

**Multi-intervention outreach and
mentoring evaluation report:
Local evaluation of the University of
Birmingham's Forward Thinking
programme**

May 2023

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1. Summary

This report demonstrates the use of several evaluation methods to explore the Forward Thinking (FT) programme, a multi-intervention outreach and mentoring (MIOM) programme delivered by the University of Birmingham.

1.1. Aim and description of intervention

FT is a progressive widening participation (WP) programme, delivered by the University of Birmingham. The FT programme is designed to encourage and support students from disadvantaged and underrepresented backgrounds to access higher education (HE) and specially, to apply to 'research-intensive' higher education providers (HEPs). The multi-intervention, outreach and mentoring programme has been designed to support subject choices in Year 9 and 11 and improve student attainment whilst also informing students about HE pathways, courses, student life and employment opportunities. Throughout the programme learners participate in a range of on-campus activities, receive one-to-one mentoring support from undergraduates in school, and have access to bespoke information and advice. Due to COVID-19, these activities were temporarily moved online during the 2019-20 and 2020-21 academic years.

1.2. Target group

The target group are Year 8 students from WP backgrounds in partner schools in the Birmingham, Sandwell and Solihull areas. The FT programme aims to target talented students (students with the ability or potential to develop significantly ahead of their peers) who, with further support, have the potential to apply to a research-intensive university like the University of Birmingham.

1.3. Number of students involved

The FT programme engages with four cohorts in each year due to the progressive nature of the programme working with students between Year 8 and Year 11. In total the programme has engaged with 685 students between 2007-08 and 2020-21.

1.4. Implementation

The FT programme is delivered by the University of Birmingham outreach team to 35 state schools in the Birmingham, Sandwell and Solihull areas. The FT programme began in 2007-08, and a new cohort of learners are recruited at the start of each academic year. Selected learners take part in a series of activities between Year 8 and Year 11. However, due to the COVID-19 pandemic, the delivery of many of the activities

was disrupted between the academic years 2019-20 and 2020-21. FT activities are typically held in person but due to the pandemic, the majority were moved online. FT programme activities consist of several key elements:

- Year 8 launch day
- Year 9 subject taster day
- Year 9 university experience day
- Year 9 and 10 parent event
- Year 10 mentoring
- Year 11 celebration event

1.5. Brief description of the IE

The impact evaluation (IE) uses several evaluation methods to explore the FT programme:

- A pilot randomised controlled trial (RCT) to investigate whether personalised communication is an effective strategy for increasing parental/guardian engagement with the FT programme.
- An online survey to explore the short-term outcomes associated with different modes of mentoring delivery (online versus in-person) for FT students.
- Exploratory analysis to understand the FT programme using a matched-group design and data from the Higher Education Statistics Agency (HESA).

This report contains findings from pilot RCT and mentoring survey data. A separate analysis report covering the exploratory analysis using HESA data can be [accessed here](#).

1.6. Brief description of the IPE

The project also included an implementation and process evaluation (IPE) to understand whether the programme was implemented as planned and whether the assumptions underpinning the programme held true. Semi-structured interviews and focus groups were conducted with key stakeholders - including the FT team, mentors, previous FT students, school coordinators, parents, and current FT students - to answer the implementation and process evaluation research questions.

1.7. Key findings

The key findings from the pilot parental engagement RCT show that personalised communication increases parental engagement. The pilot trial found that sending personalised invitations (versus a standard invitation) meant that parents/guardians

were significantly more likely to attend the parent/guardian event. However due to the small sample size and pilot nature of the trial, further evaluation is required to replicate this study before the results can be generalised to the wider population.

The mentoring evaluation found no significant difference in outcomes for students, dependent on whether mentoring was delivered online or in-person. Mentoring was generally viewed as particularly effective by students because it offered a wide range of tailored support and could be adapted to suit the students' individual needs. Mentors provided academic skills support, information about future job prospects, CV writing skills support, and offered advice on how to choose A Levels that would help students progress to university.

The implementation and process evaluation found that the main components of the programme, as set out in the Theory of Change, work as theorised. However, further causal evaluation is required to estimate the impact of FT on outcomes for students. The implementation and process evaluation showed that the programme enabled students to gain a richer understanding of HE and valuable insights into both the academic and social side of life at university. Important to this is the 'real life' experience of the university campus which a number of students missed out on due to the restrictions imposed by the pandemic. Mentoring was viewed by both mentors and mentees as being particularly effective because it is tailored to meet the needs of individual students.

1.8. Key conclusions

This study adopted a mixed-method, multi-cohort approach which involved integrating data from both quantitative and qualitative research designs including a pilot RCT, an online mentoring survey and qualitative interviews with key stakeholders of the programme.

Findings from the pilot RCT show that personalised invitations resulted in significantly more parents/guardians attending the parent event, relative to a standard invitation. Due to the small sample size in the survey data collected to measure secondary outcomes, it is not possible to confirm whether attendance at the event resulted in changes to parental/guardian attitudes or behaviour.

The results of the online mentoring survey show that there was no significant difference between online and face-to-face mentoring for students' outcomes. However, the small sample size is a considerable limitation and future research should further explore this research question.

The implementation and process evaluation suggests that students felt they had been provided with effective information, advice and guidance about HE, increased

awareness of HE and increased aspirations, confidence and motivation for students to reach their potential. However, the evaluation was not able to evidence whether the theorised impact of the FT programme – increased applications and progression to research-intensive universities – was achieved.

The limitations of the study pose a significant challenge for estimating impact. However, a study conducted simultaneously to the evaluation outlined in this report provides further insight into whether those on the FT programme are more likely than a comparator group to apply and attend HE and specifically research-intensive universities. The exploratory analysis using a matched comparison group from the HESA data can be [accessed here](#).

2. Overview

This report demonstrates the use of several evaluation methods to explore the Forward Thinking (FT) programme, a multi-intervention outreach and mentoring (MIOM) programme delivered by the University of Birmingham. The report is broken into five sections and outlines how different methods are used to explore discrete elements of the FT programme:

- An introduction to the evaluation and FT programme
- A pilot randomised controlled trial (RCT) to investigate whether personalised communication is an effective strategy for increasing parental/guardian engagement with the FT programme.
- An online survey to explore the short-term outcomes associated with different modes of mentoring delivery (online versus in-person) for FT students
- An implementation and process evaluation to explore the fidelity and compliance of the programme and to better understand whether the programme worked as theorised
- A discussion of the results and limitations.

3. Introduction

3.1. Project team

This local evaluation of the FT programme was a collaboration between The Centre for Transforming Access and Student Outcomes in Higher Education (TASO) and the University of Birmingham. The project team is outlined in [Table 1](#) below.

Table 1: Project team roles and responsibilities.

Organisation	Name	Role and responsibilities
Aston or Birmingham	Shaheen Barkat	Evaluation Manager <ul style="list-style-type: none"> Project lead
Aston or Birmingham	Liz Killick	Research Assistant <ul style="list-style-type: none"> Impact evaluation Implementation and process evaluation Overseeing collection of data
TASO	Eliza Kozman	Deputy Director of Research <ul style="list-style-type: none"> Quality assure the design and implementation of the evaluation from the TASO side.
TASO	Helen Lawson	Research Programmes Manager <ul style="list-style-type: none"> Lead project management on the broader MIOM project.
TASO	Rain Sherlock	Evaluation Manager <ul style="list-style-type: none"> Oversee the design and implementation of the evaluation from the TASO side.
TASO	Sarah Chappell	Research Officer <ul style="list-style-type: none"> Support on design and implementation of evaluation from the TASO side.

3.2. Background and rationale for the evaluation

Young people from disadvantaged and underrepresented backgrounds do not progress to higher education (HE) at the same rate as their more advantaged peers. Recent data from the Office for Students (OfS) has indicated that 8% of UK students from the most underrepresented backgrounds were admitted to a high-tariff university in 2019-20, compared to 27% of students from the most represented areas.¹ Tailored widening participation (WP) programmes aim to improve access to HE for young people from disadvantaged backgrounds and underrepresented groups. However, there is limited evidence of the effectiveness of many of the WP interventions delivered by higher education providers (HEPs). WP programmes, such as the FT programme, are often

1

<https://www.officeforstudents.org.uk/news-blog-and-events/press-and-media/students-need-support-to-succeed-in-and-beyond-higher-education/>

large-scale and high-cost, highlighting the need for more rigorous, causal evaluations to measure the impact these programmes have on outcomes for students.²

FT is a progressive WP programme, delivered by the University of Birmingham. The multi-intervention outreach and mentoring programme is designed to encourage and support students from disadvantaged and underrepresented backgrounds to access HE and specially, to apply to research-intensive HEPs (see [Appendix 1](#) for a list of research-intensive HEPs).³ The programme has been designed to support appropriate subject choices in Year 9 and 11 and improve student attainment whilst also informing students about HE pathways, courses, student life and employment opportunities. Throughout the programme learners participate in a range of on-campus activities, receive one-to-one mentoring support from undergraduates in school, and have access to bespoke information and advice. Due to COVID-19, these activities were temporarily moved online.

As there is limited evidence on the efficacy of these sorts of programmes, this evaluation demonstrates how different methods can be used to explore certain components of the FT programme. While the pilot RCT explores parental/guardian engagement specifically, and the post-intervention survey focuses on the short-term outcomes of mentoring, the implementation and process evaluation has a broader lens, helping us understand whether the programme was implemented as planned and whether the assumptions underpinning the programme held true and had the expected impact on students.

3.3. Forward Thinking Programme

The FT programme is delivered by the University of Birmingham outreach team to 35 state schools in the Birmingham, Sandwell and Solihull areas. The FT programme began in 2007-08, and a new cohort of learners are recruited at the start of each academic year. Selected learners take part in a series of activities between Year 8 and Year 11. However, due to the COVID-19 pandemic, the delivery of many of the activities was disrupted between the academic years 2019-20 and 2020-21. FT activities are typically held in person but due to the pandemic, the majority were moved online. A full breakdown of the FT programme activities and how they were adapted during COVID-19 can be found in [Appendix 2](#). Briefly, the activities consist of several key elements:

² https://epi.org.uk/wp-content/uploads/2020/03/Widening_participation-review_EPI-TASO_2020-1.pdf

³ The term 'research intensive' is most commonly operationalised as top third HEPs or 'high tariff' providers for analysis. However, as the University of Birmingham uses the pre-specified list of research-intensive providers to inform the design of the FT programme, this report uses the list of HEPs included in [Appendix 1](#).

- Year 8 launch day
- Year 9 subject taster day
- Year 9 university experience day
- Year 9 and 10 parent/guardian event
- Year 10 mentoring
- Year 11 celebration event

3.3.1. Criteria for the FT programme

In order to take part in the FT programme students have to meet one of the following criteria:

- Have the academic potential to achieve good GCSE grades and go to a research-intensive university
- Have parents/guardians who have not completed a HE qualification in the UK or abroad

In addition, students should meet at least one of the following criteria:

- Live in a low progression area
- Be eligible for pupil premium funding or free school meals
- Have a recognised disability
- Have experienced significant extenuating circumstances that has had (or is having) a detrimental impact on their studies
- Be a young carer

3.4. Intervention aims and objectives

The FT programme objectives are:

- To motivate students to maximise their potential and attainment in secondary education.
- To motivate students to apply to university and in particular a research-intensive university like the University of Birmingham.
- To develop students' knowledge and understanding about HE and of the variety of courses and HE opportunities available post-18.
- To help students make informed and appropriate decisions about GCSE choices, post-16 choices and pathways to professional careers.

The overall assumption that underpins the FT programme is that working with students over a longer period of time, is more effective in raising attainment, achievement and progression to research-intensive universities. The FT programmes' sub-activities focus

on increasing students' knowledge and understanding of HE, improving their awareness of HE progression routes (particularly progression to research-intensive institutions), supporting students in making informed educational and progression choices, and increasing progression to Level 3 studies. As shown in the programme Theory of Change (see [Appendix 3](#)), engagement with the overall programme is intended to increase applications and progression to research-intensive universities for students from disadvantaged and underrepresented backgrounds.

3.5. Key research questions that the evaluation is looking to answer

There are three evaluation methods used in this report, each addressing several key research questions to explore specific elements of the FT programme - see [Table 2](#) below.

Table 2: Evaluation methods and research questions

Evaluation phase	Research questions (RQs)
Parental/guardian engagement pilot randomised controlled trial	<p>Primary research question</p> <ol style="list-style-type: none"> 1. Does personalised communication increase parents' attendance to a parent event? <p>Secondary research questions</p> <ol style="list-style-type: none"> 2. Does attendance at a parent event influence parents' aspirations for/attitudes toward their child attending HE? 3. Does attendance at a parent event influence parents' self-reported behaviours and intended future behaviours? <p>Additional research questions</p> <ol style="list-style-type: none"> 4. Does increased parental engagement result in increased applications to HE? 5. Does increased parental engagement result in increased admissions to HE? 6. Does increased parental engagement result in increased applications to a research-intensive university? 7. Does increased parental engagement result in increased admissions to a research-intensive university? <p>Note: The additional research questions were set out at the beginning of the study but due to the project timeline and data tracking limitations, it has not been possible to address these questions as part of this report. Longer-term tracking may permit this at a later date.</p>
Online mentoring survey	<ol style="list-style-type: none"> 1. Do levels of aspiration, knowledge, and understanding, and subject choice, vary according to whether mentoring was delivered face-to-face in-person versus online?
Implementation and process evaluation	<ol style="list-style-type: none"> 1. Was the programme implemented as planned? 2. From the perspective of key stakeholders (parents, schools, students) how effective is the FT programme? 3. What elements of the programme are particularly effective and why? 4. How can the programme be improved to have greater impact? 5. Did the intervention work as theorised?

3.6. Theory of Change

The FT programme Theory of Change can be found in [Appendix 3](#).

3.7. Ethics

Ethical approval for running the parental engagement randomised controlled trial, mentoring evaluation and implementation and process evaluation was given by University of Birmingham's Humanities and Social Sciences Ethical Review Committee which was granted on the 31st of August 2021 (ref: ERN_21-0539).

4. Pilot RCT

4.1. Overview of the method and design

Previous research has shown that parental/guardian engagement influences educational outcomes. Benefits of increasing parental/guardian engagement include lower absenteeism, higher academic attainment, and a greater likelihood of attending HE.⁴ WP programmes recognise that parents, guardians and carers play a key role in their children's decision making. As a result, multiple WP programmes in the UK include some form of parental engagement. However, there is a lack of robust evaluation to improve our understanding of the most effective forms of parental engagement. This pilot RCT aims to contribute to the evidence on what works to encourage parents'/guardians' engagement in students' education and journey to HE.

4.1.1. Research questions

The pilot RCT examines whether employing personalised communication is an effective strategy for increasing parental/guardian engagement with the FT programme, as well as encouraging parents/guardians to support their child(ren) to apply to a research-intensive university. Specifically, the RCT examines the effectiveness of personalised communications in: i) increasing attendance to a FT parent/guardian event, and ii) increasing parental support for learners in applying to a research-intensive university. See [Appendix 3](#) the intervention Theory of Change.

The primary study hypothesis:

- H1: Parents who receive personalised communication will be more likely to attend a parent event.

Secondary study hypotheses:

⁴ Mulcahy, E., & Baars, S. (2018) *Partners in Progression: Engaging parents in university access*. King's College London.

<https://www.cfey.org/wp-content/uploads/2018/07/Partners-in-Progression.-Engaging-parents-in-university-access.pdf>

- H2: Attendance at a parent event will influence parents' aspirations for/attitudes toward their child attending HE.
- H3: Attendance at a parent event will influence parents' self-reported behaviours and intended future behaviours.

Other study hypotheses:

- H4: Students whose parents engaged with the parent event will be more likely to apply to HE.
- H5: Students whose parents engaged with the parent event will be more likely to attend HE.
- H6: Students whose parents engaged with the parent event will be more likely to apply to a research-intensive university.
- H7: Students whose parents engaged with the parent event will be more likely to attend a research-intensive university.

As a pilot, the trial does not seek to test all of these hypotheses but rather focuses on the short-term (primary and secondary) hypotheses.

4.1.2. Research methods

The parent/guardian event is a new feature of the FT programme, designed exclusively for parents/guardians of students on the programme. The aim of the event is to provide parents/guardians with information and guidance about HE, as well as to introduce the University of Birmingham's Pathways to Birmingham programme which is available for Year 12 and Year 13 WP students.

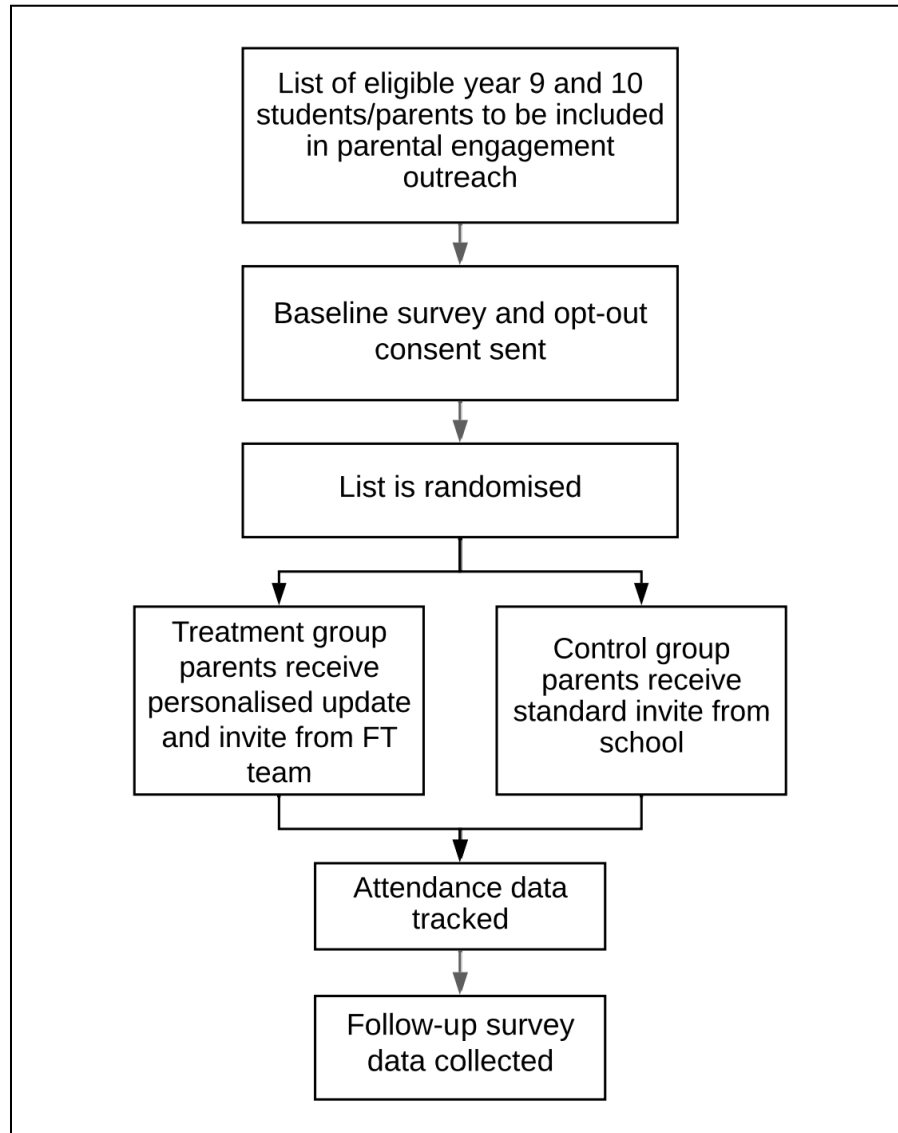
The event was hosted by the FT team via an online Zoom webinar in November 2021. A total of 347 parents/guardians were invited to take part in the study and attend the event. [Figure 1](#) below illustrates the study design. Participants (parents/guardians) were randomly assigned to one of two conditions - see [Appendix 6](#) for copies of the invitation formats:

- Treatment condition: parents/guardians received a combined personalised update on their child's progress and a personalised invitation from the FT team
- Control condition: parents/guardians received a standard invite from the school that *did not* include a personalised update on the child's progress.

Two weeks prior to the event, parents/guardians received a baseline survey asking questions about their attitudes toward HE and their plans to discuss HE with their child. They received the same questions in a follow-up survey two weeks after the event. A copy of the survey can be found in [Appendix 7](#).

A Zoom webinar registration was also taken during the event which provided data on: (i) the number of parents/guardians who registered for the event, and (ii) the number of parents/guardians who attended the event.

Figure 1: Parental engagement pilot RCT design



4.1.3. Outcome measures

[Table 3](#) below outlines the outcome measures for each of the research hypotheses.

Table 3: Research hypotheses and corresponding outcome measures

Hypothesis	Outcome measure	Data collected	Response options
H1 - parents who receive personalised communication will be more likely to attend a parent' event	Primary Attendance at a Year 9/10 parent/guardian event (binary)	<ul style="list-style-type: none"> Online attendance tracking via Zoom 	Binary (Yes/No)
H2: Attendance at a parent event will influence parents' aspirations for/attitudes toward their child attending HE	Secondary Scores on a survey which measured parents'/guardians' self-reported attitudes to HE (ordinal)	<ul style="list-style-type: none"> My child's education will create many future opportunities for them It's important to me that my child goes to university It's important to me that my child goes to a Russell Group university I expect my child to apply to university University is important for helping my child achieve their future goals I am hopeful about my child's future 	Strongly Agree Agree Disagree Strongly Disagree
H3 - Attendance at a parent event will influence parents' self-reported behaviours and intended future behaviours	Secondary Scores on a survey which measured parents'/guardians' commitment to discussing the process of getting into HE with their child (ordinal)	<ul style="list-style-type: none"> Have you discussed going to university as an option with your child sometime in the past month (binary: yes/no). 	Binary (Yes/No)
		<ul style="list-style-type: none"> Do you plan to have a conversation with your child about university in the future 	Year 10 Year 11 Year 12 Year 13 No plans to discuss

Primary outcome

The primary outcome measure is whether or not the parent/guardian attends the FT event and is linked to H1 - *parents who receive personalised communication will be more likely to attend a parent' event*. As such, the primary outcome is the difference in proportion of participants in the treatment and control groups that attend the online event. The data is provided by the online Zoom attendance tracking function.

Primary outcome measure:

1. Attendance at a Year 9/10 parent/guardian event (binary: yes/no).

Secondary outcomes

Secondary outcome measures include whether parents'/guardians' aspirations, attitudes and self-report behaviours encouraging their child to attend HE have changed as a result of the parent/guardian being more engaged with the FT programme. These outcomes link to H2 - *attendance at a parent event will influence parents' aspirations for/attitudes toward their child attending HE* - and H3 - *attendance at a parent event will influence parents' self-reported behaviours and intended future behaviours*.

Secondary outcome measures were:

1. Scores on a survey which measured parents'/guardians' self-reported attitudes to HE (ordinal)
2. Scores on a survey which measured parents'/guardians' commitment to discussing the process of getting into HE with their child (ordinal)

The survey scale used to measure parents'/guardians' attitudes toward their child attending HE was composed of six sub-questions. The questions were modified from a report by the Behavioural Insights Team who adapted questions from a subscale of the Student Engagement Instrument.^{5 6} An additional question was added asking parents/guardians to rate the importance of their child going to a Russell Group/research-intensive university.

Survey scale questions

1. My child's education will create many future opportunities for them
2. It's important to me that my child goes to university
3. It's important to me that my child goes to a Russell Group university
4. I expect my child to apply to university
5. University is important for helping my child achieve their future goals
6. I am hopeful about my child's future

All questions were measured on a 1-4 scale, where 1 represents 'Strongly Disagree' and 4 represents 'Strongly Agree' (there is no 'neutral' option). Outcome scores were generated by taking the average from the questions.

To investigate H3 - *attendance at a parent event will influence parents' self-reported behaviours and intended future behaviours* - self-reported behaviours were also

⁵ Behavioural Insights Team (2019). Parental Aspirations for their Children Trial (PACT).

⁶ Student Engagement Instrument (EEF Spectrum database):

<https://educationendowmentfoundation.org.uk/spectrum-essential-skills-and-non-academic-outcomes>

measured - whether conversations about HE were reported to have taken place between parents/guardians and students. Parents/guardians were asked whether they had discussed going to university as an option with their child sometime in the past month (binary: yes/no).

Parents/guardians were also asked about intended future behaviours. They were asked when they planned to have a conversation with their child about university in the future. Parents/guardians were able to select more than one option:

1. Year 10
2. Year 11
3. Year 12
4. Year 13
5. No plans to discuss

Additional outcomes

When the project was first designed, four longer-term outcome measures mapped onto hypotheses 4-7. However, due to the project timeline and data tracking limitations, it has not been possible to address these questions as part of this report. Analysis of these outcomes could be explored via longer-term tracking of the data.

1. Application to a HE institution (binary: yes/no)
2. Attendance at a HE institution (binary: yes/no)
3. Application to a research-intensive university (binary: yes/no)
4. Attendance at a research- intensive university (binary: yes/no).

4.1.4. Sample

A total of 337 Year 9 and 10 parents/guardians were contacted, through letters sent via the school coordinators, and asked to complete the baseline survey. The baseline survey could be completed online (using Online Surveys) or via postal survey using a freepost envelope provided. Parents/guardians were given the option to opt-out of the study. Three participants chose to opt-out of the study and therefore received the standard parent event invitation (business as usual option). The remaining 334 participants were randomised into either the treatment or control group using the R software 'blockrand' package. Randomisation was conducted at the individual level using stratified sampling based on whether or not the students' parent(s) or carer(s) have attended HE in the UK or abroad (attended HE: yes/no) and the year that their child was in (Year 9 or 10).

The balance between the treatment and control groups on student and parent/guardian demographics is also checked. The proportion of all student/parent demographics is balanced between the two groups (see [Table 4](#)). In addition, these demographics are controlled for in the regressions, which eliminates the observable component of this difference.

Parents/guardians were then sent either a personalised invitation to their home address (n=166) or a generic invitation via the school coordinator (n=168). A total of 81 parents/guardians completed the baseline survey and 23 completed the follow-up survey. Information on the demographic characteristics of these participants is shown in [Appendix 8](#).

Table 4: Demographic characteristics of students whose parents/guardians were invited to the event

Demographics	Personalised (n=166)	Standard (n=168)	Total
Male	72 (43.4%)	75 (44.6%)	147
Female	94 (56.6%)	93 (55.4%)	187
Year 9	89 (53.6%)	90 (53.6%)	179
Year 10	77 (46.4%)	78 (46.4%)	155
White British	41 (24.7%)	47 (28.0%)	88
Asian	66 (39.8%)	64 (38.1%)	130
Black	24 (14.5%)	23 (13.7%)	47
Other	35 (24.1%)	34 (20.2%)	69
FSM eligible	154 (92.8%)	154 (91.7%)	308
Disability	5 (3%)	2 (1.2%)	7
Care status	6 (3.6%)	6 (3.6%)	12
POLAR4 Q1&2	79 (47.6%)	92 (54.8%)	171
POLAR4 Q1	39 (23.5%)	48 (28.6%)	87
No parent/guardian HE	134 (80.7%)	136 (81%)	270

4.1.5. Analytical approach

The primary outcome measure, attendance at the parent/guardian event, is binary and is analysed using binary logistic regression. Logistic regression is used because of the dichotomous nature of the dependent variables and the presumed linear relationship between predictor variables and the outcome measure. Binary outcome measures are coded as 0 (no) and 1 (yes). For logistic regression the model will be:

$$Y_i \sim \text{bernoilli}(p_i); \text{logit}(p_i) = \beta_0 + \beta_1 T_i + \beta_2 X_i + \beta_3 S_j$$

Where the function *logitis* defined as the log-odds ratio:

$$\text{logit}(p) = \log(p/1-p)$$

Where:

- Y_i is a binary outcome for participant i
- p_i is the probability of that outcome occurring
- T_i is a treatment indicator, set to 1 for participants in the treatment group and 0 for those in the control group
- X_i is a vector of demographic covariates

The initial analysis plan for the survey data was to analyse the responses using ordinary least squares regression to incorporate continuous outcome measures, however due to the small sample size, descriptive statistics were employed instead. Please see [Appendix 9](#) for logistic regression model and additional analysis information.

4.2. Results

This section summarises the findings from the pilot parental/guardian engagement RCT - including the primary outcome measure (attendance at the parent/guardian event), survey data, and qualitative feedback from parents/guardians on how the intervention was received. Please note that the qualitative feedback from parents/guardians was collected as part of the implementation and process evaluation ([see section 6](#)) but is reported here to aid the flow of the report.

4.2.1. Primary outcome - attendance at the parent/guardian event

The primary outcome measure for the pilot RCT is attendance at a FT parent/guardian event. Parents/guardians of 334 Year 9 and 10 FT students from 35 schools in Birmingham, Sandwell and Solihull areas were invited to attend an online parent/guardian event. A total of 53 parents/guardians (15.8%) attended the event and an additional five registered for the event but did not attend (1.5%).

Binary logistic regression is used to measure the impact of the intervention on the primary outcome of interest (attendance at the event).

The following characteristics are controlled for, accessed from administrative data held by the University of Birmingham:

- Year group of the student (Year 9 or 10)
- Ethnicity (coded as Asian, Black, White or Other – White was the base case, which other factors were compared to)
- Gender of student (coded as binary)
- POLAR4 Q1 (binary)
- Disability status (binary)
- Care status (binary)
- Free school meal (FSM) eligibility (binary)
- Parental higher education - whether or not the students' parent(s) or carer(s) have attended HE in the UK or abroad - (binary)

[Table 5](#) below shows that 21.7% of the treatment group and 10.1% of the control group attended the parent/guardian event. Of the 53 parents/guardians who attended the event, 67.9% (n=36) were in the treatment group and 32.1% (n=17) were in the control group.

Table 5: Attendance at the event by year group and invitation type

	Treatment			Control		
	Invited	Attended	% attendance	Invited	Attended	% attendance
Year 9	89	25	29.1%	90	9	10.0%
Year 10	77	11	14.3%	78	8	10.3%
Total	166	36	21.7%	168	17	10.1%

The results of the binary logistic regression are shown in [Table 6](#) below. A significant effect was found of the treatment on attendance. Binary logistic regression was used to identify factors associated with attending the parent/guardian event. The treatment (receiving a personalised invitation) was the only significant predictor ($p < 0.01$). The odds ratio indicates that attendance at the event was 2.1 times more likely if the parent/guardian received a personalised invitation, relative to receiving a standard invitation.

Table 6: Binary logistic regression analysis – predictors of attendance at the event

Variable	B	SE	Wald	p	OR	95% C.I for OR	
Personalised invitation (treatment)	.99	.33	9.35	.002	2.70	1.43	5.11
Gender (male)	.14	.32	.20	.65	1.15	.62	2.15
Ethnicity: Asian	-.32	.40	.64	.42	.72	.33	1.60
Ethnicity: Black	-.49	.53	.86	.35	.61	.22	1.73
Ethnicity: Other	-.35	.46	.58	.45	.71	.29	1.74
Polar1	.36	.36	1.00	.32	1.44	.71	2.93
Free School meals	.06	.59	.009	.93	1.06	.33	3.37
Care Status	-19.85	11239.53	.00	1.00	.00	.00	-
Disability	-20.15	14810.71	.00	1.00	1.70	.90	3.21
Parent HE	.34	.39	.73	.39	1.40	.65	3.03
Year Group (9)	.53	.32	2.70	.10	1.70	.90	3.21
(Constant)	-2.63	.81	10.47	.001	.07		

Table note: The sample - 166 parents/guardians were sent the personalised invitation to their home address (treatment) and 166 were sent the generic invitation via the school coordinator (control). Abbreviations - CI, confidence interval; OR, odds ratio; SE, standard error.

4.2.2. Secondary outcomes

The secondary outcome measures for the pilot RCT were:

- Scores on a survey which measured parents'/guardians' self-reported attitudes to HE (ordinal)
- Scores on a survey which measured parents'/guardians' commitment to discussing the process of getting into HE with their child (ordinal)

Of the 23 participants who completed the follow-up survey after the event had taken place, 65.2% (n=15) had attended. There was no significant effect of attending the event on parent/guardian self reported attitudes towards HE. In fact, the mean score on the survey which measured parents'/guardians' self-reported attitudes to HE is slightly lower for the group that attended the event than the mean score for those who did not attend the event (3.24 compared to 3.35). A t-test found that this difference is not significant ($p = .72$).

There was an overall percentage increase in the number of parents/guardians who indicated (self-report behaviour) that they had discussed going to university with their child in the month following attendance at the event (69.1% at baseline compared to 93.3% at follow-up). Of the parents/guardians who did not attend the parent event, 87.5% also indicated that they had discussed going to university with their child in the month prior.

As only 23 participants completed the follow-up survey and this was likely influenced by selection bias - meaning that the most engaged parents were more likely to respond to the survey - these results should be considered with caution. The breakdown of respondents demographic characteristics and a more detailed description of the results is shown in [Appendix 8](#).

4.2.3. Findings from the parent/guardian interviews

This section summarises the insights gained from semi-structured interviews with parents/guardians, as part of the implementation and process evaluation. There were a limited number of interviews (n=5), and the sample of parents/guardians is not intended to be representative, rather the goal of this section is to provide an indication of the range of experiences of the intervention and control material.

Only two parents/guardians who were interviewed received the personalised invitation. One parent/guardian commented that sending the letter to their home address “*makes it very personal*” and prompted their son to “*feel that he’s kind of important – that it’s [the programme] about him rather than about his school*”. Both parents/guardians were

satisfied with the content of the letter and said that it provided a sufficient amount of information. Neither the control or treatment group parents/guardians that were interviewed were able to provide any feedback on how the content of either letter could be improved.

In terms of the method of delivery, one parent/guardian who received the standard invitation voiced a concern about receiving letters through the school, that they may get lost in transit, *“I get the letters from the school, and [child] is pretty good but there might be a time when the letter doesn’t make it home”*. Another parent/guardian suggested that it would have been better to receive an email rather than letter as this would allow them to more easily access the Zoom webinar link and allow them to easily follow-up with any questions they might have about the event or the programme. The other parents/guardians appreciated receiving the invitation via letter, commenting that they were *“old school like that”* and preferred to have a hard copy of the invitation that they can *‘stick on the fridge’* so they are able to remember the event.

4.3. Discussion

This section of the report has outlined the context, methodology and results of a pilot RCT conducted to investigate whether personalised communications are an effective strategy for increasing parental/guardian engagement with the FT programme. The findings show that personalised invitations resulted in significantly more parents/guardians attending the parent event, relative to a standard invitation. Due to the small sample sizes in the survey data collected to measure secondary outcomes, it is not possible to confirm whether attendance at the event resulted in changes to parental/guardian attitudes or behaviour. The FT team at the University of Birmingham have started collecting parental/guardian email addresses and will be moving to email contact in the future. Personalised invitations, sent via email, could potentially be more effective in encouraging parental/guardian engagement than standard types of communication, but this will need further investigation. Some parents/guardians prefer receiving letters to emails, and a further pilot RCT could be conducted to compare the impact of letter versus email communication.

An important limitation of the pilot trial is that a small number of parents/guardians may have received both the personalised communication and a reminder from the school. It is not possible to identify how many parents/guardians in the treatment group also received reminder emails from teachers, however, two participants from the interviews stated that in addition to the letter, they also received a reminder from teachers, which may have impacted the results.

Furthermore, a small proportion of parents/guardians attended the event which may impact the results. There are several possible reasons for this. Some parents/guardians

reported not having received an invitation at all; this may be because the addresses were not up to date for these parents/guardians. The event may have been held at a time that was inconvenient for some parents, especially those working evening or night shifts. Some students in the control group may not have bought their letters home from school and therefore parents/guardians may never have received the invitation. It is difficult to confirm the delivery of letters that are sent directly home with students. As noted, emails may therefore be a better method of communication in the future so that delivery and receipt indicators can be used.

The next section of the report explores how an online survey was used to better understand the short-term outcomes associated with different modes of mentoring delivery (online versus in-person) for FT students. This is not linked to the pilot RCT, instead offering insight into how a post-test survey methodology might be used to assist with the evaluation of the FT programme.

5. Online mentoring survey

5.1. Overview of the method and design

Approximately half of the FT schools engaged with the mentoring component of the programme between October - December 2020. This was due to schools' capacity to engage during the COVID-19 pandemic. Depending on school restrictions, mentoring was either delivered in-person or online. In order to measure the short-term outcomes associated with different modes of mentoring delivery, an online survey (see [Appendix 5](#)) was distributed to all Year 10 FT students who received mentoring.

5.1.1. Research question

The research question explored in this report here is:

- Do levels of aspiration, knowledge, and understanding, and subject choice, vary according to whether mentoring was delivered face-to-face in-person versus online?

5.1.2. Research methods

The mentoring element of the FT programme had already commenced when the mentoring sub-evaluation was developed, which meant that it was not possible to collect baseline survey data and monitor changes in student outcomes pre- and post-mentoring. Instead, post-mentoring survey data is used to observe any differences in outcomes between students who received mentoring in-person compared to those who participated in online mentoring. Due to the COVID-19 restrictions, the mentoring survey was distributed online only.

5.1.3. Outcome measures

Primary outcome

The primary outcome measures are knowledge of, and aspirations to enter, HE. These are measured using scores on a survey scale (ordinal).

Secondary outcome

The secondary outcome measures are scores on a survey which measured students' response to the mentoring (ordinal).

5.1.4. Sample

FT school coordinators were contacted and asked to distribute a link to the online mentoring survey. A total of 157 students were sent a link to the online mentoring survey and 58 students (36.3%) responded to the survey. Three participants were removed from the study as their responses to the survey were incomplete. Therefore, the final sample consisted of 55 participants from 24 schools in the Birmingham Sandwell and Solihull areas. [Table 7](#) below shows the demographic characteristics of the sample - 25 (45%) of students who completed the survey had received some form of mentoring. Of these, 7 (12.7%) had received online mentoring and 18 (32.8%) had received face-to-face mentoring.

Table 7: Demographic characteristics of participants engaged in mentoring

	Total sample (n=55)	Face-to-face mentoring (n=18)	Online mentoring (n=7)
Male	20 (36.4%)	8 (44.4%)	1 (14.3%)
Female	35 (63.3%)	10 (55.6%)	6 (85.7%)
Parent/guardian attended HE	4 (7.27%)	2 (11.11%)	0
FSM	45 (81.81%)	13 (72.22%)	5 (71.4%)

5.1.5. Analytical approach

The survey data is analysed using descriptive statistics and an independent sample t-test to compare the outcomes of students who attended in-person mentoring to outcomes for students who participated online. Open-ended, free text responses to the

survey questions were analysed using thematic analysis and key themes were highlighted.

5.2. Results

Just under half (n=25, 45%) of the students who completed the survey received mentoring; of which 7 (12.7%) received their mentoring online and 18 (32.7%) received in-person mentoring. Those who had received online mentoring attended between two and eight sessions, with an average of four sessions attended (SD= 2.34). Those who received in-person mentoring had between one and 10 sessions, with an average of 3.28 sessions (SD= 2.34).

Students were asked to indicate which areas of support were covered in their mentoring activity: choosing from possible options including GCSE subject specific support; study and revision skills; information about university; and support with self-esteem and confidence - see [Table 8](#). Study skills was the most popular topic covered in the mentoring sessions, with 23 (92%) of those who received mentoring indicating that they had received this type of support. The next most popular type topic was GCSE subject specific support and information about university, with 17 (68%) students indicating that these had been covered in their sessions. Just over half of the students (n= 14, 56%) indicated that they had covered content relating to self-esteem and confidence.

Table 8: Content covered in the mentoring sessions

GCSE subject specific support	Study and revision skills	Information about university	Self-esteem and confidence
17 (68%)	23 (92%)	17 (68%)	14 (56%)

Students were asked to qualitatively indicate what they found most useful about the mentoring sessions. Using thematic analysis, the responses were broadly categorised into three themes: (i) revision techniques; (ii) applying for university/future careers; and (iii) having an experienced mentor.

Of the students who received mentoring, 22 (88%) agreed that their mentor was a positive role model. The qualitative responses indicated this was due to three main reasons: (i) their mentor was inspiring; (ii) their mentor was personable; and (iii) their mentor motivated them.

Students who received in-person mentoring were asked, using an open-ended question, what they liked about having mentoring delivered via this method. Most of the students reported feeling comfortable having their mentoring in-person as it allowed for clear communication between the mentor and mentee. When asked what the biggest

disadvantage of having the mentoring delivered in-person was, the results could be grouped into two themes: (i) frequency and duration, and (ii) timing. In terms of frequency, one person said a disadvantage was the number of sessions that they were able to attend due to COVID-19. Another disadvantage was that some students had to miss lessons in order to attend the mentoring.

The most commonly listed advantage of having the sessions delivered online was that students felt more comfortable and confident in the sessions. The most commonly listed disadvantage of having the sessions delivered online was technical issues.

Students were asked to indicate how much they agreed or disagreed with several statements about their mentoring experience. Responses showed that 88% of students found the mentoring useful and indicated that it increased their confidence to apply to the University of Birmingham and other top universities, and that their mentor was a positive role model. Additionally, 52% of students indicated that they had learnt new skills from their mentor.

Table 9: How the mentoring was received by students

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	Any endorsement (strongly agree and agree)
I found the mentoring sessions useful	0	0	3 (12%)	19 (76%)	3 (12%)	22 (88%)
The mentoring has increased my confidence to apply to the University of Birmingham and other top universities	0	0	3 (12%)	12 (48%)	10 (40%)	22 (88%)
I felt that my mentor was a positive role model	0	0	3 (12%)	13 (52%)	9 (36%)	22 (88%)
The mentoring sessions inspired me to aim higher	0	0	5 (20%)	14 (56%)	6 (24%)	20 (80%)
The mentoring sessions met my needs	0	1 (4%)	7 (28%)	16 (64%)	1 (4%)	17 (68%)
The mentoring sessions motivated me to work harder to achieve high grades	0	1 (4%)	7 (28%)	12 (48%)	5 (20%)	17 (68%)
I felt that my grades have/will improve as a result of the mentoring	0	0	9 (36%)	15 (60%)	1 (4%)	16 (64%)
I learnt new skills from my mentor	0	2 (8%)	10 (40%)	10 (40%)	3 (12%)	13 (52%)

A series of independent samples t-tests were conducted in order to compare the perceived impact of the different formats of mentoring (online versus in-person). No significant differences were found between the two groups on any of the mentoring outcomes - see [Table 10](#) below.

Table 10: Independent samples t-test for online versus in-person mentoring

Survey item	In-person (n=18)	Online (n=7)	t	P
	Mean	Mean		
I found the mentoring sessions useful	4.00	4.00	.00	1.00
The mentoring has increased my confidence to apply to the University of Birmingham and other top universities	4.39	4.00	1.31	.20
I felt that my mentor was a positive role model	4.28	4.14	.45	.66
The mentoring sessions inspired me to aim higher	4.06	4.00	.18	.86
The mentoring sessions met my needs	3.61	3.85	-.88	.39
The mentoring sessions motivated me to work harder to achieve high grades	3.94	3.57	1.05	.31
I felt that my grades have/will improve as a result of the mentoring	3.78	3.42	1.44	.16
I learnt new skills from my mentor	3.50	3.71	-.58	.57

5.3. Discussion

This section of the report has outlined the methodology and results of an online survey conducted to better understand the short-term outcomes associated with different modes of mentoring delivery (online versus in-person) for FT students. The results show that there was no significant difference between the two groups on any of the mentoring outcomes. However, the small sample size is a considerable limitation and future research should further explore this research question.

The next section of the report outlines the implementation and process evaluation, used to unpack whether the FT programme was implemented as planned and whether the assumptions underpinning the programme held true and influenced students as expected.

6. Implementation and process evaluation

6.1. Overview of the method and design

The purpose of the implementation and process evaluation is to explore the fidelity and compliance of the programme and to better understand whether the programme worked as theorised. That is, whether activities were implemented as intended, how activities did or did not work to achieve intended outcomes, and the factors that affected these processes.

6.1.1. Research methods

The implementation and process evaluation aimed to address the following research questions:

- Was the programme implemented as planned?
- From the perspective of key stakeholders (parents, schools, students) how effective is the FT programme?
- What elements of the programme are particularly effective and why?
- How can the programme be improved to have greater impact?
- Did the intervention work as theorised?

6.1.2. Research methods

The implementation and process evaluation draws on multiple sources of data in order to gain a deeper understanding of the FT programme. The following methods were employed:

- Semi-structured interviews and focus groups were conducted with the FT Team, mentors, previous FT students who were currently at university, parents/guardians, school coordinators and current FT students. When interviewing parents/guardians, those who also took part in the pilot RCT were also contacted in order to explore perceptions and opinions towards the online event and the type of communication that they received.
- Secondary data sources were also used (e.g., attendance records, FT programmes, and annual reports) to assist in the evaluation of the dosage and fidelity of the intervention activities.

6.1.3. Sample

Qualitative interviews

[Table 11](#) below details the sample for the qualitative interviews. Qualitative focus groups and telephone interviews took place between October and December 2021. The research assistant conducted the telephone interviews, and both the project lead and research assistant conducted the focus groups. Four members of the FT team took part

in a focus group and 11 school coordinators took part in a separate focus group. Eight previous FT students, seven mentors, and six parents/guardians were interviewed via telephone. Focus groups lasted approximately one hour, while telephone interviews ranged from 25 to 40 minutes.

Table 11: Sample for qualitative interviews

Stakeholders interviewed	Sample	
FT Team	4	Four members of the FT Team at the University of Birmingham took part in an in-person focus group. All four participants were female. Some had been working on the programme for many years and some joined the programme more recently
Parents/guardians	6	Of the parents/guardians who took part in an interview, five were female and one was male. They were parents/guardians to daughters in Year 9 (n=2), sons in Year 9 (n=2), a son in Year 10 (n=1), and a son in Year 11 (n=1).
School coordinators / staff	11	11 school coordinators from 10 schools took part in the focus group. The sample included four males and seven females. School coordinators role within the FT programme ranged from 3 months to 7 years
Mentors	7	Of the seven mentors, two were male and five were female. All were current University of Birmingham students in their 2 nd of 3 rd year at university. Two mentors had previously been on the FT programme when they were at school. Four of the mentors had started mentoring this academic year (2021-22) and the remaining were mentors in the previous academic year (2020-21).
Previous FT students	8	Of the eight previous FT students that part in telephone interviews, all were female with ages ranging from 18 – 19. Four of the students were in their 1 st or 2 nd year at the University of Birmingham, two were studying at a different university (University of Wolverhampton and Birmingham City University). One of the participants was retaking year 13 at college, and one student was taking a gap year but had applied to study at the University of Birmingham).
Total	36	

6.1.4. Analytical approach

Interviews were recorded and all of the content was typed verbatim into Microsoft Word, and analysed using QSR NVivo (Version 12) (a qualitative data analysis computer software package) and Microsoft Word. The data were analysed using thematic

analysis.⁷ This analysis employed a hybrid, deductive and inductive approach to examine reported outcomes of the FT programme and identify other themes that indicate additional impact.⁸ For the deductive (data-driven top-down) approach, the interviews were coded in terms of outcomes/impact that are outlined in the FT Theory of Change ([Appendix 3](#)). For the inductive (concept-driven bottom-up) approach, new open codes were generated to account for additional responses. Drawing these two approaches together allowed for the development of patterns from unknown parts of the intervention that may fall outside the predictive codes of deductive reasoning and allow for a more complete analysis. For the deductive part of the thematic analysis, the codebook was deduced a priori using the FT Theory of Change and an initial reading of the raw interview data. The codebook underwent several iterations through an inductive process before the final version was agreed on by the research team (see [Appendix 10](#) for interview schedules and [Appendix 11](#) for a copy of the codebook). For the inductive part of the thematic analysis, transcripts were read, re-read, and coded line-by-line. Ideas which reappeared across multiple interviews or which represented an important idea related to the research aims were identified as themes. As each new category is identified, previous themes were re-read for relevant material. The themes and sub themes from the focus groups and interviews are presented in [Appendix 12](#).

6.2. Results

The findings presented in this section are based on qualitative interviews and focus groups conducted with key stakeholder groups as set out in [Table 11](#) above. The purpose of the implementation and process evaluation is to understand how the key elements of the programme operate in practice from the perspectives of key stakeholders in order to gain a deeper understanding of the programme. It should be noted the previous FT students took part in the programme during pre-COVID-19 times and therefore their experience was very different from the current cohorts who engaged mainly virtually with the programme.

6.2.1. COVID-19 context

This section outlines relevant contextual information, regarding the implementation and delivery of the FT programme, during the COVID-19 pandemic.

Disrupted activities

⁷ Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.

⁸ Swain, J. (2018). *A hybrid approach to thematic analysis in qualitative research: Using a practical example*. SAGE Publications Ltd.

As shown in [Table 12](#) below, attendance at FT events and activities was disrupted by the COVID-19 pandemic. During the academic years 2020-21 and 2021-22, certain elements of the programme were not implemented as intended.

- *Academic mentoring* in 2020-21 was delivered to a limited number of schools. Schools able to take part received either online or face-to-face mentoring. All mentoring was then cancelled due to lockdown. Some students were then sent PowerPoint resources from their mentors which they could access at home.
- *The University Experience Day*, which is typically held on the university campus, was cancelled for students in Year 9 in 2020-21 while Year 9s in 2021-22 experienced a virtual live University Experience Day.
- *Year 8 Launch Event* and the *Subject Taster event* is usually held at the university, instead these were hosted as virtual live Zoom events and online Canvas⁹ courses instead.
- *For the Year 8 Launch Event* parents/guardians are also usually invited onto campus with their child, however they could not due to the event being held online.
- *For the Year 11 Celebration Event*, Year 11s in the 2020-21 academic year experienced a virtual celebration event. The Year 11's in the 2021-22 academic year got to go on campus for their celebration event, however, their parents/guardians were not invited which is typically the norm.
- *Mentoring* was also severely disrupted. Some sessions never started, others started and were then stopped after a couple of weeks due to the lockdown, some of the mentoring sessions moved online, and some mentors were asked to send pre-recorded resources. All of the other activities were pre-recorded and hosted on Canvas or they were presented in the form of a webinar.

⁹ Canvas is a course management system that supports online learning and teaching. It allows professors to post grades, information, and assignments online.

Table 12: Attendance at FT events during pre-COVID-19 and COVID-19 periods

Activity	2018-219	2019-20	2020-21	2021-22
Year 8 launch event	Cohort 12 162/176 127 parents attended	Cohort 13 Pre-recorded canvas.	Cohort 14 Virtual	N/A
Subject taster day	Cohort 11 143/164 students	Cohort 12 158/176 students	Cohort 13 Changed to Subject Taster	N/A
Subject in 10	N/A	N/A	Canvas course	N/A
University experience day	Cohort 11 151/164	Cohort 12 0 (cancelled)	Cohort 13 Virtual	N/A (not occurred)
Mentoring	Cohort 10 165/165 learners from 30 schools	Cohort 11 174/174 learners from 30 schools	Cohort 12 89/177 learners from 15 schools had a mentor launch due to the pandemic. All 31 schools had access to some online resources instead	Cohort 13 150/164 learners 28 schools
Celebration event	Cohort 9 107/173	Cohort 10 80/157	Cohort 11 Virtual	Cohort 12 76/171

In terms of reach (the percentage of the possible target group that attended the programme), one drawback of the online Canvas pages and webinars was that it was not possible to monitor attendance levels. Therefore, it is not possible to determine how many of the FT students accessed these online activities/resources.

For the Year 11 Celebration Event 2021-22, which was the first in-person activity to be held on campus since the start of the pandemic – 15 out of 31 FT schools attended and 76 out of the 171 (44%) students in that cohort attended the event. Attendance was impacted by COVID-19 and staff absences relating to COVID-19.

As a result, neither students nor parents/guardians had the opportunity to experience the university campus. Parents/guardians are typically invited on campus for the Year 8 Launch Event and Year 11 Celebration Event, however this was stopped due to COVID-19. The FT team suggested that moving these events online detracted from a large part of the experience of attending the programme. One of the FT team commented:

“They completely lose the stuff we were talking about, the positives, the meeting people, the meeting students, the identity of being a Forward Thinking student, the looking around and just visually seeing other people that look like them”

(FT team member)

“There was like a final session, like a celebration event. Because it was online we couldn’t really interact with other people like our team so I think it was a bit restricted”

(Previous FT student)

The school coordinators also talked about how visiting the campus was an important part of the programme for both parents/guardians and students. For example:

“It worked really well pre-COVID when you did have the parents come for the launch event and the same as for the celebration event where we used to all go to the Great Hall with the parents. And when I used to get feedback, they really enjoyed the event. But like I said now with COVID, we can’t do that”

(School coordinator)

Mentoring

Mentoring was particularly affected by COVID-19 because it is an activity that usually takes place face-to-face and over a number of weeks. Many of the mentoring sessions were stopped early due to the lockdown. Some schools were not able to accommodate the mentoring sessions being held online. In cases where in person mentoring was permitted, some students had to miss sessions due to isolating. The general consensus from the mentors was that students did not get to experience the full benefits of mentoring that they would experience as a result of taking part in the usual 10-12 weeks. For example:

“I had maybe 10 sessions in total across my five students, which is really not enough and as I said, I don’t really know what happened. So, in my case, they definitely received too little and it was a shame because I could see how I could help them. And I had like pinpointed things that I wanted to work on with them. So, I almost had a plan in my head, but I wasn’t able to execute that”

(Mentor 1)

“So, they started off face-to-face between October until December. Then in January, the lockdown hit, so they were meant to be moved online however the school weren’t able to accommodate this”

(Mentor 2)

However, some mentors commented that they did not receive any sort of feedback from sending weekly presentations so they were not sure how effective they were from the

perspective of the student or school coordinator. They were not able to tell levels of engagement with these materials, how these materials were being received, and whether or not they contained suitable content – as they would usually be able to do with in-person mentoring. For example:

“So, I was sending these things [resources] every week. I didn't hear anything, I didn't have any engagement with the students. That was the only bit that was a bit disappointing, really. I was sending PowerPoints each week with no sort of feedback or anything like that”

(Mentor 2)

“I didn't even hear from the students when I was sending these weekly PowerPoints. I didn't get to speak with them or anything like that ... Because I set like little tasks at the end of each session on the PowerPoint slides with a bit of information and then like little tasks and things. So, I still have no idea how much they were actually engaged with it or if they were actually helpful”

(Mentor 2)

However, from the perspective of some coordinators, sending resources home was still seen as beneficial as it allowed the students to engage with the mentoring information whilst they were not at school. For example:

“I'd just like to echo what everyone else has said and that the mentoring has been fantastic. And last year, for example, even with COVID-19 we had two in person sessions and then COVID-19 happened, and then I asked the mentors, could they send the modules through? Like clockwork, every week they sent them through, so it was still engaging at home”

(School coordinator)

Mentoring is usually delivered on a one-to-one basis. However, some of the mentoring sessions were delivered as group sessions, either in person or online, due to the number of lessons students had missed due to COVID-19, and to make the sessions easier to organise to accommodate COVID-19 bubbles.

“We tried the remote mentoring in Year 10, but it was difficult because kids with bubbles and had to be in different rooms, you know, so we did it as well as a group session”

(School coordinator)

Mentors discussed the benefits and drawbacks of one-to-one and group mentoring. The main drawback of group mentoring is that the sessions are meant to be tailored to the students' needs which is sometimes not possible when multiple people have to be

accommodated during a session. For example, one mentor said the following:

“But I think from the outset, as well, I had a sort of expectation that I'd be doing maybe one- to- one sessions, or like mini pair sessions. But [school coordinator] was quite adamant that she'd just like it all done in a one-hour session. And so, we went with a group approach instead, which is still good. But after we'd done revision strategies, which is the topic everybody wanted to do, I realised that quite a few of the students want to do different things, which logistically makes it harder because I can't do individualised sessions, and it is group sessions instead”

(Mentor 5)

Another disadvantage mentioned by one mentor is that students can be distracted when they are working with their friends:

“Previously they haven't really engaged as much because obviously they're with their friends and so then they might not take it as seriously”

(Mentor 6)

However, there were some advantages to having group sessions which the mentors discussed. These advantages included that the students may feel more comfortable working in groups, and more likely to participate as a result, and get to experience more benefits from taking part in the mentoring sessions:

“I think the students, from the very first session were a lot more at ease because they had each other. They didn't feel awkward interacting with me, which made our sessions all very smooth and interactive. It's good because they're quite familiar with each other which helps with the group dynamic. And yeah, most of them, I'm quite lucky in my group, most of my group just love answering questions and just a really proactive so it's a great, great group”

(Mentor 5)

“One of the students felt a lot more comfortable sitting in a group because I've seen that a few of them knew each other, so they felt more comfortable and they were more willing to take part because it was in a group. So, I think the group sessions was a good actual method to do it in because students are a lot more confident when it's with their friends, also people they know.”

(Mentor 6)

Benefits of one-to-one mentoring discussed by mentors included that it can encourage students to come out of their shell, particularly if they are shyer in comparison to other students, and it is possible that some students in the group sessions may have not received as many benefits from doing one-to-one mentoring:

“I think that's where it's helpful that it's one-to-one because you've sort of not got a choice really to participate. Whereas, it's quite easy to hide in a classroom and not get involved, which is again, sort of a positive for the student really, it pushes them to develop their communication skills as well”

(Mentor 2)

“They can express themselves freely and they feel more comfortable to express their concerns, which is really good. Just to have someone, especially the same face each week that they can talk to and bring up any problems that they have.”

(Mentor 3)

Some mentors who moved to online mentoring described some of the drawbacks of conducting the mentoring sessions online. This included that this method is not as engaging for the student, the mentors are limited in the activities that they can do, it is less easy to communicate through a computer screen, there may be technical issues, and it is harder to form a trusting mentor-mentee relationship:

“Firstly, I think it was a bit strange for the students as well; the fact that we were talking like through a screen. I think with mentoring, it's important to develop a close, trustworthy relationship so that all your students can open up to you and also so that you can better understand your student. I think just engaging with them, it would have been easier if we were in person. It probably would have been a bit more fun as well because we could have done some activities or games and things, but we simply just couldn't do that through a screen”

(Mentor 1)

“I would say the advantage primarily of doing it in person is you can see the benefits in-person, you can get more engagement from someone. It's easier to communicate, to listen, to ask questions and again, online there's always technical difficulties, that kind of thing”

(Mentor 2)

When asked what was the impact of COVID-19, some coordinators stated they had to learn to adapt to moving activities online. This was a new experience for them, and they suggested that if they had to go online again, that they would be more prepared for the transition:

“It's nobody's fault really but the technology. And, you know, we were all kind of learning how to deal with it”

(School coordinator)

“I think if we had to go for it, you know, to go remote again, I think we've got more experience now”

(School coordinator)

Lack of support

From the perspective of the school coordinators, one of the main impacts as a result of the changes introduced due to COVID-19 was that students may not have had the support or resources to continue to engage with the FT programme online at home. Given that FT students are students selected from disadvantaged backgrounds, access to laptops and technology to continue with activities such as mentoring from home, was not always feasible due to their personal circumstances. For example, one school coordinator said:

“With our school because of connectivity and demographics in school... if [mentoring is] during normal periods, students might be able to access things remotely if it's just that one person but when the entire family was home and parents were home they just had one laptop, that presented issues, you know? Because of personal circumstances, you know, not everyone engaged with the mentoring”

(School Coordinator)

Difficulties in communication

Some school coordinators reported that delivering the programme online was difficult for them to communicate with students about the FT programme:

“If it's not after school, as we can get them together in a room, like you said, that is money to them. Put it up on the big screens. And I think the impact of kind of not having the contact with us in school as well. So, I know for my students, I have to chase them up for consent forms and I'm the face of [FT] in school and not having that possibility of coming to see me or me going to chase them because it was all online and having to email them again, like you say, correspondences and things like that. Absolutely no fault of the programme. It was just COVID-19; the fact that we weren't that figurehead in school for them to come and talk about it.”

(School Coordinator)

School coordinators also noted that it was difficult for them to communicate with students about the FT programme:

“If it's not after school, as we can get them together in a room, like you said, that is money to them. Put it up on the big screens. And I think the impact of kind of not having

the contact with us in school as well. So, I know for my students, I have to chase them up for consent forms and I'm the face of [FT] in school and not having that possibility of coming to see me or me going to chase them because it was all online and having to email them again, like you say, correspondences and things like that. Absolutely no fault of the programme. It was just COVID; the fact that we weren't that figurehead in school for them to come and talk about it"

(School Coordinator)

6.2.2. Programme implementation

Data collected from key stakeholders is reported under the following themes: (i) the progression element of the programme; (ii) increased knowledge and awareness of university and university life, (iii) the campus experience; (iv) aspirations and confidence, (v) mentoring.

Progression element of programme

A key aspect of the programme is the element of progression, where students are part of the programme from Year 8 through to Year 11. This means that activities can be tailored to the particular age of the students, enabling students to seek advice as their future plans change, and offering a range of different activities which encourages continued engagement with the programme. On the whole, the way that the programme is structured seems to be viewed positively by several of the FT team members and students:

"I think because they're not one-off events, we can really target them based on the year that they're in and what kind of information they need at that particular point in their school year"

(FT team member)

"I felt that each year when it came up to different events it was a gradual process from going to the Taster Days and the small events, to learning more as you go along and as GCSEs became more real and got more serious. They always felt like a helpful outside source. I'm glad that it was over the course of five years"

(Previous FT student 4)

Some participants, however, commented that there were sometimes large time gaps between activities. This risk is that students forget about certain elements of the programme or possibly lose motivation with FT. For example, these two previous FT students said the following:

“I guess I’d say the only disadvantage was maybe the big gaps that we had. We would do something in Year 8 and visit the university but that would be it for a while until much later on. I mean, I remember when we had our mentor for that period, I can’t remember for how long, but after they left there was just this long period where we didn’t do very much. I guess there were times that we could have forgotten that we were on the programme and you know, forgotten previous things that we discussed. But I guess that’s understandable because it’s such a long programme and there’s only so many events that they could do”

(Previous FT student)

“I remember at the beginning of the programme there wasn’t really a lot that we did. It picked up more in Year 9 and 10 and then it kind of went away in Year 11 as well. So maybe one extra in Year 11, although I know that’s a busy year so maybe that’s why there’s not a lot of events. But maybe one more in Year 8 and one more in Year 11, if that’s possible”

(Previous FT student)

One coordinator also discussed how some of the students end up seeing the programme as a series of standalone events, rather than a continuous programme. They further suggest that the schools could be doing more to promote FT during the time between the activities, and this is something that they would appreciate additional guidance from the FT team on how to implement:

“I think what I’m trying to say might be similar to what your school does but I know for some of our students, I like the model of doing it throughout the years, but some of them can see it as a standalone event throughout the years. And I think the real key for successes in schools is how it is embedded within the school practice and that’s often what I think the school makes of it. It is once you’ve done a session, say, in Year 9, what then, what was before that session in school? What happens afterwards? And it’s whether, again, it’s what the school makes of it, but then also thinking for the future, could Forward Thinking Birmingham then visit and help the schools promote that within the school - offer advice and strategies, etc., I think would really make it more sort of continuity throughout the year rather than being one standalone event”

(School coordinator)

Increased knowledge and awareness of university and university life

Many students reported initially not wanting to go to university because they did not see it as something for them or they did not understand the benefits of going to university. For some, this belief appeared to be extrinsically influenced by a lack of family

experience of HE. For others, a lack of understanding around requirements and opportunities available was evident.

The FT programme aims to provide students with information about HE, career pathways, finance, and more broadly the practicalities involved with being a university student to enable students to make an informed decision about next steps. Five of the students interviewed considered that this enabled them to plan potential routes to apply and progress to university by encouraging them to start thinking about their future career paths, and the GCSEs/A-levels that they would need in order to study a certain course at university. As these comments highlight:

“Prior to the whole programme I didn’t really have a lot of information about how to get to university or higher education but when I started the programme, and as I progressed through it, I definitely got more insight into higher education by going to the campus, by going to the University of Birmingham, by sitting in on lectures, by getting that information on financing and how it works, getting information on what to do to get to higher education, to get to university...”

(Previous FT student 7)

“[The FT programme] also gave me the chance to go to university because it told me that you need to have a certain number of GCSEs or a certain number of A-levels or BTEC equivalent and have certain grades. I think it’s so important to research what course you want to do and what grades you need for that in order to go to university. So Forward Thinking definitely showed me that I had to do my research beforehand.”

(Previous FT student 7)

“There’s been no one to help me understand university life, especially coming from a family where I’m the first person in my family to go to university” (Previous FT student 4)

“I didn’t know much about university then. My parents didn’t go to university. So, from an early age I got to experience what university would be like, what sort of procedures I’d go through”

(Previous FT student 3)

“It was knowing about the full life of a student that really helped me make a decision about whether I wanted to go to university and pushed me towards better grades and a better outlook really on what education could do for me”

(Previous FT student 4)

In addition, the programme helped parents/guardians to find out more about HE, particularly if they had not been to university themselves. This knowledge was gained through resources sent out by the FT team and by some parents/guardians choosing to be involved in online events offered to FT students. Findings revealed that

parents/guardians felt better placed to support their child to apply to go to university:

“I didn’t go to university and her Dad didn’t go either, but I feel like I’ve got more knowledge now by sitting and watching the things that you’ve sent and things like that with her”

(Parent 1)

The campus experience

Having the opportunity to visit the university campus multiple times as part of the programmes on campus events was highly valued by students for several reasons. Firstly, it allowed the students to experience what university is like, not just in terms of the academic aspects but also the social side.

“I really enjoyed just being able to learn more about the university campus itself and getting to experience that, you know, because walking there I could picture myself as a student and walking around it was just something that boosted my confidence, you know, knowing that this could be part of my future someday” (Previous FT student 4)

“We looked at different student accommodation. For example, they kind of told us about if there’s shared accommodation with the kitchen etc. or if you have your own en suite. They showed us how the Unite student area, I think it’s called, at the University of Birmingham, where all the students can gather round. There were also different societies that they talked to us about so if you wanted join a society in science, you could do that. They told us about the social aspects and more of the education side as well”

(Previous FT student 6)

“Another important piece I think was definitely the university experience. Especially at the beginning and end. Getting to know the campus and getting to know the staff was really important because when I came to university it was a big campus, you know, so it was good to have that head start in terms of navigating my way around”

(Previous FT student 1)

This was echoed by the FT team and school coordinators:

“I think the Year 9 Uni experience is probably a big one from the student point of view because they get like lots of different things to do on that day and they get to experience, you know, a day in the life of a student”

(FT team member)

“I guess for a lot of them, that [the experience day] might be their first sort of real full interaction with the university, like they’d have had the launch, but maybe they haven’t seen sort of too much or got to attend like sessions and that sort of thing. So, I suppose

that event is, it could be the event where they decide it is for me or this particular subject, sort of have that sort of like life changing moment, you know?"

(Forward Think team member)

"It's nice for the students to have the opportunity to obviously come in to experience that first hand and have conversations about it just to spur the interest of their next destination"

(School Coordinator)

The campus days also enabled students to strengthen their social connections and bond with other FT students and staff and share experiences:

"...we got to bowling afterwards and there was a really nice event with that and all of the students talked together about their day which was really nice. So that was an important aspect for me, for everyone to sort of get together and talk about those experiences"

(Previous FT student 4)

"I think coming into the university and them taking us out to celebrate the programme was really nice because we got to talk and bond with other students as well as, you know, students from our school that were doing the programme"

(Previous FT student 5)

A few of the school coordinators also discussed how attending the campus visits promoted an improved relationship between them and the FT students. This was facilitated by the student being taken out of the school environment and having more confidence to communicate with their teacher. It also allowed them to bond over their shared experience of attending the event:

"I think also it builds a better relationship. They feel like they can share anything with you, you know outside of school. 'Oh, I've done this, I've done that' which they will not share with anybody"

(School Coordinator)

Interviews with students, parents/guardians and staff clearly highlight the importance of the live campus experience. However, as outlined in the [section 6.2.1](#) above, a number of events and activities had to be cancelled due to the restrictions on socialising and face-to-face contact during the pandemic.

Aspirations and confidence

A key aim of the programme is to provide inspirational experiences outside of the school environment to enable students to overcome perceived misrepresentations about HE such as university not being for them, or students not being confident that they can successfully progress.

Some FT parents/guardians considered that the programme had raised their child's aspirations and confidence. They reported a strength of the programme was that it introduced university to students at an early age, encouraging them to start thinking about the possibility of going to university which raised their aspirations and confidence. Two parents/guardians reported their children had become more enthusiastic about learning about HE and the prospect of going to university as a result of being part of the programme. Some parents/guardians also felt that the programme had boosted their child's confidence and belief that they are capable of going to HE and that HE is for somebody like them. Comments included:

"She'd always been clever and we knew she was going to do well but this has given her more of a reason to think about what she's going to do further on ahead. I think it's given her a goal to achieve and now she thinks 'yeah, I can do this' and she's already trying to get to that goal earlier than she would have been doing it"

(Parent 1)

"It's been a really good idea because [child] was never that enthusiastic about university in the first place. He was always thinking about alternative options but I've encouraged it from the beginning. It was nice that actually it did make him more engaged and enthusiastic about the idea [of going to university]"

(Parent 2)

School coordinators also reported that parents/guardians were appreciative that the programme had encouraged their child to start thinking about university and that they had noticed a positive change in some of the students who had engaged with the programme in terms of their university aspirations, particularly if they did not have university specific support at home:

"The parents have got back to me and the students themselves and said that it has empowered them to start thinking about higher education because previously they really hadn't"

(School coordinator)

"It's given us the opportunity for students from a disadvantaged background where nobody in the family before has ever been to university, or it's something which is not considered. It's nice for the students to have the opportunity to obviously come in to

experience that first hand and have conversations about it just to spur the interest of their next destination. I think it's nice for them to engage in that, especially if they haven't had the experience from home"

(School coordinator)

For students, early exposure to university and the possibility of going to university allowed the idea to flourish and motivated some students to achieve for high academic goals, and to work harder at school so as not to waste their opportunity:

"I think you just get to put it into perspective that I'm going to work hard and I'm going to be able to come to one of these types of universities. I think they're called research-intensive universities. So, it just motivates you to do well because you know you'll be there"

(Previous FT student 6)

Parental engagement

Feedback from the interviews indicated that the level of engagement from parents/guardians of the students was mixed. Some parents/guardians seemed to be heavily involved with their child's progress on the FT programme, while others were less familiar or aware of their participation. One of the reasons for this may be due to the parents'/guardians' own limited experience of HE. For example, the following was said by a previous FT student and a school coordinator:

"I don't think it particularly engaged my parents to be honest. I think it was mainly just focused on me. I think the only point where my parents were involved or my Mum, should I say, was at the beginning to get consent and at the end at the graduation. I don't think they were really involved at any point"

(Previous FT student 1)

"Some of our parents possibly have no idea that the children are doing this, even though we've explained it to them but that's due to their background and culture and other parents are really engaging with their children on it"

(School coordinator)

Parents/guardians suggested that they would like to have the opportunity to visit the university campus and have a university tour (in addition to attending the launch and celebration events) as this would allow them to get an idea of what university is like, particularly if they have not previously been themselves. This may then result in parents/guardians being more supportive of their child's engagement with the programme and be more likely to support their HE journey. For example:

“She would like to go around the university and see it for herself and so would I. We would like the chance to, you know, get there and have a good look round and you know, her more than me but I’d still like to open my eyes and see you know, all the benefits and everything”

(Parent 4)

“I think when my son has his Taster day to go in it would be nice if I could go with him. Not for the whole day just like for a tour with him just so I can see...put my fears at ease as well as his own. Your little one is growing up and going into the big wide world and you get to see like when he went to [high school name] I got to go to a parent tour and walk around and so on. It would be nice to do the same just to put my heart at ease”

(Parent 5)

This was echoed in the feedback provided by the previous FT students who welcomed the opportunity for parents/guardians to be included in the Subject Taster and University Experience days. This would allow the parents/guardians to see what university life is like for themselves and get their buy-in:

“I think my parents were engaged but I think a really nice addition could be if there was a parent and pupil sort of event where parents could be invited along if they had any questions about university because if they haven’t been to university before I guess it’s better hearing it cleared up by somebody who has actually attended and worked at university than sometimes the student because the student may not be fully informed themselves”

(Previous FT student 4)

“I think one time we got a tour of the campus. I think maybe it would be cool if parents could come on that tour because I think that would be...obviously they could look at university with them and maybe they could talk to parents more about university life and about maybe moving out to university in the future”

(Previous FT student 7)

A school coordinator suggested engaging with parents/guardians more frequently with written communication and gave the example of contacting the parent with a debrief after a student has engaged with an activity. This suggestion may help to increase parent’s awareness of the FT programme, motivate them to talk with their students about the activities they have engaged with, and increase their overall involvement and support and their child’s future aspirations:

“I know we get sent letters, consent letters for trips and things like this. But maybe after the event alongside us congratulating them maybe like an automated email to the

parents to say well done for the attendance of your child or something” (School Coordinator)

Mentoring

The purpose of mentoring is two-fold; to support progression to university (through information advice and guidance, exploring potential careers, next steps, study skills, extracurricular activity), and raise young people’s aspirations to succeed in their education (by influencing attitudes towards learning, supporting study skills, motivation, confidence and time management). Mentors are current undergraduate students at the university and it is a paid role. Mentors have to apply for the role, are interviewed and attend an in-depth two-day training programme as well as resources.

Mentoring was viewed as particularly effective by students because it offered a wide range of tailored support and could be adapted to suit the students’ individual needs. The content of the mentoring sessions is led by students and their needs which meant a wide range of topics were covered during the mentoring sessions including study skills, time management, subject specific support, careers and information about university.

Receiving mentoring helped some students to prepare for their exams by covering topics such as time-management skills, revision tips, specific learning strategies, and to produce revision timetables. For this reason, some students reported mentoring had supported them with their attainment at school by helping them to prepare for GCSEs:

“She was an English student, and at that time I was doing my English GCSE, I think. And, she gave me like so many tips on that. And also, she gave me some tips on my other GCSEs”

(Previous FT student 7)

Mentors also provided information about future job prospects, career pathways, CV writing skills, and information about work experience. The mentors helped students by offering advice on how to choose their A Levels that would help them to progress to university. Other students said that speaking to a mentor inspired them to think about what courses they wanted to study at university, or for those who already knew, the mentor helped them to find out further information about their chosen course:

“I remember I had mentors who were currently studying at the university come over and explain how to budget as a student, whether to go for accommodation, how to write a CV. This is all really important skills and information that I carry out today”

(Previous FT student)

“At first I was quite set on doing law then as I spoke to the mentor I kind of realised that maybe my passions lie somewhere else”

(Previous FT student)

Having a mentor who was a current University of Birmingham student was seen as beneficial by some students because they were able to relate to them and learn from their experiences by hearing about their story of their route into university. The mentors also provided students with information about what university is like, including the social aspects, and students were able to ask specific questions which the mentors would answer for them. The opportunity to speak to somebody about all the different aspects of university life and have their questions and concerns addressed was the main reason why mentoring was valued by students especially when they might not have had that support or guidance at home or school:

“She told me about like her route to university, and university life. So, not just like the academic side of things, but all the other parts of the university, including, you know, the finances and how to deal with them and how you'll be billed for them after university as well. And that was really important. Especially for people that obviously can't pay for university, like straight away”

(Previous FT student 7)

“When you go to university it's normally a teacher or a lecturer or something that tells us about it but when you hear it first hand from a student and how they experience it it's different. For example, they know more of the social side of things or they know more about...they can tell us how they got to where they are and what influenced them to do that certain course”

(Previous FT student 6)

“I think it was a really good experience to have because it gave me kind of an understanding of what university would be like. Especially speaking to someone from that uni, it helped me understand what it would be like if I went to the University of Birmingham. I think that was one of the reasons why I ended up choosing the University of Birmingham as the uni I wanted to go to”

(Previous FT student 5)

All the mentors interviewed echoed what the students had reported; that mentoring was particularly effective because students got the opportunity to receive tailored support, hear about somebody's first-hand experience, speak to somebody who is closer to their age and they may feel more comfortable talking to, and in some cases, having a FT mentor from a similar background further inspired them to apply for university:

“I would have to speak with students about topics that I was unfamiliar with. One of my students, she wanted to be a dentist. That was her career choice, but I had no knowledge of dentistry before the session. So, I did look a bit at what A levels you need for dentistry, what the courses look like at university etc. So, I did do a bit of research

just before sessions so that I could better help my students and give them good advice”
(Mentor 1)

“What [the student] might not disclose or say to a teacher, they can be honest with you because you're a bit more of a similar age to them and they can be honest about their progress and be honest about what struggles they're finding... I think that was my strength as a mentor, being able to have meaningful conversations with these young people and actually guide them through problems they wouldn't address to other people”

(Mentor 6)

Two of the mentors who were interviewed were previous FT students, meaning that they had been through a similar experience as the FT thinking students and as a result they were able to draw on their own positive experiences to guide the students further during the mentoring sessions:

“I come from a place where like a lot of people don't go to university. I think the student mentors that I had [on the FT programme], they basically showed me that everything's possible. That if you put in the work you get to these places, no matter where you come from. So, I think I wanted to instil that into other young people who are from a similar background to me”

(Mentor 4)

“The main thing I liked was working with young people who were from a similar background to me who were basically going through what I'd gone through a few years ago, having doubts about their ability to go to university. I think the biggest thing I enjoyed was giving these young people my own experiences and letting them know that no matter where they come from, they can still achieve great things. And I think that was the biggest take away I had from this programme”

(Mentor 6)

“One of our current mentors who's just started with us, tomorrow's her second session. She was a student of ours who's now mentoring in the Forward Thinking programme. So, seeing successes like that is really nice as well”

(School Coordinator)

Some mentors also reported that mentoring had helped students to increase their confidence and their belief that they could go to university. Mentors reported they saw an increase in aspirations and motivation of the students they mentored:

“In the sessions I would see a lot more students, other students, becoming more confident. I'd see them actually having some aspirations because at the start of the

sessions I asked them what do you actually want to do in life and no one really knew, no one really like had any aspirations. I think then the sessions actually inspired these young people to know that they could actually do something, they could actually go to university and go to a good university such as the university of Birmingham, and they could actually achieve great things. That was the greatest thing, giving them the motivation to know that they can actually achieve whatever they want to achieve”
(Mentor 6)

Some parents/guardians also stated similar reasons for the effectiveness of mentoring. They suggested that mentoring was important because it enabled their child to get access to information about university from a current university student, receive one-to-one tailored support and get the opportunity to ask any questions that they may have. One parent was also looking forward to their child receiving mentoring because they believed that this support would help increase their child’s confidence and belief in his own abilities:

“Any little bit of extra help he can get will benefit him greatly and he lacks confidence so to have somebody come and speak to him would be a great benefit for him as well. To try and bring him out of his shell a little bit and give him the confidence that he can go to university. He can do things. Just because he might have little quirks that doesn’t mean it’s going to stop him. So, I think the mentors will reaffirm that self-belief as well”
(FT parent 5)

Most of the school coordinators praised the mentoring aspect of the programme, and suggested that its success was in part due to high quality mentors, mentors from different backgrounds, mentors from similar backgrounds, and also that the mentors acted as role models for the FT student to aspire to:

“I know my students love their mentoring. They come and moan at me if there’s something going on and they can’t attend” (School Coordinator)

“I’d just like to echo what everyone else has said and that the mentoring has been fantastic”
(School Coordinator)

6.3. Discussion

6.3.1. Did the programme work as theorised

The FT programme Theory of Change (see [Appendix 3](#)) sets out how the programme activities are intended to lead to the desired outcomes and highlights the key

assumptions underpinning this theory. There are two key assumptions that inform the FT programme:

1. Low aspirations, lack of motivation and negative attitudes towards HE are key barriers to students from disadvantaged backgrounds accessing research-intensive universities.
2. Working with students at a young age and over a longer period of time, is more effective in raising aspiration, attainment, achievement and progression to research-intensive universities.

Information on student targeting reveals that many of the students on the programme had parents/guardians who had no experience of HE. Therefore, these students are likely to experience a lack of HE specific guidance and information from members of their family, which may influence student motivation and attitudes toward HE. Yet, as shown in the above results section, the programme - and university campus visits in particular - appears to support students to raise their aspiration and motivation to progress to HE.

The Theory of Change illustrates that several key outcomes are theorised to be associated with participating in the FT activities. These outcomes include: increased knowledge and understanding about HE courses and post 18 opportunities; raised aspirations to study at a research-intensive university; improved awareness of progression routes; making informed educational and progression choices; and increased progression to Level 3 studies. The outcomes are largely supported by the data and feedback from the key stakeholder groups consulted during the implementation and process evaluation. The targeting and engagement data shows that the programme targeted the right students, those who met the eligibility criteria, and the majority of schools and students had actively engaged with the programme activities. The FT staff are experienced in delivering the programme and have been working on the programme for a number of years. Feedback from school coordinators and students suggested they were positive about the programme and its delivery overall.

The mentors on the programme attend a two-day intensive training and are supported by the FT outreach team throughout their placements. Again, both school coordinators and students spoke highly of the mentors and the mentoring. The activities delivered were geared around increasing knowledge of HE and pre and post 16 education choices and pathways. The feedback discussed earlier suggests students understood the messages from the activities, had increased their knowledge and understanding about HE and this informed their educational decisions.

The Theory of Change highlights that the intended impact of the FT programme is increased applications to selective / research-intensive universities, and increased numbers of underrepresented groups progressing to selective / research-intensive

universities. The implementation and process evaluation results generally support this assumed impact, as all of the interviewees were either currently studying at the University of Birmingham, a different university, or they had applied to HE. However, further causal evaluation is required to provide evidence for whether those on the FT programme were more likely than a control group to apply to, and attend, HE. The programme Theory of Change can also be updated to include the suggested changes to make intervention more effective.

6.3.2. Limitations of the implementation and process evaluation

The evaluation did not include the views of previous FT participants who did not apply or progress to HE. Similarly, the sample consisted of current HE students and those who were planning to go but were taking a gap year. The parent/guardian sample size is small and consisted predominantly of Year 9/10 parents/guardians. Therefore, parents/guardians of FT students who have completed FT were not interviewed.

One major methodological limitation that should be considered is that convenience sampling was used to recruit the participants. Limitations of this sampling method include an inability to generalise the results of the interviews to the population as a whole, as well as potential biases due to individuals' motivations to take part in the research. This may also have led to self-selection bias or volunteer bias. For example, all of the previous FT students who took part in the interviews were either at HE or had applied to go to HE. Their FT experience was also different from that of the current cohorts. None of the students who did not end up applying to HE opted to take part in the research. This means the data does not include the opinions and experiences of those for whom the intervention may not have worked for, or for those whom chose a different path.

7. Discussion

7.1. Discussion of findings, linking the IE and IPE results

This report provides insight into the different elements of the FT multi-intervention outreach and mentoring programme.

The aim of the pilot RCT was to examine whether employing personalised communication is an effective strategy for increasing parental engagement with the FT programme and encouraging parents/guardians to support their child to apply to a research-intensive university. The pilot RCT showed that personalised invitations resulted in significantly more parents/guardians attending the parent event - attendance at the event was 2.1 times more likely if the parent received a personalised invitation, relative to receiving a standard invitation. Due to the small sample sizes in the survey data collected, it is not possible to confirm whether attendance at the event resulted in changes to parental/guardian attitudes or behaviour.

The newly introduced FT parent event was successful and positively received but parents/guardians would like on campus engagement. Interviews with parents, students and school coordinators indicated that there could be more engagement with parents/guardians, for example providing debriefs after events and the opportunity for parents/guardians to come onto campus and look around the university. The parent event could continue as a regular fixture in the programme but as an in-person event at the university and include a tour of the campus and accommodation.

Results from the mentoring survey, which compared the perceived impact of the different formats of mentoring (online versus in-person), showed that there was no significant difference between the two groups on any of the mentoring outcomes. However, the small sample size is a considerable limitation and future research should further explore this research question.

Results from the implementation and process evaluation suggest that mentoring was viewed as particularly effective by students because it offered a wide range of tailored support and could be adapted to suit the students' individual needs. As well as academic skills, mentors also provided information about future job prospects, career pathways, CV writing skills, and information about work experience, and offered advice on how to choose their A Levels that would help them to progress to HE.

On campus activities are also identified as a key element of the programme and are perceived by participants to be particularly effective in supporting students to apply and progress to HE in the future. These activities were perceived to be highly beneficial because they allowed students to experience what HE is like, in both the academic aspects and the social side which enabled students to see themselves at once at HE. The campus days also enabled students to strengthen their social connections with

other FT students and staff, providing them the opportunity to engage with other students from different schools and develop their social skills and confidence.

The progressive nature of the programme is a fundamental element of the programme, where students are part of the programme from Year 8 through to Year 11. This enabled students to have access to tailored support through their education journey, appropriate for their age and capabilities. It also gives students access to advice and support as their future plans change.

Interviewees, who took part in the implementation and process evaluation, reported that the programme supported students with:

- Information, advice and guidance about HE. This enabled students to plan for future application to HE and motivated them to start thinking about their future career paths and pathways.
- Awareness of HE and university life. Some students reported initially not wanting to go to HE because they did not see it as something for them or they did not understand the benefits of going to university. For some, this belief was influenced by a lack of family experience of HE. The programme supported these students by providing them with awareness about what HE is like, and that it was something for them.
- Increased aspirations and confidence. The programme encouraged students to start thinking about the possibility of going to HE at an early age which appeared to raise their aspirations and confidence. As a result of participating in the programme, students were more enthusiastic about the prospect of going to HE and had boosted confidence and belief that they were capable of going to HE and that it is for somebody like them.
- Increased motivation to reach their potential. Early introduction to HE and the possibility of going to university motivated students to work hard at school and to aim high academically so they can go to university.

The programme was significantly disrupted by COVID-19 which may have had a negative effect on outcomes. The FT programme consists of several key activities that are typically held in person, between years 8-11. However, due to the COVID-19 pandemic, one event (University Experience, April 2020) and mentoring for some schools was cancelled, whilst the majority of other activities were moved online based on government guidelines. This meant some of the cohorts attended just virtual events and others a combination of both virtual and in person depending on when they joined the programme.

The main components of the programme appear to work as theorised; however, further causal research is required to evidence outcomes. There are a number of elements that appear to make the programme effective, namely, targeting the 'right' students,

experienced programme delivery staff, trained mentors and engagement of schools and students. The assumptions of the FT programme (low aspirations, lack of motivation and negative attitudes towards HE are key barriers in less advantaged students' participation in research-intensive universities and working with students at a young age and over a longer period of time, is more effective in raising aspiration, attainment, achievement and progression to research-intensive universities), were supported by interviews with key stakeholder groups. The outcomes from attending the FT programme (increased knowledge and understanding about HE, courses and post-18 opportunities, raised aspirations to study at a research-intensive university, improved awareness of progression routes, making informed educational and progression choices, and increased progression to Level 3 studies), were also supported by the data from key stakeholder groups. However, the evaluation was not able to evidence whether the theorised impact of the FT programme were achieved (increased applications to selective / research-intensive universities, and increased numbers of underrepresented groups progressing to selective / research-intensive universities).

7.2. Limitations of the research

The limitations of each individual component of the evaluation are listed under the relevant sections:

- See [Section 4.3](#) for the limitations of the pilot RCT
- See [Section 5.3](#) for the limitations of the online meeting survey
- See [Section 6.2.4](#) for the limitations of the implementation and process evaluation.

The subsections outline the common limitations observed across the different components of the evaluation.

7.2.1. The use of unvalidated survey scales

The measures used to capture secondary outcomes for the pilot RCT and primary and secondary outcomes for the online mentoring survey were unvalidated. Using unvalidated scales means it is not possible to be confident that the questions asked actually measure the intended outcome. For example, participants may not understand the questions, or may have different interpretations to the questions' meaning. For future evaluations, researchers should seek to either validate the survey scales prior to conducting the study or adapt the pre-validated scales for use in a specific context.

7.2.2. Small sample sizes

The small sample sizes for the pilot RCT, the online mentoring survey and the implementation and process evaluation limit the validity of the evaluation. It is likely that the behaviours and views captured are not representative of the overall population and that selection bias - a trend in which the most engaged and motivated participants respond to the evaluation - influence the results observed.

8. Conclusion

This study adopted a mixed-method, multi-cohort approach which involved integrating data from both quantitative and qualitative research designs including a pilot RCT, a mentoring survey and qualitative interviews with key stakeholders of the programme. Overall, feedback from key stakeholders was complementary and positive. The pilot RCT provides some preliminary but promising evidence that personalised invitations were an effective way to increase parent engagement with a parent event.

The implementation and process evaluation suggests that students felt they had been provided with effective information, advice and guidance about HE, increased awareness of HE and increased aspirations, confidence and motivation for students to reach their potential. However, the evaluation was not able to evidence whether the theorised impact of the FT programme – increased applications and progression to research-intensive universities – was achieved.

The limitations of the study pose a significant challenge for estimating impact. However, a study conducted simultaneously to the evaluation outlined in this report provides further insight into whether those on the FT programme are more likely than a comparator group to apply and attend HE and specifically research-intensive universities. The exploratory analysis using a matched comparison group from the HESA data can be [accessed here](#).

The COVID-19 pandemic meant that some key aspects of the project were not implemented as intended (in particular mentoring and experiencing the university campus), which could negatively influence programme impacts (application and progression to HE).

Based on the findings presented in this report, the following research priorities have been identified:

- With an increasing move towards digital communication, there is a need to look at the impact of letters versus email communication with parents/guardians.
- Mentoring is highly valued by WP practitioners, beneficiaries and stakeholders, however, more causal research is needed on the impact of different forms of mentoring, for example, impact of group versus individual mentoring sessions and online versus in-person sessions.

- Administrative data needs to be easily accessible and available to support experimental and quasi-experimental research to produce causal evidence of the impact of WP interventions on applications and progression to HE.

9. Appendices

Appendix 1: Research-intensive and/ or high tariff HE providers

Research-intensive and/ or high tariff HE providers
0108 Aston University
0109 The University of Bath
0110 The University of Birmingham
0112 The University of Bristol
0114 The University of Cambridge
0116 University of Durham
0117 The University of East Anglia
0118 The University of Essex
0119 The University of Exeter
0123 The University of Lancaster
0124 The University of Leeds
0125 The University of Leicester
0126 The University of Liverpool
0127 Birkbeck College
0131 Goldsmiths College
0132 Imperial College of Science, Technology and Medicine

0133 Institute of Education
0134 King's College London
0137 London School of Economics and Political Science
0139 Queen Mary University of London
0141 Royal Holloway and Bedford New College
0146 SOAS University of London
0149 University College London
0151 University of London (Institutes and activities)
0152 Loughborough University
0154 Newcastle University
0155 University of Nottingham
0156 The University of Oxford
0157 The University of Reading
0159 The University of Sheffield
0160 The University of Southampton 0161 The University of Surrey
0162 The University of Sussex
0163 The University of Warwick
0164 The University of York

0167 The University of Edinburgh

0168 The University of Glasgow

0179 Cardiff University

0184 Queen's University Belfast

0204 The University of Manchester

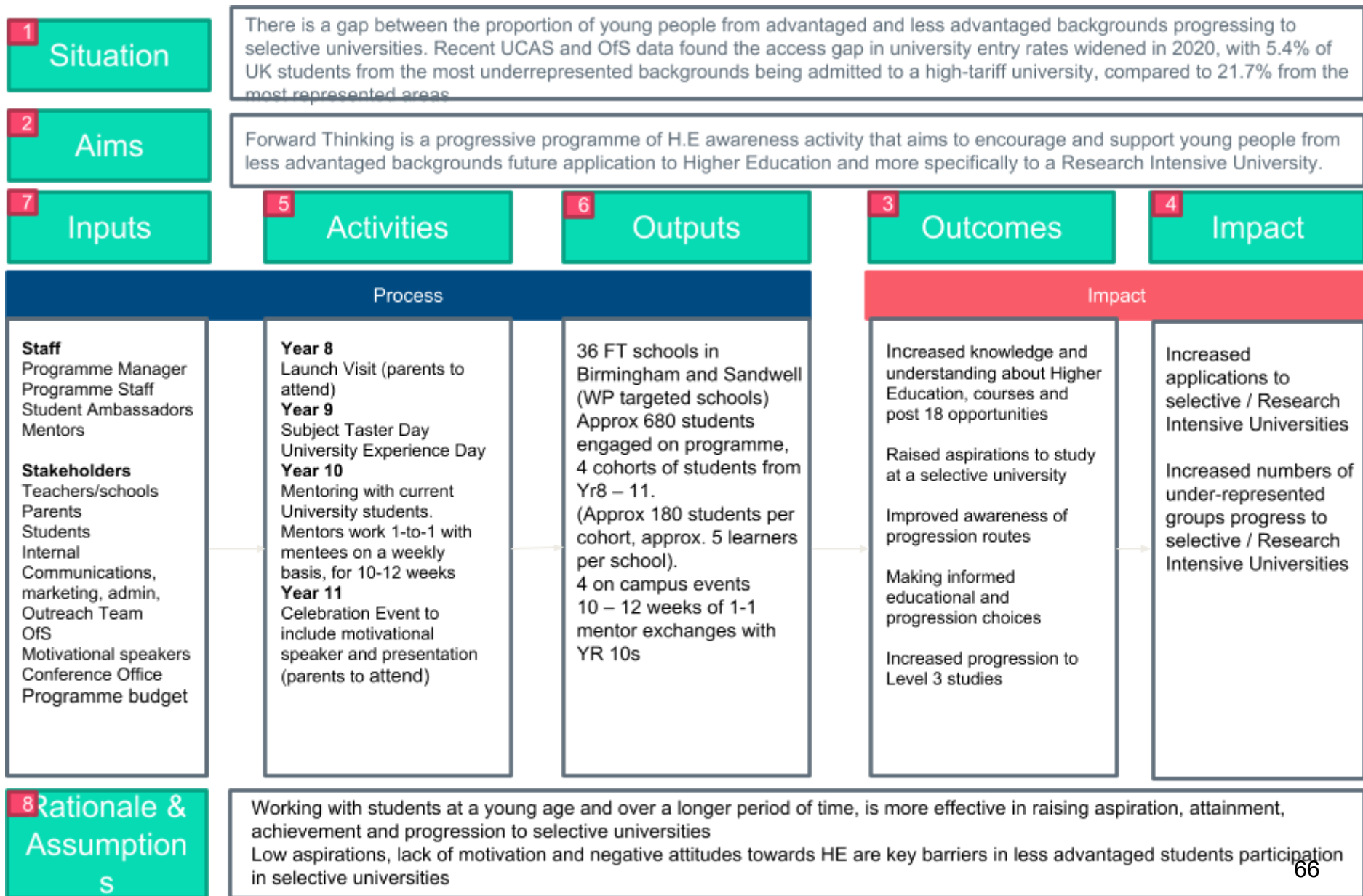
Appendix 2: Forward Thinking programme activities.

Activity	Description	Adaption during COVID-19
Year 8 launch day	The launch event typically takes place at the end of the academic year (June) when the student is in Year 8. The event introduces students to university life and the University of Birmingham. Students join in with team-building activities like creating spaghetti towers and are encouraged to start thinking about their future education and career choices. Students are also encouraged to fulfil their potential. Parents/guardians are invited to attend the event in the evening to meet the FT team and learn more about the programme.	During COVID-19, cohort 14 were not able to attend the live launch event when they were in Year 8. As a result, they were provided access to pre-recorded content hosted on Canvas (a course management system that supports online learning and teaching) in Year 9. The online content included an introduction to the programme given by the FT team, a video by a motivational speaker, and a campus tour video.
Year 9 subject taster day	Students experience interactive workshops and lectures on subjects such as engineering, earth sciences and languages. The aim of the subject taster day is to introduce students to a range of university subjects that they may not have tried at school.	During COVID-19, cohort 13 were not able to attend the subject taster day due to COVID-19 restrictions. As an alternative, they attended an online event: 'Subject in 10'. This online activity involved watching a video of student ambassadors talking about their university subject in ten minutes. The ambassadors discussed why they chose that subject, what the course entails, and future career options. They also watched a motivational speaker video and engaged with a 'You are a Star' activity.
Year 9 university	Students experience what it is like to go to university for the day. They watch a	During COVID-19, the university experience day was cancelled for Cohort

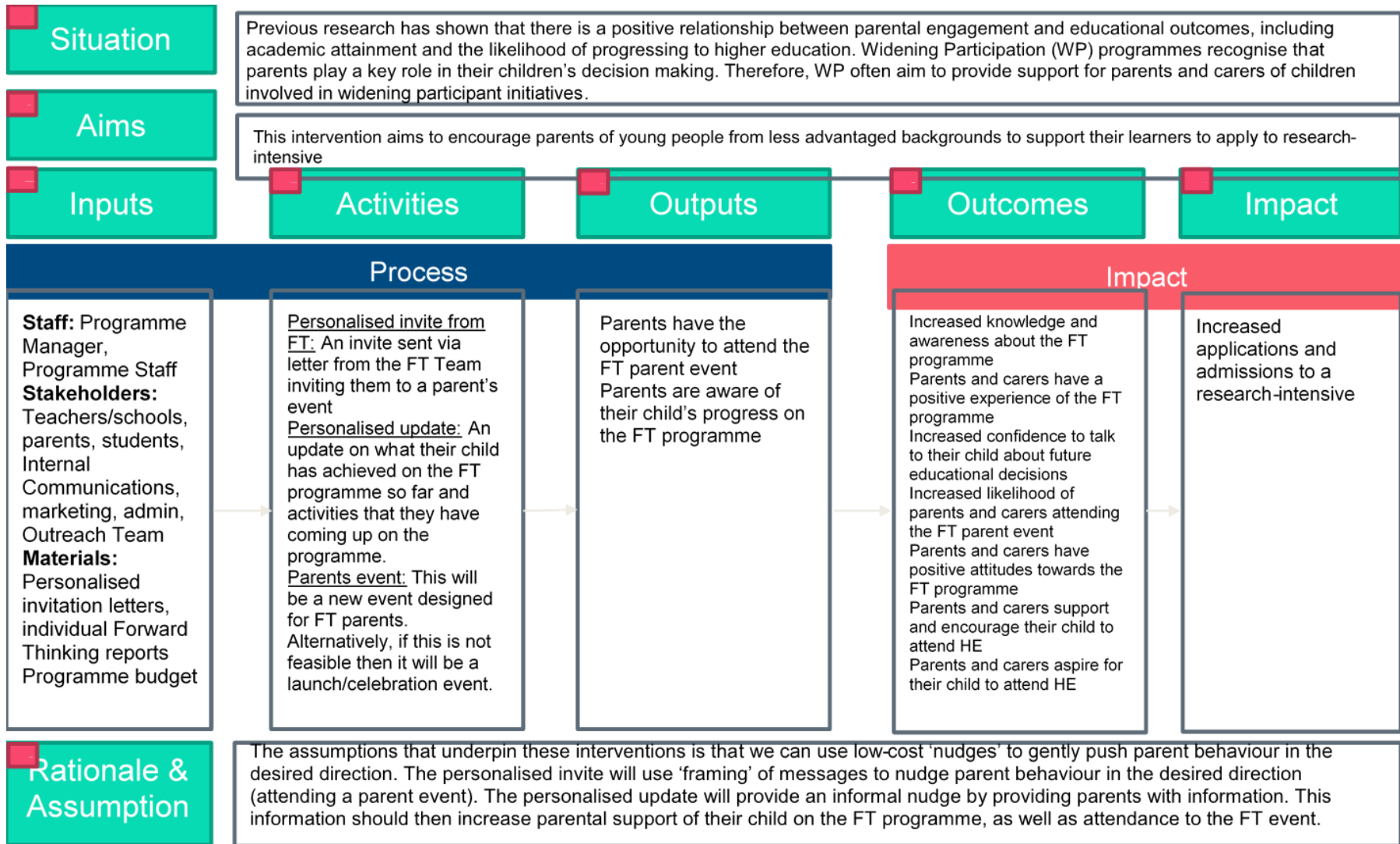
<p>experience day</p>	<p>theatre performance, try a sport and visit student accommodation at the University of Birmingham. There is also the opportunity for students to socialise at the end of the event by going bowling with other FT participants.</p>	<p>12. Cohort 13 watched a pre-recorded video by a theatre company, received a pre-recorded virtual tour of the University of Birmingham Campus, and had a Q&A session with a student ambassador.</p>
<p>Year 9 and 10 parent/guardian event</p>	<p>The parents/guardian event aims to introduce parents to the University of Birmingham and provide an overview of the FT programme.</p>	<p>During COVID-19, parents/guardians of Year 9 and 10 FT students (cohorts 13 and 14) experienced a new online event. The FT team hosted an online webinar which introduced the University of Birmingham, provided an overview of the FT programme, highlighted the importance of GCSE's and HE, outlined the benefits of HE, and provided advice on how parents can support their child. Parents were also given the opportunity to ask questions.</p>
<p>Year 10 mentoring</p>	<p>Learners receive one-to-one or small group mentoring. They receive tailored support, advice, and guidance from a current University of Birmingham student. Mentoring is designed to help students develop their skills, knowledge, confidence and aspirations towards further and HE. The mentors can offer support to students in the following areas:</p> <ul style="list-style-type: none"> ● Understanding school work better ● Asking questions about schoolwork, to aid with revision ● Revision skills ● Time management ● Advice on how to make the most out of Year 10 and 11 	<p>During COVID-19, mentoring took place in approximately half of the FT schools between October-December 2020. This was due to schools' capacity to engage with the programme during COVID-19. Depending on school and government restrictions, mentoring was either delivered face-to-face in person or face-to-face online with learners in the school. Some mentors who initially started mentoring face-to-face but had to stop sessions due to restrictions, sent their students pre-recorded materials addressing topics that they would typically cover within the mentoring sessions.</p>

	<ul style="list-style-type: none"> • How to research universities and university courses • How to make well-informed post-16 choices, such as choosing A Levels or alternative qualifications • Give advice on getting work experience, where to find it and how to arrange it. <p>Learners are advised to communicate their needs with their mentor in these meetings to make sure they get the information and support that they require.</p>	
<p>Year 11 celebration event</p>	<p>This FT event brings students, teachers and parents together so participants can graduate from the programme. The FT team celebrate students' achievements so far and focus on the upcoming challenge of GCSE exams. The FT team also talk to students about the next steps after FT, including the Pathways to Birmingham WP programmes delivered by the University to Year 12 and 13 students.</p>	<p>During COVID-19, cohort 11 received an online webinar celebration. They were provided with information about the University of Birmingham's Pathways to Birmingham programme, information about university and student finance, provided a link to watch Action Jackson (the motivational speaker), and provided a link to fill in the post programme questionnaire.</p>

Appendix 3a: Forward Thinking Theory of Change



Appendix 3b: Parent/guardian engagement Theory of Change



Appendix 4. The delivery method of the FT activities due to COVID-19

Cohort	Number of students	Year in 21-22	Activities completed	Virtual/In person	Dose (number of sessions attended)
14	185	9	Launch	Virtual live	1
			Parents event	Virtual live (23.11.21)	1
13	162	10	Launch	Pre-recorded canvas	1
			Subject in 10	Canvas	1
			University Experience	Virtual live (8 th June 6-7.15pm)	1
			Parents event	Virtual live (23.11.21)	1
12	171	11	Launch	Campus June 2019	1
			Subject taster	Campus Sept 2019	1
			University Experience	Cancelled – event 1 st & 2 nd Apr 2020 (left office 19 Mar for lockdown)	0
			Mentoring	Online and in person	0 - 8

			Year 11 Celebration	Campus (Dec 2021)	1
11	163	12	Launch	Campus	1
			Subject taster	Campus	1
			University Experience	Campus	2
			Mentoring	In person	10 – 12
			Celebration	Virtual	1

Appendix 5. Online mentoring survey

Forward Thinking

Top of Form

We are interested in finding out about your experience with the Forward Thinking programme. In particular we would like to find out more about your experience with mentoring and how it may have helped you. Your feedback is important to us, and this information will help us deliver sessions that benefit you.

We would be grateful if you could complete the following questions.

Your name

The name of your school

Did you have the support of a University mentor as part of the Forward Thinking Programme in Year 10?

Yes

No

o Mentoring

How many times did you meet with your mentor? (either online or in person)

Did you feel that the number of times that you met with your mentor was

Just right

Not enough

Too many

What support did you receive from your mentor?
GCSE subject specific support

Yes

No

Which subjects did you receive support for? Please select all that apply

Maths

English

Science

Languages

Other

If you selected Other, please specify:

Information and guidance about going to university

Yes

No

What information and guidance did you receive about going to university? Please select all that apply

Applying for university

Choosing a course

Student finance

Accommodation

Other

If you selected Other, please specify:

Study and revision skills

Yes

No

Self-esteem and confidence

Yes

No

Did you receive any other type of support from your mentor? If so, please tell us what sort of support you received

Please indicate how much you agree with the following statements

I found the mentoring sessions useful

- Strongly Disagree
- Disagree
- Neither Agree or Disagree
- Agree
- Strongly Agree

What do you think would have made the sessions more useful for you?

What did you find most useful?

The mentoring sessions met my needs

- Strongly Disagree
- Disagree

Neither Agree or Disagree

Agree

Strongly Agree

The mentoring sessions inspired me to aim higher

Strongly Disagree

Disagree

Neither Agree or Disagree

Agree

Strongly Agree

The mentoring sessions motivated me to work harder to achieve high grades

Strongly Disagree

Disagree

Neither Agree or Disagree

Agree

Strongly Agree

I learnt new skills from my mentor

Strongly Disagree

- Disagree
- Neither Agree or Disagree
- Agree
- Strongly Agree

What new skills did you learn from your mentor?



I felt that my mentor was a positive role model

- Strongly Disagree
- Disagree
- Neither Agree or Disagree
- Agree
- Strongly Agree

What was it about your mentor that made you feel that they were a positive role model?



I feel that my grades have/will improve as a result of the mentoring

- Strongly Disagree
- Disagree
- Neither Agree or Disagree
- Agree
- Strongly Agree

The mentoring has increased my confidence to apply to the University of Birmingham and other top universities

- Strongly Disagree
- Disagree
- Neither Agree or Disagree
- Agree
- Strongly Agree

How did your mentoring sessions take place?

- Face to face
- Online
- Face to face and online

What was the biggest **advantage** of having your mentoring delivered this way?

What was the biggest **disadvantage** of having your mentoring delivered this way?

Which of these approaches did you prefer?

Face to face

Online

Why did you prefer that method?

On a scale of 1 to 10, where 1 is awful and 10 is excellent, how would you rate your overall experience with Forward Thinking mentoring?

1 (awful)

2

3

4

5

- 6
- 7
- 8
- 9
- 10 (excellent)

o Future Plans

Student's plans often evolve as they move through secondary school. We are interested to understand what your current plans are at the end of Year 11

What do you want to do after you finish Year 11? Please select **one** answer

- Leave school at 16 and get a job
- Stay at school/college and get a job at 18
- Stay at school/college and go to University
- Apprenticeship scheme
- Don't know
- Other

If you selected Other, please specify:

What is the highest level of education that you plan to complete? Please select **one** answer

- GCSE (or equivalent Level 2 qualification, e.g. Level 2 BTEC, NVQ, Apprenticeship)
- A Level (or equivalent Level 3 qualification, e.g. Level 3 BTEC, NVQ, Apprenticeship)
- University degree
- Higher university degree (e.g. Masters or PhD)
- Undecided
- Other

If you selected Other, please specify:

To what extent do you agree with the following statements

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
I want to go to university	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can afford to go to university	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am smart enough to go to university	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would improve my chances of getting a better	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

job if I went to university					
University isn't for me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I understand how the subjects and grades I get at GCSE and A Level make a difference to the University course I can apply for	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How important is it **to you** that you go to university?

- Very important
- Quite important
- Not important
- I don't know

How important is it **to you** that you go to a **research-intensive** university?

- Very important
- Quite important
- Not important

I don't know what a research-intensive university is

How likely is it that you will go to university?

Very likely

Quite likely

Unsure

Quite unlikely

Very unlikely

What job or occupation do you **expect** to have at age 30?

What job or occupation would you **like** to have at age 30?

Please indicate how strongly you agree or disagree with the following statements

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
I am confident that I have the study skills to perform to the best of my ability in my GCSEs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I am aware of the options that I have after taking my GCSE exams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am confident that I will have the knowledge to choose the most suitable A-level subjects or other qualifications that will help me reach my career or university goals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am confident that I understand how the university application process works	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am confident I would fit in well with others if I went to university	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix 6 (standard and personalised invitations)

Standard parent invite



*Scan this QR code
using your mobile to
register*

Forward Thinking parent event

Date: Tuesday 23 November 2021

Time: 6-7pm

Location: online zoom webinar

Dear Parent/Guardian,

We are delighted that your son/daughter is still part of the University of Birmingham's Forward Thinking Programme which they joined in Year 8. The University is committed to its Outreach work with local schools and the Forward Thinking Programme, in which your child's school is a partner, is a key activity within this. It is targeted at gifted and talented young people who have the potential to consider future progression to a research-intensive university, such as the University of Birmingham.

Over the past few years your son/daughter has participated in a range of activities and accessed bespoke information and advice materials to support them in making an informed choice about GCSEs, post-16 options and progression to university. During the COVID-19 pandemic some of our Forward Thinking activities have been delivered online and we hope your son/daughter has found the information and sessions useful.

To help you support your son/daughter with their future choices we would like to invite you to an online **Forward Thinking Parent Event on Tuesday 23rd November 2021 from 6pm-7pm**. During the session we will provide an overview of the Forward Thinking Programme, information on the importance of GCSE's and how to support your son/daughter when thinking about their future pathways into higher education.

The event will be a Zoom webinar so your camera and microphone will automatically be turned off throughout the session; we won't be able to see or hear you and you are not expected to speak on camera. There will be the option for you to type any questions you may have throughout the session.

To access the webinar please register using the following link.

<https://tinyurl.com/FTparentevent>

We would also like to remind you that we recently sent out a survey for parents. If you haven't already, we would be grateful if you could spend 5 minutes completing it. You will have the chance to win **one of 10 £25 Amazon vouchers**. The survey can be accessed using this link or scanning the QR code below: <https://bham.onlinesurveys.ac.uk/parents>

We very much hope that you will be able to join us on 23rd November.

Best wishes

The Forward Thinking Team /University of Birmingham

forwardthinking@contacts.bham.ac.uk



Personalised invitation

Dear parent/guardian of XXX
1 name of street
Birmingham



Scan this QR code
using your mobile to
register

Forward Thinking parent event

Date: Tuesday 23rd November 2021

Time: 6-7pm

Location: online zoom webinar

Dear parent/carer of [child's name],

I am delighted that [child's name] is still part of the University of Birmingham's Forward Thinking Programme which they joined in Year 8. [child name] has been selected to be on the Forward Thinking programme as they have been identified as a gifted and talented young person with the potential to progress to a research-intensive university, such as the University of Birmingham.

To help you support [child's name] with their future choices, I would like to invite you to an online Forward Thinking Parent Event on **Tuesday 23rd November 2021 at 6pm-7pm**. During the session we will provide an overview of what your child has been involved with, the next steps on the programme and information on our Post 16 Pathways to Birmingham Programmes which follow on from Forward Thinking. Pathways to Birmingham offers Year 12 and 13 students an insight into higher education and professional careers routes, and support students throughout the university application process.

The event will be a Zoom webinar so your camera and microphone will automatically be turned off throughout the session; we won't be able to see or hear you and you are not expected to speak on camera. There will be the option for you to type any questions you may have throughout the session.

To access the webinar please register using the following link or scan the QR code at the top of this page using your mobile phone camera:

<https://tinyurl.com/FTparentevent>

We recently sent out a survey for parents. If you haven't already, we would be grateful if you could spend 5 minutes completing it. As compensation for your time taking part in the survey, you will have the chance to win **one of 10 £25 Amazon vouchers**. The survey can be accessed by accessing the following link or scanning this QR code:

<https://bham.onlinesurveys.ac.uk/parents>

I very much hope that you will be able to join us on 23rd November.

Best wishes

Lizzie Chandler / Head of Outreach

E.Chandler@bham.ac.uk



An update from the Forward Thinking Team

Your child is on track to complete the Forward Thinking Programme!

Your child has been part of the Forward Thinking programme at the University of Birmingham since Year 8. We would like to share with you how we have been supporting them and the activities that they have been involved in.

They have engaged very well with the Forward Thinking programme and here's a reminder of the programme elements that they have attended so far:

- **Welcome Launch (June 2020)**

We invited both students and parents to our pre-recorded launch event. The aim of the launch was to introduce your child to the programme, and get them to start thinking about their future education and career choices.

- **University Experience Day (June 2021)**

Students got to virtually experience what it was like to go to university for the day! They got to see the campus, student accommodation, and take part in some fun activities with their Forward Thinking peers.

- **Subject in 10 (October 2021)**

Students experienced online, interactive workshops on subjects such as engineering, earth sciences and languages. Our University of Birmingham ambassadors discussed why they choose the subject they are studying, what the course is like, and what careers these might lead to. The aim of the subject taster day was to introduce students to a range of university subjects that they may not have tried at school.

We look forward to your child attending future Forward Thinking events:

- **Mentoring (Year 10)**

Mentoring has started and will be taking place until April 2022. Students will receive tailored support, advice, and guidance from a current University of Birmingham student. Mentoring is designed to help students develop their skills, knowledge, confidence and aspirations towards further and higher education

- **Forward Thinking celebration event (December, 2022)**

This Forward Thinking event brings students, teachers and parents together so participants can graduate from the programme. The Forward Thinking team celebrate their achievements so far and focus on the upcoming challenge of GCSE exams. The Forward Thinking team also talk to students about the next steps after Forward Thinking, including the Pathways to Birmingham programmes in Years 12 and 13.

Appendix 7. Online parent survey

Page 1: The Forward Thinking programme

The University of Birmingham has been delivering the Forward Thinking programme for a number of years supporting school students by raising their awareness of higher education and applications to university. Your child is part of the Forward Thinking programme and through this study we would like to explore your thoughts and opinions towards your child's future education choices. The purpose of this research is to understand how we can boost parental engagement in their child's education journey. Longer term, we hope this will impact the learner but it is not the primary focus of this research.

You will now be asked a series of questions about you and your child. The survey should take no longer one month than five minutes to complete.

1. We would like to contact you in one month to invite you to take part in a follow-up survey. Please enter your email address here if you are happy for us to contact you

2. By completing the survey you have the option to be entered into our prize draw to win one of ten £25 Amazon vouchers. Would you like to be entered? We will contact all winners in November 2021.

Yes

No

Page 2: About your child

For this survey, we are asking about your child/student that is in Year 9, 10 or 11 and is part of the University of Birmingham Forward Thinking programme.

3. What is the name of your child that is on the Forward Thinking programme?

4. What school year is your child in?

9

10

11

5. What is the gender of your child that is on the Forward Thinking programme?

Male

Female

Prefer not to say

Other

a. If you selected Other, please specify:

Page 3: About you

6. What is your full name?

7. What is your relationship with the child who is currently on the Forward Thinking programme? *Required*

Father

Mother

Legal guardian

Carer

Other

a. If you selected Other, please specify:

b. What is your gender?

Male

Female

Prefer not to say

Other

i. If you selected Other, please specify:

8. Please enter your age in years

9. What is your ethnicity?

- White (Welsh, Scottish, Northern Irish or British)
- White (Irish)
- White (Gypsy or Irish Traveller)
- Any other White background
- White and Black Caribbean
- White and Black African
- White and Asian
- Any other Mixed or Multiple ethnic background
- Indian
- Pakistani
- Bangladeshi
- Chinese
- Any other Asian background
- African
- Caribbean
- Any other Black, African or Caribbean background
- Arab
- Any other ethnic group

10. Which of the following categories best describes your employment status? *Required*

- Employed full-time
- Employed part-time
- Not employed, looking for work
- Not employed, full-time carer
- Not employed, student/in education
- Retired
- Disabled, not able to work
- Other

a.If you selected Other, please specify:

11.What is your occupation?

12.Have you or your partner previously been to university?

- No
- Yes (I have)
- Yes (my partner has)
- Yes (we've both attended university)

Page 4: Future Goals and Aspirations

13.What is your expectation for your child after they turn 16?

- Stay at school to do A levels/BTEC
- Apprenticeship
- Leave education and get a job

Other

a. If you selected Other, please specify:

14. Please indicate the extent to which you agree or disagree with the following statements

	Strongly Disagree	Disagree	Agree	Strongly Agree
My child's education will create many future opportunities for them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It's important to me that my child goes to university	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It's important to me that my child goes to a Russell Group university	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I expect my child to apply to university	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
University is important for helping my child achieve their future goals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am hopeful about my child's future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Page 5: General university questions

15. Have you discussed going to university as an option with your child sometime in the past month?

Yes

No

16. Do you plan on discussing going to university with your child in the future? In which school years? *Select all options that apply*

Year 10

Year 11

Year 12

Year 13

No plans to discuss

Appendix 8: Results of the secondary survey outcomes of the parent/guardian engagement pilot RCT

This Appendix shows the results for the secondary survey outcomes of the parent/guardian engagement pilot RCT, including the breakdown of respondents demographic characteristics.

Table 13: Demographic characteristics of parents/guardians who responded to the survey

	Baseline survey (n= 81)	Follow-up survey (n=23)
Gender of student of FT programme		
Male	29 (35.8%)	10 (43.5%)
Female	51 (63.0%)	12 (52.2%)
Non-binary	1 (1.2%)	
Year at school		
9	36 (44.4%)	13 (56.5%)
10	45 (55.6%)	10 (43.5%)
Age of parent/guardian	42.95 years (SD= 8.09)	42.87 (SD= 6.75)
Relationship to child		
Mother	58 (71.6%)	19 (82.6%)
Father	22 (27.2%)	4 (17.4%)
Legal Guardian	1 (1.2%)	-
Gender of parent/guardian		
Male	23 (28.4%)	5 (21.7%)
Female	58 (71.6%)	18 (78.3%)
Ethnicity		
Asian	30 (37.0%)	5 (21.7%)
Black, African, Caribbean	9 (11.1%)	2 (8.7%)
White	19 (23.5%)	13 (56.5%)

	Baseline survey (n= 81)	Follow-up survey (n=23)
Other	23 (28.4%)	3 (13.0%)
Employment status		
Employed full-time	26 (32.1%)	11 (47.8%)
Employed part-time	13 (16.0%)	5 (21.7%)
Self-employed	3 (3.7%)	-
Student	3 (3.7%)	-
Unable to work - disabled	5 (6.2%)	3 (13%)
Full-time carer	16 (19.8%)	3 (13%)
Unemployed	14 (17.3%)	1 (4.3%)
Higher education status		
Has been to university	16 (19.8%)	6 (26.1%)
Has not been to university but partner has	4 (4.9%)	3 (13.0%)
Participant and partner have both been to university	2 (2.5%)	1 (4.3%)
Neither have been to university	58 (71.6%)	13 (56.5%)

Table note: where the number of participants in each row do not sum to the total this is due to missing data.

[Table 14](#) below shows the descriptive statistics for the baseline and follow-up survey results (for participants who did and did not attend the parent and guardian event).

There was an overall percentage increase for both the intervention and control group in terms of the number of parents/guardians who wanted their child to stay on at school once they had completed their A levels. The baseline survey indicated that 90.2% of parents/guardians wanted their child to stay at school and complete A-levels. This number increased to 93.3% for those parents/guardians who had attended the event. However, for those who did not attend the event, there was also an increase in the number of parents/guardians who wanted their child to stay on at school (100%).

There was also an overall percentage increase in the number of parents/guardians who indicated (self-report behaviour) that they had discussed going to university with their child in the month following attendance at the event (69.1% compared to 93.3%). Of

the parents/guardians who did not attend the parent event, 87.5% also indicated that they had discussed going to university with their child in the month prior.

Table 14: Descriptive statistics of the baseline and follow-up survey

		Follow-up survey responses (n=23)	
	Baseline survey response (n=81)	Attended parent/ guardian event (n=15)	Did not attend parent/ guardian event (n=8)
What is your expectation of your child after they turn 16?			
Apprenticeship	4 (4.9%)	-	-
Leave education and get a job	3 (3.7%)	1 (6.7%)	-
Stay at school (do A levels/BTEC)	73 (90.2%)	14 (93.3%)	8 (100%)
Discussed going to university with your child in the past month			
Yes	56 (69.1%)	14 (93.3%)	7 (87.5%)
No	25 (30.9%)	1 (6.7%)	1 (12.5%)
Parent attitudes/aspirations toward HE	3.36 (SD=.73)	3.24 (SD=.81)	3.35 (SD=.36)

Table note: where the numbers in each row do not sum to the total this is due to missing data. The - symbol in the table represents a value of 0.

Appendix 9. RCT Analytical Strategy

Baseline characteristics of participants will be described using means, SDs, and interquartile ranges for continuous data and proportions for categorical data.

The primary outcome measure (attendance at the event) will be analysed using binary logistic regression. Logistic regression will be used because of the dichotomous nature of the dependent variables and the presumed linear relationship between predictors and outcome. Binary outcome measures will be coded as 0 (no) and 1 (yes).

For logistic regression our model will be:

$$Y_i \sim \text{bernoilli}(p_i); \text{logit}(p_i) = \beta_0 + \beta_1 T_i + \beta_2 X_i + \beta_3 S_j$$

Where the function *logit* is defined as the log-odds ratio:

$$\text{logit}(p) = \log(p/1-p)$$

Where:

- Y_i is a binary outcome for participant i
- p_i is the probability of that outcome occurring
- T_i is a treatment indicator, set to 1 for participants in the treatment group and 0 for those in the control group
- X_i is a vector of demographic covariates
- S_j represents a school fixed effect allowing a different intercept to be fitted for each participant's school

Additional regression models will be conducted to measure the long-term outcomes (applications to a HE institute, attendance to a HE institution, applications to a research-intensive university, attendance to a research-intensive university) using the same strategy as above. Survey data will be analysed using OLS to incorporate continuous outcome measures.

Outliers and missing data

Outliers will be defined via visual and statistical examination of the outcome data by the research team. If outliers are identified and they substantively change the outcome of the trial, analysis will be presented both including and excluding these data points.

If there is missing data, we will explore the extent and patterns of missingness by student characteristics. We will explore various means of handling this missing data depending on the nature of the missingness (e.g., last value carried forward, mean 16 imputation, multiple

imputation). Where we exploit such methods, analysis will be conducted on both the raw data, and the data with imputed values as a robustness check. We will also analyse matched pre and post survey responses but we can also run separate analysis on just post-survey responses which is likely to have a bigger sample than matched pre and post.

Appendix 10. Implementation and process evaluation interview schedules

Mentoring interview questions

Introduction

- Introduce yourself
- About Forward Thinking
- Why we are undertaking the interviews and brief overview of the evaluation. Evaluating impact of our outreach programmes is very important: Help us to understand:
 - Do they work? How and why?
 - What are the outcomes and benefits experienced by students and schools?
 - How we can improve our programmes?
- Run through the consent form, allow time for them to read the information sheet
- Thank you for your support today with the evaluation.
- **Confidentiality** – We will collate all findings from interviews and you will not be identifiable in any reporting or write-up. Quotes will use pseudonyms or general ‘*student*’.
- Ask if it is okay to record the interview to refer back to.
- Confirm whether they have any questions they would like to ask before the interview commences

Interviewee details

- Name:
- What course are you studying and what year are you in?
- Did you attend the Forward Thinking programme when you were at school?

About the mentor

- How did you get involved in mentoring on the Forward Thinking programme?
- What were some of your reasons for wanting to be a mentor?
- What is your understanding of your role as a mentor?
- Please could you describe your experience of working as a mentor?
- What do you like about being a mentor?
- What do you dislike about being a mentor?
- What are your strengths as a mentor?
- What qualities do you think are important for a mentor to have?

- What benefits have you experienced from being a mentor?
 - Experience, skills development, confidence, something to put on CV?
- What training and resources did you receive?
 - What were your thoughts on the training that you received?
- Were you provided with adequate training to fulfil your role?
 - Why?
- Did you feel you had adequate support during your time as a mentor?
- What additional training or support did you need? /What would you have liked like to see?
- Do you have any suggestions on how the training could be improved?

The Sessions

- How many students have you mentored? (currently and in the past)
- How many sessions did you deliver?
 - To who? How many students were in the sessions?
- What topics did you cover in the mentoring sessions?
 - Revision tips, study skills, subject specific support, university life etc.
- Who decided on these topics?
 - Was it you alone, with the students, was the school / teachers involved?
- How did you prepare for the sessions?
- Did the students engage with the mentoring sessions?
- Do some students engage with mentoring better than others?
 - Why do you think this is?
- Did the mentoring sessions take place online, in-person or both?
 - What were the advantages and disadvantages to using this format?
- For face- to-face mentors: What challenges do you face as a mentor?
 - Challenges organising the sessions? Attendance by the students? Appropriate environment for the mentoring to take place?
- For online mentors: What challenges do you face a mentor?
 - Challenges organising the sessions? Attendance by the students? Technical issues?

Perceived impact on the learner

- From your perspective, how did the mentees respond to you being their mentor?
- What do you think are the advantages or disadvantages of using University of Birmingham students as mentors?
- How was the mentoring – mentee relationship?
 - What worked well? What didn't work well?
- How effective do you feel the mentoring placement was?
 - What worked well? What didn't work well?
- What do you think has been the impact of the mentoring for students? Have there been any benefits?
 - Improved revision skills, study skills, more motivation, confidence, higher aspirations
- Which element/s of mentoring is most important for the student?
- Do you think the students received enough, too many, or too little mentoring sessions?
 - Why?
- Do you think the mentoring programme could be improved? How?
- If you were to mentor again, what would you do differently and why?
- Is there anything else you would like to add about the mentoring program, positive, negative, improvements that are needed, changes that need to take place in order to enhance the programme for mentors and mentees?

Forward Thinking: Parents Topic Guide

Introduction

- Introduce yourself
- About Forward Thinking
- Why we are undertaking the interviews and brief overview of the evaluation. Evaluating impact of our outreach programmes is very important: Help us to understand:
 - Do they work? How and why?
 - What are the outcomes and benefits experienced by students and schools?
 - How we can improve our programmes?
- Run through the consent form, allow time for them to read the information sheet
- Thank you for your support today with the evaluation.

- **Confidentiality** – We will collate all findings from interviews and you will not be identifiable in any reporting or write-up. Quotes will use pseudonyms or general ‘parent’.
- Ask if it is okay to record the interview to refer back to.
- Confirm whether they have any questions they would like to ask before the interview commences

Interviewee details

- Name:
- Childs School:
- School year of child:

Forward Thinking Programme

1. How much do you know about the programme and what activities your child has engaged in? Do you feel well informed?
 - a. If yes, how did you find out about the programme? (*School, child, University of Birmingham*)
 - b. If no, what information would you like, when and in what format?
 - c. Does your child talk to you about FT / the University? What kinds of things does he/she talk about?
2. We are looking to produce an information brochure for parents. Would this be useful? What information would you like it to contain?
 - a. Is a brochure the best way to communicate information to parents? If, no, what alternative methods would you suggest?
3. What are your views on the programme?
4. Which elements or features of the programme do you consider to be the most important/influential?

Outcomes & Impact

5. Do you feel your child has benefited from the programme? If, yes, in what ways?
 - *Informed subject choices at key stages; raised attainment; raised aspirations; increased confidence; have career / future goals; increased knowledge and understanding of HE pathways, courses, stay on further study, apply to RIU*

6. Has there been any benefit for you / your child by taking part in a 'progressive' programme where engagement is over a number of years as opposed to one off events?
7. What are your plans for your child post 16? (*further study, A Levels, get a job, apprenticeship*)
8. What are your aspirations for your child's future?
 - a. Have the plans / aspirations changed / been influenced as a result of your child participating in the programme?
 - b. What do you think would have happened to your child on leaving school if they had not attended the programme?
9. Do you feel you have enough knowledge about university, different types of universities, the application process, courses and entry requirements to guide your child?
 - a. If no, what support / information would you find helpful?
 - b. Who do you think should provide this support to parents? (*schools, universities*)
10. Are there any ways the programme can be improved or changed?
11. Is there anything that you would like the programme to be doing that it isn't offering at the moment?
12. At present, parents are invited to the launch event in Yr8 and the celebration event in Yr11. Do you think this is enough engagement with parents or should the programme be engaging parents more?
13. Any other feedback / comments?

Questions specifically about the pilot RCT

These questions are only to be asked to parents who were treated as part of the trial.

1. Did you receive a letter from the FT team / University inviting you to the parent's event?

- a. What were your thoughts when you received the letter? How did you feel?
2. How did the letter compare with other school communications / Forward Thinking communications in terms of style and content?
3. Did the letter (personalised invite) influence your decision to attend / not attend the FT event?
 - a. Did it make you more / less likely to attend? Why?
4. Did you discuss the content of the letter (personalised update) with your child? What was the outcome of these conversations?
5. Would you suggest any changes or alterations to the letter?
6. Would you have preferred a different method of communication (email, text message)? Why?
7. We are recently held a parent event.
 - a. What was your reason for attending the event?
 - b. What did you think about the event?
 - c. Do you have a preference for the event to be online or face to face? Why is this? Which would make you more likely to attend?
 - d. What additional content would you have found helpful?
8. Any other comments?

Forward Thinking Topic Guide: Students (CURRENT)

Introduction

- Introduce yourself
- About Forward Thinking
- Why we are undertaking the interviews and brief overview of the evaluation. Evaluating impact of our outreach programmes is very important: Help us to understand:
 - Do they work? How and why?
 - What are the outcomes and benefits experienced by students and schools?
 - How we can improve our programmes?
- Thank you for your support today with the evaluation.

- **Confidentiality** – We will collate all findings from interviews and you will not be identifiable in any reporting or write-up. Quotes will use pseudonyms or general ‘student’.
- Ask if it is okay to record the interview to refer back to.
- Confirm whether they have any questions they would like to ask before the interview commences

Interviewee details

- Name:
- School:
- School year:

Forward Thinking Programme

1. You have been part of the FT programme. Can you remember the kinds of things you have done as part of the programme at the University?
2. What do you think about the programme?
 - a. Have you enjoyed being part of the programme? What things did you enjoy / like most?
 - b. Is there anything you didn't like about the programme?

Outcomes & Impact – Future

3. Has the programme helped you? If, yes in what ways?
 - *Raised attainment; raised aspirations; increased confidence; have career / future goals; increased knowledge and understanding of HE pathways, courses, apply to RIU*
4. What do you think about being involved in the programme over a number of years?
 - a. Was this too much? Too less? Just right?
5. Do you feel you have benefited from the programme by being involved over a number of years? How?

6. What are your plans for after your GCSEs?
7. What are your future plans? (*University, get a job, apprenticeship*)
8. Has the project helped you to think about your future? How?
9. Do you feel you have enough knowledge to make informed choices / best choices for you about what to do after GCSEs and whether to go to university?
 - a. Who do you talk to / supports you to make decisions about your future?
(*teachers, parents, friends, online*)
10. Did you learn anything about going to university from being part of the programme?
What did you learn?
11. Were you planning on going to university before FT? What about now?
12. Are there any ways the programme can be improved or changed?
13. Is there anything that you would like the programme to be doing that it isn't offering at the moment?
14. Any other comments?

Forward Thinking Topic Guide: Students (PAST)

Introduction

- Introduce yourself
- About Forward Thinking
- Why we are undertaking the interviews and brief overview of the evaluation. Evaluating impact of our outreach programmes is very important: Help us to understand:
 - Do they work? How and why?
 - What are the outcomes and benefits experienced by students and schools?
 - How we can improve our programmes?
- Run through the consent form, allow time for them to read the information sheet
- Thank you for your support today with the evaluation.

- **Confidentiality** – We will collate all findings from interviews and you will not be identifiable in any reporting or write-up. Quotes will use pseudonyms or general ‘*student*’.
- Ask if it is okay to record the interview to refer back to.
- Confirm whether they have any questions they would like to ask before the interview commences

Interviewee details

- Name:
- Age / University year :
- Name of University and course:

Forward Thinking Programme

1. You were part of the FT programme. What can you recall about being on the programme?
2. What do you think about the programme? What was your experience like?
3. Which elements of the programme did you consider to be most important / helpful /enjoyable?
4. What did you enjoy least?
5. Can you remember if you participated in other similar programmes / one off events whilst at School? (*Summer schools, HE fairs – ask for details – when, where, what*)
 - How did FT compare to those activities?
6. How much did your parents know about what you did on the programme?
7. Do you think the programme engaged parents enough or should they involve parents more
8. Do you feel your parents were able to support you whilst you were on the FT programme? If so, how?
 - If not, what more could have the programme done to support your parents to support you?

Outcomes & Impact

9. Do you feel the programme helped / benefited you? If, yes in what ways?

- *Raised attainment; raised aspirations; increased confidence; have career / future goals; increased knowledge and understanding of HE pathways, courses, apply to RIU*

10. Which element(s) of the programme do you feel had the biggest impact on your future / education journey?

11. Looking back, do you feel you benefited by being involved in the programme over a number of years? How?

- What were the advantages of this? Any disadvantages?

12. Did the programme influence what you did after GCSEs and your future choice? How?

- *Decision study A Levels, subject choices; to apply to university; type of university; work harder to get better grades*

13. Did taking part in the FT programme increase your knowledge and awareness of higher education? If yes, in what ways?

14. Did being part of the programme influence your decision to go to university before FT?

15. Did you discuss your involvement in the programme with others? Who? (*parents, teachers, siblings, other students*)

- Do you think this influenced others? How?

16. Has being part of FT helped you whilst at university? (*Already been on a campus; familiar with student ambassadors, lecturers*)

17. Did FT programme help with feelings of belonging at university?

18. Are there any ways the FT programme can be improved or changed?

- Programme organisation, content, delivery, staff/mentoring, time/duration, venue and other salient characteristics?

19. Was there anything missing from the programme that you feel you would have benefited from?

20. Any other comments?

Interview schedules – schools coordinators

Interviewee details

- Name:
- School:
- Job title / role:
- Role with FT programme:
- How long have you been involved with the FT programme?

Aspiration and Attainment Issues

- What are the key issues around aspiration and attainment in your schools?
 - What type of students/backgrounds does this affect?
 - Is there a difference between groups? Why do you think this is?
 - What are the issues facing G&T disadvantaged students? Is there a difference between G&T affluent and disadvantaged students?
- What barriers do students face to fulfilling their potential and progressing to the best universities? (*Motivation, attitudes, knowledge, understanding, aspirations, parental attitudes etc.*)
- In your view, how can these issues/barriers be addressed?
 - What needs to be done? When? By who and to whom?

Forward Thinking Programme

- How long has the school been engaged with the FT programme?
- How / Does FT fit in with the School Improvement Plan? Under what categories / objectives / policies? (*G&T, pupil premium, addressing attainment, OFSTED etc.*)
 - What issues do you feel the programme will support the school to address? (*attainment, aspiration, behaviour, progression etc*)
- How else is your school addressing these issues?

Targeting

- What are your views on the FT eligibility criteria? (*too broad, too restrictive, just right*)
 - Does it help you to target the right students?
 - How are students selected to be put forward for the programme? (Teacher selection, talking to parents)
 - Are you able to select enough students to put forward who meet the eligibility criteria? If not, why not?
 - Are the number of places offered just right, not enough, too many?
 - Do you feel the programme is working with the right students? G&T disadvantaged?
 - Are there any students that would benefit from the programme that we are not engaging with? Who are these students (*characteristics*)? Why do you think they would benefit from attending the programme?

Delivery model & activities

- What are your views on the FT programme and the delivery model? As a 'progressive' programme working with students from Year 8-11?
 - Do you think there is value in working with students over the years? Why/why not?
- Do you think Year 8 is the right time to engage with students? Why / why not?
- What are your views on the programme activities?
 - Are they the right activities? Do they address the issues discussed?
 - What is the quality of delivery? Sessions / materials etc?

- What are your views on the launch event, mentoring and celebration event?
- Which activity / activities do you think are most effective? Why?
- Which activity / activities do you think are the least effective? Why?
- Are there any activities missing that you feel should be part of the programme?
- How do you inform parents of their child's engagement with the FT programme? (*letters, meetings etc.*)
- What kind of feedback have you received from parents?
- Do you think the programme engages enough with parents? If not, what else how else could the programme engage with parents?
- Is there / what is the value of the university delivering the programme?
- How is your relationship with the University / FT team? Any issues?
- Are there any other similar programmes / activities that your school/students have access to? (*Careers events? Guidance events? University visits etc.*)
 - Who are they run by? Who do they target? Description? Aims?

Year Group	Activity
Year 8	<ul style="list-style-type: none"> • Launch Visit (parents to attend)
Year 9	<ul style="list-style-type: none"> • University Experience Day • Subject Taster Day
Year 10	<ul style="list-style-type: none"> • Mentoring with current University students. Mentors work 1 to 1 with mentees on a weekly basis
Year 11	<ul style="list-style-type: none"> • Celebration event

Outcomes & Impact

- Does the programme address the issues discussed earlier? If yes, which issues and how?
- Have there been any benefits for the students involved in the programme?
 - Have you made any observations? Statistics? (*Informed subject choices at key stages; raised attainment, raised aspirations, increased knowledge and understanding of HE pathways, courses, apply to RIU*)
- Have you seen a difference between students who access one-off events (uni visits, careers advice etc) compared to the FT students who have continued support at key points?
- How many G&T disadvantaged students would you expect to go on to RIU anyway, without intervention?
- Have there been any benefits for you/your school in participating in the programme? (OFSTED?)
- What would you have done/what would have happened in your schools if this programme was not available?
- Are there any specific suggestions for improvement you would make?
- Do you have any other comments in relation to any of the issues raised and the FT programme?

Interview schedule - Forward Thinking Team

Introduction

- About the Forward Thinking evaluation
- Why we are undertaking the focus group and brief overview of the evaluation.
- Run through the consent form, allow time for them to read the information sheet
- Thank you for your support today with the evaluation.
- **Confidentiality** – We will collate all findings from interviews and you will not be identifiable in any reporting or write-up. Quotes will use pseudonyms or general ‘*FT staff*’.
- Ask if it is okay to record the interview to refer back to.
- Confirm whether they have any questions they would like to ask before the interview commences

Programme Design

1. What are the key issues / problems FT is aiming to address?
2. How and why did you decide on the specific activities that are delivered?
(*Evidence-base, seemed logical, used before*)
 - a. Do you believe these activities will be successful in addressing the issues mentioned? Why?
3. What is the value / benefit / advantage of the progressive element of the programme?
4. What elements of the programme do you consider to be the most important / influential?
5. What would you say are the strengths of the programme?
6. What elements do learners engage with most on the programme? Why do you think this is?
7. Are there any aspects of the programme you feel could be strengthened?
 - a. Any elements you think should be abandoned? Why?
8. What do you think has worked/not worked with hosting the events online due to COVID-19?
9. Are there any new elements that you would like to add to the programme and why?
(*Working with parents*)
10. What do you think are the obstacles that limit the development of the FT programme (if any)?

- Explore: internal barriers/obstacles, external barriers/obstacles

Targeting

11. Do you think working with Years 8 to 11 learners is the right age group for the programme to have maximum impact?
12. How did you decide on which schools to target?
13. Do you think the eligibility criteria helps you to target the right students?
14. The targeting criteria for FT has recently changed, how do you think the change will impact on recruiting students?
 - Positive/negative impact?
 - Do you think it will lead to the recruitment of students that would benefit from the programme?
 - Will it increase numbers?
15. Do you feel schools are putting forward the right students? Enough students?
 - a. If no, what do you think the issues are?
16. Are there any students you feel the programme should be working with who you are not currently engaging with?
17. Does the programme work better for some groups of students than others? If so, why?

Delivery

18. How is your relationship with the schools?
 - a. What are the strengths and challenges?
19. What are the key challenges of the programme? (*Staff knowledge and skills, costs, recruitment, schools, budget*)

Outcomes & Impact

20. What has been the impact of the programme on schools?
21. What has been the impact of the programme on the learner? (*Raised attainment, progression to RIU, confidence*)
22. Are there any unintended outcomes?
23. What kinds of evidence are used to assess the costs and benefits?

24. Do you think the programme is cost effective? Is value for money?

25. Is there anything further that you would like to add?

Appendix 11. Codebooks used in thematic analysis

Forward Thinking Team Codebook

Name	Description
Accessible mentoring	Hosted in the schools and organised by the schools so easy for the student to attend
Alternatives options to university	Allows students to explore alternative options to university and work out the path most suitable for them
Barrier to implementation	Aspects that stop the programme being implemented as intended (budget, staff resources FT, staff resources at school)
Challenges to recruitment	Challenges/concerns when recruiting (do students get missed, do teachers self-select their favourites, is 'the potential to do well' too ambiguous.
Commitment from schools	Having the engagement and buy-in from the FT schools
Complex programme	Multiple cohorts from multiple schools running concurrently
Connection to the university	Outcome of the programme – student feels part of the university
Continuation of programme	Gap between Year 11 and university that is looking to be filled
Coordinator engagement	Coordinator engagement with the programme due to their limited time/belief that the programme is beneficial
Core activities	The main activities that have always been part of the programme: mentoring, launch event, celebration event.
Cost reduction	Reviewing activities that can be amended/combined in order to reduce the budget
Data collection methods	Paper survey response higher than online due to collecting when in person with them. Looking to do more online as it would save time for data entry

Name	Description
Developing	Programme is developing and changing based on the needs of the students and programme resources
Different outcomes	Each activity has a different intended purpose
Disadvantage of online activities	Negatives of online events e.g., not meeting other students, not identifying as a FT student, don't experience the benefits of coming on campus
Encourage a sense of belonging	Helps students who may not think that university is for them
Engagement	Students high levels of engagement with the programme and beneficial outcomes as a result of the high level of engagement
Evaluation challenges	Issues with measuring improvements in softer skills
Evidence based	Measuring the perceived impact/opinions of the programme from students using surveys
External feedback	Need to external feedback from an outside source to improve the programme
Familiarity	Students feel comfortable with the FT team and the University of Birmingham due to the progressive nature of the programme
Good colleagues	The benefits of having committed FT team, ambassadors, and mentors
Improved communication channel	Need for improved communications channels between the FT team, parents, and students e.g., an e-news letters and communicating with the students and parents directly
Inclusive	The inclusion criteria capturing everyone that would benefit from attending the programme
Increase aspirations	Benefit of programme. Encouraging students who do not believe that they can make it to university
Increased attainment	Helping students to improve their exam and coursework attainment

Name	Description
Increasing confidence	Increased social skills from meeting other students, confidence in their own abilities
Inspire others	FT students share knowledge with their friends, family, and peers
Introduction to university life	Allows students to experience what going to university would be like
Involve parents	Points at which parents are involved with the programme: Year 8 launch event and Year 11 celebration event
Issue tracking attendance online	Lack of registration for online events
lack of feedback implementation	Writing annual reports but not implementing suggested changes to the programme
Lack of understanding about university	FT programme aims to address misinterpretations about HE
Lengthening the programme	Discussions relating to extending the programme to Year 12
Length of mentoring	Positive impact from having 10-12 week of mentoring
Less ambiguity	Changes to the FT criteria so it's easier to select eligible students
Limited space	Max capacity for schools taking part. More can't join unless others leave
Linking to Pathways	Linking FT to pathways to encourage more to apply for it
Mentoring outcomes	Revision tips, time management, handing in HW on time
Missing lessons	Missing lessons at schools due to the programme
Mixed delivery	one-to-one mentoring, groups events.
Motivates parents	Parents motivated by launch event presentation from the motivational speaker
Positive relationships with schools	Friendly relationship between FT and the schools

Name	Description
Progression to HE	Outcome of the programme/implication of success
Progressive	Each element of the programme is designed to build on from the next
Raise aspirations to HE	Showing the “wow” factors of university, being inspired by seeing how students live, wanting to get better attainment in order to enter HE
Relationship building	The relationship built between the student and the university
Resource restraints	Can't take more students/cohorts due to budget
School staffing issues	Staffing issues preventing schools from being able to bring students to the events
Sense of belonging	Identity of being an FT student and fitting in at university
Sharing knowledge	FT students talking to their peers/family about what they have learned on the programme
Socialise with others	Encouraging students to meet and mix with other students
Starting early	Encouraging students to think about subject choice and university from a young age
Supportive staff	Engagement from school coordinators
Tailored	Tailored mentoring sessions to meet the student's needs; each element of the programme is tailored to meet the needs of the student at that point in their education journey
Time between activities	Large gap between some of the activities on the programme
Unsure of online engagement	Online activities – unsure of how many viewed, accessed or engaged with online materials

Parent interviews codebook

Name	Description
Benefits of mentoring	Discussion around the benefits that parents expect their child to receive from mentoring e.g., one-to-one support, building confidence, and providing an insight into university life.
Benefits of visiting the campus	The perceived importance of the child going around the campus to get an impression of what university life is like
Communication between child and parent	The lack of information shared between the student and parent about what activities they have engaged with on the FT programme
Continue in 6th form	The opinion that the FT programme should be continued into years 12 and 13
Early communication	Parents and students beginning to discuss their university aspirations
Grateful	Parents feeling grateful that their child has been selected to be part of the programme
Impact of COVID-19	Changes in the activities due to the pandemic such as not being able to go on campus
Importance of attainment	Parents and students recognising the importance of attainment to do selected courses at university.
Invitation feedback	Feedback related to the RCT intervention
Lack of HE knowledge	Parents having a lack of knowledge of HE
Method of contact	Preferred method of contact between the parent and FT team
More parental engagement	Parents desire to be included in more of the activities and receive additional information about the programme and HE
Motivated to go to university	Parents belief that their child was more motivated to attend HE as a result of being part of the programme
Need for on campus activities	Parents belief in the importance of their child visiting the university
Parental support	Parents supporting their child on the programme

Name	Description
Preparing early	Parents recognising the importance of thinking about university early
Uninformed about FT	Parents feeling that they are lacking information about the FT programme

School coordinators codebook

Name	Description
Being represented on the FT programme	The impact of having mentors and student ambassadors who have the same background as the students
Confidence as a barrier to attending HE	Lack of belief that the student is able to attend HE
Different levels of parental engagement	Some parents engage more than other in their students FT journey
Disadvantage of FT criteria	Drawbacks of the criteria including restrictive and competing for students on other programmes
Family responsibilities	Students being asked to contribute to the family as barrier to HE
High-quality mentors	Feedback about the quality of the mentors from the University of Birmingham
Impact of COVID 19	Impact of COVID on various aspects of the programme including the individual activities and the students engagement with the programme
Improved relationship between teacher and student	Additional benefit from attending the programme
Increase motivation to attend HE	Increased motivation to apply for HE as a result of being on the programme
Increased confidence	Increased confidence as a result of attending different FT activities
Increases aspirations	Increased future aspirations as a result of being on the programme
Inflexible mentor schedule	Challenges to organising mentoring due to the mentor's university schedule

Name	Description
Knowledge of university	Increased knowledge of university as a result of being on the programme
Lack of financial knowledge	Lack of knowledge about student finance by students and parents
Localism	Parents wanting a child to stay home or go to a university near home
Meeting people from different backgrounds	The outcomes of students getting to meet other FT students and mentors/ambassadors from different backgrounds
More exposure to university lectures	In addition to subject taster days, exposing students to more PhD/lecturer lectures at the university
More parental engagement needed	The belief that more should be done to involvement parents in the FT programme
More support from FT teams	Support from FT Team between the activities
Negative impact of friendship groups	Lower aspirations to attend HE due to social group
Parent or guardian has not been to HE	No family background of HE contributing to reduced aspirations
Positive response to launch event	Positive feedback for the launch event
Positive response to mentoring	Positive feedback for mentoring
Progression to HE	FT outcome – increased progression to HE
Suggested improvements	Any suggested changes or improvement for the FT programme

Mentor interviews codebook

Name	Description
Advantages of group mentoring	Any perceived benefit of hosting group mentoring sessions

Name	Description
Being adaptable	Mentors being able to adapt to their mentees needs
Being relatable	Students being able to relate to the mentor
Being reliable	Mentors turning and delivering the sessions in reliable manner
Benefit of University of Birmingham student	Any perceived advantage to using a University of Birmingham student
Career goals	Mentoring as a way to build their CV or experience with working with students
Communication skills	Mentors have strong communication skills in order to support the session
Covered topic - college courses	Covering college courses and a-level subjects in the sessions
Covered topic - future careers	Covering different types and ways to achieve their future careers
Covered topic - revision techniques	Covering academic skills and revision methods
Covered topic - stress management	Covering stress management skills, such as dealing with exam stress
Covered topic - student finance	Covering aspects of student finance including loans, bursaries and scholarships
Covered topic - time management	Covering time management skills
Covered topic - university courses	Covering university courses and different universities
Covered topic - work experience	Covering their different work experience options
Disadvantage of University of Birmingham student	Any perceived drawback from using a current University of Birmingham student

Name	Description
Disadvantages of group mentoring	Any perceived disadvantage from having group sessions
Engagement from students	Perceived levels of engagement from students
Covered topic - HE information and guidance	Covered topic – any additional information on university, such as how to apply
Impact due to limited school resources	Any perceived negative impact of limited school resources such as room availability and school coordinator availability
Impact of COVID-19	Any perceived impact of COVID-19
Improved academic skills	Outcome of mentoring – improved academic skills
Increased aspirations	Outcome of mentoring – increased aspirations to enter HE
Increased confidence	Outcome of mentoring – increased confidence in themselves and their abilities
Increased knowledge of HE	Outcome of mentoring – increased knowledge of HE
Mentoring environment	Good or bad aspects of the mentoring location e.g., too loud
Method of mentoring	Online vs offline, groups vs one-to-one
No parental HE	Overcoming gaps due to no parent who has been to HE
Non-judgemental	Quality required by mentor
Organisation skills	Quality required by mentor
Outcome of mentoring	Any additional student outcomes
Overcoming different engagement levels	Methods used to overcome different levels of engagement during the sessions
Own positive mentoring experience	Mentors being motivated to work as a mentor due to their own previous experiences

Name	Description
Planning the session	Techniques and methods used to plan the sessions
Relationship with coordinator	Any good or bad aspects of communicating with the school coordinator
Relationship with mentee	The perceived importance of having a good mentor-mentee relationship
Sending additional resources	Aspects of sending additional resources to the students
Student led	Students decide on the topics that they would like to cover in the sessions
Sufficient training and support	Positive feedback for the amount of training and support received
Suggested improvements	Any suggestions for improving the mentoring sessions

Previous and current FT student codebook

Name	Description
First-hand experience from University of Birmingham student	Getting insider knowledge on what the University of Birmingham is like from a current student
Forming a connection with the University of Birmingham	Forming bonds with people who work at the university, getting familiar with the layout of the universities
Impact of COVID-19	Any perceived impact on the delivery and outcomes from activities
Lack of parental engagement	Students perception that their parent was not involved/supportive of their role within the programme
Lack of parental knowledge or experience of HE	Any impacts from being the first member of the family to attend HE
Outcome - CV writing	Developed CV writing skills as a result of being on the programme
Outcome - easier to apply for university	Finding the university application experience easy as a result of being on the programme

Name	Description
Outcome - feeling comfortable on campus	Feeling comfortable when attending university due to going on the programme
Outcome - knowledge about HE	Increased knowledge of different aspects of HE
Outcome - learning about student life	Increased knowledge of societies and other social activities available in HE
Outcome - pathways to university	Understanding different routes (course, programmes, level 3 options) to get to university
Outcome - personal statement writing	Developed personal statement writing skills
Outcome - raising attainment	Improving attainment as result of being on the programme
Outcome - seeing yourself at university	Feeling that university is right for them, that they will fit in when they go
Outcome - social aspect	Meeting other FT students as part of the programme
Outcome - start thinking about university	Starting to get the student to think about pathways to university from a young age
Outcome - student finance info	Learning about student finance
Outcome - increased motivation to get good grades	Wanting to get certain grades in order to study a certain course at university
Parental support	Any type of support received from parents during the programme
Positive mentoring experience	Any perceived benefits from receiving mentoring
Progressive programme	Any feedback about the progressive element of the programme
Suggested improvements	Any suggested improvements

Appendix 12. Themes and sub-themes from thematic analysis

Forward Thinking Team

Theme	Sub-theme
Student outcomes	Exploring future options Connection to the university Sense of belonging Increased aspirations Increased attainment Increased confidence Additional outcomes Tailored to meet student needs
Facilitators to implementing the FT programme	Improved recruitment criteria Accessible mentoring scheme Commitment from schools/ Engaged stakeholders Continuous developments to programme
Barriers to implementing the FT programme	Lack of resources Complex programme Gaps between activities Evaluation methods Lack of external feedback Communication channels Students missing lessons Limited places Measuring improvements or softer skills Little external feedback
Future directions	Linking to Pathways Involving parents more Improved communication channels Less gaps between activities
Challenges of online activities	Tracking attendance Observing engagement Not socialising with other students Not identifying as an FT student Not experiencing the camps

School Coordinators

Theme	Sub-theme
Barriers to attending HE	Parental engagement

	<ul style="list-style-type: none"> Lack of parent HE Family commitment/responsibilities Confidence in themselves Unaspiring social networks
Outcomes of the FT programme	<ul style="list-style-type: none"> Increased motivation to apply for HE Increased confidence Between teacher – student relationships Increased aspirations Increased knowledge of university Meeting people from different backgrounds Increased progression to university
Mechanisms of successful outcomes	<ul style="list-style-type: none"> Having mentors/ambassadors from similar backgrounds Having mentors/ambassadors from different backgrounds High quality mentors University of Birmingham student mentors Experiencing the University of Birmingham campus
Impact of COVID-19	<ul style="list-style-type: none"> Less parental engagement Little or no mentoring Unable to monitor online attendance Webinars held out of school hours Lack of equipment to access online both in school and at home
Suggested changes	<ul style="list-style-type: none"> Less restrictive criteria Time of student selection (less busy part of school year) More parental engagement More university lectures Online portal for students and parents to access all materials

Parents

Theme	Sub-theme
Perceived benefits of attending the programme	<ul style="list-style-type: none"> Increased motivation to attend HE Thinking about it earlier Confidence building Provides an insight in university life

Communication	Communication with child about FT Communication from the schools Different methods of contact
Suggested improvements	More information about FT programme More involvement with activities Getting to experience the University of Birmingham campus More information and support about HE

Current and previous FT students

Theme	Sub-theme
Outcomes of attending the FT programme	CV writing skills Knowledge of HE Connection to the university Increased confidence Increased motivation to go to university
Parent engagement	No previous experience of HE Supportive
Benefits of mentoring	Tailored Supportive Insight into university life
Suggested improvements	Mentoring in Year 11 Subject specific mentor Repetitive information More activities at celebration event Parents look around campus

