

Access and Participation Plan with the Office for Students 2019/20

1. Summary

1.1 This Access and Participation Plan is submitted in accordance with the requirements placed on those Higher Education Institutions (HEIs) that intend to charge above the basic rate¹ of tuition fee for Home/EU students commencing full-time undergraduate courses in 2019/20. This Plan has been prepared in accordance with the guidance from the Office for Students (OfS)² and after extensive consideration by relevant joint committees of the collegiate University. These committees include student representation via the Student Union President, Education Officer and dedicated Access Officer, which secures student input to the Plan at every stage of drafting and approval.³

1.2 The key features of this Plan are:

- the higher rate⁴ of tuition fee (i.e. the maximum rate set by the Government annually, including increases permitted through participation in the Teaching Excellence Framework (TEF)) to be charged, irrespective of course followed, to full-time UK and EU⁵ undergraduates and Postgraduate Certificate of Education (PGCE) students admitted from 1 September 2019 onwards;
- a needs-based financial support package that will provide support for maintenance for those undergraduates from lower-income households;
- a range of highly-targeted outreach activities appropriate to currently under-represented and disadvantaged groups delivered through a variety of local, regional and national programmes, with a focus on improving measurable outcomes for participants;
- challenging milestones, aimed at increasing the proportion of our UK undergraduate intake from particular groups and contributing to improved social mobility for the sector without compromising the integrity and fairness of Cambridge's admissions procedures and entry standards;
- a research function to better understand the nature of under-representation and the impact of different interventions on access to highly selective higher education.

1.3 We note that all of the expenditure totals recorded here and in the accompanying resource plan assume that the number of home fee rate students admitted each year remains broadly the same, as is our current plan. However, the process of the UK exiting the EU in the timeframe of this Plan may lead to a fall in home fee rate numbers and absolute levels of expenditure may therefore decrease.

¹ In accordance with OfS guidance it is assumed here that the "basic rate" for 2019/20 will be set at £6,165 for full-time courses.

² www.officeforstudents.org.uk/media/1024/ofs2018_03.pdf

³ In particular, the Undergraduate Admissions Committee (UAC), the General Board and University Council. The membership of these bodies includes representatives of the Cambridge University Students' Union, as did the group tasked with producing this document.

⁴ In accordance with OfS guidance it is assumed here that the "higher rate" for 2019/20 will be set at £9,250 for full-time courses.

⁵ Provided that UK law continues to permit EU students to be charged at a lower rate than is charged to other overseas students – see section 4.

2. The Context of Undergraduate Admission to Cambridge

2.1 The collegiate University's policy is to admit students of the highest academic calibre and potential irrespective of financial or other non-academic considerations. In conducting our admissions process the University and its Colleges adhere to the five principles set out in the independent review of Admissions to Higher Education led by Professor Schwartz in September 2004.⁶ A fair admissions system should:

- be transparent;
- enable institutions to select students who are able to complete the course as judged by their achievements and their assessed potential;
- strive to use assessment methods that are reliable and valid;
- seek to minimise barriers for applicants;
- be professional in every respect and be underpinned by appropriate institutional structures and processes.

2.2 The typical A-level offer for undergraduate entry to Cambridge is currently between A*AA and A*A*A depending on the course applied for.⁷ In the 2017 application cycle (i.e. those applying in October 2016 for entry in 2017 or later), we were only able to accept 24.7% of our 10,332 applicants from UK schools and colleges. Of those accepted, 83.1% exceeded the typical offer (the average number of A*s achieved by accepted applicants from this cohort was 2.7) and, therefore, an attainment level of A*A*A is used in our assessment of our record on access.

2.3 The University does not operate subject quotas, although some courses are subject to external controls (for example, Medicine) or capacity restrictions (for example, Architecture and some laboratory-based courses) and competition is open across all subjects. Because of the full-time, residential nature of Cambridge's undergraduate courses, it is not anticipated that the University's undergraduate intake will significantly increase over the next five years.

2.4 We are also mindful of the implications of the difficulties being experienced by parts of the state sector in student take-up and teaching provision in a number of subjects that are critical for entry into many of our courses, including modern languages, mathematics and physical science subjects. Additionally, and as noted by the Russell Group, a lower proportion of state-sector students overall achieve top grades compared with those in the independent sector (see section 7), and state-sector students are less likely to apply to selective universities.⁸ This differential may be exacerbated by the impact of funding cuts in schools, particularly in those schools with the most disadvantaged intakes.⁹

2.5 We have in place rigorous selection processes which include the assessment of academic record in the context of data about the applicant, their school and their geodemographic background, interviewing over 75% of UK and EU applicants, the use of aptitude tests such as BMAT,¹⁰ examinations such as STEP Mathematics¹¹ and, since 2016, common-format written admissions assessments in most subjects (see section 2). Our process is designed to identify, as far as possible, the highest achievers with the greatest potential from the pool of

⁶ www.spa.ac.uk/sites/default/files/Admissions-review-Schwartz-2004.pdf

⁷ Our entrance requirements are set at an equivalent level for those studying within other qualifications systems.

⁸ www.russellgroup.ac.uk/search?q=HESA+Performance

⁹ Teacher Polling, Sutton Trust / NFER, Apr 2017, www.suttontrust.com/researcharchive/pupil-premium-polling-2017/

¹⁰ BioMedical Admissions Test, www.admissionstestingservice.org/for-test-takers/bmat/

¹¹ Sixth Term Examination Paper, www.admissionstestingservice.org/for-test-takers/step/about-step/

applicants who are capable of meeting our entry requirements and the demands of our intensive undergraduate programmes.

- 2.6 Whilst we shall continue to monitor the University examination performance of students from the various school backgrounds, our research shows that performance in public examinations (primarily A-level) continues to be the best predictor of a student's likely performance once admitted to the University, and that there is no significant differential in terms of performance between students admitted by school sector.¹² This reflects HEFCE studies which show that the differential performance of students at University by school type closes at the highest A-level attainment levels.¹³ We find therefore no value in making differential offers to applicants based on their school type; indeed, to do so would disadvantage the students that such measures are designed to help because, if admitted, students who had performed less well in public examinations would then have a greater learning challenge compared to those students who had met or exceeded the typical offer. We are however planning to introduce a summer bridging course in 2019 for those from disadvantaged and under-represented groups who narrowly miss the offer that they were made, and a transition year programme for similar groups of students who might otherwise not secure an offer from the University. These developments will feature more prominently in our Access and Participation Plan 2020-21.

A-Level Reform

- 2.7 We are concerned that recent and current A-level reforms are already significantly reducing student choice and flexibility. We are also concerned that revised funding arrangements are effectively restricting students in many state schools to taking three A-levels, (a concern which UCAS polling suggests is becoming a reality¹⁴), meaning that the opportunity to study extremely valuable fourth subjects, such as Further Mathematics, is lost. This has influenced our decision to provide greater support for mathematics to disadvantaged groups (see section 3).

Contextual Data

- 2.8 The collegiate University already makes extensive use of contextual data to support its outreach activity and admissions process.¹⁵ Alongside indicators of academic ability and potential, teacher predictions and references, admissions assessments and tests, we use up to three types of contextual data (where available) as a way of obtaining a more in-depth profile of an applicant:

- geodemographic data – the socio-economic characteristics of an applicant's local area (using OAC2011¹⁶), rates of progression to higher education in an applicant's local area (using POLAR3¹⁷) and measures produced by regional governments within the UK that identify relative deprivation in an applicant's local area using Indices of Multiple Deprivation (IMD), for example IMD2015 for England (see section 7);¹⁸
- school/college data – the GCSE performance, A Level performance, and recent history of entry to Cambridge or Oxford, of an applicant's school/college;

¹² "ANOVA on A*s at A-level and Tripos performance ", Sumnall, Jul 2015, www.cao.cam.ac.uk/anova-level-and-tripos-performance

¹³ "Differences in degree outcomes: Key findings", HEFCE Mar 2014, www.hefce.ac.uk/pubs/year/2014/201403/#d.en.86821

¹⁴ "Schools and colleges move away from AS qualifications, UCAS survey finds", UCAS, March 2017, www.ucas.com/corporate/news-and-key-documents/news/schools-and-colleges-move-away-qualifications-ucas-survey-finds

¹⁵ For further information see: www.undergraduate.study.cam.ac.uk/applying/contextual-data

¹⁶ Output Area Classifications, see www.ons.gov.uk/methodology/geography/geographicalproducts/areaClassifications/2011areaClassifications

¹⁷ Participation Of Local Areas, www.hefce.ac.uk/analysis/yp/POLAR/

¹⁸ www.gov.uk/government/statistics/english-indices-of-deprivation-2015

- data on individual circumstances – whether an applicant has spent time in the care of a Local Authority (declared in the UCAS application), whether they have been eligible for free school meals (declared in our Supplementary Application Questionnaire¹⁹), and any information provided in an Extenuating Circumstances Form,²⁰ where submitted, concerning educational disruption or disadvantage through health or personal problems, disability, difficulties with schooling or challenging personal or family circumstances.

2.9 Given the loss of most AS-level UMS scores, we have been compelled to develop additional measures to assist us in making the finely grained decisions that are necessary when selecting from an exceptionally strong field. The resulting common-format written admissions assessments (taken either before or at interview, depending on subject applied for), were first introduced for students applying in autumn 2016.²¹ We are carefully monitoring the use of this additional data in our admissions process to ensure that it assists in the assessment of potential and produces equitable outcomes for all groups of students when all other factors are accounted for. The number of applications to the collegiate University continues to increase, and initial analysis of the introduction of admissions assessments suggests that their introduction has not put off applicants from under-represented groups from applying.

¹⁹ www.undergraduate.study.cam.ac.uk/applying/saq

²⁰ www.undergraduate.study.cam.ac.uk/applying/decisions/extenuating-circumstances-form

²¹ www.undergraduate.study.cam.ac.uk/applying/admissions-assessments

3. Our Record on Access and Student Success

Student Success

- 3.1 The collegiate University provides unusually individualised and intensive support to its students. Regular supervisions involve very small groups and all undergraduates have a Director of Studies, typically in their own College, who closely manages their academic progress, as well as a personal Tutor in their College to advise and support them on pastoral issues. College-based support is complemented by lectures, seminars, and practical classes organised by Faculties and Departments, which are increasingly specialised in the later years of the course. Students benefit from high-quality College accommodation which is available to all undergraduates for at least three years of each course, and also from extensive medical, disability and counselling support. All of this contributes to unusually high academic attainment and a very low drop-out rate. Four of our Colleges are specifically for mature students, providing a unique environment for learners who are more likely than standard age students to have characteristics associated with disadvantage and under-representation in higher education.
- 3.2 Our ability to identify students likely to succeed and the quality of the educational experience offered to them is demonstrated by the proportion of finalists (c.91.6%)²² gaining at least Upper Second Class Honours. Feedback from students recorded in the National Student Survey is consistently high (in 2016, the last year for which we have data, this was four percentage points higher than the sector average, at 90%).²³

The University has undertaken a self-assessment into the success of different groups of students studying here. The table below shows the proportion of students achieving a first or upper class second ²⁴.

Table 1: Students achieving a first or upper class second.

Care leaver status	2012/13	2013/14	2014/15	2015/16	2016/17
Care leaver				100.0%	60.0%
Not a care leaver/not known				91.4%	91.9%
All Home/EU fundable UG classed qualifiers				91.4%	91.9%
Age group	2012/13	2013/14	2014/15	2015/16	2016/17
Young	89.2%	90.3%	91.1%	91.5%	92.0%
Mature	81.0%	70.1%	78.3%	81.6%	88.5%
All Home/EU fundable UG classed qualifiers	89.0%	89.8%	90.9%	91.4%	91.9%
Disability group	2012/13	2013/14	2014/15	2015/16	2016/17
No known disability	89.7%	90.2%	91.4%	92.3%	92.1%
Known disability	82.8%	86.6%	86.3%	83.7%	89.3%
All Home/EU fundable UG classed qualifiers	89.0%	89.8%	90.9%	91.4%	91.9%

²² Data from the University of Cambridge Business Information Team

²³ www.educationalpolicy.admin.cam.ac.uk/student-engagement/university-wide-surveys/nss#key

²⁴ Full-time Home/EU fundable undergraduate qualifiers achieving 1st or 2.1 as proportion of all full-time Home/EU fundable undergraduate qualifiers with a classed result. The data for each year are based on the submitted HESA Student record. Ethnicity and age marker definitions follow HESA's methodology.

Ethnicity group (UK-domiciled only)	2012/13	2013/14	2014/15	2015/16	2016/17
Asian	79.4%	83.5%	81.7%	82.3%	86.7%
Black	89.5%	60.0%	82.6%	87.5%	68.4%
Mixed/Other	86.8%	92.3%	91.0%	88.7%	90.2%
White	90.4%	91.0%	92.5%	92.6%	92.9%
Information refused	85.4%	83.7%	88.6%	91.4%	90.6%
All Home/EU fundable UG classed qualifiers	89.3%	90.0%	91.4%	91.5%	92.1%
POLAR4 quintiles (UK-domiciled only)	2012/13	2013/14	2014/15	2015/16	2016/17
1		86.9%	89.4%	87.7%	96.4%
2		89.2%	84.9%	89.3%	91.6%
3		86.4%	92.9%	91.5%	89.6%
4		88.0%	89.1%	91.7%	91.1%
5		91.5%	92.5%	91.8%	92.8%
Not known		100.0%	100.0%	100.0%	100.0%
All Home/EU fundable UG classed qualifiers		90.0%	91.4%	91.5%	92.1%

Indicates a group size fewer than 10
 Indicates a group size fewer than 50

It is important to note that for most of the groups where there appear to be attainment gaps, group sizes are very small - this has the effect of a single individual's performance having a much greater contribution to their group's overall percentage than a single individual in a group of larger size. As a consequence seemingly large between-year shifts in the percentage of students attaining a 2.1 or higher are not unexpected for small groups; this produces particularly disproportionate apparent effects in the case of certain ethnic groups and of care leavers.

Despite the limitations of small group sizes, where possible we have tested the statistical significance of the apparent attainment gaps, specifically looking at the following groups: areas of low HE participation (for which we have used POLAR4), ethnicity, mature students, disabled students and care leavers. For each of these groups, providing that group size has allowed, we have examined whether: (a) for a particular group (e.g. black students) there is a significant difference in the proportions of students achieving 2.1 or higher vs. 2.2 or lower in the (i) five most recent entry years, (ii) three most recent entry years; (b) for a characteristic (e.g. ethnicity) there is a significant difference in the composition of students achieving 2.1 or higher compared to those achieving 2.2 or lower when data from the (i) five most recent entry years, (ii) three most recent entry years, is combined. Significance has been tested at a level of $p < 0.05$.

Our analysis indicates that across the years analysed, there has not been a statistically significant change in attainment for students from areas of low HE participation, household income or socio-economic status. We have found that the proportion of POLAR4 quintile 5 students attaining 2.1 or higher is greater than the proportion of lower quintile students attaining these classifications; the proportion of flagged POLAR4 students (quintiles 1 and 2) attaining 2.1 or higher is also lower than the proportion of non-flagged (quintiles 3, 4 and 5) students attaining these classifications (both statistically significant at the 0.05 level).

In relation to ethnicity our analysis indicates that across the years analysed any apparent fluctuations do not represent a statistically significant change in attainment for BME students. It has not been possible to statistically test whether there has been a significant change in attainment for black students during the last five entry years owing to small numbers. However, our analysis indicates that there is no significant difference in the proportion of students of Black ethnicity attaining a 2.1 or higher across the three most recent entry years. We have found that the proportion of BME students attaining 2.1 or higher is lower than the proportion of students of White ethnicity attaining these classifications (statistically significant at the 0.01 level).

With regard to mature students our analysis indicates that across the years analysed any apparent fluctuations do not represent a statistically significant change in attainment for mature students. We have found that the proportion of mature students attaining 2.1 or higher is lower than the proportion of young students attaining these classifications (statistically significant at the 0.01 level)

With regard to students with a known disability our analysis indicates that across the last three entry years any apparent fluctuations do not represent statistically significant change in attainment for students with a known disability (although this is significantly different when the last five years are examined). We have found that the proportion of students with a known disability attaining 2.1 or higher is lower than the proportion of students with no known disability attaining these classifications (statistically significant at the 0.01 level)

It has not been possible to conduct a statistical significance test on the attainment of students who are known care leavers owing to the extremely small numbers. There does not appear to be a significant difference in the proportion of students who are known care leavers attaining 2.1 or higher compared to the proportion of students who are not known care leavers attaining at this level - although due to the very small number of known care leavers our confidence in this finding is limited.

The results of this self-assessment are being closely examined by the University and Colleges and discussed in detail at a number of committees. Further analysis will be undertaken in order to establish where in the student lifecycle any gaps in attainment arise. This in turn will determine whether additional support is required for particular groups and, if so, when that should be provided and what format it should take. Where gaps in student success have been identified, or are identified in the future, the University is committed to addressing these in order to ensure that all students are able to succeed, relative to their level of prior attainment.

- 3.3 We have one of the lowest non-continuation rates of any UK HEI (currently 0.8% compared to our HESA PI benchmark of 1.8% and an average of 6.4% for the sector).²⁵ This is in part a product of high contact hours and very small contact groups, the pastoral care provided by our Colleges and the student support facilities available, but is also assisted by the extensive financial support that we offer to our students (see section 6). Our research to date shows little significant variation between social groups in terms of their likelihood of completion, but we will continue to monitor this as our access activities contribute to a wider diversity of intake.

²⁵www.hesa.ac.uk/news/08-03-2018/non-continuation-tables TableT3

Student Progression

- 3.4 The University has undertaken a self-assessment as part of its TEF submission in order to compare our current performance with sector-wide data, specifically in relation to student progression. We exceed overall expectations for all groups.

Table 2: Self-assessment of student progression relative to sector

	Core metrics						Flag		POLAR Q1 or Q2 or Q3, Q4 or Q5	Ethnicity		Disabled	
	Denominator	Indicator (a) %	Benchmark (b) %	Difference (a)-(b)	Z- score	Flag	Age			White	BME	Yes	No
							Young	Mature					
Full-time 11,875 (97%)													
The teaching on my course	5,408	90.9	88.6	2.3	5.4	+	+	-	+	+	+	+	
Assessment and feedback	5,408	72.1	71.5	0.7	1.1								
Academic support	5,407	84.8	82.0	2.8	5.5	+	++		+	+		+	
Continuation	8,038	98.7	97.9	0.8	3.7	++	++	+	++	++		++	
Employment or further study	6,400	95.0	94.3	0.7	2.6			+			+		
Highly skilled employment or further study	6,400	88.3	80.7	7.5	15.8	++	++	+	++	++	++	++	

The University will continue to monitor this data, both as part of the preparation for the Teaching Excellence Framework and our wider commitment to

ensuring student progression. Where gaps in progression are identified for specific groups, action will be taken via relevant joint College and University committees in order to address these and ensure that appropriate measures are put in place.

Our graduates are more likely to be in work or further study (or both) six months after graduation than is the case nationally, are more likely to be in graduate-level jobs (currently 88.3% compared to 71.0% for the sector), and have amongst the highest starting salaries in the UK (currently £28,732 compared to £21,500 for first degree graduates nationwide).²⁶ Our research shows that Cambridge graduates from low-income households are as successful in the employment market as their higher-income peers.²⁷ There is no differential in starting salaries for Cambridge graduates by school type, POLAR3 Quintile or profession of student's head of household, and our analysis also shows that non-white students have higher starting salaries than white students. We do find evidence that women have lower starting salaries than men; this reflects national data and will be the focus of further attention by the University's relevant committees.²⁸ Cambridge's employability metrics in the latest Teaching Excellence Framework²⁹ clearly show that Cambridge graduates are exceptionally successful in gaining highly-skilled employment. The metrics show that this is true for every single group, including groups at risk of less positive outcomes such as mature students. The split metrics reveal additional positive flags for 'Employment or further study' for BME and disabled students.

- 3.5 Since the University exceeds national measures in relation to retention and student success and has a strong record in relation to progression, the targets that it sets for itself will continue to focus primarily on outreach and admissions (see section 7). We will nonetheless continue to monitor closely the relative progression of groups of students whilst at Cambridge and their subsequent career trajectories.

Admissions

- 3.6 We take our commitment to widening access seriously, and are transparent about our record. Since 2011, annual reports setting out applications, offers and acceptances by school type, gender, ethnicity, socio-economic background and disability have been publicly

²⁶ Destination of Leavers (DLHE) 2015-16, Tables F and K, www.hesa.ac.uk/data-and-analysis/publications/destinations-2015-16/introduction and comparable Cambridge source data. Figures are for mean salaries of graduates from full-time courses.

²⁷ Analysis of relative employment outcomes for those students receiving an award through the Cambridge Bursary Scheme conducted by Cambridge Careers Service in February 2015.

²⁸ "Destinations of leavers from higher education: initial results", Sumnall, July 2015.

²⁹ www.officeforstudents.org.uk/advice-and-guidance/teaching/tef-outcomes/#/provider/10007788

available on the University website,³⁰ and for years prior to that (1999-2010) can be found in the special issues of the Cambridge University Reporter available online.³¹

3.7 The University has made significant progress in admissions on access measures as shown in Table 3 below³². Taking the 2011 year of entry as a baseline (i.e. the year prior to the introduction of fees at the higher rate of £9,000 pa), state-sector admissions at Cambridge have risen by 5.4 percentage points (to 63.5% for 2017 entry); black and minority ethnic admissions have increased by 5.9 percentage points (to 21.8%); admissions of students from Low Participation Neighbourhoods (i.e. POLAR3 Quintile 1) have increased by 2 percentage points (to 4.6%), and those from POLAR3 Quintiles 1&2 have risen by 1.8 points (to 11.4%). The number of students admitted by Cambridge who claim Disability Support Allowance has consistently exceeded our HESA Performance Indicator since 2012.³³ Our analysis of gender data shows that Cambridge admissions broadly mirror the sector once the mix of subjects offered by Cambridge is taken into account.

Table 3: University of Cambridge Admissions Metrics 2011-17

Entry Year	State Sector	BME	POLAR3 Q1	POLAR3 Q1&2	IMD Deciles 1-3	OAC2011 Target Groups ³⁴
2011	58.1%	15.9%	2.6%	9.6%	7.9%	11.5%
2012	63.4%	17.4%	3.6%	10.4%	8.6%	12.9%
2013	60.8%	16.5%	3.8%	10.2%	8.3%	11.3%
2014	62.1%	19.8%	3.4%	10.3%	8.4%	12.6%
2015	62.1%	21.0%	3.2%	9.3%	8.0%	11.8%
2016	62.3%	21.8%	3.2%	10.6%	8.0%	12.1%
2017	63.5%	21.8%	4.6%	11.4%	10.0%	14.7%

3.8 The collegiate University aims to attract the most academically able students from around the world. In order to ensure that we maintain progress in admitting the best and brightest students from the UK, regardless of background, we have set challenging targets in relation to state-sector entry, and admissions from low participation areas and socio-economically disadvantaged groups (see section 7).

3.9 We would note that the primary factor affecting admission by under-represented and disadvantaged groups from the UK to highly selective institutions such as Cambridge is prior attainment. As indicated in section 2, the average student admitted to the University holds at least A*A*A at A-level. According to data from UCAS,³⁵ 7.6% of A-level students nationally who applied to HE attained at this level. However, students from low participation neighborhoods are half as likely to attain at that level, and Black students are even less likely to do so. So, for example, when Cambridge admitted 58 black students in 2017, this was out of a total national pool of just c.175 whose attainment reflected the University admissions profile. Our analysis of data from the National Pupil Database³⁶ shows that there are only c.390 students attending state schools in England who have claimed Free School Meals who

³⁰ www.undergraduate.study.cam.ac.uk/apply/statistics

³¹ www.admin.cam.ac.uk/reporter/

³² This table refers to UK domiciled students only

³³ www.hesa.ac.uk/news/01-02-2018/widening-participation-tables

³⁴ Note that this measures actual % from currently flagged OAC2011 subgroups

³⁵ www.ucas.com/corporate/data-and-analysis/ucas-undergraduate-releases/ucas-undergraduate-end-cycle-data-resources/applicants-and-acceptances-groups-applicants-2017

³⁶ National Pupil Database data were provided by the Department for Education (DfE). *The DfE does not accept responsibility for any inferences or conclusions derived from the NPD Data by third parties.*

secure A*A*A or better each year,³⁷ and our analysis of HESA data suggests that only c.15 students who were previously in Local Authority Care are admitted to university each year with the same grade profile.³⁸

Table 4: National Attainment and University of Cambridge Admissions 2017³⁹

Students	National A-level Admits	National A*A*A+ Admits	Proportion Securing A*A*A	Cambridge Admits	Cambridge Admits as % of National A*A*A+ Admits
All	153,470	11,660	7.6%	1,845	15.8%
POLAR3 Q1	13,690	515	3.8%	118	22.9%
Black ethnicity	6,800	175	2.6%	58	33.1%

Nonetheless, the University recognises that it needs to set itself challenging targets and must find ways (in collaboration with government, schools and other agencies) to grow the pool from which we select. For that reason our flagship outreach activities are focussed upon these activities.

Outreach

3.10 We will continue to monitor our performance in admissions for its effectiveness and fairness. However, we believe that, given the national context, the two key challenges for selective universities are:

- to find ways to attract those students who are already attaining at required levels but who may not have the aspiration to apply or the support required to do so successfully;
- to enhance the educational trajectory of younger students through longer-term programmes to grow the pool of those who are attaining at the right level.

3.11 In support of these objectives, the University, its Colleges and its students (including the Cambridge University Students' Union and College Access Officers) are currently engaged in an unprecedented level of additional outreach activity (funded from additional fee income and other sources), which reaches a diverse range of under-represented groups across the UK. These include children in care; students living in disadvantaged geographical areas; students currently or previously eligible for Free School Meals; black and minority ethnic students; mature learners; students educated in Further Education Colleges (FECs); and bright students in schools and colleges which have not historically sent students to the University of Cambridge. Examples are as below⁴⁰:

(a) Area Links Scheme⁴¹

Target Groups: Various; National Reach

Created in 2000, the College Area Links Scheme links every Local Authority in the UK with a Cambridge College; this helps to facilitate the national reach of our outreach

³⁷ Count is of pupils in England who attended a maintained school at KS4; entered Year 12 in the 2012/2013 academic year; took at least one KS5 qualification during the three year period from 2012/13 to 2014/15; and had available and non-discrepant KS4 free school meals data which indicated that they had been eligible for free school meals at some time in the last 6 years.

³⁸ HESA Student Record 2015/16; HESA Student Record 2014/15. Copyright Higher Education Statistics Agency Limited. *Neither the Higher Education Statistics Agency Limited nor HESA Services Limited can accept responsibility for any inferences or conclusions derived by third parties from data or other information supplied by HESA Services.*

³⁹Data from UCAS and Cambridge Admissions Office

⁴⁰ Because of the scale of the outreach delivered by the University and levels of take up from several thousand schools, actual numbers engaged year on year may rise and fall by a margin. This is largely a product of demand and access rather than changes in provision. For some specific events – for example Summer Schools – numbers engaged may fall or rise year on year as programmes are reviewed and provision enhanced.

⁴¹ www.undergraduate.study.cam.ac.uk/colleges/area-links

activity. The scheme is a tool for communication and a vehicle for outreach that enables the Cambridge Colleges to build effective, coherent relationships with schools and sixth form colleges – and develop an understanding of local educational contexts – across the UK. This tailored outreach work is delivered by College admissions staff, fellows, schools liaison officers and students.

In the 2016/17 academic year, through the Area Links Scheme, Colleges recorded over 124,000 student interactions and over 7,600 teacher interactions through engagement with more than 5,000 schools and colleges at over 2,500 events. This is supplemented by the work of the four Colleges which only admit mature students; such students are returning to post-compulsory education and sit outside of standard school and college networks. Most Colleges offer residential events to students from across the UK, often prioritising and promoting the opportunity to students from their relevant link area. These range from overnight stays to week-long, subject specific events.

(b) Sutton Trust Summer Schools⁴²

Target Groups: Year 12; State Sector; Low Performing Schools; Free School Meals; POLAR3 Q1&2; OAC2011 Target Groups; In Local Authority Care; IMD Deciles 1-3

The Cambridge Sutton Trust (ST) summer schools are fully-funded, six-day, subject-specific residential events, where participants live and study as if they were Cambridge students. Aimed at highly-able students from under-represented backgrounds, the summer schools are designed to help participants make informed decisions about their HE choices and equip them with the academic confidence, skills and knowledge to make a competitive application to a highly selective university.

Participants are taught by leading Cambridge academics, who guide them through new areas of study and introduce them to the depth and breadth of a Cambridge undergraduate course. The subject timetables are intense and varied, with opportunities for participants to undertake their own projects, participate in seminars, laboratory sessions or fieldwork, take advantage of the University's world-class facilities and experience the small group teaching offered by Cambridge's supervision system. In 2018 we will expand the event from five to six days, further enhancing the programme and allowing time for more in depth application support guidance, as well as a Saturday programme for parents and carers.

The ST summer schools programme at Cambridge continues to be one of the largest widening participation (WP) residential programmes in the UK, with over 500 places available in 2018.

(c) Experience Cambridge

Target Groups: Year 12; State Sector; Low Performing Schools; Free School Meals; POLAR3 Q1&2; OAC2011 Target Groups; In Local Authority Care; IMD Deciles 1-3

Experience Cambridge is an initiative that has been running since 2012; it is designed to give participants an insight into undergraduate teaching and learning at the University, and the opportunity to explore their preferred subject area in depth.

The initiative consists of a visit to the University, which includes subject masterclasses on topics outside the school curriculum; opportunities to interact with current students; and presentations on how to make a competitive university application.

⁴² www.undergraduate.study.cam.ac.uk/events/summer-schools

In 2018, a place on one of 15 strands of Experience Cambridge will be offered to around 1000 Year 12 students who had applied to take part in a Cambridge Sutton Trust Summer School, but who were not offered a place due to capacity restrictions, despite being a competitive Summer School applicant. Targeted travel bursaries and free accommodation will be available.

(d) Insight (Peterborough and West Norfolk)⁴³

Target Groups: Years 7-13; Selected State Schools in Peterborough and West Norfolk; Pupil Premium; POLAR3 Q1&2; OAC2011 Target Groups, IMD Deciles 1-3; In Local Authority Care

The Insight programme has undergone extensive redevelopment to create a new programme which will work with students throughout Years 7-13 in Peterborough and West Norfolk.

From September 2018, Insight will be a multi-phase, progressive programme that aims to increase student attainment through a series of interventions over several years, in turn increasing the number of successful applications to selective universities. The programme will also seek to support effective transitions throughout school and to university. As well as working intensively with a targeted group of students, the programme will work with schools to improve the outcomes of broader cohorts of students. Throughout the programme there will be a focus on improving the literacy skills of participating students. There is evidence that improved literacy skills can improve attainment in a range of subjects and is not just limited to attainment in English⁴⁴.

At Key Stage Three, the programme will provide challenging academic and personal development opportunities that go above and beyond the scope of the usual school curriculum. Mentoring by both undergraduate and postgraduate students will be integral to the programme as will developing student skills. Activity will be delivered in close collaboration with The Brilliant Club (with whom the University has a strong relationship spanning several years) which will provide academic content and support with ongoing evaluation.

At Key Stage Four, students will explore academic subjects alongside workshops aimed at improving their writing skills. Targeted students will be invited to take part in five 'core' day events and have the opportunity to attend optional subject-based days. Students will receive personalised feedback on assignments they complete with the opportunity to complete longer research projects over the summer holidays.

At Key Stage Five, Insight+ will focus on raising attainment in core A-Level subjects, starting with Chemistry, Physics and English in the first instance, from July of Year 12 and continuing throughout the final year of A-level. Activities delivered include a non-residential study school and a series of study days which will address common areas of weakness in student performance, identified through research undertaken via our network of teacher contacts across the country. A team of experienced teachers and specialists at the University, including the team at Isaac Physics, will deliver a programme of work which will complement school curricula. We will use continuous assessment and tracking to evaluate the success of the programme. Alongside attainment raising activity, timely and relevant Information, Advice and Guidance (IAG)

⁴³ www.undergraduate.study.cam.ac.uk/outreach/insight

⁴⁴ Terezinha Nunes and others, 'Review of SES and Science Learning', *EEF*, 2017

www.educationendowmentfoundation.org.uk/public/files/Review_of_SES_and_Science_Learning_in_Formal_Educational_Settings.pdf

will be implemented to increase the number of students applying and successfully transitioning to highly selective universities.

The programme will engage seven schools in Peterborough and five schools in West Norfolk. Schools have been selected for this programme due to lower than average school attainment and low progression to Higher Education. Highly-able students are selected for the targeted events of the programme with priority given to the groups detailed above. A total of c.800 students will be involved in the targeted elements of the programme. In addition, schools engaging in Insight will also be supported with wider engagement for a larger cohort of students. The University will fund a reading initiative for all 4,000 students in Year 7 and 8 of participating schools. This initiative measures students' reading age and encourages them to read challenging books and has been shown to have a positive impact on the reading level of students⁴⁵. Teachers will be engaged throughout the programme, through a series of timely reports on student progress. This will be coordinated across the programme to ensure schools have an overall picture of the effectiveness of the intervention. Key Stage 5 teachers and advisers will be provided with webinars and advice and guidance to ensure they are best supporting highly-able students with applications to selective universities. This specialised support will supplement and enhance that which is currently provided by the Network for Eastern Anglian Collaborative Outreach (NEACO) project for the whole school.

(e) Realise

Target Groups: Years 7-13; In Local Authority Care

Engaging with children in care and care leavers is a key priority for the University and we are committed to offering this group of students ongoing support during their studies. Any applicant who indicates on their UCAS application that they have spent time in care is also flagged in our admissions process⁴⁶, in order to ensure that these students' educational and social context is carefully considered by our selectors. Those admitted are often eligible for additional financial support, along with a £500 advance on their first bursary payment, and year-round accommodation if needed.

Care status is a priority selection criterion for outreach events delivered by the Cambridge Admissions Office and children in care can apply for funding towards travel to open days and other events in Cambridge. Every year, we also run a series of events for children in care aged 11-18 of all abilities as part of our Realise initiative, which aims to inspire more young people in care to consider higher education. In 2016/17, 150 children in care and their supporters from 20 local authorities engaged in seven aspiration-raising events. The University is currently working closely with Cambridgeshire Local Authority to run a non-residential summer school where students gain a Bronze CREST award from the British Science Association⁴⁷.

(f) HE+⁴⁸

Target Groups: Year 12; State Sector; POLAR3 Q1&2; National Reach

HE+ is a collaborative outreach initiative partnering the University and its Colleges with consortia of state schools and colleges within a particular geographical region. The programme brings together highly-able Year 12 students for a sustained year-long programme of super-curricular academic enrichment activity, and HE application advice

⁴⁵ www.educationendowmentfoundation.org.uk/projects-and-evaluation/projects/accelerated-reader/

⁴⁶ <https://www.undergraduate.study.cam.ac.uk/applying/contextual-data>

⁴⁷ www.crestawards.org/

⁴⁸ www.undergraduate.study.cam.ac.uk/find-out-more/widening-participation/he-plus

and support. In each consortium, teachers work closely with Cambridge staff to develop a bespoke programme of activity, delivered through a combination of sessions in the local area and in Cambridge.

The programmes feature multiple interactions with students across Year 12 - including conferences, visits to Cambridge, subject masterclasses, extension classes and information provision. Students have the opportunity to broaden their subject knowledge and develop academic skills by engaging in super-curricular activities, and to increase their motivation and confidence to apply successfully to a selective university. HE+ fosters and facilitates the sharing of good practice between schools and colleges. Colleagues from participating schools and colleges are encouraged to share best practice in stretching and challenging their brightest students and to create an atmosphere in which students can support each other in raising their academic attainment and aspirations.

Since it started in 2010/11 more than 17,000 Year 12 students across the UK have taken part in the programme. There are currently 146 schools and colleges involved across 18 consortia. In recognition of the considerable interest in online super-curricular extension materials the University has developed an open access website⁴⁹, which is aimed at highly-able Year 12 students. The website hosts a wide variety of academic extension resources across 18 subject disciplines (an increase from 15 in 2016/17) which have been created by Cambridge academics and postgraduates, often based on their own research areas.

In 2017, the University undertook research to establish the barriers facing those HE+ participants who made an application to Cambridge. It was identified that the offer rate was lowest for students from less experienced schools, even taking in to account personal characteristics using postcode measures such as POLAR3 Quintiles 1&2. Therefore an additional activity was trialled in September 2017 specifically for students about to make an application to Cambridge or Oxford and attending a school with on average fewer than three applications to Oxford or Cambridge per year. A two night, weekend residential in a Cambridge College aimed to familiarise students with every aspect of the application process and provide them with the advice and guidance which is often provided by more experienced schools. Initial feedback and tracking results are positive; of the students who completed HE+ and the additional residential and went on to apply to Cambridge, 57% were made an offer. Further evaluation and analysis will be undertaken when this event is repeated in 2018.

(g) Student-led widening participation

(i) Cambridge Colleges' student-led initiatives

Across the collegiate University, many current students are engaged in WP efforts. Access and outreach issues are very important to Cambridge's student body and almost all undergraduate Colleges have an elected student representative – usually known as an Access Officer - who sits on the College Student Union Committee.

Access Officers work closely with staff in their College admissions office to recruit student ambassadors for outreach activity, as well as supporting events such as College open days and school visits. Access Officers also take responsibility for a range of student-led access initiatives – such as the Murray Edwards College Offer Holders' Event, the Newnham College BME Conference and the King's College Access Bus (a series of workshops for schools in the North East).

⁴⁹ www.myheplus.com

In addition, many undergraduates act as student ambassadors or mentors for University or College initiatives, such as the Cambridge University Students' Union (CUSU) Target Schools Scheme⁵⁰ - a campaign which encourages students to return to their old school to speak about life at Cambridge and what applying to university is like. There are also opportunities for students to provide regular support for disadvantaged pupils in local Cambridge state schools through projects such as STIMULUS⁵¹ and Schools Plus⁵².

More recently, we have engaged more postgraduate students in the delivery of teaching sessions on many WP programmes – for example, over 40 postgraduates have joined our Postgraduate Outreach scheme to deliver a wide range of subject sessions and many more support activities run by third sector organisations, such as being a PhD Tutor⁵³ for The Brilliant Club.

(ii) CUSU Shadowing Scheme⁵⁴

Target Groups: State Sector; Low Performing School; First In Family; POLAR3 Q1&2; In Care

The CUSU Shadowing Scheme provides an opportunity for Year 12 state school students and mature learners from WP backgrounds to experience life as a Cambridge student. The CUSU Shadowing Scheme is the largest, most well-established student-led access initiative in the country, well-known and well-respected amongst UK state schools.

Each year the Shadowing Scheme takes at least 330 academically talented students, and pairs each of them with a Cambridge undergraduate studying a subject in which they are interested. Shadows stay in Cambridge for two nights and three days in accommodation provided by Cambridge Colleges, accompanying their undergraduate mentor to academic and social activities, getting a feel for a wide range of aspects of life as a student at Cambridge; they are also given advice about making a competitive application.

In 2016, 340 Year 12 students took part in the scheme, of whom 106 applied to Cambridge in the 2016/17 application cycle, 26 were made an offer, and 18 were accepted onto a Cambridge course.

(h) Departmental Outreach

Target Groups: Various

The University has developed a Widening Participation Project Fund, which enables our Faculties and Departments to submit proposals and bid for funds to create or develop WP projects.

The fund allocates around £200,000 per annum to a diverse range of projects, which to date have included projects for state-sector students around Archaeology, Physics, Languages, Music, Law, Theology and Classics.

A new pilot project has been set up in 2018, with Outreach Coordinators based in the University's academic schools, offering further support to Faculties and Departments to develop and enhance their WP and outreach provision.

(i) Target Oxbridge programme

Target Groups: Years 12-13, Black ethnicity

⁵⁰ www.target.cusu.co.uk

⁵¹ stimulus.maths.org/content/

⁵² www.cambridgehub.org/activities/schools-plus

⁵³ www.thebrilliantclub.org/the-brilliant-club-for-researchers/working-as-a-phd-tutor/

⁵⁴ www.applytocambridge.com/shadowing/

The collegiate University is supporting Rare Recruitment to deliver the Target Oxbridge programme⁵⁵ to 160 students in 2018. The programme aims to support highly-able black students to increase their chances of progressing to Oxford and Cambridge. This intensive programme provides a range of support for students, including individual mentoring and information and guidance about applying to Oxford and Cambridge, residential and day visits to both universities and a summer development programme.

Cambridge Admissions Tutors, staff and subject specialists will support the programme throughout, particularly through the delivery of the Cambridge residential event to be held in April 2018 for 80 students, and at the summer conference. Through continued exposure to the University and its staff and students, the programme aims to increase students' confidence to apply and equip them with the skills required to make a successful application.

- 3.12 Each of the above programmes is offered on a different scale and to different target group(s) depending on its specific objective. The table below provides a sense of the overall annual participation by students in each programme (these are variable by year so the academic year 2016/17 shown should be taken as a guideline), and the levels of attendance by target group, where data was available⁵⁶.

Table 5: Outreach Programmes Participation Statistics 2016/17

Programme	Participants	POLAR3 Q1&2	OAC2011 Target Groups	IMD Deciles 1-3	Free School Meals/ Pupil Premium	Care	BME	Disability
Sutton Trust Summer Schools	518	80.1%	86.5%	57.3%	34.2%	4.8%	39.0%	4.4%
Experience Cambridge	884	28.1%	42.9%	30.1%	21.3%	0.0%	43.2%	4.0%
HE+	2990	26.3%	25.0%	16.4%	6.2%	-	21.2%	1.1%
Insight (P'borough & West Norfolk)	73	87.7%	60.3%	52.1%	26.0%	1.4%	35.6%	1.4%
Insight (London)	123	16.0%	68.8%	77.2%	100.0%	-	-	-
CUSU Shadowing Scheme	306	38.2%	56.9%	39.5%	34.0%	-	-	6.2%
Teach First Easter School	277	44.0%	63.9%	54.2%	50.2%	1.4%	53.4%	-

- 3.13 Much of our outreach work is delivered in collaboration with other HEIs, schools and colleges, and third-party organisations, and we will continue to support this work (see Table 6). Each year the Universities of Cambridge and Oxford take Student Conferences to stadia in seven locations across England, Scotland, Wales and Northern Ireland, at which we engage with c.8,000 highly-able students and c.900 teachers from over 700 schools. We have also continued the collaborative website initially developed with the University of Oxford as part of HEFCE's National Networks for Collaborative Outreach initiative to enhance the visibility of the outreach work we deliver across the UK and continue to deliver collaborative interactive webinars to students and teachers. These initiatives ensure that geography is no barrier to

⁵⁵ www.targetoxbridge.co.uk/

⁵⁶ The symbol '-' denotes where there is not enough verifiable data is available in a particular category

exploring what the two institutions have to offer. In addition, we also collaborate with Teach First on the Futures Programme⁵⁷, which includes an Easter residential event for over 230 students, and with universities within the Russell Group on the Advancing Access⁵⁸ project. The collegiate university is a partner university of The Brilliant Club and supports its flagship Scholars Programme by hosting visits for students from state schools across the East of England, East Midlands and London.

Table 6: Collaborative outreach projects

Project	Collaborative partner(s)
Advancing Access	Russell Group HEIs
Insight (Peterborough and West Norfolk)	The Brilliant Club; Brightside
Oxford and Cambridge Student Conferences	The University of Oxford
Sutton Trust (ST) Summer Schools	The Sutton Trust
Target Oxbridge	Rare Recruitment; The University of Oxford
Teach First Futures Programme	Teach First

- 3.14 The University is additionally the lead partner in the Network for East Anglian Collaborative Outreach (NEACO)⁵⁹, a collaborative programme with Anglia Ruskin University, Norwich University of the Arts, the University of East Anglia, the University of Suffolk and the region's eight FECs which offer HE provision. NEACO is the largest of the 29 consortia established in 2016 to form the HEFCE funded National Collaborative Outreach Programme (NCOP), and it has spent the past 18 months establishing the most ambitious and large-scale HE outreach project East Anglia has ever seen. As well as HEIs, FECs and schools as key stakeholders, the consortium is working in close partnership with the region's local authorities, Local Education Partnerships, businesses, careers-focussed organisations and a wide range of third sector enterprises. NEACO is working particularly closely with the three DfE Opportunity Areas in the region, and has been named as a key partner in the published Delivery Plans of each. The very targeted work and specific objectives of NEACO are delivered in addition to the partners' existing commitments under their Access and Participation Plans.
- 3.15 The University also has a long-standing commitment to public engagement through its Science Festival,⁶⁰ Festival of Ideas⁶¹ and the work of its libraries and museums which reaches a wide range of age groups including primary and early secondary school children. In 2017, for example, the Science Festival included over 300 events and over 60,000 visits.⁶²
- 3.16 We know that this work is having an effect. As discussed in previous Access Agreements, the Sutton Trust has produced research showing that the vast majority of students attending its summer schools (most of whom are from state-sector schools and colleges with relatively low rates of progression to selective universities) go on to participate in higher education.⁶³ Research using comparator groups further suggests that summer school attendees are more likely to apply aspirationally and successfully than peers with similar characteristics.⁶⁴ Through data made available by HESA (via HEAT)⁶⁵, we know that at least 91.9% of trackable students attending one of Cambridge's Sutton Trust summer schools in the academic years

⁵⁷ www.teachfirst.org.uk/schools/secondary/access

⁵⁸ www.advancingaccess.ac.uk/

⁵⁹ www.takeyourplace.ac.uk/annual-report/

⁶⁰ www.sciencefestival.cam.ac.uk/

⁶¹ www.festivalofideas.cam.ac.uk/

⁶² www.sciencefestival.cam.ac.uk/news/thank-you-everyone-weve-had-fabulous-two-weeks

⁶³ www.suttontrust.com/researcharchive/ten-year-review-sutton-trust-summer-schools

⁶⁴ www.suttontrust.com/researcharchive/impact-sutton-trusts-summer-schools-subsequent-higher-education-participation-report-sutton-trust/

⁶⁵ All analysis completed with data provided by HESA via HEAT. HEAT disseminates HESA tracking to member institutions annually, based on participant information recorded on the database. Only participants with the relevant tracking fields and who are 'age ready' are submitted for HESA tracking and the most recent HE year of entry available is 2016/17

2011/12 to 2014/15 subsequently progressed to higher education, with 77.1% of those found in higher education attending a Russell Group institution and 16.9% attending either Oxford or Cambridge. Similar data over the same period for HE+ (which involves many more students each year), shows at least 87.2% subsequently progressed to higher education. Of those found in higher education, 68.6% were attending a Russell Group institution and 8% were attending either Oxford or Cambridge. Experience Cambridge attendees have also been tracked through HESA for the academic year 2014/15, with at least 85.6% progressing to higher education, 85.7% of those found in higher education attending a Russell Group institution, and 19.8% of those found in higher education attending either Oxford or Cambridge. More students are expected to be found in future HESA tracking as deferred entrants, a pattern noted when comparing annual HESA tracking outputs over the last three years.

- 3.17 The University additionally submitted data for the Cambridge ST summer schools and for HE+ for the 2015/16 academic year to be independently evaluated by UCAS through its STROBE service. The evaluation compared the 2017 UCAS cycle outcomes of trackable students on each of these programmes with those of 500 “representative control groups” of students with similar characteristics⁶⁶. This benchmarking process is one of the most rigorous quantitative tests that can be applied to outreach activity, and is considered to meet the Office for Fair Access (OFFA) definition of ‘Level 3’ standard evaluation⁶⁷. The University is therefore delighted that the STROBE evaluation revealed that the observed outcome figures for our trackable participants on both programmes were ‘very significantly high’ compared to the control groups, both for application rates to “high tariff group” HEIs (ST summer schools 87% vs 38% expected based on the mean of the 500 control groups, HE+ 81% vs 44% expected), Russell Group HEIs (ST summer schools 86% vs 37% expected, HE+ 81% vs 42% expected) and Oxford and Cambridge (ST summer schools 49% vs 3% expected, HE+ 22% vs 4% expected), and for acceptance rates to “high tariff group” HEIs (ST summer schools 69% vs 54% expected, HE+ 70% vs 60% expected) and Russell Group HEIs (ST summer schools 61% vs 20% expected, HE+ 60% vs 20% expected), although not Oxford and Cambridge (rates not provided by UCAS because no significant difference was found)⁶⁸. These results suggest that both programmes have substantial positive impacts on participants’ likelihood of applying to selective HE and of being successful in doing so.

Raising Attainment in Schools

- 3.18 In its response to the Education Green Paper, *Schools That Work For Everyone*, the collegiate University stated its strong opposition to any obligation to set up new schools or to sponsor (insofar as that was defined) existing schools, since doing so would be outside of the expertise of HEIs and would constitute a significant diversion from the core role of the sector.⁶⁹ It noted that one of the most effective ways for universities to contribute to raising school-level attainment is instead through the training of qualified teachers and drew attention to the DfE’s submission to the Education Select Committee’s inquiry into the supply of teachers, which states that “evidence shows that high-quality teachers are the single most important factor determining how well pupils do in school”.⁷⁰

⁶⁶ UCAS have informed us that for applications, the control group students are “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”, whilst for acceptances, they are “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).”

⁶⁷ Claire Crawford, Siobhan Dytham, and Robin Naylor, *The Evaluation of the Impact of Outreach: Proposed Standards of Evaluation Practice and Associated Guidance*, Office for Fair Access, June 2017.

⁶⁸ This information has been derived from the Universities and Colleges Admissions Service (UCAS) STROBE analytical data service

⁶⁹ University of Cambridge Response to the Education Green Paper, Dec 2016

⁷⁰ DfE submission to Education Select Committee inquiry (SOT0046), November 2015.

- 3.19 The University does have direct engagement with individual schools, but for very specific reasons. For example, the University (in particular the Faculty of Education) has close links with the University of Cambridge Primary School (UCPS). The University is pleased to be contributing to the governance and distinct educational and pedagogical offer of the school, but its role results from its obligations as part of the North West Cambridge development rather than any ambition to involve itself in the creation or sponsorship of schools. The University is also working closely to provide support to the proposed Cambridge Mathematics Free School in Chesterton, the application for which was given approval in the pre-opening stage in April 2017.⁷¹
- 3.20 The University is engaged in a multitude of initiatives which support teachers and provide subject enrichment for and academic engagement with students, all of which contribute towards the raising of attainment. These are particularly important for WP, as they provide an additional layer of support for students who may not be studying in well-resourced schools or have teachers who have the opportunity to refresh their subject skills and support their students as they engage with the sort of material covered at highly selective institutions. For example:
- (a) Designing our Tomorrow (DOT)⁷², is a collaborative initiative that brings together the expertise of the University's Department of Engineering and Faculty of Education. DOT started in 2009 as a project aimed at bringing authentic engineering design practice to STEM subjects, particularly Design & Technology (D&T). It has since grown to develop a range of continuing professional development resources in conjunction with industry partners to support teachers to equip their students with the 'thinking tools' to creatively solve problems in a complex world. Staff from DOT have also been invited to contribute to policy-making and consultation in areas such as revisions to the National Curriculum 2014 and GCSE and A-Level Specifications 2017. DOT is currently live in 54 schools nationally and internationally and the project is expanding to new areas working with specific target schools over the coming year.
 - (b) Isaac Physics⁷³ is a DfE-funded, national project that is based at the University of Cambridge. The platform offers support and activities in physics problem solving to teachers and to students transitioning from GCSE (Year 11), through to Sixth Form (Years 12-13), to university. It combines an online study tool and associated books with face-to-face events for students (and CPD for teachers) at partner schools and tertiary institutions across the UK.
 - (c) The NRICH Maths Project,⁷⁴ the largest programme within the University's Millennium Mathematics Project, includes the NRICH website plus face-to-face pupil workshops and Continuing Professional Development (CPD) courses for teachers. The NRICH website publishes thousands of free mathematics education resources, focusing on developing problem-solving and taking a low-threshold high-ceiling approach accessible to all students. NRICH resources are tailored for all ages from 3 to 18, covering all stages of Early Years, primary, and secondary education, through to support for students' transition from A-level to university. Detailed teacher support material is included. In the 2016/17 school year, the NRICH website attracted more than 9.5 million visits and over 37 million page views from users worldwide, with 53% of visits from the UK. NRICH staff also worked face-to-face with around 4,600 teachers and more than 11,000 students in 2016/17 providing associated teacher CPD support and student events.

⁷¹ www.gov.uk/government/publications/free-schools-open-schools-and-successful-applications

⁷² www.education.designingourtomorrow.com/

⁷³ isaacphysics.org/

⁷⁴ nrich.maths.org/

- (d) I Want To Study Engineering⁷⁵ is designed to address inequalities in the ability of different schools to prepare their pupils for competitive university admissions interviews for disciplines related to the physical sciences and engineering. The site makes high quality preparatory material freely available. The site now has 211 interview style exercises, plus 291 exercises based on A-level mathematics and physics problems. In 2017 over 45,000 visitors to the site engaged in over 96,000 'sessions', and there are currently 10,103 users signed up to the site. Whilst it is difficult to measure engagement and impact of online resources, it is known that users engage for an average of nearly 10 minutes per visit, and that the number of questions answered correctly on the site has increased each year from 2014 to 2017 and the proportion of incorrect answers has fallen from 62% to 55%, perhaps showing improvement in user engagement with the problems. The project is led by the Department of Engineering and is funded through a philanthropic donation.
- (e) The online STEP Support Programme⁷⁶ is designed to support university applicants in developing their advanced mathematical problem-solving skills and prepare for sitting STEP Mathematics examinations. The programme is particularly aimed at students whose schools cannot offer support for STEP preparation, and the resources are freely available online. Developed by the Faculty of Mathematics and NRICH, the programme consists of online assignment modules, designed to be used as a weekly course for individual study from Year 12 onwards. Each module consists of a structured mathematical problem-solving assignment, leading to work on carefully-selected STEP questions, with support material and partial solutions to help students assess progress and identify areas that need more work. Additional support is available through an online discussion forum, mentored by Cambridge mathematics students and staff. The programme is reaching a significant audience. Between September 2016 and August 2017 the mathematical assignments attracted over 69,000 unique downloads, with at least 1,400 users engaging with the advanced modules. 75% of users of the online programme are located in the UK. To complement and extend the online STEP Support Programme course, all UK state school students holding a Cambridge offer based on STEP papers II and III have also been invited to attend a full-day intensive preparation workshop held in Cambridge during March 2018. Two-thirds of those eligible have taken up the opportunity, with 202 students registering for the events. This demonstrates how the University of Cambridge has now fully met the outreach target set in previous Access Agreements to embed the STEP Support Programme into its own provision; thus, this target has now been discontinued.
- (f) Subject Masterclasses⁷⁷ offers Year 12 students subject enrichment and the opportunity to explore topics of interest beyond what is covered within the A Level syllabus. Subjects have included Chemistry, Engineering, Genetics, Geography, History, Languages, Mathematics, Music and Psychology. Of the 8,000 students who attended the University's Subject Masterclasses in 2016/17, 33% applied to the University and 38% of those applicants were made offers of a place. The constituent Colleges of the University also undertake subject workshops, giving secondary school students of different ages the opportunity to experience subjects as they are taught at university.
- (g) The Subject Matters⁷⁸ initiative provides guidance for Year 10 and 11 students on A Level subject choice. At these sessions, Admissions Tutors explore the opportunities that higher education can offer; provide guidance on A Level (or equivalent) subject choice; and outline what universities look for in applications.

⁷⁵ i-want-to-study-engineering.org/

⁷⁶ maths.org/step/

⁷⁷ www.undergraduate.study.cam.ac.uk/events/masterclasses

⁷⁸ www.undergraduate.study.cam.ac.uk/events/subjectmatters

- 3.21 We recognise the importance of contributing to the sectoral understanding the types of intervention that make a difference to aspiration and attainment raising, and improving outcomes for students. We share good practice through participation in national conferences and through engagement with specific groups and committees; the Director of the Cambridge Admissions Office is a member of a Sutton Trust / OFFA advisory group which is specifically considering how to measure the impact of outreach activities, and the University recently hosted the annual meeting of the Russell Group WP Evaluation Forum network.
- 3.22 Further information regarding the research and evaluation into the outcomes of outreach activity are included within section 8. It should be noted that many activities do not possess directly measurable outcomes in terms of student attainment or admissions as they are designed to have a wide reach to students considering not just Cambridge but other highly selective institutions and have been included here solely to provide a fuller picture of the Collegiate University's engagement with outreach activities

4. Fee Limits

- 4.1 Following the participation of the University in the TEF, the tuition fee charged to Home and EU undergraduate and PGCE students admitted from 1 September 2019 will be the tuition fee set at the amount determined by the Secretary of State as the higher rate under Part III of the Higher Education Act 2004.⁷⁹ For 2018/19 this has been set at £9,250.⁸⁰ The figure for 2019/20 has not yet been announced. The University will set tuition fees for 2019/20 at the maximum rate permitted, which OfS has asked institutions to assume for the purposes of this Access and Participation Plan to be £9,250. We will ensure prospective students are aware of these intentions and commit to publish details on our website as soon as the position becomes clear. Home students admitted on or after 1 September 2019 to full-time undergraduate degree programmes will be subject to annual or other periodic fee increases raised in line with the higher amount.⁸¹ Our promotional material makes it clear that fees may increase and we are confident that it will be possible to do so in compliance with consumer law. Fees for current and continuing students are published on the University's website.⁸² The text provided by OfS regarding registration has been added to our website.
- 4.2 At the time of drafting this Plan, it is not fully known what impact the outcome of the referendum on the UK's membership of the EU will have on UK policy on higher education tuition fees, loans and bursaries for 2019/20 and beyond. Our intention until then is to continue to charge EU students at the UK fee rate applicable at the time, for as long as it continues to be permitted by UK law.
- 4.3 In 2019/20, approximately 10,355 undergraduate students and 291 PGCE students admitted to the University will be paying the higher rate of tuition fee. This produces an additional fee income above the standard rate of c.£31.5 million.

⁸⁰ Note that previous years entrants may have been admitted to different fee rates; see previous years Access Agreements for information

⁸¹The higher amount is £9,250 in 2018/19 and may be increased to a new higher amount which the Government will announce. The higher amount does not always increase, but when it does it has typically been by no more than the RPIX (Retail Prices Index excluding mortgage interest payments)

⁸²www.undergraduate.study.cam.ac.uk/fees-and-finance/tuition-fees

5. Level of Expenditure on Access Measures

- 5.1 The collegiate University has a strong commitment to widening participation. The collegiate University therefore intends to commit to expenditure on access measures at a higher level, as suggested in guidance from OfS.
- 5.2 Overall the collegiate University plans to expend c.32% of undergraduate tuition fee income (and c.10% of PGCE tuition fee income) above the standard rate on access measures. It is estimated that in 2019/20, this will amount to c.£10 million.
- 5.3 Until 2012, outreach activity was funded primarily from time-limited sources including external sponsorship, philanthropic donation, government grants and from similarly limited national initiatives, such as Gifted and Talented Excellence Hubs and AimHigher. Since 2012 the collegiate University has allocated a proportion of additional fee income to underpin and develop outreach activity. In 2019/20 outreach funding associated with the additional fee income will amount to c.£3.7million.
- 5.4 We do not intend at this point to make any changes to the level of expenditure on bursaries for 2019/20 (approximately £6.3 million per annum), though the scheme remains under annual review through a sub-committee of the Undergraduate Admissions Committee. Whilst mindful of OfS guidance on this subject, we believe that, in addition to the positive effect that our bursary scheme has on attracting applications to the University, it is right to provide financial support to students with less means to enable their full participation in the student experience. This too is an important aspect of social mobility. We have also taken full account of student feedback in the formulation of the present scheme and it has the very strong support from the representatives of the Student Union at meetings where these arrangements have been discussed. In January 2015, the University received 856 responses from bursary recipients (40% of the total) to a survey of attitudes towards bursary provision, both generally and at Cambridge. Of those students from low-income backgrounds (as defined by eligibility for Free School Meals whilst in secondary school), 20.6% said that they would not have gone to university if bursaries had been unavailable; 43.1% said that the bursary offered was a deciding or very important factor in their choice of institution; and 44.1% said that without a bursary they could not continue their studies.⁸³ The Cambridge Colleges undertook further research in 2017. Of the current students surveyed, 69% reported concerns over debt. Compared to their high income peers, students from low income backgrounds were much more likely to report not having enough money to get the most of their time at Cambridge (34% vs 16%), not being able to afford course books (28% vs 16%), financial concerns affecting their studying (34% vs 14%) and sometimes not eating to save money (25% vs 10%).
- 5.5 We intend to undertake an evaluation of the impact of our bursaries guided by the statistical tool published by OFFA⁸⁴ using our internal bursary and household income data for the 2015/16 academic year onwards (i.e. from the year we switched to using the HEBSS system). HESA provided the necessary dataset for the analysis of the 2015/16 cohort's continuation outcomes to us (and other HEIs) at the end of March 2018.

We will be conducting the bursary impact evaluation early in 2019 using the three tools that OFFA published (the statistical tool, survey tool and interview tool). The outcomes will be reported in our next Access and Participation Plan. Furthermore, we are conducting a research project which will evaluate the effectiveness of bursaries for access to Higher Education, and the implications for student support more broadly, mindful that this may be

⁸³ Survey conducted and received by the UAC Cambridge Bursary Schemes Steering Group.

⁸⁴ www.offa.org.uk/press-releases/offa-tools-evaluate-financial-support/

affected by the recommendations of the Augur Review. We are in the process of appointing a post-doctoral Research Associate to conduct this research. The research aims to provide robust evidence to inform the further development of the Cambridge Bursary Scheme and student support. We anticipate that findings of this research will be available in August 2019.

- 5.6 It should be noted that the level of expenditure on financial support and outreach activity outlined in this agreement is supplemented with substantial funding through other sources, which include philanthropic donations and funding agreements with government agencies and third party organisations.
- 5.7 Overall, the collegiate University will, even with the higher fee, still be meeting out of its own resources almost half the real annual cost of c.£18,500⁸⁵ of educating an undergraduate at Cambridge and thereby benefiting every UK and EU student at the University, regardless of background.

⁸⁵ Assessed in 2015/16

6. Financial Support for Students

- 6.1 The collegiate University is committed to the principle that no publicly-funded UK student should be deterred from applying to an undergraduate course at the University of Cambridge because of financial considerations, and that no such student should have to leave because of financial difficulties.
- 6.2 We are concerned that levels of debt are a clear deterrent for many students, and that the loss of the state HE maintenance grant in England and the rising cost of student loans present a real risk to maintaining current levels of access. We believe that providing maintenance support for those from low-income households is essential in order to mitigate that risk.
- 6.3 For 2018/19, the collegiate University will continue to provide all UK undergraduate students from households with an income of £25,000 or less financial support of £3,500 per year (£5,600 for most independent students⁸⁶) in the form of a maintenance bursary. Students from households with incomes of between £25,000 and £42,620 will be offered support of up to £3,400 on a tapering basis.⁸⁷ Students from elsewhere in the EU will be entitled to similar support subject to proper demonstration of equivalent household income⁸⁸. Figures for 2019/20 have not yet been confirmed and will be published on the University's website when available.
- 6.4 The University will use the Higher Education Bursaries and Scholarships System (HEBSS) to inform the process of allocating maintenance bursaries.
- 6.5 The financial support package described above will be reviewed each year and may be subject to change to ensure that intended outcomes are achieved. Wherever possible we will seek to ensure that existing recipients are not negatively impacted by any future changes.
- 6.6 In view of the financial support offered by the government to teacher trainees the University will not be making bursary awards to PGCE students.
- 6.7 The collegiate University recognises that the cost of travel to attend an interview can be a barrier to some students. Therefore, in 2017 public transport costs for interviewees eligible for Free School Meals or in Local Authority Care who attend a UK maintained sector school or college, were reimbursed. 108 students benefitted from the scheme, with financial support of over £6,000 offered. The trial will be reviewed and changes to further improve uptake will be put in place for 2018.

⁸⁶ Students who are classed as independent by their regional student funding body and do not return to a parental home during vacations.

⁸⁷ We have chosen to link our provision to government support arrangements; this will be reviewed should these arrangements change significantly.

⁸⁸ At present this is only applicable for 2018/19

7. Targets and Milestones

- 7.1 The University will continue to encourage applications from well-qualified students from groups that are currently under-represented and to admit a greater proportion of them within the framework of our admissions policy and without compromising entry standards.
- 7.2 The University recognises the value of HESA performance indicators and benchmarks, but notes that the benchmarks have severe limitations in a Cambridge context, in that they take insufficient account of the University's entrance requirements, both in terms of subject combinations and levels of attainment.⁸⁹
- 7.3 The University has identified three key areas to be addressed by its Access and Participation Plan. These are outreach, admissions and retention. Accordingly, the University proposes to measure its progress against eight targets across these three areas:

Outreach

- to offer a commitment to the minimum number of places available on summer schools at the University;
- to offer a long-term, progressive and collaborative outreach project in the Eastern region focussed on attainment raising;
- to develop a new programme designed to improve the number of students from specific ethnic minority groups progressing to high tariff institutions;

Admissions

- to admit UK resident students from UK state-sector schools and colleges so that they fall within a range of 62.0-64.0% of the total intake, reaching the top of that range by 2019/20;
- to admit UK resident students from Quintiles 1&2 of the Participation of Local Areas (POLAR3) classification so that they fall within the range 10.0-13.0% of the total intake, reaching the top of that range by 2019/20;
- to admit UK resident students from supergroup 8, groups 3a, 3b, 3c, 4b, 7a, 7b and 7c, and subgroups 4a1, 4a2, 4c2 and 6b3 of the Output Area Classification (OAC2011) so that they comprise 13.9% of the total intake by 2021/22;
- to admit UK resident students from regional Indices of Multiple Deprivation (IMD) deciles 1-3 so that they comprise 8.5% of the total intake by 2019/20.

Retention

- to maintain our record of retention, with the rate of non-continuation in HE following year of entry to be 2.1% or less.
- 7.4 In addition, we will continue to invest in our research function to understand better the issues underlying each of these areas and to measure our impact (see section 8).

⁸⁹ www.cam.ac.uk/admissions/undergraduate/research/

- 7.5 The University has selected the eight targets described above because they are measurable, do not rely on information which is unavailable (or inconsistently available) at the point of application, and are possible to influence without compromising either the principle of needs-blind admissions or entry standards. We will nonetheless continue to consider such other data as is made available by UCAS and HESA and its usefulness in measuring our progress.

Minimum Number of Places on Summer Schools

- 7.6 Research has shown that summer schools are a particularly effective and measurable mechanism for improving access to higher education. Analysis of internal and external data sources demonstrates proven success in relation to subsequent admission to Cambridge (and other highly selective universities) of summer school attendees over several admission cycles. The University will therefore continue to offer a minimum of 600 places per year on its programmes, making the Cambridge summer schools programme one of the largest and most ambitious in the UK.

Long-Term Outreach and Attainment Raising

- 7.7 Long-term engagement with schools to improve outcomes for the sector is a key strategic aim for the University, achieved through both our ongoing outreach activity and through our role as lead HEI for the National Collaborative Outreach Programme in our region, with its emphasis on Years 9-13.

- 7.8 As noted in section 3.11(d), we have now launched a regional outreach programme in Peterborough, called Insight, which will also be extended to West Norfolk in 2018/19. During 2018/19, we will develop interventions that aim to have an explicit impact on students' literacy skills, with the hope that this will help raise the participants' attainment more broadly.⁹⁰ This is a particularly relevant issue for Peterborough which is one of the worst performing local authorities in the country for Key Stage 2 performance in Reading and Writing National Curriculum assessments⁹¹, meaning many students are starting Year 7 with poor literacy skills. We are currently developing a Theory of Change (ToC) model and evaluation framework to measure the impact of these interventions. As part of this, we are in discussion with Cambridge Assessment regarding the use of a cognitive ability test which is designed in such a way that this is not dependent on reading ability, which students on the programme would take in Year 7. We are exploring how this can be used for targeting and evaluation of the programme. Success will ultimately be measured in terms of improving the Key Stage 4 and Key Stage 5 outcomes of target students as well as progression to selective universities. Our progress on this work will be reported in our next Access and Participation Plan, at which point we will propose quantifiable metrics for this area. This initiative is a significant part of our efforts to increase the number of students attaining at the level we require for admission.

- 7.9 As indicated in section 3.9, our data suggests that we currently admit BME students at least at the expected level when prior attainment is factored in. However, there is clear evidence that the pool of particular groups of students securing top grades – particularly black and some Asian ethnic groups – is disproportionately small. We will therefore work with partners to attract those students that do meet our entrance requirements, but will additionally seek to re-focus our outreach efforts to improve the aspiration of such students. As noted in section 3.11(i), we have collaborated with Rare Recruitment to increase the number of

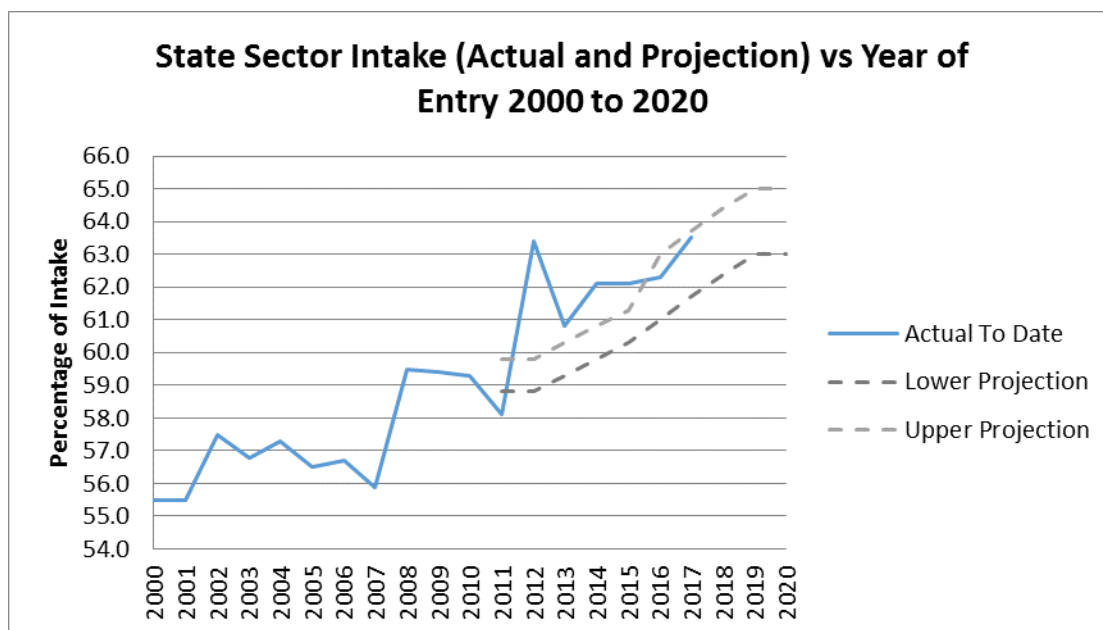
⁹⁰ v1.educationendowmentfoundation.org.uk/uploads/pdf/EEF_Interim_Evidence_Brief_-_Reading_at_the_Transition.pdf

⁹¹ educationdatalab.org.uk/2017/08/provisional-ks2-data-2017-five-key-points-from-todays-release/
According to KS2 results in 2017, only 61 % of pupils in Peterborough were at the expected standard in reading and 67% at the expected standard in writing. Excluding outliers, this was the lowest percentage of pupils for any Local Authority in England in either measure.

places on the Target Oxbridge programme to provide intensive support to 160 highly-able black students. It should be noted that the University became a member of the Race Equality Charter (REC) in September 2016 and is preparing to apply for a REC Bronze Award in July 2018.

Proportion of Intake from State Schools

- 7.10 The collegiate University seeks to increase the proportion of our UK undergraduate intake from schools and colleges in the UK state sector.
- 7.11 National A-level attainment data shows that the proportion of students educated in state-sector schools at typical attainment levels (A*A*A+) required for entry to Cambridge fall somewhere in the range 61.0-65.0%,⁹² with research conducted by the University pointing towards the lower end of that range as being a reasonable expectation for Cambridge state sector admissions when several relevant factors are taken into account.⁹³ The University will retain its objective for 62.0-64.0% of students admitted to be from state-sector schools and colleges, making annual progress and reaching a milestone of 63.4% by 2018/19 and 64.0% by 2019/20. We cannot predict the effect of A-level reforms and funding cuts on schools, and guidance from the OfS has indicated that we need not extend targets beyond 2019/20, so at the current time we propose to maintain this position. We will however review this position in a year's time when the impact of the new situation in respect of the examination system and school and college finances is better understood.
- 7.12 The graph below shows progress since 2000 and the upper and lower projections allowing for a 1.0% fluctuation either side of the planned position:



Proportion of Intake by POLAR3 Quintile

- 7.13 Current HESA performance indicators and other national datasets relating to socio-economic background do not take adequate account of the entry requirements of individual

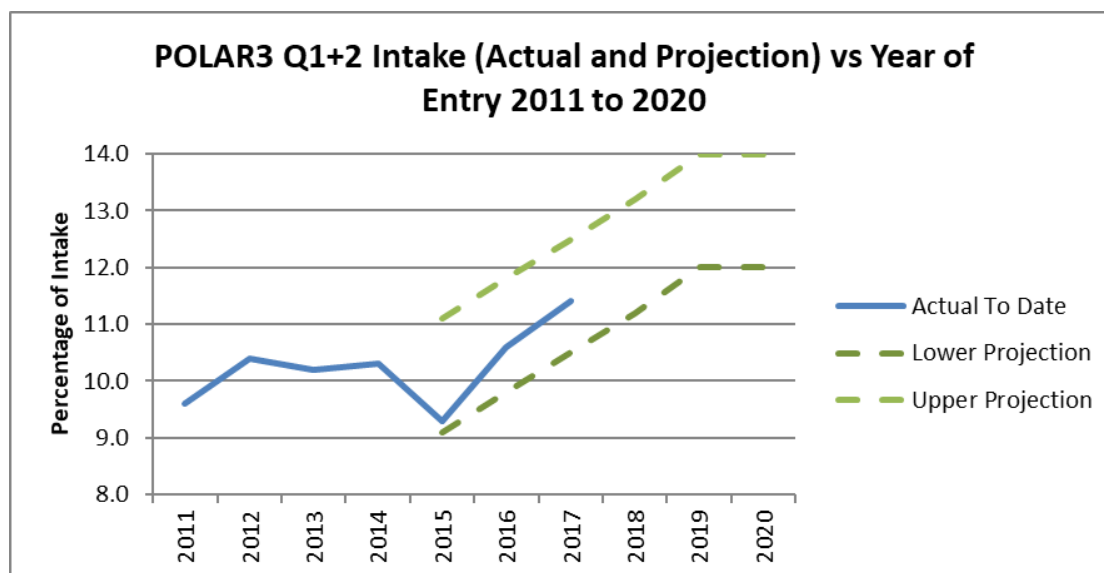
⁹² "Candidates awarded the A* grade at A-level in 2014", T.Gill, Cambridge Assessment Statistical Report Series No.92, Table 5b.

⁹³ www.cao.cam.ac.uk/admissions-research/achievable-target and "Re-Evaluation of the Target for Maintained Sector Schools", Horner, 2016.

institutions. Whilst they take some account of attainment, they do not do so in sufficient detail for highly selective institutions such as Cambridge, where the average candidate admitted has 2.7 A* grades with specific subject entry requirements. We would also note that POLAR3, which is a key part of the language used by OfS and the sector in terms of WP, is a measure of participation in higher education⁹⁴, rather than of socio-economic circumstances (though there is overlap between the two).

7.14 Nonetheless, the University recognises the directional value of measures such as POLAR3. In our 2016/17 Access Agreement, we stated that our objective was for the proportion of students admitted from POLAR3 Quintiles 1&2 to fall within the range 10.0-13.0% of the total intake, reaching the top of that range by 2019/20 (aiming at the same time to maintain admissions for low participation neighbourhoods – i.e. Quintile 1 - at between 3.0-4.0% in any given year). However, as proposed by the Director of Fair Access, this was reviewed during 2015/16 using UCAS data, and in our 2017/18 Access Agreement we noted our finding that around 12.5% of HE entrants achieving A*A*A or better at A-level were in POLAR3 Quintiles 1&2. Despite this, we maintained our objective of reaching 13.0% by 2019/20 in our 2017/18 and 2018/19 Access Agreements at the request of OFFA, but noted that, as confirmed by discussion with UCAS in the light of the data it controls, this would mean admitting POLAR3 Quintiles 1&2 students disproportionately in relation to the national attainment profiles at the levels of attainment required by Cambridge. Although our current Plan indicates an intention to maintain our position (13.0%) beyond 2019-20, we are engaging in activities (such as Insight, see 7.8 above) which we anticipate will increase the pool of suitably qualified applicants. We have the desire to be increasingly challenging in all of our targets, as long as this is consistent with our evidence-based approach to admissions and the development and implementation of this Access and Participation Plan. This continued ambition will be reflected in our submission next year. We will at the same time be considering the use of POLAR4 as opposed to POLAR3⁹⁵

7.15 The graph below shows progress since 2011 and the upper and lower projections allowing for a 1.0% fluctuation either side of the planned position:



Proportion of Intake by OAC2011 Target Groups

⁹⁴ www.hefce.ac.uk/analysis/yp/POLAR/

⁹⁵ www.hefce.ac.uk/analysis/yp/POLAR/POLAR4.data/

- 7.16 Output Area Classification (OAC2011)⁹⁶ is a geodemographic segmentation system produced by the UK Office for National Statistics. It is different to POLAR3 in that it is (in part) based on socio-economic and occupation variables, as opposed to representation in higher education, and therefore provides an alternative indicator of social mobility in higher education. Unlike commercial measures, it is an entirely transparent measure based on known variables. When coupled with POLAR3 we believe that this measure provides a more meaningful indication of progress on WP measures.
- 7.17 We conducted research during 2016/17⁹⁷ that analysed the associations between different OAC2011 subgroups, groups and supergroups and several indicators of disadvantage. As a result of this, we determined last year that our pre-existing OAC2011 admissions target should be re-focussed on (UK resident) students in the following OAC2011 groups:
- groups 3a (“ethnic family life”), 3b (“endeavouring ethnic mix”) and 3c (“ethnic dynamics”)
 - (sub)groups 4a1 (“social renting young families”), 4a2 (“private renting new arrivals”), 4b (“challenged Asian terraces”) and 4c2 (“multicultural new arrivals”)
 - subgroup 6b3 (“semi-detached ageing”)
 - groups 7a (“Challenged diversity”), 7b (“constrained flat dwellers”) and 7c (“White communities”)
 - supergroup 8 (“hard-pressed living”)

We are retaining the target agreed as part of our 2018/19 Access Agreement for admission of students from areas classified into these OAC2011 groups – with a target of 13.9% (based in part upon national data provided by HESA⁹⁸) against a baseline of 11.5%, and are aiming to reach that target by 2021/22.

Proportion of Intake by IMD Decile

- 7.18 Each country within the UK has created their own Index of Multiple Deprivation (IMD).⁹⁹ These measures assess geographical areas according to a number of different indicators of deprivation, including low income, unemployment, health deprivation and disability, education, skills and training deprivation, barriers to housing and services, crime, and living environment. While each measure operates independently, and are thus not directly comparable, they all seek to highlight areas that suffer from relative disadvantage and have been used by HEIs in the UK to identify students from disadvantaged backgrounds.¹⁰⁰
- 7.19 Work by the University on IMD2015 (England’s IMD measure) in 2017 showed that, similar to OAC2011 target groups, the three lowest IMD2015 deciles are associated with considerable relative disadvantage¹⁰¹. Provisional examinations of data for IMD measures in Northern Ireland, Scotland and Wales suggested that this association remains true across the UK. Alongside POLAR3 and OAC2011, we believe that the IMD measures are a useful indicator of progress on widening access, and so the University introduced a new IMD admissions target

⁹⁶ www.ons.gov.uk/methodology/geography/geographicalproducts/areaClassifications/2011areaClassifications

⁹⁷ “Using Geo-Demographic Measures to contextualise Admissions”, Walmsley, March 2017

⁹⁸ Sources: HESA Student Record 2015/16; HESA Student Record 2014/15. Copyright Higher Education Statistics Agency Limited. *Neither the Higher Education Statistics Agency Limited nor HESA Services Limited can accept responsibility for any inferences or conclusions derived by third parties from data or other information supplied by HESA Services.*

⁹⁹ Department for Communities and Local Government, The English Index of Multiple Deprivation (IMD) 2015 – Guidance, English Indices of Deprivation, 30 September 2015 /www.gov.uk/government/statistics/english-indices-of-deprivation-2015; Scottish Government, ‘Scottish Index of Multiple Deprivation’, 2017

www.gov.scot/Topics/Statistics/SIMD; Welsh Government, ‘Welsh Index of Multiple Deprivation (WIMD)’ gov.wales/statistics-and-research/welsh-index-multiple-deprivation/?lang=en; ‘Northern Ireland Multiple Deprivation Measure 2010 (NIMDM2010)’, Northern Ireland Statistics and Research Agency www.nisra.gov.uk/statistics/deprivation/northern-ireland-multiple-deprivation-measure-2010-nimdm2010.

¹⁰⁰ heat.ac.uk/2017/04/advice-from-offa-regarding-withdrawal-of-ns-sec-data/

¹⁰¹ “Using Geo-Demographic Measures to contextualise Admissions”, Walmsley, March 2017

last year, proposing to make progress over three years towards an admissions target of 8.5% from IMD deciles 1-3 (which is the proportion of students our analysis suggested we should be admitting at the level of attainment that we require), from a baseline of 7.7%. Given guidance from the OfS this year that we need not extend targets beyond 2019/20, we will retain this admissions target this year. However, this target will be considered for revision next year using data that allows us to evaluate national levels of attainment broken down by IMD deciles. A similar exercise for OAC2011 (described in our 2018/19 Access Agreement) resulted in a higher target and a greater level of ambition.

Retention

- 7.20 The extensive support offered by the Cambridge collegiate system ensures that the University has one of the best rates of student retention in the sector (currently 99.2%¹⁰²). Nonetheless, increased levels of fee debt present significant challenges to retention that are difficult to predict. A continuing objective will therefore be to ensure that the University maintains its position in relation to the HESA benchmark on non-continuation of full-time degree entrants in higher education following year of entry. Taking an average of the five years from 2008/09 to 2012/13 as a baseline, that figure is 2.1%.¹⁰³

8. Research and Evaluation

- 8.1 The success of all of our work depends upon applying an evidence-based approach to achieve a deep understanding of the issues affecting under-represented and disadvantaged groups in the context of admission to highly selective institutions. This approach includes effective identification and targeting of at-risk groups, the delivery of high-quality outreach interventions and the robust measurement and evaluation of outputs and impact in terms of being admitted to and succeeding at leading universities, as well as ensuring the fairness of our own admissions process. We aim to develop our own understanding and practice of outreach interventions and fair admissions, but also to contribute to that of the wider sector.

Research unit with core research and evaluation remit

- 8.2 Much of this critical ongoing work is undertaken or supported by a research unit within the Cambridge Admissions Office, which was expanded significantly in 2016/17. The research and evaluation remit of this unit can be summarised under two broad and inter-related themes:
- efforts to continually assess and improve the fairness of our admissions, including informing our use of contextual data in the admissions process and our admissions targets (and also the targeting of some of our outreach activities), which is detailed in section 8.3;
 - conducting and developing the evaluation of widening participation and outreach activities, which is detailed in section 8.4 onwards.
- 8.3 Research efforts to continually assess and improve the fairness of our admissions include the following:
- profiling the national pool of potential applicants with high prior academic attainment by characteristic and background using data from UCAS, HESA and the DfE (insofar as their data policies allow);
 - making comparisons between Cambridge and the wider HE sector;

¹⁰² www.hesa.ac.uk/news/08-03-2018/non-continuation-tables Table T3

¹⁰³ HESA performance indicators 2011-12, www.hesa.ac.uk/index.php?option=com_content&task=view&id=2064&Itemid=141, Table 3a.

- assessing the predictive quality and impact of contextual data, and other characteristics



- and circumstances, for example on admission and then in terms of student success (such as degree outcomes) once admitted;
- assessing the predictive quality and evaluating the impact of our recently introduced admissions assessments in our admissions process;
- researching the proxies that Cambridge and the wider HE sector utilise to identify individuals who have characteristics, circumstances or backgrounds that

are typically associated with disadvantage or under-representation in highly selective HE - for example, we intend to research combinations of these proxies, and in particular to explore the utility of UCAS's multiple equality measure (MEM).¹⁰⁴

Outreach and widening participation evaluation

8.4 The evaluation of outreach and widening participation activity is a key area of work for the research unit, and the unit's expansion has much improved its capacity to support this evaluation for activities delivered both by the central Cambridge Admissions Office and by the wider collegiate University. In recent years the Cambridge Admissions Office has begun developing a comprehensive evaluation framework for all of these activities. Presently the framework is focussed on projects run centrally by the Cambridge Admissions Office but eventually it will attempt to incorporate and underpin the wide variety of outreach work being undertaken across the University of Cambridge. The broad architecture of the framework is illustrated in Figure 1.

Figure 1: Architecture of current evaluation framework

8.5 This framework is complemented by individual project evaluation plans that identify measurable intended outcomes and embed evaluation throughout an outreach programme's lifecycle. Each project's evaluation plan aims to meet or exceed the relevant standard or level of evaluation that is appropriate for the type(s) of activity involved, based on the guidance

¹⁰⁴ www.ucas.com/corporate/data-and-analysis/ucas-undergraduate-releases/equality-and-entry-rates-data-explorer

provided in OFFA's Proposed Standards of Evaluation.¹⁰⁵ For each major programme delivered by the Cambridge Admissions Office, we are developing Theory of Change (ToC) models to underpin the design of each programme and feed into its evaluation.¹⁰⁶ These models are not fixed but are designed to be updated as more evaluation data (such as survey results, tracking analysis, etc.) become available. ToC allows us to take a holistic approach to outreach evaluation, combining intervention-based improvements with a better understanding of how each activity fits into the University's wider strategic objectives for WP. These models are being developed collaboratively between the research unit and outreach practitioners involved in project delivery to ensure ownership is shared and relevant expertise brought to bear.

- 8.6 An example of this ongoing work is an initial ToC model for the HE+ programme which has been developed by the research unit in conjunction with the WP practitioners responsible for the programme (see section 3.11 (f)). As is the case with many of our projects, this required us to map a ToC model onto an existing programme; although this presented challenges, it has already proved a useful exercise and the model now underpins a revised evaluation plan for the programme including: a baseline/post-programme survey; tracking participants through HEAT/HESA and internal applicant tracking to Cambridge; and comparing HE+ participant progression to control groups with similar characteristics using UCAS STROBE. Another example has involved conducting an academic literature review to inform the design of a new literacy improvement intervention.

Coordinated monitoring and evaluation of WP activity

- 8.7 The collegiate structure and the broad and diverse outreach offering at Cambridge presents a challenge to coordinated monitoring and evaluation of WP. There are colleagues in our 29 undergraduate Colleges and over 40 departments, faculties and institutions delivering some form of outreach/WP activity, alongside the central Cambridge Admissions Office teams. Some of the main objectives of the research unit are to enable practitioners across the collegiate University to record their outreach/WP work more effectively and facilitate sharing of best practice across Cambridge.
- 8.8 Following recommendations from OFFA and HEFCE¹⁰⁷, the collegiate University has subscribed to the Higher Education Access Tracker (HEAT) and began its institutional rollout in September 2017. All Cambridge Admissions Office activity is now being recorded in the database (including participant information where appropriate), and Colleges are beginning to use the database too. Many departments and faculties that are delivering outreach activity are also using HEAT to record this work and its use is now a requirement of funding for the Widening Participation Project Fund (see section 3.11(h)). The research unit has also developed standardised methods of data collection and a core set of intended outcomes that contribute towards the University's strategic objectives for WP, for use across the collegiate University in conjunction with HEAT.
- 8.9 It is hoped that in the coming years, these new systems will facilitate the development of a more comprehensive and detailed picture of Cambridge's broader outreach work and its coverage. For example, the ability within HEAT to identify individuals who have taken part in multiple interventions is already proving useful to inform our coverage and targeting effectiveness. The ability for HEAT's central team and our research unit to profile participants

¹⁰⁵Claire Crawford, Siobhan Dytham, and Robin Naylor, *The Evaluation of the Impact of Outreach: Proposed Standards of Evaluation Practice and Associated Guidance*, Office for Fair Access, June 2017.

¹⁰⁶For a useful overview of how a ToC model can be applied to interventions see: Mary J. De Silva and others, 'Theory of Change: A Theory-Driven Approach to Enhance the Medical Research Council's Framework for Complex Interventions', *Trials*, 15 (2014), 267 <doi.org/10.1186/1745-6215-15-267>; James P. Connell and Anne C. Kubisch, *Applying a Theory of Change Approach to the Evaluation of Comprehensive Community Initiatives: Progress, Prospects, and Problems* (The Aspen Institute, 1998).

¹⁰⁷www.offa.org.uk/universities-and-colleges/guidance/collaborative-working/

against their engagement with other HEIs will be invaluable in producing a more comprehensive picture of outreach across the UK which is vital for an institution with a national outreach mission.

- 8.10 Where participant information is recorded on HEAT, we will be able to obtain information about progression to the wider HE sector via HESA tracking. The inherent time delay with this type of tracking means that it is of limited use for evaluation of individual programmes but the research unit will be looking at long term trends across the collegiate University. For some projects, we will use UCAS' STROBE service for tracking of progression outcomes to the wider HE sector (see section 3.17). Additionally, the Cambridge Admissions Office undertakes internal Cambridge application tracking, and we intend to use this increasingly in future to help collegiate University practitioners evaluate their individual programmes where progression to Cambridge is an intended outcome or interim evaluation measure.
- 8.11 The research unit is aiming to improve evaluation across the collegiate University by supporting WP practitioners to conduct, embed, and take ownership of evaluation as part of their own programmes. As well as producing an evaluation framework and several other resources, and training practitioners to use HEAT, the research unit is currently conducting an evaluation workshop series where practitioners design an evaluation plan for a current project. This has been well-received and will be repeated throughout the coming year along with additional training sessions on targeting methods, programme design, and Theory of Change models.

9. Monitoring Arrangements

- 9.1 The University will continue its policy of making admissions statistics publicly available, through its website¹⁰⁸. Those statistics include data on the number of applications and acceptances by school type, region, gender, ethnicity and socio-economic classification.
- 9.2 The University's adherence to this agreement and its progress in reaching the objectives indicated above will be monitored through the University's Undergraduate Admissions Committee (jointly chaired by the Pro-Vice-Chancellor (Education) and the Associate Secretary of the Colleges' Senior Tutors' Committee with responsibility for admissions) which reports to the principal University and Collegiate bodies. The Committee will take advice from the Admissions Forum, the intercollegiate body charged with managing undergraduate admissions and delivering agreed targets and objectives. The Undergraduate Admissions Committee will annually review application, offer and admission trends, particularly in respect of currently under-represented groups. It will also keep under review, and advise as necessary on the amendment of, admissions and recruitment processes that have a bearing on securing a wide and diverse pool of well-qualified applicants. Each of these groups includes student representation.
- 9.3 The Cambridge Bursary Scheme and other financial support will continue to be reviewed by the Undergraduate Admissions Committee through a specially tasked Cambridge Bursary Scheme Sub Group, which monitors the operation and impact of the scheme using annual reports and data analysis, and make recommendations as appropriate.
- 9.4 Scrutiny of outreach activities will be undertaken by the Outreach Steering Group (reporting to the Undergraduate Admissions Committee), which receives reports on those activities and reviews their effectiveness. The success of outreach activities (aside from those which are web-based or of a general aspiration-raising nature) will be monitored annually using a mixture of qualitative and quantitative evaluation methods (see section 8). A working party has recently been set up to explore different evaluation methods, both on an individual programme level and across the wider University. It is our intention to embed or grow those initiatives which make demonstrable progress towards their objectives.
- 9.5 The University has identified specific groups that may be particularly affected by higher tuition fees and so has prepared an Equality Assurance Assessment in line with BEIS guidance. The University will continue to consider any potential disproportionate or adverse impact on protected groups (as defined by the Equality Act 2010) periodically via the groups described above. An Equality Assurance Assessment in relation to the University's WP activities has been completed and approved by the University Equality Assurance Assessment Review Group to ensure that it fulfils its legal obligations in this area. It should be noted that national data regarding several protected characteristics does not exist, and so no comparisons can be made in any such assessment.
- 9.6 Post-entry reviews will be undertaken by continued analyses of retention rates and examination performances of relevant groups in comparison with those of the overall cohorts.
- 9.7 We will continue to monitor the ease with which students make the transition from school to university on a subject-by-subject basis. The University's Centre for Teaching and Learning¹⁰⁹ working in collaboration with Faculties, Departments and Colleges, is taking the lead on this and is considering the varying ways in which technology can support students, through the

¹⁰⁸ www.undergraduate.study.cam.ac.uk/apply/statistics

¹⁰⁹ www.cctl.cam.ac.uk

implementation of the University's digital education strategy. The personal attention paid to the needs of students through the Colleges will continue to enable prompt resolution of any individual difficulties.

10. Provision of Information to Students

- 10.1 The University will ensure that full details of its access measures, including a detailed description of fees and financial support arrangements, are published in future editions of our Undergraduate Prospectus, finance guides and on our website¹¹⁰. Advice and information will continue to be given to students during school and college visits and at Higher Education fairs, conferences and open days.
- 10.2 We shall provide in a timely manner such information as the Universities and Colleges Admissions Service (UCAS) and the Student Loans Company (SLC) reasonably require to populate their applicant-facing web services.
- 10.3 Once approved the Access and Participation Plan will be published on our website, alongside all previous approved Access Agreements.¹¹¹

¹¹⁰ www.cam.ac.uk/admissions/undergraduate/finance and www.admin.cam.ac.uk/univ/cambridgebursary

¹¹¹ <https://www.undergraduate.study.cam.ac.uk/find-out-more/widening-participation/access-and-participation-plans>

* course type not listed.

Full-time and part-time course fee levels for 2019-20 entrants.

Please enter inflationary statement in the free text box below.

Home students admitted on or after 1 September 2019 to full time first undergraduate degree programmes will be subject to annual or other periodic fee increases raised in line with the higher amount. The higher amount does not always increase, but when it does it is by an amount set by government and has typically been by no more than the RPIX (Retail Prices Index excluding mortgage interest payments)

Full-time course type:	Additional information:	Course fee:
First degree		£9,250
Foundation degree		*
Foundation year / Year 0		*
HNC / HND		*
CertHE / DipHE		*
Postgraduate ITT		£9,250
Accelerated degree		*
Sandwich year		£1,385
Erasmus and overseas study years		£1,385
Other		*
Franchise full-time course type:	Additional information:	Course fee:
First degree		*
Foundation degree		*
Foundation year / Year 0		*
HNC / HND		*
CertHE / DipHE		*
Postgraduate ITT		*
Accelerated degree		*
Sandwich year		*
Erasmus and overseas study years		*
Other		*
Part-time course type:	Additional information:	Course fee:
First degree		*
Foundation degree		*
Foundation year / Year 0		*
HNC / HND		*
CertHE / DipHE		*
Postgraduate ITT		*
Accelerated degree		*
Sandwich year		*
Erasmus and overseas study years		*
Other		*

Table 8a - Statistical targets and milestones relating to your applicants, entrants or student body

Reference number	Stage of the lifecycle (drop-down menu)	Main target type (drop-down menu)	Target type (drop-down menu)	Description (500 characters maximum)	Is this a collaborative target? (drop-down menu)	Baseline year (drop-down menu)	Baseline data	Yearly milestones (numeric where possible, however you may use text)					Commentary on your milestones/targets or textual description where numerical description is not appropriate (500 characters maximum)
								2018-19	2019-20	2020-21	2021-22	2022-23	
T16a_01	Access	State school	Other statistic - State School (please give details in the next column)	Proportion of UK undergraduate intake from schools in the UK state sector per admissions cycle	No	Other (please give details in Description column)	59.3%	63.4%	64.0%				Our baseline is set at 2010-11 as per our original access agreement. Note that these figures are for each admission cycle rather than for year of entry. In any given year there may be statistical variation of +/- 1.0%.
T16a_02	Access	Other (please give details in Description column)	Other statistic - Location (please give details in the next column)	POLAR3 Quintiles 1 and 2	No	Other (please give details in Description column)	9.6%	12.2%	13.0%				Our baseline data is set at 2010-11 to be consistent with our other targets. Note that these figures are for each admission cycle rather than for year of entry. In any given year there may be statistical variation of +/- 1.0%.
T16a_03	Student success	Other (please give details in Description column)	HESA T3a - No longer in HE after 1 year (All, full-time, first degree entrants)	Proportion of students leaving the University during the first year. Aim to meet or exceed the HESA benchmark.	No	Other (please give details in Description column)	2.1%	2.1%	2.1%	2.1%	2.1%		As agreed with the Director for Fair Access the target is to maintain the average figure recorded in HESA PIs for the 5 year period to 2012-13 (the most up to date data available at time of setting the target)
T16a_04	Access	Socio-economic	Other statistic - Location (please give details in the next column)	Output Area Classification (OAC) is a geodemographic segmentation system produced by the Office for National Statistics (ONS), which provides an alternative indicator of social mobility to POLAR as it is based on socio-economic and occupational variables as opposed to HE representation.	No	2015-16	11.5%	12.2%	12.8%	13.4%	13.9%		We are proposing to target OAC 2011 groups 3a-c, 4a1-2, 4b, 4c2, 6b3, 7a-c, and 8, because our research and analysis has found that these OAC groups are especially associated with one or more indicators of disadvantage. In any given year there may be statistical variation of +/- 1.0%.
T16a_05	Access	Socio-economic	Other statistic - Location (please give details in the next column)	Indices of Multiple Deprivation (IMD), which assess geographical areas according to multiple indicators of deprivation	No	2015-16	7.7%	8.1%	8.5%				We are proposing to target IMD deciles 1-3, because our research and analysis has found that these IMD groups are especially associated with one or more indicators of disadvantage. In any given year there may be statistical variation of +/- 0.2%.

Table 8b - Other milestones and targets.

Reference Number	Select stage of the lifecycle	Main target type (drop-down menu)	Target type (drop-down menu)	Description (500 characters maximum)	Is this a collaborative target?	Baseline year	Baseline data	Yearly milestones (numeric where possible, however you may use text)					Commentary on your milestones/targets or textual description where numerical description is not appropriate (500 characters maximum)
								2018-19	2019-20	2020-21	2021-22	2022-23	
T16b_01	Access	Other (please give details in Description column)	Outreach / WP activity (summer schools)	Focussed on students with multiple markets of widening participation. Minimum number of places offered each year	No	Other (please give details in Description column)	400	600	600	600	600		Our baseline is set at 2010-11 as per our original access agreement.
T16b_02	Access	Attainment raising	Outreach / WP activity (collaborative - please give details in the next column)	Long-term regional outreach to raise attainment.	Yes	2016-17	165	450	600	TBC	TBC		Students in Years 7-11 (once at full roll-out) who score highest in multiple WP criteria - eg POLAR, OAC, IMD, FSM. To deliver a statistically significant increase in attainment for students engaged in the full programme.
T16b_03	Access	Ethnicity	Outreach / WP activity (other - please give details in the next column)	Long term outreach to engage specific ethnic minority groups	Yes	2016-17	80	160	160	160	TBC		Students in Year 12 engaged - Black Ethnicity