

PRE-HE MENTORING PROGRAMMES: RAPID EVIDENCE REVIEW



Written by: Julian
Crockford

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Executive Summary

Programmes to provide mentoring support for young people, through professional mentors or, more commonly, student peers are frequently included as a component in higher-education focused outreach activities and programmes, as well as on-course interventions. This report describes a rapid evidence review of a selection of case studies of mentoring programmes delivered in this context.

Key Themes

Reviewing the case studies revealed a series of key themes:

- **Recruiting mentees:** Some programmes had very specific selection criteria for participation, others were much more open. There was variation in how mentees were recruited. Some programmes delegated mentee selection to partner schools, while others had an open process through which mentees could self-select and apply. Selection biases are possible in both cases, and few of the examined case studies described a robust method of reaching the 'hardest to reach' participants, who were likely to receive most benefit from the programme.
- **Engaging mentees:** Some mentoring programmes were tightly scheduled, while others were mentee-driven. In both cases, there were variations in the extent to which mentees engaged with mentoring activities. There were examples of mentees missing scheduled sessions, while mentee-driven programmes depended on the mentees own motivation to ensure mentoring happened.
- **Recruiting Mentors:** The approach to selecting mentors often depended on the nature of the mentoring being delivered. Where mentors were recruited to respond to specific needs (whether this was similarity to mentees in terms of locality, age or experiences, or their ability to provide specific insights or knowledge - about specific careers, for example), selection criteria tended to be prescriptive. In other cases, this was more open, with mentors volunteering their participation. In one case study (Brightside 2020b) mentees were able to chose to engage with specific mentors on the basis of the experience they offered.
- **Mentors as role models:** Integral to the impact of many of the case study programmes is an assumption that mentors act as role models for their mentees. This approach tends to rely on a model of social learning, with a focus on changing the ways that mentees see themselves and their potential options. Writing about the use of student ambassadors as role models, Gartland (2015) suggests that the role modelling approach tends to be more effective in informal settings, where mentees were more likely to perceive their similarities to the role model and therefore their effectiveness in modelling potential futures.
- **Mentoring challenges:** The mentoring process carries potential risks for both mentors and mentees. Mentors risk being put in positions that exceed their knowledge (especially when in a tutoring role) or experience. In the worse cases this can damage the mentoring relationship or have negative impacts for both mentors and mentees.
- **Training Mentors:** The amount of training mentors received varied across the programmes we reviewed. Some mentors received minimal training and preparation, but for other programmes (e.g. the Grow programme) there was extensive training (25 hours) and the opportunity for mentors to study for a professional certificate. Mentor training was flagged in many of the evaluations as a crucial success factor. There was some correlation between the amount of training provided to mentors and the extent to which programme content and design were structured and / or informed by an underpinning theory. More 'open' programmes, or those which were mentee led, tended to include a smaller mentor training component.
- **Mentoring Function:** We also found variation in the extent to which the mentoring process was viewed as the intervention itself or which it operated as the delivery vehicle for other

forms of development. This roughly aligns to a distinction between psycho-social mentoring, in which the mentoring relationship is crucial in supporting mentee identity work and affective and attitudinal development, and instrumental mentoring which is focused on building specific skills or achieving specific goals. This distinction was not clearly articulated in many of the reports we reviewed.

- Underpinning Theory: Some of the programmes we reviewed were explicitly informed by an underlying theory, from academic capital formation (O’Sullivan et al. 2017) through science capital teaching (Thomas and Rushton 2020) or particular models of identity formation and youth development.
- Mentoring objectives: Across the programmes we reviewed there were a range of stated objectives, from developing general and specific development skills, personal attributes (such as resilience or self-efficacy), through to specific higher education focused knowledge, skills and attributes (such as the ability to produce an effective HE application).
- Mentoring Delivery: We observed a set of three interrelated logistic variables in the literature we reviewed. Programmes varied in the duration of mentoring sessions (usually 30-90 minutes), the number of sessions provided, and the frequency of sessions. All three aspects were viewed as impacting on the success of the programme. Unfortunately, there was not enough consistency in the way in which evaluations were conducted to build an evidence base about the most effective arrangements for a mentoring programme, but the evidence suggests that a higher number of sessions correlates with positive outcomes (in part because it helps build a positive mentoring relationship). There was also a suggestion (although insufficiently robustly evaluated to establish baseline recommendations) that frequent and regular sessions also positively impact on outcomes. More research and evaluation are required here.
- Mentee engagement: Across the reports a correlation was identified between mentee engagement (in terms of attending sessions or contacting their mentors) and successful outcomes.
- Modalities of delivery: There was variation across the programmes we reviewed in how mentoring was delivered. The COVID pandemic that formed the backdrop to some of these programmes meant that online delivery was the most effective mode of delivery in these cases. For other programmes (e.g. Brightside 2020b), online provision meant that mentees could be connected with geographically remote mentors who possessed the skills or experience they were most interested in. Other mentoring programmes were conducted face to face, allowing for direct contact between mentor and mentee. Many of the programmes provided mentoring on an individual level, but others were configured to support group mentoring. Again, we do not yet have enough consistent data to indicate which is likely to be most successful in meeting objectives.

Evaluation Challenges

Common to evaluations of other forms of outreach intervention (Harrison et al. 2015, Passy et al. 2009), some of the reports we reviewed described (or exhibited) challenges in effectively evaluating mentoring programmes. These challenges included:

- Difficulty in singling out and attributing specific impact to the mentoring programme where participants were likely to be participating in a range of other interventions in a complex environment. In particular, it is often challenging to disentangle the impact of mentoring programmes from the outcomes of broader school-led learning and teaching activities.
- Some of the evaluations included only weak causal descriptions of how the mentoring programme was expected to deliver intended outcomes. Without a clear model of how the

programme works to deliver impact, there can be only limited confidence that the intervention, rather than other factors, was responsible for the changes observed.

- Many of the evaluations rely on self-report data from participants. While this is often relatively straightforward to collect, and collects information directly from participants, there is the risk that it introduces a range of different biases, including recall and retrospective review issues (Pekrun 2020, McDonald 2008, John and Robins 1994).
- A related issue concerns a potential lack of consistency in the definition of key evaluation terms, like mentoring relationship quality. These concepts can be interpreted in different ways by different respondents, resulting in a lack of alignment between different evaluation responses or uncertainty about what evaluation measures are referring to.
- Where data collection depended on participants choosing to respond to evaluation instruments, there is a risk of non- and selective response bias, where particular student cohorts are more or less likely to respond than others, skewing the data.
- There was often a reliance on short term or intermediate outcome data. For many of the mentoring programmes reviewed here, ultimate intended outcomes (e.g. eventual HE progression) might be separated from the intervention by a gap of several years. The long timeframes involved mean that many of the evaluations were limited to reporting intermediate or short-term outcomes, such as intention to apply to HE. While the use of intermediate outcomes can be an important component of evaluation (see Harrison and Waller 2017), limitations in connecting them with longer term objectives can reduce the strength of reported impacts.
- Reporting and Analysis: There were a range of analytical and reporting strategies evident across the different evaluation reports, with similar datasets and participant response data analysed and reported in different ways. This limits opportunity to synthesis or compare evaluation outcomes.

Impact of Mentoring: Evidence

Across the reports we reviewed the following evidence emerged:

- External Evidence: TASO (the ‘what works’ centre for widening participation and student success interventions) report that there is some evidence that pre-HE mentoring interventions can influence students attitudes to and aspirations about HE progression, but that existing evidence is not causal (i.e. not based in trial-based evaluation designs). There is, however, some debate about whether this definition of ‘evidence’ is appropriate for complex social and educational interventions.
- Outcomes for mentees: The evidence we reviewed suggests that mentoring has positive impacts on mentees. Across the various programmes, this included supporting their re-engagement with education following the COVID pandemic, increasing academic confidence and confidence in ability to successfully apply to HE, increasing confidence in a range of study-related skills, increasing rates of HE progression and decisions to pursue particular academic subjects. Participants increased their knowledge about higher education and required qualifications and were more confident they knew what to expect of the HE experience. Teachers reported observing increases in academic engagement and in the quality of schoolwork for pupils participating in mentoring programmes.
- Outcomes for mentors: Some evaluations also assessed programme impacts on mentors. Outcomes included their developing employability skills and potential and increasing self-confidence.
- Other outcomes: In two of the evaluations, partner organisations were also seen to have derived benefits from the programme. In these cases, schools and universities both reported increased connections and links with each other.

- Mentoring Programme Success Factors: The impact of mentoring appeared to increase where an effective mentor / mentee relationship developed. Across the various programmes this included the mentee's perception that their mentor had a personal interest in them. In the reverse direction, where mentees were uninterested in their mentor's career or experience this limited impact.

Conclusion

Across the literature we reviewed there was variation in the extent to which mentoring was seen as the intervention in itself or as a vehicle for the delivery of other mechanisms.

Mentoring can be a complex relational practice and successful outcomes can be dependent on a range of factors, including the quality of the mentor-mentee relationship, clarity of purpose, the extent to which mentoring is informed by an underpinning theoretical approach and to which mentors are effectively trained for the role. The evidence suggests that mentoring programmes can deliver a range of outcomes for participants including the development of relevant knowledge, skills, attributes and attitudes.

The evidence we reviewed suggests, however, that there is variation in the quality and scope of the evaluation process and that more intensive evaluation approaches tended to produce more detailed findings.

Recommendations

<i>Mentoring Programme Design</i>	
When considering, designing and / or developing, we recommend that the following practical and logistical aspects are considered and addressed in programme design:	
<i>Recommendation 1</i>	As part of the planning process, consideration is given to the reasons for selecting a mentoring as a core part of the intervention and how it is understood to address the core issues or problems that the programme is designed to respond to.
<i>Recommendation 2</i>	A clear definition of intended outcomes is developed. The design and impact of mentoring programmes can be strengthened by a detailed theory of change which describes how and why these intended outcomes are to be delivered.
<i>Recommendation 3</i>	Consideration is given to whether the mentoring process should be informed by an underpinning theory or theoretical model and, if so, what this model is and how it should inform the design and delivery of the mentoring process. This may include consideration of the scope of mentoring, whether it is designed as a psychosocial intervention and / or as an instrumental process to address specific skills or development needs.
<i>Recommendation 4</i>	Evidence-informed consideration is given to the practical aspects of delivery, including: <ul style="list-style-type: none"> • Whether delivery is online or face to face • Whether mentoring is delivered on an individual basis or in groups • The duration of each mentoring session or engagement • How strongly the programme is to be structured (whether sessions are rigidly scheduled or responsive to mentee needs) • If the programme is to be strongly structured, how frequently sessions are to be scheduled or arranged • How long the mentoring programme is to last (this variable can interact with the frequency of sessions).

	<p>Each of these factors can have a significant impact on mentee engagement and programme outcomes. Programme impact is likely to be influenced by the extent to which these practical arrangements align with the needs and requirement of mentees.</p> <p>We also recommend that, as part of the evaluation process, assumptions about mentee needs and requirements are checked and confirmed through direct engagement with mentees and the observation of key stakeholder groups (e.g. teachers).</p>
<i>Recruiting, Selecting and Engaging Mentees</i>	
To help ensure that the mentoring programme delivers its full potential impact, we recommend that the following aspects are considered in respect of targeting, selecting and recruiting mentees best placed to benefit from the programme:	
<i>Recommendation 5</i>	<p>Consideration is given to how awareness might be raised of both the programme and the opportunities it offers for potential target groups. How this is achieved will vary depending on how open or closed the recruitment process is. Where potential mentees are recruited from a closed pool (e.g. a year group in a particular school or college or where there is an intermediary party in the recruitment process) this process is likely to be easier than when conducting open recruitment from a less clearly bounded population. In the latter case, there is likely to be significant challenge in ensuring that the hardest to reach groups (who often stand to receive the most benefit from this kind of support) are addressed.</p>
<i>Recommendation 6</i>	<p>Consideration is given to how mentees are recruited or selected. Where there are more potential mentees than the programme can support, a selection process may be required. We recommend that consideration is given to how any selection criteria imposed might act as enablers or barriers to specific groups of potential mentees.</p> <p>The selection process may be delegated to third mediating parties (e.g. partner schools). Where this is the case, we recommend that there is explicit discussion about how individual mentees will be selected. Some of the literature suggests that partner stakeholders (e.g. schools and colleges in HE-focused outreach) can impose their own explicit or implicit criteria and it is important to make sure these align with those of the programme as a whole.</p>
<i>Recommendation 7</i>	<p>Consideration is given to how mentors are matched with mentees. Much of the literature we reviewed suggests that the impact of a mentoring engagement could depend in significant part on the quality of the mentor/mentee relationship.</p> <p>Few of the reports we reviewed, however, explicitly discussed how mentees were matched with mentors. This may be because matching processes are specific to each individual mentoring programme. This is an area which may require further research and evaluation. Brightside (2020b) enabled mentees to select their own mentor on the basis of their experiences, interests and what they were intending to get out of the mentoring process. This may be a useful option to consider where appropriate.</p>
<i>Recommendation 8</i>	<p>Consideration is given to how mentor engagement might be guaranteed or increased. Many of the evaluations we reviewed identified a correlation between mentee engagement and outcomes. The extent to</p>

	<p>which the practical aspects of programme delivery align with the needs of preferences of mentees can influence engagement (see above), but we also recommend that the expectations of programme organisers, mentors and mentees are discussed at the outset of the programme to make sure they are clear, explicit and aligned.</p>
<p><i>Recruiting and Training Mentors</i></p>	
<p>Across the literature we reviewed there were varying approaches to recruiting suitable mentors. There were also differences in the extent and amount of training they were given in preparation for their role. We recommend considering the following aspects when recruiting and training mentors:</p>	
<p><i>Recommendation 9</i></p>	<p>Consideration is given to how effective mentors can be recruited for specific mentoring roles.</p> <p>We recommend that clear information is provided about the proposed mentoring role and the skills or experience required to deliver it at the outset. This can help target mentor recruitment. The degree of specificity provided will depend on the nature of the programme and mentee requirements. Some of the surrounding literature suggests that the blurring or indeterminacy of an intended mentoring role can have a negative impact on programme outcomes (Gartland 2015). This is particularly the case where mentors are put in positions that expose the limits of their knowledge and experience (e.g. when asked to act as a substitute for a classroom teacher without relevant experience).</p> <p>According to programme requirements there can be an open recruitment of mentors, or a closed approach in which mentors with specific skills or experiences are approached. The latter approach is often adopted where mentors are also intended to act as role models for their mentees, in which case a similarity in age or background can often be sought.</p>
<p><i>Recommendation 10</i></p>	<p>Although this will depend on the complexity and specificity of individual mentoring programmes, we recommend that consideration is given to the extent, detail and content of mentor training.</p> <p>The effective training of mentors is often seen as crucial to a programme's success. Training can cover the expectations and design of the programme, mentoring skills, specific informing theories or the use of programme resources, specialist academic skills (such as trauma informed education – Pountney et al 2020) or mentee requirements and expectations.</p>
<p><i>Mentoring Programme Evaluation</i></p>	
<p>The evaluation reports we reviewed adopted a range of evaluation approaches, and the depth and complexity of the evaluation process varied according to the design and implementation of the programme. We recommend consideration of the following aspects when developing an evaluation approach:</p>	
<p><i>Recommendation 11</i></p>	<p>Where possible, evaluation is built into programme design and development at the outset. Some approaches, including developing a theory of change can help with mentoring programme design as well as developing an effective evaluation approach.</p>
<p><i>Recommendation 12</i></p>	<p>Consideration is given to how the impact of specific mentoring programmes can be disentangled from those of other interventions and activities that mentees may be involved in.</p>

	<p>This can be partially addressed by developing a theory of change that specifies the outcomes expected and described how these changes are produced. Consideration might also be given to measuring intermediate outcomes and including a non-participant counter-factual group in the evaluation.</p>
<i>Recommendation 13</i>	<p>We recommend that mentoring programmes are underpinned by an effective and detailed theory of change.</p> <p>The stronger and more detailed a theory of change for the mentoring programme and the clearer description of the chain mechanisms (the components of the programme that cause the intended changes) the stronger the causal claim between activity and outcomes.</p> <p>For more information about theory of change see https://blog.shu.ac.uk/steer/2022/02/18/everybodys-talking-abouttheory-of-change/</p> <p>And https://blog.shu.ac.uk/steer/2020/01/20/building-an-evaluative-mindset-at-hallam-3-programme-activity-intervention-design/</p>
<i>Recommendation 14</i>	<p>Where possible, 'convenience measures' are avoided. These are evaluation data that may be easy to collect but do not clearly articulate with the design of the programme. The more closely evaluation measures are calibrated with the description of change mechanisms and / or the theory of change, the more accurately evaluation measures will reflect outcomes produced by the programme.</p>
<i>Recommendation 15</i>	<p>Where self-report data is used, we recommend triangulating self-report data with observations of changes in relevant mentee behaviours or skills (including observations from teachers or parents) or by testing specific development domains.</p> <p>There are a number of advantages in using mentee self-report data in the evaluation of a mentoring programme (ease of use, they represent direct contact with participants) but they also risk introducing a range of biases into the evaluation data. Where possible, it is helpful to 'test' expected changes such as mentee knowledge acquisition through quizzes or surveys or by providing opportunities for mentees to demonstrate skills or attribute development. This approach is further strengthened by also testing a comparator non-participant group.</p>
<i>Recommendation 16</i>	<p>We recommend that response bias is mitigated through the use of additional evaluation instruments, such as observation, triangulation with other data and testing key development areas in evaluation processes that involve a wide participant cohort. This may help to mitigate risks that certain participant groups are more likely to respond to surveys or evaluation tools (particularly where they are already engaged, the evaluation is salient to their interests, or they have certain demographic characteristics).</p> <p>For more information about triangulating data sources, see the following blog - https://blog.shu.ac.uk/steer/2020/10/19/triangulating-evaluative-data-sources-whats-the-point/</p>

	For more information about using surveys, see the following STEER blog - https://blog.shu.ac.uk/steer/2018/09/28/if-you-really-have-to-do-a-survey-with-your-students-read-this-first/
<i>Recommendation 17</i>	<p>When asking evaluation respondents to provide feedback or response data about aspects of the mentoring programme, we recommend that consideration is given to whether particular terms or concepts (such as the quality of the mentoring relationship) are consistently understood by respondents. Cognitive testing surveys can help with this, but it may also be helpful to break down questions where there might be a risk of inconsistency into more specific questions.</p> <p>More information about cognitive testing of surveys can be found at the STEER blogs at https://blog.shu.ac.uk/steer/2021/12/01/how-to-be-a-survey-whisperer-using-cognitive-interviewing-to-co-design-a-module-evaluation-questionnaire/</p> <p>And https://blog.shu.ac.uk/steer/2020/04/09/eat-sleep-research-repeat-conducting-cognitive-interviews-in-a-pandemic/</p>
<i>Recommendation 18</i>	If relying on intermediate or short-term outcomes, consider how these might articulate with medium- and long-term outcomes. Sometimes external evidence can indicate how intermediate outcomes inform later outcomes. Again, this information can be helpfully included in a theory of change.
<i>Recommendation 19</i>	When analysing evaluation data, we recommend considering a range of options in how the task is approached, how data will be reported, what your key evaluation stakeholders are expecting and how they will use the data. Ideally, this thinking will have occurred early in the evaluation design stage to ensure data collection approach matches requirements, but further consideration before starting analysis can help ensure that findings are meaningful and useful to evaluation stakeholders.

Introduction to the Report

This is a rapid evidence review, rather than a comprehensive systematic review governed by clear protocols and a systematic selection and analysis process. It is intended to present a range of relevant factors for consideration when designing and implementing mentoring programmes in future. There was limited time to prepare this report and it represents a starting point only. It is designed to be revisited, updated and developed over time with the inclusion of more case studies and as more evidence becomes available.

For this review, examples of mentoring programme evaluations were selected because they were a) from the UK (with the exception of one from Ireland) and b) focused on pre-HE (widening participation) outreach interventions. Further resources were selected via snowball sampling from initial sources.

Version 1.0 (12/04/2023) of this literature review draws on 10 articles:

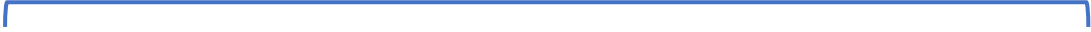


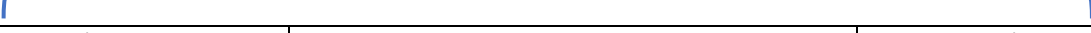





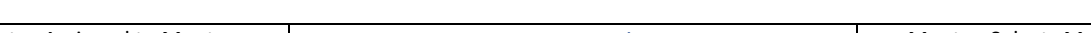
- 1 x Literature Review (Sanders and Higham 2012)
- 1 x Study of peer mentoring (Andrews and Clark 2011)
- 8 x Evaluation reports for mentoring interventions (Poutney et al. 2021; O'Sullivan et al. 2017; COSMO 2020; Brightside 2020a; Brightside 2020b; Thomas and Rushton 2020; Lilley et al. n.d.; Brightside and NEACO 2021).

Additional literature and related resources are drawn on as required and relevant.

The format of the report consists of a thematic overview of relevant success factors drawn from the broader academic literature and the case studies and concludes with summaries of the included case studies.

Themes Across the Evaluation Literature

The diagram below illustrates some of the key themes that emerge from the literature review, in terms of mentoring programme design. There were variations in the positioning of the various programmes across these axes, but collectively they represent a set of considerations that might support the design of HE-focused mentoring programmes in future.

Mentoring Programme Design		
		
Tightly Structured Function	Function of Mentoring	Open Function
		
Tightly Scheduled	Function of Mentoring	Responsive To Mentees
		
Theoretically Informed	Theoretical Base	Responsive to Mentees
		
Programme/ Theory Led	Function of Mentoring	Mentor / Mentee Led
Mentoring Programme Delivery		
		
Targeted Mentee Recruitment	Recruiting, Selecting and Engaging Mentees	Mentee Self-Selection
		
Targeted Mentor Recruitment	Recruiting and Training Mentors	Mentor Self-Selection
		
Individual Mentoring	Individual or Group Mentoring	Group Mentoring
		
Online Mentoring	Online or In-Person Mentoring	In Person Mentoring
		
Extensive Mentor Training	Recruiting and Training Mentors	Mentor Dependent
		
Mentor Assigned to Mentee	Pairing Mentors and Mentees	Mentee Selects Mentor

Mentees

Targeting and Recruiting Mentees

Across the projects there were a range of mentee targeting and selection approaches and criteria, the nature of which primarily depended on the requirements and characteristics of the mentoring programme. Some programmes had very tight criteria for selecting mentees (e.g. Thomas and Rushton 2020, where mentees were female students who had indicated they were unsure whether they would continue to study physics at level 3), while others had much broader, wide-ranging criteria, (e.g. Brightside 2020b, where mentees were accepted through open recruitment with few criteria).

There is also a continuum of approaches to the recruiting of mentees within these selection parameters; from a delegated selection process in which partner schools nominate and select specific mentees from within their pupil population, to an open process in which mentees self-select and apply.

In terms of the school-driven selection process, the criteria used by schools to select participants is often not discussed in the evaluations reviewed here. There is, therefore, potential for partner schools to overlay their own criteria or requirements on to the selection process, which can align or conflict with programme provider intentions (see Canovan and Fallon 2021, Burgess et al. 2021; Harrison et al. 2018; Passy et al. 2009).

Other programmes adopted a more open recruitment process which relied on students self-selecting, which, in turn, can lead to other forms of selection bias (Harrison and Waller 2017, Harrison et al. 2018, Burgess et al. 2021). There is a risk that the students most likely to self-select are those who are already motivated and engaged and therefore likely to progress towards programme objectives without the support provided by the mentoring programme (e.g. Domina 2009). Harrison and Waller (2017) discuss a related concept in the context of widening access to HE programmes, which they call 'deadweight'; 'the targeting of individuals who meet the relevant criteria of disadvantage, but who would have followed the desired path without the activity; in other words, a disadvantaged young person who is already on the pathway to higher education without the need for outreach activities' (83). Vietze et al. (2009) discuss the opposite problem in the context of US HE progression in which some students self-select out of college options, despite being qualified and well-placed to benefit.

In either case, the challenge remains of ensuring maximum impact and return on investment in the programme by identifying and recruiting mentees most able to benefit from the mentoring process.

Mentee Engagement

Many of the evaluation reports noted that, once recruited, there were variations in the extent to which mentees engaged with their mentoring programme. This depended in part on differing expectations about how the programme was delivered. In some cases, mentees were expected to participate in a series of scheduled sessions, in other programmes, for example the Brightside online mentoring programme, mentees controlled their own patterns of engagement with no scheduled sessions. Mentors themselves determined the frequency with which they contacted their mentors through the online platform. In these cases, engagement was measured through the number of messages sent by participants at the end of the programme.

In terms of scheduled sessions, some of the projects reported reductions in engagement where practical and logistical issues (e.g. arranging weekly sessions in the context of other timetable pressures, Poutney et al. 2021) negatively impacted on attendance at the sessions. Nonetheless, many of the evaluations concluded that there was a correlation between mentee engagement rates and

intended programme outcomes, concluding that a minimum level of mentee engagement is a key success factor.

Mentors

Recruiting Mentors

As with mentees, the case studies in this report had different selection criteria for and approaches to recruiting mentors. In some senses, this reflects variations in the assumed role and purpose of mentors. This, in turn, is contingent on the nature of the programme and its implementation. There are a range of possible models. Sanders and Higham (2012) distinguish between a peer-mentoring role and peer-tutoring, a difference which can be blurred depending on how the programme is set up. This blurring of roles can have a negative impact on programme outcomes (Gartland 2015). There are also variations across the case studies in how rigidly and explicitly the role of mentor and its purpose was defined (see below).

The perceived nature and function of the mentoring role impacts on mentor selection criteria, determining who is likely to become a mentor. In some of the case studies, mentor selection criteria were fairly open, with potential mentors self-selecting (e.g. Brightside 2020b). In other cases, the mentor recruitment criteria was much more closed, with specific types of mentors targeted, often because they were similar to mentees in age or recent experience (e.g. the use of current students in Lilley et al. or students who had recently left the target school in O'Sullivan et al. 2017). In other cases, programme administrators aimed to recruit mentors with experience likely to be of relevance or interest to the mentee pool. In some of the case studies, this included recent higher education or specific career experience.

The targeting of mentors is less likely to be discussed as an evaluation factor than the recruitment of mentees, even though several evaluations point to the quality of the mentor / mentee relationship as an important impact factor and, in some cases, crucial to project outcomes. Indeed, there is a growing body of relevant literature about the role of mentors (or student ambassadors) as role models for the young people they support.

A Brief Note About: Mentors as Role Models

In its guidance about interventions designed to support HE progression, the Centre for Access and Student Outcomes (TASO) notes that 'role models are [...] likely to be most effective when they can credibly represent HE as a desirable and attainable destination and they are seen as successful individuals' (TASO 2023).

One of the causal explanations for this lies in a view of learning and personal development as a social process. As Kearney and Levine (2020) observe, 'role models can be a powerful force for social learning. They can affect the way people view themselves and ultimately affect their decisions about how to conduct their lives' (85). Within a sample of relevant literature, there are different perspectives on how this works.

Focusing specifically on student ambassadors, Gartland (2015) suggests that role models function through the relationship between learning and identity development. She notes that where student ambassadors are employed in more 'informal' learning environments and activities, they were often able to engage with students in a relaxed way. As such, they avoided negative responses from pupils receiving peer-tutoring who saw student ambassadors as ineffectual teacher substitutes. In informal settings, pupils were more likely to see ambassadors as being 'like them', engaged in a learning journey. This sense of similarity or affinity encouraged pupils to see student ambassadors as modelling a viable potential future for themselves (i.e. HE progression). From this perspective, the effectiveness of a student ambassador or mentor as 'role model' is complex and context dependent.

Another strand of literature, again centred on HE outreach, locates students ambassadors (and by extension, student mentors) in information-giving roles, describing them as 'warm' (more trustworthy, authoritative) sources of information about HE and the university experience than the 'cold' sources of marketised institutional material or formal institutional representatives (Slack et al. 2014; Austin and Hatt 2005).

Role modelling aspects of mentoring are reflected in many of the evaluation reports we reviewed. For O'Sullivan et al. (2017), mentors in the project they assessed were HE graduates from low-income backgrounds and therefore intended to reflect the experience of mentees. Qualitative research with mentees on the programme indicated increased success when mentors and mentees had similar backgrounds. Conversely, Thomas and Rushton (2020) found that the impact of mentoring was reduced where mentees had no interest in their mentor's career or outcome.

Pairing Mentors and Mentees

Given the importance of the mentoring relationship, the process of pairing mentees with appropriate mentors could be a key impact factor. In most of the case studies, mentees were assigned a mentor. Despite the relevance of this process, the criteria used to make this match is rarely discussed in the reports we reviewed. In the Brightside (2020b) project, mentees were given the opportunity to select their own mentor on the basis of their interests and what they were hoping to get out of the mentoring process. There were high rates (99%) of respondents feeling they 'got on' with their mentor and were able to build a positive relationship as a result.

Challenges in Mentoring Role

In their literature review of student mentoring, Sanders and Higham (2012) report that assuming the role of a mentor for young people can be challenging. Mentors risk being put into positions that expose the limits of their own knowledge and experience or failing to meet mentee expectations with potentially damaging implications for the mentor / mentee relationship. Gartland (2015) observes that

in some cases student ambassadors in the classroom were seen by pupils as ‘inadequate substitutes for real teachers’ (1201) and that their perceived shortcomings in this area did damage to their function as role models as well as pupils’ academic aspirations and identities. This suggests that the mentor role and function in the programme should be carefully framed and bounded and, just as importantly, that the mentor’s role and function should be made clear to mentees (and mentors!) at the outset.

Mentor Training

Across the programmes we reviewed, there was variation in the extent to which mentors were trained for their role. Many of the evaluation reports suggest that training for the role is an important impact factor because it helps mentors to understand the framing of their role, mentee expectations as well as equipping them with the skills and knowledge necessary to deliver programme aims.

The Grow programme (Pountney et al. 2021) provided an extensive (25 hour) training course for mentors. This covered a range of topics, including the programme’s underpinning theoretical approach and instruction in using scaffolded resources and session materials. At the other end of the scale, in the programme described by O’Sullivan et al. (2017), mentors received only two hours of training in preparation for their role.

The role of effective training and preparation of the mentoring role appeared to be crucial in achieving programme outcomes, in many cases. In their review of the evidence around the impact of mentoring programmes, TASO point to the importance of effective training. Sanders and Higham (2012) reference at least two evaluation reports (Carpenter and Kerrigan 2009, Porter 2010) which included recommendations for improving the mentor training process, suggesting this retrospectively identified as a weakness in original programme design. Gartland’s (2015) study of a particular case, student ambassadors assisting in a maths classroom, provides a cautionary tale in which student ambassadors were neither adequately trained or prepared for the tasks assigned to them.

Thomas and Rushton (2020) attribute a ‘significant increase in impact’ of later iterations of the programme to improvements made to mentor training, as well as the ‘introduction of a robust underlying theoretical approach’ (3). The more focused and structured a mentoring programme, the more detailed and focused training is required to prepare mentors for their role.

Intervention Design

Function of Mentoring

The expectations placed upon the mentor are informed by the underlying approach and assumptions about how the mentoring process works. In the broader literature, there is a distinction between psycho-social mentoring, which focuses on ‘building close relationships as a way to facilitate the youth’s overall development’ and instrumental mentoring, which focuses ‘on building specific skills and movement towards achieving goals’ (Raposa et al. 2016: 321). The GROW evaluation report is the only evaluation we reviewed that acknowledges this distinction by explicitly identifying the programme’s design as a psycho-social intervention (Poutney et al. 2021: 4).

Theoretical Base

In addition to the broad distinction between psychosocial and instrumental mentoring, the case studies vary in the extent to which mentoring programmes were underpinned by an informing theoretical framework and the extent to which this influenced mentoring delivery.

O’Sullivan et al. (2017) describe how the mentoring programme they evaluated was built on a theorisation of academic capital formation, which combined the ideas of social capital development and human capital (an individual’s potential for building and developing their skills and attainments).

This theoretical perspective informed the mentoring process by bounding and steering the mentoring process towards particular outcomes. Mentors were encouraged to take a goal-orientated approach and build relationships with their mentees with the goal of operating as a social capital base and supporting positive personal, socio-economic and identity development. In a similar way, Thomas and Rushton (2020) describe how the programme they evaluated was informed by a Science Capital Teaching Approach. Mentors were encouraged to personalise and localise the sessions for individual mentees and make the content more relevant to them. Unfortunately, the report included no detail about how this worked in practice.

Elsewhere, mentoring programmes were designed with a specific focus on curriculum content and / or HE progression (e.g. Lilley et al.). Nonetheless, there were variations in the degree to which sessions were scaffolded and structured by specific resources or materials. Some of the programmes were designed with each session tightly structured and supported by relevant material (e.g. GROW mentoring), while others (e.g. Brightside 2020b) were mentee-driven and mentors were required to respond to what their mentees brought to the interaction. Across the case studies, this resulted in a distinction between those programmes which employed mentoring as a 'delivery mechanism' for support other theoretically informed development models and those in which the mentoring process itself was regarded as the vehicle for change.

Mentoring Programme Objectives

Across these programmes, target outcomes (either explicitly described or inferred through evaluation measures) included developing:

General and specific development skills:

- relevant skills development
- communication skills
- stress management techniques
- cognitive and meta-cognitive skills

Personal attributes:

- resilience
- self-efficacy
- increased self-motivation
- increased study-motivation
- confidence in the ability to achieve future goals
- academic confidence
- socio-emotional attributes
- positive identity development
- positivity about outcomes in current educational context
- positivity about outcomes in future educational context
- increased aspiration to study specific subject at level 3 / HE
- increased outcomes in current subjects of study (raising attainment)
- expanded social capital networks

Higher education focused knowledge, skills and attributes:

- increased knowledge about the benefits of higher education
- increased knowledge about the context, culture and experience of HE
- increased knowledge about HE application process
- confidence in a positive HE experience

- preparation for HE learning
- sense of fit and belonging in HE
- increased aspirations for higher education / apprenticeships
- skills to apply for higher education
- higher education progression

A Brief Note About: Possible Selves Theory

Outside of the literature we reviewed, some mentoring and coaching programmes designed for young people are underpinned by a 'possible selves' theoretical model. This includes the model of mentoring provided by the educational charity [Villiers Park](#) or mentoring organisation [Inclusive Futures](#).

The possible selves model was originally described by Markus and Nurius (1986) when they explored how the relationship between self-concept, motivation and behaviour was mediated by an individual's imagined future self or possible future selves. For Markus and Nurius imagining positive future selves was understood to motivate the necessary action to achieve desired outcomes and negative future selves to motivate action or behaviours to avoid these outcomes.

The kinds of possible selves people can imagine are limited, however, by the conceptual resources they have available to them, and this is shaped by their social and cultural context; what they see around them in their families or communities, their own experiences and the people who are close to them. Without access to the necessary examples or experience, certain possibilities will be closed off and unimaginable. The more detailed a future possibility is, however, and the more realistic it seems, the more motivation an individual is likely to have to take necessary action. This can include developing a 'roadmap' outlining how an ambition or vision for a future outcome can be achieved (Oyserman et al. 2004). Respected others also have the ability to validate the potential of future selves and this can also increase motivation and positive behaviours (Markus and Nurius 1986).

Many of these aspects can be, and often are, built into mentoring programmes. This can include mentors validating their mentee's self-concepts and future ambitions and supporting the development of possible future selves by modelling new forms of positive outcome. There is variation in the extent to which possible selves theory was explicitly addressed in the design of mentoring programmes, however, with many drawing on similar concepts without explicitly pointing to the formal theory.

A Brief Note About: Belonging and Mattering

Belonging, a student's sense of fitting into / being part of an institution, has become an increasingly common objective of widening participation and on-course student success and progression activities (see, for example, Meehan and Howells 2019, Thomas 2012, Read et al. 2003).

Increasing a mentee's sense of fit and belonging in higher education is also a declared objective of some of the case studies in this report. Unfortunately, the concept of belonging is ill-defined and has a broad range of meanings (Dost and Mazzoli Smith 2023). Furthermore, although belonging is often measured (and evidenced) as a programme outcome, evaluation reports seldom discuss the change mechanisms by which mentoring can engender an impactful sense of belonging for mentees. Poutney et al. (2021) associate a sense of belonging with understanding the reality of a university education (6), Brightside (2020b) and O'Sullivan et al. (2017) refer instead to an increase in social capital as an outcome of the mentoring programmes they evaluate, but this is often not explicitly theorised.

In their observation that 'transitional peer mentoring works by providing the means by which new students quickly gain a sense of "belonging"' (9), Andrews and Clark (2011) exemplify this tendency, failing to provide any further theorisation. Later in their literature review, they do suggest that 'the use of more experienced students to guide and advise newer students does much to promote independent learning; enriching the overall student experience by nurturing a sense of belonging through offering on-going support and friendship' (10). This relatively loose framing of the relationship between mentoring and belonging reflects a broader tendency to view the mentoring

process as, in itself, the cause of positive outcomes, without considering the impact of other factors or change mechanisms.

In recent years, the focus on belonging in higher education literature has shifted to an associated construct, mattering. Although these are sometimes yoked together, they are different domains with different characteristics. As with belonging, however, mattering is a broad construct with no consensus definition. While belonging places students in a specific relationship with their institution or organisational culture (which they aspire to belong to or in), mattering describes a more dialogic relationship in which a student experiences 'feeling valued' and 'adding value' (Prilleltensky et al. 2020). Mattering is not, however, an aspect which explicitly features in the evaluation reports we reviewed. Elsewhere, Flett et al. (2019) suggest, however, that a mentee's sense of mattering to their mentor could generate positive outcomes from the mentoring process (677).

Although belonging and, albeit to a lesser extent, mattering are implicitly assumed to be key outputs of the mentoring process, this is not extensively theorised in the literature we reviewed. Consequently, none of the case studies clearly articulated how belonging and mattering effects were produced by the mentoring process and its design. Where these are intended mentoring outcomes more research and a clearer articulation of change mechanisms is needed.

Delivery and Logistics

Programme Scheduling

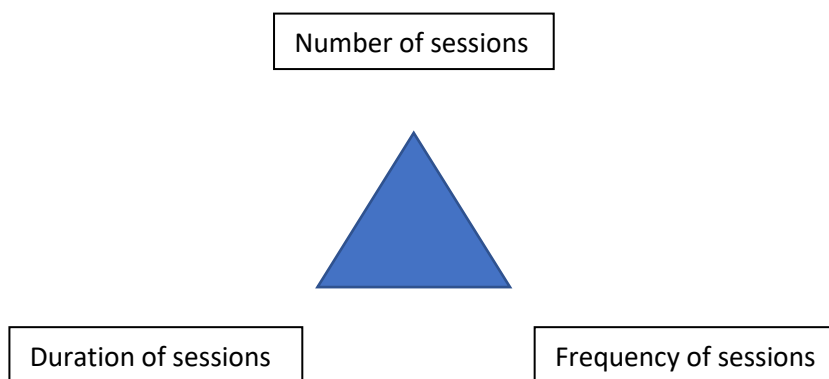
The literature we reviewed identified a series of practical and logistical factors as impacting on programme outcomes.

Session Duration, Frequency and Number

The duration of the mentoring session (usually between 30 and 90 minutes in the case studies), the number of mentoring sessions that take place, the frequency of mentoring sessions, and the duration of contact between mentors and mentees are all assessed as impacting on programme outcomes. Similar factors are identified as impact variables in literature on mentoring programmes implemented in other contexts (e.g. Grossman and Rhodes 2002).

O'Sullivan et al. (2017), for example, found that the number of sessions positively impacted on mentees' reported confidence in their ability to apply for and succeed in HE. They note 'for a strong connection to be forged, based on mutuality and trust, mentors and mentees need to have consistent contact over a long period of time' (117). In contrast, Cosmos Engagement (2020) found that increasing contact hours increased positive impacts to a certain point, but then appeared to produce negative effects.

Represented diagrammatically the following inter-related factors appear to correlate with mentoring programme outcomes and impacts.



The literature we reviewed suggests that considerations about format, logistics and mode of delivery of a mentoring programme can have a significant impact on outcomes.

Engagement and Attendance

A number of evaluation reports also identified a positive correlation between mentee engagement and intended outcomes. O'Sullivan et al. (2017) noted that inconsistent attendance by mentees negatively impacted on their outcomes. Similarly, Brightside (2020a, 2020b) used higher and lower rates of engagement to distinguish between two impact groups in the evaluation of their online mentoring programme. This was based on the assumption that minimal engagement (two or fewer messages) limited programme impact compared to more frequent engagement patterns.

Individual or Group Mentoring

Another implementation issue concerns the nature of mentoring delivery; whether sessions are conducted one-on-one (with sufficient safeguarding arrangements in place) or in a group with a number of mentees at the same time. In some of the reports, there is a clear approach, with either group (O'Sullivan et al. 2017) or individual delivery being implemented. In others (e.g. Lilley et al.) there appears to be slippage between the two, or the decision is left to the mentor. The difference between these two approaches and the impact on programme outcomes is not significantly discussed in any of the literature reviewed here, although Cosmos Engagement (2020) suggested that although numbers were small, there were indications that group mentoring produced slightly better skills development outcomes than individual mentoring.

Online or In-Person Mentoring

Some of the case studies described mentoring conducted during, or designed as a response to, the COVID-19 pandemic. The lockdown requirements in force for much of the period 2020-2021, and the closure of schools, meant that in some cases (e.g. Pountney et al. 2021) online delivery was the only available option.

In other programmes, online delivery was adopted for practical or logistical reasons (e.g. Brightside and NEACO 2021, Brightside 2020b, Lilley et al.). In some cases, this was because it broadened geographical reach, making mentors with specific skills and experiences available for individual mentees, irrespective of location, ensuring that a more relevant match was possible than where mentees were limited to a local pool of mentors.

Evaluation Challenges

In the section below, we reflect on some of the evaluation challenges and limitations that are reported or implicit in the literature we reviewed. Some of these challenges are common to evaluation of other forms of outreach intervention (e.g. Harrison et al. 2015, Passy et al. 2009), while others are specific to the evaluation of mentoring programmes.

Difficulty of Attributing Impact to Mentoring Programmes in a Complex Environment

Common to similar outreach interventions is the challenge of distinguishing the specific impact of the mentoring programme from a participant's potential involvement in other interventions or activities designed to deliver similar outcomes. As Harrison and Waller (2017) observe of widening participation evaluation generally, 'one temptation may be to seek changes in young people over [the duration of the intervention] as if the efforts of the practitioners are the only influence when, in reality, there are many confounding factors at work, in particular the impact of the school and its teachers' (84). This is the case for many of the evaluations discussed here, outcomes tend to be reported with an implicit claim that the mentoring intervention was responsible for the mentee outcomes identified. This issue is partially mitigated in Thomas and Rushton 2020, in which intended outcomes are compared across 'treatment' and non-participating groups. This enables the report authors to make a stronger claim that the impacts observed in the participant group were causally related to the mentoring programme.

Indeed, many evaluations in this space are critiqued by TASO for failing to include a counter-factual group to strengthen causal claims. In the Office for Students' (2019) standards of evidence, evaluations including this kind of trial-based design, would be classed as type 3 evaluations, which provide 'evidence of a causal effect of an intervention' (2).

Assessing Impact: Weak Causal Descriptions

A recurring theme in this literature review is the spectrum between generic and specific modes of mentoring. Some programmes attribute outcomes to the mentoring process itself, while others position mentoring as the vehicle (delivery mechanism) for a carefully designed programme structure. This feeds through to project evaluations in terms of how objectives and outcomes are framed. The more detailed the design of the mentoring process, the more theoretically informed and the more explicit the intended outcomes, the more specific the evaluation measures tend to be. This supports stronger causal claims. This tends to be strongest where interventions include a theory of change describing how the intervention is assumed to work to deliver its outcomes (e.g. Mayne 2015, Connell and Kubisch 1998). The more detailed the description of the assumed change mechanisms (what the mentoring process actually does with and to mentees) the more clearly these tend to be articulated and measured in an evaluation. In contrast, weaker programme evaluations tend to be underpinned by a loosely conceived model of the mentoring process, with little consideration of the causal relationship between programme delivery and outcomes. These types of evaluations tend to be reliant on 'convenience' or generic measures of impact. Without a clear model of how the mentoring process 'caused' the measured outcomes, there can only be limited confidence the intervention was responsible for these changes. Indeed, some mentoring objectives (e.g. increased knowledge of HE or sense of fitting in) are common to a range of other WP outreach interventions. It would therefore be challenging to isolate the mentoring programme outcomes from other influences (e.g. Harrison et al. 2018).

Reliance on Self-Report Data

A common characteristic of many of the evaluations reviewed here is a reliance on self-report data from participants. This form of data collection is often integral to HE-focused outreach programme evaluations, because it is relatively straightforward to collect, can be designed to articulate with

programme objectives and collects information directly from participants (Pekrun 2020, McDonald 2008).

By asking respondents to retrospectively assess their feelings, thinking, attributes or knowledge, however, this evaluation approach risks introducing a range of memory biases and flaws in recall. The collection of information from the autobiographical memory can, for example, allow for subjective reconfiguration of memory to align with self-image (Pekrun 2020, McDonald 2008, John and Robins 1994).

There is also the risk of social acceptability bias, where respondents want to please programme team or present a more favourable image of themselves (Harrison and Waller 2017, Paulhaus 2017). This can be compounded by acquiescent response bias, the tendency to overuse the positive end of scales (e.g. van Vaerenbergh and Thomas 2013). These effects can lead to more positive evaluation outcomes that might otherwise be the case.

Similarly, the Dunning-Kruger effect describes the risk of bias in the outcomes of pre- / post- survey design when respondents are more likely to over-estimate their capacity or capability in areas with which they are relatively unfamiliar. This can depress outcome results. By the time of the post-intervention survey respondents are likely to have more accurate understanding of the domain or context being assessed and may therefore downgrade their original positive assessments, leading to small or even reversed reported gains (Kruger and Dunning 1999). This was flagged as a possible cause of negative trends and inconsistent results in Brightside (2020b).

Non-Response Bias

Another form of bias appears where the tendency to respond to surveys or evaluation tools varies across different participant sub-groups. This means that outcomes may not be representative for the whole mentee population. In their study of non-response bias in surveys about (US) college student engagement, Standish and Umbach (2019) note a bias skewed towards positive responses, because students who are less engaged were less likely to complete associated surveys (339). Standish and Umbach also argue that students who identify as female, white or home students were more likely to respond to surveys than students who identify as male, a minority ethnic group or international. They also suggest that students with less financial need, who are mature or more successful academically are more likely to respond to surveys (341). Moreover, they argue that the more a survey topic appears salient to an individual, their interests and needs, the more likely they are to complete it (351).

Bacon et al. 2016 explored the impact of leverage-saliency theory in student evaluations of teaching in a US context and describe how students weigh the decision to respond, or not, to a survey. Potential factors are likely to include interest in the topic, tendency towards involvement in the student community, reputation of the body sending out the survey, and consideration of any proffered incentives, all of which are weighed against the time and effort costs of completing the survey. Respondents can also, however, be driven by negative sentiment. Reisenwitz (2016) aligns the response of students dissatisfied with teaching to an unhappy customer, suggesting that like complaining customers, the propensity to respond to a teaching evaluation survey 'may be stronger for those students who negatively view their instructor. Furthermore, students who have a propensity to complain may make a concerted effort to complete an online evaluation' (9). This aspect may encourage a bias towards more negative responses.

Defining Mentoring Relationship Quality

A key impact measure across many of these evaluations was an assessment of the quality of the mentoring relationship. This was a concern for both mentees (O'Sullivan et al. 2017, Brightside 2020b,

Lilley et al., Sanders and Higham 2012) and mentors (Pountney et al. 2021, Lilley et al.). However, in most cases the concept of relationship quality was not well-defined, and different respondents may have interpreted this concept in different ways, undermining the validity of this measure. Indeed, there was no consistent and coherent definition of a quality mentoring relationship across the literature we reviewed.¹

In a small sample of mentoring literature from other contexts, however, we found a range of mentee-mentor relational factors identified as impacting on a quality mentoring relationship.

Context	Success Factors	Failure Factors
US Medical Professional (Strauss et al. 2013)	Relational – reciprocity, mutual respect, clear expectations, personal connection and shared values.	Poor communication, lack of commitment, personality differences, perceived competition, mentor's lack of experience.
UK Healthcare Trust (Jones 2013)	Early alignment of expectations, similarity between mentor and mentee, and opportunity to learn through different experiences, sharing experiences and stories, personal reflection.	Not addressed.
Business Relationships in India (Joshi and Sikdar 2015)	Mentor characteristics: sincerity, commitment, skill and knowledge, organisational impact.	Not addressed.
Literature Review (McDowall-Long 2004)	Personal qualities of mentors: Friendly, approachable, understanding and patient, honest, respectful, dedicated, compassionate. Expertise: teaching skills, professional skills, organisation and communication skills, self-confidence.	Not addressed.
Review of evidence: poor quality mentoring (Feldman 1999)	Not addressed.	Differences in expectations about the mentoring relationship, incompatible personal styles, lack of honest and openness, incompatible career stages (organisational mentoring), role conflicts.

Given the importance of a productive match between mentor and mentee, which often relies on a series of personal and attitudinal characteristics and connections, the matching process was seldom explicitly addressed in some of the HE focused literature we reviewed, except through discussion of mentors as role models, or in the context of the Brightside (2020b) mentoring programme, which enabled mentees to select their own mentee. Given its significant role in programme impacts, mentor-

¹ Although a small number of studies have attempted to explore this complex area, e.g. Karcher et al. 2005.

mentee matching is likely to be an area benefitting from further review and research for the HE context under discussion here.

Reporting and Analysing Data

In terms of how evaluation data was analysed across the different evaluation projects, most of the evaluations relied, at least partially, on self-report data gathered through a series of Likert or Likert-type scales and reported as descriptive statistics. This data was analysed and reported in different ways across the case studies.

As part of their analysis of the Hello Future Programme evaluation data, Cosmos (2021) analysed the proportion of respondents selecting the two highest (of five) positive categories across the different domains and compared pre- and post- programme outcomes. In contrast, Brightside (2020b) focused specifically on pre- post- changes, reporting the percentages of respondents who reported a positive, negative or no change in particular target domains. This was a useful approach for showing impact across the population but did not include specific information about the extent of the change for different individuals. Most programmes also provided a demographic overview of participants, particularly where the programme was designed for a specific target group.

Four of the eight case studies included qualitative research, commonly focus groups and / or interviews with mentees (4), mentors (3) and other stakeholders, e.g. school staff (1).

Limited Evidence of Long-Term Outcomes.

An often acknowledged challenge of HE outreach interventions is that their often long duration, or the gap between intervention and intended outcome (HE progression), makes it challenging to assess long term impacts and participant outcomes (Passy et al. 2009, Harrison and Waller 2017, Robinson and Salvestrini 2020). For this reason, much evaluation in this space, including the mentoring programmes discussed here, tends to focus on intermediate outcomes which can be assessed in shorter time frames. Harrison and Waller (2017) describe these as intermediate outcomes as ‘small steps’ contributing to longer term outcomes (e.g. HE progression).

Few of the studies reviewed here include long-term outcome data, with most reporting on ‘intention’ to progress to HE or an apprenticeship where this was listed as a programme objective. Brightside (2020a) drew on a broad sample population of participants who had engaged with the organisation over a number of years, and were able to report on eventual HE progression for some earlier cohorts. In another study, by accessing participant data from the Higher Education Access Tracker (HEAT)², a data service that provides access to linked datasets enabling the tracking of young people through compulsory into higher education, Brightside (2020b) were able to demonstrate a correlation between online mentoring and both HE entry and attainment outcomes. To achieve this, they used a synthetic counter-factual group of young people who registered for but did not engage with their mentoring platform.

Mentoring Programme Outcomes

Evaluation Evidence

TASO reviewed evidence about the impact of pre-HE and on-course student and peer mentoring programmes. They note that there is emerging evidence that some forms of mentoring have a small positive impact on participant aspirations and attitudes, and uncertain evidence about the impact on behaviour and outcomes, for medium cost.³ Their report concludes that ‘there is some evidence from the UK to suggest these interventions can influence students’ attitudes / aspirations relating to HE.

² <https://heat.ac.uk/>

³ <https://taso.org.uk/im-reviewing-an-existing-programme/#mentoring-role-models-pre-entry/>

However, the research is not “causal” (in other words it can’t tell us definitively that the intervention is effective)’. TASO’s focus on causality in this context rests on an assumption that robust evidence depends on a Randomised Control Trial design. There is some debate about the extent to which this applies in more complex social science and educational contexts (e.g. Harrison and Waller 2017, Clegg 2007).

None of the literature reviewed in the current document included a formal RCT evaluation design, although Thomas and Rushton (2020) did include a non-participant comparison group. Across the case studies, a range of outcomes and impacts were identified as objectives of the mentoring process. Although we have noted in some cases, of a weak association between the details of intervention design and evaluation measures, collectively the case studies included here provide data for a range of successful outcomes for mentees, mentors and programme sponsors.

Outcomes for Mentees

Pountney et al. 2021	<p>Mentors and school staff reported that the programme had helped mentees to re-engage with school and develop positive learning habits. Mentors suggested that they were seeing some development of mentees future decision-making capacity.</p> <p>In addition, school staff reported increases in mentee confidence and classroom behaviour. The programme’s emphasis on future options was viewed as increasing student academic motivation and engagement.</p>
O’Sullivan et al. 2017	<p>Mentees reported increased confidence in their ability to succeed at college and in their ability to submit a successful application.</p> <p>Mentees trusted mentors and saw them as a trustworthy and relatable source of information.</p>
Cosmos 2020	<p>Mentees reported increased confidence in their skills across 9 domains, with a particular emphasis on stress management.</p> <p>There was a decrease in mentees’ determination to do well in exams. This may have been an impact of COVID 19.</p> <p>There was also a shift in ambition and intention from HE towards apprenticeship opportunities.</p>
Brightside 2020a	<p>A higher proportion of mentees from POLAR4 Q1&2 progressed into HE compared to non-participants.</p> <p>Brightside mentees eligible for free school meals (FSM) achieved on average an increase of 6.5 GCSE grades compared to non-participants also eligible for FSM.</p>
Thomas and Rushton 2020	<p>At the end of the programme, there was a 38% increase in mentees indicating their likelihood to continue physics level 3 study.</p> <p>There was also a 19% increase in female pupils indicating their interest in a science-related career.</p> <p>Teachers associated participation in the programme with a student’s increased consideration of continuing to study science subjects at level 3.</p>

Lilley et al.	<p>Mentees reported increased self-confidence and improvements in the quality of their work.</p> <p>54% of mentees increased their grades, and 64% of mentees receiving subject-specific mentoring improved their grades in these subjects.</p> <p>Mentees reported increasing their knowledge and understanding of the social aspects of higher education.</p>
NEACO and Brightside 2021	<p>There were high levels of engagement with the mentoring platform. All mentor groups reported increasing their knowledge about HE and future options and developing relevant skills and knowledge about qualifications.</p> <p>Mentees reported experiencing a high-quality mentoring relationship with their mentor and felt understood and supported.</p>
Brightside 2020b	<p>54% mentees reported increasing their knowledge about what to expect from HE. 86% of mentees progressed across multiple programme objectives.</p> <p>The COVID context meant that mentees were uncertain about grades and their potential future experience.</p> <p>Mentees reported increases in their social capital and knowledge about qualification and that mentoring contributed to their decision making.</p> <p>Smaller proportions of mentees reported positive motivational and attitudinal changes.</p>

Benefits for Mentors

Pountney et al. 2021	Mentors reported that their mentoring role had increased employability skills and potential and helped increase their self-confidence.
O'Sullivan et al. 2017	Mentors felt they could relate to their mentees because they were from the same background.
Thomas and Rushton 2020	Mentors reported developing employability skills, particularly organisational, time management and communication skills. They also valued the opportunity to experience the school context in a professional capacity.
Lilley et al.	Mentors reported increased confidence in their own ability to achieve their ambitions and enjoying re-engaging with subjects they had previously studied.
Brightside 2020b	93% of mentors reported feeling they were a good match for their mentees and that they had developed skills and accrued experiences they would add to their cv.

Other Outcomes

Thomas and Rushton 2020	School contacts reported that involvement in the project improved links with universities and enabled them to connect the teaching of physics with real world contexts.
Lilley et al.	Participating universities reported benefitting from increased outreach contact with partner schools.

Conclusion

Although mentoring is often deployed in the HE access / outreach space, there can be an assumption that the mentoring programme itself delivers the impact. However, mentoring is a complex relational process and outcomes can be the result of a number of nuanced factors, including the relationship between mentor and mentee (and how this is understood and defined). O’Sullivan et al. (2017) found that a strong mentor-mentee bond, built on mutual interest was important in ensuring positive outcomes. This reflects the findings of Pountey et al. (2021) that the impact of mentoring was increased where mentees felt that their mentor had a personal interest in them (See also - [A Brief Note About: Belonging and Mattering](#)).

In addition, effective training is seen as important to the successful outcome of the mentoring process, as are a number of practical and logistical factors including programme duration, frequency and length of sessions.

The evaluation of the GROW programme is effective and indicates that the programme was successful in achieving the defined objectives. However, some of the other evaluations were reviewed were less effective and suffered from weak design, ineffective measures, or insufficiently robust methodology.

Overall, we suggest that mentoring, although an expensive form of intervention (relative to the low number of beneficiaries), has potential to support and positively impact the lives of some target groups, but that success is likely to be linked to careful and effective programme design, a clear set of outcomes linked to this programme design and demonstrated through effectively calibrated evaluation design.

Recommendations

<i>Mentoring Programme Design</i>	
When considering, designing and / or developing, we recommend that the following practical and logistical aspects are considered and addressed in programme design:	
<i>Recommendation 1</i>	As part of the planning process, consideration is given to the reasons for selecting a mentoring as a core part of the intervention and how it is understood to address the core issues or problems that the programme is designed to respond to.
<i>Recommendation 2</i>	A clear definition of intended outcomes is developed. The design and impact of mentoring programmes can be strengthened by a detailed theory of change which describes how and why these intended outcomes are to be delivered.
<i>Recommendation 3</i>	Consideration is given to whether the mentoring process should be informed by an underpinning theory or theoretical model and, if so, what this model is and how it should inform the design and delivery of the mentoring process. This may include consideration of the scope of mentoring, whether it is designed as a psychosocial intervention and / or as an instrumental process to address specific skills or development needs.
<i>Recommendation 4</i>	<p>Evidence-informed consideration is given to the practical aspects of delivery, including:</p> <ul style="list-style-type: none"> • Whether delivery is online or face to face • Whether mentoring is delivered on an individual basis or in groups • The duration of each mentoring session or engagement • How strongly the programme is to be structured (whether sessions are rigidly scheduled or responsive to mentee needs) • If the programme is to be strongly structured, how frequently sessions are to be scheduled or arranged • How long the mentoring programme is to last (this variable can interact with the frequency of sessions). <p>Each of these factors can have a significant impact on mentee engagement and programme outcomes. Programme impact is likely to be influenced by the extent to which these practical arrangements align with the needs and requirement of mentees.</p> <p>We also recommend that, as part of the evaluation process, assumptions about mentee needs and requirements are checked and confirmed through direct engagement with mentees and the observation of key stakeholder groups (e.g. teachers).</p>
<i>Recruiting, Selecting and Engaging Mentees</i>	
To help ensure that the mentoring programme delivers its full potential impact, we recommend that the following aspects are considered in respect of targeting, selecting and recruiting mentees best placed to benefit from the programme:	
<i>Recommendation 5</i>	Consideration is given to how awareness might be raised of both the programme and the opportunities it offers for potential target groups. How this is achieved will vary depending on how open or closed the recruitment process is. Where potential mentees are recruited from a closed pool (e.g. a year group in a particular school or college or where

	there is an intermediary party in the recruitment process) this process is likely to be easier than when conducting open recruitment from a less clearly bounded population. In the latter case, there is likely to be significant challenge in ensuring that the hardest to reach groups (who often stand to receive the most benefit from this kind of support) are addressed.
<i>Recommendation 6</i>	<p>Consideration is given to how mentees are recruited or selected. Where there are more potential mentees than the programme can support, a selection process may be required. We recommend that consideration is given to how any selection criteria imposed might act as enablers or barriers to specific groups of potential mentees.</p> <p>The selection process may be delegated to third mediating parties (e.g. partner schools). Where this is the case, we recommend that there is explicit discussion about how individual mentees will be selected. Some of the literature suggests that partner stakeholders (e.g. schools and colleges in HE-focused outreach) can impose their own explicit or implicit criteria and it is important to make sure these align with those of the programme as a whole.</p>
<i>Recommendation 7</i>	<p>Consideration is given to how mentors are matched with mentees. Much of the literature we reviewed suggests that the impact of a mentoring engagement could depend in significant part on the quality of the mentor/mentee relationship.</p> <p>Few of the reports we reviewed, however, explicitly discussed how mentees were matched with mentors. This may be because matching processes are specific to each individual mentoring programme. This is an area which may require further research and evaluation. Brightside (2020b) enabled mentees to select their own mentor on the basis of their experiences, interests and what they were intending to get out of the mentoring process. This may be a useful option to consider where appropriate.</p>
<i>Recommendation 8</i>	Consideration is given to how mentor engagement might be guaranteed or increased. Many of the evaluations we reviewed identified a correlation between mentee engagement and outcomes. The extent to which the practical aspects of programme delivery align with the needs and preferences of mentees can influence engagement (see above), but we also recommend that the expectations of programme organisers, mentors and mentees are discussed at the outset of the programme to make sure they are clear, explicit and aligned.
<i>Recruiting and Training Mentors</i>	
Across the literature we reviewed there were varying approaches to recruiting suitable mentors. There were also differences in the extent and amount of training they were given in preparation for their role. We recommend considering the following aspects when recruiting and training mentors:	
<i>Recommendation 9</i>	<p>Consideration is given to how effective mentors can be recruited for specific mentoring roles.</p> <p>We recommend that clear information is provided about the proposed mentoring role and the skills or experience required to deliver it at the outset. This can help target mentor recruitment. The degree of specificity provided will depend on the nature of the programme and mentee requirements. Some of the surrounding literature suggests that the blurring or indeterminacy of an intended mentoring role can have a</p>

	<p>negative impact on programme outcomes (Gartland 2015). This is particularly the case where mentors are put in positions that expose the limits of their knowledge and experience (e.g. when asked to act as a substitute for a classroom teacher without relevant experience).</p> <p>According to programme requirements there can be an open recruitment of mentors, or a closed approach in which mentors with specific skills or experiences are approached. The latter approach is often adopted where mentors are also intended to act as role models for their mentees, in which case a similarity in age or background can often be sought.</p>
<i>Recommendation 10</i>	<p>Although this will depend on the complexity and specificity of individual mentoring programmes, we recommend that consideration is given to the extent, detail and content of mentor training.</p> <p>The effective training of mentors is often seen as crucial to a programme's success. Training can cover the expectations and design of the programme, mentoring skills, specific informing theories or the use of programme resources, specialist academic skills (such as trauma informed education – Pountney et al 2020) or mentee requirements and expectations.</p>
<i>Mentoring Programme Evaluation</i>	
<p>The evaluation reports we reviewed adopted a range of evaluation approaches, and the depth and complexity of the evaluation process varied according to the design and implementation of the programme. We recommend consideration of the following aspects when developing an evaluation approach:</p>	
<i>Recommendation 11</i>	<p>Where possible, evaluation is built into programme design and development at the outset. Some approaches, including developing a theory of change can help with mentoring programme design as well as developing an effective evaluation approach.</p>
<i>Recommendation 12</i>	<p>Consideration is given to how the impact of specific mentoring programmes can be disentangled from those of other interventions and activities that mentees may be involved in.</p> <p>This can be partially addressed by developing a theory of change that specifies the outcomes expected and described how these changes are produced. Consideration might also be given to measuring intermediate outcomes and including a non-participant counter-factual group in the evaluation.</p>
<i>Recommendation 13</i>	<p>We recommend that mentoring programmes are underpinned by an effective and detailed theory of change.</p> <p>The stronger and more detailed a theory of change for the mentoring programme and the clearer description of the chain mechanisms (the components of the programme that cause the intended changes) the stronger the causal claim between activity and outcomes.</p> <p>For more information about theory of change see https://blog.shu.ac.uk/steer/2022/02/18/everybodys-talking-abouttheory-of-change/</p> <p>And https://blog.shu.ac.uk/steer/2020/01/20/building-an-evaluative-mindset-at-hallam-3-programme-activity-intervention-design/</p>

<i>Recommendation 14</i>	Where possible, 'convenience measures' are avoided. These are evaluation data that may be easy to collect but do not clearly articulate with the design of the programme. The more closely evaluation measures are calibrated with the description of change mechanisms and / or the theory of change, the more accurately evaluation measures will reflect outcomes produced by the programme.
<i>Recommendation 15</i>	<p>Where self-report data is used, we recommend triangulating self-report data with observations of changes in relevant mentee behaviours or skills (including observations from teachers or parents) or by testing specific development domains.</p> <p>There are a number of advantages in using mentee self-report data in the evaluation of a mentoring programme (ease of use, they represent direct contact with participants) but they also risk introducing a range of biases into the evaluation data. Where possible, it is helpful to 'test' expected changes such as mentee knowledge acquisition through quizzes or surveys or by providing opportunities for mentees to demonstrate skills or attribute development. This approach is further strengthened by also testing a comparator non-participant group.</p>
<i>Recommendation 16</i>	<p>We recommend that response bias is mitigated through the use of additional evaluation instruments, such as observation, triangulation with other data and testing key development areas in evaluation processes that involve a wide participant cohort. This may help to mitigate risks that certain participant groups are more likely to respond to surveys or evaluation tools (particularly where they are already engaged, the evaluation is salient to their interests, or they have certain demographic characteristics).</p> <p>For more information about triangulating data sources, see the following blog - https://blog.shu.ac.uk/steer/2020/10/19/triangulating-evaluative-data-sources-whats-the-point/</p> <p>For more information about using surveys, see the following STEER blog - https://blog.shu.ac.uk/steer/2018/09/28/if-you-really-have-to-do-a-survey-with-your-students-read-this-first/</p>
<i>Recommendation 17</i>	<p>When asking evaluation respondents to provide feedback or response data about aspects of the mentoring programme, we recommend that consideration is given to whether particular terms or concepts (such as the quality of the mentoring relationship) are consistently understood by respondents. Cognitive testing surveys can help with this, but it may also be helpful to break down questions where there might be a risk of inconsistency into more specific questions.</p> <p>More information about cognitive testing of surveys can be found at the STEER blogs at https://blog.shu.ac.uk/steer/2021/12/01/how-to-be-a-survey-whisperer-using-cognitive-interviewing-to-co-design-a-module-evaluation-questionnaire/</p> <p>And https://blog.shu.ac.uk/steer/2020/04/09/eat-sleep-research-repeat-conducting-cognitive-interviews-in-a-pandemic/</p>
<i>Recommendation 18</i>	If relying on intermediate or short-term outcomes, consider how these might articulate with medium- and long-term outcomes. Sometimes external evidence can indicate how intermediate outcomes inform later

	outcomes. Again, this information can be helpfully included in a theory of change.
<i>Recommendation 19</i>	When analysing evaluation data, we recommend considering a range of options in how the task is approached, how data will be reported, what your key evaluation stakeholders are expecting and how they will use the data. Ideally, this thinking will have occurred early in the evaluation design stage to ensure data collection approach matches requirements, but further consideration before starting analysis can help ensure that findings are meaningful and useful to evaluation stakeholders.

Case Studies

Case Study 1: A College Focused Mentoring Programme for Students in Socio-Economically Disadvantaged Schools

Source

O'Sullivan, K., Mulligan, R., Kuster, M., Smith, R., & Hannon, C. (2017). A college focused mentoring programme for students in socio-economically disadvantaged schools: The impact of mentoring relationship and frequency on college-going confidence, application efficacy and aspirations. *Widening Participation and Lifelong Learning*, 19(2), 113-141.

<i>Programme Context</i>	Taking place in the Irish education system, the study investigated the impact of a college mentoring scheme on low-income students in terms of their confidence, self-efficacy, and aspirations for higher education.
Mentoring Methodology	
<i>Mentees</i>	1005 students in 11 secondary schools participating in the Trinity Access 21 programme. 728 students (aged 14) completed the evaluation. Participants were deemed low income via the socio-economic status of their school and community.
<i>Mentors</i>	Mentors were recruited by the school and project co-ordinators and were i) previously students at that school, ii) from a low-income background and iii) previous participants in college education.
<i>Mentor Training</i>	Mentors received a two-hour training session about the structure and purpose of the programme.
<i>Programme Delivery</i>	<p>The programme was delivered during school hours or as extra-curricular time.</p> <p>6 mentoring sessions were planned across 1 or 2 academic terms (10 -20 weeks). Mentoring was delivered to students in groups of 5.</p> <p>For each session mentees were asked to research a particular topic. Mentors were encouraged to take a goal-orientated approach and to build a relationship with their mentees. The programme was designed to balance the development of a meaningful relationship and impact mentees' HE knowledge and aspirations.</p>
<i>Theoretical Base</i>	Academic confidence formation (St John 2013), which draws on social, cultural and human capital models to describe barriers faced by low-income students. The relationship with mentors was designed to build a social capital base and to support positive socio-emotional, cognitive and identity development.
<i>Mentoring Programme Content</i>	Not addressed.
<i>Programme Objectives</i>	To increase mentees aspirations to progress onto college, to increase confidence in their ability to succeed at college and make effective college applications.
Evaluation	
<i>Evaluator(s)</i>	The evaluation was conducted by staff within the college delivering the intervention. The report does not indicate whether evaluators were involved in programme design or delivery.

<i>Evaluation Methodology</i>	<p>Key evaluation tools:</p> <ul style="list-style-type: none"> • Repeated measure, cross-sectional mixed methods design. • Thematic content analysis of: <ul style="list-style-type: none"> ○ Pre-/post surveys for mentees ○ Focus groups with mentees <p>Evaluation measures:</p> <ul style="list-style-type: none"> • Mentee demographic information (context) • Confidence to succeed in college scale (adapted from Wohnet al. 2013) – 5 point Likert-type scale self-rating • College application efficacy scale (adapted from Wohnet al. 2013) – 5 point Likert-type scale of self-rating agreement • Aspiration to go to college, single item (adapted from Markow and Pieters 2011) – 5 point Likert-type scale self-rating • Further questions to assess contact pattern (number of sessions and frequency of contact) and quality of mentoring relationship. <p>Effect of relationship quality and duration on the three core objectives was assessed through three multiple regressions.</p>
<i>Evaluation Outcomes: Mentees</i>	<p>There was a significant increase in mentees' confidence to succeed in college and in their application efficacy. There was no significant change in aspiration (which were already high prior to the intervention).</p> <p>The number of sessions and the quality of the mentoring relationship predicted confidence to succeed in college and application efficacy.</p> <p>Qualitative evidence suggested mentees trusted mentors and saw them as an approachable and relatable source of information. Mentors were also seen to increase mentees confidence and were regarded as able to explain information in an easy-to-understand way.</p> <p>Mentors felt they could relate to their mentees because they came from the same community or background. Relating to mentors as someone inspirational who came from the same background was seen as crucial to the success of the programme. Conversely where mentees failed to relate to, or were uninterested in their mentor or their career, this negatively impacted on their rating of the relationship. The activities through which sessions were constructed was also seen as important.</p> <p>Frequency of contact was seen as necessary to build a successful mentoring relationship.</p>
<i>Evaluation Outcomes: Mentors</i>	Not addressed.
<i>Evaluation Outcomes: Programme Implementation</i>	Not addressed.

Case Study 2: Hello Future: Peer Mentoring Programme Evaluation 2020 Report

Source

Cosmos Engagement (2020), Hello Future: Peer Mentoring Programme Evaluation 2020 Report. Available at https://www.hellofuture.ac.uk/wp-content/uploads/Hello-Future-Mentoring-Evaluation-19_20.pdf

<i>Programme Context</i>	The Hello Futures peer-mentoring programme was delivered by the Hello Future Uni Connect partnership, working across Cumbria with school and university partners.
Mentoring Methodology	
<i>Mentees</i>	Evaluation data was provided via 160 pre- and 94 post- intervention surveys. Mentees were Y10, Y11, Y12 students from schools in West Cumbria who were participants in the regional Uni Connect programme.
<i>Mentors</i>	Not addressed.
<i>Mentor Training</i>	Not addressed.
<i>Programme Delivery</i>	Not addressed.
<i>Theoretical Base</i>	Not addressed.
<i>Mentoring Programme Content</i>	Not addressed.
<i>Programme Objectives</i>	The report, which appears to be intended more for an internal than external audience, includes no information about the design of the mentoring programme or its objectives. These may be inferred from the evaluation measures below. See the note above about the risk of a disconnect between evaluation measures and programme objectives.
Evaluation	
<i>Evaluator(s)</i>	The evaluation was conducted by a research and evaluation consultancy organisation, Cosmos.
<i>Evaluation Methodology</i>	<p>Quantitative analysis of data from paper surveys administered pre- and post-intervention.</p> <p>Surveys used a matched pre- / post- design, consisting of 5 point self-report response scales collecting data about skills development across 10 domains (stress management, confidence in asking questions, study skills, study self-motivation, confidence in achieving future goals, communication skills, understanding of learning styles, responding to setbacks, determination to achieve well in exams).</p> <p>A further two questions asked respondents to report their likelihood of progressing on to university or an apprenticeship.</p> <p>The main mode of skills analysis measured the proportion of respondents agreeing or strongly agreeing with a series of skills-related statements, with a pre- post comparison of change across the intervention. Analysis included an additional measure of the percentage of respondents whose response was more positive post-intervention than prior to it.</p> <p>The report provides a comprehensive breakdown of differences between different groups on the basis of year group, region, group verses one-to-one</p>

	<p>modes of delivery, number of sessions received and contact hours, and target and non-target groups (gender and IMD) to assess the differential impact of the programme.</p> <p>Additional analysis compared the response of different participant groups to their future intentions.</p> <p>The report also included a thematic analysis of qualitative responses, based on asking mentees what they hoped to get out of the programme (pre-) and how the programme could be improved (post-).</p>
<i>Evaluation Outcomes: Mentees</i>	<p>Mentees reported increased confidence in their skills across 9 domains, with particularly strong responses to their ability to manage stress while studying. There was a negative trend in terms of determination to do well in exams. The report authors suggested this may have been down to learning more about the examination process. The report does not indicate timings, but this may have coincided with the COVID-19 response and the Department for Education decision to derive exam outcomes via an algorithm.</p> <p>There was a shift in the number of students indicate their likely next step destinations away from HE destinations and towards apprenticeship options.</p>
<i>Evaluation Outcomes: Mentors</i>	Not addressed.
<i>Evaluation Outcomes: Programme Implementation</i>	Not addressed.

Case Study 3: Brightside Online Mentoring Evaluation

Source

Brightside (2020a), The Power of Online Mentoring. Available at <https://brightside.org.uk/impact-reports/2020-yearofimpact/>

<i>Programme Context</i>	This is a brief summary report that does not include detail about the mentoring programme but provides headline outcomes.
Mentoring Methodology	
<i>Mentees</i>	<p>Although no details are provided about the recruitment of mentees, the report is based on the analysis of data from 9000+ mentees who have engaged in mentoring via the Brightside online mentoring platform.</p> <p>The mentee population is segmented by POLAR quintile (postcode measure of rates of participation in higher education), GCSE outcomes and eligibility for free school meals.</p>
<i>Mentors</i>	Not addressed.
<i>Mentor Training</i>	Not addressed.
<i>Programme Delivery</i>	Not addressed.
<i>Theoretical Base</i>	Not addressed.

<i>Mentoring Programme Content</i>	Not addressed.
<i>Programme Objectives</i>	This brief summary report includes no information about the design of the mentoring programme or its objectives. These may be inferred from the evaluation measures below. See the note above about the risk of a disconnect between evaluation measures and programme objectives.
Evaluation	
<i>Evaluator(s)</i>	Evaluation was conducted by the Brightside organisation using data from the Higher Education Access Tracker (HEAT).
<i>Evaluation Methodology</i>	<p>This summary report provides an overview of analysis of a large dataset of 9,253 students (aged 17-18) from data included in the Higher Education Access Tracker (HEAT). This represents students who were registered on a Brightside programme between 2009 and 2017.</p> <p>Analysis included an assessment of mentee engagement (more than 2 messages sent to mentor) and the creation of a treatment (engaged) and quasi-control (low engagement) group.</p>
<i>Evaluation Outcomes: Mentees</i>	<p>77% of students from areas with the lowest rates of HE progression (POLAR4 Q1&2) who engaged with the Brightside mentoring programme were in higher education, compared with 46% of low-engagement students in the HEAT dataset and a national average of 24%. The participation gap between POLAR4 Q1 and Q5 was lower for students who had engaged with the platform than those who had not.</p> <p>Similarly, students eligible for free school meals who engaged with Brightside mentoring did better by an average of 6.5 GCSE grades across all subjects than matched students with low engagement.</p>
<i>Evaluation Outcomes: Mentors</i>	Not addressed.
<i>Evaluation Outcomes: Programme Implementation</i>	Not addressed.

Case Study 4: Physics Mentoring Project: Final Evaluation Report

Source

Thomas, L. and Rushton, L. (2020), *Physics Mentoring Project: Final Evaluation Report*. Ondata Research. Available at https://kclpure.kcl.ac.uk/portal/files/139468519/Final_report_Physics_Mentoring_June_2020_final.pdf

<i>Programme Context</i>	The Physics Mentoring Project (PMP) was led by Cardiff University and partner Welsh universities between 2019 and 2020, with the aim of increasing the uptake of physics and female pupils' intentions towards a science-related career.
Mentoring Methodology	

<i>Mentees</i>	90 Y10 and Y11 pupils were recruited from schools in Wales. Mentees were recruited through partner schools. A pre-participation survey was given to all students in a year group. Students who were unsure whether they would consider taking physics A level were targeted for selection for the programme with final selection conducted by teachers, based on student's assessed ability to succeed at Physics A level.
<i>Mentors</i>	Not addressed.
<i>Mentor Training</i>	Mentors took part in a centrally organised training session. The training was reviewed and extended for phase two, although details about this development are not included in the report.
<i>Programme Delivery</i>	Mentoring was delivered in person and in-school, with mentors delivering 5 weekly sessions on physics related content. Delivery was disrupted by the COVID-19 pandemic in 2020, which also negatively impacted on evaluation response rates.
<i>Theoretical Base</i>	As the programme was developed a theorisation of Science Capital (Archer et. al 2015 and DeWitt and Archer 2017) was introduced through a Science Capital Teaching Approach (Godec et at. 2017). In particular, this informed the mentoring approach with mentors encouraged to personalise and localise the sessions and make them more relevant to the mentees. There was limited additional detail, however, on how this theory informed programme design and delivery.
<i>Mentoring Programme Content</i>	There is little detail about the content of the individual sessions, but mentors were encouraged to localise and personalise the sessions. Mentees responded to this flexibility and most positive feedback was generated when mentees felt the content was closely related to their interests and experiences.
<i>Programme Objectives</i>	To increase the uptake of Physics as a subject in post-16 assessments and increase the uptake of women in STEM subjects.
Evaluation	
<i>Evaluator(s)</i>	The research was conducted by researchers from an external research and evaluation organisation, Ondata Research.
<i>Evaluation Methodology</i>	A mixed methods approach was adopted combining qualitative and quantitative methods: <ul style="list-style-type: none"> • Pre- post- participation surveys for mentees and non-participating students in school year group • Mentee reflection sheets completed weekly • Training evaluation and observations for mentors • Mentor reflection sheets completed weekly • Teacher interviews and post-intervention survey about the perceived impact of the programme on participants • Stakeholder and project team interviews
<i>Evaluation Outcomes: Mentees</i>	<p>There was a 38% increase in mentees indicating they 'definitely' or 'probably' would take physics A level. There was a 19% increase in female pupils 'definitely' or 'probably' considering a science-related career. For non-participant female pupils this dropped by 8%. Both teachers and mentors reported that mentees benefit from contact with role models.</p> <p>Teachers observed that participants enjoyed the mentoring process and for most it had informed their thinking about whether to study physics at A level.</p>
<i>Evaluation Outcomes: Mentors</i>	Mentors reported developing employability-related skills development and the opportunity to experience the school environment in a professional

	capacity. Mentors also reported developing organisational, time management and communication skills.
<i>Evaluation outcomes: Participating Schools</i>	School teachers reported that involvement in the project improved links with universities and connected physics with real world contexts. These projects are demanding of schools and teachers time, however, the communication between the project co-ordinator and school contacts was seen as effective and supporting delivery.
<i>Evaluation Outcomes: Programme Implementation</i>	Not addressed.

Case Study 5: Peer Mentoring Works!: How Peer Mentoring Enhances Student Success in Higher Education

Andrews and Clark (2011)

Source:

Andrews, J. and Clark, R. (2011). Peer Mentoring Works: How Peer Mentoring Enhances Student Success in Higher Education. Available at https://publications.aston.ac.uk/id/eprint/17968/1/Peer_mentoring_works.pdf

Rather than the evaluation of a specific programme as in the other literature reviewed, this report comprises a report on the outcome of seven projects in the 'What Works? Student Retention and Success Programme' sponsored by Paul Hamlyn Foundation and Higher Education funding Council for England (HEFCE). As such it summarises evidence and learning across a range of discrete programmes.

The report explores mentoring across all stages of the student lifecycle with a particular focus on transition into HE. For the purposes of the discussion above, only information relevant to pre-HE outreach intervention is included.

Evaluation Approach

The research involved a multiple case-study study mixed methods design.

- Pilot survey across all partner HEIs.
- Follow up survey at three partner institutions.
- In-depth qualitative interviews and focus groups with peer mentors and mentees.
- Overt observation of peer mentoring activity of peer mentoring activity across induction mentoring.

Case Study 6: Wessex Inspiration Network: Evaluation Report: Online Mentoring of A Level Students at Weston College

Source

Lilley, J., Anderson, B. and Blight, N. (n.d.). Wessex Inspiration Network: Evaluation Report: Online Mentoring of A Level Students at Weston College. Available at <https://www.winnacop.ac.uk/assets/files/Evaluation-Report-for-A-Level-Mentoring-Scheme.pdf>

<i>Programme Context</i>	<p>The programme provided a mentoring scheme targeted at A level learners in a target college.</p> <p>An online mentoring approach was selected in response to the constraints of the COVID-19 pandemic. The impact of the platform on mentoring was included in the evaluation of the project.</p>
Mentoring Methodology	
<i>Mentees</i>	Mentees were identified by the college and met specific Uni Connect targeting criteria as well as POLAR 4 postcode measures.
<i>Mentors</i>	Undergraduate mentors were selected from partner universities on the basis of academic subject experience and because of a closeness in age to the mentees, with the aim of operating as role models to mentees.
<i>Mentor Training</i>	Mentors received a single session of online training. They also received subject-specific support and guidance from course tutors at the college.
<i>Programme Delivery</i>	<p>The mentoring programme was delivered for 18 weeks with the aim of facilitating a weekly session. The duration of sessions was between 30 and 90 minutes. There was a mix of individual and group mentoring sessions. 528 contact hours were delivered over 312 sessions by 14 mentees and attended by 87 mentees.</p> <p>Mentoring was delivered online via a common platform (Microsoft Teams). The programme was designed to mitigate a loss in opportunities for college students to meet current undergraduates and prepare for higher education.</p>
<i>Theoretical Base</i>	Not Addressed.
<i>Mentoring Programme Content</i>	Subject tutors met with mentors to ensure content of sessions aligned with a mentee's study curriculum. Comments elsewhere in the evaluation suggest that mentees used the sessions to share aspects of their coursework with which they wanted help and support.
<i>Programme Objectives</i>	<p>To increase confidence and awareness of HE progression for A level learners at the partner College.</p> <p>To increase attainment outcomes in specific subjects.</p> <p>Intervention objectives, including associated evaluation measures were informed by the NERUPI framework⁴ (a widening participation framework from the Network for Evaluating and Researching University Participation Interventions, which is informed by Bourdieu's theory of social and cultural capital). As such the mentoring programme is designed to enable beneficiaries to:</p> <ul style="list-style-type: none"> • explore the academic, social, economic and personal benefits of progression to HE • explore difference between different HE institutions and study opportunities • develop study skills and enhance academic skills • broaden their subject knowledge
Evaluation	
<i>Evaluator(s)</i>	Evaluation was conducted by staff at Wessex Information Network, the Uni Connect Partnership delivering the intervention being evaluated. The report

⁴ <https://www.nerupi.co.uk/about/nerupi-framework-overview>

	does not indicate whether evaluators were involved in programme design or delivery.
<i>Evaluation Methodology</i>	<p>A mixed methods approach was employed, which included:</p> <ul style="list-style-type: none"> • pre-intervention online participation survey (informed by a broader sector-wide Uni Connect evaluation survey designed by CFE research) • post-intervention survey exploring changes in knowledge and intentions • 7 online focus groups with 14 mentees • Mentor survey exploring confidence about mentoring role • Focus group with 2 mentors • College tutor survey • Predicted A level grades (and start and final grades for participating Y11 students). <p>Survey responses were self-reported on 3 and 5 point scales. In analysis, averages were calculated on the basis of the numeric responses and pre- and post- intervention scores compared.</p>
<i>Evaluation Outcomes: Mentees</i>	<p>Analysis of survey responses revealed increases across all aspects.</p> <ul style="list-style-type: none"> • Respondents self-reported confidence and indicated that mentoring improved the quality of their work. • Mentees receiving subject-specific mentoring saw increases in the grades for the specific subjects they were mentored in compared to students receiving non-subject mentoring. • Mentees reported learning more about the social aspects of university life from mentors. <p>There was no non-participant comparator group.</p> <p>Thematic analysis of qualitative survey responses and the use of polling software during focus groups revealed that improvements in course work and development of skills were the most commonly mentioned positive aspects of participating in the programme, followed by increased knowledge about university life and academic subjects.</p> <p>In terms of specific focus group comments, respondents described how their mentor had helped them develop specific academic skills, including structuring and writing assessment answers. In survey responses, tutors also felt that the programme had helped participants develop their knowledge and confidence about HE, study skills, knowledge about the subject, and quality of their work.</p> <p>Analysis of start and end grades reveal that a majority of mentored students (54%) increased their grades rising to 64% in the specific subjects for which they received mentoring. This suggests that mentoring contributed to improved grades.</p>
<i>Evaluation Outcomes: Mentors</i>	Mentors reported increased levels of confidence in their own career plans and enjoyment in re-engaging with academic subjects they had previously studied.
<i>Evaluation outcomes: Stakeholders</i>	Uni Connect partners, specifically universities, reported benefiting from increased outreach relationships with participating schools.

<i>Evaluation Outcomes: Programme Implementation</i>	<p>Mentors and mentees reported that the online mode of delivery was convenient and accessible. The use of online mentoring meant that it was practically and logistically easier to engage mentors from a wider geographical area than would have been possible by face to face delivery.</p> <p>In the initial stages of the programme mentees did not use their cameras or microphones and relied on chat for communication. As the programme progressed mentees were more likely to use cameras and microphones. The mentoring programme was assessed as delivering GATSBY career-support benchmarks 3, 4 and 7 for participating schools.</p>
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Case Study 7: HE Explore Online Mentoring: Executive Summary

Source

NEACO and Brightside (2021) HE Explore Online Mentoring: Executive Summary. Available at <https://www.takeyourplace.ac.uk/media/1358/neaco-he-explore-2021-online-mentoring-evaluation-sept-2021-executive-summary.pdf>

<i>Programme Context</i>	<p>The programme was an online mentoring programme, provided by Brightside, for Y10 and Y12 students exploring their higher education options and applications. This means that several aspects of the programme were similar to the Brightside evaluations discussed elsewhere.</p> <p>The use of Brightside's online mentoring platform meant that mentees could select their own mentor from the options available, this increased the chances of an effective match between mentor and mentee than where the matching was done by others.</p>
Mentoring Methodology	
<i>Mentees</i>	323 mentees took part in the evaluated mentoring programme, sending an average 11.7 messages to their mentor.
<i>Mentors</i>	Mentors were drawn from the Brightside mentoring pool.
<i>Mentor Training</i>	Not addressed.
<i>Programme Delivery</i>	See Case Study 8 for more information.
<i>Theoretical Base</i>	See Case Study 8 for more information.
<i>Mentoring Programme Content</i>	Not Addressed.
<i>Programme Objectives</i>	<p>To increase participants' knowledge of higher education, where to find support and guidance and how to write an effective personal statement.</p> <p>For Y10 students to increase knowledge of post-16 study options and opportunities.</p> <p>Brightside divide development impacts into human capital (knowledge about required development and qualifications), social capital (building social networks), and hope (optimism and belief in ability to achieve desired outcomes).</p>
Evaluation	

<i>Evaluator(s)</i>	Not detailed in the report. The report was published by both of the participating organisations and analysed mentee data provided by Brightside.
<i>Evaluation Methodology</i>	Not addressed. See Case Study 8 for more information.
<i>Evaluation Outcomes: Mentees</i>	<p>Evaluation suggested that there were high levels of engagement for mentees who engaged with the platform, with 87% of participants sending at least 3 and 73% of mentees sending at least 6 messages.</p> <p>Outcomes analysis was separated into Y10, Y12 and Y12 highly able cohort groups. There were increases in HE knowledge or future options for all groups. All three groups also self-reported increases in human capital (23%-40%), social capital (5%-9%) and hope (2%-3%) domains. 83%-89% of mentoring cohorts reported that mentoring supported their decision-making about post-18 options, and 3%-7% recorded an increase in confidence in their own decision-making in this area.</p> <p>Both mentors and mentees reported high quality mentoring experiences with 96% of mentees agreeing that they had a good relationship with their mentor. 90% of mentees felt that mentors understood their needs and 89% that their mentor helped them think more clearly about their future.</p> <p>Mentees reported increasing their knowledge about HE, the application process and university experience.</p>
<i>Evaluation Outcomes: Mentors</i>	Not addressed.
<i>Evaluation Outcomes: Programme Implementation</i>	Not addressed.

Case Study 8: Brightside Mentoring: Prepare for HE Evaluation Report

Source

Brightside. (2020b). Brightside Mentoring: Prepare for HE Evaluation Report (June – October 2020). Available at <https://gmhigher.ac.uk/wp-content/uploads/2022/01/Prepare-for-HE-Brightside-Evaluation-Report-Nov-2020.pdf>

<i>Programme Context</i>	This programme, in collaboration with a range of partners (universities and Uni Connect partnerships) was designed as a rapid response to the COVID-19 pandemic lockdown process. The programme differed from some of the other programmes listed in that it encouraged a self-selection process for recruitment, rather than being mediated through other parties such as schools and colleges.
Mentoring Methodology	
<i>Mentees</i>	<p>848 mentees were recruited via self-selection and sign up through UCAS, universities contacting their offer-holders directly, and through promotion through school and college networks.</p> <p>30% of mentees were mature students. The recruitment process took part during lockdown, which may have depressed take up.</p>

<i>Mentors</i>	<p>Mentors were also recruited through a self-selecting recruitment process, with more mentors recruited than were required by the number of recruited mentees. Mentors were current HE student volunteers and other graduate-volunteers.</p> <p>173 mentors took part. Mentees were able to select their own preferred mentor on the basis of their interests and their motivations for engaging in mentoring.</p>
<i>Mentor Training</i>	Mentors were provided with an 'extensive mentoring guide' which included information about key student milestones, advice on how to address topics through mentoring and tips for engaging mentees. There was also a community of practice for mentors.
<i>Programme Delivery</i>	Mentoring was delivered via an exchange of messages using Brightside's established mentoring platform. The programme was originally intended to run from June 2020 to mid-September 2020, but was extended until the end of October to incorporate transition into HE.
<i>Theoretical Base</i>	<p>The design of the programme is built on Brightside's pre-existing theory of change, which focuses on the development of:</p> <ul style="list-style-type: none"> • Human capital – learning specific knowledge and skills • Social capital – knowing people who could provide advice and support • Hope – setting goals and having flexibility and motivation to achieve them • Coping – resilience • Self-efficacy • Growth mindset
<i>Mentoring Programme Content</i>	Brightside supported mentors through regular contacts, including recommendation for themes and topics for mentoring exchanges. Mentors also supported the mentoring relationship via regular engagement reminders to their mentees.
<i>Programme Objectives</i>	<ul style="list-style-type: none"> • Increase mentee understanding of what HE study and student life would be like • Prepare mentees for HE learning approaches • Help maintain mentees' academic motivation • Build a sense of belonging and help mentees feel confident they would have a positive HE experience.
Evaluation	
<i>Evaluator(s)</i>	The programme was evaluated by Brightside staff using core mentee data, mentor/mentee conversation data and a survey. The report does not indicate whether evaluators were involved in programme design or delivery.
<i>Evaluation Methodology</i>	<p>Multi-mode evaluation was conducted, which incorporated:</p> <ul style="list-style-type: none"> • engagement monitoring (number of messages exchanged) through the platform • pre- and post- intervention mentee surveys incorporating response scales and open text responses, including questions about the perceived quality of the mentoring process • post-programme mentor survey • analysis of a sample of message content text <p>Survey analysis was conducted on the basis of the percentage of respondents who saw a positive change in responses. One aspect noted in the report is that this reporting method was challenged by the proportion of respondents</p>

	who replied to the initial survey with a maximum score therefore leaving no scope to register increased positive change.
<i>Evaluation Outcomes: Mentees</i>	<p>54% of mentees reported increases in knowledge about what to expect from HE and the difference in learning approaches at HE level. 46% of mentees reported increase their social capital, 27% in human capital and 24% in hope. 97% of mentees increased in at least one of the desired outcomes, 86% of multiple outcomes, with an average progression of 4 outcomes.</p> <p>At the same time, the circumstances surrounding the programme (COVID-19) created uncertainty for mentees, with some negative impact demonstrated through qualitative feedback on their reported optimism about the future. Mentees also reported uncertainty about their grades (calculated by algorithm at this point), and worry about online HE delivery and the potential effects of social distancing.</p> <p>12% of mentees felt that their social capital had increased as a result of participating in the programme, 23% reported a positive change in their human capital, with qualitative responses indicating that mentees had received useful insights and information from mentors. This was likely to be the case particularly where they had chosen mentors because they were engaged in the future occupation or studying the subjects of interest to them. Results for increases in hope were lower than expected, given other positive responses to the survey. Report authors put this down to the broader challenges associated with the COVID-19 context.</p> <p>Other gains were observed in the motivational and attitudinal self-report data, with 39% of respondents reporting a positive change in coping, 41% in self-efficacy (although there was also a 38% negative response in this domain), 25% in growth mindset (with a 25% negative response). The report authors concluded that 'this is an interesting set of results that allude to the complex changes facing young people during this period as well as some of the ways in which Prepare for HE helped' (p.30).</p> <p>70% of respondents reported that the programme had contributed to their decision about what to do next in their academic development (at least in part).</p> <p>Qualitative comments confirmed that for a number of mentees, the programme had helped confirm their decision and increase their confidence in their own decision-making.</p>
<i>Evaluation Outcomes: Mentors</i>	<p>Mentors felt that the mentoring process had been effective and 93% felt they were the right match for their mentee. This strengthens the claim that enabling mentees to select their mentors can increase impact.</p> <p>93% of mentors who responded to the survey would include their experience on the programme on their CV, with 79% reporting that they had developed professionally as a result of their mentoring role.</p>
<i>Evaluation Outcomes: Programme Implementation</i>	<p>The conversion rate was 44% with 1089 initial sign-ups translating into 484 participating mentees. 90% of mentoring sign ups met at least one of the targeting criteria. An average of 10.9 messages were sent by mentees, with 81% sending at least 3 messages. Mature students tended to be the least engaged because of other pressures on their time. 98% of respondents</p>

	reported enjoying the programme and 99% feeling they got on well with their mentor (this was confirmed by 93% of mentors).
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Grow Programme – Evaluation Report: Phase 1

Source

Pountney, Booth and Campbell (2021), *Evaluation of the GROW Programme Report: Phase 1*.

Available at <https://blogs.shu.ac.uk/grow/files/2022/02/GROW-Programme-Evaluation-preliminary-report-Final-v2.pdf>

<i>Programme Context</i>	The GROW programme was developed in July 2020 in response to the disruption of schooling caused by the COVID-19 pandemic. There was a specific concern that this disruption could have a disproportionate impact on pupils from lower socio-economic backgrounds.
Mentoring Methodology	
<i>Mentees</i>	The initial target group was Y10 and Y11 school pupils in South Yorkshire. Y13 cohorts were added in 2021. Mentees were recruited through partner schools who nominated pupils for participation in the programme. (How schools selected participants is not detailed in the report). Overall, 730 mentees across 31 schools accessed the programme.
<i>Mentors</i>	Mentors were primarily recent graduates of Sheffield Hallam University. 76 mentors were recruited through advertising to recent graduates.
<i>Mentor Training</i>	Mentors received 25 hours of online training. Mentors were required to complete a training log. Mentors were also offered the opportunity to complete a PG Certificate in Professional Practice alongside their role. This option was taken up by 14 mentors who completed the qualification.
<i>Programme Delivery</i>	Mentoring was delivered via a collaborative online platform as 12 x 1 hour sessions across a 6 week period. Mentoring sessions were structured and scaffolded via activity resources designed in collaboration with local schools. The online platform enabled mentors and mentees to work together on these resources and activities.
<i>Theoretical Base</i>	A pedagogic model is well-established in the evaluation. The mentoring process was informed by established the GROW mentoring model (Goal, current Reality, Options / Obstacles, Will / Way forward). In response to the COVID context, mentors were also trained to use trauma-informed educational approaches in their practice.
<i>Mentoring Programme Content</i>	<p>Each mentoring session was highly structured, and the curriculum for each session proscribed in the mentor guidance. Each session was accompanied by a mentee workbook, which included resources and activities. The programme included an explicit focus on teaching and supporting the development of mentees' metacognitive strategies (planning, monitoring and evaluating learning) and supporting the development of self-regulation.</p> <p>The programme was not explicitly subject-focused but designed to address broader curriculum learning and academic skills.</p> <p>Although the programme was highly structured and scaffolded, mentors were also encouraged to be flexible and tailor and adapt session for individual mentees.</p>
<i>Programme Objectives</i>	The primary aim of the programme was to improve academic success for mentees through a psychosocial intervention designed to influence how

	students think and feel about themselves and their studies. Mentoring sessions were intended to increase mentees academic buoyancy and academic resilience. The programme also focused on helping mentees deal with the educational disruption caused by the pandemic, and the process of returning and recovering positive habits of work and learning. These outcomes were supported by a programme designed to help mentees develop shared 'learner identities' with student ambassadors.
Evaluation	
<i>Evaluator(s)</i>	The evaluation was conducted by academic researchers from Sheffield Hallam University's Sheffield Institute of Education. The report does not indicate whether evaluators were involved in programme design or delivery.
<i>Evaluation Methodology</i>	<p>Evaluation of the programme was primarily through a mixed methods approach, which incorporated:</p> <ul style="list-style-type: none"> • Interviews with mentors and school key contacts • Focus groups with mentees • Pre- / Post-programme and training survey for Mentors • Survey for school staff • Mentor training logs • Pupil workbooks.
<i>Evaluation Outcomes: Mentees</i>	<p>Mentors reported that the programme successfully helped mentees re-engage with school and develop positive work and learning habits. Mentors also felt that longer term benefits were emerging as mentees began to consider their future learning, career options and their personal development.</p> <p>In qualitative responses, school staff observed similar effects, reporting increases in mentee confidence and, as a knock-on effect, better behaviour in the classroom. The focus on future options and opportunities was seen as helping to increase student motivation and engagement with assessment. School staff also reported seeing developments in participating pupils' metacognitive skills and strategies.</p> <p>Mentees reported increased motivation and future orientation.</p> <p>Both mentees and mentors stressed the importance of an effective mentor-mentee relationship. Using recent graduates to mentor was seen as creating a closeness in age between both parties that increased opportunities to share experiences.</p>
<i>Evaluation Outcomes: Mentors</i>	<p>The training logs suggested that mentors viewed the training programme as beneficial and increased their understanding of the programme and its methodology, the mentoring process and mentor role, the needs of mentees and the support available to them. The detailed training process was also seen as helping increase their preparation for the mentoring process. Mentors reported that their participation had helped them develop employability skills and potential, prepare them for work, and increase their self-confidence</p>
<i>Evaluation Outcomes: Programme Implementation</i>	<p>Mentors positively regarded the programme structure and quality of materials. They also highlighted the support of programme tutor and school staff, which enabled them to adapt and flex the sessions to reflect the needs of specific mentees. This ability to be flexible and responsive withing the sessions was seen as integral to the success of the programme by mentors, mentees and school staff.</p>

	<p>Implementation issues: Practicalities and logistics raised specific challenges. The availability of time and other timetabling pressures meant, for example, that some mentees missed sessions. This negatively impacted on continuity and therefore the integrity of the development process for those mentees affected.</p> <p>There were also additional practical and logistical challenges in arranging and delivering sessions for some mentees. However, the three-way support design of the programme, which linked mentors, mentees and school staff was seen as an effective response to these challenges. The importance of dedicated administrative and practical support able to mediate between the central programme and school partners was therefore seen as an essential part of the programme.</p>
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References

- Andrews, J. and Clark, R. (2011). Peer Mentoring Works: How Peer Mentoring Enhances Student Success in Higher Education. Available at https://publications.aston.ac.uk/id/eprint/17968/1/Peer_mentoring_works.pdf
- Austin, M., & Hatt, S. (2005). The messengers are the message: A study of the effects of employing higher education student ambassadors to work with school students. *Widening Participation and Lifelong Learning*, 7(1), 1-8
- Bacon, D., Johnson, C. & Stewart, K. (2016). Nonresponse Bias in Student Evaluations of Teaching, *Marketing Education Review*, 26:2, 93-104
- Brightside. (2020a). *The Power of Online Mentoring*. Available at <https://brightside.org.uk/impact-reports/2020-yearofimpact/>
- Brightside. (2020b). *Brightside Mentoring: Prepare for HE Evaluation Report (June – October 2020)*. Available at <https://gmhigher.ac.uk/wp-content/uploads/2022/01/Prepare-for-HE-Brightside-Evaluation-Report-Nov-2020.pdf>
- Burgess, A. P., Horton, M. S., & Moores, E. (2021). Optimising the impact of a multi-intervention outreach programme on progression to higher education: recommendations for future practice and research. *Heliyon*, 7(7), e07519
- Canovan, C., & Fallon, N. (2021). Speak and be heard: Listening to schools' perspectives on widening participation provision. Available at <https://clock.uclan.ac.uk/39975/1/39975%20Canovan-Future-U-report-FINAL.pdf>
- Connell, J. P., & Kubisch, A. C. (1998). Applying a theory of change approach to the evaluation of comprehensive community initiatives: progress, prospects, and problems. *New approaches to evaluating community initiatives*, 2(15-44), 1-16
- Cosmos Engagement (2020), Hello Future: Peer Mentoring Programme Evaluation 2020 Report. Available at https://www.hellofuture.ac.uk/wp-content/uploads/Hello-Future-Mentoring-Evaluation-19_20.pdf
- Domina, T. (2009). What works in college outreach: Assessing targeted and schoolwide interventions for disadvantaged students. *Educational evaluation and policy analysis*, 31(2), 127-152
- Dost, G. & Mazzoli Smith, L. (2023). Understanding higher education students' sense of belonging: a qualitative meta-ethnographic analysis, *Journal of Further and Higher Education*
- Feldman, D. C. (1999). Toxic mentors or toxic protégés? A critical re-examination of dysfunctional mentoring. *Human resource management review*, 9(3), 247-278
- Flett, G., Khan, A. & Su, C. (2019). Mattering and Psychological Well-being in College and University Students: Review and Recommendations for Campus-Based Initiatives. *Int J Ment Health Addiction* 17, 667–680

- Gartland, C. (2013). Marketing participation? Student ambassadors' contribution to widening participation schemes in engineering and medicine at two contrasting universities. *Journal of widening participation and lifelong learning*, 14(3), 102-119.
- Gartland, C. (2015). Student ambassadors: 'role-models', learning practices and identities, *British Journal of Sociology of Education*, 36:8, 1192-1211
- Grossman, J. B., & Rhodes, J. E. (2002). The test of time: Predictors and effects of duration in youth mentoring relationships. *American journal of community psychology*, 30, 199-219
- Haddock, S., Weiler, L., Krafchick, J., Zimmerman, T. S., McLure, M., & Rudisill, S. (2013). Campus Corps Therapeutic Mentoring: Making a Difference for Mentors. *Journal of Higher Education Outreach and Engagement*, 17(4), 225-256.
- 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
- Harrison, N., Waller, R., & Last, K. (2015). The evaluation of widening participation activities in higher education: A survey of institutional leaders in England. Available at <https://uwe-repository.worktribe.com/OutputFile/833601>
- Harrison, N., Vigurs, K., Crockford, J., McCaig, C., Squire, R., & Clark, L. (2018). Understanding the evaluation of access and participation outreach interventions for under 16 year olds. Available at http://shura.shu.ac.uk/23719/1/Final%20outputs%20-%20Report%20ofs2018_aevaluation.pdf
- John, O. P., & Robins, R. W. (1994). Accuracy and bias in self-perception: Individual differences in self-enhancement and the role of narcissism. *Journal of Personality and Social Psychology*, 66, 206-219
- Jones, J. (2013). Factors influencing mentees' and mentors' learning throughout formal mentoring relationships, *Human Resource Development International*, 16:4, 390-408
- Joshi, G., & Sikdar, C. (2015). A study of the mentees' perspective of the informal mentors' characteristics essential for mentoring success. *Global Business Review*, 16(6), 963-980
- Karcher, M. J., Nakkula, M. J., & Harris, J. (2005). Developmental mentoring match characteristics: Correspondence between mentors' and mentees' assessments of relationship quality. *Journal of Primary Prevention*, 26, 93-110
- Kearney, M. S., & Levine, P. B. (2020). Role Models, Mentors, and Media Influences. *The Future of Children*, 30(1), 83-106
- Kruger, J., & Dunning, D. (1999). Unskilled and unaware of it: how difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of personality and social psychology*, 77(6), 1121
- Lilley, J., Anderson, B. and Blight, N. (n.d.). Wessex Inspiration Network: Evaluation Report: Online Mentoring of A Level Students at Weston College. Available at <https://www.winncop.ac.uk/assets/files/Evaluation-Report-for-A-Level-Mentoring-Scheme.pdf>
- Markus, H., & Nurius, P. (1986). Possible selves. *American psychologist*, 41(9), 954.

- Meehan, C., & Howells, K. (2019). In search of the feeling of 'belonging' in higher education: undergraduate students transition into higher education. *Journal of Further and Higher Education*, 43(10), 1376-1390
- NEACO and Brightside (2021) HE Explore Online Mentoring: Executive Summary. Available at <https://www.takeyourplace.ac.uk/media/1358/neaco-he-explore-2021-online-mentoring-evaluation-sept-2021-executive-summary.pdf>
- Office for Students. (2019). *Access and Participation Standards of Evidence*. Available at <https://www.officeforstudents.org.uk/publications/standards-of-evidence-and-evaluating-impact-of-outreach/>
- Oyserman, D., Bybee, D., Terry, K., & Hart-Johnson, T. (2004). Possible selves as roadmaps. *Journal of Research in personality*, 38(2), 130-149
- Mayne, J. (2015). Useful theory of change models. *Canadian Journal of Program Evaluation*, 30(2)
- O'Sullivan, K., Mulligan, R., Kuster, M., Smith, R., & Hannon, C. (2017). A college focused mentoring programme for students in socio-economically disadvantaged schools: The impact of mentoring relationship and frequency on college-going confidence, application efficacy and aspirations. *Widening Participation and Lifelong Learning*, 19(2), 113-141
- Passy, R., Morris, M., & Waldman, J. (2009). Evaluation of the impact of Aimhigher and widening participation outreach programmes on learner attainment and progression. *London: National Foundation for Education Research*. Available at <https://www.nfer.ac.uk/publications/AIM01/AIM01.pdf>
- Paulhus, D. L. (2017). Socially desirable responding on self-reports. *Encyclopedia of personality and individual differences*, 1-5
- Pekrun, R. (2020). Commentary: Self-Report Is Indispensable to Assess Students' Learning. *Frontline Learning Research*, 8(3), 185-193
- Pountney, R., Booth, J. & Campbell, R. (2021), *Evaluation of the GROW Programme Report: Phase 1*. Available at <https://blogs.shu.ac.uk/grow/files/2022/02/GROW-Programme-Evaluation-preliminary-report-Final-v2.pdf>
- Prilleltensky, I., Dietz, S., Zopluoglu, C., Clarke, A., Lipsky, M., & Hartnett, C. M. (2020). Assessing a culture of mattering in a higher education context. *Journal for the Study of Postsecondary and Tertiary Education*, 5, 085-104
- Read, B., Archer, L. & Leathwood, C. (2003). Challenging Cultures? Student Conceptions of 'Belonging' and 'Isolation' at a Post-1992 University, *Studies in Higher Education*, 28:3, 261-277
- Reisenwitz, T. H. (2016). Student evaluation of teaching: an investigation of nonresponse bias in an online context. *Journal of marketing education*, 38(1), 7-17
- Robinson, D., & Salvestrini, V. (2020). *The impact of interventions for widening access to higher education: A review of the evidence*. Available at https://dera.ioe.ac.uk/34885/1/Widening_participation-review_EPI-TASO_2020.pdf

Slack, K., Mangan, J., Hughes, A., & Davies, P. (2014). 'Hot', 'cold' and 'warm' information and higher education decision-making. *British Journal of Sociology of Education*, 35(2), 204-223

Standish, T., & Umbach, P. D. (2019). Should we be concerned about nonresponse bias in college student surveys? Evidence of bias from a validation study. *Research in Higher Education*, 60, 338-357

Straus, S., Johnson, M., Marquez, C., & Feldman, M. (2013). Characteristics of successful and failed mentoring relationships: a qualitative study across two academic health centers. *Academic medicine: journal of the Association of American Medical Colleges*, 88(1), 82

TASO (2023), *I'm developing or reviewing a student outreach intervention: Mentoring, counselling, coaching and role models*. Accessed 15 March 2023. Available at <https://taso.org.uk/im-reviewing-an-existing-programme/#mentoring-role-mod>

Thomas, L. (2012). What works? Student retention and success. York, UK: Higher Education Academy. Available at https://s3.eu-west-2.amazonaws.com/assets.creode.advancehe-document-manager/documents/hea/private/what_works_final_report_1568036657.pdf

Thomas, L. and Rushton, L. (2020). *Physics Mentoring Project: Final Evaluation Report*. Ondata Research. Available at https://kclpure.kcl.ac.uk/portal/files/139468519/Final_report_Physics_Mentoring_June_2020_final.pdf

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