

#### Introduction to Higher Education Settings in England

Note to SAGE to support COVID19 modelling July 2020

Higher Education, STEM and Tertiary Providers Directorate Higher Education and Further Education Group Department for Education July 2020

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## 1 - Background

## Higher Education in England: Levels and Qualifications

Higher Education courses are delivered at levels 4 and above and include both academic and technical qualifications.

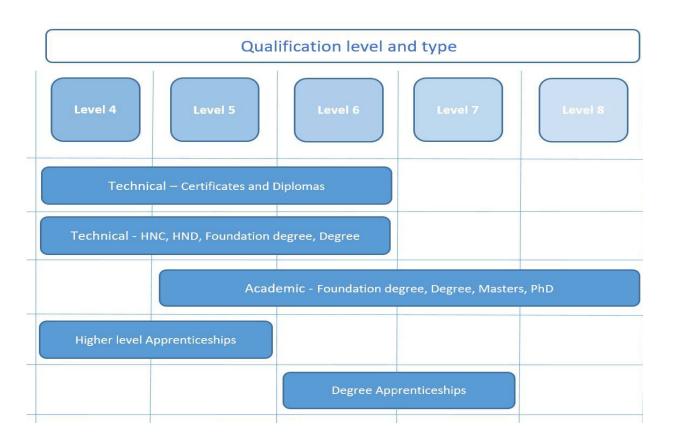
**Qualification levels** 

Level 8 – e.g. PhDs

- Level 7 e.g. Masters, Medicine, PGCE
- Level 6 e.g. Bachelor's degree
- Level 5 e.g. Foundation degree, HND
- Level 4 e.g. Diploma/ Certificate of HE

Level 3 – e.g. A-levels

Level 1/2 – e.g. GCSEs



#### Sector Overview for England

In  $2018/19^1$  there were:

- **1.94 million** undergraduate and postgraduate students studying at **135 English Higher Education Institutions (HEIs)** (including the AP, the University of Buckingham, see table below).<sup>2</sup>
- 114,000 undergraduate and postgraduate students studying on HE level courses at English Further Education Colleges (FECs).<sup>3</sup>
- 73,180 undergraduate and postgraduate students studying at 97 designated English HE Alternative Providers (APs). Research published in 2017 suggests that were are also over 600 non-designated HE APs in England, though no estimate of the number of students enrolled is available.<sup>4</sup>

Note that all subsequent analysis in this pack is for English HEIs only.

Mode and Level of Study	Type of Students	Number of Students	% of Total
Full-time undergraduate	New entrants	457,245	23.5%
	Continuing students	802,265	41.3%
Part-time undergraduate	New entrants	88,520	4.6%
	Continuing students	112,500	5.8%
Postgraduate	New entrants	308,595	15.9%
	Continuing students	173,410	8.9%
Total	All Students	1,942,535	100.0%

#### Numbers of Enrolments at English HEIs (home and international students), 2018/19

Source: Figure 3, HESA, Higher Education Student Statistics, 2018/19 <u>https://www.hesa.ac.uk/data-and-analysis/sb255/figure-3</u>

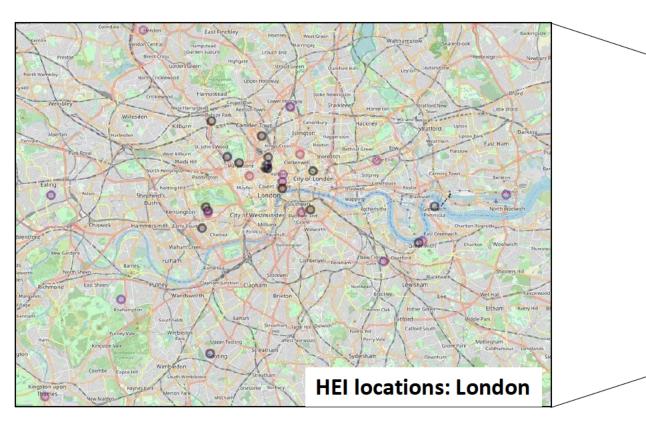
<sup>1</sup>From academic year 2019/20 the regulatory framework for HE has changed, and the distinction between HEIs and APs has ended. As this pack relies on data from 2018/19 (the latest available), the older terminology is used. The new HE provider categorisation is presented in the annex. <sup>2</sup>Figure 3, HESA Higher Education Student Statistics:, UK, 2018/19 <u>https://www.hesa.ac.uk/data-and-analysis/sb255/figure-3</u>

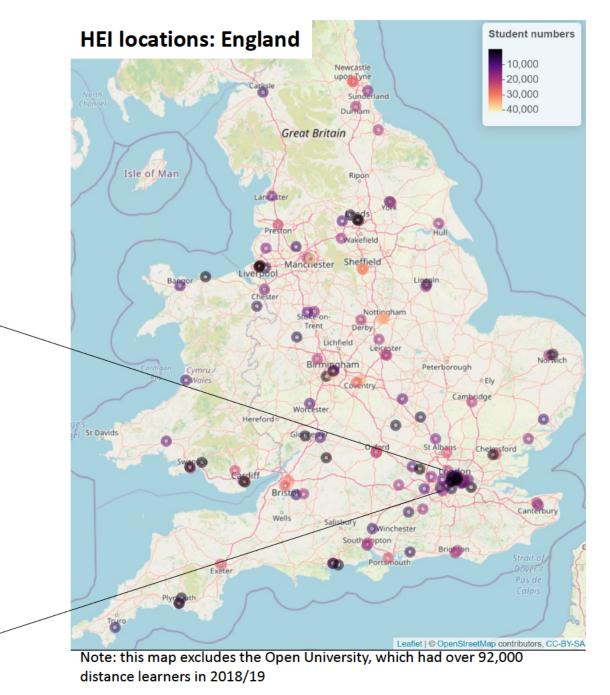
<sup>3</sup>Figure 3b, HESA Open data tables, Higher Education Student Statistics:, UK, 2018/19 <u>https://www.hesa.ac.uk/data-and-analysis/sb255/figure-3b</u>

<sup>4</sup>Figure 6a, HESA Higher Education Student Statistics:, UK, 2018/19 <u>https://www.hesa.ac.uk/data-and-analysis/sb255/figure-6a</u>

## Locations of English HEIs and their associated student numbers

Although HEIs are found in all English regions, they are generally located in towns and cities. London and the South East has the largest concentration of both providers and associated student enrolments. Clusters can also be found around the North West, West Yorkshire and the West Midlands.





Source: Bespoke DfE analysis. Each ring represents one provider. Enrolments data taken from HESA Student Record, 2018/19.

## 2 – Student and Workforce Numbers

#### Student and Workforce Numbers by region of provider

At English HEIs in 2018/19:

- London had the largest number of students (374,670) and academic staff (45,675), accounting for 19% of students and 25% of academic staff.
- London had 8.2 students per member of academic staff. The East of England (9.4) and the South East (11.1) also had relatively low ratios of students per member of academic staff<sup>1</sup>.
- The North East had the lowest number of students (106,060) and academic staff (7,870), with the highest ratio of students to academic staff (13.5).

Note that regional breakdowns presented here **include students who are distance learners** and do not attend campus in person. In 2018/19, there were 92,985 distance learners at the Open University, which is based in the South East.

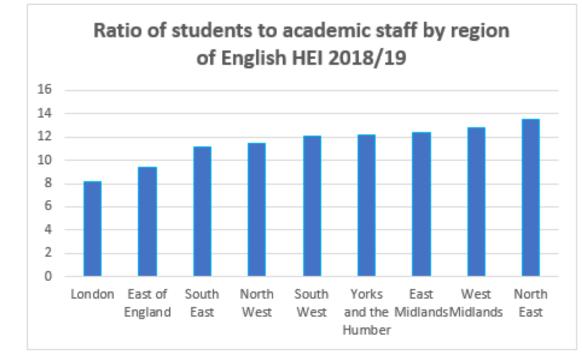
#### Student (Home and International) and Staff numbers at English HEIs by region in 2018/19

	Total number of students (under and	Number of	Number of Non-
English region	postgraduate)	Academic Staff <sup>2</sup>	academic Staff <sup>2</sup>
London	374,670	45,675	35,990
East of England	132,350	14,135	14,005
South East	346,120 <sup>3</sup>	31,095	31,280
North West	235,630	20,595	21,440
South West	169,660	14,035	16,140
Yorks and the Humber	196,020	16,050	19,550
East Midlands	176,755	14,315	15,625
West Midlands	205,275	16,120	19,210
North East	106,060	7,870	9,345
England	1,942,535	179,895	182,580

Sources: HESA Figure 6, Higher Education Student Statistics, UK, 2018/19 https://www.hesa.ac.uk/data-and-analysis/sb255/figure-6

Open Data Table 1, Higher Educations Staff Statistics, UK, 2018/19

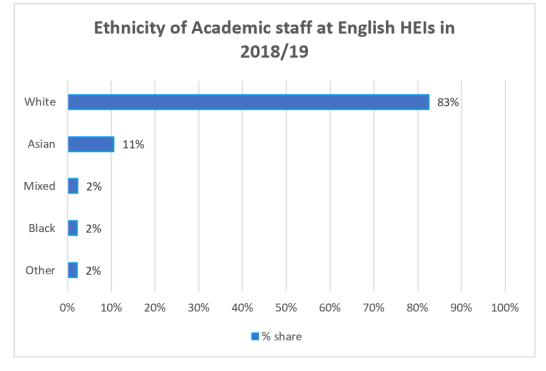
https://www.hesa.ac.uk/data-and-analysis/staff/table-1



1: Student-staff ratios are typically based on FTE (full-time equivalent) rather than headcount, which accounts for part-time students having fewer contact hours with a staff member than students on full-time courses. Analysis on this slide uses student and staff headcount.

2: Research from UUK shows that the sector supports more than 940,000 jobs in the UK. Figures above exclude staff who are on short/freelancing contracts or who do not have contracts with HEIs themselves. 3: Includes students at the Open University who are distance learners

## Academic Staff numbers by ethnicity<sup>1</sup> and age<sup>2</sup>



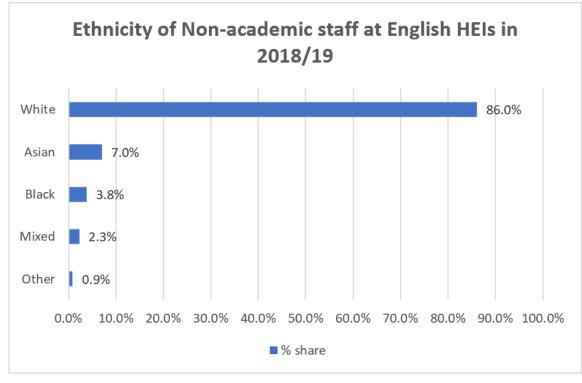
Source: Figure 6, HESA Higher Education Staff Statistics: UK, 2018/19 https://www.hesa.ac.uk/data-and-analysis/sb256/figure-6

- In 2018/19 there were 179,895 academic staff working in English HEIs. This excludes a small proportion of HEI staff who are on short/freelancing style contracts (atypical).
- 83% were White and 17% were from BAME groups. This is compared to 85% of the working age population in England who are White and 15% who are from BAME groups, based on the 2011 Census.<sup>3</sup>
- 25% of staff were aged between 41 to 50, 22% were aged between 51 and 60, and 9% were over 60. The remaining 44% were aged 40 and under.
- 18% of staff from BAME groups were aged 51 years and over. Within this group, Black staff had the highest proportion aged 51 years and over (24%). White staff had the oldest age profile, with 34% being aged 51 and over.

1: Figures on this slide for ethnicity are taken from HESA Higher Education Staff Statistics, 2018/19, figure 6. <u>https://www.hesa.ac.uk/data-and-analysis/sb256/figure-6</u>. Note that ethnicity percentages exclude staff with unknown ethnicities.

Percentages on this slide for age and for combined ethnicity and age were based on a bespoke DfE analysis of the HESA staff record, 2018/19.
 Source: 2011 Census, <u>https://www.ethnicity-facts-figures.service.gov.uk/uk-population-by-ethnicity/demographics/working-age-population/latest#ethnic-groups-by-working-age</u>.
 The ethnic breakdown of the population will likely have changed from 2011, so these figures should be treated as an estimate.

### Non-academic Staff numbers by ethnicity<sup>1</sup> and age<sup>2</sup>



Source: Figure 6, HESA Higher Education Staff Statistics: UK, 2018/19

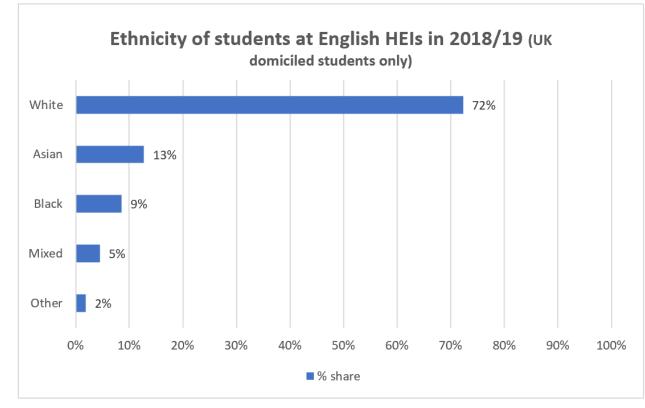
https://www.hesa.ac.uk/data-and-analysis/sb256/figure-6

- In 2018/19 there were 182,580 non-academic staff working in English HEIs. The analysis on this slide is limited to these staff.
- In addition, there are also approximately twice as many staff working with jobs associated to the HE sector but who do not have contracts with HEIs themselves; for example catering and accommodation staff who are employed privately.<sup>3</sup>
- 86% were White and 14% were from BAME groups.
- 25% were aged 41 to 50, 22% were 51 to 60 and 6% were aged over 60. The remaining 47% were aged 40 and under.
- **17% of staff from BAME groups were aged 51 years and over**. Within this group, Black staff had the highest proportion aged 51 years and over (27%). White staff had the oldest age profile, with 29% being aged 51 and over.

1: Figures on this slide for ethnicity are taken from HESA Higher Education Staff Statistics, 2018/19, figure 6. <u>https://www.hesa.ac.uk/data-and-analysis/sb256/figure-6</u>. Note that ethnicity percentages exclude staff with unknown ethnicities.

2: Percentages on this slide for age and for combined ethnicity and age were based on a bespoke DfE analysis of the HESA staff record, 2018/19. 3: Source: UUK report, https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2017/the-economic-impact-of-universities.pdf

#### Student numbers by ethnicity and age



 In 2018/19, 72% of UK domiciled students were White and 28% were BAME. Ethnicity is only available for UK domiciled students. This is compared to 15% of the working age population who are from BAME groups, based on the 2011 Census.<sup>1</sup>

 70% of all students (home and international) were under 25 years, 11% were aged 25-29 and 19% were aged 30 years and over.<sup>2</sup>

Source: Figure 4, HESA Higher Education Student Statistics: UK, 2018/19 https://www.hesa.ac.uk/data-and-analysis/sb255/figure-4

Source: 2011 Census, <u>https://www.ethnicity-facts-figures.service.gov.uk/uk-population-by-ethnicity/demographics/working-age-population/latest#ethnic-groups-by-working-age.</u>
 The ethnic breakdown of the population will likely have changed from 2011, so these figures should be treated as an estimate.
 Source: Figure 4, HESA Higher Education Student Statistics UK, 2018/19 <u>https://www.hesa.ac.uk/data-and-analysis/sb255/figure-4</u>

## 3- Travel Patterns

#### Do students typically move home to study?

In 2014/15 (the latest year for which analysis is available), **74.4% of full-time, UK-domiciled students moved home** while enrolled at **UK higher education institutions**. The vast majority of the remainder commuted a 'short' distance from their family home to their provider.

#### UK Student Movers and Commuters for 2014/15<sup>1</sup>

Distance	Mover	Commuter
Short (0-91 km)	32.5%	23.3%
Medium (91-244 km)	31.5%	1.2%
Long (more than 244 km)	10.9%	0.3%
Total	74.4%	24.8%

Source: The Sutton Trust, 'Home and Away: Social, ethnic and spatial inequalities in student mobility' (2018) <a href="https://www.suttontrust.com/wp-content/uploads/2019/12/Home\_and\_away\_FINAL.pdf">https://www.suttontrust.com/wp-content/uploads/2019/12/Home\_and\_away\_FINAL.pdf</a>

There are significant variations by student characteristics and region of domicile:

- BAME students were more likely to be 'short' commuter students than White students. This is particularly noticeable for students from Bangladeshi (71.1%) and Pakistani (65.9%) backgrounds. Only 18.8% of White students were 'short' commuters.
- Students from the North East (33.2%), London (31.8%), West Midlands (30.9%) and North West (30.7%), were most likely to be 'short' commuters. Students from the South West (11.2%) and South East (11.4%) were least likely.

1 - Note on 'distance' categories. statistical methods were used to define the demarcations between 'short', 'medium' and 'long' based on the whole student population. Since 'movers' are in the majority, this results in a commute of 91km being defined as 'short'. Further refinement is not presented in the source report.

#### Enrolment inflows to region of provider

Numbers of students enrolling at providers outside their home region

		Inflow from:			
Region	Total inflow to region	Other English regions	Rest of the UK	Outside the UK	
South East	235,455*	175,050*	6,380	54,025	* Totals for the South
London	217,055	92,100	5,635	119,315	East region include
East Midlands	125,865	91,295	3,590	30,980	students enrolling at the Open University. In
Yorkshire and The Humber	123,775	85,305	3,845	34,625	18/19 this inflates the
West Midlands	122,190	75,665	5,625	40,900	inflow to the South
North West	119,050	64,075	15,145	39,830	East from other English
South West	109,710	70,315	10,035	29,360	regions by
East of England	87,635	55,230	2,090	30,315	approximately 74,000
North East	63,750	39,070	3,605	21,075	students.
Total	1,204,480	748,100	55,945	400,435	

Note: Not all students enrolled outside of their home region will move home to do so (some will be commuters and some will be distance learners).

- In 2018/19, 1.2 million students at English HEIs (62% of the total) were enrolled at a provider outside of their region of home domicile.
- Of these, 39% were enrolled at HEIs in London or the South East.
- HEI students domiciled outside the UK were most likely to enrol at providers in London (30% of the total).
- English domiciled HEI students enrolling outside their home region were most likely to enrol at providers in the South East (23% of the total, but note that this is inflated by the Open University).

Source: Bespoke DfE analysis of the HESA Student Record 2018/19.

#### Term Time Location by Provider

The modern, post-92 institutions tend to have a higher proportion of local, commuter students.

#### Top 20 English providers with the highest proportions of students living in their parental home, 2018/19 (full-time, UK domiciles)

Provider	No. in Parental Perce Home Total	ntage of
Newman University	1,340	62%
The University of Bradford	3,590	56%
Queen Mary University of London	6,815	55%
City, University of London	5,415	55%
Middlesex University	6,480	52%
The University of Wolverhampton	6,430	50%
Brunel University London	4,760	49%
Aston University	4,910	48%
Birmingham City University	8,810	48%
The University of Salford	7,355	46%
The University of East London	4,370	45%
The University of Huddersfield	5,250	45%
University of the West of England, Bristol	8,320	45%
University College Birmingham	1,225	45%
Teesside University	4,525	43%
Ravensbourne University London	925	43%
University of Hertfordshire	5,940	42%
London Metropolitan University	2,735	42%
Kingston University	4,750	42%
Goldsmiths College	2,640	42%

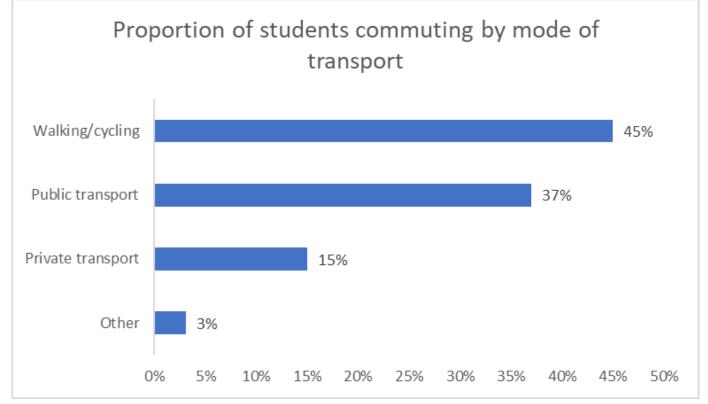
#### <u>Top 20 English providers with the highest</u> proportions of students living in their own residence<sup>1</sup>, 2018/19 (full-time, UK domiciles)

Provider	No. in own residence	Percentage of Total
London South Bank University	7,510	) 87%
Birkbeck College	2,615	5 73%
London Business School	150	) 66%
University of Bedfordshire	4,635	5 58%
The Institute of Cancer Research	45	5 57%
London School of Hygiene and Tropical Medicine	180	) 57%
The University of Westminster	5,110	) 52%
University of Suffolk	2,760	) 46%
The University of East London	4,280	) 44%
The University of Bolton	2,145	5 44%
Anglia Ruskin University	7,000	) 43%
The University of West London	3,075	5 43%
Buckinghamshire New University	3,210	) 41%
The University of Buckingham	770	) 41%
The University of Sunderland	3,845	5 39%
Ravensbourne University London	855	5 39%
University of St Mark and St John	925	5 39%
London Metropolitan University	2,415	5 37%
Cranfield University	140	) 37%
King's College London	5,325	5 36%

Source: Bespoke analysis of the HESA Student Record 2018/19.

<sup>1</sup>Own residence does not include provider or privately owned halls

### Student Term Time Travel



Source: HESA 2018/19 Estates data for English Higher Education Institutions. Based on complete data for 84 providers. Averages were calculated internally.

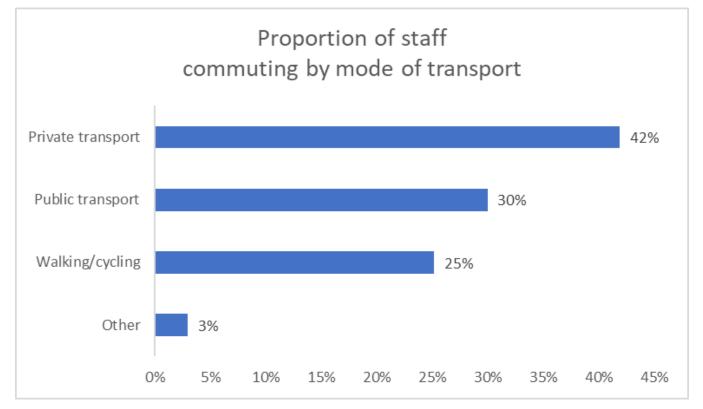
<sup>1</sup>Figures are inflated due to inclusion of students who are distance learners and do not often attend campus in person. In 2018/19, there were 92,985 distance learners at the Open University.

- Students typically walk or take public transport when travelling to their provider.
- The chart opposite is based on HESA returns from only 84 institutions (out of 135). However, bespoke Department for Transport analysis of the National Travel Survey 2016-8 found that 42% of trips to education providers (of any type) by adults aged 19 and over were taken on foot or by bicycle.

If the proportions opposite are scaled up to the 1.9 million<sup>1</sup> students at English HEIs, then we estimate that the numbers traveling by each mode would be:

- 874,000 walking/cycling
- **719,000** taking public transport
- **291,000** taking private transport
- **61,000** taking another form of transportation

### Staff Term Time Travel



Source: HESA 2018/19 Estates data for English Higher Education Institutions. Based on complete data for 89 providers. Averages were calculated internally.

Note that figures on this slide do not include HEI staff on short/freelancing style contracts or staff who do not have contracts with HEIs themselves.

#### 1: Source: CT1102 Covid-19\_2011 Census:

https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/adhocs/11656ct1102covid192011census

- Staff at English HEIs most often use private transport to reach their place of work.
- The chart opposite is based on HESA returns from only 89 institutions (out of 135). Analysis of the 2011 census published by the Office for National Statistics<sup>1</sup> suggests that private car/van is the most common mode of commute for workers in 'education', but it is not possible to disaggregate HEI workers from the totality.

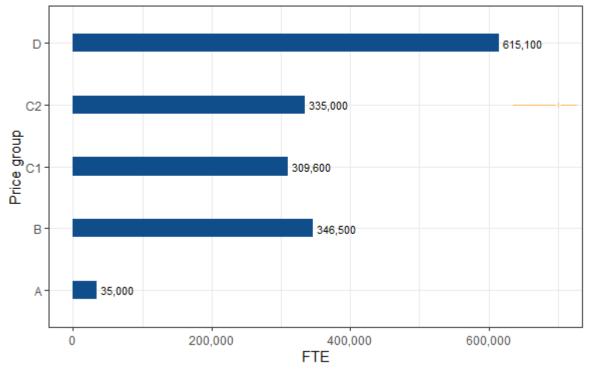
If the proportions opposite are scaled up to the 362,475 staff at English HEIs then we estimate that the numbers traveling by each mode would be:

- **152,000** using private transport
- **109,000** taking public transport
- 91,000 walking/cycling
- **11,000** taking another form of transport

## 4 – Courses, Class Sizes and Campus Density

#### How many students may require face-to-face provision? (1)

2019/20 HESES data indicates that 23% of students' total full time equivalence<sup>1</sup> is in subjects that require elements of face to face provision (price group A and B), **39%** is in subjects that have extensive contact hours or practical elements (C1 and C2) while the remaining **37%** is in subjects that are classroom based (D) and may therefore be more adaptable to online only delivery.



Number of students (FTE) by price group

#### Price group details with example subjects

Price group	Cost profile	Example subjects
А	Medical degrees, involving lab work, practical instruction and placement inside hospitals	Medicine, Dentistry, Veterinary science
В	Scientific/technology subjects that require time in laboratories and/or use of expensive equipment	Chemistry, Physics, Mechanical Engineering
C1/C2	Intermediate cost subjects. Classroom based with extensive contact hours or practical elements like fieldwork or training	Mathematics, Languages, Performing Arts, Geography, Architecture, Nursing
D	Classroom based subjects	Economics, English, History, Philosophy

<sup>1</sup>Full time equivalence represents the proportion of a 'standard' full-time year of study being undertaken in the academic year by each student.

Source: Total estimated FTE of students at English providers from 2019/20 HESES FTE data. Numbers have been rounded to nearest 100 FTE. https://www.officeforstudents.org.uk/media/d9eb67c0-3f4b-4863-b87c-da86d0b87d01/heses19-publication.xlsx

#### How many students may require face-to-face provision? (2)

The non-classroom-based cost centres (price groups A,B,C1 and C2) with the largest student populations include:

- Nursing and allied health professions (110,700 FTE)
- Art and design (85,300 FTE)
- **Clinical medicine** (52,100 FTE)
- Music, dance, drama and performing arts (45,600 FTE)

Source: HESA, Open Data table 37. <u>https://www.hesa.ac.uk/data-and-analysis/students/table-37</u>. Price groups have been assigned to cost centres according to published OFS mappings: <u>https://dera.ioe.ac.uk/21101/12/HEFCE2014\_23I.pdf</u>. Numbers have been rounded to nearest 100 FTE

Note that the proportion of students enrolled in given cost centres will vary from provider to provider. Smaller and/or specialist providers may have most of their students in cost centres that require face-to-face provision.

Most providers (85%) have confirmed they will offer both in-person and online provision in September, irrespective of subject. Subjects that could be offered online may still offer in-person provision on campus. Each provider will make different choices on how they offer provision for each subject.

#### Caveats for data on face-to-face provision (slides 19 and 20):

- FTE is used as a measure of student headcount. Each student on full-time provision will count as 1 FTE, with students on part-time provision counting as 0.5 FTE. Using FTE over other measures (such as counting each student) is appropriate for this analysis as it accounts for part-time students being on campus for fewer contact hours than students on full-time courses.
- Numbers have been rounded to the nearest 100 FTE.
- Some cost centres can be placed in different price groups depending on provider, specific subject studied, or year of study.

#### Class sizes and contact hours in HE

Full-time undergraduate students spend the majority of their contact hours in **class sizes of 16-50**.

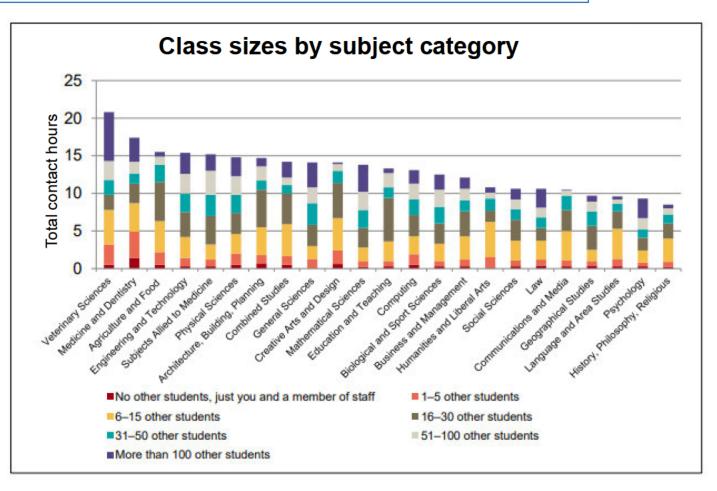
#### Average hours per week spent in different class sizes

Number of other students	0-5	6-15	16-50	51-100	101+
Hours per week	1.5	2.9	4.9	1.7	1.7

There is variation across subjects, with veterinary students spending a substantial proportion of their contact hours with more than 100 other students.

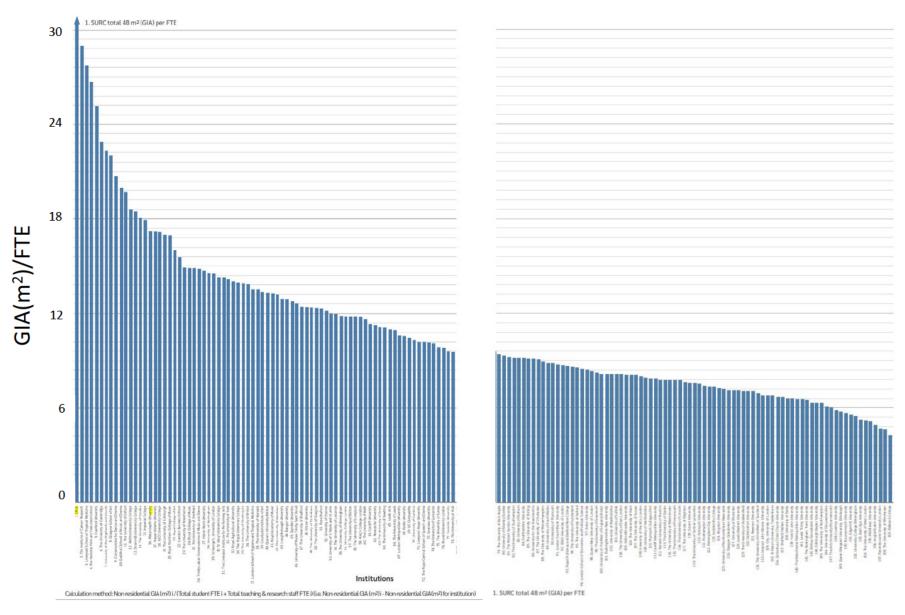
There is also variation in contact hours, with veterinary students having over 20 contact hours compared to history, philosophical and religious studies students (under 10 contact hours per week).

However, note that veterinary students account for less than 1% (4,560) of full-time undergraduates.



Source: <u>https://www.hepi.ac.uk/wp-content/uploads/2020/06/The-Student-Academic-Experience-Survey-2020.pdf</u>. 10,227 responses, full-time undergraduate, weighted to 2018/19 HESA data.

#### Campus density (m<sup>2</sup> per staff and student FTE) – UK HEIs



One measure of campus density is the Gross Internal Area (total area of buildings, owned, occupied or maintained by the provider) per FTE (full time equivalent staff and students).

Campus density is likely to vary across providers, reflecting the different characteristics of the residential and non-residential estate (e.g. single vs multiple sites and city vs rural location)

Lower density providers (to the left of this chart) are the smaller, specialist providers, including research institutes, and those based in Scotland and Wales.

Higher density (to the right) providers tend to be the bigger 'post92' teaching intensives, some of which are based in larger population areas.

Source: AUDE, 'Higher Education Estates Management Report 2019'. Note that this chart includes non-English HEIs.

## 5 – Impact of Covid-19

### What does September look like for providers

As of 29<sup>th</sup> June, the majority (93%) of universities have confirmed their intentions for starting in September/October<sup>1</sup>:

- **85%** will teach through blended learning
- **1%** will teach by online learning only

According to 92 universities in a recent UUK survey (June 17) :

- 87% of universities are planning to provide in-person sporting, fitness and wellbeing activities for students in autumn 2020
- **95%** of universities will offer a mixture of online and in-person student support
- 82% of universities are working with bars and cafes in the local community as they develop their plans

<sup>1</sup>Source: <u>https://www.studentcrowd.com/article/university-responses-to-covid-19</u>

<sup>2</sup> Source: UUK survey published June 17, <u>https://www.universitiesuk.ac.uk/news/Pages/Most-universities-will-teach-in-person-this-autumn.aspx</u>

#### Scenarios for HE

DfE analysts are working to the following two scenarios to understand impacts to HE providers for 2020/21:

## Scenario 1: Effective containment and testing

What this looks like: testing, contact tracing and physical distancing can contain outbreaks

What this means for HE: the sector opens in September but with changes to teaching provision, including online learning and physical distancing rules on campus (such as one-way systems). Entertainment and student services may be limited but open. Local lockdowns at providers may be required.

#### Scenario 2: On and off restrictions

What this looks like: lockdown measures are imposed and reversed in a clinical way to control outbreaks

What this means for HE: providers either teach online for the Autumn term and return to campus in January, or progress with a January start and compressed academic year, or both

# Annex – New HE Classification (post-2019)

## The HE sector in England has a large and highly diverse provider base

University Title (115) (1.56m FTE students)	Further Education Colleges (169) ( <i>81,000 FTE students</i> )	Other providers (112) (164,000 FTE students)
Vary in terms of history, legal status, organisational structure, size, mission, subject mix and student demographics.	Typically publicly funded. Smaller sized providers with a focus on vocational/ technical education below first degree level. Provision more likely to be local/ regional.	<ul> <li>A mix of:</li> <li>Medium sized providers (London based colleges and institutions)</li> <li>Specialist providers (e.g. creative and performing arts)</li> <li>Private providers</li> </ul>
Pre-1992 institutions Research intensive Academic learning Post-1992 institutions Teaching intensive Vocational learning Includes former polytechnics Specialist provision	Regulated       sector       Total: 396       Approved (Fee       Cap)       Total: 332       Total: 332	Unregulated sector Estimate of between 60 700 providers in Englar (not eligible for studen support, not receiving grant funding, small specialist niche provide Small number of studen

consistently irrespective of what type of body they are.

1: Bespoke DfE analysis of the OfS Register <a href="https://www.officeforstudents.org.uk/advice-and-guidance/the-register/the-ofs-register/">https://www.officeforstudents.org.uk/advice-and-guidance/the-register/the-ofs-register/</a> FTE numbers from OfS <a href="https://www.officeforstudents.org.uk/data-and-analysis/student-number-data/get-the-data/">https://www.officeforstudents.org.uk/data-and-analysis/student-number-data/get-the-data/</a> (updated 3 July), numbers rounded to the nearest thousand.. FECs have been identified through the College accounts data for the academic year 2018 to 2019. Note that student number data was only available for 391 providers. Additionally, 3 providers have zero number of students in the data.

2: CGHE (2019) Private providers of higher education in the UK: mapping the terrain. <u>https://www.researchcghe.org/publications/working-paper/private-providers-of-higher-education-in-the-uk-mapping-the-terrain/</u>