# Trial Evaluation Protocol ASCENTS 121 Support for Science Follow-up Study



NatCen Social Research
Principal investigator: Terry Ng-Knight

PROJECT TITLE	ASCENTS 121 Support for Science Mentor Follow-up Study
DEVELOPER (INSTITUTION)	University of Lincoln
EVALUATOR (INSTITUTION)	NatCen Social Research
PRINCIPAL INVESTIGATOR	Terry Ng-Knight
PROTOCOL AUTHOR(S)	Enes Duysak, Andi Fugard, Daniel Philips
DESIGN	Web-based survey and administrative data analysis
NUMBER OF UNIVERSITIES	5
NUMBER OF MENTORS	385

# **Protocol version history**

VERSION	DATE	REASON FOR REVISION
1.0	23/02/2022	N\A

#### **Contents**

1.	Introduction	4
2.	ASCENTS Mentor Follow-up Study	8
3.	Ethics	14
4.	Data protection	15
5.	Reporting	16
6.	Risks	17
7.	Timeline	18
8.	References	19
9.	Appendices	20

#### 1. Introduction

ASCENTS 121 Support for Science (hereafter 'ASCENTS') trained undergraduate students studying Science, Technology, Engineering, and Mathematics (STEM) to provide one-to-one science support to disadvantaged Year 11 pupils in local schools. A follow-up study has been designed consisting of a survey and analysis of administrative data. The focus of this study is to investigate if ASCENTS has had any effect on mentors' interest in becoming a teacher or on their career paths. This protocol sets out the study design and plan for the analysis of the ASCENTS Mentor Follow-up Study.

#### 1.1. Overview of ASCENTS Mentor Follow-up Study

STEM undergraduates from five different universities were trained to deliver mentoring sessions as part of ASCENTS. The programme ran in 35 schools from September 2019 to May 2020.

For the purpose of this study, mentoring was defined as the provision of intensive, individualised, and subject-specific support by a teacher, teaching assistant or other adult, to a pupil. It is important to note that this definition usually refers to the activity of tutoring rather than mentoring<sup>1</sup>. As ASCENTS was also developed with a view to build confidence and resilience among pupils, it was felt by the developers that the term tutoring was too restrictive. Throughout his protocol, the terms 'mentoring' and 'tutoring' will be taken to have broadly the same meaning.

This project and its evaluation were affected by the 2020 partial school and university closures caused by the COVID-19 pandemic. The intervention and trial ended earlier, and the impact evaluation was cancelled. However, the implementation and process evaluation of the programme has been completed and the report of findings was recently published.2 The Mentor Follow-Up Study is commissioned by EEF to analyse whether ASCENTS had any effect on mentors' interest in becoming a teacher and/or on their career paths.

#### 1.2. Who

ASCENTS was developed by the University of Lincoln. The programme was delivered by the University of Lincoln in collaboration with the University of Leeds, University of Liverpool, UCL Institute of Education, and University of York. Each university co-ordinated intervention activities with mentors and local schools.

ASCENTS was delivered by undergraduate students (mentors) to Year 11 pupils (mentees).

In order to be eligible to take part, mentors must have met the following criteria:

- Be in their 2nd or 3rd year of study during the academic year of mentoring sessions (i.e. 2019/2020)
- Studying for a degree in a science related subject that confers a BSc degree or integrated master's degree

<sup>&</sup>lt;sup>1</sup> According to the EEF, "mentoring involves pairing young people with an older peer or volunteer, who acts as a positive role model. In general, mentoring aims to build confidence, develop resilience, and character, or raise aspirations, rather than to develop specific academic skills or knowledge". See: https://educationendowmentfoundation.org.uk/evidencesummaries/teaching-learning-toolkit/mentoring/

<sup>2</sup> You can find the report at the following link: Scandone et al., 2021

- Minimum of a C grade in GCSE English, Maths and Science
- Minimum of one A-level in either Biology, Chemistry, Physics or Psychology at grade C or higher

This protocol focuses only on the parts of the ASCENTS programme which are related to the ASCENTS Mentor Follow-up Study. <u>Scandone et al., 2021</u> explains the overall ASCENTS program in detail.

This project as well as ASCENTS overall are jointly funded by EEF and the Wellcome Trust.

#### 1.3. What

The implementation of the programme was affected by the 2020 partial school and university closures due to the Covid-19 pandemic. The number of mentoring sessions were reduced, and the revision day was cancelled. The details of changes in the programme implementation can be found below.

The ASCENTS Mentor Follow-up Study involved the key activities below.3

#### 1.3.1. Recruitment of mentors

Each university participating in the programme was responsible for recruiting mentors from the cohort of undergraduate students attending the university. Universities invited students to take part in the programme via an invitation letter sent to all STEM undergraduates in their first or second year of study. Information about the programme was also communicated through advertisements on the university website as well as through announcements during lectures and seminars. Undergraduates were able to apply to take part in the programme by emailing the ASCENTS university lead or applying through the student job shop. Places on the programme were allocated to eligible mentors on a first-come first-served basis. Once recruited into the programme, the university verified that the eligibility criteria are met and undertake DBS clearance check. Seventy-seven mentors were recruited from each of five universities giving a total of 385 mentors.

Universities were responsible for pairing undergraduate students with Year 11 pupils. Undergraduate timetabling determined which mentors were made available to schools, and then mentors were randomly allocated to pupils. Once the pairings had been completed, universities informed mentors of their allocated schools and the details of their first mentoring session.

#### 1.3.2. Mentor training and support

Mentors were required to attend two days of training held at their university in advance of the mentoring sessions. The first day of training was delivered by the University of Lincoln. The purpose of this day was to cover procedural aspects of the program, including an introduction to the ASCENTS project alongside DBS and paperwork checks. The second day was delivered by a trained university programme manager and provided mentoring and safeguarding training. The mentors were given the opportunity to ask questions at the end of each training day.

<sup>&</sup>lt;sup>3</sup> The details of the ASCENTS programme can be found in <u>Scandone et al., 2021</u>.

Mentors were required to attend an additional school specific procedural training session in their allocated school prior to the first mentoring session, delivered by the ASCENTS contact at each school.

#### 1.3.3. Delivery of 23 mentoring sessions

Mentees were supposed to receive 23 weekly one-hour face-to-face ASCENTS sessions throughout Year 11. However, due to COVID-19 and related school and university partial closures, the intervention was stopped after 19 or 20 weeks instead of the intended 23 weeks. The topics covered were planned to be part of the GCSE science curriculum. For each mentoring session, the topic was decided by the Year 11 pupil, with an opportunity for teachers to suggest work to be included. All sessions were desk based and there was no practical component. Mentors were paid for their time.

#### 1.3.4. Revision day for mentees

After the mentoring sessions had been delivered, a six-hour revision session was planned to be held at pupil's partner university in the weeks before their GCSE examinations. The session would be delivered by mentors, and include mentoring on each subject for biology, chemistry, and physics. However, due to COVID-19 and related school and university partial closures, the revision day was cancelled.

#### 1.4 Summary of the literature

This section briefly summarises studies on long-term effect of mentoring programmes in educational settings.

#### 1.4.1. Effect of interest in becoming a teacher

NatCen identified a few studies analysing the effect of tutoring on tutors' intention to continue teaching. Many of them come from evaluations of 'near-peer' teaching programmes in medical schools. One such study found that 91% of tutors who took part in a scheme agreed that being a tutor made them consider pursuing teaching in the future (Khalid et al., 2018). Others found that among participants who already were considering making teaching part of their future career path, there was a feeling that tutoring gave them practice of many of the skills that they would need (Rodrigues et al., 2009). Similarly, another study found an increased interest in teaching among tutors as they felt that taking part in the programme had improved their confidence and communication skills (Buckley and Zamora, 2007). However, it is also worth noting that literature does not present a wholly uniform picture on this question – one study of a near-peer tutoring programme found that tutors did not report an increased interest in teaching, in part because they felt that the intervention did nothing to improve their CV in this regard (Liew et al, 2015).

#### 1.4.2. Effect of behaviours

NatCen did not find studies analysing whether mentors/tutors were likely to study to become teachers or to become teachers following their participation to a mentoring/tutoring programme. This suggests a possible contribution of the ASCENTS evaluation to the literature.

#### 1.4.3. ASCENTS: Findings from the Implementation and Process Evaluation (IPE)

The findings from the ASCENTS implementation and process evaluation (IPE)<sup>4</sup> align with the existing evidence from evaluations and meta-analyses of tutoring and mentoring programmes and offer new insights, particularly into the mentors' outcomes. In line with existing research on mentoring (Sharpe et al., 2018), findings from mentor's self-reported data indicate that participation is likely to increase mentors' interest in teaching and a career supporting disadvantaged young people.

Specifically, around half (53.9%) said it had increased their interest in teaching 'somewhat' or 'a lot' and 64.4% said the same about careers supporting disadvantaged young people. On the other hand, it is also important to note that 13% said it had decreased their interest in teaching 'somewhat' or 'a lot' and 3.9% said the same about careers with disadvantaged young people. Furthermore, the findings suggest an increase in mentors' science knowledge due to taking part in ASCENTS. Post-intervention, over half of mentors (58.2%) said their subject knowledge had increased following ASCENTS. However, this did not necessarily translate into improved attainment, with less than a fifth (16.8%) reporting that their university attainment had improved.

<sup>4</sup> For more details, please see <u>Scandone et al. (2021)</u>.

#### 2. ASCENTS Mentor Follow-up Study

The current study will investigate whether ASCENTS had any effect on mentors' interest in becoming a teacher and on study/career paths.

#### 2.1. Research Questions

The follow-up study aims to answer the following research questions:

**RQ1:** How do mentor's think their experience on the ASCENTS mentoring programme has influenced their interest in having a career in teaching?

**RQ2:** What proportion of mentors have enrolled in Initial Teacher Training?

RQ3: What proportion of mentors have become science teachers?

**RQ4:** What proportion of mentors have become any kind of teacher?

**RQ5:** What proportion of those who rated high on interest in becoming a teacher later decided not to enrol on training or become a teacher?

For all these research questions, we will investigate answers for the whole sample and also whether they are associated with mentor's background, attitudes and/or experience. Background characteristics include gender, ethnicity, mentor's cohort, and the university attended. Attitudinal and experiential characteristics include prior mentoring experience and career aspirations from the pre-intervention mentor survey and overall ASCENTS mentoring experience, their experience with mentees, mentee engagement and number of mentoring sessions completed from the post-intervention mentor survey and the registry filled by schools. More details on the background, attitudinal and experiential characteristics can be found in Section 2.5.

#### 2.2. Participants and their recruitment

Seventy-seven mentors were recruited from each of five universities mentioned above giving a total of 385 mentors. Undergraduate students who were interested in becoming a mentor were given an information letter including a link to the NatCen project webpage and asked to sign a Memorandum of Understating (MoU) in which they agreed to taking part in various aspects of the evaluation, including online surveys with mentors and the current follow-up study. This acted as their formal consent to taking part. The project website also provides a privacy notice explaining procedures for ensuring data quality, anonymity, and confidentiality and indicating individual rights including their right to withdraw their consent.

#### 2.3. Data collection plan

#### 2.3.1. Pre-intervention mentor survey

The aim of this survey was to collect data on mentors' demographic profile, background, mentoring experience, career aspirations, motivation to take part in ASCENTS, experience of ASCENTS so far (application, training) and expectations about ASCENTS and mentoring.<sup>5</sup> The survey was designed by NatCen and was distributed in May 2019 during the mentor

\_\_\_

<sup>&</sup>lt;sup>5</sup> Pre-intervention survey can be found in Appendix A.

training session. The mode of this survey was online. No incentives were used. The expected completion time was 15 minutes. A total of 347 mentors out of 385 mentors completed the survey.

#### 2.3.2. Post-intervention mentor survey

The aim of this survey was to collect data on mentors' experience of ASCENTS, including delivery of the mentoring sessions, interactions with students, teachers, and programme managers, as well as study plans and career aspirations.<sup>6</sup> The survey was designed by NatCen and was conducted in May and June 2020. The delivery mode of this survey was online. No incentives were used. The expected completion time was 15 minutes. A total of 208 mentors out of 385 mentors completed the survey.

#### 2.3.3. Follow-up mentor survey

The aim of this survey is to collect data on mentors' study/career progression, whether they entered teacher training or the teaching profession and, for those who did, their reasons for making such a decision. The timing of this survey is one year after mentors' graduation. Given that mentors can be in their 2<sup>nd</sup> or 3<sup>rd</sup> year of study during mentoring sessions, different mentor groups will have different graduation years.8 The Table 1 below shows when each mentor group will graduate and be invited to complete the follow-up survey. The follow-up survey will be conducted in November 2021 for Group A, November 2022 for Groups B and C, and November 2023 for Group D. The mode of this survey is online. The mentors will be offered a financial incentive in the form of £10 e-voucher upon completing the survey. 10 The expected duration is 10 minutes.

<sup>&</sup>lt;sup>6</sup> Post-intervention survey can be found in Appendix B.

<sup>&</sup>lt;sup>7</sup> Follow-up survey can be found in Appendix C.

<sup>&</sup>lt;sup>8</sup> Please note that a small number of mentors (fewer than 10) were on a five-year degree programme. Therefore, they will not have left the university within the planned follow-up time period. These mentors will not be part of the follow-up study and contacted to complete the follow-up survey.

<sup>&</sup>lt;sup>9</sup> Some mentors had dropped out of mentoring sessions and additional mentors joined to the programme to replace mentors who had dropped out. Mentors who have withdrawn their consent will not be contacted to complete the follow-up survey. However, please note that some mentors might have kept their consent while dropping out of the mentoring sessions only. <sup>10</sup> Our budget includes £10 incentive per mentor for completion up to a total of 385 mentors.

 Table 1: Timeline for mentor surveys and administrative data request

	2019	2020	2021	2022	2023	2024
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
	ASCENTS starts	ASCENTS ends				
Y3 of 3Y course (Group A)	Recruited, ASCENTS baseline survey	Graduate, ASCENTS endline survey	1y follow- up post- graduation			
Y2 of 3Y course (Group B)	Recruited, ASCENTS baseline survey	ASCENTS Endline survey	Graduate	1y follow-up post- graduation		Admin data request
Y3 of 4Y course (Group C)	Recruited, ASCENTS baseline survey	ASCENTS Endline survey	Graduate	1y follow-up post- graduation		
Y2 of 4Y course (GROUP D)	Recruited, ASCENTS baseline survey	ASCENTS Endline survey		Graduate	1y follow- up post- graduation	

#### 2.3.4. Administrative data

NatCen will request data from the Initial Teacher Training Performance Profiles (ITTPP) and the School Workforce Census (SWC). These data will be shared by DfE via Office for National Statistics (ONS) Secure Research Service (SRS). The indicative timing of this data request is Summer 2024 (which is when data from 2023 will be published). The Table 1 above shows the intended timeline for the request for administrative data.

The ITTPP includes information on age, gender, declared disability status, declared ethnicity, subject, degree class, and route onto Initial Teaching Training (ITT). The SWC identifies all teachers working in state-funded schools in England. The SWC provides information about the individual's work status, type of school employed in, full or part-time status, contract, roles and responsibilities, subject taught salary, sickness absence and qualifications. It also provides data on 'teacher leavers' (ex-teachers who have left the profession).

Information obtained from the administrative data will also help us answer the research questions for mentors whose data from the follow-up mentor survey are missing.

#### 2.3.5. Data linkage

ITTPP and SWC will be linked using Teacher Reference Numbers (TRN), a unique identifier used throughout a teacher's career. TRN is well-populated and reliable in both datasets. TRN can be used to link on data at later time periods, creating a longitudinal data set for the purposes of analysis. The linked dataset could potentially be used to assess how many undergraduate mentors were awarded Qualified Teacher Status (QTS), how many found employment in a state-funded teaching role, and their retention rates.

Data collected from the ITTPP/SWC will also be linked with the survey data (pre-intervention survey, post-intervention survey, and follow-up mentor survey) using the forename, surname, and date of birth, along with length of course and course year at time of ASCENTS for all ASCENTS mentors.

#### 2.4. Key outcome variables

For RQ 1, the outcome variable will be obtained from the follow-up mentor survey. In this survey, mentors will be asked to rate how ASCENTS experience has influenced their interest in having a career in teaching, ranging from 1 (decreased a lot) to 5 (increased a lot). We will use this self-assessed measure to identify whether a mentor has developed an interest in having a career in teaching after participating in ASCENTS.

For RQs 2–5, the outcome variables will be obtained from both the follow-up mentor survey and the administrative data explained in detail above. These outcome variables will be dichotomous, which will take value of one if a mentor has experienced the respective outcome and zero otherwise.

#### 2.5. Analysis plan

The follow-up analysis will include all mentors who consent to being part of the study. The findings from the ASCENTS IPE report indicate that the average number of ASCENTS sessions delivered is 16, ranging from 10 to 20. About a quarter (22%) of mentors self-reported missing no sessions, and around 80% reported missing one or more sessions (Scandone et al., 2021).

The follow-up analysis will examine the relationship between mentor's background, attitudinal and experiential characteristics and the outcomes mentioned in Section 2.1. Background characteristics include gender, ethnicity, mentor's cohort<sup>12</sup>, and the university attended. Attitudinal and experiential characteristics include prior mentoring experience and career aspirations from the pre-intervention mentor survey and overall ASCENTS mentoring experience, their experience with mentees, mentee engagement and number of mentoring sessions completed from the post-intervention mentor survey and the registry filled by schools. Table 2 below summarises questions to be used for the explanatory variables in the analysis. The question numbers next to each question in the table correspond to the numbers for survey questions in the appendices.

-

<sup>&</sup>lt;sup>11</sup> Previous research suggests matching 86% of individuals on ITTPP data could be matched to the SWC Census using the TRN (<a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/682892/SFR11\_2018\_Main\_Text.pdf">https://www.gov.uk/government/uploads/system/uploads/system/uploads/attachment\_data/file/682892/SFR11\_2018\_Main\_Text.pdf</a>)

<sup>&</sup>lt;sup>12</sup> Table 1 on page 10 shows that mentors will be invited to complete the follow-up survey based on their graduation year and their year of study during ASCENTS mentoring sessions. This will give us 4 mentor cohorts (which were stated as Groups A, B, C, and D). For more details, please at the section 2.4.3. Follow-up mentor survey.

**Table 2**: Explanatory variables for the analysis

Variables in the analysis	Survey	Questions	
Prior Mentoring Experience	Pre- intervention	<ul> <li>How often, if at all, have you done the following?</li> <li>Academic tutoring/mentoring (Q14)</li> <li>Working as a teaching assistant in a school (Q15)</li> <li>Other work with young people (Q16)</li> </ul>	
Career Aspirations	Pre- intervention	Thinking about your plans for after you graduate, how likely are you to pursue each of the following career options?  • Secondary school teaching (Q17)  • Further education teaching (Q18)  • Primary school teaching (Q19)  • University teaching, lecturing or research (Q20)	
Overall Mentoring Experience	Post- intervention	To what extent do you agree or disagree with the following statement  Overall, I enjoyed my mentoring sessions (Q66)	
Mentee Engagement	Post- intervention	To what extent to you agree or disagree with the following statements about your mentee:  • My mentee paid attention during our ASCENTS mentoring sessions (Q88)	
Experience with Mentees	Post- intervention	To what extent to you agree or disagree with the following statements about your mentee:  • I got on well with my mentee (Q89)	

Two separate models will be formed for each research question. For RQ 1 we will use linear regression models while for RQs 2–5 we will use binary logistic regression models. The first model will include variables for background information and variables from the pre-intervention mentor survey. The second model will include variables from the post-intervention survey in addition to those in the first model. The reason for having two separate models for each research question is about missing observations in the post-intervention survey. As explained in Section 2.3 (p. 8), only 208 mentors out of 385 mentors completed survey whereas 347 mentors out of 385 mentors completed the pre-intervention survey. The basic form of the second model is:

$$Outcome_i = \beta_0 + {\beta'}_1 Background_i + {\beta'}_2 Experience + {\beta'}_3 University Attended + {\beta'}_4 Mentor Cohort + e_i$$

Where  $Outcome_i$  is the mentor's interest in becoming a teacher for RQ-1 and the odds of observing the relevant behaviour for RQs 2-5 for the mentor.  $Background_i$  and  $Experience_i$  are background and attitudinal and experiential variables explained above, respectively. UniversityAttended represents the university fixed effects to account for university-level characteristics. MentorCohorts represents the cohorts that a mentor belongs to. <sup>13</sup> Finally, it is important to note that our current design does not allow for a causal estimate of the difference the ASCENTS programme made to mentor outcomes.

The follow-up survey includes questions asking reasons to become a teacher or considering a career in teaching, and the effect of the COVID-19 pandemic on mentors' interest in having a career in teaching. A descriptive analysis will be provided of responses, including frequency distributions and cross-tabulations.

-

<sup>&</sup>lt;sup>13</sup> Some mentors could finish their undergraduate studies later than a year estimated from the pre- and post-intervention surveys. This would not be possible to identify until a mentor completes the follow-up survey. It means that some mentors could complete the follow-up survey before one year after their graduation. Therefore, our model will include a binary variable that indicates whether a mentor has completed the follow-up survey earlier than projected year.

#### 3. Ethics

#### 3.1. Approval

NatCen's Research Ethics Committee (REC) approved the research proposal for the followup study on 7 October 2021. Guidance and recommendations provided by the REC have been incorporated in this study plan.

#### 3.2. Procedures for obtaining agreement to participate in the trial

Delivery partners identified and recruited mentors, with NatCen communicating the requirements for research participation. Mentors were sent an information letter including a link to the NatCen project webpage and were asked to sign a Memorandum of Understanding where they expressed consent to take part in various aspects of the evaluation, including online surveys with mentors and the current follow-up study.

Mentors have the right to review, verify, correct, or request erasure of their personal information; withdraw their permission for the processing their personal data; or request to transfer a copy of their personal information to another party. When any data they provide has been aggregated with other responses in the analyses, NatCen will be unable to remove their data from those analyses. However, the original data will be erased, and it will not be possible to identify them in these aggregated results.

Mentors will also have the right to raise any concerns with the Information Commissioner's Office (ICO).<sup>14</sup>

-

<sup>&</sup>lt;sup>14</sup> More details can be found on the privacy notice on the project website. For the privacy notice, please follow the following link: <a href="http://www.natcen.ac.uk/taking-part/studies-in-field/evaluation-of-ascents-121-support-for-science/privacy-notice/">http://www.natcen.ac.uk/taking-part/studies-in-field/evaluation-of-ascents-121-support-for-science/privacy-notice/</a>

#### 4. Data protection

NatCen is the data controller and data processor for this project. For the use of personal data to be lawful, one (or more) conditions must be met, as set out in Article 6(1) of the General Data Protection Regulation (GDPR). The legal basis for processing personal data is covered by GDPR Article 6 (1) (f):

Legitimate interests: the processing is necessary for your (or a third party's) legitimate interests unless there is a good reason to protect the individual's personal data which overrides those legitimate interests.

NatCen's assessment is that the evaluation fulfils one of its core business purposes (undertaking research, evaluation and information activities) and is therefore in its legitimate interest, that processing personal information is necessary for addressing the research questions in this study. NatCen has considered and balanced any potential impact on the data subjects' rights and find that its activities will not do the data subject any unwarranted harm.

Special category data is personal data that needs more protection because it is sensitive. In order to lawfully process special category data, we must identify both a lawful basis under Article 6 of the UK GDPR and a separate condition for processing under Article 9. The special category data we will be processing in the course of this study is the ethnic background of the mentors involved. Our lawful basis for processing is consent as this information was freely given by the people concerned.

NatCen provided a Memorandum of Understanding to participating mentors, explaining the nature of the data being requested, how it will be collected, and how it will be passed to and shared. Procedures for ensuring data quality, anonymity and confidentiality can be found in the privacy notice<sup>15</sup>. Data on mentors' experiences of the ASCENTS programme will be held until six months after the publication of follow-up mentor survey findings in 2025. At the end of the project, NatCen will share the final anonymised set of data that will later be archived with all five collaborating universities in order to facilitate additional analysis for the purpose of writing a co-authored academic publication. The data will be deleted within 3 months of the project ending and the deletion of the data from Universities will be done by the Principle Investigator and witnessed by the Co-Investigator.<sup>16</sup> The Principle Investigator will email NatCen to confirm deletion. Furthermore, before deleting the data held by NatCen, the data will be shared with EEF and FFT (EEF's data processors for the EEF data archive) to archive the data on the Secure Research Service (SRS) at the Office for National Statistics (ONS).

<sup>15</sup> http://www.natcen.ac.uk/taking-part/studies-in-field/evaluation-of-ascents-121-support-for-science/privacy-notice/

<sup>&</sup>lt;sup>16</sup> This might need to be a role rather than an individual. We need to allow for staff moving on so shouldn't assume that the contacts involved at the time when the data sharing agreement is created will still be involved at the time when the data needs deleting.

## 5. Reporting

The final analysis report will be submitted to the EEF in February 2025. Additional interim reports will be provided to EEF in March each year after the questionnaires are completed (in November). Each report will include descriptive analysis: frequency distributions of responses; where relevant, means and SDs; and sample size and missingness on each item.

## 6. Risks

Risk	Likelihood/ Impact	Mitigation/Contingency
Mentors do not complete the survey	Likelihood: Low Impact: Medium	To maximise the response rate, NatCen will administer the follow-up mentor survey is online. The survey will be live for a sufficiently long period for mentors to complete the survey at a time convenient to them. The survey will be no longer than 10minutes. Additionally, mentors will be offered £10 e-voucher upon completion of the survey.
Mentors cannot be contacted as their email address has changed	Likelihood: Medium Impact: Medium	This is an unavoidable potential source of attrition. We do have personal email addresses, which helps to mitigated against this risk.
Delayed access to administrative data	Likelihood: Low Impact: Medium	NatCen will need to access the ITTPP and SWC data for outcomes measures of mentors. The data extract will be requested in summer 2024. To prevent a delay in obtaining administrative data extracts, NatCen will monitor the processing times on other similar projects and inform EEF about any potential delays to the analysis timetable due to data access.
Staffing issues: staff leaving/unavailable over extended duration of the project	Likelihood: Medium Impact: Medium	Succession planning has been built into team roles. Large teams can absorb problems in the short-term. Sufficient numbers of experienced staff in senior roles are available to cover others in the team.

## 7. Timeline

Dates	Activity	Staff responsible/ leading
Oct 2021	Follow-up survey design signed off and ready for going online in November 2021	
Oct 2021	Ethics approved	
Nov 2021	Follow-up survey sent to mentors graduating in 2020 (Group A)	
March 2022	Interim report for Group A mentors	
Nov 2022	Follow-up survey sent to mentors graduating in 2021 (Groups B and C)	NatCen
March 2023	Interim report for Groups B and C mentors	
Nov 2023	Follow-up survey sent to mentors graduating in 2022 (Group D)	
March 2024	Interim report for Group D mentors	
June 2024	Data requests ITT PP and SWC	
Feb 2025	Submission of final analysis report to EEF	

#### 8. References

Buckley, S, Zamora, J (2007). Effects of participation in a cross year peer tutoring programme in clinical examination skills on volunteer tutors' skills and attitudes towards teachers and teaching. *BMC Medical Education* 2007 7:20 https://doi.org/10.1186/1472-6920-7-20

Khalid, H., Shahid, S., Punjabi, N., & Sahdev, N. (2018). An integrated 2-year clinical skills peer tutoring scheme in a UK-based medical school: perceptions of tutees and peer tutors. *Advances in medical education and practice*, 9, 423–432. doi:10.2147/AMEP.S159502

Liew, SC, Sow, CF, Sidhu, J, Devi Nadarajah V (2015). The near-peer tutoring programme: embracing the 'doctors-to-teach' philosophy – a comparison of the effects of participation between the senior and junior near-peer tutors, *Medical Education Online*, 20:1, DOI: 10.3402/meo.v20.27959

Rodrigues, J, Sengupta, A, Mitchell, A, Kane, C, Kane, C, Maxwell, S, Cameron, H, Ross, M, Ford, M (2009). The South-east Scotland Foundation Doctor Teaching Programme — Is "nearpeer" teaching feasible, efficacious and sustainable on a regional scale? *Medical Teacher*, 31:2, e51-e57, DOI: 10.1080/01421590802520915

Scandone, B., Burridhe, H., Takala, H., Brsitow, T., Bartasevicius, V., and Gill, V. (2021) 'ASCENTS 121 Support for Science Evaluation Report', London: Education Endowment Foundation. Available from:

https://educationendowmentfoundation.org.uk/public/files/ASCENTS\_Report\_April\_2021\_Final.pdf

Sharpe, R., Abrahams, I. & Fotou, N. (2018). Does paired mentoring work? A study of the effectiveness and affective value of academically asymmetrical peer mentoring in supporting disadvantaged students in school science. Research in Science and Technological Education, 36, 205-225.

#### 9. Appendices

#### 9.1. Appendix A: Pre-intervention Mentor Survey

# ASCENTS mentor survey, wave one Immediately after training

Questions are documented as follows:
{Question routing - who is asked the question}
Question Name
Question text
: Question response options
(Variable label)
Textfills from sample include:
TEXTFILL:
Triggering outcomes:
<u>Timestamps:</u>

#### **TESTING**

#### Please check:

- 1. That all questions are compulsory (with the exception of two, "anything else to add" questions, highlighted below). Please test this by trying to skip every question in the survey before you answer it
- That all questions are present
   Question wording should match the survey script
   Answer options should match the survey script
- 5. Questions should follow the same order as the survey script
- 6. Spelling mistakes and typos
- 7. Formatting
- 8. Logic applies only to questions 13 16

Rule: should only be asked 14-16 if you answer "I have done this" to Q13. Please check that you are then asked all three of 14-16, and sent to Q17 if select "I have not done this"

9. Finally, do highlight if, on seeing questions in the flesh, you think they do not make sense or will draw invalid responses

Please highlight any errors with a comment on the relevant question in this documer	nt.

#### I. Introduction

{ASK ALL}

Intro

**Evaluation of ASCENTS 121 Support for Science** 

This survey was created by NatCen Social Research for the evaluation of the ASCENTS mentoring programme, and will help us find ways to improve the programme. Please answer all questions as honestly as you can – we want to know your genuine experiences and feelings. It takes about ten minutes.

Please do the survey only after you have completed your second day of ASCENTS training.

If you have any questions about the evaluation of ASCENTS, please visit our website http://natcen.ac.uk/taking-part/studies-in-field/evaluation-of-ascents-121-support-for-science/or email ASCENTS@natcen.ac.uk.

To submit responses for this survey, you will need to answer all questions and click "submit" at the end. If you stop the survey, you will need to complete it again from the start.

Thank you for taking the time to complete this survey.

#### Stop page:

This survey has been stopped. You will need to come back and answer all questions to complete the survey

#### II. Characteristics

#### FName (VARLAB: first name)

1. What is your first name?

<Open text box>

#### SName (VARLAB: surname)

2. What is your surname?

<Open text box>

#### DoB (VARLAB: DoB)

3. What is your date of birth?

Please write in the following format: day/month/year. E.G. 25/12/2000

<Open text box>

#### UniMail (VARLAB: university email)

4. We may want to get in touch again at the end of the ASCENTS programme to ask for your feedback. Please provide your university email address so we can do this:

<Open text box>

#### PerMail (VARLAB: Personal email)

5. After you graduate we may want to get in touch to ask how ASCENTS has affected your career plans. Please provide your personal email address so we can do this:

<Open text box>

#### UniAttnd (VARLAB: University attended)

#### 6. Which of the following universities do you attend?

University of Lincoln

University of Liverpool

University of York

University College London Institute of Education

University of Leeds

#### CrsYrs (VARLAB: course length)

#### 7. How many years does your course last?

Three years

Four years

Five years

Other (specify)

#### BScMSc (VARLAB: BSc or MSc)

#### 8. At the end of your course, will you receive a BSc or MSc qualification?

BSc

MSc

Other (specify)

#### CrntYr (VARLAB: current course year)

#### 9. What year of your course are you currently in?

First

Second

Third

Fourth

Fifth

Other

#### Gender (VARLAB: gender)

#### 10. What is your gender?

Male

Female

Other

Prefer not to answer

#### EthnGrp (VARLAB: ethnic group)

#### 11. What is your ethnic group?

White British

White Other

Mixed or multiple ethnic groups

Asian/Asian British

Black/African/Caribbean/Black British

Other ethnic group

Prefer not to answer

#### Subject (VARLAB: subject studied)

# 12. . What is your subject of study? If you are a dual subject student, please specify your two subjects in the "other" textbox below.

Aerospace engineering

**Astronomy** 

Biochemistry

**Biology** 

Chemical engineering

Chemistry

Civil engineering

Computer science

Electrical engineering

Mathematics

Mechanical engineering

Neuroscience

**Physics** 

Psychology

Statistics

Other (specify)

#### III. Prior experience

PrvWrk (VARLAB: if done previous work with young people)

13. Before ASCENTS, have you had any other experience of working or volunteering with children or young people?

I have done this

I have not done this

Those who choose "I have done this" at 16

PrvTtr (VARLAB: if tutored)

How often, if it all, have you done the following?

14. Academic tutoring / mentoring

Once

A few times

Regularly – as part of a paid job

Regularly – as part of unpaid voluntary work

Never

Those who choose "I have done this" at 16

PrvTch (VARLAB: if worked as a teaching assistant)

How often, if at all, have you done the following?

15. Working as a teaching assistant in a school

Once

A few times

Regularly – as part of a paid job

Regularly – as part of unpaid voluntary work

Never

Those who choose "I have done this" at 16

PrvOtWrk (VARLAB: if done any other work with young people)

How often, if at all, have you done the following?

16. Other work with young people (e.g. working with a youth organisation, helping at a school with extracurricular activities, School Experience Programme, nannying, babysitting)

Once

A few times

Regularly – as part of a paid job

Regularly – as part of unpaid voluntary work

Never

#### IV. Career aspirations

Thinking about your plans for after you graduate, how likely are you to pursue each of the following career options? On a scale of 0 to 10, where 0 is extremely unlikely, 5 is neither likely nor unlikely and 10 is extremely likely.

#### TchSSch (VARLAB: how likely to become a secondary school teacher)

# 17. Secondary school teaching 0 – Extremely unlikely 1 2 3 4 5 – Neither likely nor unlikely 6 7 8

10 - Extremely likely

Don't know

#### TchFE (VARLAB: how likely to become a further education teacher)

#### 18. Further education (e.g. college) teaching

0 – Extremely unlikely

5 – Neither likely nor unlikely

10 – Extremely likely

Don't know

#### TchPSch (VARLAB: how likely to become a primary school teacher)

#### 19. Primary school teaching

0 – Extremely unlikely

5 – Neither likely nor unlikely

10 – Extremely likely

Don't know

#### TchUni (VARLAB: how likely to work in a university)

#### 20. University teaching, lecturing or research

0 – Extremely unlikely

5 – Neither likely nor unlikely

10 – Extremely likely

Don't know

#### WkPubSec (VARLAB: how likely to work in the public sector)

#### 21. Public sector not in education, such as the civil service, NHS or local government

0 – Extremely unlikely

5 – Neither likely nor unlikely

10 – Extremely likely

Don't know

#### WkPrvSec (VARLAB: how likely to work in private sector)

#### 22. Private sector / industry

- 0 Extremely unlikely
- 5 Neither likely nor unlikely
- 10 Extremely likely

Don't know

Thinking about your plans for after you graduate, how likely are you to pursue each of the following options for further education or training? On a scale of 0 to 10, where 0 is extremely unlikely, 5 is neither likely nor unlikely and 10 is extremely likely.

#### FtrStud (VARLAB: how likely to study further in subject)

#### 23. Further academic study in your subject area

- 0 Extremely unlikely
- 5 Neither likely nor unlikely
- 10 Extremely likely

Don't know

#### StudTch (VARLAB: how likely to train in teaching)

#### 24. A postgraduate qualification in education or teaching

- 0 Extremely unlikely
- 5 Neither likely nor unlikely
- 10 Extremely likely

Don't know

#### V. Motivations to take part in ASCENTS

Thinking about your reasons for doing ASCENTS, how important were each of the following to you when deciding to do the programme? On a scale of 0 to 10 where 0 is not important to you at all, 5 is somewhat important to you and 10 is extremely important to you.

#### CrrTch (VARLAB: importance of ASCENTS for future career in teaching)

25. I thought ASCENTS would strengthen my CV and help me get a job after university

```
0 – Not important to me at all 1
```

2

4 5 – Somewhat important to me

6 7

8 a

10 – Extremely important to me

#### SptYPpl (VARLAB: importance of supporting disadvantaged young people)

26. I wanted to mentor and / or support the learning of disadvantaged young people

- 0 Not important to me at all
- 5 Somewhat important to me
- 10 Extremely important to me

#### LrnYPpl (VARLAB: importance of learning what it's like to work with young people)

27. I wanted to learn what it's like to work with young people

- 0 Not important to me at all
- 5 Somewhat important to me
- 10 Extremely important to me

#### SptArea (VARLAB: importance of supporting local area)

- 28. I wanted to do something to support the local area
- 0 Not important to me at all
- 5 Somewhat important to me
- 10 Extremely important to me

#### HIpSTEM (VARLAB: importance helping young people with STEM)

- 29. I thought it was important to help young people do well in STEM
- 0 Not important to me at all
- 5 Somewhat important to me
- 10 Extremely important to me

#### ErnMny (VARLAB: importance of earning money)

- 30. I wanted to earn some money while I'm studying
- 0 Not important to me at all
- 5 Somewhat important to me
- 10 Extremely important to me

#### VI. Engagement

#### TimePrep (VARLAB: time spent preparing for ASCENTS)

31. Now that you have had the ASCENTS training, do you think you will need to spend any time preparing for each one-hour mentoring session? If so, approximately how much time per session?

I don't think I will need to spend any time preparing

Less than one hour

Between 1 and 2 hours

Between 2 and 3 hours

More than three hours

Don't know

#### TimeAft (VARLAB: time spent on follow up work for ASCENTS)

32. Do you think you will need to spend any time on follow up work after each one-hour mentoring session? If so, approximately how much time per session?

I don't think I will need to spend any time doing follow up work

Less than one hour

Between 1 and 2 hours

Between 2 and 3 hours

More than three hours

Don't know

#### EsyPrp (VARLAB: ease or difficulty of finding time for ASCENTS)

33. If you think you will need to spend time to prepare and/or follow up, how easy or difficult do you think it will it be to find this time?

Very easy

Easy

Neither easy nor difficult

Difficult

Very difficult

Not applicable – I won't need to spend any time on preparation or follow up work

Don't know

#### StudLess (VARLAB: if will study less to make time for ASCENTS)

# Will you have to do any of the following things less in order to make time for ASCENTS?

#### 34. Study

I will have to study less I will not have to study less Don't know

#### SocLess (VARLAB: if will socialise less to make time for ASCENTS)

# Will you have to do any of the following things less in order to make time for ASCENTS?

#### 35. Socialise

I will have to socialise less I will not have to socialise less Not applicable – I don't socialise Don't know

#### WrkLess (VARLAB: if will work less to make time for ASCENTS)

#### 36. Paid work

I will have to do less paid work
I will not have to do less paid work
Not applicable – I don't do paid work
Don't know

#### VolLess (VARLAB: if will volunteer less to make time for ASCENTS

#### 37. Volunteering

I will have to volunteer less
I will not have to volunteer less
Not applicable – I don't volunteer
Don't know

#### SprtLess (VARLAB: if will do sports less to make time for ASCENTS)

#### 38. Sports

Will have to do sports less
Will not have to do sports less
Not applicable – I don't do sports
Don't know

#### ElseLess (VARLAB: if will do anything else less to make time for ASCENTS)

39. If there is anything else you will have to do less in order to make time for ASCENTS please describe it here.

<open text box>

#### SubKnwl (VARLAB: if ASCENTS will increase tutor knowledge of subject)

40. Do you think that being an ASCENTS mentor will help increase your knowledge of your own subject, or will it make no difference?

I think it will increase my knowledge of my subject a lot I think it will increase my knowledge of my subject somewhat I think it will increase my knowledge of my subject a little bit I don't think it will make a difference

Don't know

## VII. Satisfaction with training \*

On a scale of 0 to 10, where 0 is highly dissatisfied, 5 is neither satisfied nor dissatisfied and 10 is highly satisfied, how satisfied are you with each of the following aspects of the ASCENTS application process and training:

#### TrnrDay1 (VARLAB: satisfaction with the trainer on day one)

#### 41. The trainer on day one

0 - Highly dissatisfied

1 2

3

ა 4

5 - Neither satisfied nor dissatisfied

6 7

8

9

10 – Highly satisfied

Don't know

#### TrnrDay2 (VARLAB: satisfaction with trainer on day two)

#### 42. The mentoring trainer on day two (not the safeguarding trainer)

0 – Highly dissatisfied

5 - Neither satisfied nor dissatisfied

10 - Highly satisfied

Don't know

#### TrngCont (VARLAB: satisfaction with training content)

#### 43. The training content

0 – Highly dissatisfied

5 - Neither satisfied nor dissatisfied

10 - Highly satisfied

Don't know

#### TrngSuff (VARLAB: satisfaction with training quantity)

**44.** Thinking about both training days, do you think the training was too long, too short, or about right?

Too long

Too short

About right

Don't know

#### Prprd (VARLAB: how well prepared)

45. In conclusion, thinking about how well prepared you feel to be a mentor now you have had the training, how confident do you feel about your mentoring skills?

Very confident

Fairly confident

A little bit confident

Not confident at all

Don't know

#### AnyElse (VARLAB: anything else to add)

46. Thank you for taking the time to complete this survey. Is there anything else you would like to add?

Open text box

# ASCENTS mentor survey, wave 2 Post-intervention

# Questions are documented as follows: {Question routing - who is asked the question}

**Question Name** 

Question text

: Question response options

(Variable label)

Textfills from sample include:

TEXTFILL:

**Triggering outcomes:** 

**Timestamps:** 

#### **Sections**

- i. Intro
- ii. Characteristics
- iii. Career expectations
- iv. Your experience of ASCENTS
- v. Your mentee
- vi. Impact of your ASCENTS mentoring

#### VIII.Introduction

#### **Evaluation of ASCENTS 121 Support for Science**

This survey was created by NatCen Social Research for the evaluation of the ASCENTS mentoring programme to help us find ways to improve the programme.

Please answer all questions as honestly as you can – we want to know your genuine views. The survey only takes about ten minutes, and all answers will be reported anonymously.

If you have any questions about the evaluation of ASCENTS, please visit our website: http://natcen.ac.uk/taking-part/studies-in-field/evaluation-of-ascents-121-support-for science/ or email ASCENTS@natcen.ac.uk.

To submit your responses, you will need to answer all questions and click "submit" at the end. If you stop the survey, you will need to complete it again from the start.

Thank you for taking the time to complete this survey.

#### Stop page:

This survey has been stopped. You will need to come back and answer all questions to complete the survey.

#### IX.Characteristics

First, a few questions about you. These are to help us with our research and your answers will not be shared outside the NatCen team.

#### FName (VARLAB: first name)

47. What is your first name?

<Open text box>

#### SName (VARLAB: surname)

48. What is your surname?

<Open text box>

#### DoB (VARLAB: DoB)

49. What is your date of birth?

Please write in the following format: day/month/year; e.g. 25/12/2000

<Open text box>

#### PerMail (VARLAB: Personal email)

50. After you graduate we may want to get in touch to ask how ASCENTS has affected your career plans. Please provide your personal email address so we can do this:

<Open text box>

#### Gender (VARLAB: gender)

51. What is your gender?

Male Female Other

Prefer not to answer

EthnGrp (VARLAB: ethnic group)

#### 52. What is your ethnic group?

White British

White Other

Mixed or multiple ethnic groups

Asian/Asian British

Black/African/Caribbean/Black British

Other ethnic group

Prefer not to answer

#### UniAttnd (VARLAB: University attended)

#### 53. Which of the following universities do / did you attend?

University of Lincoln

University of Liverpool

University of York

University College London

University of Leeds

#### BScMSc (VARLAB: BSc or MSc)

#### 54. At the end of your university course, will you receive a BSc or MSc qualification?

BSc

MSc

Other (specify)

#### CrntYr (VARLAB: current course year)

#### 55. What year of your university course are you currently in?

First

Second

Third

Fourth

Fifth

Other (specify)

#### CrsYrs (VARLAB: course length)

#### 56. How long is your university course?

Three years

Four years

Five years

Other (specify)

#### Subject (VARLAB: subject studied)

# 57. What is your subject of study? If you are a dual subject student, please specify your two subjects in the "other" textbox below.

Aerospace engineering

Astronomy

Biochemistry

Biology

**Biomedical Science** 

Chemical engineering

Chemistry

Civil engineering

Computer science

Electrical engineering

Mathematics

Mechanical engineering

Neuroscience

Physics Psychology Statistics Other (specify)

#### X.Career expectations

The next questions are about your plans for when you have graduated.

Thinking about your plans after graduation, how likely or unlikely are you to pursue each of the following career options? On a scale of 0 to 10, where 0 is extremely unlikely, 5 is neither likely nor unlikely and 10 is extremely likely.

#### TchPSch (VARLAB: how likely to become a primary school teacher)

# 58. Primary school teaching 0 – Extremely unlikely 2 3 4 5 – Neither likely nor unlikely 6 7 8 9 10 – Extremely likely Don't know

#### TchSSch (VARLAB: how likely to become a secondary school teacher)

#### 59. Secondary school teaching

0 – Extremely unlikely

5 – Neither likely nor unlikely

10 - Extremely likely

Don't know

#### TchFE (VARLAB: how likely to become a further education teacher)

#### 60. Further education (e.g. college) teaching

0 - Extremely unlikely

5 – Neither likely nor unlikely

10 - Extremely likely

Don't know

#### TchUni (VARLAB: how likely to work in a university)

#### 61. University teaching, lecturing or research

0 – Extremely unlikely

5 – Neither likely nor unlikely

10 - Extremely likely

Don't know

#### WkPubSec (VARLAB: how likely to work in the public sector)

- 62. Public sector (not education) such as the civil service, NHS or local government
- 0 Extremely unlikely
- 5 Neither likely nor unlikely
- 10 Extremely likely

Don't know

#### WkPrvSec (VARLAB: how likely to work in private sector)

- 63. Private sector / industry
- 0 Extremely unlikely
- 5 Neither likely nor unlikely
- 10 Extremely likely

Don't know

Thinking about your plans after graduation, how likely or unlikely are you to pursue each of the following options for further education or training? On a scale of 0 to 10, where 0 is extremely unlikely, 5 is neither likely nor unlikely and 10 is extremely likely.

#### FtrStud (VARLAB: how likely to study further in subject)

- 64. Further academic study in your subject area
- 0 Extremely unlikely
- 5 Neither likely nor unlikely
- 10 Extremely likely

Don't know

#### StudTch (VARLAB: how likely to train in teaching)

- 65. A postgraduate qualification in education or teaching
- 0 Extremely unlikely
- 5 Neither likely nor unlikely
- 10 Extremely likely

Don't know

#### **XI.Your experience of ASCENTS**

The next questions are about your experience of ASCENTS mentoring.

#### OverEnjo (VARLAB: whether enjoyed mentoring)

66. To what extent do you agree or disagree with the following statement:

#### Overall, I enjoyed my mentoring sessions

Strongly agree

Agree

Neither agree nor disagree

Disagree

Strongly disagree

Don't know

#### Mentlike (VARLAB: liked about mentoring)

**67.** What, if anything, did you like about the mentoring sessions? {Open textbox}

#### Mentdis (VARLAB: disliked about mentoring)

68. What, if anything, did you *not* like about the mentoring sessions? {Open textbox}

#### MentCont (VARLAB: content of mentoring sessions)

69. What content did your mentoring sessions cover? Please select all that apply.

Science classwork

Science homework

Learning strategies

Improving confidence

Career options

Other (please specify)

#### TimePrep (VARLAB: time spent preparing for ASCENTS)

# **70.** Did you spend any time preparing for your mentoring sessions? If so, roughly how much time did you spend preparing before each session?

I didn't spend any time preparing before my mentoring sessions

Less than 30 minutes

Between 30 minutes and 60 minutes

Between 60 minutes and 90 minutes

More than 90 minutes

Don't know

#### TimeFollow (VARLAB: time spent on follow-up work for ASCENTS)

71. Did you spend any time on follow-up work specifically for ASCENTS after your mentoring sessions? If so, roughly how much time did you spend on follow-up work after each session?

I didn't spend any time on follow-up work after my mentoring sessions

Less than 30 minutes

Between 30 minutes and 60 minutes

Between 60 minutes and 90 minutes

More than 90 minutes

Don't know

#### IfDrop (VARLAB: if dropped out of ASCENTS)

72. Did you stop ASCENTS mentoring before the end of the programme? Please do not count mentoring sessions that were scheduled to take place after school closures.

Yes, I stopped ASCENTS mentoring before the end of the programme

No. I have not stopped ASCENTS mentoring before the end of the programme

#### IF IFDROP = YES

#### WhenDrop (VARLAB: when dropped out of ASCENTS)

**73.** How many mentoring sessions did you attend before stopping ASCENTS? [Open text box]

#### WhenDrop [any value]

#### WhyDrop (VARLAB: why dropped out of ASCENTS)

# 74. Did you stop ASCENTS for any of the following reasons? Please select all that apply.

Health problems

Problems with transport to or from mentoring

My mentee didn't show up

The mentoring clashed with lectures or other university work

The mentoring clashed with other paid work

The mentoring clashed with other things I wanted to do

I missed so many mentoring sessions I didn't want to keep going My home life made it hard for me to attend mentoring Other (specify)

#### IF IFDROP = NO

#### MissSess (VARLAB: whether missed any sessions)

75. How many mentoring sessions did you have to miss? Please do not count mentoring sessions that were scheduled to take place after school closures.

[Numeric open text box; tick box: 'I didn't miss any mentoring sessions']

#### ANY WHO HAS MISSED ONE OR MORE SESSIONS

#### WhyMiss (VARLAB: reasons why missed any mentoring sessions)

76. Did you miss any of your ASCENTS sessions for any of the following reasons? Please select all that apply.

I was ill

Problems with transport to or from mentoring

My mentee didn't show up

The mentoring clashed with lectures or other university work

The mentoring clashed with other paid work

The mentoring clashed with other things I wanted to do

I missed so many mentoring sessions I didn't want to keep going

My home life made it hard for me to attend mentoring

Other (specify)

#### TrainHelp (VARLAB: how helpful was the training received)

77. Now that you have done your ASCENTS mentoring, how helpful or unhelpful did you find the ASCENTS mentor training in preparing you?

Very helpful

Somewhat helpful

Not helpful

Not applicable – I did not attend mentor training

Don't know

#### TrainWhat (VARLAB: anything that could have made training more helpful)

78. Is there anything that could have made your ASCENTS mentor training more helpful? [Open box]

#### ProbRoom (VARLAB: any problems with mentoring room)

79. Were there any problems with the room where you had your mentoring? Please select all that apply.

The mentoring room was too noisy

The mentoring room was too crowded

The mentoring room was too cold

The mentoring room was too hot

Other (please specify)

There were no problems

#### EasDel (VARLAB: whether found delivery easy or difficult)

80. Overall, how easy or difficult did you find it to deliver ASCENTS mentoring?

Very easy

Fairly easy

Neither easy nor difficult

Fairly difficult

Very difficult

Don't know

#### EasDelExpl (VARLAB: explain why delivery difficult)

81. Please explain why.

[open text box]

#### OthCYP (VARLAB: if done previous work with young people)

82. This academic year, have you had any other experience of working or volunteering with children or young people, apart from ASCENTS?

Yes, I have done this

No, I have not done this

#### XII. Your ASCENTS mentee

The next questions are about your ASCENTS mentee.

#### OneMent (VARLAB: whether had more than one mentee)

83. Have you had the same mentee for all your ASCENTS sessions, or have you had a different mentee at any point?

I've had the same mentee since I started ASCENTS

I've had different mentees since I started ASCENTS

#### IF HAD MORE THAN ONE MENTEE

#### ChngMent (VARLAB: why had to change mentee)

84. Were any of the following a/the reason(s) why you had more than one mentee? Please select all that apply.

My mentee dropped out of ASCENTS

My mentee couldn't come to some of our sessions

I was allocated more than one mentee

I wanted a mentee with a different gender

I didn't get on with my mentee

Other (please specify)

If you had more than one mentee, please think of the mentee you had the most sessions with when you answer the following questions.

#### MentGndr (VARLAB: whether mentee was same gender)

85. Was your mentee the same gender as you?

Yes, my mentee was the same gender as me

No, my mentee was a different gender from me

#### IF DIFFERENT GENDER

#### DiffGndr (VARLAB: how felt about mentee of different gender)

86. How did you feel about having a mentee who was a different gender from you?

I would have preferred a mentee who was the same gender

I liked that my mentee was a different gender from me

It didn't make a difference to me what gender my mentee was

Don't know

#### IF SAME GENDER

#### SameGndr (VARLAB: how felt about mentee of same gender)

87. How did you feel about having a mentee who was the same gender as you?

I would have preferred a mentee who was a different gender

I liked that my mentee was the same gender as me

It didn't make a difference to me what gender my mentee was

Don't know

To what extent to you agree or disagree with the following statements about your mentee:

#### MentEng (VARLAB: how engaged was the mentee)

#### 88. My mentee paid attention during our ASCENTS mentoring sessions

Strongly agree

Agree

Neither agree nor disagree

Disagree

Strongly disagree

Don't know

#### LikdMent (VARLAB: how well got on with mentee)

#### 89. I got on well with my mentee

Strongly agree

Agree

Neither agree nor disagree

Disagree

Strongly disagree

Don't know

#### XIII.Impact of your ASCENTS mentoring

The next questions are about the benefits and costs of being an ASCENTS mentor.

#### BenAsc (VARLAB: benefits of taking part in ASCENTS)

# 90. Do you feel you have benefitted in any of the following ways from taking part in ASCENTS? [Yes/No grid]

Increased subject knowledge

Improved university attainment

Better time management skills

Improved confidence

Increased sense of belonging in the local area

Improved CV

Feeling good about helping others

Socialising with other mentors

Other (please specify)

#### CostAsc (VARLAB: costs of taking part in ASCENTS)

# 91. Did you have to do any of the following things less in order to make time for ASCENTS? Please select all that apply.

I had to study less

I had to socialise less

I had to do less paid work

I had to volunteer less

I had to do sports less

Other (please specify)

I did not have to do anything less

#### TeachInt (VARLAB: if ASCENTS has increased interest in teaching)

# 92. To what extent has ASCENTS mentoring increased or decreased your interest in teaching?

Increased a lot

Increased somewhat

No difference Decreased somewhat Decreased a lot Don't know

# DisadvInt (VARLAB: if ASCENTS has increased interest in career supporting disadvantaged students)

# 93. To what extent has ASCENTS mentoring increased or decreased your interest in a career supporting disadvantaged students?

Increased a lot Increased somewhat No difference Decreased somewhat Decreased a lot Don't know

#### GdExAsts (VARLAB: good experience or not ASCENTS)

# 94. Which of the following statements describes your attitude to ASCENTS: Overall, I have had:

A good experience with the ASCENTS mentoring programme An okay experience with the ASCENTS mentoring programme A bad experience with the ASCENTS mentoring programme Don't know

#### GdExExpla (VARLAB: explain why good experience or not)

95. Please explain why. [open text box]

#### AsBett (VARLAB: change about ASCENTS)

96. What would you change about ASCENTS to make it better?

#### AnyElse (VARLAB: anything else to add on ASCENTS)

97. If there is anything else you would like to share about ASCENTS, please write it here. [Open text box]

#### End

Thank you for taking the time to complete this survey. Your answers will help us improve the programme for future mentors and mentees.

# **ASCENTS Mentor follow up survey**

Questions are documented as follows:
{Question routing - who is asked the question}
Question Name
Question text
: Question response options
(Variable label)
Textfills from sample include:
TEXTFILL:
Triggering outcomes:
Timestamps:

## **Sections**

- vii. Introduction
- viii. Characteristics
- ix. Employment/Education outcomes
- x. Career expectations

Short URL:

The short URL for this survey was "survey.natcen.ac.uk/ASCENTS3".

#### XIV.Introduction

#### **Evaluation of ASCENTS 121 Support for Science**

This survey was created by NatCen Social Research for the evaluation of the ASCENTS mentoring programme to help us find ways to improve the programme. We are inviting you to complete this survey because you have previously agreed to participate in the ASCENTS project. Please note that your participation in this survey is voluntary and you can skip any questions you do not wish to answer.

Please answer all questions as honestly as you can – we want to know your genuine views. The survey only takes about ten minutes, and all answers will be reported anonymously in the final report. The data collected will only be used for research purposes. Reports and publications arising from this research will not identify any individual participant. The privacy notice can be found on the project website below.

If you have any questions or concerns about the evaluation of ASCENTS, please visit our website: <a href="https://natcen.ac.uk/taking-part/studies-in-field/evaluation-of-ascents-121-support-for-science/">https://natcen.ac.uk/taking-part/studies-in-field/evaluation-of-ascents-121-support-for-science/</a> or email ASCENTS@natcen.ac.uk.

To submit your responses, you will need to answer all questions and click "submit" at the end. If you stop the survey, you will need to complete it again from the beginning.

You will receive a £10 e-voucher by email within 5 working days of completing the survey.

Thank you for taking the time to complete this survey.

#### XV.Characteristics

First, a few questions about you. These are to help us match your answers with your responses to previous ASCENTS surveys.

```
{ASK ALL}
FName (VARLAB: first name)
    98. What is your first name?
<Open text box>

{ASK ALL}
SName (VARLAB: surname)
    99. What is your surname?
<Open text box>

{ASK ALL}
DoB (VARLAB: DoB)
    100. What is your date of birth?
<DOB validated date field>

{ASK ALL}
Gender (VARLAB: gender)
```

#### 101. Which of these options describes how you think of yourself?

Male

Female

In another way < Open text box>

#### {ASK ALL}

#### UniAttnd (VARLAB: University attended)

#### 102. Which of the following universities did you attend?

University of Lincoln

University of Liverpool

University of York

University College London

University of Leeds

#### {ASK ALL}

#### SubjectStudied (VARLAB: subject studied)

# 103. What subject did you study? If you studied two or more subjects, please list them in the "Other" textbox below.

Aerospace engineering

Astronomy

Astrophysics

Biochemistry

Biology

Biomedical Science

Chemical engineering

Chemistry

Civil engineering

Computer science

Electrical engineering

Mathematics

Mechanical engineering

Neuroscience

**Physics** 

Psychology

**Statistics** 

Other (specify) < Open text box>

#### {ASK ALL}

#### BScMSc (VARLAB: BSc or MSc)

# 104. At the end of your university course, what kind of qualification did you receive?

- **1.** Bachelor's degree (e.g., BSc, BEng)
- 2. Master's degree (e.g., MSc, MEng)
- **3.** I did not receive a qualification
- 4. I'm still continuing my undergraduate studies
- 5. Other (please specify) < Open text box>

#### $\{IF BScMSc = 4\}$

#### GradDate (VARLAB: Year of Graduation)

105. Can you tell us when you expect to complete your undergradute studies (e.g. June 2023)? <Open text box>

#### $\{IF BScMSc = 4\}$

#### ContactNxYr

Stop page for those indicating continuing their undergraduate studies in Q9:

You have indicated that you are continuing your undergraduate studies. We will contact you again next year to ask if you have completed your studies then. Thank you for your time.

```
{IF BScMSc = 1 or BScMSc = 2 or BScMSc = 5 or BScMSc = 'Don't Know' or BScMSc =
     'Prefer not to say'}
     WhenDegree (VARLAB: When obtained degree)
                   When did you graduate? (e.g. June 2021)
         106.
            <Open text box>
     {IF BScMSc = 1 or BScMSc = 2 or BScMSc = 5 or BScMSc = 'Don't Know' or BScMSc =
     'Prefer not to say'}
     DegreeClass (VARLAB: level of degree)
                   What level of degree have you obtained from your undergraduate
         107.
            degree?
         1. First
         2. Upper Second (2:1)
         3. Lower Second (2:2)
         4. Third
         5. Other (specify) < Open text box>
XVI. Employment/Education Outcomes
     {IF BScMSc = 1 or BScMSc = 2 or BScMSc = 5 or BScMSc = 'Don't Know' or BScMSc =
     'Prefer not to say'}
     QTS (VARLAB: qts status)
                   Did you graduate from your undergraduate studies with Qualified
         108.
            Teacher Status (QTS) or Early Years Teacher Status (EYTS)?
            1. Yes
            2. No
     {IF QTS = 2 or BScMSc = 3 or QTS = 'Don't Know' or QTS = 'Prefer not to say'}
     ITTStatus (VARLAB: itt status)
         109.
                   Which of the following statements applies to you?
                a. Currently enrolled in a programme of initial teaching training (ITT)
                b. Completed a programme of initial teaching training (ITT)
                c. Neither of these options
     {IF ITTStatus = 3 or ITTStatus = 'Don't Know' or ITTStatus = 'Prefer not to say'}
     ITTLikely (VARLAB: how likely to enrol in ITT)
         110.
                   How likely is it that you enrol in a programme of initial teaching training
            (ITT) in the future to become a teacher?
            1. Very likely
            2. Likely
            3. Neutral
            4. Unlikely
            5. Very unlikely
     {IF QTS = 1 or ITTStatus = 2}
     IsTeacher (VARLAB: teacher status)
                   Have you become a teacher?
         111.
            1. Yes
            2. No
```

{IF IsTeacher = 1 or IsTeacher = 'Don't Know' or IsTeacher = 'Prefer not to say'} Institution (VARLAB: teaching in what type of institution)

- 112. What/which type of institution have you become a teacher in?
  - **1.** A state-funded institution
  - 2. Non state-funded institution
  - **3.** Other (please specify)

{IF IsTeacher = 1 or IsTeacher = 'Don't Know` or IsTeacher = 'Prefer not to say`} TeachingSetting (VARLAB: type of teaching setting)

- 113. What setting are you teaching in?
  - 1. early years (children up to the age of 5)
  - 2. primary (ages 5 to 11)
  - **3.** secondary (ages 11 to 18)
  - **4.** further education (i.e. teaching at further education colleges or sixth form colleges)

{IF IsTeacher = 1 or IsTeacher = 'Don't Know' or IsTeacher = 'Prefer not to say'} IsTeachingScience (VARLAB: teaching science)

- 114. Are you teaching (or planning to teach) science?
  - 1. Yes
  - **2.** No
  - 3. Not applicable

{IF ITTStatus = 1 or ITTLikely = 1 or ITTLikely = 2 or ITTLikely = 3 or IsTeacher = 1 or Isteacher = 2 or IsTeacher = 'Don't Know' or IsTeacher = 'Prefer not to say'}
ReasonsToTeachSelf (VARLAB: reasons they are interested in teaching)

- 115. Why do you think you have become a teacher or are considering a career in teaching? Please select all that apply.
  - 1. I love working with children/young people
  - 2. I find teaching really satisfying
  - 3. I want to encourage more young people to have a career in STEM
  - 4. Every day as a teacher is different
  - **5.** I want to make a difference to children's lives
  - **6.** I want to make the world a better place
  - 7. I was inspired by my own teachers
  - 8. It has been my ambition for many years
  - 9. Someone suggested that it would be a great career for me
  - **10.** It is a great career with excellent chances of promotion
  - **11.** I want to improve the STEM literacy of children/young people
  - 12. It is my calling
  - **13.** The pay is good
  - **14.** The long holidays
  - 15. I could not find another suitable career
  - 16. Other <please specify>

{IF ITTLikely = 4 or ITTLikely = 5 or ITTLikely = 'Don't Know' or ITTLikely = 'Prefer not to say'}

ReasonsToTeachOthers (VARLAB: reasons others become a teacher)

- 116. Why do you think people choose to become a teacher? Please select all that apply.
  - 1. They love working with children/young people
  - 2. They find teaching really satisfying
  - 3. They want to encourage more young people to have a career in STEM
  - **4.** Every day as a teacher is different
  - 5. They want to make a difference to children's lives

- 6. They want to make the world a better place
- 7. They were inspired by their own teachers
- 8. It was their ambition for many years
- **9.** Someone suggested that it would be a great career for them
- **10.** It is a great career with excellent chances of promotion
- 11. They want to improve the STEM literacy of children/young people
- **12.** It is their calling
- **13.** The pay is good
- **14.** The long holidays
- 15. They could not find another suitable career
- 16. Other <please specify>

{IF ITTLikely = 4 or ITTLikely = 5 or ITTLikely = 'Don't Know' or ITTLikely = 'Prefer not to say'}

ReasonsNotToTeach (VARLAB: reasons not to teach)

117. Why do you think it is unlikely that you will become a teacher? </p

{ASK ALL}

ASCENTSEffect (VARLAB: ASCENTS effect on interest in teaching)

118. Do you think your experience on the ASCENTS mentoring programme has influenced your interest in having a career in teaching?

My interest in teaching has

- 1. increased a lot
- 2. increased a little
- 3. not changed
- 4. decreased a little
- 5. decreased a lot

{ASK ALL}

ASCENTSEffectText (VARLAB: ASCENTS effect on career free text)

119. Can you say a little about why you have answered this way? <Open text box>

{ASK ALL}

Covid19Effect (VARLAB: Covid19's effect on interest in teaching)

120. Do you think the COVID-19 pandemic has influenced your interest in having a career in teaching?

My interest in teaching has

- 1. increased a lot
- 2. increased a little
- 3. not changed
- 4. decreased a little
- **5.** decreased a lot

{ASK ALL}

Covid19EffectText (VARLAB: Covid19's effect on career free text)

121. Can you say a little about why you have answered this way? <Open text box>

{ASK ALL}

WrkGRD (VARLAB: if done work with young people since graduate)

- 122. Have you had any experience of working or volunteering with children or young people since you completed ASCENTS mentoring programme?
  - 1. Yes

#### **2.** No

How often, if it all, have you done the following since you completed the ASCENTS mentoring programme?

```
{IF WrkGRD = 1 or WrkGRD = 'Don't Know' or WrkGRD = 'Prefer not to say'}
TtrGRD (VARLAB: if tutored)
          Academic tutoring / mentoring
123.
      Once
      A few times
      Regularly
      Never
{IF WrkGRD = 1 or WrkGRD = 'Don't Know' or WrkGRD = 'Prefer not to say'}
TchGRD (VARLAB: if worked as a teaching assistant)
124.
          Working as a teaching assistant in a school
      Once
      A few times
      Regularly
      Never
{IF WrkGRD = 1 or WrkGRD = 'Don't Know' or WrkGRD = 'Prefer not to say'}
OtWrkGRD (VARLAB: if done any other work with young people)
125.
          Other work with young people (e.g. working with a youth organisation,
   helping at a school with extracurricular activities, School Experience
   Programme, nannying, babysitting)
      Once
      A few times
      Regularly
      Never
```

# {SHOW ALL} End page

Thank you for taking the time to complete this survey. We value the information you have provided. If you have any questions, comments, or feedback about the evaluation of ASCENTS, please visit our website: <a href="https://natcen.ac.uk/taking-part/studies-in-field/evaluation-of-ascents-121-support-for-science/">https://natcen.ac.uk/taking-part/studies-in-field/evaluation-of-ascents-121-support-for-science/</a> or email the researcher team on ASCENTS@natcen.ac.uk