



Research Note: The Scholars Programme and Raising Attainment

One of the biggest barriers to accessing the most competitive universities is achieving good grades at secondary school. The Education Policy Institute estimates that by the time they sit their GCSEs, FSM-eligible students have fallen 18.8 months behind their peers ([Education Policy Institute, 2023](#)).

The Brilliant Club's [Scholars Programme](#) gives students from non-selective state schools and colleges the opportunity to work with a PhD researcher to experience university-style learning. It helps students to develop the university knowledge, academic skills, and attainment to secure a place at a competitive university. Specifically, the programme supports students' attainment in two ways:

1) Scholars Programme students have higher GCSE scores than Local Authority students who have similar Key Stage 2 prior attainment

Methodology

We are a member of the Higher Education Access Tracker ([HEAT](#)), which helps us to evaluate the impact of The Scholars Programme through accessing data from the National Pupil Database ([NPD](#)) and the Higher Education Statistics Agency ([HESA](#)). Using the NPD, our latest data from HEAT includes the average GCSE scores for 1,060 students who participated in The Scholars Programme in 2018/19 (Year 10) and were awarded their GCSEs in the 2019/20 academic year.¹

Importantly, HEAT also provides the overall average Local Authority GCSE scores from the 2019/20 academic year. The average Local Authority GCSE score is calculated based on the Local Authority of the Scholars Programme students' schools and includes all state schools in each relevant Local Authority.

The GCSE metric of interest for this report is the percentage of students who achieved a 9-5 in maths and English. We can estimate the difference between the percentage of Scholars Programme students achieving a 9-5 in maths and English and the percentage of Local Authority students achieving a 9-5 in maths and English. The comparison includes:

Percentage of Scholars Programme students achieving a 9-5 in maths and English

VS.

Percentage of Local Authority students achieving a 9-5 in maths and English

We have accounted for prior attainment at Key Stage 2, between The Scholars Programme students and the Local Authority students, to ensure we are comparing similar groups of students in this analysis. The methodology used to create the Local Authority comparator groups and the conclusions drawn from the analysis have also been peer-reviewed by academics working in the student access and success space.

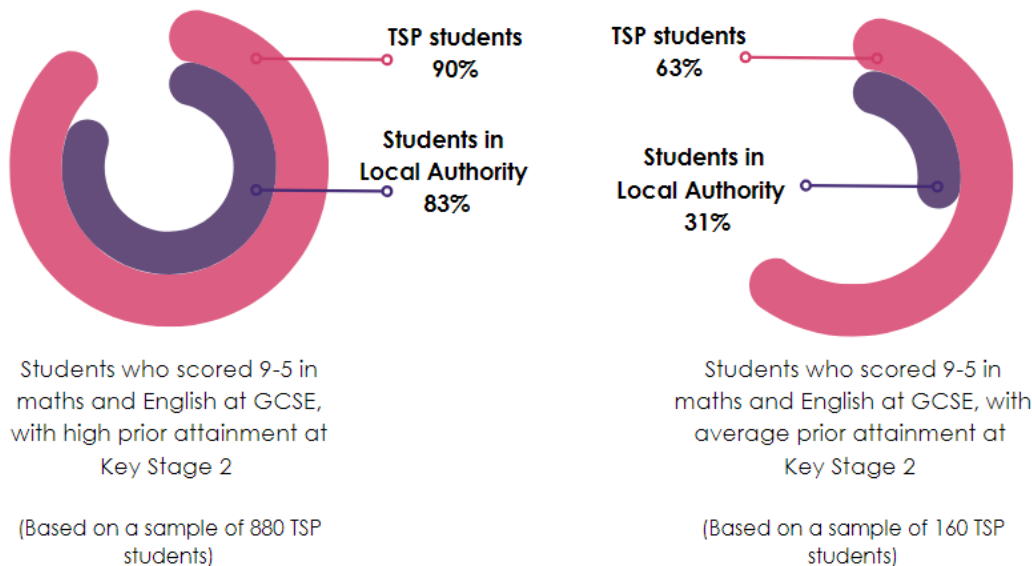
Key findings

HEAT compares the average GCSE scores of Scholars Programme students to the Local Authority average for the subset of students who scored similarly in Key Stage 2 (KS2). This means that we look at the GCSE attainment of participants in relation to their prior attainment at KS2.

Specifically, students were placed into three categoriesⁱⁱ of KS2 attainment: 1) low – did not meet expected standard at end of KS2, 2) average – met expected standard at end of KS2 or 3) high – reached higher than expected standard at end of KS2. This allows us to compare GCSE scores between Scholars Programme students and Local Authority students who have similar KS2 scores.

The comparison shows that Scholars Programme students have higher GCSE scores than Local Authority students who have similar KS2 prior attainment:

GCSE Scores of Year 10 Scholars Programme Students



Students who did The Scholars Programme in Year 10, with average Key Stage 2 prior attainment, were twice as likely to achieve a 9-5 in maths and English at GCSE.

Conclusions and next steps

The analysis shows how the Scholars Programme students in 2018/2019 achieved higher GCSEs compared to similar students in their local area (Local Authority), accounting for prior attainment at KS2.

This type of analysis provides supportive evidence that The Scholars Programme contributes to the raising of students' attainment. The analysis shows a positive relationship between participation in The Scholars Programme and GCSE results, with the largest improvements for mid-prior attainers, when compared to similar students not participating in the programme.

However, this comparison cannot control for further influencing factors like participants' motivation or engagement in their education. We will continue to collaborate with HEAT and make use of their tools to develop more robust comparator groups so that we can further understand the impact of The Scholars Programme on attainment at GCSE and A-Level.

Dr Anna Anthony, Co-Director of HEAT, reflected on the findings:

"We are delighted to provide the data underpinning this research which shows a clear positive relationship between participation in The Brilliant Club's Scholars Programme and GCSE attainment. The analysis provides a solid foundation to improve our understanding of the impact of attainment-raising programmes such as the Scholars Programme and we look forward to continuing to work with The Brilliant Club to generate robust causal evidence for future cohorts. These results would not be possible without the collaboration of the Department for Education who provide attainment outcomes for all HEAT member organisations to evaluate their interventions."

2) Scholars Programme students show a significant improvement in attainment-related outcomes

Intermediate outcomes refer to outcomes that occur following a targeted intervention or activity, and may include changes in behaviour, attitude, knowledge, or skill. It is important to identify empirical evidence that an intermediate outcome is associated with positive changes in the relevant long-term outcome. In the case of widening participation, long-term outcomes are often attainment and progression to higher education. However, more recently, success in higher education (e.g. retention, degree classification) has also been cited as a key long-term outcome, consistent with a more comprehensive definition of higher education access and success.

In November 2022, our research and impact team conducted an evidence review to examine the intermediate outcomes that are associated with attainment on behalf of the affiliated What Works Centre, the Centre for Transforming Access and Student Outcomes in Higher Education ([TASO](#)). Based on the review, there is clear evidence that intermediate outcomes, such as academic self-efficacy (the belief that you can succeed in university-

style learning) and critical thinking, are an essential stepping-stone for attainment both within school and higher education settings ([Thomson, Bellaera, Ilie & Maragkou, 2022](#)).

The Scholars Programme develops intermediate outcomes that are strongly associated with improvements in school attainment. For students who complete the programme, we consistently see improvements in academic self-efficacy (7% increase), critical thinking (27% increase), subject knowledge (23% increase) and written communication (24% increase). Furthermore, a randomised controlled trial (RCT) conducted by researchers at the University of Cambridge in 2019/20 showed that students who take part in The Scholars Programme report significantly higher levels of academic self-efficacy for university-style learning. In Appendix 1, we present further information about these outcomes and how The Scholars Programme develops them.

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Appendix 1: Attainment-related outcomes and The Scholars Programme

Outcome	Definition	Key evidence	Design of The Scholars Programme	Impact of The Scholars Programme	What students tell us
Academic self-efficacy	Individuals' confidence in their own ability and skills necessary to perform well academically in higher education.	Academic self-efficacy consistently emerges as the strongest correlate of attainment. Part of this high correlation can be attributed to the fact that prior attainment affects both self-efficacy and subsequent attainment.	On The Scholars Programme, students experience university-style learning and develop the skills, knowledge, and confidence to go on to, and excel at, the most competitive universities.	We use a measure of self-efficacy in relation to university-style learning. University self-efficacy is made up of: academic skills, university knowledge and sense of belonging. In Summer 2023, Scholars Programme students' university self-efficacy increased by 7%.	"I really enjoyed the Scholars Programme. It helped me with my schoolwork and built up my confidence and resilience."
Critical thinking	Purposeful reflection, logical reasoning and the ability to construct and evaluate arguments and engage in reflective scepticism	The ability to think critically is a strong predictor of academic achievement in children and adults, and successful life decisions in general.	The university style teaching in The Scholars Programme promotes critical thinking through small class sizes and open-ended questions and extended written tasks.	In Summer 2023, critical thinking scores increased by 27% between the baseline and final assignment, which is marked by the PhD tutor.	"The advice on critical thinking and how to check the reliability of sources made it clear on how to work with sources in a research project and generally."

Subject knowledge	Understanding subject-specific concepts, ideas, issues and methodologies, and how they relate to each other. Subject knowledge taught in the programme relates to broad areas of the curriculum (e.g. humanities, social sciences and STEM).	Improvements in academic skills is linked to higher performance within school. Better performance in GCSEs is linked to a higher likelihood of progression to university.	Courses designed by PhD tutors on The Scholars Programme span all academic disciplines, ranging right across all areas of STEM, Social Sciences and Arts and Humanities.	In Summer 2023, subject knowledge increased by 23% between the baseline and final assignment which is marked by the PhD tutor.	"I learned how to understand and gain subject knowledge while also being able to evaluate my points across clearly and improve my writing style significantly."
Written communication	The process of conveying messages and exchanging information through written language.	To perform well academically at school, students must be able to write at length for different purposes and audiences, select and organise ideas to write about, use appropriate vocabulary and grammar, and revise their own writing.	To complete the programme, students need to write an essay (usually longer than their previous essay experience) which builds their confidence in writing.	In Summer 2023, written communication scores increased by 24% between the baseline and final assignment which is marked by the PhD tutor.	"It was brilliant to be taught by a PhD tutor. We learnt how to structure essays and how to effectively argue points across to an audience."

ⁱ In 2019/20 students received teacher assessed grades for their GCSEs which differed in several ways from GCSE grades that are awarded for exams ([Ofqual](#)) so these results are relevant for this specific GCSE year.

ⁱⁱ The KS2 attainment groups correspond to an average scaled score in English reading and maths of below 100 (low prior attainer group); greater than or equal to 100 but less than 110 (average prior attainers group); greater than or equal to 110 (high prior attainers group).