

Access Agreement with the Office for Fair Access (OFFA) 2018-19

1. Summary

1.1 This Agreement is submitted in accordance with the requirements placed on those higher education institutions that intend to charge above the basic rate¹ of tuition fee for Home/EU students commencing full-time undergraduate courses in 2018-19. This Agreement and those preceding it have been prepared in accordance with the guidance from OFFA² and after extensive consideration by relevant joint committees of the collegiate University, which have included student representation.³

1.2 The key features of the Agreement are:

- the higher rate⁴ of tuition fee (ie 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 2018 onwards;
- a needs-based financial support package that will provide support for maintenance for those undergraduates from lower-income households;
- a range of outreach activities appropriate to currently under-represented and disadvantaged groups, 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 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 would 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 it may be the process of the UK exiting the EU in the timeframe of this agreement (ie between 2018-19 and 2021-22) leads to a fall in home fee rate numbers and that absolute levels of expenditure therefore decrease.

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;

¹ In accordance with OFFA guidance it is assumed here that the "basic rate" for 2018-19 will be set at £6,165 for full-time courses.

² "Strategic Guidance For 2018-19 Access Agreements", Office For Fair Access, Feb 2017.

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

⁴ In accordance with OFFA guidance it is assumed here that the "higher rate" for 2018-19 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 paragraph 4.3 below. A recent announcement indicates that this will be the case for 2018-19 entrants.

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

- 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 standard A-level offer for undergraduate entry to Cambridge is currently A*AA for most arts and humanities subjects and A*A*A for most science subjects.⁷ There is a large pool of qualified applicants and competition is keen: in 2015-16, only 27.3% of 9,351 applicants from UK schools and colleges were accepted, and of those 83.7% exceeded the standard offer (the average number of A*s achieved by accepted applicants from this cohort was 2.7).
- 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 7.10), 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 includes the assessment of academic record in the context of data about the applicant, their school and their geodemographic background, interviewing c.78% of UK and EU applicants, 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 2.11). These are intended to identify, as precisely as possible, the highest achievers with the greatest potential from the pool of 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 AS and 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 standard offer.

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

⁸ <http://www.russellgroup.ac.uk/search?q=HESA+Performance>

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

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

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

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

A-Level Reform

- 2.7 We are concerned that A-level reforms currently being implemented are already significantly reducing student choice and flexibility. Public examinations at the end of Year 12 have until recently provided most UK students and their advisers with an objective and meaningful measure of how well the transition from GCSE to Sixth Form study has been made. These results indicated progress and enabled students to make informed decisions about which subjects to focus on in Year 13 and beyond. The lack of formal end of Year 12 examinations taken in all subjects studied will, we believe, adversely affect student confidence in making these decisions (as well as the quality of the advice they receive about higher education options), and also make it more difficult for institutions such as Cambridge to assess accurately current academic performance and trajectory.
- 2.8 Once fully implemented, these reforms could have a significant bearing on our ability to make progress on access measures¹⁴ because our quantitative research shows that UMS scores, which will no longer be consistently available to us, provide the single best indicator of academic achievement and potential, and are significantly superior to GCSEs in this respect.¹⁵ Independent research conducted by the University of Bristol supports this view.¹⁶ We note that the removal of UMS takes the sector one step further away from a post-qualification admissions process, placing more reliance on GCSEs which are 18 months old at the point of application, and which were taken when the applicant was academically less mature, rather than on AS-level qualifications taken just 4 months previously.
- 2.9 We are also concerned that proposed funding arrangements will effectively restrict students in many state schools to taking three A-levels (a concern which UCAS polling suggests is becoming a reality¹⁷), meaning that the opportunity to study extremely valuable fourth subjects, such as Further Mathematics, would be lost. This has influenced our decision to provide greater support for mathematics to disadvantaged groups in future (see section 7.10).

Contextual Data

- 2.10 The collegiate University already makes extensive use of contextual data to support its outreach activity and admissions process.¹⁸ Alongside indicators of academic ability and potential such as GCSE scores, AS-level UMS scores (where they remain available), teacher predictions and references, admissions assessments and tests such as BMAT, we consider:
- geodemographic data – the socio-economic characteristics of an applicant’s local area (using OAC2011¹⁹), and rates of progression to higher education in an applicant’s local area (using POLAR3²⁰). We will develop our use of geodemographic contextual data in the admissions process to mirror relevant admissions targets set out in section 7 below;
 - school/college data – the GCSE performance,²¹ and recent history of entry to Cambridge or Oxford; and
 - data on individual circumstances – whether an applicant has spent time in care at some point (declared in the UCAS application), and any information provided in the Extenuating Circumstances Form (where submitted) concerning educational disruption or disadvantage through health or personal problems, disability or difficulties with schooling.

¹⁴ See letter to the Right Hon Michael Gove MP, www.cao.cam.ac.uk/files/rfc/rfc_reform_of_gce_alevels_mgmp.pdf

¹⁵ “Predictive Effectiveness of Metrics In Admissions”, Partington, Apr 2011, <http://www.cao.cam.ac.uk/admissions-research/alevels-degree-potential>

¹⁶ “University Admissions and the Prediction of Degree Performance: an Analysis in the Light of Changes to the English Schools’ Examination System”, R. Johnston et al., Higher Education Quarterly, Jan 2015. <http://onlinelibrary.wiley.com/doi/10.1111/hequ.12067/pdf>

¹⁷ “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

¹⁸ For further information see www.study.cam.ac.uk/undergraduate/info/contextualdata.html

¹⁹ Output Area Classifications, see <https://www.ons.gov.uk/methodology/geography/geographicalproducts/areaClassifications/2011areaClassifications>

²⁰ Participation Of Local Areas, www.hefce.ac.uk/analysis/yp/POLAR/

²¹ Taken from the DfE National Pupil Database, www.gov.uk/government/collections/national-pupil-database

- 2.11 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 2016.²² We will carefully monitor 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 (see further section 7.20). Early analysis of our first year of using admissions assessments suggests that their introduction has not adversely affected rates of application overall or from under-represented groups in particular.

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.
- 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.91.1%)²³ gaining at least Upper Second Class Honours. Feedback from students recorded in the National Student Survey is consistently high (currently four percentage points higher than the sector average, at 90%).²⁴
- 3.3 We have one of the highest continuation rates of any UK higher education institution (currently 98.5% compared to 91.4% 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.
- 3.4 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 89.1% compared to 70.5% for the sector), and have amongst the highest starting salaries in the UK (currently £27,895 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

²² www.undergraduate.study.cam.ac.uk/applying/admissions-assessments

²³ University of Cambridge Examination Results and Degree Statistics, Table TS01a, Classified Honours examination results, www.prao.admin.cam.ac.uk/files/es_2016.pdf

²⁴ <http://www.educationalpolicy.admin.cam.ac.uk/student-engagement/university-wide-surveys/nss#key>

²⁵ HESA Performance Indicators 2014-15, Table T3a, www.hesa.ac.uk/pis/noncon; all entrants, percentage who continue or qualify at same institution.

²⁶ Destination of Leavers (DLHE) 2014-15, Tables F and K, <https://www.hesa.ac.uk/data-and-analysis/publications/destinations-2014-15/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.

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

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 available on the admissions website,²⁹ and for years prior to that (1999-2010) can be found in the special issues of the Cambridge University Reporter held online.³⁰

3.7 The University has made significant progress in admissions on access measures. Taking the 2011 year of entry (ie the year prior to the introduction of fees at the higher rate of £9000 pa) as a baseline, state-sector admissions at Cambridge have risen by 4.2 percentage points (to 62.3% for 2016 entry); ethnic minority admissions have increased by 5.9 points (to 21.8%); admissions of students from low participation neighborhoods (ie POLAR3 quintile 1) have increased by 0.6 percentage point (to 3.2%), and those from POLAR3 quintiles 1 and 2 have risen by 1.0 point (to 10.6%). The number of students admitted by Cambridge who claim Disability Support Allowance has exceeded the HESA Performance Indicator for each of the last 5 years.³¹ 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 1: University of Cambridge Admissions Metrics 2011-16

| Year Of Entry | State Sector | BME | POLAR3 Q1 | POLAR3 Q1+Q2 |
|----------------|--------------|-------|-----------|--------------|
| 2011 | 58.1% | 15.9% | 2.6% | 9.6% |
| 2012 | 63.4% | 17.4% | 3.6% | 10.4% |
| 2013 | 60.8% | 16.5% | 3.8% | 10.2% |
| 2014 | 62.1% | 19.8% | 3.4% | 10.3% |
| 2015 | 62.1% | 21.0% | 3.2% | 9.3% |
| 2016 | 62.3% | 21.8% | 3.2% | 10.6% |
| Change 2011v16 | +4.2% | +5.9% | +0.6% | +1.0% |

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, however, 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 above, the average student admitted to the University holds at least A*A*A at A-level. According to data from UCAS,³² 7.3% 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 almost half as likely again. So, for example, when Cambridge admitted 38 black students in 2016, this was out of a total national pool of just c140 whose attainment reflected the University admissions profile. Our analysis of data from the National

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

²⁹ www.undergraduate.study.cam.ac.uk/apply/statistics

³⁰ www.admin.cam.ac.uk/reporter/

³¹ HESA Performance Indicators 2014-15, Table T7, www.hesa.ac.uk/pis/dsa

³² <https://www.ucas.com/corporate/data-and-analysis/ucas-undergraduate-releases/ucas-undergraduate-end-cycle-data-resources/applicants-and-acceptances-groups-applicants-2016>

Pupil Database³³ shows that there are only c400 students attending state schools in England who have claimed Free School Meals who secure A*A*A or better each year,³⁴ and our analysis of HESA data suggests that only c15 students who were previously in local authority care are admitted to university each year with the same grade profile.³⁵

Table 2: National Attainment and University of Cambridge Admissions 2016³⁶

| 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 | 152930 | 11065 | 7.3% | 1894 | 17.1% |
| POLAR3 Q1 | 13090 | 465 | 3.6% | 82 | 17.6% |
| Black ethnicity | 6645 | 140 | 2.1% | 38 | 27.1% |

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, and 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 ethnicity students; mature learners; students educated in further education colleges; and bright students in schools and colleges which have not historically sent students to the University of Cambridge. Examples are as below³⁷:

(a) Area Links Scheme³⁸

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 activity. The Scheme is a tool for communication and 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 2015-16 academic year, through the Area Links Scheme, Colleges recorded over 100,000 student interactions and over 5,700 teacher interactions through engagement with more than 5,100 schools and colleges at over 2,100 events. This is supplemented by the work of the four Colleges which only admit mature students; such students are returning to education post-compulsory education and sit outside of standard school and college networks. A review of the

³³ 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.

³⁴ NPD, 2011-12 to 2014-15

³⁵ HESA data for academic years 2014-15 and 2015-16 were provided by the Higher Education Statistics Agency Limited ('HESA'). HESA does not accept responsibility for any inferences or conclusions derived from their data by third parties.

³⁶ Data from UCAS and Cambridge Admissions Office

³⁷ 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.

³⁸ www.undergraduate.study.cam.ac.uk/colleges/area-links

Scheme took place in 2016-17 to ensure that the provision is as accessible as possible. In addition, new collaborative outreach activity with local state sector secondary schools and colleges is being implemented, under a new scheme called Connect to Cambridge, which has expanded work in the local area.

All Colleges are willing to provide information and advice, and to listen to teachers' perspectives, as well as seeking prospective students' views, on what can be done to help make Cambridge as accessible as possible to any student with the ability and potential to study at the University.

(b) Sutton Trust Summer Schools³⁹

Target Groups: Year 12; State Sector; Low Performing Schools; Free School Meals; POLAR3 Q1+2; OAC 2011 Flagged Groups; In Care

The Cambridge Sutton Trust Summer Schools are fully-funded, week-long, 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.

The Sutton Trust Summer Schools programme at Cambridge continues to be one of the largest widening participation residential programmes in the UK, with 530 places available in 2017. Whilst it is not an explicit aim of the programme, in 2016 some 37.3% of attendees on our Sutton Trust Summer Schools were from an ethnic minority background.

(c) Experience Cambridge

Target Groups: Year 12; State Sector; Low Performing Schools; Free School Meals; POLAR3 Q1+2; OAC 2011 Flagged Groups

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 two day-visits to the University, which include subject masterclasses on topics outside the school curriculum; opportunities to visit Cambridge Colleges and interact with current students; and talks on how to make a competitive university application. Alongside the Cambridge visits, participants develop their independent research skills by completing an online academic project with support from their peers and an academic co-ordinator.

The number of subject-specific strands of Experience Cambridge is growing year-on-year. In 2017, a place on one of 14 strands of Experience Cambridge will be offered to around 600 Year 12 students who had applied to take part in a Cambridge Sutton Trust Summer School, but who were not offered a place despite being a competitive Summer School applicant.

Following a successful trial of an Experience Cambridge parent and supporter day in 2016, which was attended by over 100 participants, we are partnering with the Sutton Trust in 2017 to

³⁹ www.undergraduate.study.cam.ac.uk/events/summer-schools

deliver a more comprehensive day-long programme for parents and supporters, with targeted travel bursaries for students and their parents/supporters available.

(d) Insight⁴⁰

Target Groups: Years 9-11; State Sector; Pupil Premium; POLAR3 Q1+Q2; OAC 2011 Flagged Groups

Insight is a progressive programme which works with highly able students in Years 9-11, with the aim of developing their academic interests and helping them to make informed decisions about their future educational choices.

Schools with above average proportions of students in receipt of Free School Meals and in areas of high ethnic diversity are particularly targeted and invited to nominate students to take part. Students who are eligible for Pupil Premium funding are prioritised.

Participants explore academic subjects including those that are not taught in school and have the opportunity to talk to our academic staff and student ambassadors about subject choices. There are also sessions on developing skills that will be helpful during further study and on university life, which aim to alleviate worries regarding topics such as the admissions process and student finance.

Students are invited to take part in five 'core' day events and have the opportunity to attend up to six optional subject-based days per year. At the end of Year 10, students visit Cambridge to work on an intensive academic project in small groups and the programme culminates with a summer residential event at the end of Year 11.

(e) Sutton Scholars

Target Groups: Years 9-10; State Sector; rural and coastal deprivation; Pupil Premium; POLAR3 Q1+Q2; OAC 2011 Flagged Groups

In partnership with the Sutton Trust we have launched the 'Sutton Scholars' programme in East Anglia for students in Years 9 and 10, to address some of the particular challenges faced by predominantly white working class young people living in areas of rural and coastal deprivation, and low social mobility. Currently five schools around Kings Lynn and six around Great Yarmouth, all with below average GCSE attainment, have enthusiastically engaged with the programme.

The programme works with over 100 students in Years 9 and 10 to develop participants' academic interests, stretching them beyond their studies in school, and to provide them with information and insights into applying to and studying at university.

Working with ten highly-able students from each participating school, the programme is focused on supporting schools with higher levels of disadvantage and lower rates of attainment in comparison to local and national averages. Students are given the opportunity to visit Cambridge and other partner universities (50% of students surveyed at the start of the programme in 2014-15 had never visited a university before) and to complete an academic project led by a Cambridge postgraduate student.

(f) Realise

Target Groups: Year 7+; In Care

The University of Cambridge held the Buttle UK Quality Mark, in recognition of our commitment to supporting prospective applicants who are or have spent time in care, and our care-leaver

⁴⁰ www.undergraduate.study.cam.ac.uk/outreach/insight

students during their time at the University. Although the Quality Mark has been discontinued, the University has undertaken to maintain its commitment at the same level.

Engaging with children in care and care leavers is a high priority for the University. Care status is a priority selection criterion for outreach events run by the Cambridge Admissions Office. Children in care can apply for funding towards travel to open days and other events at Cambridge and time spent in care is also flagged in our admissions process, in order to ensure that these students' educational and social context is carefully considered by our selectors. Those admitted are offered additional financial support and year-round accommodation.

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. During 2015-16 a total of 81 young people and 41 supporting adults from 14 local authorities attended seven events hosted by the University. In addition, the University engages in bespoke events to support ongoing activity, for example hosting a day-long event as part of the University of Hertfordshire's Care Leaver Summer School.

(g) HE+⁴¹

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 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. In addition, after a successful HE+ teacher CPD event in 2016, 96% of those who attended agreed that it provided them with information to help deliver subject extension classes in their consortium.

Since it started in 2010-11 more than 14,000 Year 12 students across the UK have taken part in the programme. There are currently 112 schools and colleges involved across 15 consortia.

In recognition of the considerable interest in online super-curricular extension materials the University has developed an open access website⁴², which is aimed at highly-able Year 12 students. The website hosts a wide variety of academic extension resources across 15 subject disciplines which have been created by Cambridge academics and postgraduates, often based on their own research areas.

⁴¹ www.undergraduate.study.cam.ac.uk/find-out-more/widening-participation/he-plus

⁴² www.myheplus.com

(h) CUSU Shadowing Scheme⁴³

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

The Cambridge University Students' Union (CUSU) Shadowing Scheme provides the opportunity for Year 12 state school students and mature learners from widening participation 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 350 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 2015, 418 Year 12 students took part in the scheme, of whom 89 applied to the University of Cambridge in the 2015-16 application cycle, and 27 were made an offer.

(i) 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 widening participation projects.

The fund allocates around £250,000 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, Classics and the University of Cambridge Museums.

(j) Insight Peterborough:

Target Groups: Years 7-9, State Sector, Pupil Premium, POLAR3 Q1+2; OAC 2011 Flagged Groups

During 2016-2017, the University has launched a new, progressive programme for targeted students in Year 7-9 which aims to provide challenging academic and personal development opportunities that go above and beyond the scope of the usual school curriculum. This is a collaborative programme with The Brilliant Club as a key partner in delivery and evaluation.

The programme consists of two main strands: an academic strand based on The Brilliant Club's Scholars Programme and a personal development strand delivered by the University. Mentoring by both postgraduate and undergraduate students is integral to this programme. This year we are engaging with 165 Year 7 and 8 students in selected schools in Peterborough.

3.12 Each of the above events is offered on a different scale and to a 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 an order of magnitude is given rather than exact figures), and the average levels of attendance by target group, where data was available (typically the last two years):

⁴³ www.applytocambridge.com/shadowing/

Table 3: Outreach Event Participation Statistics 2015-16

| Activity | Participants | POLAR Q1+Q2 | OAC2011 Flag | FSM/PP | Care | BME | Disab |
|-------------------|--------------|-------------|--------------|--------|------|-------|-------|
| ST Summer Schools | 550+ | 63.4% | 42.3% | 42.2% | 3.3% | 35.7% | 8.8% |
| Experience Cam | 650+ | 22.6% | 20.9% | 18.2% | 0.2% | 33.8% | - |
| HE+ | 2950+ | 26.3% | 18.5% | - | - | - | - |
| Insight | 130+ | 19.2% | 63.8% | - | 2.3% | - | - |
| Sutton Scholars | 200+ | 81.1% | 32.3% | 33.8% | 0.0% | - | - |
| Shadowing Scheme | 330+ | 42.0% | 39.8% | 30.0% | 3.6% | - | - |

- 3.13 Much of our outreach work is delivered in collaboration with other higher education institutions, schools and colleges, and third-party organisations, and we will continue to support this work. In addition to the Sutton Trust, we also collaborate with Teach First on an Easter School programme for over 230 students annually, and 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 c8000 highly able students and c900 teachers from over 700 schools. These events ensure that geography is no barrier to exploring what the two institutions have to offer. The Universities of Cambridge and Oxford have continued the collaborative website initially produced via funding secured through 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. In addition, the University has continued its involvement in the Russell Group Advancing Access project.
- 3.14 The University is additionally the lead partner in the Network for East Anglian Collaborative Outreach (NEACO), a collaborative programme with Anglia Ruskin University, Norwich University of the Arts, the University of East Anglia, and the University of Suffolk funded through HEFCE's National Collaborative Outreach Programme⁴⁴. The consortium – which is the biggest of the 29 participating nationally in terms of number of target learners - will involve close liaison with students in over 100 disadvantaged areas across the East Anglia region. All activity is delivered in addition to commitments made in Access Agreements.
- 3.15 The University also has a long-standing commitment to public engagement through its Science Festival,⁴⁵ Festival of Ideas and the work of its libraries and museums which reaches a wide range of age groups including primary and early secondary school children. In 2016, for example, the Science Festival included over 300 events and reached nearly 65,000 people.
- 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.⁴⁶ Research using comparator groups further suggests that summer school attendees are more likely to apply aspirationally and successfully than peers with similar characteristics.⁴⁷ Through data made available by HESA, we know that at least 91.6% of trackable students attending one of the University's Sutton Trust Summer Schools in the years 2010/11 to 2013/14 progressed to university, with over 70.2% attending a Russell Group institution and 15.8% being admitted by either Oxford or Cambridge. Similar data for HE+, which involves six times as many students each year, for those engaged between 2012-13 and 2013/14 shows that at least 85.9% had already progressed to university, with more expected to attend as deferred entrants in the 2015/16 academic year. Of those already at university, 59.5% were at a Russell Group institution and 7.1% had progressed to either Oxford or Cambridge.
- 3.17 The University additionally submitted data for both of these programmes for the 2014-15 academic year to be independently evaluated by UCAS through its STROBE service. The evaluation compared

⁴⁴ <http://www.hefce.ac.uk/sas/ncop/>

⁴⁵ www.sciencefestival.cam.ac.uk/

⁴⁶ <http://www.suttontrust.com/researcharchive/ten-year-review-sutton-trust-summer-schools>

⁴⁷ www.suttontrust.com/researcharchive/impact-sutton-trusts-summer-schools-subsequent-higher-education-participation-report-sutton-trust/

the outcome of students on our programmes versus 500 alternative groups of students who were similar in terms of attainment at KS4, age, ethnicity, gender, POLAR3 quintile, and the percentage of their school on free school meals (FSM). This benchmarking process is one of the most rigorous quantitative tests that can be applied to outreach activity, so the University is delighted that both programmes were placed in the 100th percentile for applications, offers, and acceptances to high tariff institutions in the 2016 UCAS cycle. With UCAS claiming that the statistical significance of this high performance was “very significantly high”, the University can be confident that these outreach activities are having a positive impact on the proportion of students who apply to, receive offers from, and are accepted at high tariff institutions⁴⁸.

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 higher education institutions and would constitute a significant diversion from the core role of the sector.⁴⁹ 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 Department for Education’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”.⁵⁰
- 3.19 The University does, have direct engagement with individual schools, but for very specific reasons. For example, the University and in particular its Faculty of Education has intimate 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. It is also working closely with the proposed Cambridge Mathematics Free School in Chesterton, the application for which was recently given approval in the pre-opening stage.⁵¹
- 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 widening participation, 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) Underground Mathematics,⁵² which started in 2012 as the Cambridge Mathematics Education Project (CMEP). Based at the University of Cambridge and funded by a grant from the UK Department for Education, Underground Mathematics provides free web-based resources that support the teaching and learning of post-16 mathematics. Many of the resources are low threshold and high ceiling, and combine solving problems, mathematical reasoning and fluency. They aim to help students build firm foundations for mathematical understanding by connecting ideas and developing techniques and are designed to encourage students to pose questions, reflect and collaborate, thereby deepening their individual understanding. The project has significant recorded qualitative evidence that teachers using Underground Mathematics report deeper understanding and improved formative assessment results.

⁴⁸ This information has been derived from the Universities and Colleges Admissions Service STROBE analytical data service.

⁴⁹ University of Cambridge Response to the Education Green Paper, Dec 2016

⁵⁰ DfE submission to Education Select Committee inquiry (SOT0046), November 2015.

⁵¹ <https://www.gov.uk/government/publications/free-schools-open-schools-and-successful-applications>

⁵² <https://undergroundmathematics.org/>

- (b) Isaac Physics⁵³ is another Department for Education-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,⁵⁴ 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 capabilities.

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 2015/6 school year the NRICH website attracted more than 9.5 million visits and over 39 million page views from users worldwide, with 54% of users in the UK. NRICH staff also worked face-to-face with around 4,000 teachers and 15,000 students in 2015/6 providing associated teacher CPD support and student events.

- (d) I Want To Study Engineering⁵⁵ is designed to address inequalities in the teaching of mathematics and physics for Year 12 and 13, particularly for those with a specific focus on a higher education in Engineering. The site now has 211 interview style exercises, plus 291 exercises based on A-level mathematics and physics problems. In 2016 over 45,000 visitors to the site engaged in almost 93,000 'sessions', and there are currently 8,100 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 just over 13 minutes per visit, and that the number of questions answered correctly on the site has increased each year from 2014 to 2016 and the proportion of incorrect answers has fallen from 62% to 55%, perhaps showing improvement in user engagement with the problems. The project was led by the Faculty of Engineering and funded through philanthropic donation.
- (e) The online STEP Support Programme⁵⁶ 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 already reaching a significant audience. Since September 2016, more than 1,100 users have downloaded at least four assignments and as of April 2017 around 600 users have reached the advanced modules leading to a total of 33,800 unique downloads.

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 were invited to attend one of two full-day intensive preparation workshops held in Cambridge during March 2017. Two-thirds of those eligible took up the opportunity, with 188 students participating in the events.

⁵³ <https://isaacphysics.org/>

⁵⁴ <https://nrich.maths.org/>

⁵⁵ <http://i-want-to-study-engineering.org/>

⁵⁶ <https://maths.org/step/>

- (f) Subject Masterclasses⁵⁷ 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 4,500 students who attended the University's Subject Masterclasses in 2015, 24% applied to the University and 45% 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 Matters⁵⁸ 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.

3.21 We recognise that the Office for Fair Access wishes to see a specific target in relationship to attainment raising. We intend therefore to modify our long-term, collaborative and progressive outreach programmes focussed on selected schools within our region so that they address this strategic objective. See section 7 for more details.

3.22 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 Head of the Cambridge Admissions Office is for example a member of a Sutton Trust / OFFA advisory group which is specifically considering how to measure the impact of 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 2018 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 2004.⁵⁹ For 2017-18 this has been set at £9,250⁶⁰. The figure for 2018-19 has not yet been announced. The University will set tuition fees for 2018-19 at the maximum rate permitted, which OFFA has asked institutions to assume for the purposes of this Access Agreement to be £9,250. We will publish details on our website as soon as the position becomes clear. New and continuing students in subsequent years may be subject to annual or other periodic fee increases raised in line with the higher rate. 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.

4.3 At the time of drafting this Access Agreement it is not known what impact the outcome of the recent referendum on the UK's membership of the EU will have on UK policy on higher education tuition fees, loans and bursaries beyond 2018-19. 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.

4.4 Those undergraduates who are undertaking an Erasmus year abroad or an overseas year of study as part of their undergraduate course will be charged 15% of the fee that would otherwise apply. In 2017-18 that was £1,385 for students in scope of paragraph 4.1. However, it is anticipated that the year abroad fee will also increase in future years for students admitted after 1 September 2017 in line with the higher rate. The fee for students on work placements will be charged at the same rate as those taking a year abroad.

⁵⁷ <https://www.undergraduate.study.cam.ac.uk/events/masterclasses>

⁵⁸ <https://www.undergraduate.study.cam.ac.uk/events/subjectmatters>

⁶⁰ Note that previous years entrants may have been admitted to different fee rates; see previous years Access Agreements for information

- 4.5 In 2018-19 approximately 10,300 undergraduate students and 325 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. £31.2 million.

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 OFFA (see 5.4 below).
- 5.2 Overall the collegiate University plans to expend 32% of undergraduate tuition fee income (and 10% of PGCE tuition fee income) above the standard rate on access measures. It is estimated that in 2018-19, this will amount to circa £9.8 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. The collegiate University has also undertaken to divert the funding that it had previously allocated to the National Scholarship Programme (which ended in 2014-15) to support outreach work. In consequence, in 2018-19 outreach funding associated with the additional fee income will amount to circa £3.5m.
- 5.4 We do not intend at this point to make any changes to the level of expenditure on bursaries for 2018-19 (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 OFFA 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. 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 the University of 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.⁶¹ In 2016 a further survey conducted by CUSU showed that 53.5% of bursary recipients regarded the availability of financial support as either very important, or they would not have attended university without it. Every College Students' Union Access Officer has called for the bursary scheme to be retained at current levels as a minimum.⁶²
- 5.5 We do however propose to evaluate our bursary scheme using financial support evaluation tools provided by OFFA,⁶³ and following the recent release of relevant data by HESA. We will report on this, along with any actions, in our next Access Agreement. We also propose to conduct research into potential alternative forms of support which will enable students from a more diverse range of backgrounds to engage successfully with their education at Cambridge.
- 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.

⁶¹ Survey conducted and received by the UAC Cambridge Bursary Schemes Steering Group.

⁶² Survey conducted by CUSU in Spring 2016; results for publication later in the year

⁶³ <https://www.offa.org.uk/guidance-notes/understanding-impact-institutional-financial-support-student-success/>

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£18,500⁶⁴ of educating an undergraduate at Cambridge and thereby benefiting every UK and EU student at the University, regardless of background.

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 The collegiate University will continue to give all UK undergraduate students from households with an income of £25,000 or less financial support of £3,500 per year (£5,600 for mature students,⁶⁵ care leavers and estranged students) in the form of a maintenance bursary.⁶⁶ Students from households with incomes of between £25,000 and £42,620 will be offered support of up to £3,500 on a tapering basis.⁶⁷ Students from elsewhere in the EU will be entitled to similar support subject to proper demonstration of equivalent household income.

Figure 1: Summary of Undergraduate Financial Measures

| Household Income | Support Package |
|-----------------------------|-------------------------------------|
| Below £25,000 pa | A bursary of £3,500 per year. |
| Between £25,000 and £42,620 | A bursary of up to £3,500 per year. |

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.

6.6 Almost all students admitted to the PGCE programme at Cambridge are entitled to government training bursaries. The University will therefore not be making additional bursary awards to PGCE students.

7. Targets and Milestones

7.1 The University will continue to encourage applications from well-qualified applicants 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. Experience demonstrates that outreach activity (particularly that focussed on younger age groups, as advocated in OFFA guidance) will not be reflected in the composition of the student population for some years.

⁶⁴ Assessed in 2014-15.

⁶⁵ Mature students for the purposes of financial support will be defined as (a) studying for a first degree, (b) 21 or over at the start of the course and (c) resident in Cambridge all year round.

⁶⁶ Note that we will take into account any funding secured from other public sources (for example the NHS and funding made available from UK devolved administrations) when assessing eligibility and amounts to be awarded.

⁶⁷ We have chosen to link our provision to government support arrangements; this will be reviewed should these arrangements change significantly.

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.⁶⁸

7.3 Guidance from the Office for Fair Access sets out three key areas to be addressed by Access Agreements. These are outreach, admissions and retention. Accordingly, the University proposes to measure its progress against nine 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;
- to embed the DfE-piloted STEP Support Programme within University provision.

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 and 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 (OAC 2011) so that they comprise 13.9% of the total intake by 2021-22;
- to admit UK resident students from national 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 be investing in our research function to understand better the issues underlying each of these areas and to measure our impact.

7.5 The University has selected the nine 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

⁶⁸ www.cam.ac.uk/admissions/undergraduate/research/

- 7.6 Research has shown that summer schools are a particularly effective and measurable mechanism for improving access to higher education. The University's own data demonstrates proven success in relation to subsequent admission to Cambridge 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. As discussed at 3.11 and 3.14 above, we are therefore pleased to be working in partnership with the Sutton Trust on the Sutton Scholars programme for students in Years 9 and 10 in rural and coastal East Anglia, and to be leading on the National Collaborative Outreach Programme in our region, with its emphasis on Years 9 to 13.
- 7.8 As discussed in our last Access Agreement, we have now launched an additional outreach scheme in Peterborough in partnership with the Brilliant Club.⁶⁹ We plan to expand the scheme into London from next year, and to be engaging with a minimum of 300 learners, growing to at least double that number by 2019-20. The new regional outreach initiative focuses on students from under-represented and disadvantaged students (as defined by Free School Meal eligibility, POLAR3 and OAC 2011) in clusters of schools from Year 7 through to Year 11. The programme will progressively engage students from the point of transition to secondary school (which has been identified as a point at which bright students can fall into a negative trajectory).⁷⁰
- 7.9 We intend to explore ways of measuring impact on secondary school attainment through these initiatives, and during 2017-18 will explore with participating schools and partners what sorts of interventions might have the most impact (for example science practical videos for schools that lack necessary technical equipment to allow students to observe experiments), what metrics we should use to measure our progress (for example Randomised Control Tests and Progress 8) and how we might set baselines and objectives. Success will ultimately be measured in terms of improving the KS4 outcomes of target students. Our progress on this work will be reported in our next Access Agreement, and which point we will propose targets in this area.
- 7.10 As indicated at 3.9 above, 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 and attainment of such students. As a first step we have recently agreed to sponsor the Target Oxbridge⁷¹ programme offered by Rare⁷², which will expand to provide tailored support to 60 highly-able black students each year. 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 2018⁷³.

STEP Support Programme

- 7.11 As noted at section 2.9, we are concerned about the impact of Government reforms on mathematics provision in schools. This is a particularly important issue for Cambridge, given that around three quarters of all students admitted to the University hold a post-GCSE mathematics qualification, and for many subjects it is a key requirement. We therefore propose to use additional fee income to continue to embed the STEP Support Programme into University provision, which builds on the successful STEP Mathematics Correspondence course pilot, initiated by the Faculty of Mathematics

⁶⁹ <http://www.thebrilliantclub.org/>

⁷⁰ www.suttontrust.com/researcharchive/missing-talent/

⁷¹ www.targetoxbridge.co.uk

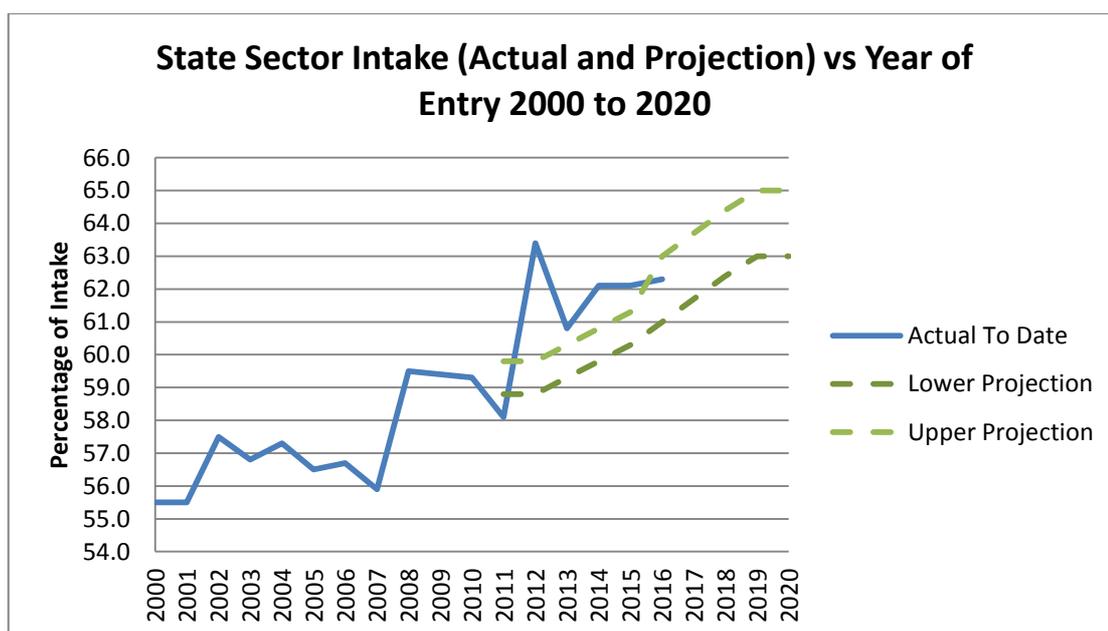
⁷² <https://www.rarerecruitment.co.uk/>

⁷³ <http://www.ecu.ac.uk/equality-charters/race-equality-charter/>

using time-limited funding from the Department for Education. This programme, which introduces students to the style of mathematical argument required at selective universities, will engage over a thousand learners through online materials from the start of Year 12, and will provide up to 250 applicants to Cambridge, drawn from widening participation backgrounds, with further support as they engage with the admissions process.

Proportion of Intake from State Schools

- 7.12 The collegiate University seeks to increase the proportion of our UK undergraduate intake from schools and colleges in the UK state sector.
- 7.13 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%,⁷⁴ 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.⁷⁵ 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 64.0% by 2019-20. We cannot predict the effect of A-level reforms and funding cuts on schools, and so at the current time we propose to maintain that position beyond 2019-20. We will however review this position in two years when the impact of the new situation in respect of the examination system and school and college finances is better understood.
- 7.14 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

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

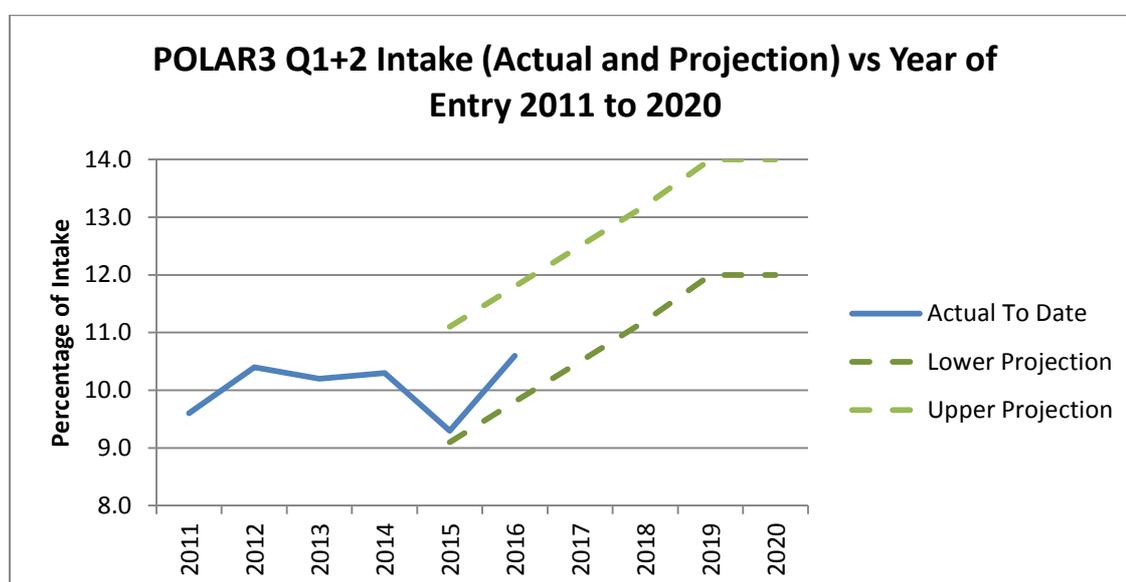
⁷⁴ "Candidates awarded the A* grade at A-level in 2014", T.Gill, Cambridge Assessment Statistical Report Series No.92, Table 5b.

⁷⁵ <http://www.cao.cam.ac.uk/admissions-research/achievable-target> and "Re-Evaluation of the Target for Maintained Sector Schools", Horner, 2016.

used by HEFCE and the sector in terms of widening participation, is a measure of participation in higher education, rather than of socio-economic circumstances (though there is overlap between the two).

7.16 Nonetheless, the University recognises the directional value of measures such as POLAR3. In our Access Agreement last year, we stated that our objective was for the proportion of students admitted from POLAR3 quintiles 1 and 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 – ie 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. That data shows that around 12.5% of HE entrants achieving A*A*A or better at A-level were in POLAR3 quintiles 1 and 2. Despite this, and at the request of OFFA, we will maintain our objective of reaching 13.0% by 2019-20, but note that, as confirmed by discussion with UCAS in the light of the data it controls, this means admitting students disproportionately in relation to the national profile at the levels of attainment required by Cambridge. For that reason our objective is to maintain that position beyond 2019-20 unless there is any further data to support an increase.

7.17 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 Flagged Groups

7.18 Output Area Classification (OAC2011)⁷⁶ 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 widening participation measures.

7.19 Last year we indicated that we intended to adopt a target focussing on supergroups 7 (“constrained city dwellers”) and 8 (“hard-pressed living”), and groups 3a (“ethnic family life”), 3b (“endeavouring ethnic mix”), 3c (“ethnic dynamics”) and 4b (“challenged Asian terraces”), because our research and analysis had found that these OAC 2011 groups were especially associated with one or more indicators of disadvantage, including under-representation in the Cambridge applicant population; low household incomes (using Cambridge Bursary Scheme data for admitted applicants); and/or a

⁷⁶ <https://www.ons.gov.uk/methodology/geography/geographicalproducts/areaClassifications/2011areaClassifications>

relatively low proportion of heads of household being in professional or managerial occupational classifications (using UCAS data for Cambridge applicants).⁷⁷ Further analysis of supergroup 7 suggests that group 7d (Ageing City Dwellers) should be removed - although groups 7a (“Challenged diversity”), 7b (“Constrained flat dwellers”), 7c (“White communities”) remain - and subgroups 4a1 (“Social renting young families”), 4a2 (“Private renting new arrivals”), 4c2 (“Multicultural new arrivals”) and 6b3 (“Semi-detached ageing”) should be added⁷⁸, creating a new baseline of 11.5%. Based in part upon national data provided by HESA⁷⁹, we have recalculated our target at the new and higher level of 13.9%. We will therefore aim to increase our admissions of students from areas classified into these OAC 2011 groups to reach that target by 2021-22.

Proportion of Intake by IMD2015 Decile

- 7.20 Each country within the UK has created their own Index of Multiple Deprivation (IMD).⁸⁰ 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.⁸¹
- 7.21 Work by the University on IMD2015 (England’s IMD measure) has shown that, similar to OAC 2011 Flagged Groups, the three lowest IMD2015 deciles are associated with considerable relative disadvantage⁸². Initial examinations of data for IMD measures in Northern Ireland, Scotland and Wales suggests that this association remains true across the UK and further research into these measures is scheduled for the next admissions cycle. Alongside POLAR3 and OAC 2011, we believe that the IMD measures are a useful indicator of progress on widening access, and so the University proposes to make progress over the next three years towards an admissions target of 8.5% (which is the proportion of students our suggests we should be admitting at the level of attainment that we require) from IMD deciles 1-3, from a baseline of 7.7%. This target will be considered for revision in the next Access Agreement once we receive and process data that allows us to evaluate national levels of attainment broken down by IMD deciles. A similar exercise for OAC (described above) resulted in a higher target and a greater level of ambition.

Retention

- 7.22 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 98.5%⁸³). 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%.⁸⁴

Research

⁷⁷ “Output Area Classification 2011”, Sumnall Aug 2014.

⁷⁸ “Using Geo-Demographic Measures to contextualise Admissions”, Walmsley, March 2017

⁷⁹ HESA data for academic years 2014-15 and 2015-16 were provided by the Higher Education Statistics Agency Limited (‘HESA’). HESA does not accept responsibility for any inferences or conclusions derived from their data by third parties.

⁸⁰ Department for Communities and Local Government, The English Index of Multiple Deprivation (IMD) 2015 – Guidance, English Indices of Deprivation, 30 September 2015 <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015>; Scottish Government, ‘Scottish Index of Multiple Deprivation’, 2017 <http://www.gov.scot/Topics/Statistics/SIMD>; Welsh Government, ‘Welsh Index of Multiple Deprivation (WIMD)’ <http://gov.wales/statistics-and-research/welsh-index-multiple-deprivation/?lang=en>; Northern Ireland Multiple Deprivation Measure 2010 (NIMDM2010), Northern Ireland Statistics and Research Agency <<https://www.nisra.gov.uk/statistics/deprivation/northern-ireland-multiple-deprivation-measure-2010-nimdm2010>.

⁸¹ <http://heat.ac.uk/2017/04/advice-from-offa-regarding-withdrawal-of-ns-sec-data/>

⁸² “Using Geo-Demographic Measures to contextualise Admissions”, Walmsley, March 2017

⁸³ HESA performance indicators 2011-12, www.hesa.ac.uk/index.php?option=com_content&task=view&id=2064&Itemid=141, Table 3a.

⁸⁴ Ibid.

- 7.23 The success of all of our work depends upon deep understanding of the issues affecting under-represented and disadvantaged groups in the context of admission to highly selective institutions, effective targeting of at-risk groups, the delivery of high-quality learning opportunities, and the measurement of outputs and impact in terms of being admitted to and succeeding at leading universities.
- 7.24 We have already begun this work, and in 2016-17 established a strengthened research team with a specific remit to contribute to the sector's understanding of these issues. In particular, we will:
- produce research to develop an understanding of different forms of disadvantage and under-representation;
 - assess the impact of outreach work conducted by the collegiate University using quantitative tools such as HEAT,⁸⁵ and qualitative tools such as surveys;
 - profile the national pool of potential applicants by characteristic and background using data from UCAS, HESA and the DfE (insofar as their data policies allow) to inform targeting of activity;
 - measure the predictive quality and impact of admissions assessments and contextual data use on selection, and develop policy accordingly;
 - monitor student success by characteristic;
 - explore work on collaborative projects with admissions research groups at other universities.
- 7.25 The work of the research team will also help ensure that the University is spending its additional fee income effectively by improving the targeting, delivery, and evaluation of outreach activity. As part of their work, the research unit within CAO are adapting a Theory of Change (ToC) model to analyse and evaluate the office's current activity.⁸⁶ The advantage of this model is the ability 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. The University's new evaluation strategy will also utilise Participatory Action Research (PAR) methodologies, believing that outreach activity is only successful when it responds to, and is driven by, a wide variety of stakeholders.⁸⁷
- 7.26 Combining a ToC model of evaluation, aspects of PAR, and more traditional metrics – such as progression to Higher Education as measured by the Higher Education Statistical Agency (HESA) – will ensure that the University is taking a research led approach that is “listening to voices” when conducting outreach work.⁸⁸ The work already conducted on this strategy underpins the University's decision to delay the introduction of a universal “evaluation framework” until the individual and community-based needs of the students with whom we work can be adequately assessed.
- 7.27 To achieve this, the research unit will be conducting a series of training workshops with colleagues across the collegiate University to encourage outreach practitioners to carefully consider the local context in which they work and the assumptions that are often made when delivering widening participation initiatives. In conjunction with the University's subscription to HEAT, which will be rolled out across the collegiate University in September 2017, this approach to outreach evaluation will ultimately result in a diverse but unified and strengthened offering to students across the UK.

⁸⁵ The Higher Education Access Tracker, <http://heat.ac.uk>

⁸⁶ For 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 <<https://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).

⁸⁷ Jarg Bergold and Stefan Thomas, 'Participatory Research Methods: A Methodological Approach in Motion', *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 13.1 (2012) <<http://www.qualitative-research.net/index.php/fqs/article/view/1801>>.

⁸⁸ Liz Thomas, "'Bums on Seats"; or "Listening to Voices": Evaluating Widening Participation Initiatives Using Participatory Action Research', *Studies in Continuing Education*, 22.1 (2000), 95–113 <<https://doi.org/10.1080/713695716>>.

8. Monitoring Arrangements

- 8.1 The University will continue its policy of making admissions statistics publicly available, through its website. Those statistics include data on the number of applications and acceptances by school type, region, gender, ethnicity and socio-economic classification.
- 8.2 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.
- 8.3 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.
- 8.4 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 through annual analyses of qualitative evaluation and attendee and application data. It will not be possible to measure routinely the wider benefit to the HE sector of Cambridge activity until measures are put in place at a national level to assist with quantitative evaluation. It is our intention to embed or grow those initiatives which make demonstrable progress towards their objectives.
- 8.5 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 widening participation 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.
- 8.6 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.
- 8.7 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 Learning⁸⁹ 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 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.

9. Provision of Information to Students

- 9.1 The University will ensure that full details of its access measures, including a detailed description of financial support arrangements, are published in future editions of our Undergraduate Prospectus,

⁸⁹ www.cctl.cam.ac.uk

finance guides and on the web.⁹⁰ Advice and information will continue to be given to students during school and college visits and at Higher Education fairs, conferences and open days.

- 9.2 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.

⁹⁰ See www.cam.ac.uk/admissions/undergraduate/finance and www.admin.cam.ac.uk/univ/cambridgebursary