

Zero Gravity: UCAS Evaluation

Zero Gravity commissioned UCAS, the organisation responsible for handling undergraduate degree applications in the UK, to perform an evaluation of the social impact of its Access Oxbridge pilot programme.

The evaluation had two stages:

1. UCAS performed an audit of the university destination data of the cohort of students who completed the 2019–20 Access Oxbridge programme. By utilising data from the UCAS application system, UCAS was able to independently verify the university applications, offers, and places achieved by Access Oxbridge students across the 2019 and 2020 admissions cycles.
2. Using the data from Stage 1, UCAS performed a statistical analysis which compared the university outcomes of Access Oxbridge students against 500 different control groups of non-Access Oxbridge students with similar characteristics. By comparing the outcomes of Access Oxbridge students against students with similar levels of prior academic attainment and socio-economic disadvantage, UCAS was able to assess the statistical significance of the impact of the Access Oxbridge programme.

Stage One: Headline Destination Data

The UCAS audit corroborated that students on the Access Oxbridge pilot programme were incredibly successful at achieving offers and places at not only Oxford and Cambridge University, but other highly-selective universities too.

The headline numbers are detailed below:

| 234 Students | Applied | Offered | Accepted |
|---------------------|----------------|----------------|-----------------|
| Oxbridge | 210 (90%) | 100 (48%) | 85 (40%) |
| Russell Group | 220 (94%) | 215 (98%) | 170 (77%) |
| Highly-selective | 220 (94%) | 220 (100%) | 180 (82%) |

Technical Note: UCAS applied ‘disclosure controls’ to the dataset which means the headline numbers in the table are rounded to the nearest multiple of five.

Stage Two: Control Group Evaluation

UCAS evaluated the impact of the Access Oxbridge programme by comparing the university outcomes of the Access Oxbridge cohort against 500 control groups of similar university applicants.

Students in the control groups were selected on the basis of their statistical similarity to students on the Access Oxbridge programme. Students were matched across a range of characteristics: including gender, ethnicity, socio-economic background, and GCSE results.

By analysing the university destination outcomes of these control groups, UCAS was able to calculate the 'expected result' of Access Oxbridge students. Expected results can be interpreted as the outcomes Access Oxbridge students would've achieved had they not participated in the Access Oxbridge programme.

UCAS then compared these outcomes to the 'achieved result' of Access Oxbridge students - what students actually achieved having participated in the Access Oxbridge programme. From this data UCAS then drew a conclusion about the statistical significance of the difference between the expected and achieved results of the Access Oxbridge cohort.

The results of this evaluation with regards to Oxbridge, Russell Group, and highly-selective university outcomes are detailed below:

| Oxbridge | Expected Result (%) | Achieved Result (%) | Access Oxbridge Impact | Statistical significance |
|----------------|---------------------|---------------------|------------------------|--------------------------|
| Offer | 27% | 48% | 1.78x | Significantly high |
| Achieved place | 21% | 40% | 1.9x | Significantly high |

| Russell Group | Expected Result (%) | Achieved Result (%) | Access Oxbridge Impact | Statistical significance |
|----------------|---------------------|---------------------|------------------------|--------------------------|
| Offer | 91% | 98% | 1.08x | Very significantly high |
| Achieved place | 56% | 77% | 1.38x | Very significantly high |

| Highly Selective | Expected Result (%) | Achieved Result (%) | Access Oxbridge Impact | Statistical significance |
|------------------|---------------------|---------------------|------------------------|--------------------------|
| Offer | 91% | 100% | 1.1x | Very significantly high |
| Achieved place | 60% | 82% | 1.37x | Very significantly high |

Terminology Explainer

| | |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Oxbridge | Refers to Cambridge University and / or Oxford University |
| Russell Group | Refers to a UK association of 24 research-intensive universities |
| Highly-selective universities | Refers to a DofE designation of the top-third UK universities according to the A-Level attainment of their undergraduates |
| Control Group | A group in a study which does not receive the intervention and is used as a benchmark to measure how the other tested cases do |
| Expected Result | The average outcomes achieved by students in the control groups who were not subject to the Access Oxbridge intervention |
| Achieved Result | The average outcomes achieved by students on the Access Oxbridge programme |
| Statistical significance | A measure of the likelihood that the difference between the expected result and the achieved result is not due to random chance |
| Significantly high | The result is statistically significant at the 95% level (i.e. can have at least 95% confidence that the result is not due to random chance) |
| Very significantly high | The result is statistically significant at the 99% level (i.e. can have at least 99% confidence that the result is not due to random chance) |

| | |
|------------------|------------------------|
| STROBE reference | SR200630_001_ZEROGRAV |
| Client name | ZERO GRAVITY |
| Report type | High Resolution Report |
| Date | 11/01/2021 |

Contents

This report is for the supplied cohort from Zero Gravity and matches into cycle years 2019 - 2020.

| | |
|-----------|-----------------------------------------------|
| Section 1 | Summary results - split by cycle year |
| Section 2 | Benchmarking - summary results |
| Section 3 | Benchmarking - by provider tariff group |
| Section 4 | Benchmarking - by user-defined provider group |
| Section 5 | Summary - by provider tariff group |
| Section 6 | Summary - by provider |
| | Technical notes |
| | Benchmarking guide |

Section 1 Summary

summary results

| | 2019 | 2020 |
|---------------------------------|------|------|
| Initial cohort | 234 | 0 |
| Applied | 80 | 140 |
| Applied - Main scheme | 80 | 140 |
| Offered | 80 | 140 |
| Conditional offers made | 75 | 125 |
| Holding conditional firm | 20 | 30 |
| Holding conditional insurance | 20 | 30 |
| Unconditional offers made | 5 | 10 |
| Holding unconditional firm | 0 | 5 |
| Holding unconditional insurance | 0 | 0 |
| Accepted | 65 | 125 |
| Accepted - Main scheme | 60 | 105 |
| Accepted - Extra | 0 | 0 |
| Accepted - Adjustment | 0 | 0 |
| Accepted - RPA | 0 | 0 |
| Accepted - Clearing | 5 | 20 |

| | Totals | % achieved result | % expected result | Significance of result |
|----------|--------|-------------------|-------------------|---------------------------|
| Applied | 220 | 94% | 61% | Very significantly high |
| Offered | 220 | 100% | 97% | Significantly high |
| Accepted | 190 | 86% | - | No significant difference |

Section 3 Benchmarking

by provider tariff group

| | | Totals | % achieved result | % expected result | Significance of result |
|----------|------------------------|--------|-------------------|-------------------|-------------------------|
| Applied | 1. Lower tariff group | 5 | 2% | 40% | Very significantly low |
| | 2. Medium tariff group | 60 | 26% | 44% | Significantly low |
| | 3. Higher tariff group | 220 | 94% | 33% | Very significantly high |
| Offered | 1. Lower tariff group | 5 | 100% | 88% | Very significantly high |
| | 2. Medium tariff group | 60 | 100% | 89% | Very significantly high |
| | 3. Higher tariff group | 220 | 100% | 91% | Very significantly high |
| Accepted | 1. Lower tariff group | 0 | 0% | 37% | Very significantly low |
| | 2. Medium tariff group | 5 | 8% | 38% | Very significantly low |
| | 3. Higher tariff group | 180 | 82% | 60% | Very significantly high |

Section 4 Benchmarking

by user-defined provider group

| | | Totals | % achieved result | % expected result | Significance of result |
|----------|----------|--------|-------------------|-------------------|-------------------------|
| Applied | Oxbridge | 210 | 90% | 3% | Very significantly high |
| Offered | Oxbridge | 100 | 48% | 27% | Significantly high |
| Accepted | Oxbridge | 85 | 40% | 21% | Significantly high |

Section 4 Benchmarking

by user-defined provider group

| | | Totals | % achieved result | % expected result | Significance of result |
|----------|---------------|--------|-------------------|-------------------|-------------------------|
| Applied | Russell Group | 220 | 94% | 33% | Very significantly high |
| Offered | Russell Group | 215 | 98% | 91% | Very significantly high |
| Accepted | Russell Group | 170 | 77% | 56% | Very significantly high |

Section 5 Summary

by provider tariff group

| | Applied | | Offered | | Accepted | |
|------------------------|---------|------|---------|------|----------|------|
| | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 |
| 1. Lower tariff group | 0 | 5 | 0 | 5 | 0 | 0 |
| 2. Medium tariff group | 20 | 35 | 20 | 35 | 0 | 5 |
| 3. Higher tariff group | 80 | 140 | 80 | 140 | 65 | 120 |

Section 6 Summary

by provider

| | Applied | | Offered | | Accepted | |
|----------------------------------------------------|---------|------|---------|------|----------|------|
| | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 |
| Aberystwyth University | 0 | 0 | 0 | 0 | 0 | 0 |
| Aston University, Birmingham | 0 | 0 | 0 | 0 | 0 | 0 |
| Birmingham City University | 0 | 0 | 0 | 0 | 0 | 0 |
| Brighton and Sussex Medical School | 0 | 0 | 0 | 0 | 0 | 0 |
| Brunel University London | 0 | 0 | 0 | 0 | 0 | 0 |
| Cardiff University | 0 | 5 | 0 | 5 | 0 | 5 |
| City, University of London | 0 | 5 | 0 | 5 | 0 | 0 |
| Durham University | 25 | 50 | 20 | 45 | 5 | 10 |
| Goldsmiths, University of London | 0 | 0 | 0 | 0 | 0 | 0 |
| Heriot-Watt University | 0 | 0 | 0 | 0 | 0 | 0 |
| Hull York Medical School | 0 | 0 | 0 | 0 | 0 | 0 |
| Imperial College London | 15 | 20 | 10 | 10 | 0 | 0 |
| Keele University | 0 | 0 | 0 | 0 | 0 | 0 |
| King's College London, University of London | 15 | 20 | 15 | 20 | 0 | 5 |
| Lancaster University | 10 | 10 | 5 | 10 | 0 | 5 |
| Liverpool John Moores University | 0 | 0 | 0 | 0 | 0 | 0 |
| London School of Economics and Political Sci (UOL) | 10 | 25 | 5 | 20 | 0 | 5 |
| Loughborough University | 0 | 10 | 0 | 10 | 0 | 0 |
| Manchester Metropolitan University | 0 | 0 | 0 | 0 | 0 | 0 |
| Middlesex University | 0 | 0 | 0 | 0 | 0 | 0 |
| Newcastle University | 5 | 10 | 5 | 10 | 0 | 0 |
| Nottingham Trent University | 0 | 0 | 0 | 0 | 0 | 0 |
| Queen Mary University of London | 10 | 15 | 10 | 15 | 0 | 5 |
| Queen's University Belfast | 0 | 0 | 0 | 0 | 0 | 0 |
| Royal Holloway, University of London | 0 | 5 | 0 | 5 | 0 | 0 |
| Royal Veterinary College, University of London | 0 | 0 | 0 | 0 | 0 | 0 |
| SOAS University of London | 0 | 5 | 0 | 5 | 0 | 0 |
| Swansea University | 0 | 0 | 0 | 0 | 0 | 0 |
| The University of Edinburgh | 10 | 25 | 5 | 25 | 0 | 5 |
| The University of Law | 0 | 0 | 0 | 0 | 0 | 0 |
| UCL (University College London) | 25 | 35 | 20 | 30 | 0 | 5 |
| University of Aberdeen | 0 | 5 | 0 | 5 | 0 | 0 |
| University of Bath | 10 | 10 | 10 | 10 | 0 | 0 |
| University of Birmingham | 10 | 15 | 10 | 15 | 5 | 0 |
| University of Bradford | 0 | 0 | 0 | 0 | 0 | 0 |

Section 6 Summary

by provider

UCAS

| | Applied | | Offered | | Accepted | |
|-----------------------------------------|---------|------|---------|------|----------|------|
| | 2019 | 2020 | 2019 | 2020 | 2019 | 2020 |
| University of Bristol | 25 | 35 | 25 | 35 | 5 | 5 |
| University of Cambridge | 25 | 60 | 20 | 25 | 15 | 20 |
| University of Central Lancashire | 0 | 0 | 0 | 0 | 0 | 0 |
| University of Dundee | 0 | 5 | 0 | 5 | 0 | 0 |
| University of East Anglia UEA | 5 | 0 | 5 | 0 | 0 | 0 |
| University of Exeter | 15 | 15 | 15 | 15 | 0 | 0 |
| University of Glasgow | 0 | 10 | 0 | 10 | 0 | 0 |
| University of Hull | 0 | 0 | 0 | 0 | 0 | 0 |
| University of Kent | 0 | 0 | 0 | 0 | 0 | 0 |
| University of Leeds | 20 | 20 | 20 | 15 | 5 | 0 |
| University of Leicester | 0 | 0 | 0 | 0 | 0 | 0 |
| University of Lincoln | 0 | 5 | 0 | 5 | 0 | 0 |
| University of Liverpool | 5 | 10 | 5 | 10 | 0 | 0 |
| University of London Institute in Paris | 0 | 0 | 0 | 0 | 0 | 0 |
| University of Manchester | 20 | 35 | 15 | 30 | 0 | 0 |
| University of Nottingham | 10 | 25 | 10 | 25 | 0 | 0 |
| University of Oxford | 50 | 75 | 25 | 35 | 20 | 30 |
| University of Portsmouth | 0 | 0 | 0 | 0 | 0 | 0 |
| University of Reading | 0 | 0 | 0 | 0 | 0 | 0 |
| University of Sheffield | 5 | 15 | 5 | 10 | 0 | 0 |
| University of Southampton | 5 | 5 | 5 | 5 | 0 | 0 |
| University of St Andrews | 10 | 20 | 10 | 15 | 0 | 5 |
| University of Stirling | 0 | 0 | 0 | 0 | 0 | 0 |
| University of Strathclyde | 0 | 0 | 0 | 0 | 0 | 0 |
| University of Surrey | 0 | 0 | 0 | 0 | 0 | 0 |
| University of Sussex | 0 | 0 | 0 | 0 | 0 | 0 |
| University of Warwick | 20 | 35 | 15 | 30 | 0 | 5 |
| University of York | 10 | 20 | 5 | 20 | 0 | 0 |

Cohort

The number of participants provided in the tracking group.

Applied

The number of participants tracked (applied) through the UCAS scheme. An applicant is defined as a person who has made a valid application in the UCAS system. RPA's are included in the total. An RPA (record of prior acceptance) is an application submitted to UCAS by an institution when an unconditional firm has already been offered and accepted by the applicant.

Applications

Application is defined as a choice to a course in higher education through the UCAS main scheme. Each applicant can make up to five choices, which was reduced from six in 2008. The number of applications does not include choices made through the following acceptance routes: Clearing, Extra, Adjustment and RPAs.

Acceptances

Acceptance is defined as an applicant who has been placed for entry into higher education. RPA's are included in the total. An RPA (record of prior acceptance) is an application submitted to UCAS by an institution when an unconditional firm has already been offered and accepted by the applicant.

Offers

Offer is defined as a provider's decision to grant a place to an applicant via an application made through the UCAS main scheme (i.e. does not cover choices made through the following routes: Clearing, Extra, Adjustment and RPAs). Offers are captured at June 30 deadline for the purpose of consistent reporting.

Offer rate

The offer rate is calculated as the total number of offers received divided by the total number of main scheme applications made.

Firm replies

Firm Reply is defined as an applicant's decision to confirm either a conditional or an unconditional offer from a provider as their first choice. This relates to applications made through the UCAS main scheme only (i.e. does not cover choices made through the following routes: Clearing, Extra, Adjustment and RPAs). Firm Replies are captured at June 30 deadline for the purpose of consistent reporting.

Insurance replies

Insurance Reply is defined as an applicant's decision to confirm either a conditional or an unconditional offer from a provider as their second choice, in case the conditions of the firm choice are not met. This relates to applications made through the UCAS main scheme only (i.e. does not cover choices made through the following routes: Clearing, Extra, Adjustment and RPAs). Insurance Replies are captured at June 30 deadline for the purpose of consistent reporting.

Disclosure controls

Numbers in the data resources are rounded to the nearest five. Each number is rounded independently, so the sum of rounded categories may not add to the rounded sum of those categories, within or between data resources. The listing of a category in an output table does not imply that data was recorded for that category. The .csv data files contain only data items that are not rounded to zero. The omission of a category in these data files does not imply that the unrounded total was zero.

Your STROBE report has been subject to a benchmarking exercise, upon which our assessments of statistical significance have been made. Your data has been compared to two UCAS data sources:

- 1) A database of potential applicants. This is used to benchmark the application rate of your cohort. Using the UCAS applications database is inappropriate for obvious reasons, and using the wider population is inappropriate due to the bias that is inherent in looking students that are prepared to be subject to a widening participation intervention. For this reason, the potential applicant database is thought to be appropriate. We believe that even using this source, the bias is so strong that the results are slightly skewed positively.
- 2) UCAS applications database. This is used to benchmark the progress of your cohort through the application process. This is the de facto source and the only one that we would consider.

In both cases, your data has been compared to a representative set from the relevant source in the following ways:

- 1) The potential applicant database cohort is similar in terms of a score that represents the combination of age, socio-demographics of the home address, and the proportion of their nearest school being eligible for free school meals.
- 2) The UCAS applications database cohort is similar in terms of a score that represents the combination of age, ethnicity, gender, socio-demographics of home address, and proportion of their school being eligible for free school meals, as well as a score that represents the achievement of that student at GCSE level (or Scottish equivalent). GCSE chosen as the WP interventions are thought to have a positive correlation with A Level attainment, which this solution designs out.

The cohort of students that you have sent to us has been compared to many cohorts of similar size and make up, and the position of your cohort within the sample is represented in terms of a percentile. This percentile is then assessed for statistical significance, and the result of this test is shown.

If you have any questions in relation to the benchmarking service, please contact strobe@ucas.ac.uk.

Guide to Tariff Groupings

Your STROBE report contains, as standard, the headline performance of your cohort, in relation to the three University tariff groupings. High tariff represents the highest performing and most competitive institutions, and vice versa. The reason that this is included is the intricacy of the relationship between the tariff groups, and how a widening participation intervention can affect it.

It is felt that a student who is subject to a widening participation intervention may become more ambitious with their choices. This ambition is actually the stated aim of many of our charitable partners. This can have an effect on offer rates and acceptance rates that does not necessarily appear positive to the untrained eye, as the students are applying to institutions with lower offer and acceptance rates.

It is believed that the presentation of the three tariff groups allows you to see these nuances and further understand the performance of your cohort.