The Skills in Schools programme at the University of Reading

2024 Pilot Evaluation report

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Executive Summary

Overview

The Skills in Schools programme was piloted in the 2023/2024 academic year as a form of targeted outreach aimed at raising attainment in pupil demographics underrepresented in higher education. Through ad-hoc workshops, visit days and in-school sessions, the programme was designed to cultivate the key skills and knowledge needed to succeed in GCSE and A-Level (or equivalent) study, and, by extension, lay the groundwork for accessing higher education. The majority of sessions lasted for between one to two hours (with some structured over the course of a four to five-hour visit day, or on a sustained basis over a term), and, where possible, focused on working with pupils from disadvantaged backgrounds or those underrepresented in higher education, such as those from POLAR4 and IMD quintile 1, as well as those in receipt of free school meals (FSM), black pupils and first-generation applicants.

Aligned with the university's Access and Participation Plan (APP), the objectives of the programme were as follows:

- Reach more disadvantaged people through programmes of activity that support a successful application to University of Reading (UoR) courses.
- Further reduce perceived and real barriers to entry to UoR for applicants from disadvantaged backgrounds.
- Achieve a student population at UoR that is more representative of society.

The general objectives of the programme were as follows:

- Improve self-reported study skills ability in the pupils that participated in the programme.
- Improve self-reported academic self-confidence in the pupils that participated in the programme.
- Improve self-reported metacognition skills in the pupils that participated in the programme.
- Demonstrate a positive trend between study skills interventions and teacher feedback regarding the programme.

Assessment of Impact

Overall, the Skills in Schools programme is likely to have had a moderately positive effect on self-reported study skills and self-confidence, with a minor positive effect on self-reported metacognition. Pupils participating in the programme demonstrated a strong understanding of the benefits of improving their study skills and valued the skills they were developing. Qualitative feedback from both pupils and teachers was also consistently positive, with some reporting that sessions would have a positive impact on skills and attainment in class.

Metacognition was measured using a paired T-Test, with limitations on the collection of pre-evaluation data due to time constraints resulting in approximately one-third of pupils participating being surveyed. Negligible to small positive effect sizes were observed, but it is

important to note that all but one of the p values observed in this T-Test were not within the 0.05 acceptable tolerance. This may be due to the survey questions used, which were undergoing validation from TASO at the time of the Study Skills evaluation plan and have since been reclassified as suitable for use with university students, rather than school pupils.

A total of 247 pupils were surveyed as part of this programme; pre- and post-evaluation data was obtained for 86. 14 teachers were also surveyed. A total of 12 different schools participated, with a total of 633 pupils participating overall, not all of whom were surveyed due to practical constraints (such as when working with entire year groups or in short-form sessions).

Highlights of the post-workshop evaluation data include:

Process and Impact

- 86% of pupils ‘Agree’ or ‘Strongly Agree’ that the workshops were useful
- 81% of pupils ‘Agree’ or ‘Strongly Agree’ that the workshops were engaging
- 84% of pupils ‘Agree’ or ‘Strongly Agree’ that they would recommend the workshops to others

Self-Reported Study Skills/Academic Self-Confidence

- 80% of pupils ‘Agree’ or ‘Strongly Agree’ that they learned/developed a useful skill
- 80% of pupils ‘Agree’ or ‘Strongly Agree’ that they will be able to use what they learned in future
- 69% of pupils ‘Agree’ or ‘Strongly Agree’ that what they learned is relevant to their studies

Self-Reported Metacognition: T-Test Data

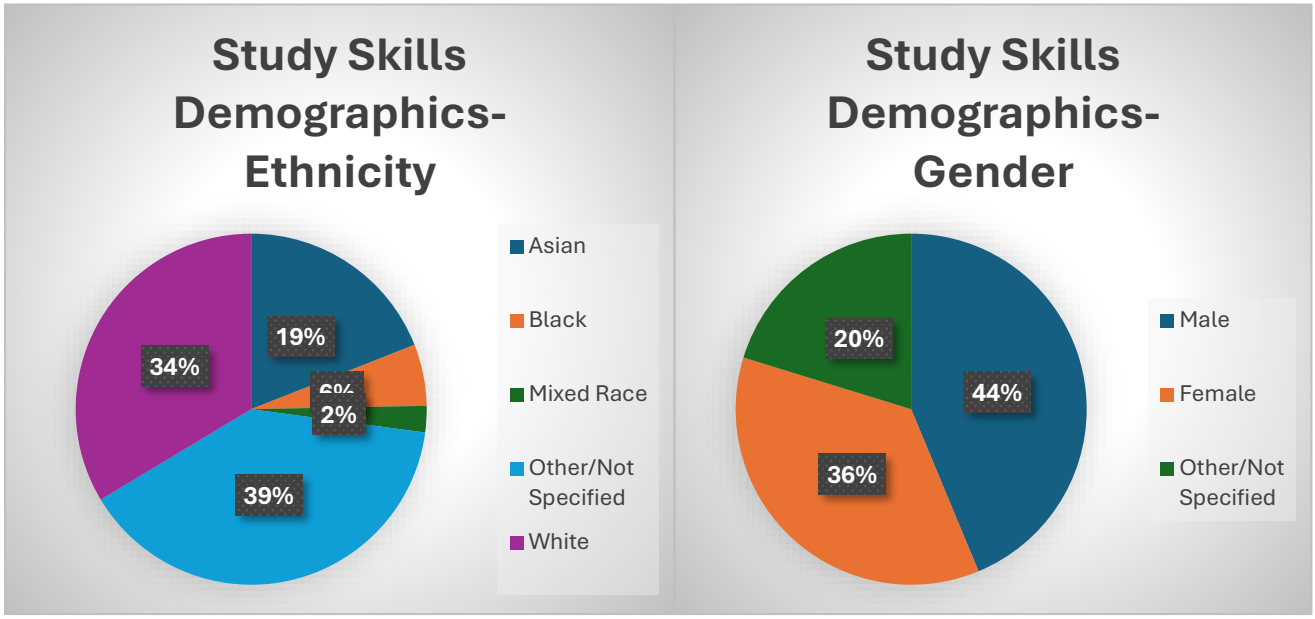
The t-test indicated no significant impact of the sessions on metacognition (t = -1.04, p = 0.15). This may have been due to challenges with the instrument and numbers of pre and post surveys collected. However, most of the post-sessional feedback on metacognition indicates a moderate to high rate of self-reported confidence in participants’ metacognitive skills.

Teacher Feedback

- 100% of teachers ‘Agree’ or ‘Strongly Agree’ that their students learned/developed a useful skill
- 100% of teachers ‘Agree’ or ‘Strongly Agree’ that their students were engaged by the sessions
- 100% of teachers ‘Agree’ or ‘Strongly Agree’ that their students valued the sessions
- 100% of teachers ‘Agree’ or ‘Strongly Agree’ that the sessions built on and supported prior learning
- 100% of teachers ‘Agree’ or ‘Strongly Agree’ that they would participate in sessions such as these again in future

Participant Demographics- Gender and Ethnicity

The demographic charts for the Skills in Schools programme are given below. This is based on a sample size of N = 247.



In future iterations of the programme, work needs to be done to ensure a higher percentage of black participants, in accordance with the goals of the evaluation plan. In addition, the percentage of pupils that chose not to specify their ethnicity was also higher than expected, meaning that further work needs to be done to ensure accurate data collection.

Summary of Impact

From the data, we can infer the following:

1. The Skills in Schools programme was well-received by both pupils and teaching staff. Pupils were highly engaged, valued participating in the programme and would likely participate again in future.

2. Most pupils felt that they learned and/or developed useful, applicable and relevant skills as part of the programme. Teachers also felt that the sessions were useful and built on pupils' prior learning.

3. There is no statistically significant impact of participation in the Skills in Schools programme on metacognition, despite negligible to small positive effect sizes across three of four variables. However, most of the post-sessional feedback on metacognition indicates a moderate to high rate of self-reported confidence in participants' metacognitive skills.

This results in the following key recommendations:

1. Focus our 2024/2025 marketing of the Skills in Schools programme on the medium to long-term interventions we can offer for study skills and subject-specific attainment. Establish ongoing relationships with schools and students, which will potentially translate into more longitudinal data for T-Tests and measures of impact.
2. Ensure that either pupils provide more accurate details about ethnicity and gender where possible or ask teachers to provide more complete information about participating students.
3. Provide targeted outreach opportunities aimed at black pupils to improve their participation rate in the programme.
4. Work more closely with external providers and other branches of the university to provide a more consistently positive experience for teachers and students participating in the Skills in Schools programme.
5. The overall percentage of positive responses to the survey question of whether the material was relevant to pupils' current studies is 11% lower than the percentages of positive responses to the other two survey questions. As such, material needs to be retooled for the new academic year to ensure it is as strictly relevant to pupils as possible, to express how this material will be useful to them in context and in relation to raising their attainment.
6. There is a considerable discrepancy between positive feedback responses from male and female pupils. Female pupils have responded positively to the skills element of the programme at a rate of 17%, 23% and 20% higher than male pupils across these three variables respectively. As such, we need to ensure future iterations of the programme focus more on improving the male experience, ensuring they engage with the skills being taught more positively. This could be achieved through focused and/or targeted outreach, or by focusing on a broader range of subjects that may be more applicable to male pupils.
7. Across all three variables, Asian pupils exhibit lower rates of positive feedback than the overall average. As such, more work must be done to ensure Asian pupils are engaged with and benefitting from the programme. In addition, although Black pupils exhibit high rates of positive feedback in line with the overall percentages, the sample size for this demographic is small at 14 pupils. As such, to ensure that this data is representative, a larger sample size is necessary for future years of the programme. Finally, only 6 Mixed Race pupils participated in the programme- as such, the data is likely unreliable or otherwise not statistically significant. Again, more sustained recruitment is necessary in future.

8. A larger sample size is necessary to ensure paired T-Test analysis is reliable and statistically significant. In addition, a change in the survey questions is necessary to ensure accurate data capture for the Year 7 to Year 13 demographic this programme is aimed at.
9. Ensure targeted outreach is in place to attract schools with higher percentages of IMD Q1 & Q2 students to the Skills in Schools programme. Create bespoke activities designed with these students in mind and support them with engaging consistently in the programme.

Caveat on Evaluation Methodology

It is noted that this evaluation is based primarily on self-reported post-workshop data, due to limited baseline or comparative data. There were practical challenges to data collection, including schools opting for more ad-hoc delivery and issues with students completing the necessary data and it is acknowledged that the limited pre-intervention data reduces the robustness of claims about the programme's effectiveness beyond immediate reactions. However, post-workshop data provides useful insight into perceptions of the programme, and future reports will include further comparative data, including a measure of attainment progress (actual or perceived).

Introduction

Report caveats

This report is part of the first cycle of more robust evaluation in line with our new Access and Participation Plan. Therefore, we acknowledge that the evaluation still has limitations and we do not intend to over-claim the strength of any conclusions.

In particular, it is noted that this evaluation is based primarily on self-reported data, which can be impacted by many factors. There were practical challenges to data collection, and it is acknowledged that the limited sample size of pre- and post-intervention data reduces the robustness of claims about the programme's effectiveness beyond immediate reactions. Nevertheless, the data here still provide valuable insights into engagement and the immediate perceived benefits of the programme. Future evaluations will aim to strengthen data collection, ensuring a more robust set of pre- and post-intervention measures, and include comparison groups where possible. Long-term data will also become available.

Rationale and Context

There are significant barriers to accessing higher education facing certain student demographics, such as young people in receipt of Free School Meals (FSM), those that occupy POLAR4 and IMD quintile 1, and those from black communities. The UK UCAS report, released in January 2020, found "that those in quintile 5 of the POLAR4 measure are 2.24 times more likely to apply to university than POLAR4 quintile 1" (McCabe et al, 2022). One of the key contributing factors to this disparity is a statistically significant gap in attainment, caused by unequal access to skills and a focus on deficit narratives regarding disadvantaged young people, which place a "narrow focus on what students do not have or cannot do" (Wang et al, 2021). In the 2018/2019 academic year, only 22.08% of disadvantaged boys, defined as boys in receipt of Free School Meals, those adopted from care or those that are looked-after children for at least one day, nationally achieved grade 5 or higher in GCSE English and Maths (Boys Impact Coalition, 2023), which is 33.5% below non-disadvantaged boys, demonstrating a considerable attainment gap in the core facilitating subjects necessary for access to and success within higher education.

It is imperative that providers of higher education act to address the deficiencies in attainment in underrepresented groups to support their access to HE. Given that "attainment at Key Stage 4 is a key predictor of participation in higher education" (Office for Students), this programme of study skills workshops intends to support the attainment of pupils in years 7 to 13, especially those in high-priority target demographics.

Implementation and Delivery

We have designed a series of Study Skills workshops focusing on the key skills necessary to succeed in Key Stages 3, 4 and 5. These encompass topics such as revision, academic writing, research skills, decoding questions and debating, amongst others. These workshops are designed to run for an hour each, and either form part of an ad-hoc visit day to the University of Reading or a target school, or form part of a medium-term programme of sustained intervention.

Workshops will be delivered by Ben Worsfold, Student Recruitment & Access Officer (Attainment Raising), and will require minimal resources aside from classroom stationary,

which will likely be provided by participating schools. Student ambassadors may also be required for on-campus visits. The target end users for these workshops are students in years 7 to 13, with a specific focus on students from IMD/POLAR4 quintile 1, those in receipt of free school meals and black students.

The general aim of this project is to have a measurable impact on the attainment of young people in the schools we work with. This translates to noted improvements in their study skills, educational outcomes in exams and coursework, and overall metacognitive ability.

Link to Access & Participation Plan (APP)

Aligned with the university's Access and Participation Plan (APP), the objectives of the programme were as follows:

Through targeted attainment-raising initiatives with partner schools, to support the removal of attainment-gaps at KS4 for students eligible for Free School Meals, those in IMD Q1, and those of Black ethnicity, such that by 2034 students from these groups progress equally into KS5 as their peers.

The general objectives of the programme were as follows:

- Improve self-reported study skills ability in the pupils that participated in the programme.
- Improve self-reported academic self-confidence in the pupils that participated in the programme.
- Improve self-reported metacognition skills in the pupils that participated in the programme.
- Demonstrate a positive trend between study skills interventions and teacher feedback regarding the programme.

Methodology

Evaluation Questions

Reach

- How many students took part?
    - Overall
    - Across Target Schools
    - From IMD Q1 & Q2
    - Black Students
        - *Sub-Question:* Is this a statistically significant level of participation?
        - *Sub-Question:* Was participation ad-hoc or sustained?

- What were the levels of engagement and demographic characteristics of participants?
    - Overall
    - Across Target Schools
        - *Sub-Question:* Was there a statistically significant level of participation from key target demographics?

Reaction

- Were the sessions engaging, and how did students feel about participating?
- Overall
    - Across Target Schools
    - From IMD Q1& Q2
    - Black Students
        - *Sub-Question:* Would students recommend the workshop to others?

- Did students value the content delivered in each workshop?
    - Overall
    - Across Target Schools
    - From IMD Q1 & Q2
    - Black Students
        - *Sub-Question:* Were there any areas that students from key target demographics thought were lacking or needed improvement?
        - *Sub-Question:* Does teacher perception of the value of the workshops align with student perception?

Learning

- Does participation in study skills sessions improve self-reported academic skills and their use in education?
    - Overall
    - Across Target Schools
    - From IMD Q1 & Q2
    - Black Students
        - *Sub-Question:* Do students' self-reported improvements in academic performance align with teacher perceptions?

- Does participation in study skills sessions improve self-reported metacognition?
    - Overall
    - Across Target Schools
    - From IMD Q1 & Q2
    - Black Students

- Is participation in study skills sessions linked to teacher reports of improved subject attainment? ***Note:*** *due to the long-term nature of these feedback, this research question has not been answered in this report. Data will be provided once it is available.*
    - Overall
    - Across Target Schools
    - From IMD Q1 & Q2
    - Black Students

Behaviour

- Does participation in study skills sessions improve self-reported academic confidence and attitudes to learning?
    - Overall
    - Across Target Schools
    - From IMD Q1 & Q2
    - Black Students
        - *Sub-Question:* Did students take any further actions post-activity to build on their academic confidence further? ***Note:*** *due to the long-term nature of these feedback, this research question has not been answered in this report. Data will be provided once it is available.*

Impact on UoR KPIs and Targets

- What impact has the project had on overall KPIs and university targets?

Process Evaluation Research Questions

- Are there any changes necessary to the activity to make it more *relevant?*
- Are there any changes necessary to the activity to make it more *engaging?*
- Can the activity be delivered on a *sustained basis* rather than *ad-hoc?*
- Are there any unforeseen *costs* of the programme?
- If any changes are made, what is the impact of these changes on key target demographics?

Data Collection Methods

Data Collected	Items or Methods of Data Collection
A). Student Survey: Study Skills Assessment *(Data Range: Strongly Disagree to Strongly Agree, scored from 1 to 5, out of a total of 15)*	1). I feel I have learned or developed a useful skill in this workshop. 2). I will be able to use what I've learned in this workshop in the future. 3). What I learned in this workshop is relevant to my studies.
B). Student Survey: Metacognitive Strategies Assessment *(Data Range: Strongly Disagree to Strongly Agree, scored from 1 to 5, out of a total of 20)*	1). I can tell when I've understood a concept or idea. 2). I can motivate myself to study when I need to. 3). I can think of several ways to solve an academic problem and then choose the best way. 4). I am confident that I can learn and study effectively.
C). Student Survey: Process Evaluation *(Data Range: Strongly Disagree to Strongly Agree, scored from 1 to 5, out of a total of 15)*	1). Did you find this workshop useful? 2). Did you find this workshop engaging? 3). Would you recommend this workshop to other students?
D). Teacher Survey: Process Evaluation *(Data Range: Qualitative Feedback)*	1). What was the most useful thing about this workshop for your students? 2). What did you feel was lacking, and what could be improved? 3). Do you have any further comments on the workshop?
E). **Teacher Observed / Reported Improvements in Subject Attainment** (Data Range: Qualitative Feedback)	Anecdotal and/or qualitative feedback from teachers about progress students are making. ***Note:*** *due to the long-term nature of these feedback, this data has not been provided in this report. Data will be provided once it is available.*

Ethics and Data Security

Standard ethics procedures were followed, with participants giving informed consent for their data to be used for evaluation purposes and anonymised reporting. Teachers participating in the programme were over 18 and therefore gave consent for their feedback to be used for evaluation purposes and reported in a way in which they won't be identifiable.

Data Analysis Methods

Data Collected	Analysis Conducted
Student & Teacher Surveys (*Items A through D*)	Paired T tests comparing pre- and post-workshop scores.
Teacher Observed / Reported Improvements in Subject Attainment (*Item E*)	Qualitative analysis of teacher observations. ***Note:*** *due to the long-term nature of these feedback, this data has not been answered in this report. Data will be provided once it is available.*

As part of our measure of improvement in participants' metacognitive skills, we conducted a paired T-Test of participants using a pre- and post-sessional survey based on the approved TASO framework questions for measuring metacognition in university students.

Participant responses to these questions were collated, anonymised and checked for normalcy, before being assigned numerical values, with 'Strongly Agree' being a 5 to 'Strongly Disagree' being a 1. A paired T-Test was then conducted for each question's set of responses, and an effect size was calculated.

The intent of this analysis was to determine whether there was any statistically significant correlation between participation in the Skills in Schools programme and improvements in self-reported metacognition. If a statistically significant result was observed, we could be justified in claiming that the Skills in Schools programme may have had a significant positive impact on pupil metacognition and, by extension, overall attainment.

Limitations and caveats

It is noted that this evaluation is based primarily on self-reported post-workshop data, due to limited baseline or comparative data. There were practical challenges to data collection, and it is acknowledged that the limited pre-intervention data reduces the robustness of claims about the programme's effectiveness beyond immediate reactions. Nevertheless, the descriptive data on reach and participant attitudes still provides valuable insights into engagement and the immediate perceived benefits of the programme. Future evaluations will aim to strengthen data collection, ensuring a more robust set of pre- and post-intervention measures.

A couple of limitations became apparent over the course of the programme regarding reach. Firstly, schools were mostly interested in ad-hoc visit days and workshops, rather than in sustained medium to long-term intervention. Most schools participated in one or two workshops and/or visit days over the course of the academic year. Whilst sustained intervention was offered, it was not typically of interest to participating schools.

The second limitation identified is in terms of demographics. Participants often chose not to provide details of their ethnicity or gender on their pre- and post-evaluation surveys. This is evident in both the demographics by ethnicity and demographics by gender charts provided below. Ethnicities used for the survey aligned with those recommended for use by the UK Government, i.e. Asian, Black, Mixed or Multiple Ethnic Groups, White and Other Ethnicity.

There are also some limitations to the t-test analysis, which are as follows:

- ***Small Sample Size:*** For one to two-hour in-school workshops, as well as single-session ad-hoc visits, it is not feasible to conduct pre and post in a timely and efficient manner. As such, for these sessions, it was not possible to collect paired pre and post data for analysis. Therefore, instead of a sample size of 247 surveyed students, this analysis only has a sample size of 86. Data for this analysis was primarily collected from full-day workshops, usually held on the university campus.
- ***Difficulty Pairing Pre- and Post-Evaluation Data:*** Participants were often inconsistent in labelling their pre- and post-evaluation surveys. In some cases, this made it impossible to accurately pair pre- and post-evaluation data, resulting again in a diminished sample size and questions surrounding the analysis's reliability.
- ***Overestimation of Self-Reported Abilities:*** Participants often gave higher ratings in their pre-sessional surveys than their post-sessional surveys. Given that it is unlikely that the sessions caused regression in their abilities, this is likely symptomatic of overconfidence or a lack of understanding of the questions, which may have skewed the data.
- ***Use of University-Level TASO Questions:*** These survey questions underwent validation and only passed validation for use with university students, and as such may not produce the same consistent results when used with students of the age within our sample.

Results

Results of Analysis- Process

Reach

Across the 12 schools that participated in at least one session and/or visit day during the programme, the following averages were observed in terms of measures of pupil disadvantage:

Percentage of Disadvantaged Pupils (as of 2022/2023 in KS4, *HEAT, 2022/2023*)

- **Range:** 48.8
- **Median:** 18.5%
- **Mean:** 22.1%

Percentage of Free School Meals (*HEAT, 2024*)

- **Range:** 47.6
- **Median:** 17.2%
- **Mean:** 19.1%

Pupils in IMD Q1 (*HEAT, 2023/2024*)

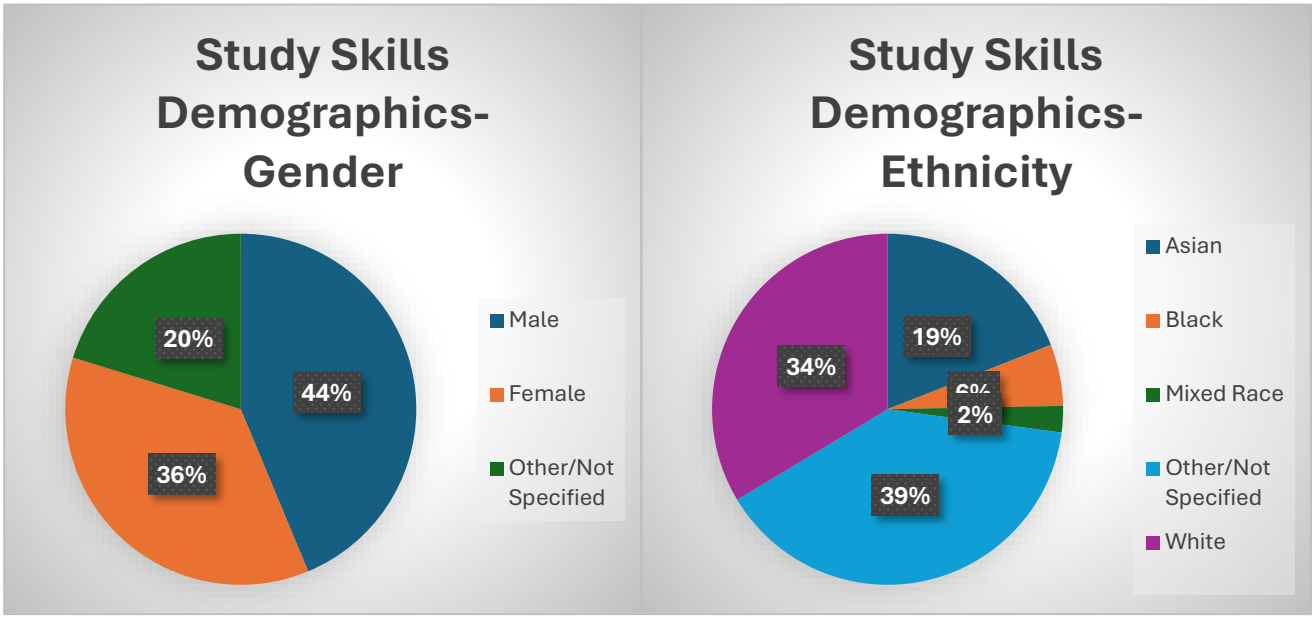
- **Range:** 60.5
- **Median:** 6.15%
- **Mean:** 10.9%

Pupils in IMD Q2 (*HEAT, 2023/2024*)

- **Range:** 65.6
- **Median:** 24.5%
- **Mean:** 23.2%

In total, 247 pupils were surveyed across the course of the programme, alongside 14 individual teachers. This is a reasonably large sample size, which shows that we mitigated our initial ‘School Uptake’ and ‘Small Sample Size’ risks identified at the start of the programme. In addition, 633 pupils participated overall, including those not surveyed. It is likely that our sustained programme of marketing through DotDigital and in-school teacher contacts contributed to the success of the programme from an uptake perspective, as well as positive word of mouth in the Reading, Berkshire and Oxfordshire teaching communities. Hopefully, this will translate into sustained relationships going forward, with more opportunities to work with these schools arising in future.

A significant percentage of participants (39% and 20% respectively) did not provide demographic data for use in evaluation. These demographic charts are based on a sample size of 247 surveyed pupils (N = 247).



Important Note: the percentage of pupils that listed their gender identity as non-binary or otherwise gender non-conforming was not statistically significant in the case of this survey data (i.e. less than 1% of all participating students). As such, it has not been listed as a separate category for demographic analysis by gender, as this small percentage would provide skewed results. Should a statistically significant number of participants list their gender identity as non-binary or non-conforming in future, the charts will be updated to reflect this demographic.

In addition, the percentage of non-white pupils worked with (i.e. those that identify as Asian, Black or Mixed Race) was also significantly lower than our target. This is especially true for black pupils, who only made up 6% of the overall participants.

IMD Demographics

Where possible, study skills workshops were targeted at students from disadvantaged backgrounds, including from IMD Q1 & Q2, as per the university's Access and Participation Plan (APP). Given the limited information received from students as to their postcodes, it was not possible to map each individual student's IMD quintile, and, as such, a rough outline of the rate of IMD Q1/Q2 participation was determined by using school characteristics available through HEAT. In future, more stringent measures to ensure accurate data collection on pre- and post-surveys will be taken, to allow the same level of analysis of IMD Q1/Q2 students as students by gender and by ethnicity.

Out of the 12 participating schools, the average percentage of IMD Q1 students across all year groups was 10.86%. For IMD Q2 students, the average percentage was 23.2%. Note that these measures are intended as rough indicators of the number of IMD Q1/Q2 students reached and are not indicative of the specific demographic makeup of students participating in the sessions. These percentages are both lower than anticipated,

despite targeting schools with a high rate of IMD Q1 and Q2 students and will need to be improved through targeted outreach in subsequent years.

Reaction

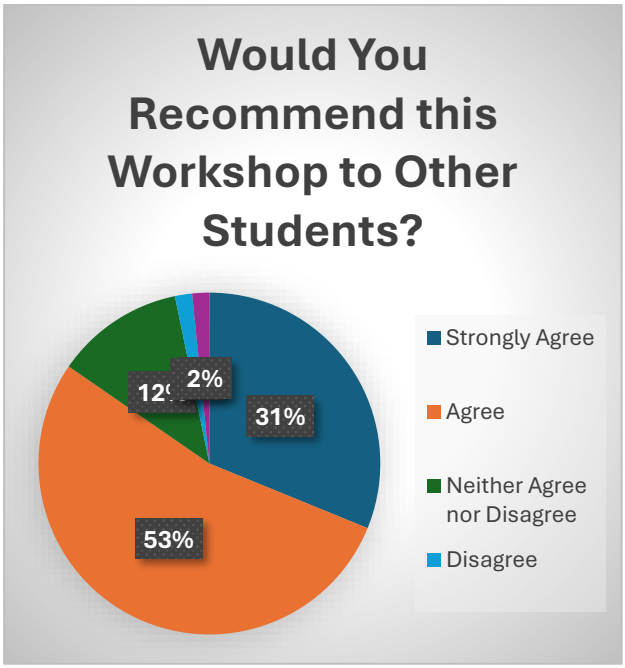
Quantitative Analysis- Pupils

The following is the quantitative data on pupil reactions to the programme.

Overall, across all participant demographics (n = 247):

- 86% of pupils 'Agree' or 'Strongly Agree' that the workshops were useful
    - Mean Average Score: 4.08 (Standard Deviation: 0.73)
- 81% of pupils 'Agree' or 'Strongly Agree' that the workshops were engaging
    - Mean Average Score: 4.10 (Standard Deviation: 0.78)
- 84% of pupils 'Agree' or 'Strongly Agree' that they would recommend the workshops to others

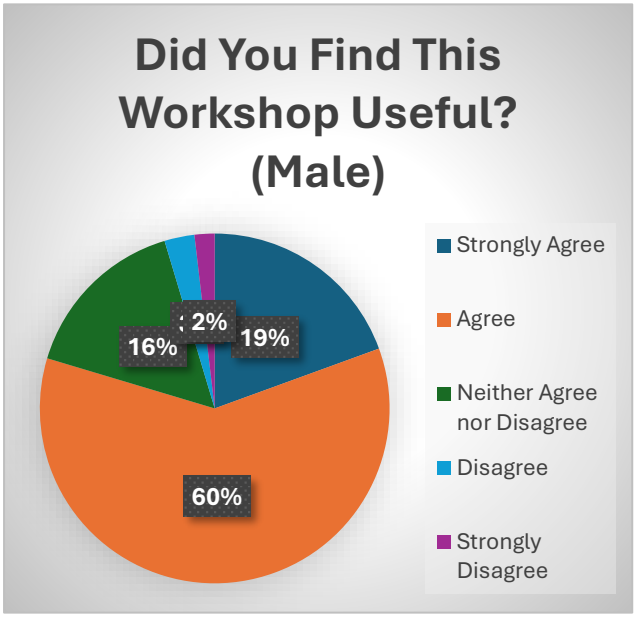
- Mean Average Score: 4.11 (Standard Deviation: 0.79)

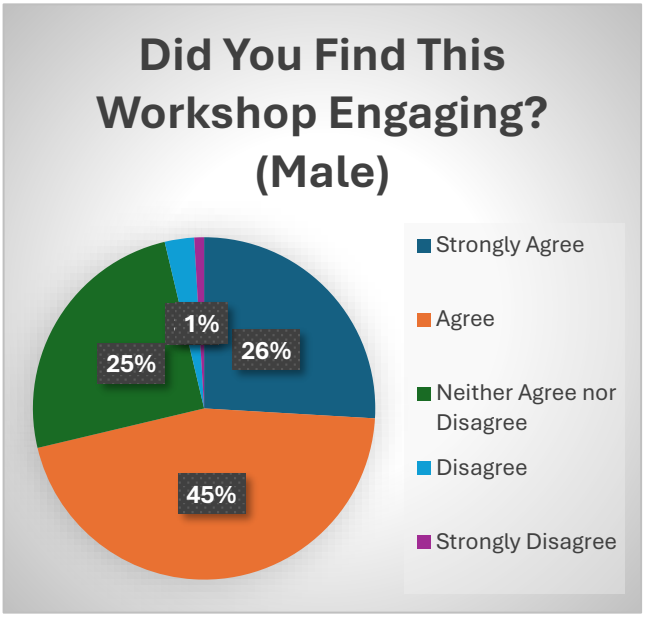


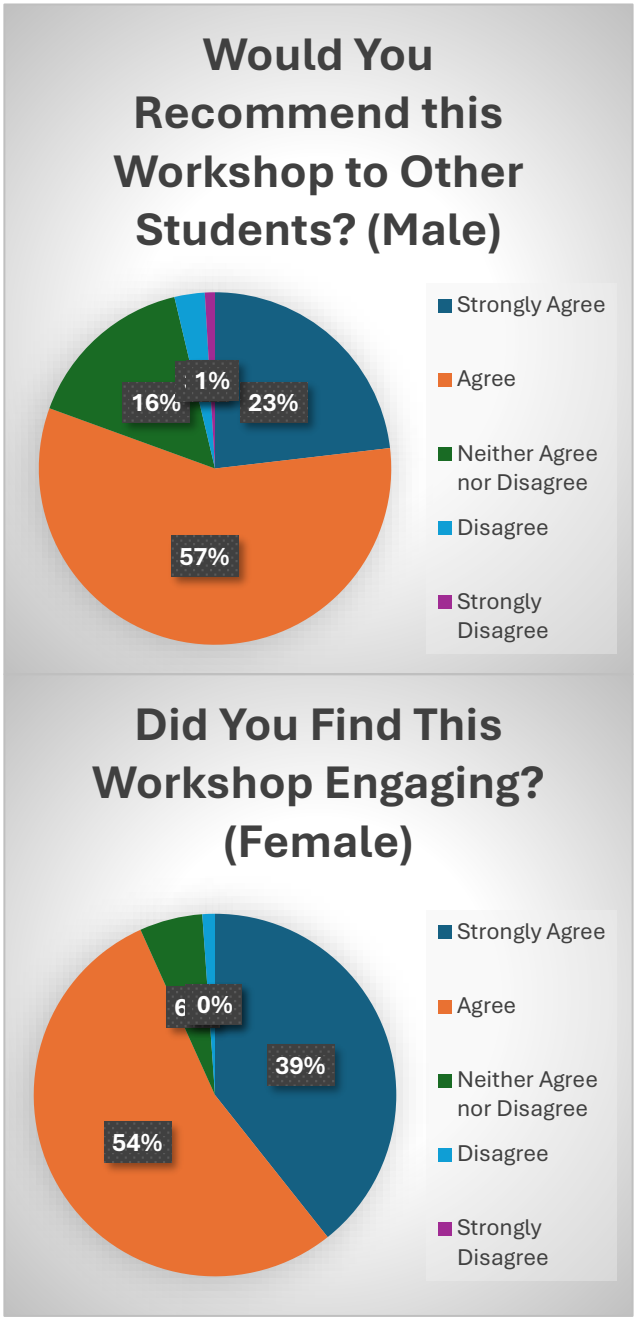
For male and female pupil demographics (n = 108 and n = 89 respectively):

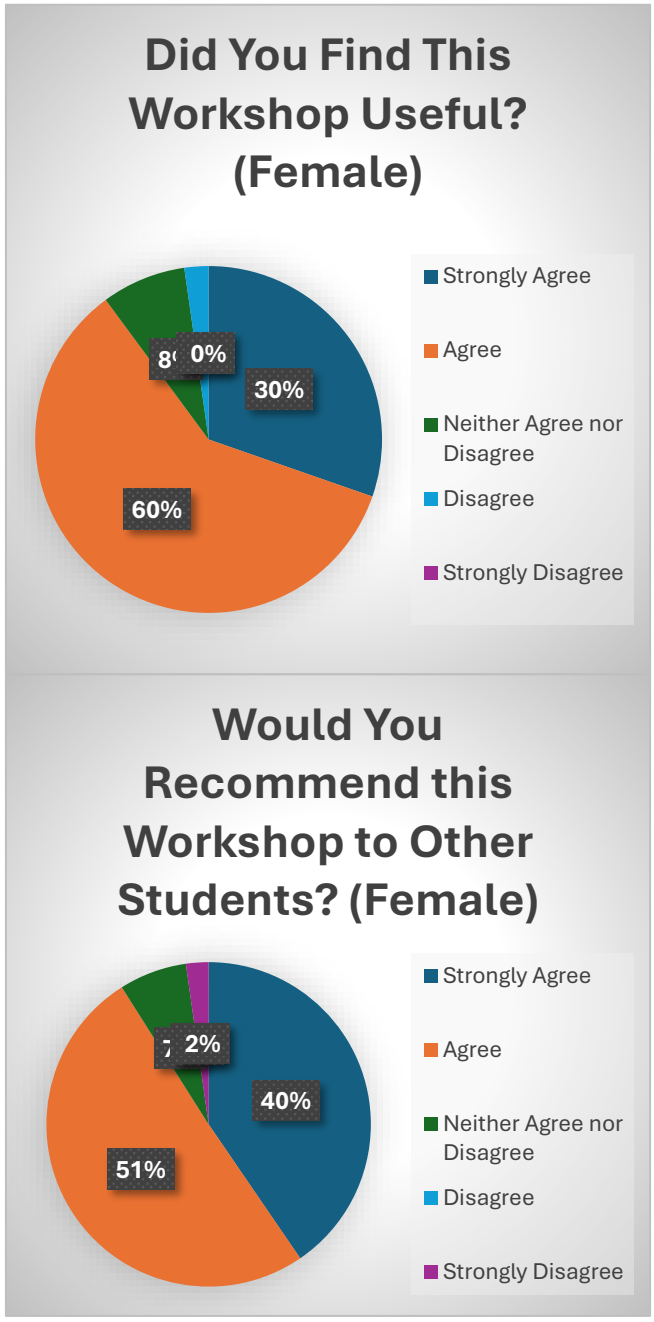
- 79% of male pupils 'Agree' or 'Strongly Agree' that the workshops were useful
  - Mean Average Score: 3.93 (Standard Deviation: 0.79)
- 71% of male pupils 'Agree' or 'Strongly Agree' that the workshops were engaging
  - Mean Average Score: 3.93 (Standard Deviation: 0.84)
- 80% of male pupils 'Agree' or 'Strongly Agree' that they would recommend the workshops to others
  - Mean Average Score: 3.99 (Standard Deviation: 0.76)

- 90% of female pupils 'Agree' or 'Strongly Agree' that the workshops were engaging
  - Mean Average Score: 4.18 (Standard Deviation: 0.66)
- 93% of female pupils 'Agree' or 'Strongly Agree' that the workshops were useful
  - Mean Average Score: 4.31 (Standard Deviation: 0.63)
- 91% of female pupils 'Agree' or 'Strongly Agree' that they would recommend the workshops to others
  - Mean Average Score: 4.27 (Standard Deviation: 0.78)







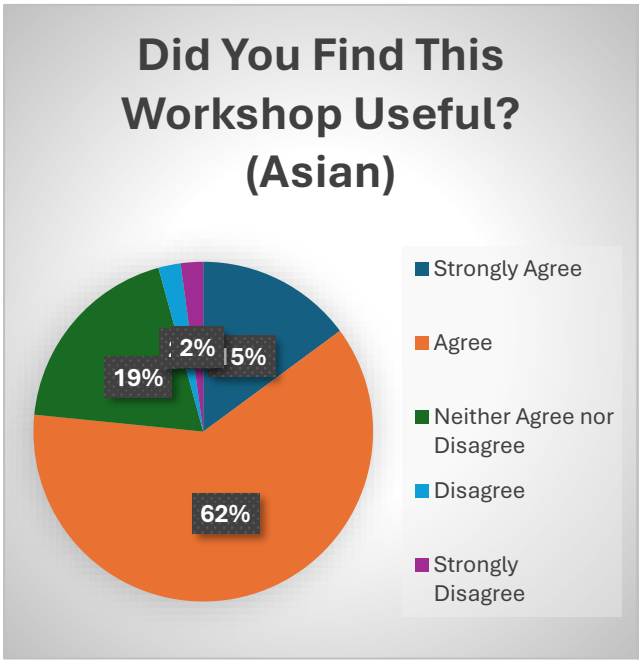


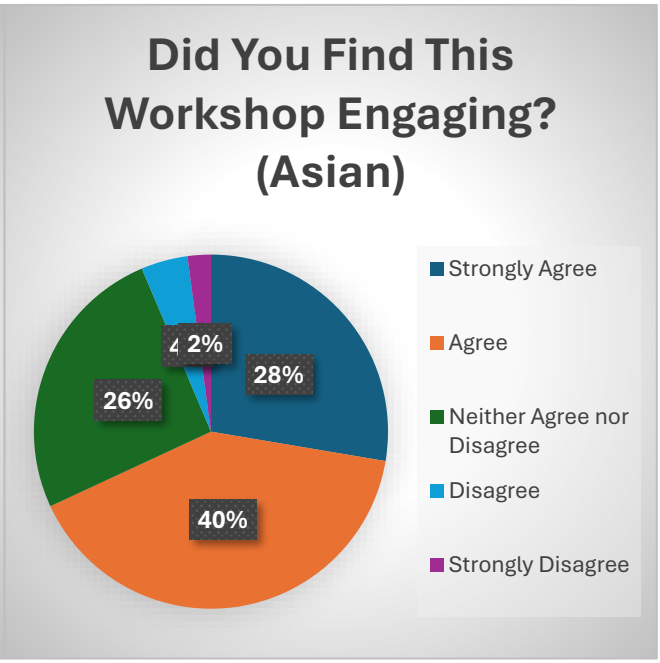
For Asian, Black and Mixed-Race pupil demographics (Sample Sizes 47, 14 and 6 respectively):

- 77% of Asian pupils 'Agree' or 'Strongly Agree' that the workshops were useful
  - Mean Average Score: 3.85 (Standard Deviation: 0.77)
- 68% of Asian pupils 'Agree' or 'Strongly Agree' that the workshops were engaging
  - Mean Average Score: 3.87 (Standard Deviation: 0.94)
- 68% of Asian pupils 'Agree' or 'Strongly Agree' that they would recommend the workshops to others
  - Mean Average Score: 3.68 (Standard Deviation: 1.01)

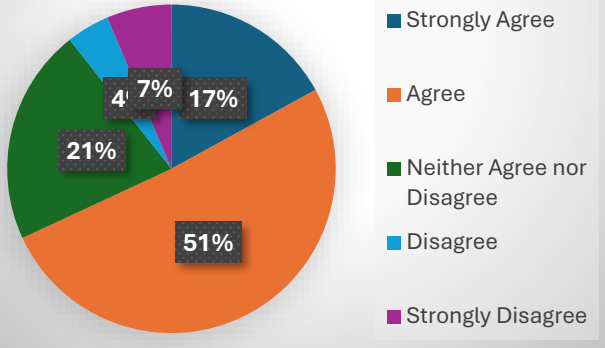
- 78% of Black pupils 'Agree' or 'Strongly Agree' that the workshops were useful
  - Mean Average Score: 3.79 (Standard Deviation: 0.67)
- 71% of Black pupils 'Agree' or 'Strongly Agree' that the workshops were engaging
  - Mean Average Score: 3.79 (Standard Deviation: 0.77)
- 85% of Black pupils 'Agree' or 'Strongly Agree' that they would recommend the workshops to others
  - Mean Average Score: 3.86 (Standard Deviation: 1.06)

- 100% of Mixed-Race pupils 'Agree' or 'Strongly Agree' that the workshops were useful
  - Mean Average Score: 4.50 (Standard Deviation: 0.5)
- 100% of Mixed-Race pupils 'Agree' or 'Strongly Agree' that the workshops were engaging
  - Mean Average Score: 4.66 (Standard Deviation: 0.47)
- 80% of Mixed-Race pupils 'Agree' or 'Strongly Agree' that they would recommend the workshops to others
  - Mean Average Score: 5 (Standard Deviation: 0.00)

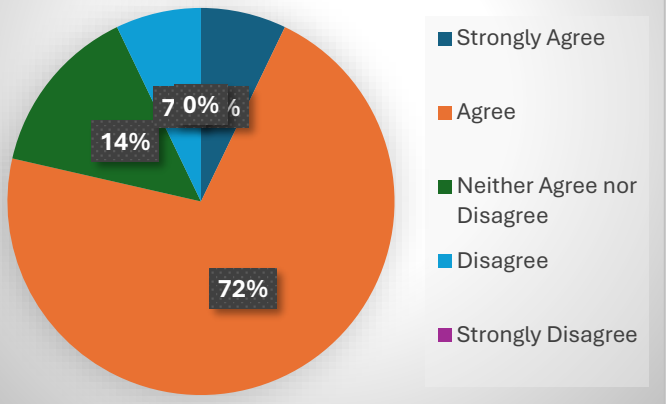




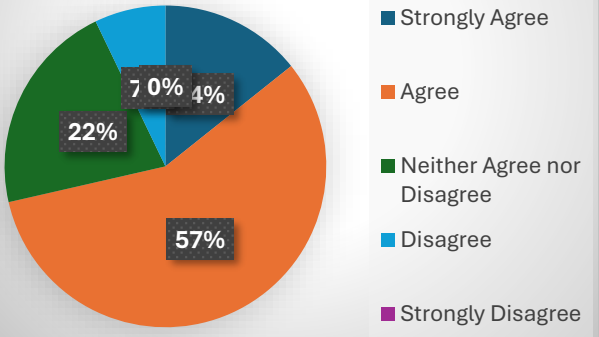
Would You Recommend this Workshop to Other Students? (Asian)



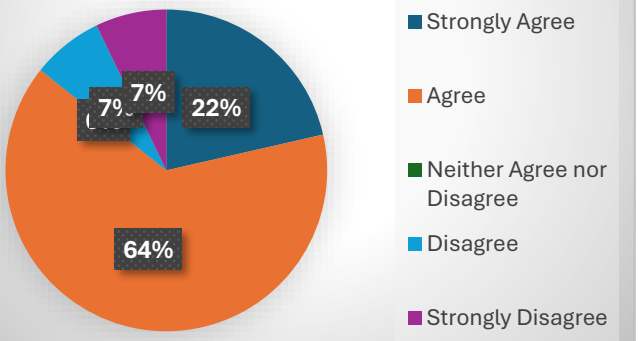
Did You Find This Workshop Useful? (Black)



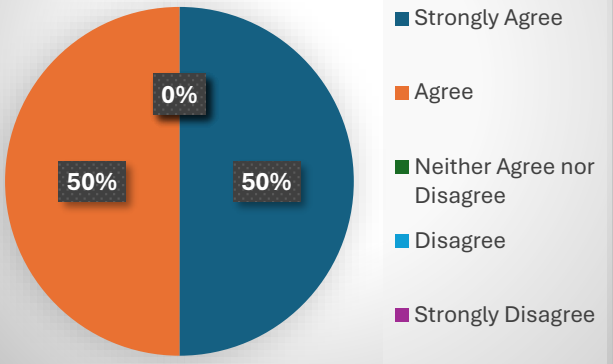
Did You Find This Workshop Engaging? (Black)



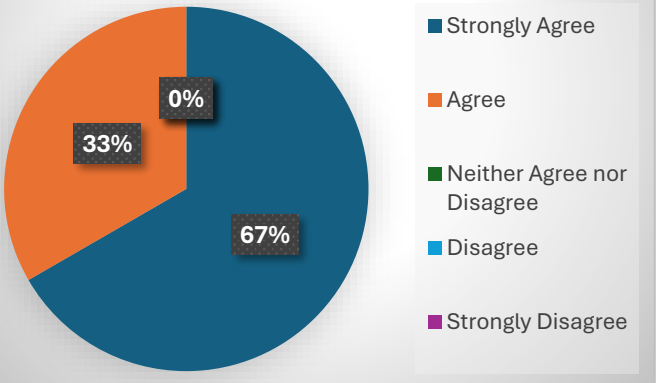
Would You Recommend this Workshop to Other Students? (Black)

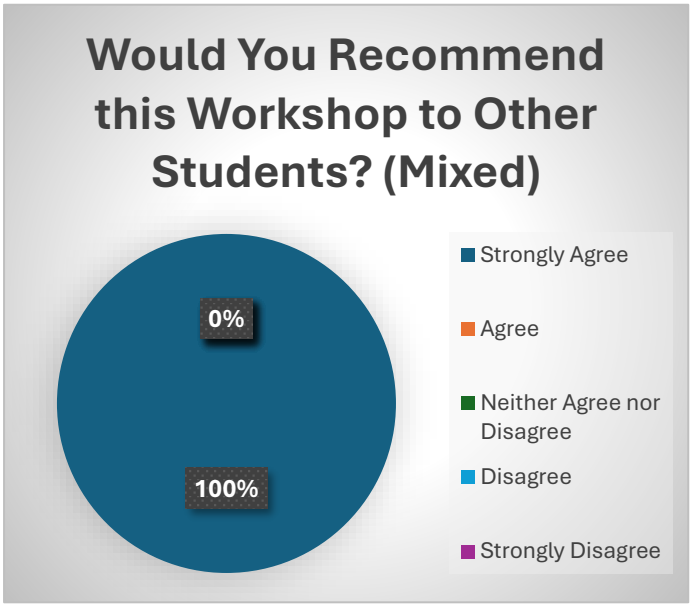


Did You Find This Workshop Useful? (Mixed)



Did You Find This Workshop Engaging? (Mixed)





Quantitative and Qualitative Analysis- Teachers

For all teachers surveyed (i.e. 14 total teachers across 6 participating schools):

- 100% of teachers 'Agree' or 'Strongly Agree' that their students learned/developed a useful skill
  - Mean Average Score: 4.57 (Standard Deviation: 0.49)
- 100% of teachers 'Agree' or 'Strongly Agree' that their students were engaged by the sessions
  - Mean Average Score: 4.71 (Standard Deviation: 0.45)
- 100% of teachers 'Agree' or 'Strongly Agree' that their students valued the sessions
  - Mean Average Score: 4.57 (Standard Deviation: 0.49)
- 100% of teachers 'Agree' or 'Strongly Agree' that the sessions built on/supported prior learning
  - Mean Average Score: 4.50 (Standard Deviation: 0.50)
- 100% of teachers 'Agree' or 'Strongly Agree' that they would participate in sessions in future
  - Mean Average Score: 4.57 (Standard Deviation: 0.49)

It is safe to suggest that teacher perceptions of and reactions to the Skills in Schools programme were strongly positive, and are more positive than those of their pupils, albeit not by an overly significant amount (100% vs. 86% on session usefulness, 100% vs 81% on session engagement, and 100% vs. 84% on future session participation/recommendation). Important metrics here include the fact that teachers valued the sessions, and believed their pupils found them valuable in raising their attainment, and the fact that sessions tied into and built on the prior learning pupils had undertaken.

In terms of qualitative feedback, teacher comments were also largely positive. When asked about the 'Most Useful Thing' experienced by their pupils during Skills in Schools sessions, teachers responded in the following ways:

- *"Helps when thinking about future careers."*

- *"Group work v[ery] successful."*
- *"More engaged, improved collaborative learning skills"*
- *"Them learning how to fail properly. The failing forward was really positive and beneficial."*
- *"The ability to research as a team, under tight timescales, to produce innovative solutions. The skills and confidence gained are significant to their futures."*
- *"The research activity. Students were really engaged."*
- *"Group research activity was engaging and encouraged independence."*
- *"The simple models and broken-down instructions. Writing guides."*
- *"Fun, engaged even disengaged learners."*

When asked about things that "Felt Lacking" during Skills in Schools sessions, teachers responded in the following ways:

- *"The intro was a bit wordy but they definitely engaged so didn't effect anything."*
- *"Some high-level vocab in seminar section could be further explained."*
- *"More time- perhaps one more hour?!?"*
- *"The second session was not as engaging as some students started daydreaming."*
- *"An activity similar to first session during second session would have been nice."*
- *"Would be better to allow more writing time"*

Important Note: aside from the final comment, the comments made about elements of the sessions that felt lacking originated solely from sessions run in conjunction with academic departments and/or external providers. As such, there may be work we can do to improve delivery when working on a collaborative basis with other branches of the university and external providers. In addition, out of 14 responses in total, only the 6 above specified elements requiring improvement, a rate of 42%, meaning that in 58% of cases, teachers did not have any negative and/or constructive feedback about our events.

When asked for 'Further Comments' on the Skills in Schools programme, teachers responded in the following ways:

- *"Camera guy was so engaging, really well ran."*
- *"Ensure timings are rigidly stuck to."*
- *"Amazing staff, energetic and passionate."*
- *"Really positive session, engaging and interactive."*
- *"The two lecturers were most engaging, enthusiastic and stimulating."*
- *"All brilliant. Thank you."*
- *"Well-structured and thought out. Music taster was especially popular."*
- *"Fantastic engagement from students & uni staff."*

- *"Loved how it linked literature to lang skills. Ben was excellent & very knowledgeable."*

Aside from the comment regarding timings, which was an issue during the event in question, anecdotal and additional feedback from teachers regarding the Skills in Schools programme and its impact on pupils is considerably positive.

Key messages, Conclusions and Recommendations (Reach & Reaction)

Key messages

- Pupils demonstrated a high level of engagement with the programme (81% 'Strongly Agree' and 'Agree'), and largely understood and appreciated its importance and value (86% 'Strongly Agree' and 'Agree'). This is also reflected in the high percentage of pupils that would recommend the programme to other students (84% 'Strongly Agree' and 'Agree').
- Black pupils, whilst responding positively to the programme, were underrepresented despite being a target demographic. This also applies to pupils who identify as mixed race. In addition, Asian pupils responded below the group average in terms of engagement, workshop usefulness and future participation.
- Teachers demonstrated a high level of positivity towards the programme, its approach, and its potential impact on their pupils' attainment. This is reflected in both qualitative and quantitative feedback data.

Conclusions to Reach and Reaction Research Questions

Were the Sessions Engaging, and How Did Students Feel About Participating?

- Feedback indicates that sessions were likely highly engaging from both the perspective of participants and teaching staff. There are target areas for improvement, specifically for Asian pupils, and, to a lesser extent, those pupils that identify as male. Most of the pupils report that they would recommend the workshop to others.

Did Students Value the Content Delivered in Each Workshop?

- Feedback indicates that most participants found the sessions valuable; this is reflected in qualitative and quantitative feedback from teaching staff. Teacher perception of the value of the sessions was higher than pupil perception, but both exceeded 85% positive feedback responses, indicating that both teachers and pupils found the sessions useful and valuable. Black participants also found the sessions useful but, given the small sample size, the statistical significance of these feedback cannot be guaranteed.

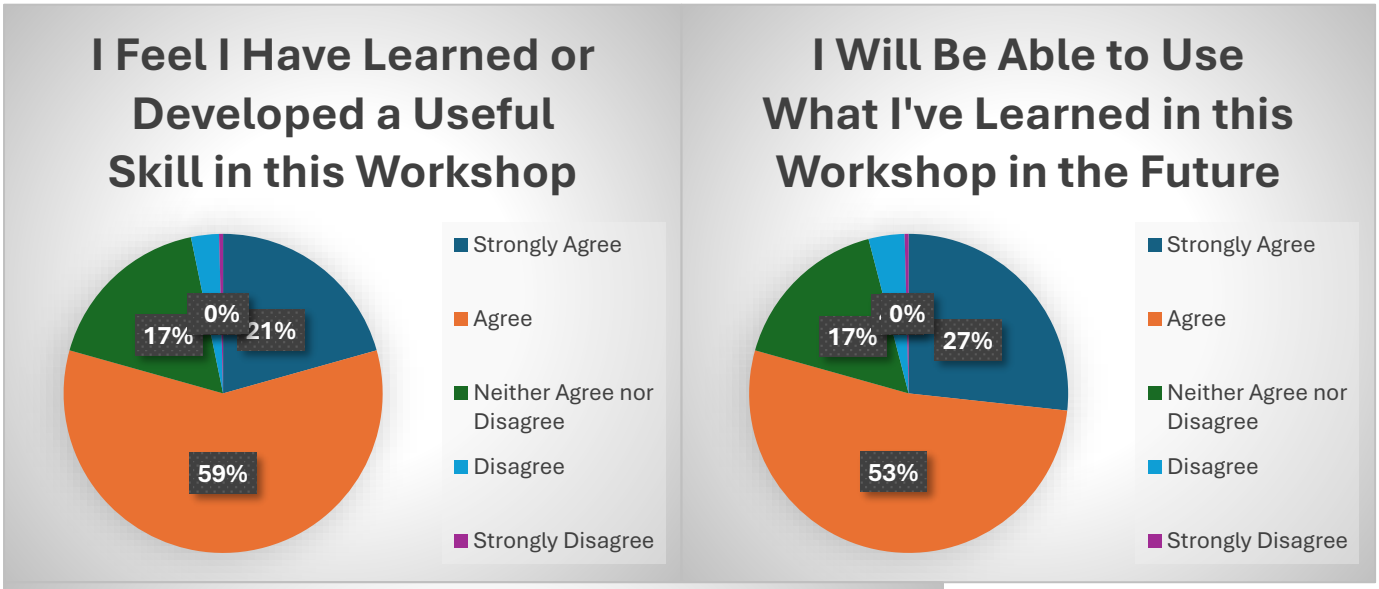
Results of Analysis- Study Skills

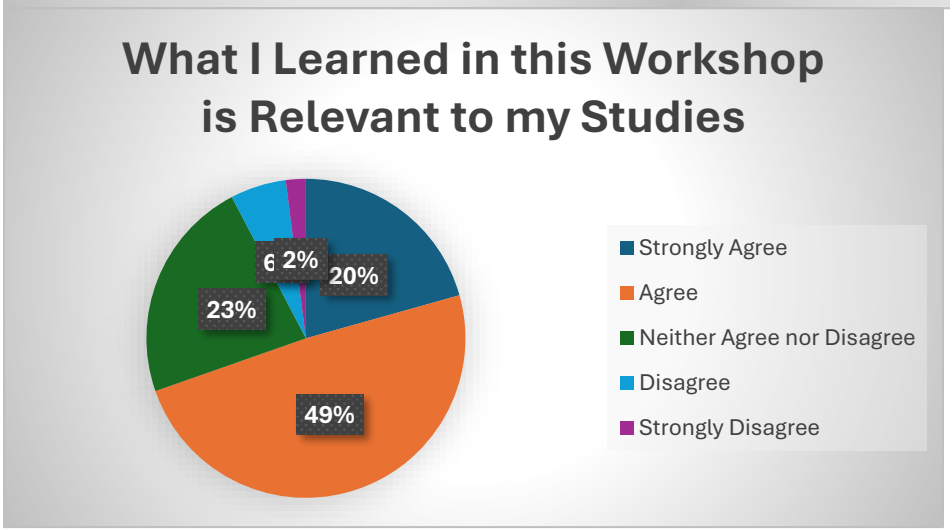
Quantitative Analysis

The following is the quantitative data on pupil perceptions of the study skills they developed as part of the Skills in Schools programme.

Overall, across all participant demographics (Sample Size: 247):

- 80% of pupils 'Agree' or 'Strongly Agree' that they learned and/or developed a useful skill as part of the programme
  - Mean Average Score: 3.96 (Standard Deviation: 0.72)
- 80% of pupils 'Agree' or 'Strongly Agree' that they will be able to use what they've learned in the programme in the future
  - Mean Average Score: 4.02 (Standard Deviation: 0.78)
- 69% of pupils 'Agree' or 'Strongly Agree' that the content of the programme was relevant to their studies
  - Mean Average Score: 3.81 (Standard Deviation: 0.90)

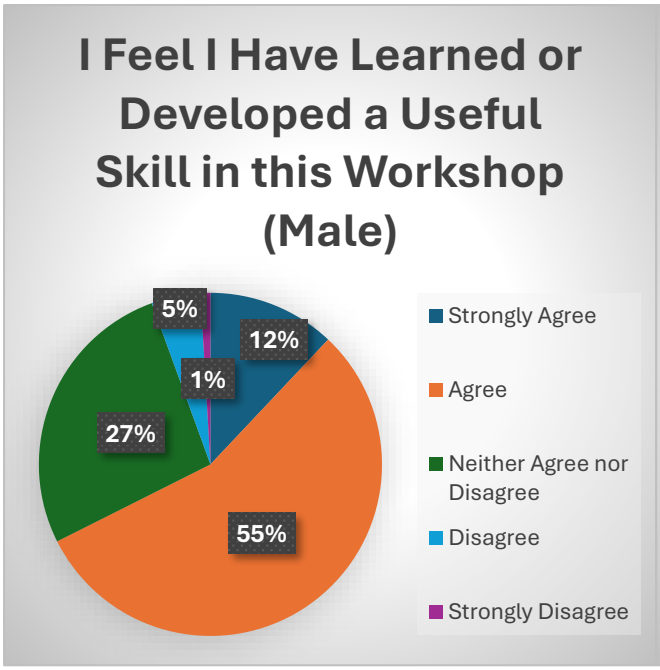


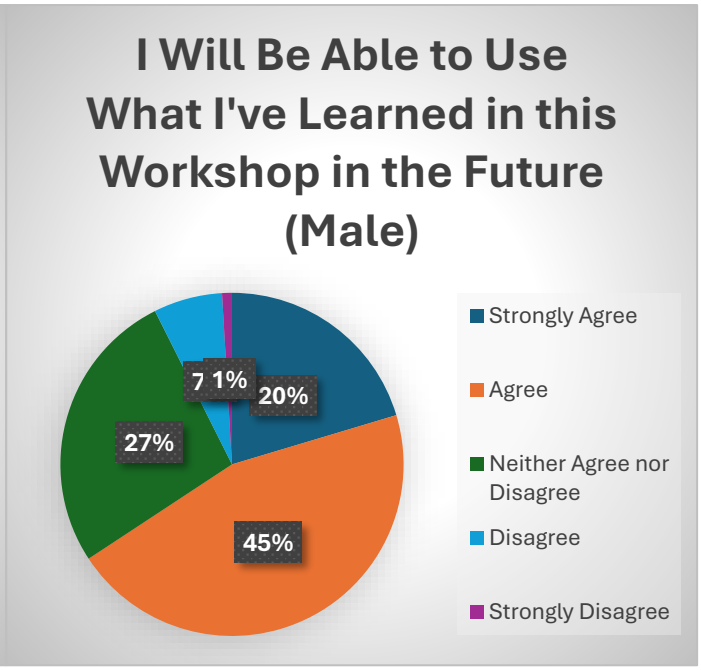


For male and female pupil demographics (Sample Sizes 108 and 89 respectively):

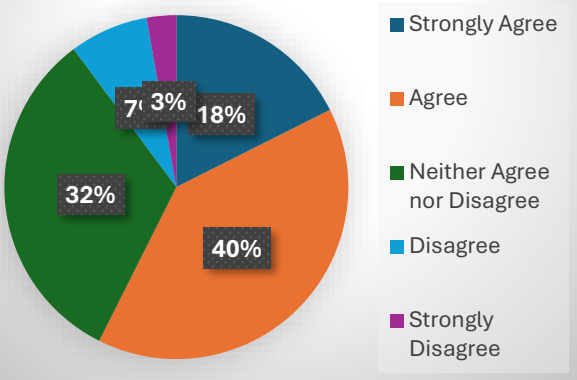
- 68% of male pupils 'Agree' or 'Strongly Agree' that they learned and/or developed a useful skill as part of the programme
    - Mean Average Score: 3.73 (Standard Deviation: 0.76)
- 65% of male pupils 'Agree' or 'Strongly Agree' that they will be able to use what they've learned in the programme in the future
    - Mean Average Score: 3.78 (Standard Deviation: 0.87)
- 58% of male pupils 'Agree' or 'Strongly Agree' that the content of the programme was relevant to their studies
    - Mean Average Score: 3.62 (Standard Deviation: 0.95)

- 85% of female pupils 'Agree' or 'Strongly Agree' that they learned and/or developed a useful skill as part of the programme
    - Mean Average Score: 4.03 (Standard Deviation: 0.61)
- 88% of female pupils 'Agree' or 'Strongly Agree' that they will be able to use what they've learned in the programme in the future
    - Mean Average Score: 4.12 (Standard Deviation: 0.60)
- 78% of female pupils 'Agree' or 'Strongly Agree' that the content of the programme was relevant to their studies
    - Mean Average Score: 3.91 (Standard Deviation: 0.86)

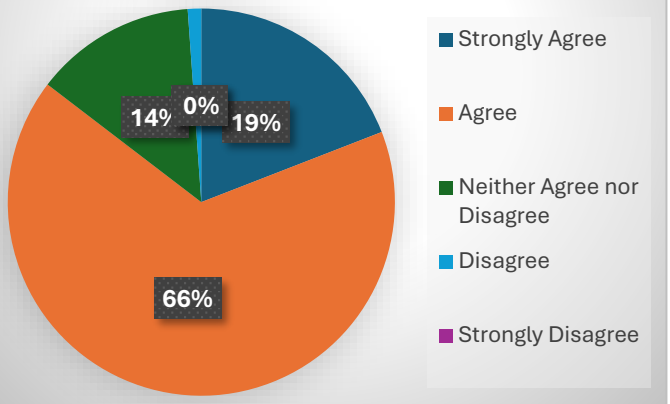




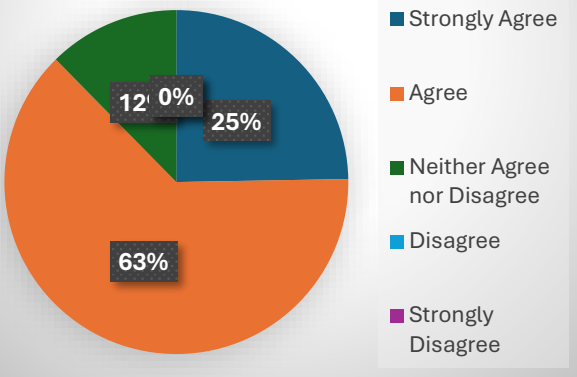
What I Learned in this Workshop is Relevant to my Studies (Male)



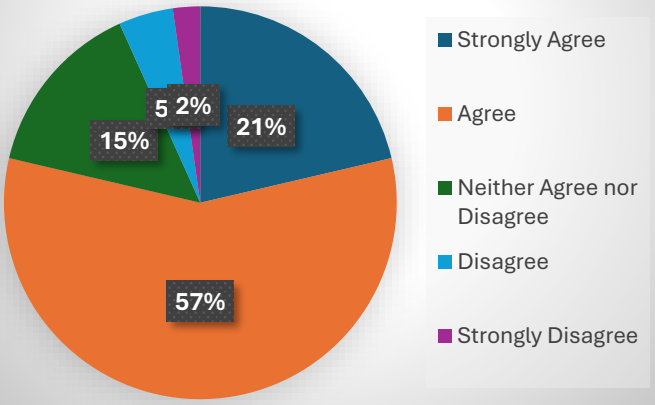
I Feel I Have Learned or Developed a Useful Skill in this Workshop (Female)



I Will Be Able to Use What I've Learned in this Workshop in the Future (Female)

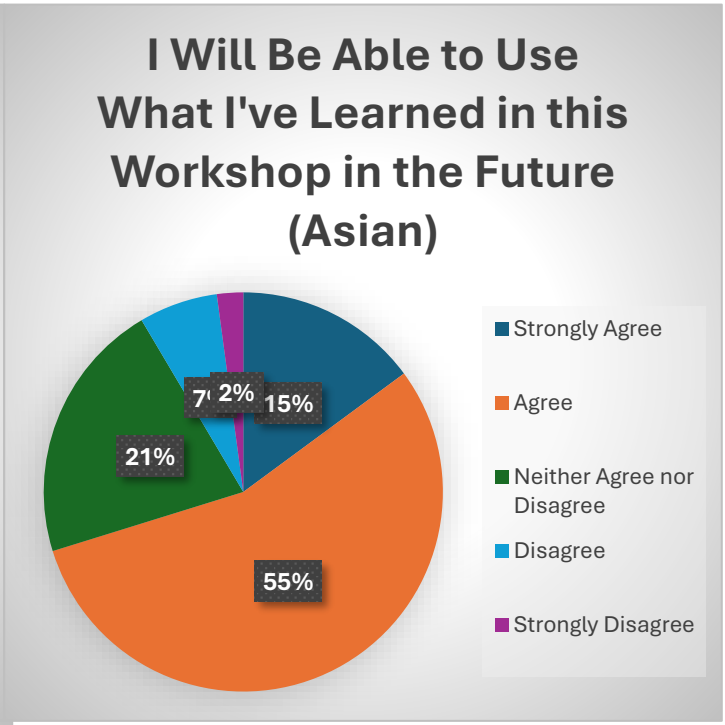


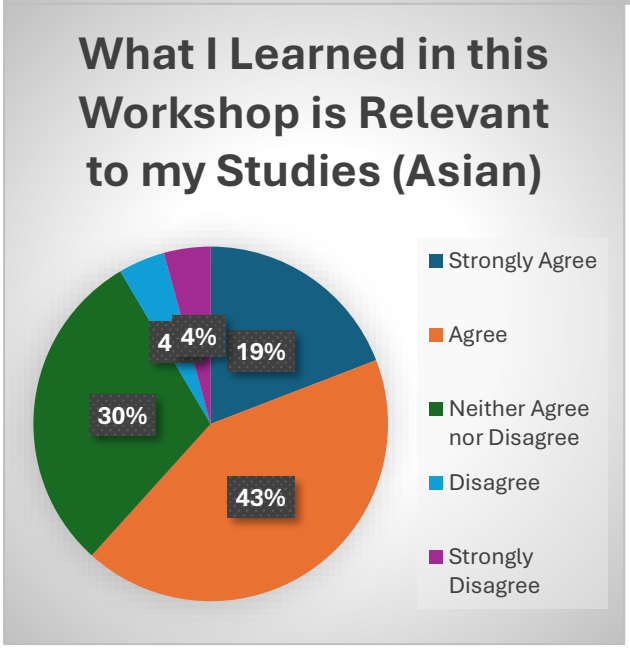
What I Learned in this Workshop is Relevant to my Studies (Female)



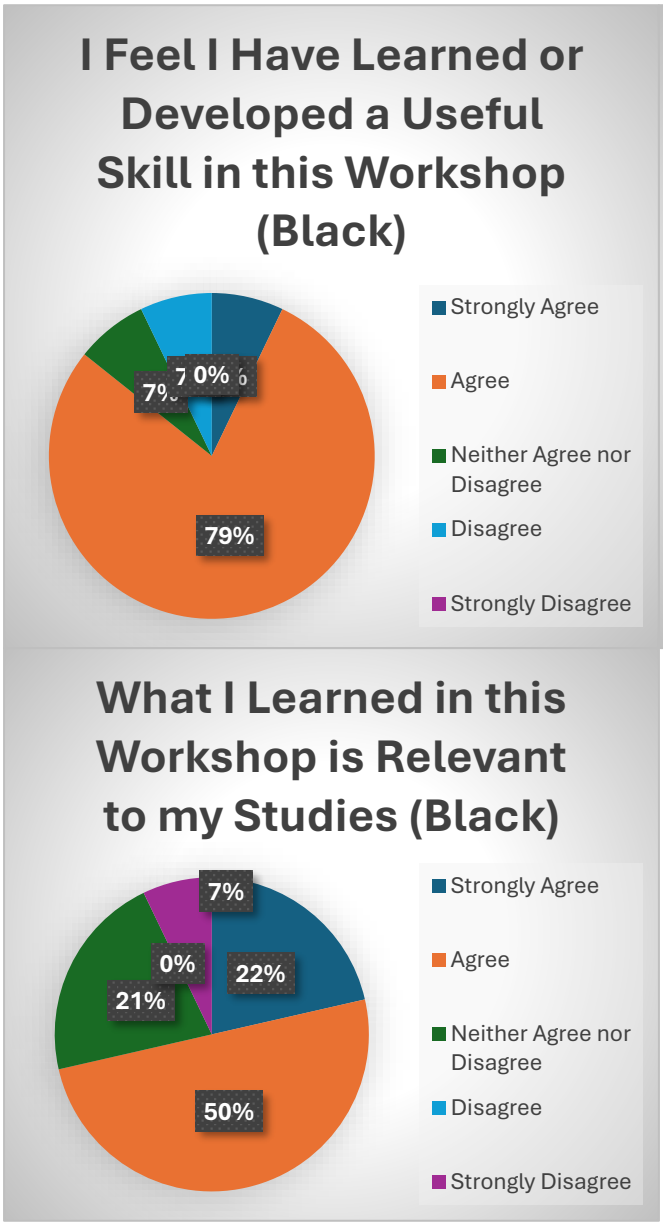
For Asian, Black and Mixed-Race pupil demographics (Sample Sizes 47, 14 and 6 respectively):

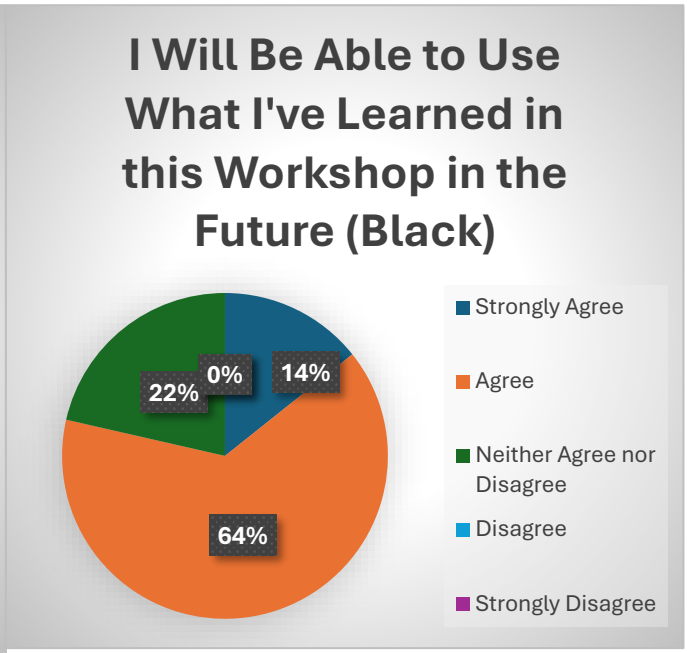
- 66% of Asian pupils 'Agree' or 'Strongly Agree' that they learned and/or developed a useful skill as part of the programme
    - Mean Average Score: 3.77 (Standard Deviation: 0.88)
- 70% of Asian pupils 'Agree' or 'Strongly Agree' that they will be able to use what they've learned in the programme in the future
    - Mean Average Score: 3.74 (Standard Deviation: 0.86)
- 62% of Asian pupils 'Agree' or 'Strongly Agree' that the content of the programme was relevant to their studies
    - Mean Average Score: 3.68 (Standard Deviation: 0.97)



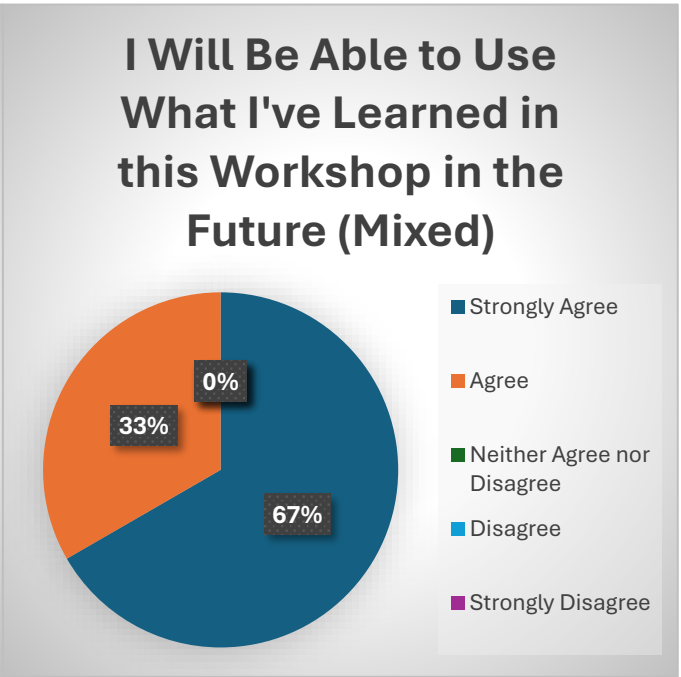


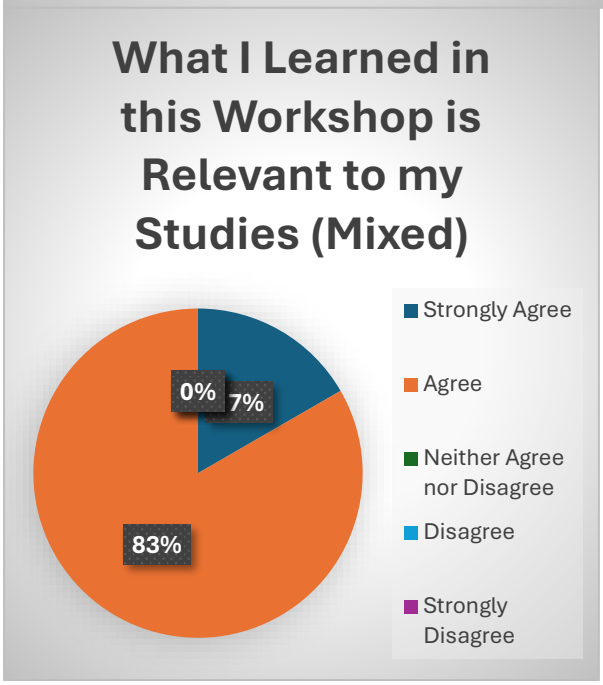
- 86% of Black pupils 'Agree' or 'Strongly Agree' that they learned and/or developed a useful skill as part of the programme
    - Mean Average Score: 3.86 (Standard Deviation: 0.64)
- 78% of Black pupils 'Agree' or 'Strongly Agree' that they will be able to use what they've learned in the programme in the future
    - Mean Average Score: 3.93 (Standard Deviation: 0.59)
- 71% of Black pupils 'Agree' or 'Strongly Agree' that the content of the programme was relevant to their studies
    - Mean Average Score: 3.79 (Standard Deviation: 1.01)





- 100% of Mixed-Race pupils 'Agree' or 'Strongly Agree' that they learned and/or developed a useful skill as part of the programme
    - Mean Average Score: 4.17 (Standard Deviation: 0.37)
- 100% of Mixed-Race pupils 'Agree' or 'Strongly Agree' that they will be able to use what they've learned in the programme in the future
    - Mean Average Score: 4.67 (Standard Deviation: 0.47)
- 100% of Mixed-Race pupils 'Agree' or 'Strongly Agree' that the content of the programme was relevant to their studies
    - Mean Average Score: 4.17 (Standard Deviation: 0.37)





Key messages, Conclusions and Further Recommendations (Study Skills)

- Overall, pupils were positive as to the usefulness of the skills they learned and/or developed as part of the programme (80% 'Strongly Agree' or 'Agree'). In addition, the majority understood the future applications of these skills (80% 'Strongly Agree' or 'Agree'). However, relevance to current studies trended lower (69% 'Strongly Agree' or 'Agree').
- There is a significant discrepancy between positive feedback responses from male and female pupils as to the value, importance, relevance and applicability of the skills being taught.
- Asian pupils responded less positively than the overall average and any of the other identified ethnicities that participated in the programme. In addition, for Black and Mixed-Race pupils, whilst responses were largely positive, the sample size was small.

Conclusions to Learning Research Questions- Study Skills

Does Participation in Study Skills Sessions Improve Self-Reported Academic Skills and their Use in Education?

- Feedback indicates that pupils had a strong sense that the skills they were learning were both useful, applicable to their futures and, to a lesser extent, relevant to their studies. Target areas for improvement include focusing on skills relevancy, to ensure pupils have a stronger sense of context for the sessions. It can be suggested from the feedback data and teacher comments that the sessions may have had a minor to moderate positive effect on student attainment in the subject areas and skills covered during the sessions.

Does Participation in Study Skills Sessions Improve Self-Reported Academic Confidence and Attitudes to Learning?

- We have insufficient quantitative data from the surveys conducted with participants to make a strong claim about the impact of sessions on pupil behaviour. Anecdotally, pupil engagement with learning materials could be said to correlate with improved behaviour and confidence in the classroom. However, with the data we have, we cannot make a more concrete claim than these sessions may have had a positive impact on academic self-confidence and attitudes to learning because of pupil engagement and their self-reported sense of value of the sessions.

Results of Statistical Analysis- Metacognition

Quantitative Analysis- Longitudinal Data Derived from Paired T-Tests

The following are the results from the paired T-Test, including relevant p-values and effect sizes. Note that the individual items have been included for interest purposes, with the overall concept t-test presented in the final row.

	Mean Before (*SD*)	Mean After (*SD*)	Statistical Test (t Stat)	Effect Size
I can tell when I've understood a concept or idea	3.95 (*0.71*)	3.88 (*0.74*)	t (85) = 0.81, p = 0.42	d = -0.10
I can motivate myself to study when I need to	3.37 (*1.05*)	3.45 (*1.02*)	t (85) = -0.77, p = 0.45	d = 0.08
I can think of several ways to solve an academic problem and then choose the best way	3.41 (*0.91*)	3.60 (*0.80*)	t (85) = -1.79, p = 0.08	d = 0.22
I am confident that I can learn and study effectively	3.65 (*0.85*)	3.74 (*0.87*)	t (85) = -0.85, p = 0.40	d = 0.11
Mean Averages (Pre vs. Post)	3.60 (*0.64*)	3.67 (*0.67*)	t (85) = -1.04, p = 0.30	d = 0.12

Analysis of the Data

- The statistical test p-values for all the survey questions, excluding Item 3: “I can think of several ways to solve an academic problem and then choose the best way”, but critically for the mean average of responses, is above the acceptable threshold of 0.05. As such, we cannot infer that any of the changes observed were because of participation in the programme, aside from potentially those observed in Item 3.

- Across three of the four survey questions, negligible to small positive effect sizes were observed, with the largest impact being a 0.22 effect size from “I think of several ways to solve an academic problem and then choose the best way”. This could be indicative that participation in the programme resulted in some small improvements in participants’ motivation, academic flexibility and academic self-confidence. However, given the small effect sizes and lack of statistical impact, it is likely that impact was negligible overall.

- The overall mean average of responses for pre- and post-sessional survey data demonstrates a negligible positive effect size of 0.12. This could indicate general small improvements in participants’ metacognitive skills because of participating in the programme. Again, given the small effect size, it is likely this impact was also negligible overall.

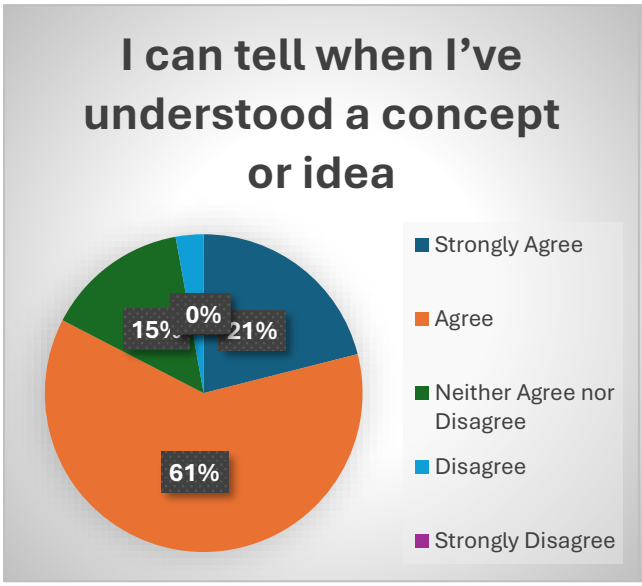
- One of the survey questions, “I can tell when I’ve understood a concept or idea”, has a negligible negative effect size of -0.10, which could be indicative of participants reporting a higher level of confidence in their academic abilities pre-session. This change, like the changes observed above, is also likely negligible.

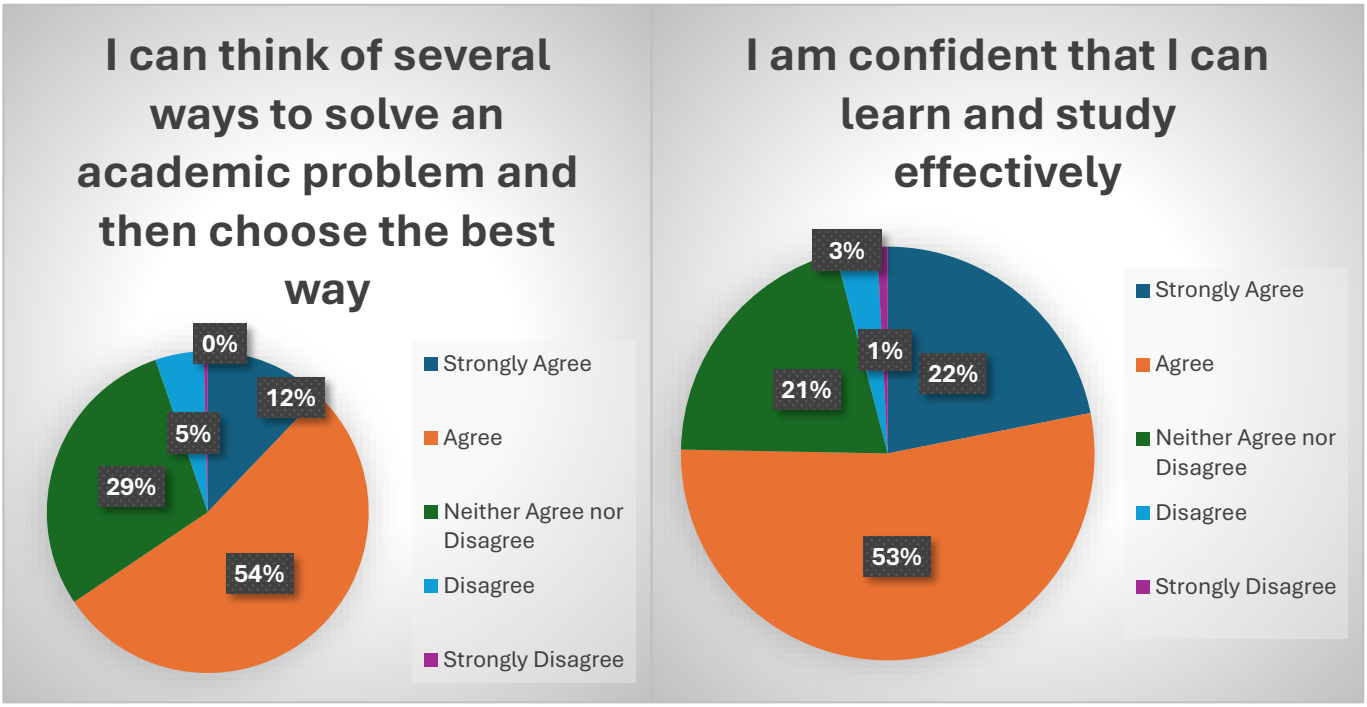
Quantitative Analysis- Pupils (Post-Sessional Data)

The following is the quantitative data on self-reported pupil perceptions of metacognitive skills and academic self-confidence after the programme, broken down by item.

Overall, across all participant demographics, from survey data collected post-session (Sample Size: 247):

- 83% of pupils 'Agree' or 'Strongly Agree' that they can tell when they've understood a concept or idea
  - Mean Average Score: 4.01 (Standard Deviation: 0.69)
- 62% of pupils 'Agree' or 'Strongly Agree' that they can motivate themselves to study when they need to
  - Mean Average Score: 3.64 (Standard Deviation: 0.93)
- 65% of pupils 'Agree' or 'Strongly Agree' that they can think of several ways to solve an academic problem and then choose the best way to solve it
  - Mean Average Score: 3.72 (Standard Deviation: 0.75)
- 75% of pupils 'Agree' or 'Strongly Agree' that they are confident that they can learn and study effectively
  - Mean Average Score: 3.92 (Standard Deviation: 0.79)





For male and female participant demographics, from survey data collected post-session (Sample Sizes 108 and 89 respectively):

- 78% of male pupils ‘Agree’ or ‘Strongly Agree’ that they can tell when they’ve understood a concept or idea
    - Mean Average Score: 3.92 (Standard Deviation: 0.71)
- 56% of male pupils ‘Agree’ or ‘Strongly Agree’ that they can motivate themselves to study when they need to
    - Mean Average Score: 3.54 (Standard Deviation: 0.99)
- 67% of male pupils ‘Agree’ or ‘Strongly Agree’ that they can think of several ways to solve an academic problem and then choose the best way to solve it
    - Mean Average Score: 3.69 (Standard Deviation: 0.82)
- 71% of male pupils ‘Agree’ or ‘Strongly Agree’ that they are confident that they can learn and study effectively
    - Mean Average Score: 3.92 (Standard Deviation: 0.83)
- 83% of female pupils ‘Agree’ or ‘Strongly Agree’ that they can tell when they’ve understood a concept or idea
    - Mean Average Score: 3.99 (Standard Deviation: 0.68)
- 65% of female pupils ‘Agree’ or ‘Strongly Agree’ that they can motivate themselves to study when they need to
    - Mean Average Score: 3.62 (Standard Deviation: 0.88)
- 63% of female pupils ‘Agree’ or ‘Strongly Agree’ that they can think of several ways to solve an academic problem and then choose the best way to solve it
    - Mean Average Score: 3.71 (Standard Deviation: 0.67)
- 74% of female pupils ‘Agree’ or ‘Strongly Agree’ that they are confident that they can learn and study effectively
    - Mean Average Score: 3.80 (Standard Deviation: 0.78)

For Asian, Black and Mixed-Race participant demographics, from survey data collected post-session (Sample Sizes 47, 14 and 6 respectively):

- 78% of Asian pupils ‘Agree’ or ‘Strongly Agree’ that they can tell when they’ve understood a concept or idea
    - Mean Average Score: 3.95 (Standard Deviation: 0.74)
- 64% of Asian pupils ‘Agree’ or ‘Strongly Agree’ that they can motivate themselves to study when they need to
    - Mean Average Score: 3.53 (Standard Deviation: 1.05)
- 57% of Asian pupils ‘Agree’ or ‘Strongly Agree’ that they can think of several ways to solve an academic problem and then choose the best way to solve it
    - Mean Average Score: 3.55 (Standard Deviation: 0.74)
- 64% of Asian pupils ‘Agree’ or ‘Strongly Agree’ that they are confident that they can learn and study effectively
    - Mean Average Score: 3.64 (Standard Deviation: 0.86)
- 85% of Black pupils ‘Agree’ or ‘Strongly Agree’ that they can tell when they’ve understood a concept or idea
    - Mean Average Score: 3.86 (Standard Deviation: 0.83)

- 50% of Black pupils ‘Agree’ or ‘Strongly Agree’ that they can motivate themselves to study when they need to
    - Mean Average Score: 3.50 (Standard Deviation: 1.12)
- 64% of Black pupils ‘Agree’ or ‘Strongly Agree’ that they can think of several ways to solve an academic problem and then choose the best way to solve it
    - Mean Average Score: 3.71 (Standard Deviation: 0.59)
- 86% of Black pupils ‘Agree’ or ‘Strongly Agree’ that they are confident that they can learn and study effectively
    - Mean Average Score: 4.14 (Standard Deviation: 0.83)

- 83% of Mixed-Race pupils ‘Agree’ or ‘Strongly Agree’ that they can tell when they’ve understood a concept or idea
    - Mean Average Score: 4.17 (Standard Deviation: 0.69)
- 67% of Mixed-Race pupils ‘Agree’ or ‘Strongly Agree’ that they can motivate themselves to study when they need to
    - Mean Average Score: 3.67 (Standard Deviation: 0.47)
- 84% of Mixed-Race pupils ‘Agree’ or ‘Strongly Agree’ that they can think of several ways to solve an academic problem and then choose the best way to solve it
    - Mean Average Score: 4.00 (Standard Deviation: 0.58)
- 84% of Mixed-Race pupils ‘Agree’ or ‘Strongly Agree’ that they are confident that they can learn and study effectively
    - Mean Average Score: 4.00 (Standard Deviation: 0.58)

Main Conclusions and Recommendations

Conclusions

From a quantitative perspective, the reception of the Skills in Schools programme was largely positive. Participating pupils were engaged and valued the sessions they participated in; teacher feedback was overwhelmingly positive, with 100% of all teachers surveyed agreeing that they would participate in the programme in future. Data also indicates that the majority of pupils felt they learned and/or developed useful, relevant and applicable skills as part of the programme. This positive feedback was consistent across the majority of participating demographics, with some discrepancies between male and female students and some shortfalls in target groups such as Black and Asian students. Teacher commentary on the impact of the sessions in the medium to the long-term was also positive. As such, we can infer that the Skills in Schools programme likely had a positive impact on participant attainment.

However, in terms of measuring the impact of the Skills in Schools programme, the results of the paired T-Test on metacognition were not able to prove a statistically significant correlation between participation in the sessions and improvements in metacognitive skills. In addition, whilst feedback on self-reported metacognitive skills post-session was largely positive, there were several areas that require improvement. Whilst we can suggest a potential correlation between positive reports of metacognition and participation in the

sessions, we cannot make a stronger link than that. In future, a larger sample size and a different methodology when approaching pre- and post-evaluation will be necessary to ensure more reliable results.

Qualitative feedback from both teachers and pupils for the Skills in Schools programme was almost universally positive. Pupils enjoyed their time in the sessions and were enthusiastic and engaged. Teachers reported that they and their pupils valued the time they spent on the programme and were very complimentary about the way the programme was convened, structured, organised and delivered. This is consolidated by all feedback variables from teachers being 100% positive (i.e. 100% 'Agree' and 'Strongly Agree' across all questions).

Main Recommendations

1. Ensure that either pupils provide more accurate details about ethnicity and gender where possible or ask teachers to provide more complete information about participating students.
2. Provide targeted outreach opportunities aimed at black pupils to improve their participation rate in the programme.
3. Female pupils have a significantly more positive response to study skills workshops than male pupils. Focus on providing targeted outreach for male participants, and/or work on delivery to suit the needs of male pupils more closely.
4. Whilst Black pupils are responding similarly to the averages across all demographics, Asian pupils are below the average on several variables, specifically engagement and recommendation. These areas need to be targeted for this demographic specifically.
5. Work more closely with external providers and other branches of the university to provide a more consistently positive experience for teachers and students participating in the Skills in Schools programme.
6. The overall percentage of positive responses to the survey question of whether the material was relevant to pupils' current studies is 11% lower than the percentages of positive responses to the other two survey questions. As such, material needs to be retooled for the new academic year to ensure it is as strictly relevant to pupils as possible, to express how this material will be useful to them in context and in relation to raising their attainment.
7. Investigate which aspects of metacognition had smaller improvements and ensure sessions are focusing on these core skills.
8. There is a considerable discrepancy between positive feedback responses from male and female pupils. Female pupils have responded positively to the skills element of the programme at a rate of 17%, 23% and 20% higher than male pupils across these three variables respectively. As such, we need to ensure future iterations of the programme focus more on improving the male experience, ensuring they engage with the skills being taught more positively. This could be achieved through focused and/or targeted outreach, or by focusing on a broader range of subjects that may be more applicable to male pupils.
9. Across all three variables, Asian pupils exhibit lower rates of positive feedback than the overall average. As such, more work must be done to ensure Asian pupils are engaged with and benefitting from the programme. In addition, although Black pupils

exhibit high rates of positive feedback in line with the overall percentages, the sample size for this demographic is small at 14 pupils. As such, to ensure that this data is representative, a larger sample size is necessary for future years of the programme. Finally, only 6 Mixed Race pupils participated in the programme- as such, the data is likely unreliable or otherwise not statistically significant. Again, more sustained recruitment is necessary in future.

10. A larger sample size is necessary to ensure paired T-Test analysis is reliable and statistically significant. In addition, a change in the survey questions is necessary to ensure accurate data capture for the Year 7 to Year 13 demographic this programme is aimed at.
11. Ensure targeted outreach is in place to attract schools with higher percentages of IMD Q1 & Q2 students to the Skills in Schools programme. Create bespoke activities designed with these students in mind and support them with engaging consistently in the programme.

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Notes

This report has been reviewed by members of the Access and Participation Evaluation Subcommittee (APES), with particular support on data analysis in an earlier version.

Appendix – Theory of Change

Note, the below is a combined Theory of Change for three attainment raising programmes, of which study skills is one.