

Assessing the impact of regional transformative outreach activities aimed at widening university access, and participation among under-represented groups in schools

Anthea Rose, University of Lincoln, UK

Lucy Mallinson, University of Lincoln, UK

Email: lmallinson@lincoln.ac.uk

DOI: <https://doi.org/10.5456/WPLL.24.3.113>

Abstract Transformative outreach activities, including study skills workshops, motivational speakers and campus visits, are common across the educational sector. However, little is known about their impact on non-traditional students' decisions regarding higher education. Designed to raise the higher education aspirations of young people in Years 9 to 13 (aged 13 – 18), the Uni Connect programme delivers outreach activities to young people in areas in England, UK, where higher education participation is much lower than expected based on attainment in national examinations taken at ages 15 and 16. This article presents the findings of a student activity survey conducted as part of the Lincolnshire Uni Connect regional evaluation. Surveys were sent to participating students between May and July 2020 to assess the impact of the outreach activities they had received during the school year. A total of 672 valid responses were received: 247 (37%) from Uni Connect students. Impact was measured against the NERUPI evaluation framework, which comprises five elements: knowing, choosing, becoming, practicing and understanding, and is designed to determine the success of widening participation initiatives. The data showed activities focusing on NERUPI outcomes 'know' and 'become' were the most effective. Findings from the study raise important questions about the choice and effectiveness of transformative activities aimed at under-represented groups.

Key words Widening participation; Outreach; Uni Connect; NERUPI framework; Higher Education

Introduction

Outreach activities have been defined by the Office for Fair Access (OFFA; now the Office for Students or OfS) as '...activities that help raise awareness, aspirations and attainment among young people from disadvantaged or under-represented groups...' (Barkat, 2019: 1163). Such activities commonly include campus visits to universities or colleges, taster days, master classes,

mentoring and summer schools. In England, aspirational outreach activities are usually delivered in secondary schools by a range of different providers including universities, further education colleges, private companies and local learning partnerships. The delivery of outreach activities forms an integral part of the universities' Access and Participation Plans (APP) in England, designed to help them meet their widening Higher Education (HE) access and participation targets. The OfS is the government regulator of HE in England. To register with the OfS as an Approved (fee cap) provider, i.e., to be able to charge tuition fees, there has been a requirement since April 2018 (OfS, 2020a), for all universities and colleges in England to have comprehensive APPs. The plans, which are required to be submitted to and approved by the OfS, focus on increasing the number of university admissions in key student target groups. For example, those from low socio-economic status households or students from Black, Asian and Minority Ethnic (BAME) communities. The national Uni Connect (UC) programme plays an important part in helping English universities reach their APP targets. According to a joint partnership report published by The Network for East Anglian Collaborative Outreach in January 2021, 42% of all school-based outreach activity in England is now delivered through the UC programme.

The OfS funded the UC outreach programme (formerly known as the National Collaborative Outreach Programme), at a cost of £60 million a year over four years to July 2021 (OfS, 2020b). The programme has now been extended until 2025, albeit with a reduced budget of £40 million per year. The UC programme is designed to deliver targeted HE transitional outreach activities to young people in England in schools and colleges in Years 9 to 13 (aged 13 – 18) via 29 regional education partnerships. It focuses specifically on the 997 wards in England where the HE participation of young people has been shown to be lower than expected. This is based on attainment levels achieved in the national examinations – the General Certificate of Secondary Education (GCSE) – taken at the end of Year 11. Students residing in these wards, identified by their postcode, are eligible to participate in the UC programme. Activities delivered as part of the programme include motivational speakers, study skills workshops and supporting college and university campus visits.

Evaluating the impact of activities in raising the HE aspirations of target learners (i.e., UC students) forms a key element of the programme.

This article draws on findings derived from data gathered through a student activity survey distributed between May and July 2020 to six participating case study schools in Lincolnshire. The aim of the survey was to evaluate the impact of outreach activities students received during the school year. The data collected forms part of the wider regional UC evaluation in Lincolnshire, where the programme is managed and delivered by LiNCHigher, a consortium partnership of education providers and organisations from the county. The overall roll-out of the programme and evaluation process was partly interrupted by the Covid-19 pandemic, which saw the closure of UK schools to all but vulnerable children and those of key workers, between March and June 2020, during which all outreach activity was delivered online.

Literature and theoretical framework

Whilst outreach activities are established and widely used across the educational sector, little is known about how they impact on non-traditional students' decisions towards HE. This is mainly because evaluating their impact on non-traditional students is acknowledged to be complex and difficult (Barkat, 2019; Younger et al., 2019; Evans et al., 2017; Harrison and Waller, 2017; Lingenfelter 2016; Donaldson, Christie, and Mark 2009 and Pawson 2006). Holton (2018: 557) defines non-traditional students as 'first-generation university attendees from working-class or minority backgrounds' whose knowledge of HE is limited, or, in the context of this paper, UC students. With outreach activities in England costing the public purse around £176 million in 2019-2020 (OfS, 2019), it is understandable that the government is increasingly looking for robust evidence of their impact (Harrison and Waller, 2017). However, evidence of impact is hard to find in the literature (Torgerson et al., 2014). What does exist centres primarily on STEM subjects (Science, Technology, Engineering and Mathematics), and comes from an international perspective. As such they have limited value in the UC context.

For example, the work of Vennix et al. (2017 and 2018) looks at STEM outreach activities for secondary school children in the US and The Netherlands. Their studies explored student

perceptions of their learning environments, motivations and attitudes. Their survey-based studies found that teaching methods were most likely to have a positive effect on students' perceptions of STEM. They concluded that school involvement with outreach activities could potentially lead to greater student engagement with STEM subjects and careers.

In their systematic review of evidence on the effectiveness of interventions and strategies for widening participation in HE, Younger et al. (2019) found just 16 studies, out of some 3,500, were relevant to the UK context and of high enough quality to be included in the final review. Likewise, Heaslip et al.'s (2020) recent systematic review of studies established that just 26 out of 847 were UK-focused. The review aimed to explore how current research identifies and understands impact in outreach activities over the ten-year period 2005 to 2015. They found the majority (16) of the 26 UK studies were qualitative, five were quantitative and five took a mixed-methods approach. The studies found little evidence that the activities had any long-term impact on non-traditional students in terms of HE engagement. Most focused on the student experience either during, or shortly after interventions were delivered (Heaslip et al., 2020: 40). Both systematic reviews also highlighted a lack of good quality, robust evidence available in the UK in this field of enquiry.

One of the few robust studies that measured the impact of HE outreach activities in the UK was conducted by Hoare and Mann (2012). They looked at the impact that the Sutton Trust's Summer School Programme had on encouraging students from non-traditional backgrounds to apply to university. The Sutton Trust is a prominent UK social mobility charity. They have been running this national initiative since 1997, initially at the University of Oxford, and currently in 13 of the UK's top universities. The programme is open to students who meet both the Trust's academic attainment criteria (which, at the time of the study were five or more GCSEs at A/A* grades), and certain social conditions. These include: attendance at a low performing school, being in receipt of the Educational Maintenance Allowance, or whose parents have had no HE experience. In essence, students with little or no university familial or HE habitus (Bourdieu, 1977 and 1986). Hoare and Mann's evaluation of the 2008 and 2009 programme followed both attendees and non-attendees (a control group) through a range of methods including UCAS (the Universities and Colleges Admissions Service) tracking, and pre and post questionnaires. The study discovered strong empirical evidence that summer school attendance had the potential to narrow the gap in university applications. Attendees were not only more likely to engage with the university

application process, they were also more likely to apply to leading universities. Hoare and Mann (2012: 2) concluded: 'Summer schools make the biggest difference to the poorest students'.

Robust evidence of impact has been strongly encouraged by the OfS since the start of the UC programme, and evaluation has become an integral part of the work carried out by local partnerships. For example, Formby et al.'s (2020) realist evaluation of the Go Higher West Yorkshire UC programme, reported in this journal in July 2020, draws on the theory of 'sense of place' to assess the impact of different community settings (mainly rural and urban) for non-traditional learners.

Embedding evaluation within an appropriate framework to assess the impact of outreach activities on students has also been important. As such the UC programme is strongly aligned to the Network for Evaluating and Researching University Participation Interventions (NERUPI) framework designed by Hayton and Bengry-Howell in 2016. The framework was designed to be accessible to policymakers, academics, practitioners and non-specialists alike. It was developed in response to growing demands for 'rigorous evaluation of the impact of widening participation' (Hayton and Bengry-Howell, 2016: 42). The framework is divided into five categories – knowing, choosing, becoming, practicing and understanding. Together they aim to develop a students' knowledge, understanding, experiences and skills in relation to HE, as detailed in Table 1.

The framework itself is based on Bourdieu's concept of habitus, field and capitals (1977 and 1986):

'The NERUPI Framework is predicated on a cultural model of widening participation, which locates interventions within a contextual field of engagement where student habitus and the institutional habituses of school and university intersect. In this respect, the framework's emphasis on students' habitus and capital is underpinned by an acknowledgement of HEIs' responsibilities to deliver 'enabling' interventions, which facilitate institutional reflexivity as well as personal change for participants.'

(Hayton and Bengry-Howell, 2016: 46)

Table 1: NERUPI Framework

NERUPI Framework: Five Overarching Aims (www.nerupi.co.uk)	
NERUPI Category A: Know	Develop students' knowledge and awareness of the benefits of HE and graduate employment
NERUPI Category B: Choose	Develop students' capacity to navigate HE and graduate employment
NERUPI Category C: Become	Develop students' confidence and resilience in HE and graduate employment
NERUPI Category D: Practice	Develop students' skills and capacity for student and career success
NERUPI Category E: Understand	Develop understanding through contextualised subject knowledge and attainment raising

The family environment, being the field in which an individual is raised, can be viewed as a determining factor in the life choices available to an individual, especially in their formative years. Consequently, as Reay (2018: 529) points out, 'horizons are inevitably wider for some than for others'. Similar issues occur amongst other under-represented groups of students such as those from the Gypsy, Roma and Traveller (GRT) (Mulcahy, et al., 2017) and BAME communities (Bhopal, Myers and Pitkin, 2020; Greaves, 2015).

However, habitus is not static. It can, and does, change over time as a result of different experiences and connections, but these are usually from outside the field, in this case the school setting. This is where good, clear information, advice and guidance in a school can help students from under-represented groups make informed decisions about their future (Thompson, 2019).

The notion of capital is intrinsically linked to habitus and comes, initially, in four forms: economic, cultural, social and symbolic (Holton, 2018). Cultural and social capital are the most relevant to the UC programme; specifically, the transference of cultural capital between parent and child in relation to their experiences, knowledge and understanding, or not, of HE. The role of the UC programme is to provide students with the tools required for them to engage effectively with HE and help them,

along with their families, to navigate the HE system where no familial habitus of HE currently exists.

The NERUPI framework was employed in this evaluation to first map the intended outcomes of outreach activities and then to assess impact through the student-activity survey.

Methodology

The evaluation focused on six case study schools. They were selected in consultation with LiNCHigher to ensure the sample represented the range of different types of schools across the county of Lincolnshire in terms of size, settings and the percentage of UC students on-roll. Two of the schools were rural (one in the south of the county and one in the north), one was coastal, one in the city of Lincoln and two in market towns. The proportion of UC students in the schools ranged from 19% in the rural north to 64% on the coast. The number of students on-roll varied considerably from just over 200 to approximately 1,300. All were secondary schools receiving a high-level of support from the partnership as part of the UC programme.

Research design

The work presented here was conducted as part of a larger body of research. This article focuses on data collected through a student activity survey in six case study schools. Data collection took place between May and July 2020 whilst schools were largely closed due to Covid-19.

The online activity survey was based on activities students had participated in, between September 2019 and March 2020, when schools were open. The survey link was provided to schools by the evaluation team and was sent to students via email by the teacher responsible for the UC programme in their school (i.e., the School Lead). The survey asked students how the activities had helped them improve a range of study skills, their confidence and self-motivation as well as their knowledge of HE, the benefits of a graduate career and how subjects related to graduate careers. Where appropriate, questions were linked to the NERUPI framework (outlined earlier) to enable their impact to be assessed against it. Whilst most of the questions were closed, students were invited to leave comments at the end of the survey about the activities they had attended.

The first section of the survey asked students in Years 9 to 13 to select all the activities they had participated in between September 2019 and March 2020 (note, only two case study schools had sixth forms, Years 12 and 13). The second section presented a series of statements regarding the delivery of the activity they had (i) enjoyed the most, and (ii) enjoyed the least as detailed in Table 2. The third section was designed to assess to what extent each of the activities had met the desired NERUPI objectives. These questions were asked on a five-point Likert scale from strongly disagree to strongly agree (Table 2). The final section asked for demographic information (name, school, year group, gender and postcode). Postcodes were collected to enable students to be identified as UC or non-UC during data analysis. The survey responses provide a reflection of students' experience rather than instant feedback on activities.

Table 2: Examples of questions from sections two and three of the activity survey

Section Two – Questions about the delivery of the sessions
<p><i>'You said you enjoyed the exam revision workshop the best/least, please tell us what you liked most/did not like about it (select all that apply)'</i>:</p> <ol style="list-style-type: none"> 1. The workshop leader explained things well/did not explain things well 2. The workshop leader was enthusiastic/was not enthusiastic 3. The workshop linked with our curriculum/did not link with our curriculum 4. I liked/didn't like the length/timing of the workshop
Section Three – Outcome questions linked to the NERUPI framework addressing D - Practice
<p><i>'Having taken part in the exam revision workshop please select how much you agree or disagree with the following'</i>:</p> <ol style="list-style-type: none"> 1. I feel more motivated to revise 2. It has helped me improve my revision skills 3. It has given me a better understanding of how to revise for different subjects

Data analysis

A total of 853 student responses were received, which reduced to 672 after data cleaning, giving a completion rate of 79%. All data were analysed using SPSS (IBM SPSS 25.0).

Of the 672 responses, 362 (54%) were from female students and 260 (39%) from male students, the remaining 7% comprised 'prefer not to say', 'other', or was not stated. There were 247 (37%) responses from UC students and 425 (63%) from non-UC students overall. This was slightly out of proportion with the actual split within the schools being 47% and 53% respectively. This was thought to be due to UC students having limited or no access to suitable technology to attend online learning at home during the pandemic, thereby reducing or prohibiting access to school email. This highlights the disadvantages associated with access and underrepresentation. Table 3 details the number of student responses for each activity type by year group. The table also indicates which NERUPI outcome(s) each activity type was designed to meet.

Table 3: Number of responses for each activity type by year group

Activity Type	NERUPI	Year Group				
		9	10	11	12	13
Campus Visits - college	A,B,C&E	11	-	-	-	-
Campus Visits - university	A,B&C	-	-	-	31	32
Careers Fair	A,B&C	80	29	21	30	10
Motivational speaker	C&D	18	18	7	-	-
Workshop/Masterclass (various)	A,B,C,D&E	83	82	41	24	23
Revision/study skills workshop	D	-	69	67	10	2
Employability workshop/session	A,C&E	12	20	4	13	-
Med-intensity one-day workshops	A,B,C,D&E	55	161	29	1	-
Total		259	379	169	109	67

Note: Some students attended more than one activity, therefore the total number above is greater than the total number of survey responses.

The activities reviewed in this paper have been combined where possible to present evidence of impact at an activity type level. Whilst not all activities are covered in the data presented,

due to an insufficient number of responses, data from each activity were made available as supplementary material for the LiNCHigher team, to share with schools where appropriate.

Ethics

The evaluation process followed the University of Lincoln's ethics procedures, in accordance with British Education Research Association (BERA) guidelines (2018). All students were asked to consent to their information and responses being collected before they completed the survey. Schools had already obtained general consent from students and their families (as appropriate) to enable them to participate in all aspects of the UC programme, including evaluation.

Limitations

The activity survey was originally planned to capture the impact of the UC programme outreach activity delivered over the whole academic year. However, due to the first Covid-19 national closure of schools in late March 2020, it was only possible to evaluate delivery that took place between September and March. The number of responses received was lower than anticipated, despite several reminder emails being sent by the School Leads. This was most likely because students were entrusted to complete the survey from home rather than at school. This meant that the impact of some activities might not be as reliable or representative as desired. In addition, the responses may be biased towards those students most engaged with their schools. However, completing the survey during lockdown may have mitigated the possibility of an individual's response being influenced by other students, perhaps providing a truer reflection of both the impact of the activity, and how well it was received.

Findings

The survey data presented here concentrates on the following five different types of HE outreach activity: campus visits, career fairs, motivational speakers, workshops/masterclasses (1-2 hours) and medium intensity (one-day) workshops.

Campus Visits

Survey responses were received from 63 Year-12 and -13 students (UC n=28, non-UC n=38) from two schools, one coastal and one from the city. Both schools had taken part in campus visits to three relatively local universities and one college offering HE provision. The visits were to De Montfort in Leicestershire, Sheffield Hallam in South Yorkshire, University of Lincoln and University Centre Grimsby, both in Lincolnshire. The responses show the visits were well received. The most popular reasons for liking the visit were 'seeing the campus', 'seeing the facilities' and that it 'gave an idea of what university life would be like'. Gaining a better understanding of the benefits of HE (NERUPI A) – for 72% of UC students and 92% non-UC students – was the biggest impact of the visits. Whilst a positive impact was observed for both groups, overall, the four campus visits had a bigger impact on non-UC students than they did on UC students (Figure 1).

Students' comments regarding campus visits were mostly positive, however recurring themes were: 'wanting more time to see more of both the campus and the facilities, particularly to see where lectures and seminars take place'.

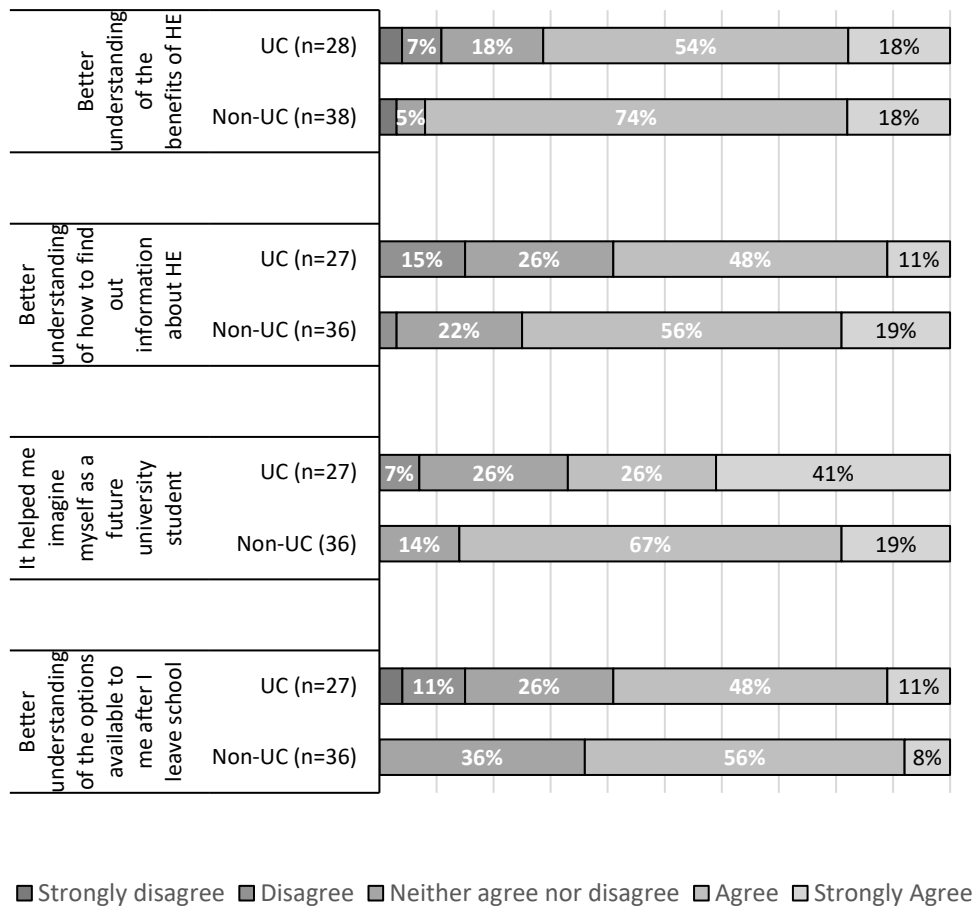


Figure 1: Years 12 and 13 Campus Visits (NERUPI A, B and C)

Careers Fairs

In February 2020, students from all year groups at the coastal school attended an in-school careers fair where a variety of universities, colleges and local and national employers were represented. The careers fair had a positive impact on most students in Years 9 to 11 (Figure 2). UC students gained a better understanding of the benefits of HE (NERUPI A) and the post-school options available to them (NERUPI A&B) (76% and 78% respectively).

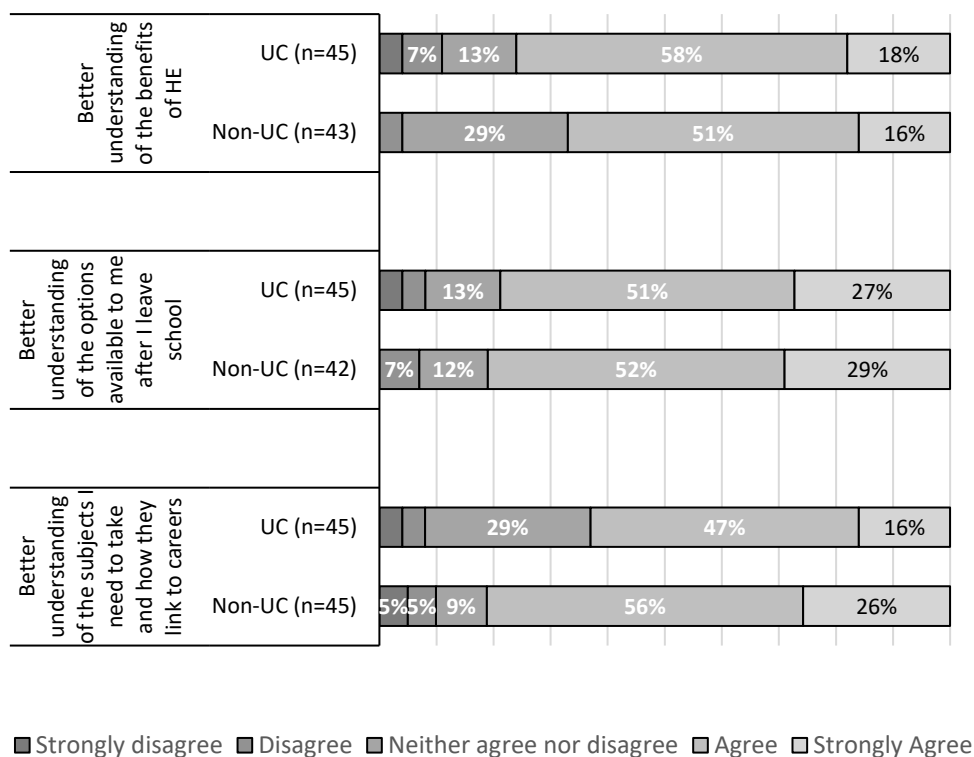


Figure 2: Years 9 to 11 Careers Fair (NERUPI A, B and E)

The careers fair had a positive impact on most students in Years 12 and 13. However, it was more impactful overall for non-UC students with 84% gaining a better understanding of the post-school options available to them and 74% a better understanding of the benefits of HE. This compared to 64% and 68% of UC students, respectively.

Students' comments about the careers fair were mostly positive. Year 9 students enjoyed 'being able to discover opportunities that might be available to me after leaving school' (NERUPI A&B). Year 10 students liked 'the variety of different employers' and Year 11 and 12 students enjoyed 'being able to get information from different colleges and universities'. However, Year 12 students in particular would have liked more universities to be represented at the fair. They would also have liked more information about alternative post-16 and -18 routes, i.e., after GCSEs in Year 11, and at the end of compulsory education in Year 13. One student commented they would have liked: "...more

options for post-16 and -18; such as apprenticeships or different pathways to degrees". The comments received from students in Years 9 to 11 were mostly positive. Several students would have liked to have spent longer at the event and some wanted a wider representation of different career paths.

Motivational Speakers

Three separate groups of students received talks by two different motivational speakers. Two groups from the rural school in the north of the county; Year 9 with Speaker 1 and Year 11 with Speaker 2. A Year 10 group from the coastal school also received a talk by Speaker 2. Whilst the content of the two talks and their intended impact were slightly different, both focused on confidence building. Speaker 1 also placed an emphasis on team building and resilience. The talk by Speaker 1 had a bigger impact on confidence (NERUPI C) with 62% of students agreeing that it had improved their confidence compared with 35% for the talk by Speaker 2.

Two-thirds of students that attended the motivational talk by Speaker 1 felt the talk had also improved their resilience (NERUPI C). However, fewer than half agreed that it had given them a better understanding of how to work well with others (NERUPI D), which was the third intended outcome of the talk. Students would have liked the session to have been shorter, more time for questions, and for the sessions to have been more active.

The 24 responses from across the two sessions with Speaker 2 were mixed (Figure 3). There was a slightly bigger impact on UC students' confidence to make positive choices than their self-motivation (both NERUPI C), although the number of responses from each of the two groups were low. However, students' comments indicated that the talk by Speaker 2 was particularly poorly received by the Year 10 group.

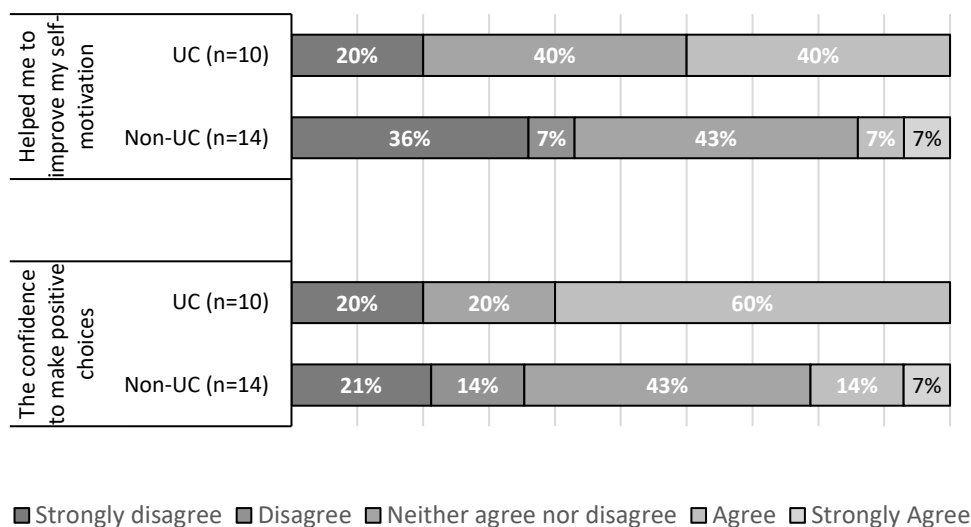


Figure 3: Speaker 2 (NERUPI C)

Study skills workshops – Revision

Four groups of Year 11 students from four of the case study schools (coastal, rural north, city and market town) participated in an exam revision workshop (NERUPI D). Whilst survey responses revealed a positive impact on all students, a bigger impact overall for non-UC students was observed: 82% of non-UC students agreed that the session had helped improve their revision or study skills compared to 65% of UC students. Similarly, a larger proportion of non-UC students said that the workshop had given them a better understanding of how to study or revise for different subjects (81%), compared with UC students (65%). Non-UC students also felt more motivated to revise following the session (73%), compared with UC students (65%).

Year 10 students from the market town school also took part in the exam revision workshop, which was delivered by the same provider. The impact here was mixed, for example, whilst UC students were more likely to feel motivated to revise than non-UC students (65% compared to 45%), non-UC students were more likely to feel that the workshop had improved their understanding of how to revise for different subjects (69% compared to 53%).

Most of the students' comments about the activity were suggestions for improving the workshop by making it more

interactive, engaging and fun. Some students wanted more revision tips and practical examples. Despite having a moderate impact, the workshop was not particularly rated as enjoyable by students. Over 70% of the Year 10 group said the workshop was the activity they enjoyed least.

Medium-intensity one-day workshops

Three different types of one-day medium intensity workshops were delivered to the market town school as part of the UC outreach activity programme, two involved designing and marketing a commercial product, and one, a university course and campus. For all three challenges, students worked in teams and presented their designs to the other groups at the end of the day. They are referred to here as Challenges 1, 2 and 3.

Challenge 1

Students in Years 9 and 10 from one school participated in Challenge 1, which involved designing a new protein snack bar. The focus of the challenge was teamwork, communication, time management, problem solving and presentation skills. The objectives of the challenge were: furthering understanding of graduate careers, improving confidence and encouraging teamwork (NERUPI A, C and D). Figure 4 shows the combined responses for Years 9 and 10, split by UC students and non-UC students. Overall, evidence of positive impact was strongest for the UC students with 87% believing the challenge had shown them the benefits of teamwork (NERUPI D). Additionally, over half (57%) of UC students said the challenge had improved their confidence (NERUPI C).

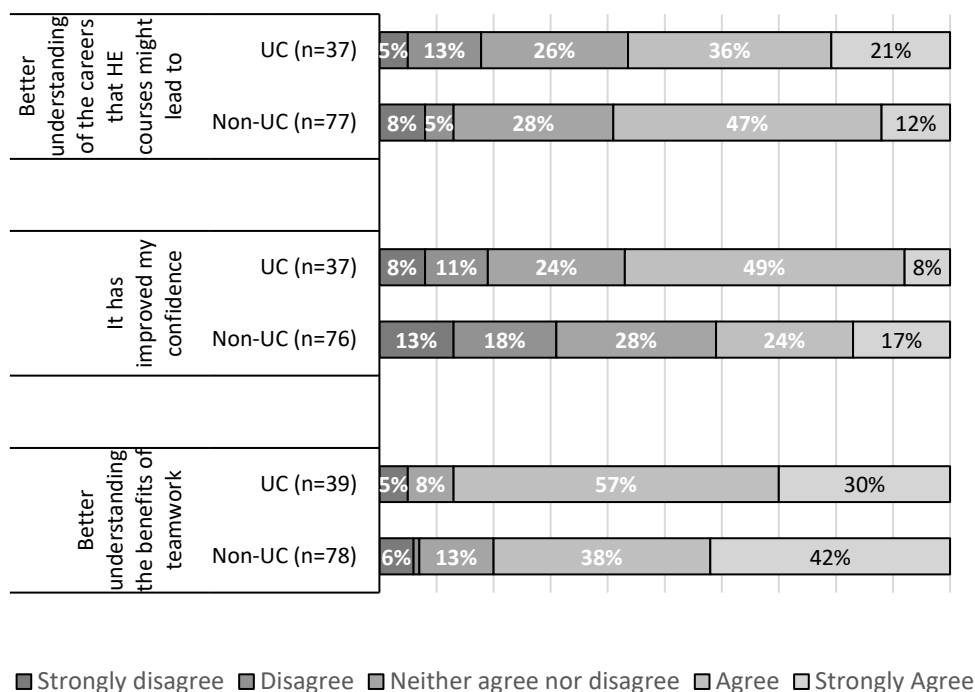


Figure 4: Years 9 and 10 combined Challenge 1 – UC and non-UC students (NERUPI A, C and D)

On comparing the two year groups for Challenge 1, it transpired there was a bigger impact on students in Year 10 than in Year 9 across all three measures. The difference was most marked for improving confidence with 53% of Year 10 students agreeing this was the case compared to 36% of Year 9 students.

The comments about the challenge were very positive, particularly from the Year 10 students, describing it as ‘amazing’ and ‘perfect’. One Year 10 student commented: ‘I have enjoyed the activities especially the challenge, it was fun, challenging and if I had the chance I would do it again’. However, several students also noted that they disliked having to present in front of the whole group, and particularly not being given a choice about whether to do so.

Challenge 2

Year 11 students took part in Challenge 2, which involved designing a new product to be made with recycled gas cylinders.

Students identified environmental issues, designed branding and created a marketing campaign within their groups. As for Challenge 1, the objectives were NERUPI A, C and D. There was a particular positive impact on UC students' confidence, where 85% felt they had improved in this area (Figure 5). However, compared with Challenge 1, it had less impact helping students understand the benefits of teamwork. This may have been because the challenge was delivered in one school and jointly attended by students from another local non-case study school. In the comments received, several students noted they would have preferred to select their own teams and not to have had to worked in mixed school groups.

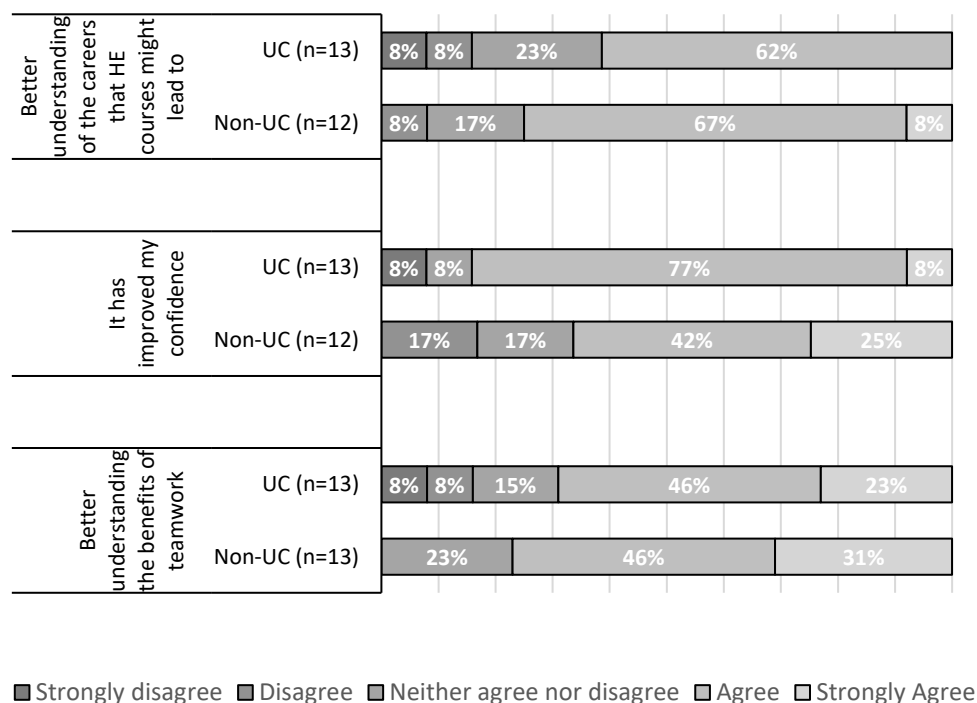


Figure 5: Year 11 Challenge 2 (NERUPI A, C and D)

Challenge 3

Year 10 students took part in Challenge 3, in which students created their ideal university by designing a campus, a marketing campaign and choosing their preferred course to study. The challenge covered NERUPI targets A, D and E. The activity had a positive impact on UC students' knowledge of the benefits of HE and what to look for when choosing a university to apply to,

(NERUPI A and B), 78% and 70% respectively said that the challenge had given them a better understanding (Figure 6). However, much like the first challenge, some students did not wish to present their finished ideas in front of such a large audience. One student suggested that smaller groups in separate classrooms might be a more favourable option.

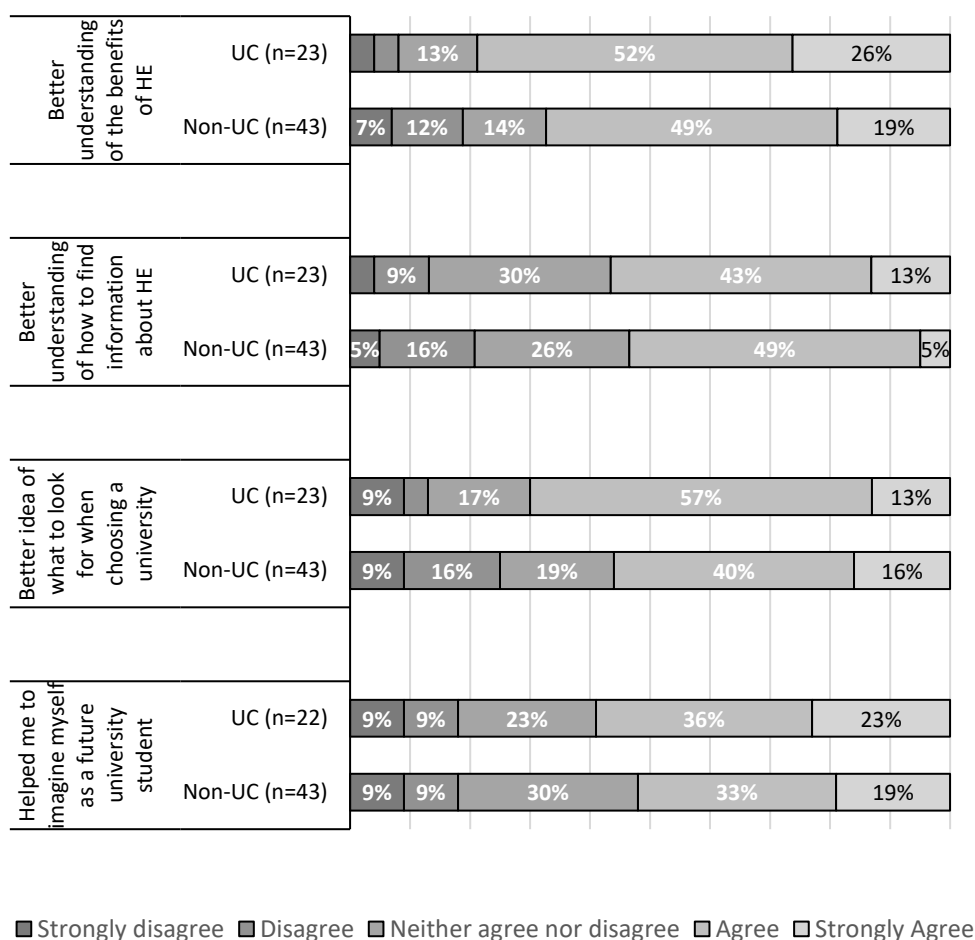


Figure 6: Year 10 Challenge 3 (NERUPI A, C and D)

Discussion and implications

This work presents details of the impact of five different types of transformative outreach activities delivered as part of the UC programme: campus visits, career fairs, motivational speakers, study skills workshops and one-day workshops. The activities were measured, through a student survey, against the NERUPI

framework. As there is little, if any, empirical evidence concerning the impact of these particular activities in the literature, the study provides a unique insight into which outreach activities are effective and for which students. The data from the student activity survey shows positive impact for several of the funded HE outreach activities, specifically the medium-intensity one-day workshops (the challenges), campus visits, career fairs and exam revision sessions.

Whilst the results of the activity survey do not appear to show any overall difference in impact between UC and non-UC students, some differences were observed between the two groups of students at an activity or year-group level. Overall, the activities that had the biggest impact on UC students were the three challenges. It is likely that the more intense one-day workshop format of these challenges enabled UC students to build on and consolidate their limited knowledge and understanding of HE, compared with other shorter workshops or sessions.

Challenge 3 had the biggest impact on UC students, particularly their knowledge of the benefits of HE and in enabling them to know what to look for when choosing a university. UC students may have little or no university familial habitus, and consequently, limited opportunity for discussions about HE at home. Therefore, it is vital that schools ensure UC students are equipped with the information, advice and guidance they need to make informed choices about their future, as pointed out by Thompson (2019). This could potentially help them to facilitate a smoother transition from school to HE by expanding their horizons; an area that is often extremely challenging for such students (Reay, 2018).

Challenge 1 was well received, and the aggregated Year 9 and Year 10 data demonstrated a bigger positive impact for UC students. This was specifically in relation to providing students with a better understanding of the benefits of teamwork (practice) and improving their confidence (becoming). However, comparing across the two year groups, the impact was greater for Year 10 than Year 9. Both year groups were from the same school and took part in the challenge on consecutive days. Therefore, the difference in impact could be that the content of Challenge 1 was more appropriate for older students.

In terms of the NERUPI framework, activities that targeted knowing and becoming outcomes were the most likely to have effected a positive change in both UC and non-UC students' attitudes and aspirations in relation to HE. The data also highlighted that students do not necessarily have to enjoy an activity for it to be beneficial. For example, the exam revision workshop (addressing practice) showed a positive impact despite being the activity most students enjoyed the least.

The activity survey suggests that campus visits were well received by students, and particularly demonstrated high levels of impact on students' understanding of the benefits of HE (knowing); a crucial part of encouraging UC students to apply. The visits gave non-UC students in particular, a sense of what being a university student would be like, possibly because these students are already able to visualise themselves in a university environment compared with UC students.

The careers fair had a bigger impact overall on Year 9, 10 and 11 students than those in Years 12 and 13. However, it did demonstrate impact across both UC and non-UC students in all year groups, particularly in terms of knowing and choosing. The careers fair appealed to all students, UC and non-UC alike. This is most likely a reflection of the breadth of representation with universities, colleges, local and national employers all present and offering information on post-16 and -18 routes, i.e., after GCSEs in Year 11, and at the end of compulsory education in Year 13.

Overall, the Year 11 exam workshops helped improve students' motivation and revision skills, particularly how to revise for different subjects (practice). The impact of motivational speakers varied depending on the speaker and what they were trying to motivate in the students.

Overall, the survey showed that students wanted more time with most of the outreach activities, wanted them to be more fun, more interactive, and to link more closely to the school curriculum and their work in class. Students further noted when presenters were not enthusiastic or did not appear to engage with the students as they expected them to. Whilst popular, the main issue that students highlighted with the one-day challenges was presenting in front of large groups of other students.

Following the results of the student activity survey, the evaluation team made several recommendations to LiNCHigher for them to consider when designing the programme of outreach activities to be delivered in the following academic year (2020-2021). The evaluation team specifically recommended that motivational speakers should be carefully selected and to ensure workshops are interactive, engaging and set at an appropriate level for participating students.

Outcomes from the work raise implications in terms of the choice, delivery and effectiveness of transformative activities aimed at under-represented groups from within the UC programme. It also raises the issue for others, including GRT and BAME participants, failing to fully consider many of the advantages associated with HE participation. Activities that focused on the NERUPI outcomes, 'know' and 'become', were the most highly regarded and most positively received. We would argue these outcomes are key to such under-represented student groups aspiring to and accessing HE. Developing a student's knowledge and awareness of the benefits of HE and graduate employment (knowing), as well as their confidence and resilience (becoming), through transformative outreach activities helps begin to address some of the familial habitus gaps in under-represented student groups. In so doing, under-represented students will not only be better prepared, in Bourdieusian terms to engage in the field of HE, but they will also have the knowledge, confidence and social and cultural capital they require to make informed decisions about their future. The UC programme has the potential to widen the horizons of all under-represented groups and help redress some of the inequalities identified by Reay (2018) and others in the literature.

Employing an evaluation framework, such as the NERUPI framework, helps address some of the issues raised both in the literature and by policymakers around the robustness of studies conducted in this area (Harrison and Waller, 2017). For example, choosing which outreach activities should be delivered to which year groups, and how is important to maximise the success of the UC programme and ensure value for money from the public purse. It will also help universities to engage fully with marginalised and neglected stakeholder groups and address their APP targets.

This regional evaluation of the UC programme shows that transformative outreach activities provided by LINCHigher can be effective in raising HE aspirations and participation for under-represented groups of students, if delivered in a timely and engaging fashion. This study goes some way to addressing the general lack of evidence of the impact of transformative outreach activities as highlighted by Torgerson et al. (2014) earlier. Specifically, it addresses the lack of evidence on impact from programmes delivered in the UK (Younger et al., 2019 and Heaslip et al., 2020). It also highlights the importance of robust evaluation and the usefulness of applying the NERUPI framework in this context, in assessing the impact of transformative outreach activities on intended outcomes. Ultimately, the study helps demonstrate whether or not the UC programme represents value for money as defined by the OfS.

Conclusions

Of the five types of outreach activities focused on in this article, the longer more-intense activities (i.e., the challenges) were found to have had the most impact on UC students. However, some improvement was demonstrated across all activities and student types. This could be because non-UC students were able to build on their existing knowledge and understanding of HE and UC students were exposed to opportunities and perspectives that were perhaps previously unknown, and therefore closed off, to them; effectively broadening their horizons.

The survey data presented here provides only part of the picture. Whilst the data shows what works well in the short-term in relation to transformative outreach activities delivered in participating case study schools, it does not fully explain the reasons why this is so. Nor does it take into account external programme factors such as school culture, location or community settings. These are aspects that the wider regional evaluation will investigate further through student focus groups. The longer-term sustainable impact of the programme will be tracked over the next four years which will provide a more holistic picture of the impact of the UC programme. These regional evaluation findings will be published in due course.

Acknowledgements

The authors wish to thank the six case study School Leads and the LiNCHigher partnership based at Bishop Grosseteste University, Lincoln, UK, for all their time, help and support with the evaluation. This work is funded by the LiNCHigher partnership through the Office for Students' Uni Connect programme.

References

- Barkat, S. (2019) 'Evaluating the impact of the Academic Enrichment Programme on widening access to selective universities: Application of the theory of change framework' *British Educational Research Journal*, 45, 6: 1160–1185. Available at: <https://doi.org/10.1002/berj.3556>
- Bhopal, K., Myers, M. and Pitkin, C. (2020) 'Routes through higher education: BME students and the development of a 'specialisation of consciousness'' *British Educational Research Journal*, 46, 6: 1321–1338. Available at: <https://doi.org/10.1002/berj.3634>
- Bourdieu, P. (1977) *Outline of a Theory of Practice*. Cambridge: Cambridge University Press.
- Bourdieu, P. (1986) 'The Forms of Capital', in Richardson, J. (ed.) *Handbook of Theory and Research for the Sociology of Education*. New York: Greenwood, pp.241–258.
- British Education Research Association (BERA) (2018) *Ethical Guidelines for Education Research, fourth edition*. London: BERA. Available at: https://www.bera.ac.uk/wp-content/uploads/2018/06/BERA-Ethical-Guidelines-for-Educational-Research_4thEdn_2018.pdf (accessed: 7 April 2020)
- Donaldson, S., Christie, C. and Mark, M. (eds.) (2009) *What Counts as Credible Evidence in Applied Research and Evaluation Practice?* Thousand Oaks: Sage.
- Evans, R., Brown, R., Rees, G. and Smith, P. (2017) 'Systematic review of educational interventions for looked-after children and young people: Recommendations for intervention development and evaluation', *British Educational Research Journal*, 43,1: 68–94. Available at: <https://doi.org/10.1002/berj.3252>
- Formby, A., Woodhouse, A. and Basham, J. (2020) 'Reframing widening participation towards the community: a realist evaluation', *Widening Participation and Lifelong Learning*, 22, 2, 184–204. Available at: <https://doi.org/10.5456/WPLL.22.2.184>.
- Greaves, E. (2015) *Socio-economic, ethnic and gender differences in HE participation*. Department for Business, Innovation and Skills: Research Paper No. 186 (London: BIS).
- Harrison, N. and Waller, R. (2017) 'Evaluating outreach activities: Overcoming challenges through a realist 'small steps' approach', *Perspectives: Policy and Practice in Higher Education*. 21, 2-3: 81–87. Available at: <https://doi.org/10.1080/13603108.2016.1256353>
- Hayton, A. and Bengry-Howell, A. (2016) 'Theory, evaluation and practice in widening participation: A framework approach to assessing impact', *London Review of Education*. 14, 3: 41–53. Available at: <https://doi.org/10.18546/LRE.14.3.04>

- Heaslip, V., Hutchings, M., Collins, B., Crowley, E., Eccles, S., Hunt, C., Tooth, R. and Wardrop A (2020) 'Situating the evidence for impact of outreach strategies: A systematic review for improving access to higher education', *Widening Participation and Lifelong Learning*. 22(1), 25–55. Available at: <https://doi.org/10.5456/WPLL.22.1.25>
- Hoare, T. and Mann. R. (2012) *The Impact of the Sutton Trust's Summer Schools on Subsequent Higher Education Participation*. London: Sutton Trust.
- Holton, M. (2018) 'Traditional or non-traditional students? Incorporating UK students' living arrangements into decisions about going to university', *Journal of Further and Higher Education*, 42, 4: 556–569. Available at: <https://doi.org/10.1080/0309877X.2017.1301408>
- Lingenfelter, P. (2016) "*Proof*", *Policy and Practice: Understanding the Role of Evidence in Improving Education*. Sterling: Stylus.
- Mulcahy, E., Baars, S., Bowen-Viner, K. and Menzies, L. (2017) *The underrepresentation of Gypsy, Roma and Traveller pupils in higher education: A report on barriers from early years to secondary and beyond*. LKMco. Available at: https://www.cfey.org/wp-content/uploads/2017/07/KINGWIDE_28494_FINAL.pdf (accessed: 1 September 2021)
- The Network for East Anglian Collaborative Outreach (NEACO) (January 2021) 'Reducing the gap in higher education participation through Uni Connect: Evidence from Uni Connect Partnership Leads in support of continuing the Uni Connect Programme to Phase 3'. Available at: <https://linchigher.co.uk/admin/resources/editor/uni-connect-national-evidence-report-jan-2021.pdf> (accessed: 22 September 2021?)
- Office for Students (OfS) (2019) English Higher Education 2019: The Office for Students annual review. Available at: <https://officeforstudents.org.uk/media/53fd78d2-6388-4540-b622-3e73be0434c8/ofs-annual-review-2019.pdf> (accessed: 11 February 2020)
- Office for Students (OfS) (2020a) Regulatory notice 1: Access and participation plan guidance. Available at: <https://www.officeforstudents.org.uk/media/ee5a189a-2ed1-4345-803e-e02d38384025/regulatory-notice-1-guidance-may-2020.pdf> (accessed: 5 October 2021)
- Office for Students (OfS) (2020b) 'How Uni Connect works'. Available at: <https://www.officeforstudents.org.uk/advice-and-guidance/promoting-equal-opportunities/uni-connect/how-uni-connect-works/> (accessed 15 March 2021)

- Pawson, R. (2006) *Evidence-Based Policy: A Realist Perspective*. London: Sage.
- Reay D. (2018) 'Working class educational transitions to university: The limits of success'. *European Journal of Education*, 53, 4: 528–540. Available at: <https://doi.org/10.1111/ejed.12298>
- Thompson, D. W. (2019) 'Aspirations and ambiguities: The need for focused IAG for school pupils considering progression to higher education (HE)'. *Journal of Further and Higher Education*, 44, 7, 911–924. Available at: <https://doi.org/10.1080/0309877X.2019.1616081>
- Torgerson, C., Gascoine, L., Heaps, C., Menzies, V. and Younger, K. (2014) *Higher Education access: Evidence of effectiveness of university access strategies and approaches. A report to The Sutton Trust*. Durham University: Durham. Available at: <https://www.suttontrust.com/wp-content/uploads/2019/12/Higher-Education-Access-Report-1.pdf> (accessed: 19 February 2020)
- Vennix, J., den Brok, P. and Taconis, R. (2017) 'Perceptions of STEM-based outreach learning activities in secondary education'. *Learning Environments Research*, 20, 1: 21-46. Available at: <https://doi.org/10.1007/s10984-016-9217-6>
- Vennix, J., den Brok, P. and Taconis, R. (2018) 'Do outreach activities in secondary STEM education motivate students and improve their attitudes towards STEM? *International Journal of Science Education*, 40, 11: 1263-1283. Available at: <https://doi.org/10.1080/09500693.2018.1473659>
- Younger, K., Gascoine, L., Menzies, V. and Torgerson, C. (2019) 'A systematic review of evidence on the effectiveness of interventions and strategies for widening participation in higher education'. *Journal of Further and Higher Education*, 43, 6: 742–773. Available at: <https://doi.org/10.1080/0309877X.2017.1404558>