Independent review of Uni Connect attainment-raising activity

Evaluation of evidence submitted by Uni Connect partnerships for the Office for Students

30th May 2025



Acknowledgements

Thank you to all Uni Connect partnerships who submitted evidence for this independent review of attainment-raising activities for the Office for Students.

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Executive summary

Uni Connect is a national programme funded by the Office for Students (OfS), which aims to support students who are most at risk of experiencing unequal access to higher education (HE). The programme delivers a range of activities for these students that develop the knowledge, skills and confidence needed to make well-informed decisions about their future education and long-term career ambitions. From the 2023-24 academic year, Uni Connect partnerships have been required to deliver evidence-based, attainment-raising¹, collaborative approaches for students in years 7 to 11 in state secondary schools. This is in recognition that persistent gaps in attainment exist between students from advantaged and disadvantaged backgrounds. These usually start early in life and continue through school and into their later education, affecting participation and performance in HE. Attainment-raising activity aims to improve students' academic achievement and their opportunities to access higher education. Partnerships were encouraged to devise targeted interventions for underrepresented groups and respond to locally identified priorities as part of this OfS key strategic priority.

Understanding the impact of attainment-raising activity

A key aim of Uni Connect is to strengthen evaluation practice within the sector and contribute to a stronger evidence base around 'what works' to improve attainment and progression to HE. Partnerships have devised targeted interventions in response to locally identified priorities and have undertaken evaluation activity to inform the evidence base about what outcomes are associated with attainment-raising. Outcomes measured include improved student grades, subject knowledge and study skills, and interpersonal skills such as motivation and self-confidence.

To assess the impact of attainment-raising activity, CFE has collated and analysed the local evaluation evidence produced by partnerships in response to a formal call for evidence, which ran from January to March 2025.

Approach to the evidence review

Each output was reviewed and coded using a framework based on criteria developed by TASO to identify the key features of the evaluation. This included:

- the research questions
- the outcomes being measured
- sample size relative to the population participating in the activity
- the methodological approach
- the key findings and any evidence of impact positive or negative.

¹ Improving educational outcomes for all students, with a particular focus on closing achievement gaps and ensuring that every child reaches their full potential.

Partnerships provide evidence on the impact of their activities, which include:

- multi-intervention approaches
- study skills workshops
- subject-specific workshops
- subject and non-subject-specific tutoring
- oracy and reading support
- revision skills
- summer schools
- admission test support
- curriculum support
- continuous professional development (CPD) for teachers.

After the call closed in March 2025, CFE coded, analysed and synthesised the evidence to develop a more detailed understanding about the impact of different interventions on a range of outcomes that can lead to increased attainment.

Characteristics of the evidence submitted

For this standalone evidence review of attainment-raising activity, a total of 51 sources of evidence were independently reviewed by CFE. The majority (41) of these are empirical, that is, based on primary quantitative or mixed methods research that identifies associations between Uni Connect activities and outcomes for students.

Submissions were rated using the Standards of Evidence², which categorises evaluation types as causal or empirical, and rates their methodological strength as strong, average or weak. Seven were rated as strong, 16 average and 18 weak. A minority of the evidence submitted is weak causal (10). Causal evaluations compare outcomes of students who have taken part in an attainment-raising intervention with the outcomes of a comparison group, to attribute impact to the programme. Type 1 'narrative' evidence is out of scope for this review. Of the 51 reports submitted in this review, the largest volume and strength is observed for study skills workshops (14), with most of these evaluations reporting positive student outcomes, most notably in metacognition strategies, academic self-efficacy, motivation, confidence and resilience

Key findings

Impact on attainment outcomes

 In response to the OfS strategic priority on attainment-raising, partnerships have adopted a 'test and learn' approach to start building an understanding of which attainment-raising activities work best, for whom, in what context and why.

² OfS Standards of Evidence

- Challenges accessing attainment data have meant most partnerships have focused on delivering activities intended to achieve short-term outcomes – including improved knowledge and study skills, self-efficacy and confidence to do well – that can contribute to improved attainment.
- Evidence suggests that partnerships have identified local priorities and tailored interventions to address specific attainment-raising outcomes.
- There is limited evidence from this call about the impact of attainment-raising interventions on actual student grades either because it is too early to assess the impact or because of difficulties in obtaining grade data from schools. There is some emerging evidence from four submissions that subject-specific workshops and tutoring can have a positive impact on science, maths and English grades, and reading assessment scores.

Impact of individual interventions

Study skills workshops

- Study skills interventions have the greatest overall positive impact on students' metacognition, academic self-efficacy, motivation, resilience and confidence in their ability to do well in their exams.
- Four evidence submissions rated 'strong empirical'/'weak causal' suggest that
 the number and regularity of sessions has an impact on how beneficial the
 intervention is, with six sessions being the optimum dosage.
- Although study skills programmes appear to have a positive impact on the skills needed for successful attainment, there is no evidence that this translates into increased grades.

Subject-specific workshops

- Positive impact is reported for subject-specific workshops, with only one submission, a multi-disciplinary programme of subject-specific workshops, reporting mixed impact.
- Causal and empirical evidence submissions indicate that subject-specific workshops have the greatest overall positive impact on students' confidence, with four submissions reporting positive change.
- Other impacts associated with subject-specific workshops include confidence in newly acquired knowledge and skills to help students do well, and confidence in revision strategies. One causal evidence submission observes that confidence did not increase across all aspects measured, indicating that positive impact on student confidence can be context specific.
- Subject-specific workshops aim to increase students' ability to effectively and confidently apply knowledge and skills in the context of core subject areas.
 Evidence from this review about the impact on actual subject knowledge is limited and mixed, however.

Multi-intervention approaches

- Evaluations of multi-intervention programmes suggest an overall positive impact, with improved confidence, study skills and motivation the most frequent outcomes reported.
- Two programmes specifically targeting free school meals (FSM) students report positive impacts on study skills, confidence and self-efficacy.
- A strong empirical evidence submission also reports a positive impact on FSM students' confidence to do well in exams. One participating school also reported predicted grade increases in English. One empirical evidence submission targeting Year 8 students in receipt of FSM reports improved literacy test scores after the intervention, specifically after the tutoring element of the multi-intervention programme, compared with students who had not participated.
- One submission targeting Year 8 students shows positive impacts on selfregulated learning, critical thinking and study strategies.
- More evidence is required to understand the combination of activities that are the most effective for different attainment outcomes in multi-intervention approaches.

Subject-specific tutoring

- Evidence of subject-specific tutoring is more limited, but four submissions with larger sample sizes report overall positive impacts. The most positive impacts are for students' English and maths abilities.
- Online delivery was used to deliver tutoring in two submissions, with one causal submission reporting increased English and maths GCSE grades (by 1.5 grades) for a group of Year 11 students in receipt of FSM. This compares to a 0.8 grade increase for students in the control group. The second submission aimed at improving maths grades for Year 9 students reports more mixed impact, with minimal change in students' study skills and decreased self-efficacy.
- Subject-specific tutoring has less impact on students' perceptions of their abilities to do well and on self-efficacy, with three submissions reporting either mixed, negative or no impact. Two programmes describe how they plan to deliver their tutoring programme to the same student cohorts in subsequent years to see whether sustained support improves student outcomes for an allmale group and students in receipt of FSM.

Other interventions

- Although fewer partnerships delivered programmes focused on non-subjectspecific tutoring, mentoring, oracy workshops, revision workshops and academic summer schools, which limits the strength of evidence, positive effects were found for self-efficacy, study skills, attitudes towards learning and a sense of belonging.
- Only one submission considers the impact of teacher CPD, finding a positive effect on confidence to teach and assess Key Stage 4 English for a small group of teachers.

Recommendations

To further strengthen the evidence base about the impact of attainment-raising activities, partnerships may wish to consider the following:

- Larger sample sizes: Many submissions for this review are based on extremely small participant sample sizes, which weakens the robustness of the evidence and confidence in the findings. Increasing sample sizes would help to mitigate against participant attrition between pre-post (before and after intervention) phases³.
- More causal evidence using attainment data: A larger body of causal evidence, drawing on actual attainment data, is needed to accurately assess the impact of interventions on students' grades. Planning how and when data will be captured and the timescales involved to obtain attainment data, particularly from national administrative datasets, will help to incorporate these elements into future evaluations.
- Collaborative approaches: Partnerships could collaborate on larger scale programmes to enable more robust causal studies with sufficient sample sizes.
- Targeted evaluation activity: All submissions aim to support underrepresented students, but more evidence is required about how specific groups respond to different interventions.
- Assess 'dosage' and duration: Evaluate the 'dosage effect' to increase knowledge about the optimum number of activities and duration required to achieve positive outcomes.
- Mixed-method approaches: Combining quantitative and qualitative methods will provide a richer insight about 'how' and 'why' interventions have or have not worked and the contexts in which they are most effective.

are weakened.

³ A pre-survey establishes a baseline position, while the post-survey assesses changes or impact resulting from the intervention. This approach is valuable for evaluating program effectiveness, identifying areas for improvement, and understanding how participants' knowledge, opinions, or skills have changed. If there is attrition (a reduction in participation) between these phases, the results are

Introduction

Uni Connect is a national programme, funded by the Office for Students (OfS), supporting 29 partnerships of universities, colleges and other local partners across England. Uni Connect aims to widen access to higher education (HE) supporting the OfS's strategic goal that students' access to higher education is not limited by their background, location or characteristics. The programme works with students who are most at risk of experiencing unequal access to HE. More information can be found in the Equality of Opportunity Risk Register.

Uni Connect partnerships deliver a range of activities designed to help students develop the knowledge, skills and confidence needed to make well-informed decisions about their future education and realise their long-term career ambitions.

The aims and objectives of the programme have evolved over time in response to the OfS's revised priorities. From the 2023-24 academic year, Uni Connect partnerships have been required to deliver evidence-based, collaborative approaches to raising attainment with students in Years 7 to 11 in state secondary schools. This is in recognition that persistent gaps in attainment exist between students from advantaged and disadvantaged backgrounds. These usually start early in life and continue through school and into their later education, affecting participation and performance in HE and later life prospects.

To date, CFE has produced a series of reports for the national evaluation of Uni Connect, including five based on our independent review of partnerships' local evaluation evidence. The reports, along with an evidence bank summarising the strength and quality of partnerships' evaluation evidence and the key findings, are published on the Office for Students website.⁴

This report focuses on evidence submissions that have evaluated student attainment-raising activities. This standalone evidence is not compared against previous local evaluation evidence due to different outcome and impact criteria measured. Activity designed to deliver student outcomes about higher education expectations, higher education knowledge, future options, pathways or other similar outcomes do not fall under this attainment-raising element of the programme and are out of scope for this evidence review. Evidence on post-16 activity, including work with further education (FE) colleges, is also out of scope.

The findings and synthesis of evidence in this report is intended to inform the ongoing planning and delivery of Uni Connect and the work of the wider access and participation sector as it pertains to attainment-raising.

⁴ Further information on the evaluation of Uni Connect, the evidence bank (including the fifth call for evidence) and the previous reports published by the national evaluation team are available on the <u>Uni Connect section of the Office for Students website</u>.

Understanding the impact of attainment-raising activities

The OfS is striving to strengthen evaluation practice within the sector and enhance the evidence base around 'what works' in higher education outreach. It is working to achieve these outcomes through programmes such as Uni Connect and other initiatives, such as the Centre for Transforming Access and Student Outcomes in Higher Education (TASO).⁵ The OfS's approach to regulating access and participation in higher education is focused on mitigating risks to equality of opportunity.

The initial focus for Uni Connect was to provide high-quality, impartial information, advice and guidance on the benefits and realities of university and sought to engage young people living in target areas with the capability to go into higher education. As the programme has evolved, there has been a shift to focus on raising attainment to support underrepresented groups to progress to higher education. To reflect the changing priorities of the OfS, in the academic year 2023-24 partnerships were expected to prioritise and deliver a new strand of attainment-raising activity with schools to address Risk 1 in the Equality of Opportunity Risk Register:

'Students may not have equal opportunity to develop the knowledge and skills required to be accepted onto higher education courses that match their expectations and ambitions.'

The aim of attainment-raising is to improve students' academic achievement (grades) and their opportunities to access higher education. Partnerships are also encouraged to devise targeted interventions for underrepresented groups and respond to locally identified priorities. Partnerships determine how to define success to respond to local objectives. Consequently, the aims and intended outcomes for interventions vary by partnership. This evidence round includes activities designed to:

- upskill and support existing teachers
- provide targeted academic support to students
- tackle non-academic barriers to learning
- support curriculum development.

The meta-review of local evaluation evidence

Each partnership is responsible for evaluating the effectiveness and impact of its attainment-raising activities at the local level. For this latest formal call for evidence in January 2025, partnerships were asked to submit their own reports documenting evaluation findings and/or to complete a template that included the required information to fully assess their quality and strength. Each partnership received a guidance document explaining the review process and what types of evidence could be included in the review.

After the call closed in March 2025, CFE coded, analysed and synthesised the evidence to develop a more detailed understanding about the impact of different

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⁵ TASO is an independent charity founded in 2019 and funded by the OfS.

interventions on a range of student attainment outcomes⁶. Attainment-raising interventions in scope for this review, alongside those which partnerships delivered, are detailed in Table 1:

Table 1: Attainment-raising activities included in the review and those delivered

Attainment-raising activities in scope	Interventions delivered by partnerships
Multi-intervention approaches	✓
Study skills workshops	✓
Subject-specific tutoring	✓
Subject-specific workshops	✓
Oracy workshops or support	✓
Revision workshops	✓
Reading sessions	✓
Teacher CPD	✓
Academic summer schools	✓
Other (mentoring)	✓
Non-subject-specific tutoring	X
Admission test support	X
Supporting curriculum design	X

Drawing on the evidence, CFE offers recommendations designed to support future programme development.

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⁶ The range of student attainment outcomes is defined in this TASO document: 2023-10_Attainment-raising-MOAT-visual-overview_TASO.pdf.

The review process

All sources of evidence submitted by partnerships were screened against the criteria in Table 2. Those that fell outside the scope of the review are excluded at this stage.

Table 2: Inclusion criteria

Out of scope for the evidence review Included in the evidence review Outputs with a focus on the effectiveness Outputs with a focus on the outcomes and impact of individual activities or of systems and processes associated with the delivery of Uni Connect, e.g. student programmes of activity on Uni Connect students and those who support them or teacher feedback on what they liked or disliked about an activity, what worked Quantitative and/or qualitative evidence well and what could be improved of impact Outputs with a focus on operational • Evidence that an activity or programme issues, e.g. the effectiveness of has a positive impact governance arrangements or partnership membership and collaborative working Evidence that an activity or programme has a negative impact or no effect Outputs aimed at FE and post-16 education and attainment-raising Outputs focused on the targeted and strategic outreach elements of the programme

A total of 25 partnerships submitted 58 sources of evidence in response to this call. Of these:

- Seven were screened out during the initial review because they did not meet one or more of the inclusion criteria or were duplicate reports or pieces of evidence
- A total of 51 sources of evidence were reviewed in more detail and are included in the synthesis of evidence in this report.
- 50 submissions are included in the standalone attainment-raising evidence bank.⁷
- The 51 sources of evidence included in the review were assessed and categorised as either Type 2 'Empirical enquiry' (41) or Type 3 'Causal' (10).

⁷ One partnership submitted evidence for the review but denied permission to share in the Higher Education Evaluation Library (HEEL) and in the evidence bank.

• The strength of the empirical evidence is categorised as: strong (7), average (16) and weak (18) using the Standards of Evidence.⁸ Type 1 'Narrative' evidence is out of scope for this review.

Each output was reviewed and coded using a framework based on criteria developed by <u>TASO</u> to identify the key features of the evaluation, including the research questions, the outcomes being measured, sample size relative to the population participating in the activity and the methodological approach, along with the key findings and any evidence of impact – positive or negative.

The overall rating of the quality of the evidence considers the type (empirical or causal) of evidence as well as the strength (strong, average, weak) of the evaluation design. Well-designed and executed evaluations that demonstrate a causal relationship between the intervention and outcomes achieved are considered the highest quality evidence. The coding of evidence emphasises that strong causal evidence is of the highest quality, and weak narrative the lowest quality (see Figure 1 below). The results of this and all previous evidence calls can be accessed on the OfS website. Description Evidence will also be held in the Higher Education Evaluation Library (HEEL), a new resource currently being designed to bring together evaluations on access, participation and student success interventions.

Each submission is classified according to the categories in Figure 1. The highest quality evidence is represented by the darker green square (top right) and the weakest by the grey square (bottom left). Different types of evidence of equivalent quality are represented by the same colour.

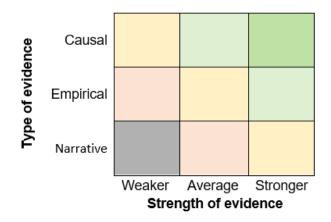
⁸ The standards of evidence can be accessed at: www.officeforstudents.org.uk/for-providers/equality-of-opportunity/evaluation/standards-of-evidence-and-evaluation-self-assessment-tool

⁹ 'Strength' refers to the strength of the evaluation design, and what methods the evaluation team has used to collect the data and conduct their analyses. Strength does not explicitly relate to the strength, level or type (positive/negative) of impact achieved.

¹⁰ Available at: https://www.officeforstudents.org.uk/for-providers/equality-of-opportunity/uni-connect/evaluating-uni-connects-impact/

¹¹ HEEL will complement TASO's evidence toolkit and will support its other work to develop high-quality guidance, resources and research.

Figure 1: Assessing the quality of evidence



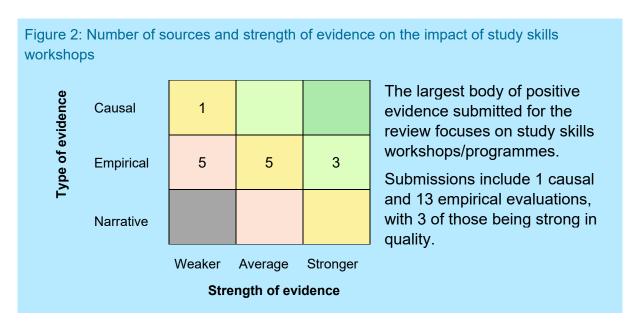
Synthesis of attainment-raising evidence

The next section synthesises evidence on the impact of attainment-raising activities on **short-term** student outcomes. For each intervention type, a table like Figure 1 represents the number of pieces of evidence of each type and strength. The strength and type of evidence on which the findings are based (e.g. 'average empirical' denotes an empirical evaluation of average strength) provide an indication of the level of confidence in the findings and conclusions drawn.

There is an important note of caution: the evidence is largely empirical and, in many cases, average or weak in strength of approach. Therefore, these are **indicative of impact**; it is not possible to claim that the outcomes achieved are attributable (that is, caused by) the interventions, unless it has been assessed as a *causal* evaluation. Confidence in the findings will likely increase as the weight of evidence grows.

Study skills workshops

Study skills workshops principally focus on metacognition strategies to support studying and revising, critical thinking and problem solving. Some of the study skills programmes include campus visits or based their workshops on campus. The number of sessions delivered in these programmes varies considerably from an intensive one-day intervention to a nine-week programme totalling 13.5 hours of face-to-face contact time.



- Across the 14 sources of evidence submitted and coded as study skills in this
 review, 12 report positive impact. Only two reported a mixed impact overall
 and these were based on a one-day intervention and a programme of
 sessions with a small sample size and high attrition rate. No submissions
 reported a negative impact.
- Study skills programmes appear to have the greatest overall positive impact on students' metacognition, academic self-efficacy, motivation, resilience and confidence in their ability to do well in their exams.
- Study skills workshops were delivered to all year groups, with overall evidence indicating that they are most impactful for Year 10 students.
- One strong empirical submission reports a more positive impact on study skills for girls and non-white students than for boys and white students. In contrast, two submissions targeting boys report small positive shifts in self-efficacy, selfregulated learning and resilience. Two submissions targeting students in receipt of free school meals (FSM) primarily show a positive shift in study skills, motivation and confidence in their abilities to do well.
- Evidence from one submission suggests that a longitudinal programme can be effective. Year 8 students re-engaged in the study skills programme in Year 9,

which helped strengthen and embed their study skills. Other submissions recognise longitudinal programmes as a potentially effective strategy and plan to repeat their activities in subsequent years to determine the impact of this approach.

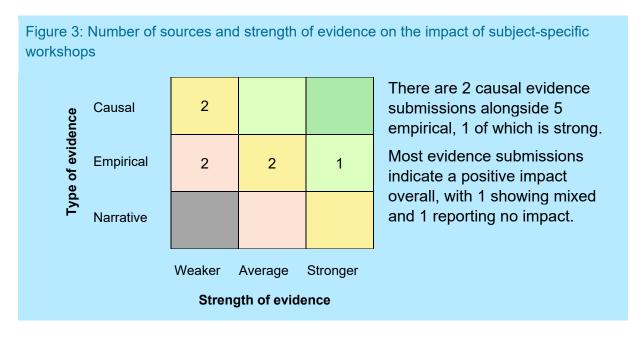
- Four strong empirical/weak causal evidence submissions suggest that the number and regularity of sessions has an impact on how beneficial the intervention is. Less intensive programmes (e.g. less than one hour) delivered over several weeks (around six weeks) are more beneficial for students than shorter, more intensive study skills programmes.
- One strong empirical evidence submission shows that a collaborative approach to delivering study skills programmes across schools in several partnership areas is more impactful than focusing on one school.
 Collaboration enables partnerships to draw on larger sample sizes and demonstrate how different areas achieve similar outcomes, thereby increasing the robustness of the evidence.
- One weak causal submission suggests that although study skills programmes
 can have a positive impact on the skills needed for successful attainment,
 there is no evidence that this translates into increased grades. The strength of
 this study is limited due to challenges faced with obtaining accurate student
 attainment data.

Table 3: Evidence of the impact of study skills workshops

Short-term outcomes	Impacts achieved
Metacognition/study strategies	 10 submissions report a positive effect on metacognition in those students taking part in study skills interventions, including one causal and three strong empirical. Most submissions report increased knowledge of different study strategies such as understanding the need to self-reflect, to effectively use research and improving abilities to plan and organise. Only one submission reports mixed findings and one a negative response, both based on smaller sample sizes compared with other submissions.
Confidence	 10 submissions document a positive increase in student confidence after engaging in study skills workshops. Two report mixed findings – these targeted specific student groups: males only, with low confidence prior to the intervention; and students with low attendance and engagement. These student groups may require more sustained and intensive programmes to increase their confidence; however, more evidence is needed to test this hypothesis.
Academic self-efficacy	 Positive increases in academic self-efficacy are reported in eight submissions, with students reporting being more confident in their own abilities post-intervention and that they can more confidently apply their skills and track their progress.
Motivation	 Seven evidence submissions report a positive impact on students' motivation across Years 9-11, with Year 11 particularly reporting increased motivation to succeed.
Resilience	 A positive effect on student resilience, particularly students in Years 10 and 11 is reported in three submissions. These programmes – linking study skills with motivation and resilience – are typically sustained over a duration of at least four weeks. Resilience for these year groups is particularly important for increasing motivation and self-efficacy.
Locus of control	Three submissions indicate a positive impact on students' locus of control. This outcome is seen in programmes focused on exam preparation for older year groups.
Self-regulated learning	 Two evidence submissions indicate positive effects on students' self-regulation, specifically questioning and assessing their own approach to their studies.
Critical thinking	 A positive effect on Year 10 students being able to critically assess information in two evidence submissions was indicated. One submission reports mixed impact on Year 8 students.

Subject-specific workshops

Subject-specific workshops are intensive programmes concentrating on a specific subject or area of the curriculum identified as being a priority for Uni Connect target schools. In this review, subject-specific workshops focused on English, maths, science and humanities. The intensity of these sessions' ranges from two one-hour sessions to an intensive week of full day sessions. These workshops target specific students identified by schools as being likely to benefit the most, for example when on the boundary between two grades.



- Across the seven sources of evidence coded as subject-specific workshops, five report positive impact. Only one submission, a multi-disciplinary programme of subject-specific workshops, reports a mixed impact. One submission aimed at building resilience and revision skills in underperforming Year 11 students found no overall impact.
- Causal and empirical evidence submissions indicate that subject-specific
 workshops have the greatest overall positive impact on students' confidence,
 with four submissions reporting positive change. Other impacts include
 confidence in newly acquired knowledge and skills to help them do well, and
 confidence in revision strategies. One causal evidence submission observes
 that confidence did not increase across all aspects measured, indicating that
 positive impact on student confidence can be context specific.
- In addition to increased confidence, three pieces of evidence report positive shifts for Year 7 and Year 10 students' self-efficacy, and two report positive shifts in resilience and motivation across all year groups.
- Three evidence submissions evaluated pre-post assessment grades, with one submission showing increased Year 7 science test scores for the intervention

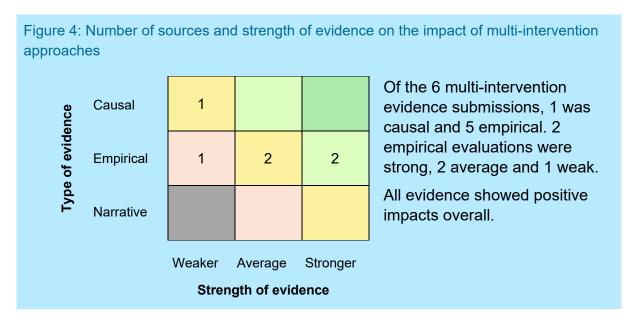
- group compared with a control group, indicating a causal (albeit weak) link between the intervention and increased attainment.
- Subject-specific workshops aimed to increase students' ability to effectively
 and confidently apply knowledge and skills in the context of core subject areas
 but, according to the evidence, the impact on actual subject knowledge is
 limited and mixed.

Table 4: Evidence of the impact of subject-specific workshops

Short-term outcomes	Impacts achieved
Confidence	 Most of the evidence submitted indicates a positive impact on student confidence. Only one submission shows a mixed impact for a Year 7 group. Pupils' confidence in achieving overall target grades increased following the activity and improved assessment scores. Having more confidence in the ability to do well in specific subject areas were also reported.
Academic self-efficacy	 A positive shift in student self-efficacy is reported by three evidence submissions, with students having the belief that they can achieve their target grade.
Subject knowledge	 One piece of evidence based on monitoring assessment grades for Year 7 science, reports a positive increase in students' test results after the activity compared with a control group. One empirical evidence submission also reports an increase in assessment scores in English for a Year 10 group. However, the sample was small and did not include a comparison group to test whether there was a causal link between the activity and the results. Establishing a well-matched control group would help to establish a clearer causal effect and increase the reliability of the results.
Locus of control	 One average empirical submission highlights a positive effect on agreement with the statements "If I work hard, I can be successful" and "When I make plans, I can make them work", indicating an increased locus of control for students taking part in an English intervention.
Motivation, attitudes to learning and resilience	 Across all the subject-specific workshops submissions there is anecdotal evidence from teacher interviews of students being more resilient, motivated to do well in their studies and feeling more positive about their learning.
Metacognition/study skills	 One subject-specific resilience and revision strategy workshop for Year 11 FSM students, with high gaps in attainment, reports a negative impact on study skills. A decline in metacognitive practice scores suggests that students found it challenging to apply their newly acquired study techniques.

Multi-intervention approaches

Multi-intervention approaches incorporate a combination of different activities – such as tutoring, revision, study skills and subject-specific workshops – as part of one package of support. They range in length and intensity consisting of short programmes of three one-hour workshops and one full day on campus, through to 35 workshops attended by 600 students. Campus visits are an integral part of most multi-intervention approaches.



- Six multi-intervention programme evaluations were submitted as part of the review. All submissions had an overall positive impact, with confidence, study skills and motivation the most frequent outcomes reported.
- Two programmes specifically targeted FSM students and report positive impacts on study skills, confidence and self-efficacy. One submission targeted both midattaining students and Black and mixed heritage students. Positive effects in study skills, self-regulated learning and critical thinking skills were found for midattainment students. Among Black and mixed heritage students, the only impact identified is an increased sense of belonging.
- One causal evidence submission identifies that underperforming boys' grades in English slightly increased, whilst girls' grades in maths improved. The small sample size limits the reliability of this evidence.
- A strong empirical evidence submission targeting Year 10 and 11 students in receipt of FSM reports a positive impact on confidence to do well in exams. One participating school also reports predicted grade increases in English.
- One empirical evidence submission targeting Year 8 students in receipt of FSM reports increased literacy test scores after the intervention, specifically after the tutoring element of the multi-intervention programme, compared with students

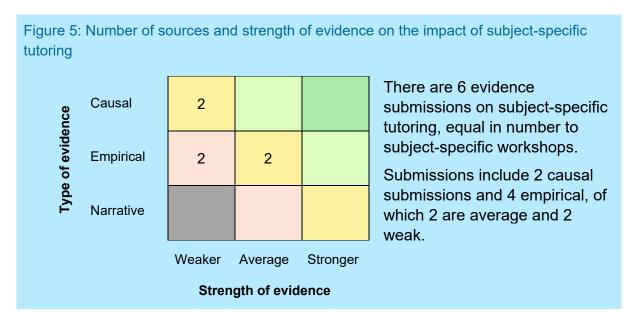
- who had not participated. One submission targeting Year 8 students shows positive impacts on self-regulated learning, critical thinking and study strategies.
- More evidence is required to understand the combination of activities that are the most effective for different attainment outcomes in multi-intervention approaches.

Table 5: Evidence of the impact of multi-intervention approaches

Short-term outcomes	Impacts achieved
Subject knowledge	 A positive impact on students' subject knowledge is indicated in three evidence submissions. One causal submission reports a positive grade shift for boys in English, and in maths for girls. A strong empirical evidence submission reports grade increases in English attainment for all students. A further average empirical evidence submission also reports an increase in post test scores for Year 8 students who participated in a literacy tutoring programme.
Confidence	 Four of the 6 submissions suggest that there is a positive impact on students' confidence to prepare for exams and in explaining ideas to others.
Motivation	 Positive effects on student motivation are indicated in three submissions, although for one submission the evidence is more tenuous due to anecdotal statements from a small sample of students.
Metacognition/study skills	 All multi-intervention programmes featured a study skills element to them, with two submissions reporting a positive outcome and two a mixed outcome. Most students report being more proficient in their ability to prepare for exams.
Self-efficacy	 One strong empirical submission indicates a positive impact on the self-efficacy of Year 10 and 11, whilst another submission targeting Year 8 and 9 students reports a mixed impact.
Resilience, self- regulated learning, sense of belonging and critical thinking	 Individual evidence submissions report positive effects. A specific intervention to increase attainment of Black and mixed heritage students through an increased sense of belonging reports an increase in this area. However, the evidence is weak, due to a small sample size.

Subject-specific tutoring

Subject-specific tutoring activities were delivered to smaller, more focused groups of students than in other interventions. Sessions typically lasted between 30 minutes and an hour, hosted over a period of six to ten weeks. The main aim of tutoring is to improve students' performance in specific subjects and therefore targeted students identified by Uni Connect schools to be most in need, for example all male students or students who are underachieving. Tutoring was delivered online in two cases.



- Of the six evidence submissions, four show positive outcomes and two mixed. Positive outcomes are reported in two causal submissions and in empirical submissions comprised of larger sample sizes. Mixed impact is reported in submissions with small sample sizes (fewer than 16 responses).
- The most positive impact is for students' subject knowledge, with two submissions reporting a positive impact on students' English ability and one for maths.
- Online delivery was used to deliver tutoring in two submissions, with one causal submission reporting increased English or maths GCSE grades (by 1.5 grades) for a group of Year 11 students in receipt of FSM. This compares to a 0.8 grade increase for students in the control group. The second submission, aimed at improving Year 9 maths grades, reports more mixed impacts, with minimal change in students' study skills and a negative shift in self-efficacy.
- Subject-specific tutoring appears to have less impact on students' perceptions of their abilities and self-efficacy, with three submissions reporting either mixed, negative or no impact. Two programmes describe how they plan to deliver their tutoring programme to the same student cohorts in the subsequent years (Year 7

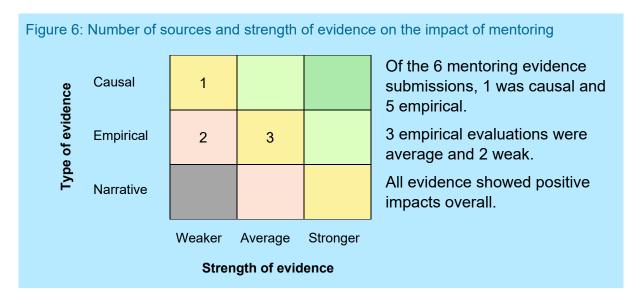
to Year 8 and Year 10 to Year 11) to see whether sustained support improves student outcomes for an all-male group and students in receipt of FSM.

Table 6: Evidence of the impact of subject-specific tutoring

Short-term outcomes	Impacts achieved
Subject knowledge	 A positive impact on subject knowledge is reported by three evidence submissions, and one reports mixed impact. One causal evidence submission reports a positive impact on Year 11 GCSE English and maths attainment.
Academic self-efficacy	Three submissions report no impact, a negative impact and a mixed impact for self-efficacy, but these outcomes are from studies with low post survey response rates. It mirrors the low confidence levels reported by this group of students, two of which are students with FSM and one where students are currently underachieving in maths.
Confidence, attitudes towards learning	 Three submissions report a mixed impact on student confidence and one a mixed impact on attitudes to learning. These outcomes imply that a longer, more sustained programme of activities is needed for these (largely) younger underperforming students, to help increase their confidence and attitudes towards learning.

Mentoring (other)

Mentoring was the only 'other' type of activity selected in the list of attainment-raising interventions. Such activities included tailored and 'holistic' support, delivered on campus or in school, by student ambassadors, to small groups and individuals in Years 9 to 11. Sessions typically involved hourly sessions over a period of six to eight weeks and focused on goal setting, time management, study skills and personal wellbeing.



- All six mentoring submissions report positive outcomes, with three average and weak empirical submissions and one causal reporting an increase in selfefficacy. Three of these report positive shifts in study strategies. One causal and one empirical evidence submission report increased levels of confidence.
- Mentoring programmes were typically delivered to older year groups, with four submissions, including the causal submission targeting their programmes at Year 10 students.
- Grade increases are reported in one causal submission, which finds that English attainment increased by one grade for some Year 11 students compared with a control group with no grade increases. Mentoring was delivered alongside other school interventions, so it is not possible to fully attribute the grade increases to mentoring alone.
- The causal submission reports smaller average grade changes of 0.7 for maths GCSE, following mentoring, and this is marginally lower than 0.8 for the control group. The smaller grade increases are accounted for by the maths students starting the mentoring programme with higher grades (already at grade 4), compared with the students who participated in the English mentoring programme.

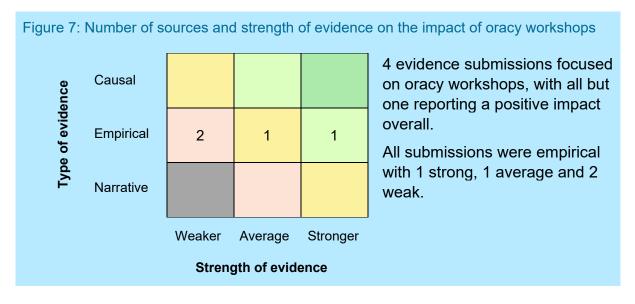
• All mentoring interventions targeted smaller groups of students and therefore the evidence is weaker compared with other interventions.

Table 7: Evidence of the impact of mentoring

Short-term outcomes	Impacts achieved
Academic self-efficacy	Of the six submissions, four (including the causal submission) report a positive increase in students' self-efficacy. One submission reports no impact.
Subject knowledge	One causal evidence submission indicates a positive effect on English knowledge, and one submission – focused on maths attainment – reports increased knowledge for a Year 9 group of students.
Confidence	A positive effect on student confidence is reported in two submissions, that also report increased subject knowledge.
Motivation	Two empirical submissions indicate a positive effect on student motivation to progress to higher education.
Sense of belonging	One empirical submission, targeting males, indicates a positive effect on their sense of belonging.
Self-regulated learning and attitudes towards learning, critical thinking	Positive effects on self-regulated learning, study strategies and confidence are indicated in one empirical submission that targeted Year 10 students. The same submission reports a positive effect on a different Year 10 group's attitudes towards learning and critical thinking.

Oracy workshops

Oracy workshops aim to develop students' language skills. Oracy support activities in this review were run as small-scale pilot projects and used a debating approach to help improve students' language and communication skills and subsequent attainment. Workshops typically included between five and 12 sessions, with some intensive workshops hosted during a full day and other less intensive one-hour sessions also taking place.



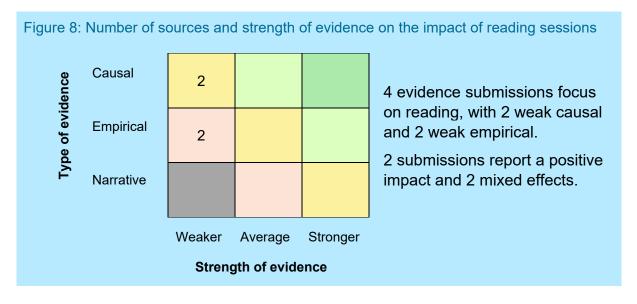
- Of the empirical evidence submitted, two are rated weak, one average and one strong. The strong empirical submission indicates that the oracy skills of a group of Year 9 students increased following the support and 90% passed the English-Speaking Board exam. The inclusion of a comparison group would add further weight to this submission to help determine the true impact of the oracy support.
- Two of the four evidence submissions for oracy workshops indicate a positive
 effect on student confidence. One of these was an 'Arguing with confidence'
 workshop for a Year 10 group in receipt of FSM, and the other workshop aimed to
 improve techniques for speech writing and delivery with a Year 8 group. One
 submission reports a mixed impact across all outcomes measured but is limited
 due to the small sample size.
- Sample sizes for three out of the four oracy workshop evidence submissions are small and therefore evidence of impact is weaker than other interventions included in this review.

Table 8: Evidence of the impact of oracy workshops

Short-term outcomes	Impacts achieved						
Oracy skills	Of the four submissions, three indicate a positive impact and one mixed . One strong submission reported that 90% of students engaged with the oracy support passed the English-Speaking Board exam and 65% were awarded a merit.						
Confidence	Positive effect on student confidence is reported in two submissions, and one reports a mixed impact.						
Resilience, motivation and a sense of belonging	One submission reports a positive effect on student motivation and resilience, and one reports a mixed impact on students' sense of belonging.						

Reading sessions

Reading sessions aim to improve the reading abilities of students who have lower than expected reading ages, to help increase their overall attainment. Sessions vary – ranging from a theatre-based workshop approach, through to paired guided reading sessions that involve older students being a reading buddy with younger students. Sessions primarily involved Year 7 students and typically lasted one hour over a period of 6-12 weeks.



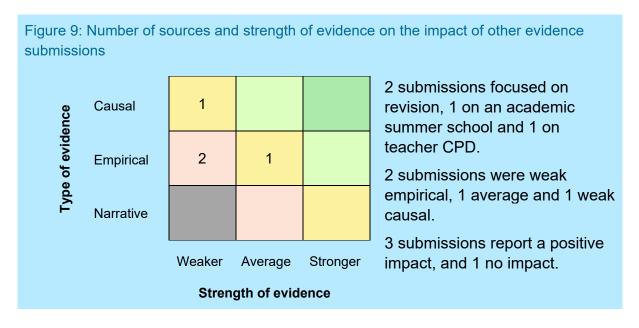
- Two causal evidence submissions report a positive impact on the reading skills of a group of Year 7 students in receipt of FSM. However, the sample sizes are small, which weakens confidence in the findings.
- Two weaker empirical submissions report a mixed impact on reading skills, but
 one shows a positive effect on attitudes towards learning. One submission does
 not have baseline findings, and the other submission has a low pre-post survey
 response rate that affects the strength of evidence.

Table 9: Evidence of the impact of reading sessions

Short-term outcomes	Impacts achieved
Reading skills	Two causal submissions report a positive impact on students' reading skills, and two report mixed impact. These positive effects are seen in improved reading scores.
Confidence	Of the two causal submissions showing positive impacts on reading skills, a positive effect on student confidence is reported by all.
Attitudes towards learning	A positive effect on attitudes towards learning is reported for one group of students in an empirical submission. This was across multiple year groups that involved pairing younger students with older reading buddies.
Study skills	For the causal submission showing a positive impact on attitudes towards learning, the same students report a negative impact on study skills. The reasons for this decline are not clear in the evidence and would need to be further investigated.

Other evidence submissions

This section reports on the remaining evidence submissions, including revision workshops, an academic summer school and a CPD programme for teachers. Revision workshops were short, three-to-four-hour sessions aimed at Year 11 students. The academic summer school was a science focused intervention for Year 10 students and the teacher CPD activity was a two-session English-focused programme held at a university campus.



- Of the two revision workshops, one average empirical submission reports a
 positive impact on students' study skills, academic self-efficacy and locus of
 control; the other weak causal submission reports no impact. Both programmes
 focused on Year 11 exam outcomes, but the causal study does not include a
 baseline survey to measure the distance travelled.
- The academic summer school involved a science-based intervention for Year 10 students, which reports a positive effect on students' study skills, self-efficacy, sense of belonging and attitudes towards learning.
- One CPD programme for teachers focusing on developing English GCSE
 assessment skills was delivered over two days on campus. Teachers report a
 positive effect on their confidence in teaching English at Key Stage 4 and an
 increased understanding of the GCSE English language assessment. Teachers
 were also able to apply what they had learned in the classroom, according to
 observations following the programme.

Table 10: Evidence of the impact of other evidence submissions

Short-term outcomes	Impacts achieved
Study skills	Two submissions report a positive effect on students' study skills, after participating in a revision workshop and another following an academic summer school. Both of these were empirical studies.
Self-efficacy	Students who took part in revision workshops or the academic summer school report a positive impact on their self-efficacy, regarding having the 'skills needed to study and revise well' and 'being able to manage the study level required at higher education.'
Locus of control, a sense of belonging and attitudes towards learning	The revision workshop indicates a positive effect on the locus of control for some students, specifically regarding being able to 'do well with the work given to them at school.'
	The academic summer school also indicated some slight positive impacts on a sense of belonging and attitudes towards learning.
Teacher motivation and professional skills	The teacher CPD empirical submission indicates a positive impact on teachers' professional skills to assess English. The limitation is the small sample size, and a high attrition rate for the post-survey, which weakens the findings.

Conclusions and recommendations

The evidence base on the impact of attainment-raising activities delivered through Uni Connect partnerships suggests that, overall, the interventions delivered have contributed to student outcomes with varying levels of success. However, as attainment-raising is a relatively new priority area, introduced in 2023-24, the strength of the evidence remains limited yet continues to develop.

The previous, fifth call for evidence included early insight about the impact of Uni Connect on attainment-raising, with six submissions reporting a positive impact on motivational and attitudinal factors that can contribute to higher attainment in the long term. Although it was not possible to draw firm conclusions about the most effective intervention for raising attainment from that evidence call, intensive subject specific sessions and skills and attainment workshops delivered some benefits.

This call for stand-alone evidence comprised different outcomes and impact criteria, which precludes being able to draw direct comparisons with previous reviews. The priority change has enabled many partnerships to take a 'test and learn' approach to start building an understanding about which attainment-raising activities work best, for whom, in what context and why. Due to long timescales and data access challenges for actual attainment data, most partnerships have focused on delivering activities intended to achieve short-term outcomes – including the development of students' knowledge and study skills, self-efficacy and confidence to do well – that can contribute to improved attainment.

Partnerships were expected to target underrepresented groups in their local priority areas who would most benefit from attainment (grades) raising support and increase their opportunities of progressing to higher education. Evidence from submissions suggests that partnerships have identified local priorities and tailored interventions to address specific outcomes. However, evidence from this call about the impact of interventions on actual student grades is still limited. There is some emerging evidence from four submissions that subject-specific workshops and tutoring have a positive impact on science, English and maths grades, and reading scores.

Of the 51 reports submitted in this review, the largest volume and strength is observed for study skills workshops (14), with most of these evaluations reporting positive student outcomes, most notably in metacognition strategies, academic self-efficacy, motivation, confidence and resilience. The largest effect is for increased student confidence. For certain target groups, however, specifically boys and students with low attendance prior to the workshops, there is limited or no impact. This suggests that some target groups would benefit from more sustained or tailored programmes. Girls and non-white students tend to have more positive outcomes than boys and white students for some study skills activities. For example, girls and non-white students saw greater progress in questioning and organising skills; white boys found career-related content more useful.

Subject-specific interventions appear to have a positive effect on students' subject knowledge, confidence and self-efficacy. Across all 17 submissions (including subject

specific workshops, tutoring and oracy), there is also evidence of benefits on students' motivation and attitudes towards learning.

Multi-intervention approaches also featured in this evidence call, combining subject-specific and study skills, revision and tutoring, which collectively indicated benefits for students' confidence to do well in exams, study skills and motivation to succeed. However, more evidence is required to understand the combination of activities that are the most effective for any given outcome, particularly grade increases, to enable partnerships to tailor their approach.

Although fewer partnerships delivered programmes focused on mentoring, oracy workshops, revision workshops and academic summer schools, which limits the strength of evidence, positive effects were found for self-efficacy, study skills, attitudes towards learning and a sense of belonging. Only one submission considered the impact of teacher CPD and found a positive effect on confidence to teach and assess Key Stage 4 English.

It is not possible to draw any firm conclusions about which year groups benefit the most from attainment-raising activities. The emerging evidence indicates that older year groups (Years 10-11) benefit the most from study skills strategies and exam preparation, although such programmes are less beneficial for underachieving students and disengaged students. The duration and intensity of activities can affect how beneficial programmes are, with evidence suggesting that between four and six sessions over consecutive weeks is the most effective programme duration.

Strengthening the evidence base

Despite a high volume of submissions for this call, there are gaps and weaknesses in the evidence base:

- Limited causal evidence: Although there are 10 causal submissions, all are rated weak, which limits the robustness of the evidence and certainty that outcomes can be attributed to Uni Connect interventions. More causal studies using actual attainment data would significantly strengthen the evidence base, as would larger sample sizes and more clearly matched comparison groups. However, it is recognised that such studies face practical challenges, including deriving 'treatment' and 'control' groups, coupled with time lags and the availability of attainment data.
- Pre-post interventions: Seven strong empirical studies of pre-post interventions
 offer the strongest evidence for this call to demonstrate the changes in student
 short-term outcomes that are precursors to change in actual attainment. Yet most
 submissions lacked qualitative insight about how and why the changes have
 occurred. Qualitative findings would bolster understanding about why certain
 interventions are more impactful than others and the conditions in which impacts
 can be maximised.
- **Understanding target groups**: More evidence is required to build a deeper understanding about who benefits the most from attainment-raising activities and the optimal duration and intensity of interventions. The evidence presented here

suggests that a 'one size fits all' approach is not effective and that there are differences between year groups and other student characteristics that should be considered.

• **Teacher professional development**: Teachers play a critical role in delivering attainment-raising activities. More research is needed to understand the impact of teacher CPD on student attainment outcomes.

Recommendations to inform the future evaluation

To further strengthen the evidence base about the impact of attainment-raising activities, partnerships may wish to consider:

- Larger sample sizes: Many submissions for this review are based on extremely small sample sizes, which weakens the robustness of the evidence and confidence in the findings. Increasing sample sizes would also help to mitigate attrition between pre and post phases of the evaluation.
- More causal evidence with attainment data: A larger body of causal evidence drawing on actual attainment data is needed to accurately assess the impact of interventions on students' final grades. Planning how and when data will be captured and the timescales involved to obtain attainment data, particularly from national administrative datasets, will help to incorporate these elements into future evaluations.
- **Collaborative approaches**: Partnerships could collaborate on larger scale programmes to enable more robust causal studies with sufficient sample sizes.
- Targeted evaluation activity: All submissions aim to support underrepresented students, but more evidence is required about how specific groups respond to different interventions.
- Assess 'dosage' and duration: Evaluate the 'dosage effect' to increase knowledge about the optimum number of activities and duration required to achieve positive outcomes.
- **Mixed-method approaches**: Combining quantitative and qualitative methods will provide a richer insight about 'how' and 'why' interventions have or have not worked and the contexts in which they are most effective.

Annex 1: Methods of analysis

Table 11: Criteria for assessing the standard (empirical or causal) of evidence

Type 2: Empirical enquiry		Type 3: Causal (includes criteria for Type 2 and the following)				
Criteria for classification of empirical enquiry	Not empirical enquiry	Criteria for classification of causal (in addition to criteria for empirical enquiry)	Not causal			
Clear aims of what activities seek to achieve	Aims developed after activity	Have a target and control/comparison group	Using groups that are not comparable			
Select indicators of impact	No concept of measuring success	Use of an experimental or quasi-experimental design	Selection bias in comparator groups			
Quantitative and/or qualitative data	Information not systematically collected	Think about selection bias and how to avoid it				
Pre- and post-activity data (minimum of two time points)	Only collect information once					
Analysis competently undertaken	Data not related to the intervention					
Sharing of results and review of activity	Results not used to inform decisions					

The evidence was coded using a framework aligned to criteria developed by TASO as part of its evidence review. In addition to the standard of evidence and overall quality score, the following information was recorded for each source of evidence.

Figure 10: Coding framework

- Partnership
- Format of material
- Date and timeframe for evaluation
- Activity type and description
- Timing, duration and frequency of activity
- Mode of activity delivery
- Target year group
- Types of students engaged in activity
- Target groups
- Type of evaluation approach
- Data collection methods
- Data subjects
- Rational for sample selection
- Total number of participants in intervention

- Total number of participants in evaluation sample
- Total number of respondents and response rate
- Attrition rate (pre- and post-activity studies)
- Data analysis
- Outcomes evaluated
- Key findings on demonstrable impact
- Notes on demonstrable impact
- Challenges/limitations of evaluation
- Overall impact achieved
- Strength of evidence
- Overall assessment rating

Annex 2: Map of outcomes to interventions

The table below illustrates the volume of evidence submitted in response to this evidence call and shows whether an intervention does (or does not) contribute to student outcomes. The 'P' codes depict evidence about the impact of an intervention that is overwhelmingly positive (when over 75% of sources report positive findings). The 'M' codes indicate mixed evidence (positive and some negative and/or less conclusive). The main body of the report presents tables for each intervention based on the most robust sources. This figure can be used alongside the evidence bank which provides further details on the strength of the evidence and impact detected.

	Multi-intervention	Subject-specific tutoring	Study skills workshops	Revision workshops	Oracy workshops	Subject-specific workshops	Reading sessions	Teacher CPD	Summer school	Other (Mentoring)
Subject knowledge	M2	P2				M1				P2
Study skills	P3	P3	P1	P3		M1	M1		P3	P2
Self-efficacy	P3	M2	P1	P3	P3	P2			P3	P2
Self-regulated learning	P3		P3							M1
Critical thinking	P3		P3	M1	P3	P3				M1
Locus of control			P3	P3		P3				
Motivation	P2		P1		РЗ	P3				P3
Sense of belonging	P3		P3		M1				P3	
Confidence	P2	M1	P1		РЗ	P2	P3			P3
Attitudes towards learning		M1	P2	M1		P3	P3		P3	
Resilience	P3		P3		P3	P3				P3
Reading skills						M1	P3			
Oracy skills					P3					
Teacher professional skills				_				Р3		

P1	Positive impact - large amount of evidence	M1	Mixed, negative or no impact - small amount of evidence
P2	Positive impact - moderate amount of evidence	M2	Mixed, negative or no impact - moderate amount of evidence
P3	Positive impact – small amount of evidence	M3	Mixed, negative or no impact - large amount of evidence