

Prep4Uni with the Brilliant Club 2023/24: An Evaluation

Lissy Upton, Regional Recruitment and Access Manager (UK Recruitment and Outreach), March 2025

Contents

Executive Summary	3
Introduction.....	4
Report caveat	4
Rationale.....	4
Intervention	5
Context	5
Link to Access & Participation Plan (APP)	5
Previous evaluation	6
Methodology.....	6
Research questions	6
Participants	6
Data collection	7
Ethics and Data Security.....	9
Data analysis	9
Type of evaluation	9
Limitations.....	9
Results	9

APP Evaluation Report - Prep4Uni2024

Conclusions & recommendations12

 Conclusions 12

 Recommendations.....12

Acknowledgements 13

Notes.....13

Appendix 1: Theory of Change.....14

Appendix 2: Engagement rates across the Prep4Uni 2024 programme.....14

Appendix 3: Prep4Uni Summer School Feedback15

Executive Summary

The activity

The Preparing for University (Prep4Uni) 2024 programme was run in partnership with the Brilliant Club as an intensive scheme for Year 12/Year 1 College students from our target regional areas (London & Kent, South Wales, the South Coast and West Midlands). The scheme combined academic experience across five subject strands¹ delivered by PhD tutors, with information, advice and guidance sessions delivered in-person at the University of Reading and an optional residential summer school.

The evaluation

The evaluation methodology was Type 2, with a comparison of pre and post scores. There were 64 participants who confirmed their place on the programme, all of whom completed the pre-event evaluation. 21 participants completed the post-event evaluation.

Main findings

The following five concepts were measured:

- Intention to progress to HE
- University knowledge
- Sense of belonging
- Academic self-efficacy
- Concerns about university.

The results showed statistically significant increases in the areas of University knowledge and Sense of belonging for students completing the Prep4Uni programme.

There were not statistically significant improvements in Intention to progress to higher education or statistically significant decreases in the measure of Concerns about university. In the area of Academic self-efficacy, mean scores decreased from the pre to post survey but were not statistically significant.

Conclusions/recommendations

The results suggest that the Prep4Uni programme had a significant, positive impact on students' knowledge of university and their sense of belonging, however the desired impact on students' academic self-efficacy, intention to progress to HE and concerns about HE, was not seen. The results are not causal as students may have also been impacted by numerous other external factors. Analysis of the larger pool of pre survey submissions showed that the areas where students felt least confident before beginning the programme were in their knowledge of higher education, the application process and what studying at university would be like. This indicates that future iterations of the

¹ Biology and Chemistry, Creative Writing, History & Politics, Law and Psychology.

programme focusing more heavily on information, advice and guidance content, while still providing real-life experience of HE, may be most beneficial to our target audience.

Introduction

Report caveat

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

At the University of Reading, students from IMD² Q1 are significantly underrepresented students both against their peers in other quintiles and in comparison, to the HE sector. Although the sector shows a positive IMD Q1-Q5 gap³, at the University of Reading there is a significant gap of 23.4pp according to the latest available data ([Office for Students Data Dashboard](#), 2022-23). Although the University has exceeded targets in raising the number of POLAR Q1 and Q2 students, we are also below the sector average for both POLAR and TUNDRA Measures with a gap of 24.2pp of TUNDRA Q1-Q5 students against a sector gap of 17.2pp ([Office for Students Data Dashboard](#), 2022-23). This intervention is part of a wider intervention strategy designed to support our target groups in applying and enrolling to higher education by increasing their knowledge and confidence, as well supporting subject-specific skills required for HE success.

² Indices of Multiple Deprivation, see <https://static.reading.ac.uk/content/PDFs/files/Evaluation/Access-and-Participation-Evaluation-glossary.pdf> for further explanation of this and the other measures referenced within the report.

³ The figures for entrants to all registered English higher education providers (Office for Students Data Dashboard, 2022-23 data) show that the percentage of entrants from IMD Q1 is higher (at 23.6%) than the number of entrants IMD Q5 (at 19.1%).

Research has shown that multi-intervention activities can be more effective in promoting HE progression⁴ and the use of mentoring and access to role models also has a positive effect⁵.

Intervention

The Preparing for University programme ran from April – July 2024 and included an in-person launch at the University, followed by virtual subject tutorials and a university-style written assessment. The scheme concluded with an optional summer school, run alongside the Year 12 Scholars programme (a longer intensive access focussed programme for Year 12 students which also offers a residential component - report also available). The programme ran with five subject strands, as per previous years, with a choice of Biology and Chemistry, Creative Writing, History and Politics, Law or Psychology offered. The programme has been running since 2021 but due to Covid restrictions, this was only the second year of running it in the current format including an in-person summer school.

In-person events were organised and coordinated by University of Reading staff, with academic staff also supporting the delivery of subject taster sessions as part of the summer school. Participants were provided with free travel, accommodation (for the summer school only) and all meals.

Tutorials were delivered by University of Reading PhD tutors, recruited and trained by the Brilliant Club. The Brilliant Club provided a Virtual Learning Environment for participants and managed the organisation of all virtual sessions, as well as coordinating the marking of the final assessment.

Both in-person and virtual sessions were supported by a team of student ambassadors, the majority of whom were studying subjects related to the subject strands offered.

Context

The evaluation covers the programme delivered in April – July 2024. Support is ongoing for participants from the programme as they go into Year 13/2nd year of college and make their university applications. Ongoing impact will be reviewed through the tracking of students applications to higher education through HEAT and UCAS and our own University of Reading application data.

Link to Access & Participation Plan (APP)

This activity contributes to the APP Intervention Strategy 2 to achieve a socio-economic mix within our student population that reflects the demographic of the year 12 and 13 population within our catchment regions.

⁴ Burgess, A. P., Horton, M. S., & Moores, E. (2021). Optimising the impact of a multi-intervention outreach programme on progression to higher education.

⁵ Sanders, M., Burgess, S., Chande, R., Dilnot, C., Kozman, E., & Macmillan, L. (2018). Role models, mentoring and university applications – evidence from a crossover randomised controlled trial in the United Kingdom. *Widening Participation And Lifelong Learning*, 20(4), 57-80.

Previous evaluation

Previous evaluation has tracked overall increases in confidence and knowledge but surveys were anonymised. This is the first year that programme participants have been evaluated using the TASO framework.

Methodology

Research questions

The research questions were:

1. Does participating in the Prep4Uni programme increase participants intention to progress to HE?
2. Does participating in the Prep4Uni programme improve participants knowledge of university and what it entails?
3. Does participating in the Prep4Uni programme increase students sense of belonging and belief that they would fit in at university?
4. Does participating in the Prep4Uni programme improve students' academic self-efficacy?
5. Does participating in the Prep4Uni programme helps reduce students' concerns about progressing to higher education?
6. Does participating in the Prep4Uni programme improve progression and enrolment to higher education, and specifically the University of Reading?

Participants

The programme was advertised to target schools and colleges in London, Kent, South Wales, the South Coast and the West Midlands. Although a variety of measures are used to identify target schools, the number of IMD Q1 students at these schools and college is generally higher than the local average. Targeted advertising (to IMD Q1-3 students from target regions) through the Unifrog website was also used.

Of the 93 applicants from the programme who met at least one of the eligibility criteria⁶, 78 students were initially offered places. 64 students confirmed their place on the programme, all of whom completed the pre-evaluation questionnaire. Following the

⁶ In order to be selected for the programme, students needed to meet at least one of the following widening participation criteria:

- Live in a POLAR4 Q1 or Q2 neighbourhood and TUNDRA MSOA Q1 or Q2 neighbourhood
- Live in an area in IMD Q1 or Q2
- Be an asylum seeker or refugee
- Be currently living in or have previously spent time in the care of the local authority
- Be estranged from family (in Friends and Family Care)
- Be a carer for a family member who may be sick, disabled or has mental health problems or is misusing drugs or alcohol (Young Carer).

programme, 21 students completed the post-evaluation questionnaire. As may be expected, the highest submission rates were from those who had fully participated in the programme (with 18 out of the 21 students having attended the summer school).

Further details of the demographics of the students completing the pre-evaluation and post-evaluation surveys can be found below.

	Percentage of students completing the pre-evaluation survey	Percentage of students completing the post-evaluation survey
IMD Q1/2	79.7%	72.7%
POLAR Q1/2	51.6%	54.5%
TUNDRA Q1/2*	38.1%	38.9%
Female	84.4%	86.4%
Male	15.6%	13.6%
Black, Black British, Caribbean or African	29.7%	27.3%
Asian or Asian British	31.3%	27.3%
White	32.8%	31.8%
Mixed or multiple ethnic groups	4.7%	4.5%
Other ethnic group	1.6%	4.5%

* No TUNDRA data available for Welsh students who have been excluded from this total.

Data collection

Surveys

Participants were sent surveys at the point of confirming their attendance on the programme and again at the end of the programme (either on the final day of the summer school, or by email in July for those who didn't attend). The questions were asked on a 5-point Likert scale. The scale was 1-5 from 'Strongly disagree' to 'Strongly agree'. The questions were derived from [TASO Access and Success Questionnaire](#) scales and the [Toolkit for Access and Participation Evaluation](#).

The concepts measured were:

Concept	Items
---------	-------

Intention to progress to HE	I am thinking about going to university in the future
University knowledge	<p>I know what studying at university would be like</p> <p>I know how studying at university is different from studying in school/college</p> <p>I believe that if I apply to university, I will get a place</p> <p>I know enough about higher education to decide whether to go or not</p> <p>I understand how to apply to higher education</p> <p>I understand how the UCAS application process works</p>
Sense of belonging	<p>University is for people like me</p> <p>I would fit in well academically with others at university</p> <p>I would fit in well socially with others at university</p>
Academic self-efficacy	<p>I am confident that I can get the exam results required to progress to university</p> <p>I have the academic ability to do well at university</p> <p>I could manage with the level of study required at university</p>
Concerns	<p>I can't afford to continue into higher education because I am worried about getting into debt</p> <p>I do not feel confident in my ability to cope with learning in higher education</p>

Progression and enrolment

Progress and enrolment data is not yet available for this cohort – they will be tracked and reported on when this data becomes available.

Ethics and Data Security

All participants consented to share their data for evaluation purposes and for their data to be shared with the relevant tracking and monitoring organisations required e.g. HEAT.

Data analysis

Descriptive statistics were generated for each outcome measure.

Surveys

Survey results were analysed using a combination of Paired T tests and Non Parametric tests as not all pre-evaluation scores were normally distributed. Where distributions were not normal, the assumptions of a T-test were not met, meaning a non-parametric alternative was used. The concepts of Knowledge and Academic Self-Efficacy were measures using Paired T tests, the other concepts used Non-Parametric test. Effect sizes were also calculated.

Type of evaluation

This evaluation was conducted to Type 2, according to the Office for Students' Standard of Evidence classification. The intermediate outcomes were measured pre- and post-activity, with the same participants. If possible, participants will also be compared to demographically similar non-participants in terms of application and enrolment, when this data becomes available.

Limitations

Students undertaking the programme may have also been impacted by a number of other outside factors meaning that causal inference cannot be made from the results.

Although the post-event evaluation was sent to all participants, completion rates from those not attending the summer school were low. We therefore lost potential data, particularly from those only engaging with parts of the programme. This may also skew the results, as those who were not benefitting from the programme may have chosen to stop engaging and not complete surveys.

Train strikes impacting the launch events affected the overall numbers completing the programme. The small sample size of the post-evaluation survey (21 students) also limited the ability to detect all effects, although it should be noted that the proportion of respondents from different demographic groups was broadly equivalent to the overall participant pool, indicating there was not a bias in who responded.

Results

University knowledge and Academic self-efficacy

The mean scores, statistical significance test and effect sizes for the measures assessed using paired t-tests are shown below (n = 21).

Measure	'before' Mean (SD)	'after' Mean (SD)	Statistical test	Effect size
University knowledge	3.53 (0.58)	4.24 (0.54)	t(20) = -3.64, p<.001**	d = 1.23
Academic self-efficacy	4.00 (0.58)	3.92 (0.65)	t(20) = 0.47, p=.64	d = -0.14

** = significant at the 1% level.

The table shows that for the measure of **University knowledge**, the mean score was significantly higher at 4.24 in the 'Post' survey, compared to 3.53 in the 'Pre' survey. The results are statistically significant at the 1% level with a large effect size of $d = 1.23$. This suggests that the programme had a significant impact on this measure, though the association is not casual.

For the measure of **Academic self-efficacy**, there was a decrease in the mean responses in the 'Post' survey, compared to the 'Pre' survey. The survey results were not statistically significant. Although, it may be assumed that these confidence levels were impacted by the time of year when the questionnaires were completed and the relative point in their sixth-form studies (February vs. July), it is disappointing that completing the subject tutorials and assignment does not seem to have positively impacted the students own confidence in their ability to transfer these skills to their academic studies.

Intention to progress to HE, Sense of belonging and Concerns about Higher Education

The mean scores, statistical significance test and effect sizes for the measures assessed using Wilcoxon Signed Ranked Tests are shown below (n = 21).

A Wilcoxon Signed Ranked Test did not reveal a statistically significant increase in **Intention to progress to HE** following participation in the programme, $z = 10.5, p > .05$. The effect size was $r = 0.22$. Given the nature of the programme, we anticipated that most students would be fairly committed to progressing to HE, however the median score did increase from pre-programme ($Md = 4$) to post-programme ($Md = 5$) suggesting that the programme did have some impact on students' intention to progress onto higher education.

A statistically significant increase for the **Sense of belonging** measure was shown, $z = 9.5, p < .05$. There was also a medium effect size ($r = 0.76$). The median score increased from pre-programme ($Md = 4$) to post-programme ($Md = 4.33$). This suggested that the programme positively impacted participants sense of belonging, though the results are not casual. Most participants completing the post-evaluation had attended the summer school, which was particularly designed to improve this measure, so it is encouraging to

Measure	'before' Median score	'after' Median score	Statistical test	Effect size
Intention to progress to HE	4	5	$z = 10.5, p > .05$	$r = 0.22$
Sense of belonging	4	4.33	$z = 9.5, p < .05$	$r = 0.76$
Concerns about higher education	3	2.5	$z = 41.5, p > .05$	$r = 0.27$

see a statistically significant increase for this measure.

The programme was designed to decrease students **concerns about higher education**, however a Wilcoxon Signed Ranked Test did not reveal a statistically significant decrease in concerns for the students on the programme, $z = 41.5, p > .05$. The effect size was $r = 0.27$. The median score did decrease from pre-programme ($Md = 3$) to post-programme ($Md = 2.5$) suggesting that the programme may have had some impact on students' concerns around their ability to afford to go to university and confidence in ability to cope with university level learning, though this was not significant.

Analysis of the pre-event survey

Due to the small sample size of the 'Post' survey, some further analysis of the 'Pre' survey was undertaken to inform recommendations for next year. The areas where mean scores for levels knowledge and confidence were the lowest in the 'Pre' survey were as follows:

- I understand how to apply to higher education (mean score of 2.9)

- I know what studying at university would be like (mean score of 3.3)
- I know enough about higher education to decide whether to go or not (mean score of 3.4).

Information, Advice and Guidance sessions embedded into the existing programme helped to increase these scores for participants on the programme, but could more strongly form the basis of a programme in the future.

Conclusions & recommendations

Conclusions

The results of the pre/post surveys suggest that Prep4Uni has a significant, positive impact on students' knowledge of university and their sense of belonging, however the desired impact on students' academic self-efficacy, intention to progress to HE and reduction of concerns was not seen. The results are not causal as students may have also been impacted by numerous other external factors. However, analysis of the larger pool of pre survey submissions showed that the areas where students felt least confident before beginning the programme were in their knowledge of higher education, the application process and what studying at university would be like. This indicates that focusing more heavily on the information, advice and guidance elements of the programme, while still providing real-life experience of HE, may be most beneficial to our target audience.

Recommendations

Following analysis of the results of the survey and in assessing the programme against the other programmes such as Reading Scholars offered by the University, the recommendation is to amend the format and focus of the Preparing for University programme in the next academic year.

Although overall numbers on the programme increased this year, the percentage of students engaging in the virtual elements of the programme (namely, subject tutorials delivered in partnership with the Brilliant Club) decreased, with only 22% of students attending all the virtual tutorials (see Appendix 2). Attendance at the in-person launch of the programme was impacted by train strikes for the second year running, also having a knock-on effect on overall conversion and completion rates.

The intention for 2025 is to refocus the programme on the Information, Advice and Guidance elements of the previous provision, whilst still retaining a residential summer school delivered with ambassadors originally from our target areas. We believe that these elements of the programme would have most significantly impacted the statistically significant increases in both students' knowledge of university and sense of belonging. The summer school in particular received positive feedback from participants (see Appendix 3) who benefited from gaining real-life experience of university life. In order to

address practical issues around attendance, the programme will begin in-region which we hope will improve subsequent participation rates at the summer school.

By further increasing the focus on the areas where participants from our target pool have shown low levels of confidence and knowledge in the pre-survey, we hope to have a positive impact on students' knowledge of higher education options and confidence in making successful applications.

As attendance was poor at the subject tutorials and we did not see an increase in students' level of academic self-efficacy following the tutorials or final assignment, we propose removing these elements from the programme in 2025. In order to continue to address the subject specific aims of the programme, students will be signposted to other provision offered by the University such as subject taster days. The opportunity to experience university-level study will also be kept within the summer school programme. In removing specific subject strands from the programme, we also hope to appeal to a broader pool of students who may yet not have decided on a specific higher education pathway.

Acknowledgements

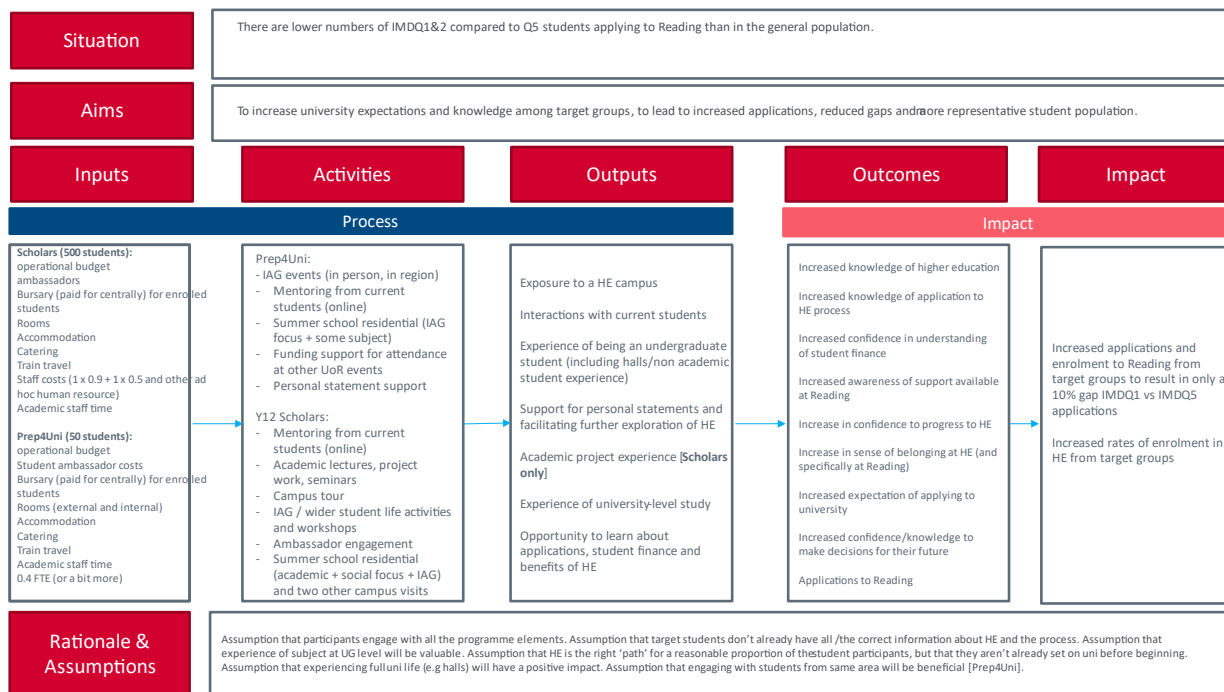
We would like to thank the participants of the scheme for completing the evaluations and feedback surveys in order for us to assess the impact of the programme.

Notes

This report has been reviewed by members of the Access and Participation Evaluation Subcommittee (APES), with particular support from Lydia Fletcher on data analysis.

Appendix 1: Theory of Change

Theory of Change for multi-strand outreach programmes:



Appendix 2: Engagement rates across the Prep4Uni 2024 programme

Subject strand	Confirmed students	Attended launch	Attended at least one virtual tutorial	Attended all virtual tutorials	Completed final assignment	Attended summer school
Biology and Chemistry	14	10	10	7	5	5
Creative Writing	7	4	6	1	4	3 (4 signed up but 1 student unable to attend due to illness)

History & Politics	12	9	8	4	6	4
Law	15	4	9	0	5	4
Psychology	16	6	10	2	6	5
TOTAL	64	33*	43	14	26	21

* Without train strikes, we anticipated having 48 students attend the launch.

Appendix 3: Prep4Uni Summer School Feedback

“ I really, really enjoyed spending time with the ambassadors, learning about their experiences with University as well as getting insight into what University life is like from the words of those who've been through it. I have also enjoyed the taster sessions, seeing what it may be like to study at university, and the lecture style of them.”

“My favourite part of the week was the ambassadors. They were so kind and considerate to me and they helped me enthusiastically when I asked about specific subjects and personal statements.”

“I really enjoyed this summer school, and at first I was having second thoughts of coming, but actually coming here I managed to create a lot of friends, be myself and I enjoyed everything.”

“The personal statement and student finance sessions were especially helpful”

“My favourite part of the week was all the activities and being able to get taster lectures in law which is what I want to go in. I like how there was a balance of social activities as well which gave us a break and let us experience life as a university student.”

“I had so much fun!! :) Thank you all.”

