

An independent evaluation of Uni Connect's impact on intermediate outcomes for learners

Technical annexe

September 2022

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Glossary

AWM	Aimhigher West Midlands – tracking organisation
DoB	Date of birth
EMWPREP	East Midlands Widening Participation Research and Evaluation
FSM	Free school meals
HE	Higher education
HEAT	Higher Education Access Tracker - tracking organisation
LAG	Information, advice and guidance
IDACI	Income Deprivation Affecting Children Index
ILR	Individual Learner Record
IMD	Index of Multiple Deprivation
KS	Key [Education] Stage
MHCLG	Ministry of Housing, Communities and Local Government
NPD	National Pupil Database
OfS	Office for Students
ONS	Office for National Statistics
SAT	Standard Assessment Test – national curriculum tests for pupils in Key Stage 2
SRS	Secure Research Service
T3	Activity data collected by the tracking organisations between W1 and W3
UC	Uni Connect
W0	Baseline learner survey, Autumn 2017
W1	Wave 1 – first follow-up of the learner survey, Autumn 2018
W2	Wave 2 – second follow-up of the learner survey, Autumn 2019
W3	Wave 3 – third follow-up of learner survey, Autumn 2020

01. Introduction

This technical annexe accompanies the findings report from the third learner survey carried out as part of the national impact evaluation of Uni Connect. It provides supplementary details about the learner survey design, implementation and sample characteristics as well as the analytical models used to explore the intermediate impact of the programme. The regression analysis output tables are also included.

Learner survey implementation

The longitudinal learner survey was first administered between September and November 2017 to obtain the baseline (Wave 0), with the first follow-up (Wave 1) between September and November 2018, the second follow-up (Wave 2) between October 2019 and January 2020, and the third follow-up (Wave 3) from October 2020 to March 2021. The survey is designed to track changes in learners' knowledge, attitudes and intentions towards higher education (HE) as they progress through the Uni Connect programme through Key Stages (KS) 3–5 into post-18 options.

The survey comprises a core set of questions (part 1) designed by CFE, and additional questions (part 2) that some partnerships have incorporated to capture additional information to inform their local evaluations and/or inform plans for activity delivery. At Wave 2, an additional core question was added to establish the main reason why learners want to go to HE. At Wave 3, further questions were added to capture the impact of Covid-19 on learners' education, future plans and engagement with Uni Connect activity. Please refer to [Appendix 1](#) for the core CFE part 1 survey questions and [Appendix 2](#) for the additional Covid-19 questions used to inform the impact evaluation.

The survey was administered by partnerships via schools and colleges using online survey links, paper versions or partnerships' own survey software. Many partnerships adopted a census approach whereby whole classes or even year groups were invited to complete the survey to minimise the burden on schools/colleges. A census approach also circumnavigated the issue of targeting learners, which some schools/colleges were reticent to do. The longitudinal evaluation design requires a targeted approach that prioritises survey completion from prior learners (i.e., Year 10 onwards) to enable changes in learner attitudes, knowledge and intentions towards HE to be measured. Partnerships were therefore advised to target those who had previously completed the baseline (W0) survey, corresponding to Years 12 and 13 at W3 (Years 9 and 10 at W0). Some partnerships also disseminated the W3 survey to 'new' Year 9 to Year 11 learners to inform their local evaluation activity and delivery plans, rather than for the purposes of the national impact evaluation. Overall, the W3 response is lower than previous waves, largely due to the impact of Covid-19 on schools and learning.

To establish impact at the programme level, learners' W3 survey responses were linked to outreach activity data (T3) collated by three tracking organisations (Aimhigher West Midlands, East Midlands Widening Participation Research and

Evaluation Partnership, Higher Education Access Tracker) to create a master dataset.¹ Tracking data identifies the type, duration and number of activities that learners have participated in over the course of the evaluation between 2017 and 2021.

To strengthen the analysis approach, CFE applied to access the National Pupil Database (NPD) and Individualised Learner Record (ILR) for learners who completed the survey in Waves 0-3. Access was granted via the Office for National Statistics (ONS) Secure Research Service (SRS) to import the master dataset to link to attainment measures and Free School Meal (FSM) status. To control for attainment in the analysis, two standardised KS2 measures were generated based on Standard Assessment Test (SAT) scores for Maths and English.² Standardised measures were used to account for changes in the way SATs scores were calculated for the cohorts participating in Uni Connect.

¹ [HEAT](#), [EMWPREP](#) and [AWM](#)

² It was not possible to use KS4 (GCSE) data for the Year 12 and 13 learners in this analysis due to a problem with the supplied data, which did not match correctly with the Uni Connect survey IDs.

02. Constructing the W3 dataset

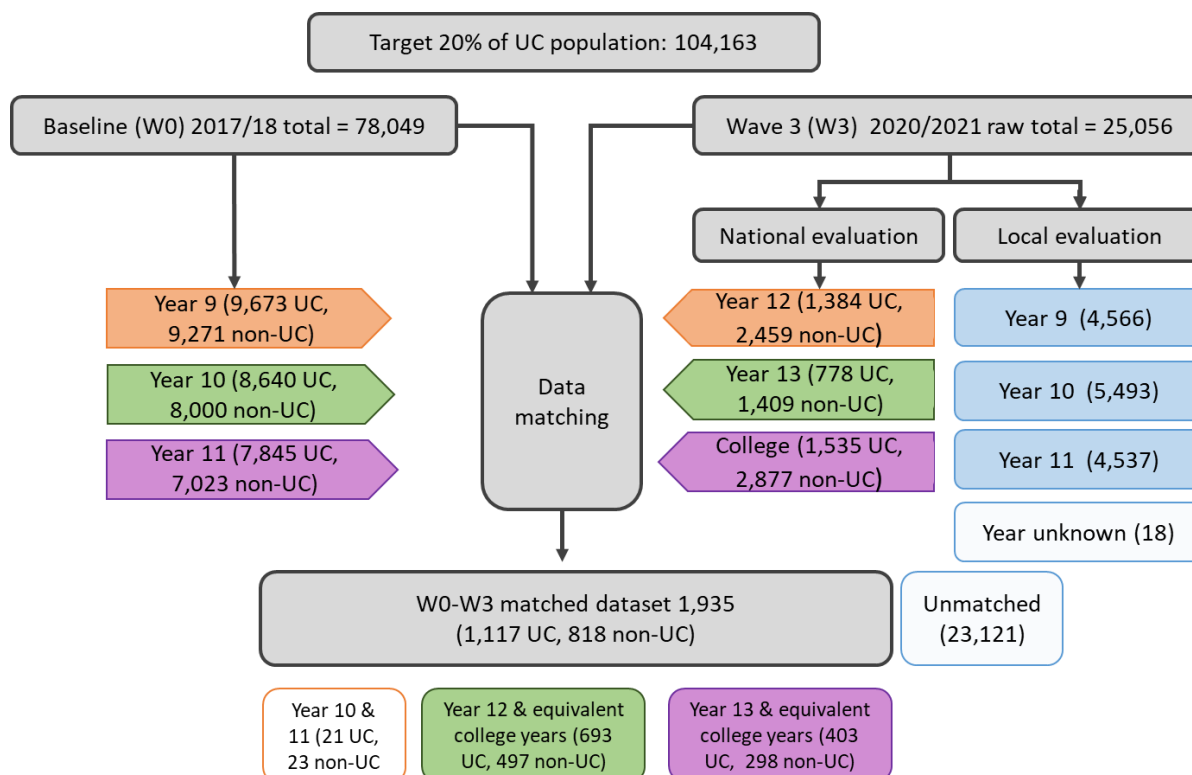
Matching the dataset

The first step in data construction involved matching the W0 to W3 learner survey datasets at an individual level. Next, the survey data was linked to area-based data on deprivation (IDACI data, including IMD) based on the home postcode of respondents. Finally, the dataset was linked with Uni Connect activity data provided by the tracking organisations. Subsequently, this master dataset was imported into the ONS SRS system and matched at an individual level with data on attainment and FSM to undertake more detailed regression analysis.

Matching W0-W3 learner survey data

After data-cleaning, there was a total of 25,056 responses to the W3 survey, comprising 13,880 responses to the online surveys run by CFE and 11,176 from partnership-run surveys (online and paper). Of the respondents, 9,769 (39%) are Uni Connect (UC) target learners (those residing in the lowest participation postcode areas according to POLAR4) and 15,287 (61%) are non-target learners. [Figure 1](#) illustrates the data processing approach for W3. It highlights the relatively low response rate to the W3 survey and the correspondingly low match rate to the W0 data.

Figure 1: Data processing flow



In previous waves, a target of 20% of Uni Connect learners in each area had been specified as the minimum engagement criterion for partnerships. Due to disruptions

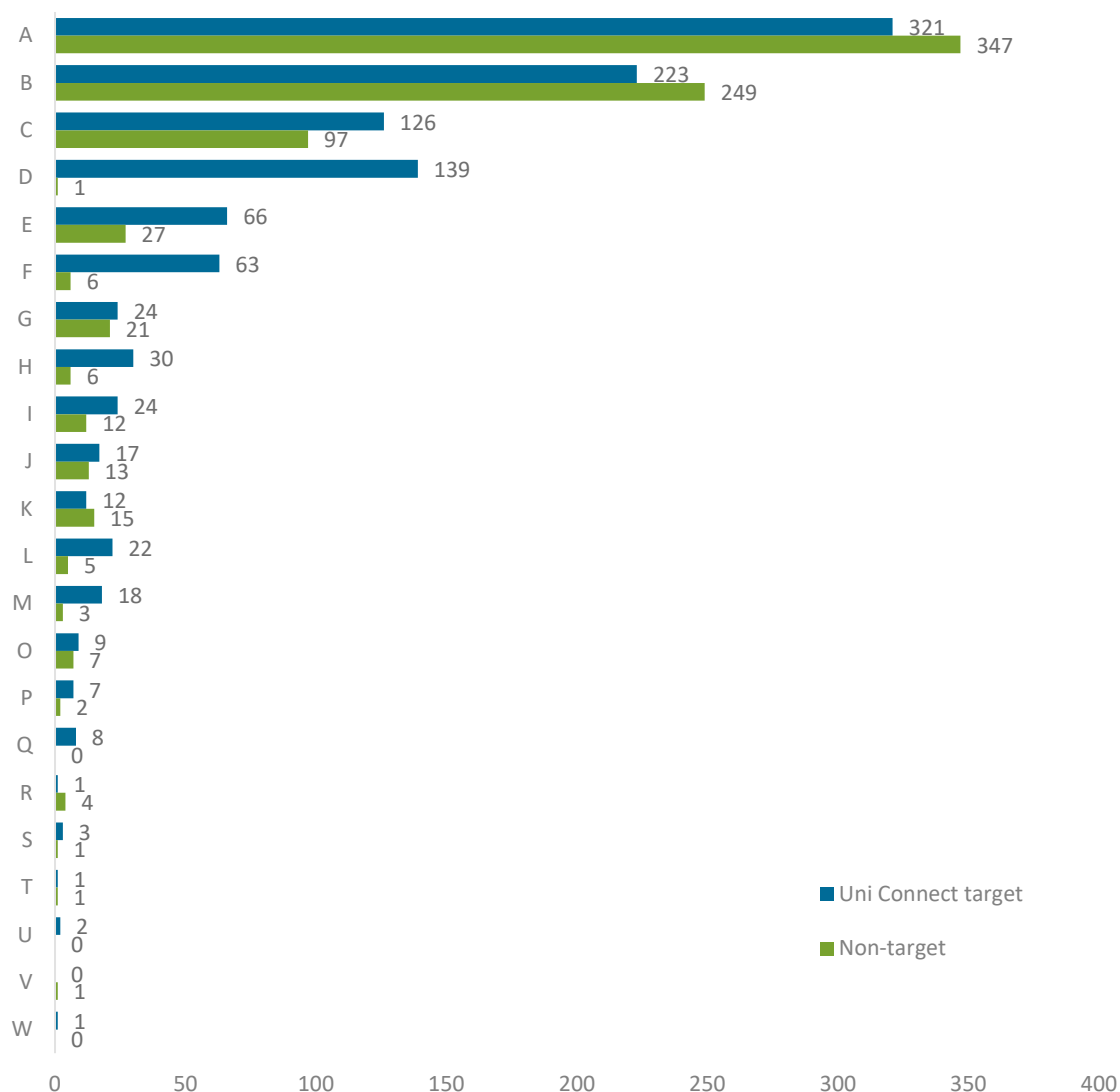
caused by the impact of Covid-19, the OfS removed these targets for W3. In the matched Wo-W3 dataset, learners did not always identify their year of study correctly, which may explain the presence of a small number of Years 10 and 11.

The Wo-W3 master dataset was matched using a fuzzy-matching process, similar to that used for matching Wo with W1 and W2. Five personal identifiers were used for matching: forename, surname, date of birth (DoB), home postcode and school. Certain combinations of identifiers – such as surname, DoB and postcode – could produce false matches in the case of twins, so these matches were checked before including them.

Data representation

Twenty partnerships are represented in the matched Wo-W3 dataset (compared with 25 partnerships at W1), demonstrating some evidence of breadth of representation nationally. The response rate differs considerably between partnerships, with only four partnerships achieving 100 or more survey responses, indicating that representation at the programme level has only been partially achieved (see [Figure 2](#)). Three fifths of the linked Wo-W3 data (59%) derives from just two partnerships, which is a more extreme pattern compared to the Wo-W1 and Wo-W2 linked datasets.

Figure 2: Number of survey responses in Wo-W3 matched dataset by partnership (anonymised) and by Uni Connect target status

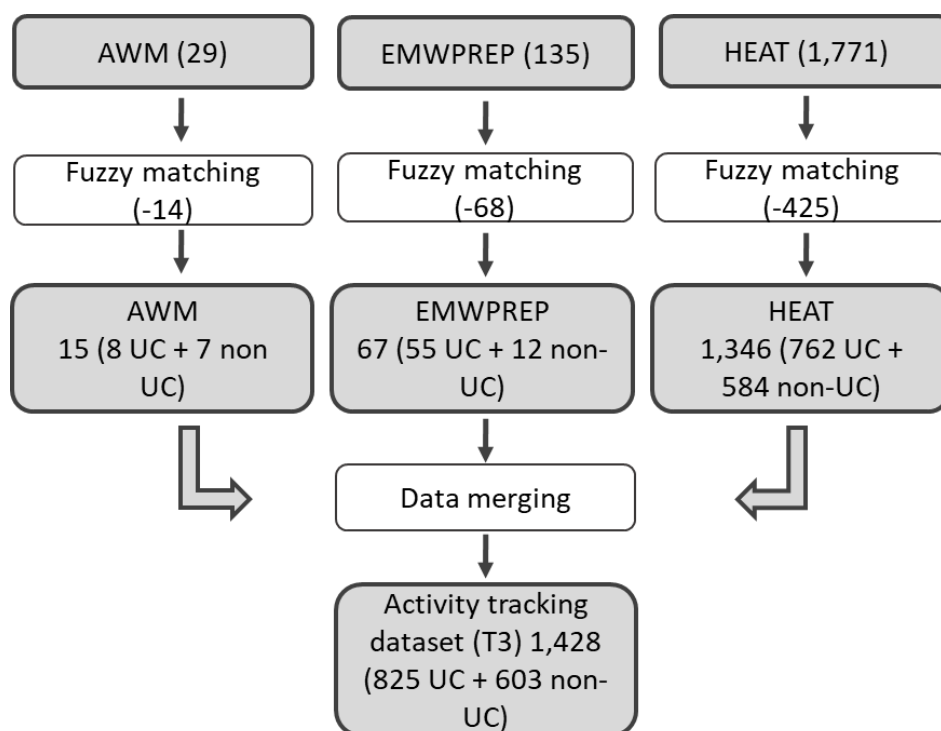


Matching W0-W3 with activity data (T3)

The tracking organisations (AWM, EMWPREP, HEAT) matched personal identifiers (forename, surname, date of birth and home postcode) from the master survey dataset with the activity data they collate using fuzzy matching techniques. The separate datasets received from the three tracking organisations were re-coded to common data formats and merged into one file. CFE then linked this with the Wo-W3 dataset to construct the Wo-W3-T3 dataset.

[Figure 3](#) outlines the data flow at the various stages of linking the tracking data.

Figure 3: Outline of data processing to create the Wo-W3-T3 dataset (numbers represent number of individual learners; minus numbers in the figure indicate unmatched data that was removed)



74% of the learner survey data was matched to activity data held by one of the tracking organisations. 507 cases in the Wo-W3 dataset could not be matched to any activity data. The number of learners in the matched Wo-W3-T3 dataset is **1,428**, compared with 7,182 for Wo-W1-T1 and 5,684 for Wo-W2-T2. As this is substantially less than previous survey waves, due to the impact of Covid-19, it restricts the reliability of analysis that can be undertaken.

When the activity data is linked with W3 survey data alone, the resulting W3-T3 dataset represents **24,997** learners (9,760 Uni Connect target learners + 15,237 non-target learners). Because this is substantially greater than the Wo-W3-T3 dataset, the analysis in the remainder of this report is based on the W3-T3 dataset.

W3-T3 activity data characteristics

Most learner activity data (84%) is derived from HEAT. Over half of W3 survey respondents (54%) had not participated in any Uni Connect activity. This is slightly lower than expected because 58 percent of respondents are not Uni Connect target learners (confirming that non-target learners participated in activity). Learners received, on average, just under 14 hours of activity and, on average, less than two sessions of activity. Information, advice and guidance (IAG), followed by skills sessions and masterclasses were the most common activities that learners engaged in ([Table 1](#)).

Table 1: Overview of activity data showing cumulative learner participation between baseline and W3

Characteristic	Proportion (min-max)	Base
Received no activity	54%	16413
No. of hours (cumulative total)	13.78 (0- 309)	11088
No. activity sessions	1.46 (0-8)	16413
Campus visits	6%	16413
IAG	43%	16413
Masterclasses	20%	16413
Mentoring	12%	16413
Summer schools	1%	16413
Skills workshop	23%	16413
Staff development	1%	16413
Other	6%	16413

03. Multivariate regression analysis

Analytical model

To explore the impact of the programme on the short-term and intermediate outcomes, multivariate regression analysis was carried out on the W3-T3 survey data. Several regression models were calculated for the following purposes:

- 1) **Identify the key predictors of the main survey outcomes** – these models included the core set of learner characteristics as predictors of the outcomes (sex, ethnicity, disability status, FSM status, first in family to go to HE, knowing someone in HE, deprivation IDACI, KS2 attainment in maths and reading, dummy variables for whether target learner and year group dummy variable (Year 9 was omitted as the baseline category).
- 2) **Explore the relationship between Uni Connect activity and survey outcomes** – these models included activity data as predictors of the outcomes, together with the core set of learner explanatory variables. Uni Connect target learner status is removed from these models to reduce collinearity.
- 3) **Identify whether speaking to someone and/or key influencers on learner decision-making was associated with the main survey outcomes** – these models included who learners spoke to about HE and who had the most influence on their decisions, together with the core set of learner explanatory variables.
- 4) **Explore whether learner experiences during the Covid-19 pandemic were associated with survey outcomes** – Covid-19 variables as predictors of the outcomes are included in these models, together with the core set of learner explanatory variables.
- 5) **Explore whether Uni Connect target learners were differentially affected by Covid-19.** First a simple regression model was calculated that included year group and target learner dummy. The second model included the core set of learner explanatory variables.

Twenty-four survey outcomes were included in the regression models, comprised of both binary (yes/no) responses and ordinal scale responses (strength of agreement and likelihood to progress to HE). Binary outcomes are modelled using probit regressions, and the ordinal scales are modelled using a linear model that treats the scale as if it were continuous. In all cases only the signs of the coefficient estimates are meaningful (showing the direction of the association), not the magnitude of the coefficient. Please refer to [Appendix 3](#) for the individual regression output tables.

Table 2: W3 Learner survey outcomes included in the regression models

Outcome No.	Name	Question	Scale type
1	NEXT	Do you want to continue in education.	binary N=0, Y=1
2	MOTIV	I am motivated to do well in my studies.	agreement 1- 5 disagree to agree
3	GRADES	I could get the grades I need for further study.	agreement 1- 5 disagree to agree
4	UCAS	Has knowledge of how to apply through UCAS.	binary N=0, Y=1
5	INFO	Has knowledge of where to find information about applying.	binary N=0, Y=1
6	QUALS	Has knowledge of grades needed to get into the course they want.	binary N=0, Y=1
7	STUD	Has knowledge of what student life would be like.	binary N=0, Y=1
8	CAREER	Has knowledge of how it leads to careers you are interested in.	binary N=0, Y=1
9	COST	Has knowledge of the costs of study.	binary N=0, Y=1
10	FIN	Has knowledge of the financial support available.	binary N=0, Y=1
11	LIVE	Has knowledge of the options of where to live while studying.	binary N=0, Y=1
12	APPLY	How likely are you to apply to higher education?	likelihood 1 = unlikely to 6 = likely
13	LIKEME	Higher education is for people like me.	agreement 1- 5 disagree to agree
14	FITIN	I would fit in well with others.	agreement 1- 5 disagree to agree
15	ACAD	I have the academic ability to succeed.	agreement 1- 5 disagree to agree
16	COPE	I could cope with the level of study required.	agreement 1- 5 disagree to agree
17	BROAD	It would broaden my horizons.	agreement 1- 5 disagree to agree
18	CHALL	It would challenge me intellectually.	agreement 1- 5 disagree to agree
19	VALU	It would give me valuable life skills.	agreement 1- 5 disagree to agree
20	SOC	It would improve my social life.	agreement 1- 5 disagree to agree
21	EARN	It would enable me to earn more.	agreement 1- 5 disagree to agree
22	JOB	It would enable me to get a better job.	agreement 1- 5 disagree to agree
23	SUBJ	Has knowledge of subjects could study.	Binary N=0, Y=1
24	TYPE	Has knowledge of type of course could take.	Binary N=0, Y=1

Sample characteristics

Learner demographics

[Table 3](#) provides the learner characteristics from the Wave 3 survey data included in the multivariate regression analysis. There are over 16,000 usable learner responses in the W3 survey data, but the numbers vary slightly for each variable due to missing responses for some survey questions. 42% of the sample is male, 11% are BAME learners and 17% report having a disability. All year groups are represented in the analysis, with more learners from Year 10 (25%) and Year 12 (23%) compared with Year 13 (17%), Year 9 (17%) and Year 11 (19%). Over a quarter of learners have FSM status (28%) and on average, for the neighbourhoods that learners live in, 18% are living in income deprived families (as shown by the IDACI score). Over half (52%) of learners would be the first person in their family to enter HE, but nearly three-quarters (73%) know someone in HE. Learners have above average KS2 attainment – standardised KS2 scores are approximately 0.20 for both Maths and Reading, which compares to an average of zero. Just over two-fifths of learners (42%) are Uni Connect target learners.

Table 3: Learner demographic characteristics for W3 survey regression analysis

Characteristic	Proportion	N	Source
Male	42%	15,968	W3 survey
BAME	11%	16,347	W3 survey
Disabled	17%	16,413	W3 survey
FSM status	28%	16,398	NPD
IDACI	19%	16,413	MHCLG
First in family to go to HE	52%	16,413	W3 survey
Know someone in HE	73%	16,190	W3 survey
KS2 maths ³	19%	16,257	NPD
KS2 reading ⁴	20%	16,270	NPD
Year Group:			
Y9	17%	16,413	W3 survey
Y10	25%	16,413	W3 survey
Y11	19%	16,413	W3 survey
Y12	23%	16,413	W3 survey
Y13	17%	16,413	W3 survey
Uni Connect target learner	42%	16,413	W3 survey

Influences on learners' decision-making

Learners are most likely to have spoken to a family member about their HE decisions, followed by a friend, teacher and careers advisor. Most learners reported speaking to someone about HE, with less than 1% reporting that they spoke to nobody. Learners report family members as the main influence on their HE decision-making and careers advisors as the least influential ([Table 4](#)).

³ Standardised raw KS2 maths score: pre-2015/16 = KS2_MATFINE, post 2015/16 = KS2_MATSCORE

⁴ Standardised raw KS2 reading score: pre-2015/16 = KS2_READFINE, post1015/16 = KS2_READSCORE

Table 4: Who learners spoke to about HE and key influencers on HE decisions

Variable	Proportion	N
Spoke to about HE:		
Family	80%	15,634
Friend	56%	15,634
Teacher	42%	15,634
Careers Advisor	19%	15,634
Nobody	1%	15,633
Who had most influence on HE decisions:		
Family	68%	16,235
Friend	10%	16,235
Teacher	11%	16,235
Careers Advisor	4%	16,235

Covid-19 variable characteristics

[Table 5](#) outlines the descriptives for the Covid-19 variables included in the regression models. These detail learner perceptions about the impact of Covid-19 that made it more difficult for them to study and the extent to which the pandemic affected their intentions to apply to HE.

Table 5: Descriptives for Covid-19 perceptions

Variable	Proportion	N
<i>Did any of the following make it more difficult for you to study?</i>		
Lack of a computer to use for school/college work	11%	16,083
Lack of other equipment or resources you would normally have in school/college	23%	16,083
Poor or no Wi Fi connection at home	14%	16,083
Lack of a quiet space to study in school/college	26%	16,083
Limited or no contact with teachers	36%	16,083
Parents or carers unable to help with school/college work	20%	16,083
Being asked to help out with other family members	23%	16,083
Nothing; had everything needed to continue learning from home	32%	16,083
<i>Impact of Covid-19 on likelihood to apply to HE</i>		
Covid-19 has made me more likely to apply to HE	7%	10,460
Covid-19 has made me less likely to apply to HE	9%	10,460

Appendix 1: Wave 3 survey design – Part 1 (Core) questions

1. Which year of study are you in?

- School - year 9
- School - year 10
- School - year 11
- College - level 2
- Sixth form - year 12 (lower sixth)
- Sixth form - year 13 (upper sixth)
- College - level 3 - year 1
- College - level 3 - year 2

2. When you finish your current studies, what would you most like to do next? [response options routed according to Key Stage]

- Study at school or a sixth-form college
- Study at a further education college
- Get a full-time job
- Get a part-time job
- Study higher education at a further education college or other further education provider
- Study at a local university or another higher education institution
- Study away from home at university or another higher education institution
- Get a job and study at the same time
- Begin an apprenticeship
- Begin a higher/degree apprenticeship
- Take a gap year
- Other (*please specify*) _____
- Don't know

3. Who have you spoken to about higher education?

- Family
- Friend(s)
- Teacher(s)
- Careers adviser(s)
- Other (*please specify*) _____
- Nobody

4. Apart from yourself, who has had the greatest influence on your decision about what to do next?

- Family
- Friend(s)
- Teacher(s)
- Careers adviser(s)
- Other (*please specify*) _____

5. How much do you agree with the following statements?

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know
I am motivated to do well in my studies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can get the grades I need for further study	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe I could go to university if I wanted to	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. How much do you know about the following things about higher education?

	Nothing	A little	A lot
The subjects that you could study	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Different types of course, such as: degree, foundation degree, or higher/degree apprenticeships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to apply to study higher education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Where to find information about applying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The qualifications and grades needed to get into higher education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. How much do you know about the following aspects of higher education?

	Nothing	A little	A lot
What student life would be like	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How it leads to careers that you may be interested in	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The costs of study	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The financial support available	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The options about where to live whilst studying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. Have you applied to study at higher education? [Sixth form year 13 (upper sixth) or College level 3 (year 2) only],

Yes *Please go to question 11*

No *Please go to question 9*

9. How likely are you to apply to higher education at age 18 or 19?

Definitely won't apply *Please go to question 10*

Very unlikely *Please go to question 10*

Fairly unlikely *Please go to question 10*

Fairly likely *Please go to question 11*

Very likely *Please go to question 11*

Definitely will apply *Please go to question 11*

Don't know *Please go to question 10*

10. What is the main reason you might NOT go on to study higher education?

- My current qualifications are enough
- I have decided on a specific career (that does not require further study)
- I want to work and earn money
- The cost is too much
- It depends on the grades I get
- I don't have the necessary study skills
- It does not appeal to me
- I want to travel
- I am still undecided
- There is nowhere close enough to home
- Other reason (*please specify*) _____

11. What is the main reason you want to go to higher education?

- I enjoy learning
- To enable me to get a well-paid job
- It's what my parents expect me to do
- It's what all my friends are planning to do
- My teachers have encouraged me to go
- I don't know what else to do
- I don't feel ready to start working yet
- Other reason (*please specify*) _____

12. How much do you agree with the following statements about higher education?

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know
It is for people like me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would fit in well with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have the academic ability to succeed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I could cope with the level of study required	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. How much do you agree with the following statements about higher education?

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know
It will broaden my horizons	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It will challenge me intellectually	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It will give me valuable life skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It will improve my social life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It will enable me to earn more	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It will enable me to get a better job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. If you go on to higher education, would you be the first person in your immediate family to go?

- Yes
- No - my grandparent(s) went first
- No - my parent(s) or guardian(s) went first
- No - my brother(s) or sister(s) went first
- Don't know

15. Do you know somebody else who has gone on to higher education?

Please select all that apply

- No
- Yes - another family member
- Yes - a friend
- Don't know
- Other (please specify) _____

16. Do you have a disability, learning difficulty or long-term physical or mental health condition?

- Yes
- No
- Prefer not to say

17. What is your gender?

- Female
- Male
- Other
- Prefer not to say

18. Which of the following ethnic groups do you belong to?

- White - British
- White - Irish
- White - Scottish
- Other White background
- Black or Black British - Caribbean
- Black or Black British - African
- Other Black background
- Mixed White and Black Caribbean
- Mixed White and Black African
- Asian or Asian British - Indian
- Asian or Asian British - Pakistani
- Asian or Asian British – Bangladeshi
- Other Asian background
- Mixed White and Asian
- Chinese
- Arab
- Irish Traveller
- Gypsy or Traveller
- Other ethnic background
- Any other mixed background
- Prefer not to say

Appendix 2: Additional questions for Wave 3 survey

Has Covid-19 influenced your decision about what to do next?

- No, not at all
- Yes, to some extent
- Yes, a great deal
- I'm not sure

Where did you study between March and July 2020 during the Covid-19 lockdown?

- I stayed in school / college (1)
- I went to school/college and studied from home (2)
- I studied from home (3)

[Respondents who studies from home all or some of the time] Did any of the following make it more difficult for you to continue learning at home? Please tick all that apply

- Lack of a computer that you could use for your school/college work
- Lack of other equipment or resources that you would normally have in school/college to help you learn
- Poor or no Wi-Fi connection at home
- Limited contact with tutor and/or subject teachers at school/college
- Lack of a quiet space to study
- Being asked to help out with other family members, such as younger brothers and sisters
- Parents/carers unable to help with school/college work
- Nothing, I had everything I needed to continue learning at home [exclusive]

Has Covid-19 affected your decision about whether or not to apply to higher education at age 18 or 19?

- Yes, I'm now more likely to apply
- Yes, I'm now less likely to apply
- No, I'm just as likely to apply to now as I was before Covid-19
- I'm not sure

What is the main reason you want to go to higher education? [Option added to core question 11]

- It will be too hard to get a job because of Covid-19

What is the main reason you might not go on to higher education? [Option added to core question 10]

- Covid-19 has put me off going to higher education

Appendix 3: Output tables from the regression models

Probit regression model output tables for binary outcomes

Table 6: Probit regression models for binary outcomes

VARIABLES	out1_next	out4_ucas	out5_info	out6_qual	out7_stud	out8_career	out9_cost	out10_fin	out11_live	out23_subj	out24_type
Male	-0.603*** (0.026)	0.085*** (0.023)	0.049** (0.024)	0.021 (0.026)	-0.031 (0.024)	0.012 (0.027)	0.003 (0.023)	0.055** (0.022)	-0.096*** (0.023)	0.035 (0.032)	0.203*** (0.025)
BAME	0.117*** (0.020)	0.014 (0.016)	-0.025 (0.016)	0.027 (0.019)	-0.026 (0.017)	-0.003 (0.019)	0.021 (0.016)	0.015 (0.015)	0.001 (0.016)	-0.039* (0.022)	-0.012 (0.017)
FSM	-0.101*** (0.030)	-0.035 (0.026)	-0.043 (0.027)	0.013 (0.030)	-0.018 (0.028)	-0.031 (0.031)	-0.065** (0.027)	-0.008 (0.025)	-0.076*** (0.026)	-0.043 (0.036)	-0.038 (0.028)
Disabled	-0.080** (0.035)	-0.115*** (0.030)	-0.133*** (0.032)	-0.153*** (0.034)	-0.114*** (0.032)	-0.127*** (0.035)	-0.123*** (0.031)	-0.103*** (0.029)	-0.102*** (0.030)	-0.102** (0.041)	-0.083*** (0.032)
First to go	-0.204*** (0.029)	-0.104*** (0.025)	-0.121*** (0.026)	-0.168*** (0.029)	-0.143*** (0.027)	-0.095*** (0.029)	-0.088*** (0.025)	-0.102*** (0.023)	-0.164*** (0.025)	-0.137*** (0.036)	-0.112*** (0.026)
Know someone	0.159*** (0.031)	0.210*** (0.027)	0.198*** (0.028)	0.216*** (0.031)	0.328*** (0.028)	0.263*** (0.031)	0.268*** (0.027)	0.244*** (0.026)	0.256*** (0.027)	0.305*** (0.037)	0.236*** (0.029)
IDACI	0.028 (0.123)	-0.067 (0.105)	0.052 (0.111)	0.057 (0.123)	-0.137 (0.112)	0.163 (0.125)	-0.023 (0.107)	0.234** (0.100)	0.099 (0.105)	0.346** (0.153)	0.198* (0.112)
KS2 maths	0.196*** (0.018)	0.032** (0.016)	0.035** (0.016)	0.085*** (0.018)	0.076*** (0.017)	0.058*** (0.018)	0.121*** (0.016)	0.057*** (0.015)	0.076*** (0.016)	0.105*** (0.022)	0.048*** (0.017)
KS2 reading	0.137*** (0.019)	-0.014 (0.016)	0.025 (0.017)	0.028 (0.019)	0.029* (0.017)	0.050*** (0.019)	0.025 (0.017)	-0.035** (0.016)	0.021 (0.016)	0.062*** (0.023)	0.015 (0.018)
Target learner	-0.013 (0.030)	0.078*** (0.026)	0.036 (0.027)	0.032 (0.030)	0.050 (0.028)	0.046 (0.030)	0.030 (0.026)	0.042 (0.024)	0.062** (0.026)	0.076** (0.037)	0.017 (0.027)
Year 10	-0.071 (0.038)	-0.814*** (0.039)	-0.598*** (0.043)	-0.484*** (0.046)	-0.283*** (0.041)	-0.281*** (0.044)	-0.359*** (0.040)	-0.443*** (0.034)	-0.453*** (0.038)	-0.302*** (0.053)	-0.541*** (0.042)
Year 11	0.681*** (0.044)	-0.453*** (0.043)	-0.373*** (0.047)	-0.190*** (0.051)	-0.466*** (0.042)	-0.235*** (0.048)	-0.718*** (0.041)	-0.652*** (0.037)	-0.590*** (0.040)	0.058 (0.062)	-0.331*** (0.046)
Year 12	0.305*** (0.041)	-1.224*** (0.040)	-1.128*** (0.043)	-0.689*** (0.046)	-0.507*** (0.041)	-0.390*** (0.045)	-0.779*** (0.040)	-0.755*** (0.035)	-0.596*** (0.038)	-0.446*** (0.053)	-0.838*** (0.042)

Year 13	0.289*** (0.045)	-1.213*** (0.042)	-1.166*** (0.045)	-0.743*** (0.048)	-0.491*** (0.043)	-0.433*** (0.047)	-0.846*** (0.042)	-0.742*** (0.037)	-0.571*** (0.041)	-0.360*** (0.057)	-0.884*** (0.044)
Constant	0.704*** (0.055)	1.142*** (0.052)	1.387*** (0.055)	1.415*** (0.060)	1.131*** (0.053)	1.243*** (0.059)	1.072*** (0.052)	0.598*** (0.047)	1.008*** (0.050)	1.538*** (0.070)	1.178*** (0.055)
Observations	13,268	15,378	15,377	15,380	15,384	15,384	15,373	15,380	15,380	15,379	15,380

Table 7: Probit regression models for binary outcomes – activity variables as predictors

VARIABLES	out1_next	out4_ucas	out5_info	out6_qual	out7_stud	out8_career	out9_cost	out10_fin	out11_live	out_23_subj	out24_type
Activity hrs [§]	0.000 (0.001)	-0.001 (0.000)	-0.000 (0.000)	0.000 (0.001)	0.000 (0.000)	-0.000 (0.000)	0.001 (0.000)	-0.000 (0.000)	-0.000 (0.000)	0.001 (0.001)	0.000 (0.000)
Observations	8,878	10,337	10,332	10,339	10,340	10,338	10,330	10,338	10,339	10,333	10,334
Activity No. [§]	-0.010 (0.009)	0.001 (0.008)	0.008 (0.008)	-0.005 (0.009)	-0.003 (0.008)	-0.003 (0.009)	0.010 (0.008)	0.003 (0.007)	0.009 (0.008)	0.014 (0.011)	0.014 (0.011)
No activity [§]	-0.011 (0.026)	0.012 (0.022)	0.035 (0.023)	0.008 (0.026)	0.001 (0.024)	0.033 (0.026)	0.035 (0.023)	0.034 (0.021)	0.032 (0.022)	0.061 (0.032)	0.021 (0.024)
<i>Activity Type</i>											
Campus visits	0.139** (0.057)	-0.036 (0.048)	-0.051 (0.051)	0.011 (0.057)	0.022 (0.052)	-0.011 (0.058)	0.034 (0.050)	0.091** (0.046)	0.009 (0.049)	0.222*** (0.075)	0.050 (0.050)
IAG	0.015 (0.030)	-0.004 (0.025)	0.075*** (0.027)	0.003 (0.029)	0.010 (0.027)	0.009 (0.030)	-0.002 (0.026)	0.021 (0.024)	0.010 (0.025)	0.069** (0.032)	0.023 (0.024)
Masterclasses	0.055 (0.036)	0.032 (0.031)	0.000 (0.033)	0.020 (0.036)	-0.004 (0.033)	-0.004 (0.036)	0.005 (0.031)	0.053 (0.029)	0.034 (0.031)	0.075 (0.041)	0.060** (0.030)
Mentoring	0.027 (0.044)	0.053 (0.037)	0.010 (0.040)	-0.017 (0.044)	0.023 (0.040)	0.063 (0.045)	0.037 (0.039)	-0.053 (0.035)	0.003 (0.037)	0.084 (0.051)	0.025 (0.037)
Summer sch	-0.116 (0.123)	-0.028 (0.110)	-0.067 (0.117)	0.245 (0.144)	0.209 (0.129)	0.145 (0.142)	0.082 (0.118)	0.058 (0.106)	0.071 (0.115)	0.392 (0.203)	0.014 (0.117)
Skills	-0.099*** (0.035)	-0.010 (0.030)	-0.005 (0.032)	-0.030 (0.035)	-0.022 (0.032)	-0.047 (0.035)	0.035 (0.031)	-0.035 (0.028)	-0.024 (0.030)	-0.003 (0.037)	-0.005 (0.028)
Staff dev.	0.234 (0.167)	-0.085 (0.128)	-0.002 (0.136)	-0.343** (0.136)	0.075 (0.142)	0.281 (0.177)	-0.045 (0.131)	0.068 (0.122)	-0.046 (0.129)	0.029 (0.187)	0.113 (0.139)
Other	-0.019 (0.053)	0.009 (0.048)	-0.034 (0.051)	0.091 (0.058)	0.010 (0.051)	0.059 (0.057)	0.023 (0.050)	0.036 (0.045)	0.075 (0.048)	0.106 (0.070)	0.034 (0.051)

Observations^{&}	13,268	15,378	15,377	15,380	15,384	15,384	15,373	15,380	15,380	15,379	15,380
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Table 8: Probit regression models for binary outcomes – ‘speak to’ and ‘influence’ variables as predictors

VARIABLES	out1_next	out4_ucas	out5_info	out6_qual	out7_stud	out8_career	out9_cost	out10_fin	out11_live	out23_subj	out24_type
<i>Who has most influence on your HE decisions?</i>											
Family	-0.133*** (0.028)	0.040* (0.024)	0.050** (0.025)	-0.010 (0.028)	0.082*** (0.026)	0.125*** (0.028)	0.049** (0.025)	0.069*** (0.023)	0.065*** (0.024)	0.031 (0.034)	0.042 (0.026)
Friend	0.072 (0.044)	-0.091** (0.036)	-0.055 (0.039)	-0.128*** (0.041)	-0.061 (0.039)	-0.178*** (0.041)	-0.101*** (0.037)	-0.074** (0.035)	-0.076** (0.036)	-0.086 (0.050)	-0.143*** (0.038)
Teacher	0.319*** (0.045)	0.065 (0.037)	0.048 (0.040)	0.194*** (0.046)	0.054 (0.040)	0.023 (0.044)	0.061 (0.038)	0.002 (0.034)	0.047 (0.037)	0.141** (0.056)	0.119** (0.041)
Career advisor	0.012 (0.063)	0.155*** (0.057)	0.121** (0.060)	0.264*** (0.072)	0.000 (0.058)	0.097 (0.067)	0.030 (0.056)	0.053 (0.052)	-0.009 (0.054)	0.313*** (0.096)	0.117 (0.061)
Observations	13,147	15,235	15,233	15,236	15,239	15,239	15,228	15,235	15,236	15,235	15,236
<i>Who did you speak to about HE?</i>											
Family	0.307*** (0.034)	0.430*** (0.028)	0.413*** (0.029)	0.555*** (0.030)	0.350*** (0.029)	0.481*** (0.031)	0.336*** (0.028)	0.327*** (0.027)	0.304*** (0.028)	0.580*** (0.036)	0.446*** (0.029)
Friend	0.379*** (0.028)	0.273*** (0.024)	0.233*** (0.025)	0.355*** (0.028)	0.281*** (0.026)	0.288*** (0.029)	0.247*** (0.025)	0.201*** (0.023)	0.215*** (0.024)	0.386*** (0.035)	0.265*** (0.026)
Teacher	0.286*** (0.029)	0.405*** (0.025)	0.356*** (0.026)	0.441*** (0.030)	0.275*** (0.027)	0.365*** (0.030)	0.250*** (0.025)	0.278*** (0.023)	0.258*** (0.025)	0.470*** (0.039)	0.412*** (0.027)
Career advisor	0.125*** (0.035)	0.361*** (0.032)	0.359*** (0.036)	0.386*** (0.041)	0.218*** (0.034)	0.305*** (0.040)	0.220*** (0.032)	0.245*** (0.029)	0.160*** (0.031)	0.445*** (0.055)	0.312*** (0.035)
Nobody	-0.223 (0.147)	0.160 (0.135)	0.276 (0.153)	0.302 (0.177)	0.063 (0.148)	0.162 (0.170)	0.144 (0.145)	0.135 (0.131)	0.055 (0.137)	0.057 (0.198)	0.234 (0.152)
Observations	12,632	14,620	14,619	14,622	14,626	14,626	14,615	14,622	14,622	14,622	14,623

Table 9: Probit regression models for binary outcomes – COVID variables as predictors

VARIABLES	out1_next	out4_ucas	out5_info	out6_quala	out7_stud	out8_career	out9_cost	out10_fin	out11_live	out23_subj	out24_type
<i>Did any of the following make it more difficult for you to study?</i>											
Computer access	-0.192*** (0.040)	-0.127*** (0.035)	-0.122*** (0.037)	-0.157*** (0.039)	-0.137*** (0.036)	-0.225*** (0.039)	-0.151*** (0.035)	-0.190*** (0.033)	-0.197*** (0.035)	-0.119** (0.048)	-0.150*** (0.037)
Lack of equipment	0.006 (0.031)	-0.110*** (0.026)	-0.107*** (0.028)	-0.101*** (0.031)	-0.124*** (0.028)	-0.132*** (0.031)	-0.148*** (0.027)	-0.180*** (0.025)	-0.145*** (0.026)	-0.070 (0.038)	-0.100*** (0.028)
Poor/no wifi	-0.096** (0.037)	-0.042 (0.032)	-0.105*** (0.034)	-0.058 (0.037)	-0.133*** (0.034)	-0.115*** (0.037)	-0.118*** (0.033)	-0.134*** (0.031)	-0.198*** (0.032)	-0.051 (0.045)	-0.036 (0.035)
Lack of quiet space	-0.002 (0.030)	-0.107*** (0.026)	-0.154*** (0.027)	-0.032 (0.030)	-0.168*** (0.027)	-0.148*** (0.030)	-0.089*** (0.026)	-0.139*** (0.024)	-0.108*** (0.026)	-0.034 (0.036)	-0.095*** (0.027)
Poor access to teacher	0.165*** (0.028)	-0.087*** (0.024)	-0.110*** (0.025)	-0.033 (0.028)	-0.116*** (0.025)	-0.065** (0.028)	-0.091*** (0.024)	-0.135*** (0.022)	-0.100*** (0.024)	0.006 (0.034)	-0.075*** (0.025)
Lack of help from parents	-0.026 (0.033)	-0.217*** (0.028)	-0.232*** (0.029)	-0.136*** (0.032)	-0.233*** (0.029)	-0.204*** (0.032)	-0.190*** (0.028)	-0.234*** (0.026)	-0.194*** (0.028)	-0.144*** (0.039)	-0.184*** (0.029)
Had to help with family	0.009 (0.032)	-0.130*** (0.027)	-0.141*** (0.028)	-0.042 (0.031)	-0.117*** (0.028)	-0.074** (0.031)	-0.080*** (0.027)	-0.114*** (0.025)	-0.082*** (0.027)	-0.054 (0.038)	-0.064** (0.029)
No problems	0.008 (0.028)	0.132*** (0.024)	0.188*** (0.026)	0.101*** (0.028)	0.139*** (0.026)	0.170*** (0.029)	0.157*** (0.025)	0.210*** (0.023)	0.165*** (0.025)	0.098*** (0.035)	0.166*** (0.026)
Observations	13,017	15,117	15,114	15,117	15,122	15,123	15,112	15,119	15,120	15,116	15,117
COVID made me more likely to apply to HE	0.234*** (0.067)	0.174*** (0.055)	0.066 (0.057)	0.013 (0.064)	0.156** (0.061)	0.064 (0.067)	0.166*** (0.057)	0.178*** (0.053)	0.094 (0.056)	-0.001 (0.078)	0.154** (0.060)
COVID made me less likely to apply to HE	-0.534*** (0.054)	-0.081 (0.048)	-0.116** (0.051)	-0.106 (0.057)	-0.113** (0.052)	-0.275*** (0.055)	0.003 (0.051)	-0.178*** (0.046)	-0.147*** (0.049)	-0.098 (0.068)	-0.188 (0.051)
Observations	8,870	9,871	9,872	9,873	9,883	9,883	9,871	9,879	9,881	9,868	9,876

Table 10: Probit regression models for binary COVID outcomes

	PC	equipment	wifi	space	teacher	parent	help out	no problems	more likely	less likely
<i>Simple Model</i>										
Target learner	0.187*** (0.026)	0.005 (0.022)	0.006 (0.025)	0.115*** (0.022)	-0.073*** (0.021)	0.049** (0.023)	0.120*** (0.022)	-0.063*** (0.021)	0.146*** (0.038)	0.039 (0.036)
Observations	16,083	16,083	16,083	16,083	16,083	16,083	16,083	16,083	10,460	10,460
<i>Multivariate Model</i>										
male	-0.080*** (0.029)	-0.132*** (0.024)	-0.127*** (0.027)	-0.253*** (0.023)	-0.190*** (0.022)	-0.357*** (0.025)	-0.289*** (0.024)	0.194*** (0.022)	-0.094** (0.041)	-0.049 (0.038)
BAME	0.010 (0.019)	0.017 (0.016)	-0.000 (0.018)	0.022 (0.016)	-0.016 (0.015)	-0.027 (0.017)	0.053*** (0.016)	-0.011 (0.015)	0.034 (0.026)	-0.020 (0.026)
FSM	0.332*** (0.031)	0.119*** (0.027)	0.104*** (0.030)	0.260*** (0.026)	-0.012 (0.025)	0.106*** (0.028)	0.274*** (0.027)	-0.222*** (0.026)	0.048 (0.046)	0.015 (0.043)
Disabled	0.092** (0.036)	0.225*** (0.030)	0.263*** (0.033)	0.280*** (0.030)	0.184*** (0.029)	0.286*** (0.031)	0.226*** (0.030)	-0.278*** (0.031)	0.109** (0.052)	0.258*** (0.046)
First to go	0.077** (0.031)	0.051** (0.025)	-0.019 (0.028)	0.080*** (0.025)	-0.047** (0.023)	0.109*** (0.026)	0.135*** (0.025)	-0.066*** (0.024)	0.039 (0.043)	0.070* (0.040)
Know someone	-0.105*** (0.033)	-0.017 (0.029)	-0.025 (0.032)	-0.025 (0.028)	0.052* (0.027)	-0.035 (0.029)	-0.025 (0.029)	0.018 (0.027)	0.075 (0.050)	-0.010 (0.046)
IDACI	0.743*** (0.127)	0.115 (0.108)	0.216* (0.122)	0.258** (0.106)	0.130 (0.101)	0.086 (0.112)	0.367*** (0.108)	-0.294*** (0.103)	0.311* (0.183)	0.101 (0.172)
KS2 maths	-0.024 (0.019)	0.049*** (0.016)	-0.014 (0.018)	0.017 (0.016)	0.063*** (0.015)	0.046*** (0.017)	0.078*** (0.016)	-0.030** (0.015)	-0.126*** (0.028)	-0.053** (0.026)
KS2 reading	-0.044** (0.020)	0.057*** (0.017)	0.019 (0.019)	0.038** (0.017)	0.133*** (0.016)	0.028 (0.018)	0.036** (0.017)	-0.027* (0.016)	-0.132*** (0.029)	-0.055** (0.027)
Target learner	0.026 (0.032)	-0.024 (0.026)	-0.040 (0.030)	0.040 (0.026)	-0.053** (0.025)	0.024 (0.027)	0.036 (0.027)	0.010 (0.025)	0.050 (0.046)	0.009 (0.042)
Year 10	-0.095** (0.045)	-0.325*** (0.035)	-0.306*** (0.039)	-0.322*** (0.034)	-0.376*** (0.032)	-0.281*** (0.037)	-0.244*** (0.035)	0.453*** (0.034)	-0.193** (0.075)	-0.454*** (0.056)
Year 11	0.148*** (0.045)	-0.071 (0.037)	-0.204*** (0.041)	-0.138*** (0.036)	-0.124*** (0.035)	0.092** (0.038)	-0.078** (0.037)	0.092** (0.037)	-0.129 (0.077)	-0.682*** (0.063)
Year 12	0.084 (0.044)	-0.199*** (0.035)	-0.265*** (0.040)	-0.276*** (0.035)	-0.311*** (0.033)	-0.052 (0.037)	-0.190*** (0.036)	0.208*** (0.035)	0.082 (0.074)	-0.762*** (0.063)
Year 13	0.030 (0.048)	-0.267*** (0.039)	-0.220*** (0.043)	-0.249*** (0.038)	-0.404*** (0.036)	-0.082** (0.040)	-0.204*** (0.039)	0.245*** (0.038)	0.181** (0.076)	-0.805*** (0.069)
Observations	15,203	15,203	15,203	15,203	15,203	15,203	15,203	15,203	9,906	9,906

Linear regression model output tables for ordinal outcomes

Table 11: Linear regression models for ordinal outcomes

VARIABLES	out2_motiv	out3_grades	out12_apply	out13_likeme	out14_fitin	out15_acad	out16_cope	out17_broad	out18_chall	out19_valu	out20_soc	out21_earn	out22_job
Male	-0.130*** (0.014)	0.088*** (0.013)	-0.450*** (0.023)	-0.037** (0.016)	0.014 (0.015)	0.080*** (0.014)	-0.024 (0.016)	-0.099*** (0.014)	-0.057*** (0.012)	-0.124*** (0.013)	-0.208*** (0.015)	-0.039*** (0.014)	-0.062*** (0.014)
BAME	0.002 (0.010)	0.006 (0.009)	0.139*** (0.015)	0.002 (0.011)	0.032*** (0.011)	0.029*** (0.009)	0.004 (0.011)	0.029*** (0.010)	0.048*** (0.008)	0.015* (0.009)	0.001 (0.011)	0.040*** (0.009)	0.031*** (0.009)
FSM	-0.055*** (0.017)	-0.044*** (0.015)	-0.045 (0.026)	-0.049*** (0.018)	-0.111*** (0.018)	-0.041** (0.016)	-0.059*** (0.018)	-0.072*** (0.016)	-0.011 (0.014)	-0.037** (0.015)	-0.043** (0.018)	-0.008 (0.016)	-0.005 (0.016)
Disabled	-0.158*** (0.019)	-0.139*** (0.018)	-0.109*** (0.030)	-0.171*** (0.021)	-0.341*** (0.020)	-0.182*** (0.018)	-0.320*** (0.021)	-0.097*** (0.018)	-0.044*** (0.016)	-0.110*** (0.018)	-0.214*** (0.021)	-0.076*** (0.018)	-0.065*** (0.018)
First to go	-0.001 (0.015)	-0.034** (0.014)	-0.217*** (0.024)	-0.118*** (0.017)	-0.048*** (0.016)	-0.084*** (0.015)	-0.066*** (0.017)	-0.072*** (0.015)	-0.061*** (0.013)	-0.071*** (0.014)	-0.057*** (0.016)	-0.062*** (0.015)	-0.085*** (0.015)
Know someone	0.104*** (0.017)	0.102*** (0.016)	0.331*** (0.028)	0.134*** (0.020)	0.209*** (0.019)	0.131*** (0.017)	0.178*** (0.019)	0.116*** (0.017)	0.086*** (0.015)	0.109*** (0.016)	0.148*** (0.019)	0.072*** (0.017)	0.062*** (0.017)
IDACI	0.037 (0.066)	-0.103 (0.061)	0.355*** (0.104)	0.113 (0.074)	-0.214*** (0.071)	-0.010 (0.063)	0.013 (0.073)	0.089 (0.064)	0.081 (0.056)	0.108 (0.061)	-0.022 (0.071)	0.239*** (0.063)	0.178*** (0.063)
KS2 maths	0.038*** (0.010)	0.098*** (0.009)	0.191*** (0.016)	0.085*** (0.011)	0.040*** (0.010)	0.158*** (0.009)	0.091*** (0.011)	0.058*** (0.009)	0.066*** (0.008)	0.048*** (0.009)	0.029*** (0.011)	0.053*** (0.009)	0.042*** (0.009)
KS2 reading	0.026** (0.010)	0.042*** (0.010)	0.125*** (0.016)	0.055*** (0.012)	0.002 (0.011)	0.085*** (0.010)	0.017 (0.011)	0.125*** (0.010)	0.109*** (0.009)	0.027*** (0.010)	-0.009 (0.011)	0.035*** (0.010)	0.035*** (0.010)
Target learner	-0.018 (0.016)	-0.007 (0.015)	0.012 (0.026)	-0.016 (0.018)	-0.048*** (0.017)	-0.008 (0.016)	-0.020 (0.018)	-0.007 (0.016)	0.005 (0.014)	0.003 (0.015)	-0.005 (0.017)	-0.002 (0.016)	0.020 (0.015)
Year 10	0.083*** (0.021)	0.007 (0.020)	0.225*** (0.044)	0.000 (0.024)	-0.059*** (0.023)	-0.045** (0.020)	-0.123*** (0.023)	-0.037* (0.020)	-0.042** (0.018)	-0.049** (0.020)	-0.027 (0.023)	0.033 (0.021)	0.045** (0.020)
Year 11	0.019 (0.023)	0.027 (0.021)	0.063 (0.045)	-0.022 (0.026)	-0.115*** (0.025)	-0.055** (0.022)	-0.054** (0.025)	-0.107*** (0.022)	-0.131*** (0.020)	-0.074*** (0.021)	-0.145*** (0.025)	0.101*** (0.022)	0.141*** (0.022)
Year 12	-0.024 (0.022)	-0.047** (0.020)	0.106** (0.045)	-0.137*** (0.025)	-0.201*** (0.023)	-0.150*** (0.021)	-0.144*** (0.024)	-0.164*** (0.021)	-0.208*** (0.019)	-0.106*** (0.020)	-0.179*** (0.024)	0.088*** (0.021)	0.160*** (0.021)
Year 13	0.024 (0.024)	-0.018 (0.022)	0.184*** (0.046)	-0.075*** (0.027)	-0.149*** (0.025)	-0.097*** (0.023)	-0.035 (0.026)	-0.201*** (0.023)	-0.235*** (0.020)	-0.037* (0.022)	-0.150*** (0.026)	0.141*** (0.023)	0.201*** (0.023)
Constant	4.207*** (0.030)	3.908*** (0.028)	4.038*** (0.055)	3.431*** (0.033)	3.643*** (0.032)	3.734*** (0.029)	3.586*** (0.033)	4.066*** (0.029)	4.177*** (0.025)	4.152*** (0.028)	4.015*** (0.032)	3.916*** (0.029)	4.035*** (0.029)
Observations	15,227	14,443	12,083	13,733	14,062	14,342	13,726	13,931	14,489	14,755	14,416	14,523	14,779

Table 12: Linear regression models for ordinal outcomes – activity variables as predictors

VARIABLES	out2_motiv	out3_grades	out12_apply	out13_likeme	out14_fitn	out15_acad	out16_cope	out17_broad	out18_chall	out19_valu	out20_soc	out21_earn	out22_job
Activity hrs [§]	0.001*** (0.000)	0.000 (0.000)	0.001*** (0.000)	0.001 (0.000)	0.000 (0.000)	0.000* (0.000)	0.001 (0.000)	0.001** (0.000)	0.001** (0.000)	0.000 (0.000)	0.001*** (0.000)	0.001** (0.000)	0.000 (0.000)
Observations	10,236	9,726	8,092	9,208	9,468	9,642	9,243	9,368	9,732	9,916	9,697	9,763	9,945
Activity No. [§]	-0.010** (0.005)	0.001 (0.004)	-0.010 (0.008)	-0.005 (0.005)	-0.002 (0.005)	-0.005 (0.005)	-0.007 (0.005)	0.001 (0.005)	0.007 (0.004)	-0.007 (0.004)	-0.007 (0.005)	-0.007 (0.005)	-0.001 (0.005)
No activity [§]	-0.002 (0.014)	0.010 (0.013)	0.030 (0.022)	0.017 (0.016)	-0.010 (0.015)	0.004 (0.013)	0.003 (0.015)	0.018 (0.013)	0.011 (0.012)	0.017 (0.013)	0.026 (0.015)	0.012 (0.013)	0.005 (0.013)
<i>Activity Type</i>													
Campus visits	0.015 (0.030)	0.024 (0.027)	0.046 (0.048)	0.023 (0.033)	0.026 (0.032)	0.037 (0.029)	0.025 (0.033)	0.042 (0.029)	0.034 (0.025)	0.040 (0.027)	0.033 (0.032)	0.001 (0.029)	-0.003 (0.028)
IAG	-0.006 (0.016)	-0.003 (0.014)	0.004 (0.025)	0.018 (0.018)	-0.002 (0.017)	0.022 (0.015)	0.009 (0.017)	0.010 (0.015)	-0.012 (0.013)	0.020 (0.015)	0.021 (0.017)	-0.011 (0.015)	-0.008 (0.015)
Masterclasses	0.043** (0.019)	0.025 (0.017)	0.047 (0.030)	0.018 (0.021)	-0.004 (0.020)	0.025 (0.018)	0.017 (0.021)	-0.001 (0.018)	0.020 (0.016)	0.018 (0.018)	0.022 (0.021)	0.022 (0.018)	0.026 (0.018)
Mentoring	0.037 (0.023)	0.017 (0.021)	0.042 (0.037)	0.045 (0.026)	0.039 (0.025)	0.021 (0.022)	0.039 (0.025)	0.060*** (0.022)	0.050*** (0.020)	0.025 (0.021)	0.060** (0.025)	0.064*** (0.022)	0.052** (0.022)
Summer sch	0.014 (0.069)	0.006 (0.063)	0.097 (0.113)	0.006 (0.076)	0.020 (0.074)	0.013 (0.066)	-0.102 (0.076)	0.010 (0.067)	0.041 (0.059)	-0.017 (0.064)	-0.102 (0.075)	0.065 (0.067)	0.049 (0.066)
Skills	-0.022 (0.019)	0.003 (0.017)	-0.026 (0.030)	-0.034 (0.021)	-0.012 (0.020)	-0.050*** (0.018)	-0.021 (0.020)	-0.013 (0.018)	0.006 (0.016)	-0.016 (0.017)	-0.002 (0.020)	-0.025 (0.018)	-0.017 (0.018)
Staff dev.	-0.003 (0.080)	-0.017 (0.073)	-0.001 (0.130)	0.132 (0.089)	0.023 (0.085)	-0.006 (0.077)	-0.067 (0.090)	0.000 (0.077)	0.047 (0.068)	-0.093 (0.073)	0.009 (0.086)	0.010 (0.077)	0.006 (0.075)
Other	-0.046 (0.029)	-0.021 (0.026)	-0.059 (0.048)	-0.070** (0.032)	-0.062** (0.031)	-0.043 (0.028)	-0.071** (0.032)	-0.024 (0.027)	-0.020 (0.024)	-0.082*** (0.027)	-0.081*** (0.031)	-0.021 (0.028)	-0.036 (0.028)
Observations[§]	15,227	14,443	12,083	13,733	14,062	14,342	13,726	13,931	14,489	14,755	14,416	14,523	14,779

Table 13: Linear regression models for ordinal outcomes – ‘speak to’ and ‘influence’ variables as predictors

VARIABLES	out2_motiv	out3_grades	out12_apply	out13_likeme	out14_fitin	out15_acad	out16_cope	out17_broad	out18_chall	out19_valu	out20_soc	out21_earn	out22_job
<i>Who has most influence on your HE decisions?</i>													
Family	0.096*** (0.015)	0.045*** (0.014)	-0.018 (0.024)	0.040** (0.017)	0.060*** (0.016)	0.052*** (0.014)	0.059*** (0.016)	0.020 (0.014)	0.006 (0.013)	0.046*** (0.014)	0.069*** (0.016)	0.032** (0.014)	0.019 (0.014)
Friend	-0.260*** (0.023)	-0.130*** (0.021)	-0.165*** (0.036)	-0.106*** (0.026)	-0.109*** (0.024)	-0.176*** (0.022)	-0.227*** (0.025)	-0.120*** (0.022)	-0.077*** (0.019)	-0.110*** (0.021)	-0.063** (0.025)	-0.076*** (0.022)	-0.096*** (0.022)
Teacher	0.114*** (0.022)	0.061*** (0.021)	0.291*** (0.037)	0.152*** (0.025)	0.060** (0.024)	0.085*** (0.021)	0.169*** (0.025)	0.129*** (0.021)	0.110*** (0.019)	0.136*** (0.021)	0.059** (0.024)	0.096*** (0.021)	0.120*** (0.021)
Career advisor	0.058* (0.034)	0.033 (0.031)	0.150*** (0.053)	0.018 (0.037)	0.057 (0.036)	0.057* (0.032)	0.034 (0.037)	0.125*** (0.032)	0.101*** (0.028)	0.079** (0.031)	0.069* (0.036)	0.063* (0.033)	0.073** (0.032)
Observations	15,085	14,311	11,971	13,609	13,939	14,210	13,605	13,805	14,364	14,628	14,295	14,393	14,646
<i>Who did you speak to about HE?</i>													
Family	0.248*** (0.018)	0.209*** (0.017)	0.478*** (0.028)	0.283*** (0.021)	0.268*** (0.020)	0.295*** (0.018)	0.342*** (0.020)	0.219*** (0.018)	0.159*** (0.016)	0.225*** (0.017)	0.240*** (0.020)	0.175*** (0.018)	0.188*** (0.018)
Friend	0.109*** (0.015)	0.111*** (0.014)	0.406*** (0.023)	0.197*** (0.017)	0.197*** (0.016)	0.183*** (0.015)	0.188*** (0.017)	0.166*** (0.015)	0.140*** (0.013)	0.165*** (0.014)	0.182*** (0.017)	0.131*** (0.015)	0.133*** (0.015)
Teacher	0.169*** (0.015)	0.137*** (0.014)	0.313*** (0.023)	0.215*** (0.017)	0.182*** (0.016)	0.213*** (0.015)	0.235*** (0.017)	0.177*** (0.015)	0.150*** (0.013)	0.183*** (0.014)	0.147*** (0.017)	0.141*** (0.015)	0.151*** (0.015)
Career advisor	0.091*** (0.019)	0.080*** (0.017)	0.188*** (0.030)	0.111*** (0.021)	0.066*** (0.020)	0.127*** (0.018)	0.122*** (0.020)	0.115*** (0.018)	0.105*** (0.016)	0.107*** (0.017)	0.077*** (0.020)	0.091*** (0.018)	0.076*** (0.018)
Nobody	-0.024 (0.084)	0.002 (0.076)	-0.252* (0.131)	0.008 (0.093)	-0.066 (0.090)	0.047 (0.080)	-0.094 (0.091)	-0.017 (0.081)	0.053 (0.071)	-0.025 (0.077)	-0.111 (0.091)	-0.073 (0.082)	-0.072 (0.079)
Observations	14,470	13,722	11,548	13,011	13,345	13,611	13,027	13,196	13,743	14,015	13,687	13,789	14,041

Table 14: Linear regression models for ordinal outcomes – COVID variables as predictors

VARIABLES	out2_motiv	out3_grades	out12_apply	out13_likeme	out14_fitin	out15_acad	out16_cope	out17_broad	out18_chall	out19_valu	out20_soc	out21_earn	out22_job
cov_pc	-0.070*** (0.023)	-0.111*** (0.021)	-0.130*** (0.036)	-0.099*** (0.025)	-0.130*** (0.024)	-0.101*** (0.022)	-0.147*** (0.025)	-0.086*** (0.022)	-0.022 (0.019)	-0.042** (0.021)	-0.014 (0.024)	-0.041* (0.022)	-0.016 (0.021)
cov_eqp	-0.058*** (0.017)	-0.075*** (0.015)	-0.083*** (0.027)	-0.081*** (0.018)	-0.043** (0.018)	-0.079*** (0.016)	-0.125*** (0.018)	0.004 (0.016)	0.000 (0.014)	-0.010 (0.015)	-0.000 (0.018)	-0.018 (0.016)	0.006 (0.016)
cov_wifi	-0.086*** (0.020)	-0.090*** (0.019)	-0.111*** (0.033)	-0.095*** (0.022)	-0.103*** (0.022)	-0.075*** (0.019)	-0.096*** (0.022)	-0.035* (0.020)	0.002 (0.017)	-0.032* (0.019)	-0.031 (0.022)	-0.023 (0.020)	-0.008 (0.019)
cov_spc	-0.108*** (0.016)	-0.109*** (0.015)	0.026 (0.026)	-0.051*** (0.018)	-0.127*** (0.017)	-0.101*** (0.015)	-0.136*** (0.018)	-0.023 (0.015)	0.004 (0.014)	-0.008 (0.015)	-0.054*** (0.017)	-0.003 (0.015)	0.018 (0.015)
cov_tch	-0.017 (0.015)	-0.025* (0.014)	0.143*** (0.023)	0.001 (0.016)	-0.012 (0.016)	-0.001 (0.014)	-0.039** (0.016)	0.045*** (0.014)	0.079*** (0.012)	0.042*** (0.014)	0.014 (0.016)	0.045*** (0.014)	0.055*** (0.014)
cov_par	-0.124*** (0.018)	-0.139*** (0.016)	-0.003 (0.028)	-0.104*** (0.020)	-0.137*** (0.019)	-0.142*** (0.017)	-0.189*** (0.019)	-0.002 (0.017)	0.011 (0.015)	-0.006 (0.016)	-0.051*** (0.019)	0.014 (0.017)	0.020 (0.017)
cov_hlp	-0.048*** (0.017)	-0.065*** (0.015)	0.075*** (0.027)	-0.031* (0.019)	-0.110*** (0.018)	-0.046*** (0.016)	-0.079*** (0.018)	-0.002 (0.016)	0.022 (0.014)	0.022 (0.015)	-0.024 (0.018)	0.024 (0.016)	0.041** (0.016)
cov_non	0.123*** (0.015)	0.135*** (0.014)	0.015 (0.024)	0.091*** (0.017)	0.139*** (0.016)	0.136*** (0.014)	0.186*** (0.016)	0.027 (0.015)	-0.008 (0.013)	0.017 (0.014)	0.027 (0.016)	0.026 (0.015)	0.001 (0.014)
Observations	14,958	14,186	11,860	13,492	13,825	14,107	13,499	13,702	14,249	14,504	14,170	14,281	14,532
cov_more	0.072** (0.034)	0.011 (0.032)	0.482*** (0.049)	0.208*** (0.038)	0.127*** (0.037)	0.086*** (0.033)	0.174*** (0.037)	0.114*** (0.033)	0.069** (0.029)	0.167*** (0.032)	0.133*** (0.038)	0.154*** (0.033)	0.096*** (0.032)
cov_less	-0.323*** (0.031)	-0.223*** (0.028)	-0.664*** (0.045)	-0.234*** (0.034)	-0.164*** (0.032)	-0.277*** (0.029)	-0.390*** (0.033)	-0.252*** (0.029)	-0.135*** (0.026)	-0.239*** (0.028)	-0.148*** (0.033)	-0.249*** (0.029)	-0.281*** (0.029)
Observations	9,805	9,385	9,187	9,084	9,176	9,388	9,010	9,220	9,529	9,612	9,404	9,549	9,639