and perhaps down-weighting results from first time Compass usage, which may reflect low familiarity with the tool and/or a catalytic shift in their careers provision.

### **Regression results: Overall EET models**

#	Model description	N	BM score linear term [p-value]	BM score squared term [p-value]	Modelled EET outcome at 30% BM score	Modelled EET outcome at 100% BM score	Peak EET value by BM score eighths
0	All providers - Core controls	1708	0.69 [0.045]	-0.43 [0.074]	84.5%	85.7%	85.9%
1	Headline results: All providers - Core & Academic controls	1676	0.67 [0.021]	-0.40 [0.047]	84.9%	86.1%	86.2%
2	(1) but no squared term on BM score	1676	0.11 [0.006]	-	85.5%	86.4%	-
3	(1) but with Extra Controls	1676	0.65 [0.016]	-0.40 [0.037]	85.0%	86.1%	86.2%
4	(1) but highest c. quarter of providers by Year 11 FSM (>28%)	409	0.71 [0.196]	-0.48 [0.209]	79.6%	80.6%	81.0%
5	(1) but lowest c. quarter by HE progression (<= 38%)	403	2.22 [0.000]	-1.46 [0.000]	73.8%	77.8%	79.2%
6	(1) but excluding 3x outliers	1673	1.01 [0.000]	-0.62 [0.002]	84.3%	86.1%	86.3%
7	(4) but excluding 3x outliers	406	1.87 [0.000]	-1.22 [0.001]	77.1%	80.3%	81.3%
8	(5) but excluding 2x outliers	401	1.68 [0.000]	-1.08 [0.000]	75.0%	78.3%	79.2%
9	(0) with no controls	1720	0.43 [0.230]	-0.30 [0.238]	85.2%	85.6%	85.9%

### Destinations by pathway on headline model

#	Pathway as outcome variable	N	BM score linear term [p-value]	BM score squared term [p-value]	Modelled uptake at a 30% BM score	Modelled uptake at a 100% BM score	Max/min uptake by BM score eighths
i	HE destinations	1676	0.97 [0.000]	-0.67 [0.000]	47.2%	48.7%	49.8%
ii	FE destinations	1674	1.19 [0.027]	-0.86 [0.022]	3.6%	3.8%	4.1%
iii	Other education destinations	1655	0.25 [0.672]	-0.46 [0.539]	3.6%	3.4%	3.7%
iv	Employment destinations	1676	-0.40 [0.080]	0.24 [0.134]	23.0%	22.0%	21.9%
v	Apprenticeship destinations	1673	-1.69 [0.000]	1.37 [0.000]	7.8%	8.2%	6.9%
vi	Unknown destinations	1676	-0.69 [0.139]	0.46 [0.161]	4.8%	4.5%	4.4%
vii	Confirmed NEET destinations	1676	-0.59 [0.014]	0.34 [0.045]	10.3%	9.4%	9.3%

### **Descriptive statistics**

	Full sample*			Headline model sample (n=1676)		
Variable	N	Mean	St. Dev.	Mean	St. Dev.	
EET Outcomes 2018/19	2222	0.86	0.08	0.86	0.07	
Gatsby Completion Score 2018/19	1720	0.77	0.16	0.77	0.16	
Number of pupils completing Year 13 or equivalent	2222	215	397	228	427	
LA District Unemployment Rate	2217	4.05	1.26	4.02	1.28	
LA Job Density (# jobs per person aged 16-64)	2217	0.87	0.34	0.87	0.33	
Percentage eligible for free school meals as of Year 11	2205	0.20	0.15	0.20	0.14	
Value added weighted percentile rank	2159	0.47	0.25	0.47	0.25	
Academic achievement weighted percentile rank	2166	0.48	0.23	0.47	0.23	
Proportion entered into any level 2 vocational qualification	2206	0.04	0.09	0.04	0.09	
Proportion entered into any academic qualification	2206	0.72	0.28	0.73	0.27	
Proportion entered into any applied general qualification	2206	0.21	0.19	0.22	0.19	
Proportion entered into any T-level	2206	0.04	0.09	0.04	0.08	
Proportion entered into any tech certificate	2206	0.00	0.01	0.00	0.01	

\* Non-fee-charging providers that appear in the post-18 destinations dataset (even if the destination metrics are suppressed).

Variable (% distribution)	Full sample* (N)	Full sample* (%)	Headline model sample (%; n=1676)
Has Key Stage 4 provision (y/n)	2222	88.2	88.6
Boys only intake (y/n)	2222	5.4	4.5
Girls only intake (y/n)	2222	7.7	7.5
Selective admissions (y/n)	2222	7.3	6.4
In Opportunity Area (y/n)	2222	4.1	5.0
Region			
East Midlands	2222	9.2	8.8
East of England	2222	11.3	12.0
London	2222	18.5	13.8
North East	2222	4.0	4.4
North West	2222	10.3	11.4
South East	2222	16.1	16.9
South West	2222	10.0	10.9
West Midlands	2222	11.8	12.2
Yorkshire and the Humber	2222	8.8	9.6
School type (CEC coding)	0000	407	10.5
Further Education College	2222	12.7	12.5
Mainstream school	2222	86.9	87.5
Special school (SEND)	2222	0.2	0.0
Other	2222	0.2	0.0
Level of rurality around school			
Rural hamlet & isolated dwellings in a sparse setting	2217	0.0	0.0
Rural hamlet & isolated dwellings	2217	1.6	1.6
Rural village in a sparse setting	2217	0.0	0.1
Rural village	2217	1.4	1.3
Rural town and fringe in a sparse setting	2217	0.7	0.8
Rural town and fringe	2217	7.6	7.7
Urban city and town in a sparse setting	2217	0.3	0.3
Urban city and town	2217	47.8	49.8
Urban minor conurbation	2217	3.1	2.9
Urban major conurbation	2217	37.3	35.4
Ofsted grading			
Serious Weaknesses	2222	1.0	0.9
Special Measures	2222	1.7	1.7
Requires improvement	2222	13.1	14.0
Good	2222	49.3	49.5
Outstanding	2222	18.1	18.3
Not available / completed	2222	16.7	15.6

15

\* Non-fee-charging providers that appear in the post-18 destinations dataset (even if the destination metrics are suppressed).

### Appendix 2: Further technical detail on post-16 destinations

#### Merging Gatsby Benchmark and MCS data

The 2016/17 Gatsby Benchmark data were too sparse to support effective matching, so we focused on the 2017/18 and 2018/19 data. Fortunately, with most improvements in careers provision being incremental from year to year, the relationship between the later Gatsby Benchmark years and their Key Stage 4 provision remains reliable enough on average to support this exploratory analysis.<sup>22</sup> There are schools in the analytical sample with both all eight Gatsby Benchmarks fully achieved and no benchmarks fully achieved (average 2.6 and standard deviation 1.7 benchmarks fully achieved).

With different schools providing Gatsby Benchmark data in 2017/18 and 2018/19, we secure the highest match rate to the MCS students by using either set of data or the arithmetic average of both where both are available. This is the chosen independent variable of interest for the headline analysis given it is a better measure of consistency of provision (where both years of data are available) and provides more complete coverage (in cases where only one year of data would be available). Compared to a reference sample of respondents in England with both Wave 6 and Wave 7 data, this approach achieves a match rate of 69%, being 5%pt-15%pt better than using other matching methods.

For consistency with previous analysis and given a preference for more granular data, the average benchmark scores are used. These scores are between 0% and 100% based on the number of sub-benchmarks achieved within each benchmark, weighting each of the eight benchmarks equally.

Given the age range of students in the survey and the need to analyse a specific transition point, we also required students to have been in Year 11 and taking Key Stage 4 exams (e.g. GCSEs or equivalents), in the academic year 2016/17. Finally, to identify students for whom the Gatsby Benchmark data would likely be a reasonable assessment of their experienced careers provision, we required students to have been in that school for at least both Years 10 and 11.

In general, the sample size is driven by students with available data for all variables in each individual analysis. We also exclude students in Pupil Referral Units, independent (fee-charging) schools, hospital schools, or special schools, in line with the previously published destinations surveys. Given the low prevalence of non-EET respondents, the sample size remains modest compared to the small effect size and complex transition relationship being researched. We restrict research to full sample analyses and do not seek to identify possible subsample, moderating, or interaction relationships.

### **Control variables**

- Demographic controls
  - Regions of England (nine options)
  - Sex (two options)
  - Ethnicity (six options)
  - Age at time of Wave 7 interview \*
- Socioeconomic controls
  - Highest parental socio-economic status by occupation (eight options)
  - Main parent's highest level of qualification (six options)
  - Overall Index of Multiple Deprivation decile score of the area around their place of residence in Wave 6 \*
- School controls
  - Type of school at Key Stage 4 (four options)
- Academic/education motivation indicators \*\*
  - Self-reported agreement with "I am good at Maths" at Wave 6 (scored 1-4)
  - Self-reported agreement with "How often do you feel school is a waste of time?" at Wave 6 (scored 1-4)
  - "Word Score" results from in-survey test at Wave 6 as academic ability indicator \* (scored out of 20)
  - Capped GCSE and equivalents point score (derived from National Pupil Database data)

\* Squared term included alongside linear term as significant at the 5% level or better in most analyses

\*\* Headline models are run with and without this set of variables, given possible endogeneity between higher quality careers provision supporting confidence and academic motivation. The following table provides descriptive statistics for the headline analytical sample for the destinations results as compared to the full eligible sample prior to requiring successful Gatsby Benchmark data matching.

Veriable	Ful	l eligible sam	ple	Headlin	ne analytical sample	
Variable	N	Mean	Std. Dev.	Ν	Mean	Std. Dev.
"I am good at maths" view	4,802	3.04	0.79	3,245	3.04	0.79
Capped GCSE & eq. score	4,861	41.36	14.19	3,245	42.54	13.75
Local IMD score	4,855	5.36	2.97	3,245	5.63	2.95
"School is waste of time" view	4,800	3.28	0.76	3,245	3.27	0.76
Word Score	4,571	7.20	2.59	3,245	7.31	2.59
Age	4,859	17.14	0.33	3,245	17.14	0.33

\* Unweighted data

Variable name	Full eligi	ble sample	Headline analytical sample		
followed by its values	Weighted N	Unweighted N	Unweighted N	Unweighted N	
KS4 school type		1	'		
Comprehensive	2,706	4,416	1,835	2,932	
Selective	189	268	152	207	
Modern	106	145	77	106	
Other	23	32	0	0	
Ethnicity					
White	2,531	3,504	1,789	2,449	
Mixed	143	275	97	186	
Indian	57	191	39	128	
Pakistani/Bangladeshi	112	473	64	276	
Black or Black British	67	189	41	119	
Other	54	137	33	87	
Region of England using GOR nun		1	1		
Region 1	114	181	65	109	
Region 2	385	600	262	419	
Region 3	335	578	215	341	
Region 4	306	448	209	293	
Region 5	279	551	169	347	
Region 6	386	579	272	397	
Region 7	296	677	183	412	
Region 8	583	799	426	580	
Region 9	341	448	263	347	
Highest main parent NVQ acaden	nic level (5= most educat	ed)	I		
0	172	435	114	299	
1	169	270	117	188	
2	711	1,081	491	730	
3	378	613	271	438	
4	1,094	1,629	831	1,214	
5	313	490	239	376	
Highest status parental SES by jol		1	<u> </u>		
1	559	782	417	577	
2	864	1,280	625	920	
3	439	656	323	470	
4	243	432	175	301	
5	93	178	65	119	
6	253	436	176	298	
7	99	207	63	136	
Not available/applicable	348	708	220	424	
Sex		1			
Non-Male	1,524	2,477	1,078	1,707	
Male	1,499	2,382	986	1,538	

### **Results for destinations outcomes**

The non-EET rate, i.e. the proportion not confirmed as EET, in the sample with control variables data is 3.3% (weighted sample size of 2064; unweighted of 3245, including 108 non-EET respondents). For the full eligible sample without requiring control variables data or matched benchmarking data, the non-EET rate is 3.7% (weighted sample of 3024; unweighted of 4861, including 176 non-EET respondents). The logistic regression results are shown in the following table.

Model	Unweighted sample (# schools)	Odds Ratio	P-value (robust)	Pseudo R2	Modelled EET rate for 0%-100% benchmark score
No controls	3779 (1158)	2.6	0.06	0.003	93.2-97.2
Core controls (excl. academic controls)	3447 (1110)	2.8	0.08	0.108	93.6-97.5
Headline results (all controls)	3245 (1070)	2.9	0.09	0.150	93.9-97.6
No controls (on headline sample)	3245 (1070)	2.7	0.09	0.003	93.8-97.6

### Results for career influence on future plans

The coefficient reported in the output tables below corresponds to a 0/1 dummy independent variable for answering "Yes" to the multiple-choice answer option "Careers advisor", when selecting all that apply in response to the Wave 7 question: "Who did you get advice from about your post-16 options?" 41% of the sample with Gatsby Benchmark data available responded yes to this question, compared to 43% of the full sample (weighted proportions; unweighted N of 4798 and 9977 respectively). For reference, 58%/57% said they got advice from teachers, 58%/56% from mothers, 45%/43% from fathers, 22%/21% from friends and 21%/20% from online.

Model	Unweighted Sample (# schools)	Odds ratio / Coefficient	P-value (robust)	(Pseudo) R2				
Are their main reasons for being likely to go or not to go to university directly related to careers considerations (respondents at Wave 7; 1 = Yes and 0 = No)								
No control variables	3195 (1205)	1.23	0.028	0.002				
With control variables	2809 (1128)	1.24	0.034	0.025				
"How much has what you are currently studying or training for been informed by the job you want to do in the future?" (asked at Wave 7; 1-4 where 1 is "A lot", 4 is "Not at all")								
No control variables	4451 (1431)	-0.055	0.071	0.001				
With control variables	3870 (1329)	-0.059	0.064	0.036				

### **Data citations**

Fitzsimons, E., Haselden, L., Smith, K., Gilbert, E., Calderwood, L., Agalioti-Sgompou, V., Veeravalli, S., Silverwood, R., Ploubidis, G. (2020) Millennium Cohort Study Age 17 Sweep (MCS7): User Guide. London: UCL Centre for Longitudinal Studies.

University of London, Institute of Education, Centre for Longitudinal Studies. (2020). Millennium Cohort Study: Longitudinal Family File, 2001-2018. [data collection]. 4th Edition. UK Data Service. SN: 8172, http://doi. org/10.5255/UKDA-SN-8172-4

University of London, Institute of Education, Centre for Longitudinal Studies. (2022). Millennium Cohort Study, Sweeps 1-7, 2001-2019: Socio-Economic, Accommodation and Occupational Data: Secure Access. [data collection]. UK Data Service. SN: 8753, DOI: 10.5255/ UKDA-SN-8753-1

University of London, Institute of Education, Centre for Longitudinal Studies. (2020). Millennium Cohort Study: Sixth Survey, 2015. [data collection]. 7th Edition. UK Data Service. SN: 8156, http://doi.org/10.5255/ UKDA-SN-8156-8

University of London, Institute of Education, Centre for Longitudinal Studies. (2021). Millennium Cohort Study: Seventh Survey, 2018. [data collection]. 2nd Edition. UK Data Service. SN: 8682, http://doi.org/10.5255/ UKDA-SN-8682-2

University College London, UCL Institute of Education, Centre for Longitudinal Studies, Department for Education. (2021). Millennium Cohort Study: Linked Education Administrative Datasets (National Pupil Database), England: Secure Access. [data collection]. 2nd Edition. UK Data Service. SN: 8481, http://doi. org/10.5255/UKDA-SN-8481-2

### **Endnotes**

- 1 Percy, C. (2023). Technical note: Further analysis on post-16 destinations for the 2016/17 to 2018/19 cohorts. London: The Careers & Enterprise Company.
- 2 "Confirmed NEET + unknown destinations" rate, referred to as "non-EET" in the January 2023 report.
- 3 Statistical significance is established between the 1% and 10% level, with uncertainty about the precise magnitude of the relationship.
- 4 The Careers & Enterprise Company (2023). Technical note: Further analysis on post-16 destinations for the 2016/17 to 2018/19 cohorts. London: The Careers & Enterprise Company.
- 5 Equivalent to an 8% reduction in non-EET rates; p-values<0.05.
- 6 p-value<0.10
- 7 Appendix 1 provides more detail on the control variables and analytical results.
- 8 This hypothetical comparison should be considered with caution, as there were few providers in the sample with Gatsby Benchmark scores below 30%, unlike in our other research on post-16 destinations.
- 9 Measured by the percentage of students who would have been eligible for Free School Meals in Year 11.
- 10 (n=406, p-values<0.01). With the small sample size, this result is sensitive to small changes and is best interpreted tentatively, prior to testing the result's validity on other cohorts. Analysis excludes 3 outlier data points. The equivalent outlier exclusion approach for all schools produces an improvement from 15.7% to 13.9%.
- 11 Small improvements were also seen in apprenticeship uptake 7.8% compared to 8.2% for those with a 100% benchmark score.
- 12 6.7% pts compared with 7.3% pts for similar institutions with no Gatsby-style provision, i.e. an 8% improvement, p-value<0.01.
- 13 (n=3,245 students in 1,070 schools; p-value<0.10)
- 14 Please see Appendix 2 for more details on control variables and analytical results.
- 15 (p-value<0.10, n=3,870)
- 16 (p-value<0.05, n=2,809)
- 17 e.g. Department for Education (2023). <u>Academic year 2021/22: 16-18 destination measures.</u> London: GOV.UK.
- 18 Based on a total eligible population of non-private schools in England with at least one cohort member graduating Year 13 in the relevant academic year (even if the actual destination rates are suppressed to preserve non-identifiability): n=2298 for 2018/19. Applying a rounded 25% of that as the approximate correction for the quartile subsample analyses: n=575.
- 19 Note that in some providers, particularly FE colleges, a proportion of the cohort did not do exams in any of these pathways, perhaps because they were taking Level 1 courses, short courses, or courses that did not have eligible exams in the relevant year. In addition, some students may take exams in more than one pathway, contributing to the uptake rate across all pathways in which they took exams.
- 20 Variable names respectively: TALLPPE\_ACAD\_1618; TALLPPE\_AGEN; TALLPPE\_TLEV; TALLPPE\_ TechCert; and for value-added: VA\_INS\_ACAD; VA\_INS\_AGEN. Note that level 2 vocational qualification data were available for number of students with an exam entry (and are used in the pathway uptake control variable) but not for average point score, so such results were excluded from the academic achievement average. For grades/VA data marked SUPP, NE, or NA for a particular average grade score or VA score for an institution, the data for that pathway are excluded from the average for that institution (e.g. weighting by 0).
- 21 Variable names respectively: TALLPUP\_ACAD\_1618; TALLPUP\_AGEN; TALLPUP\_TLEV; TALLPUP\_ TechCert; and for value-added: ENTRIES\_ACAD; ENTRIES\_AGEN. Note the weighting here is approximate since average point scores are based on all exam entries but the weighting is by students taking at least one such exam.
- 22 For instance, there is positive correlation between these school-level provision variables and a survey question asked at Wave 7 about whether respondents got advice from a careers adviser for their post-16 options.



120 Aldersgate St, London, EC1A 4JQ careersandenterprise.co.uk