



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

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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

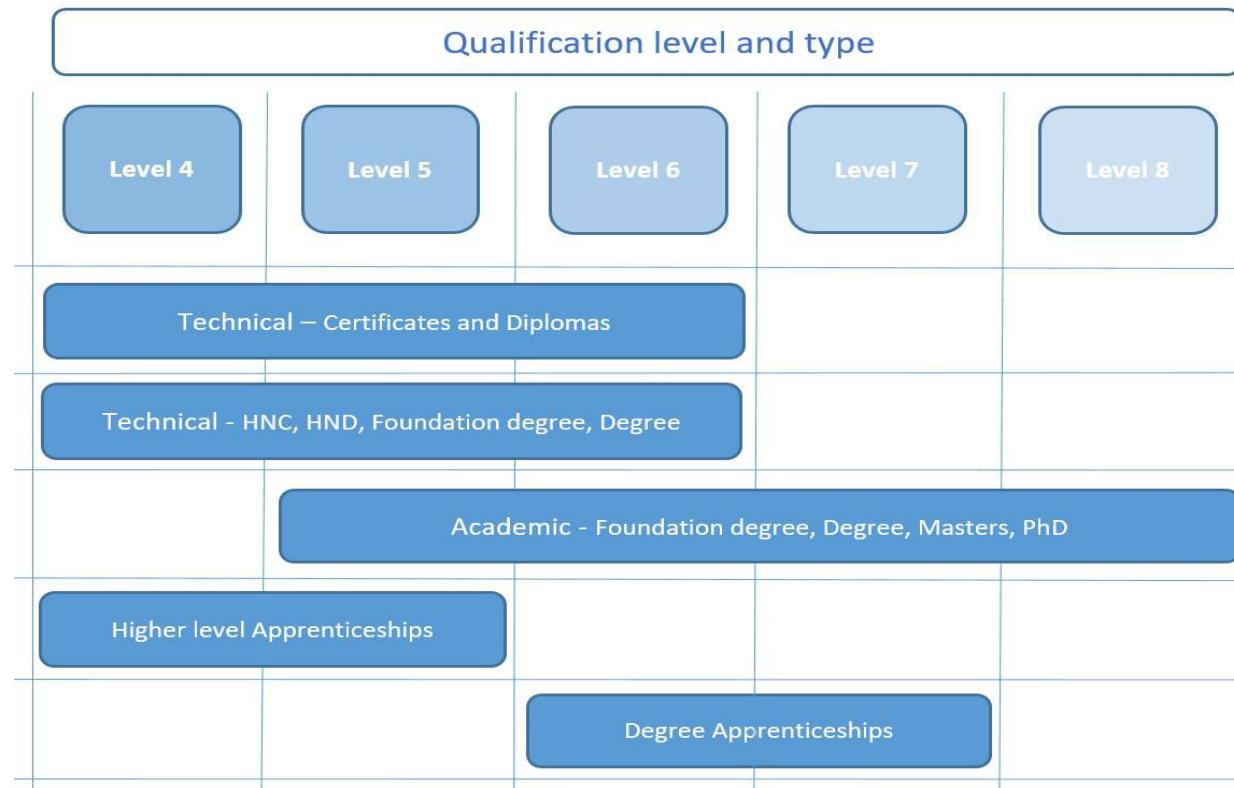
Level 6 – e.g. Bachelor's degree

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 2018/19¹ 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).
- **114,000** undergraduate and postgraduate students studying on HE level courses at **English Further Education Colleges (FECs)**.
- **73,180** undergraduate and postgraduate students studying at **97 designated English HE Alternative Providers (APs)**. Research published in 2017 suggests that there are also over 600 non-designated HE APs in England, though no estimate of the number of students enrolled is available.

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

Numbers of Enrolments at English HEIs, 2018/19

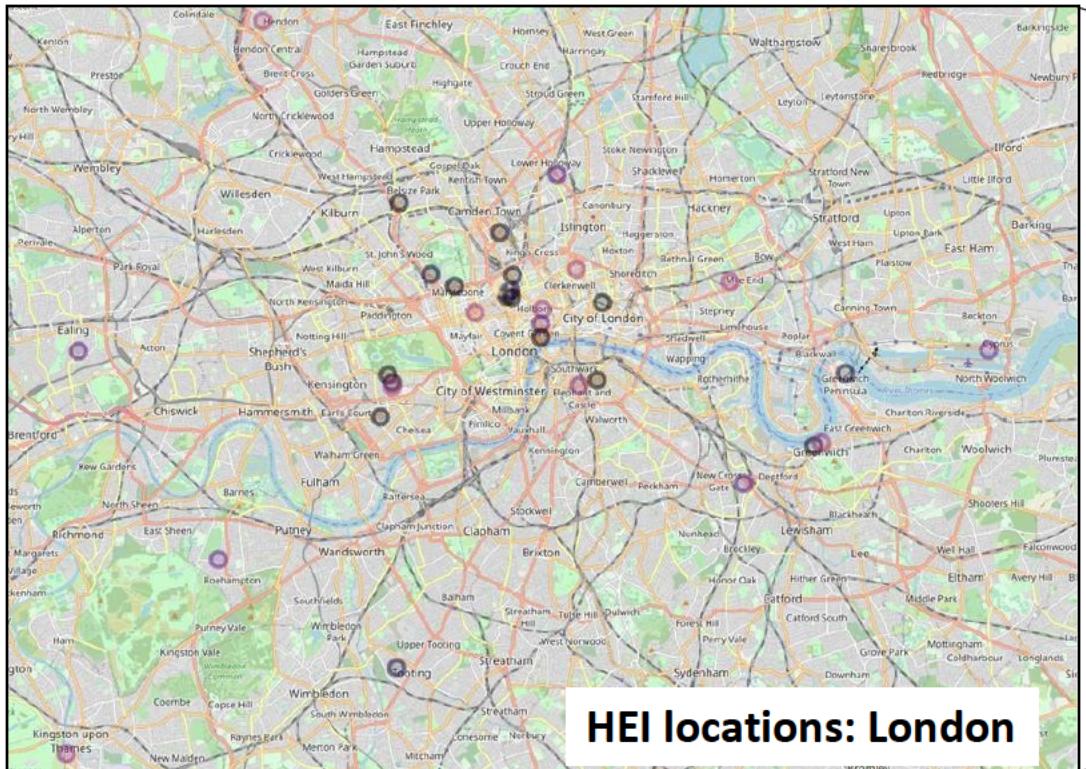
Mode and Level of Study	Type of Students	Number of Students	% of Total
Full-time undergraduate	New entrants	457,245	23.5%
	Continuing students	802,265	41.3%
Part-time undergraduate	New entrants	88,520	4.6%
	Continuing students	112,500	5.8%
Postgraduate	New entrants	308,595	15.9%
	Continuing students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

Source: HESA, Higher Education Student Statistics, 2018/19

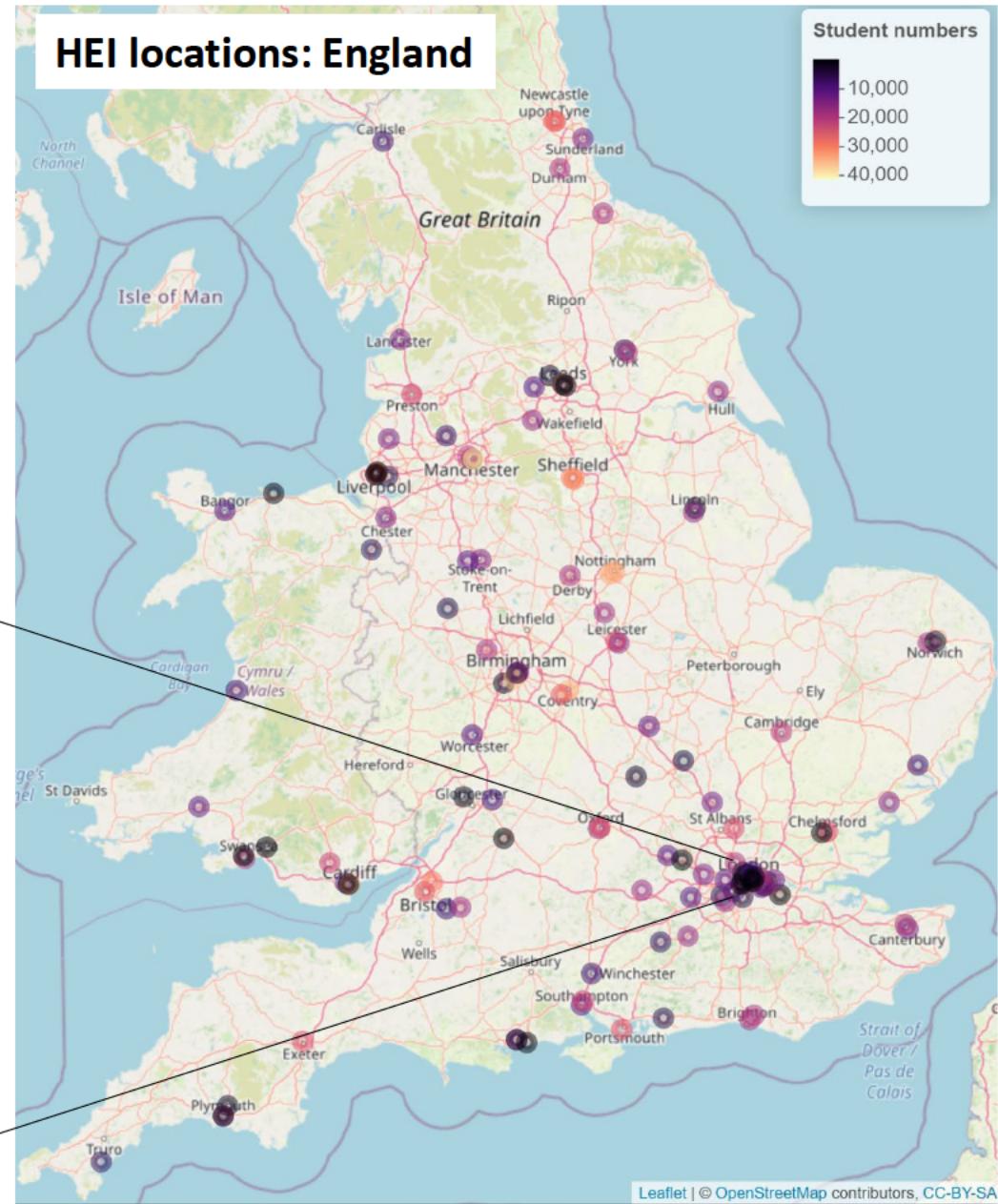
¹From academic year 2019/20 the regulatory framework for HE has changed, and the distinction between HEIs and APs has ended. As this pack relies on data from 2018/19 (the latest available), the older terminology is used. The new HE provider categorisation is presented in the annex.

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: Unpublished internal DfE analysis. Each ring represents one provider.



Note: this map excludes the Open University, which had over 92,000 distance learners in 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 (*).
- 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 and Academic staff numbers at English HEIs by region in 2018/19

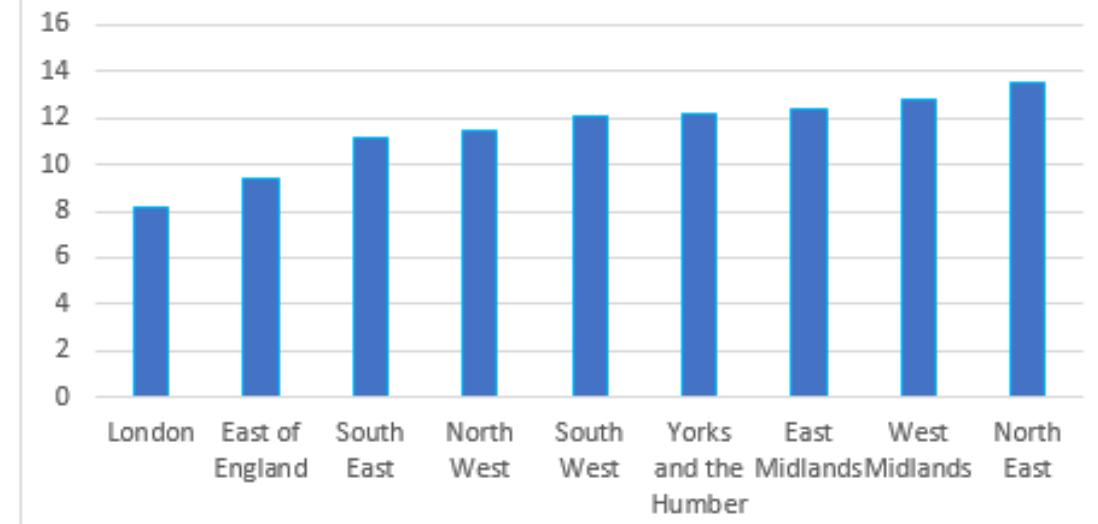
English region	Total number of students (undergraduate and postgraduate)	Number of Academic Staff ¹	Number of Non-academic Staff ¹
London	374,670	45,675	35,990
East of England	132,350	14,135	14,005
South East	346,120 ²	31,095	31,280
North West	235,630	20,595	21,440
South West	169,660	14,035	16,140
Yorks 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

Source: HESA Higher Education Students Statistics, UK, 2018/19 and Higher Education Staff Statistics, UK, 2018/19

¹ Research from UUK shows that the sector supports more than 940,000 jobs in the UK. Figures above do not include HEI staff who are on short/freelancing contracts or who do not have contracts with HEIs themselves.

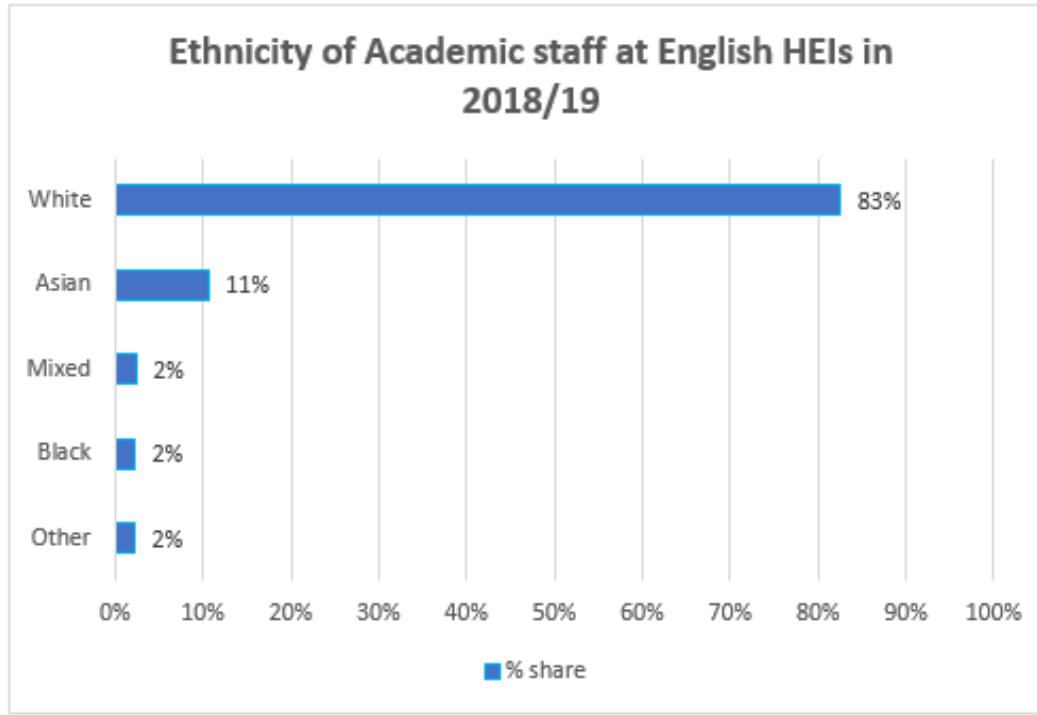
² Includes students at the Open University who are distance learners

Ratio of students to academic staff by region of English HEI 2018/19



(*) 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.

Academic Staff numbers by ethnicity and age

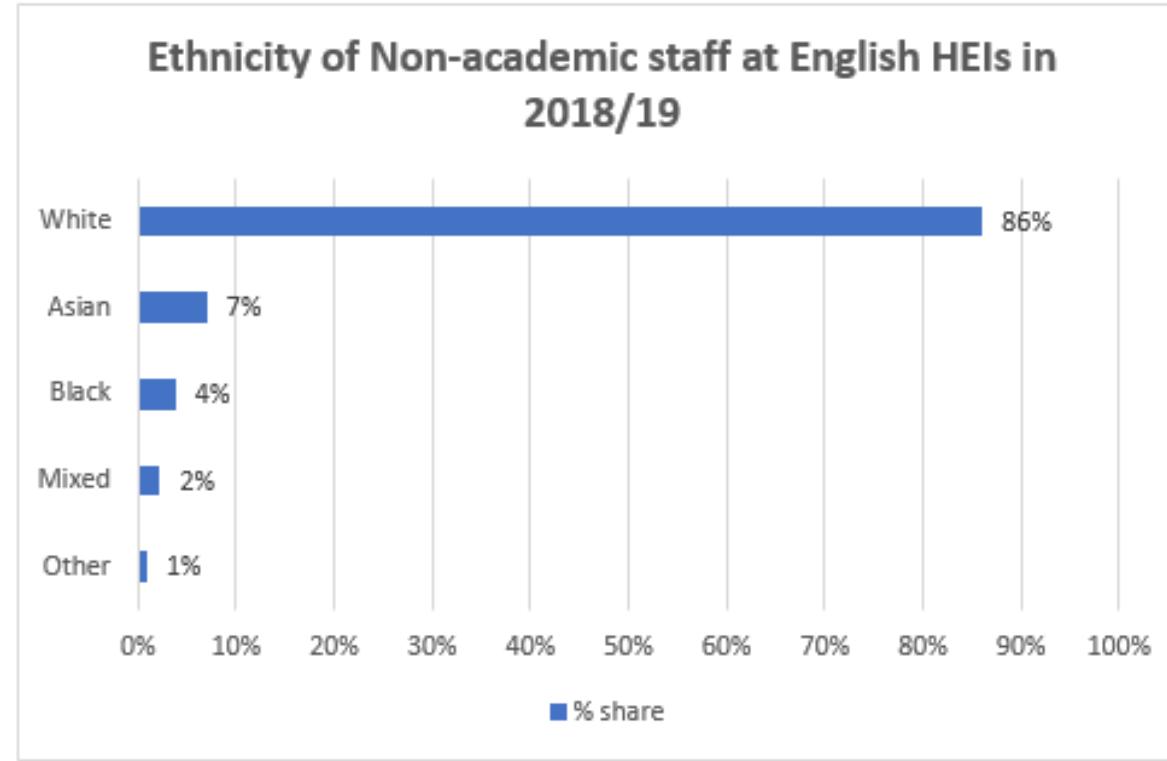


- In 2018/19 there were 179,895 academic staff working in English HEIs. This excludes a small proportion of HEI staff who are on short/freelancing style contracts (atypical).
- 83% were White and 17% were from BAME groups. This is compared to 85% of the working age population in England who are White and 15% who are from BAME groups, based on the 2011 Census¹.
- 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.

Note that Ethnicity percentages exclude unknown values. Percentages for ethnicity are published in the 2018/19 HESA data. Percentages for age, and ethnicity-age cross-tabulations have been calculated internally using unpublished 2018/19 HESA data.

¹ Source: 2011 Census, <https://www.ethnicity-facts-figures.service.gov.uk/uk-population-by-ethnicity/demographics/working-age-population/latest#ethnic-groups-by-working-age>. 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 and age



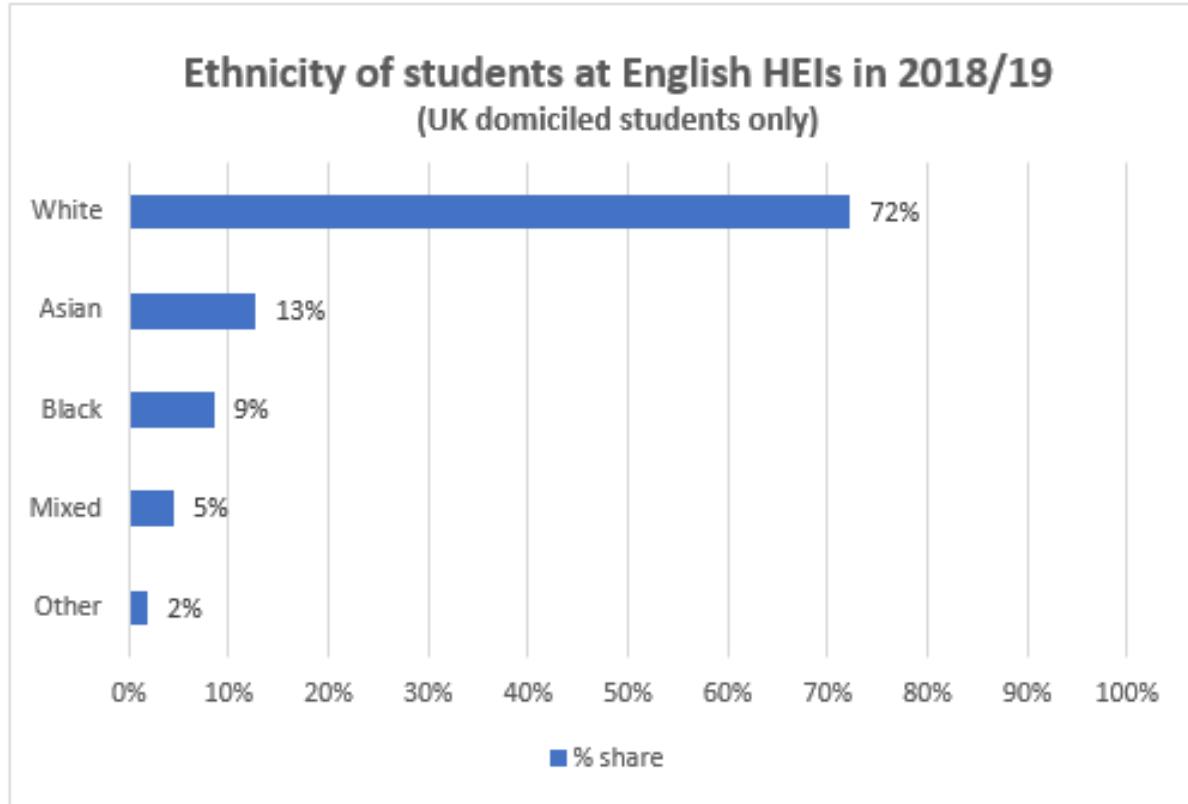
Source: HESA Higher Education Staff Statistics: UK, 2018/19

- 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 privately¹.
- 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.

Note that Ethnicity percentages exclude unknown values. Percentages for ethnicity and age are published in the 2018/19 HESA data. Percentages for age and ethnicity-age cross-tabulations have been calculated internally using unpublished 2018/19 HESA data.

¹Source: 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 Census¹
- 70% of students were under 25 years, 11% were aged 25-29 and 19% were aged 30 years and over.

Source: HESA Higher Education Student Statistics: UK, 2018/19

Note that Ethnicity percentages exclude unknown values.

¹ Source: 2011 Census, <https://www.ethnicity-facts-figures.service.gov.uk/uk-population-by-ethnicity/demographics/working-age-population/latest#ethnic-groups-by-working-age>.

The ethnic breakdown of the population will likely have changed from 2011, so these figures should be treated as an estimate.

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 2014/15¹

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)

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

Region	Total inflow to region	Inflow from:			* Totals for the South East region include students enrolling at the Open University. In 18/19 this inflates the inflow to the South East from other English regions by approximately 74,000 students.
		Other English regions	Rest of the UK	Outside the UK	
South East	235,454*	175,048*	6,379	54,027	* Totals for the South East region include students enrolling at the Open University. In 18/19 this inflates the inflow to the South East from other English regions by approximately 74,000 students.
London	217,055	92,100	5,635	119,315	
East Midlands	125,865	91,295	3,590	30,980	
Yorkshire and The Humber	123,775	85,305	3,845	34,625	
West Midlands	122,190	75,665	5,625	40,900	
North West	119,050	64,075	15,145	39,830	
South West	109,710	70,315	10,035	29,360	
East of England	87,635	55,230	2,090	30,315	
North East	63,750	39,070	3,605	21,075	
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).

Term Time Location by Provider

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

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

Provider	No. in Parental Home	Percentage of Total
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%

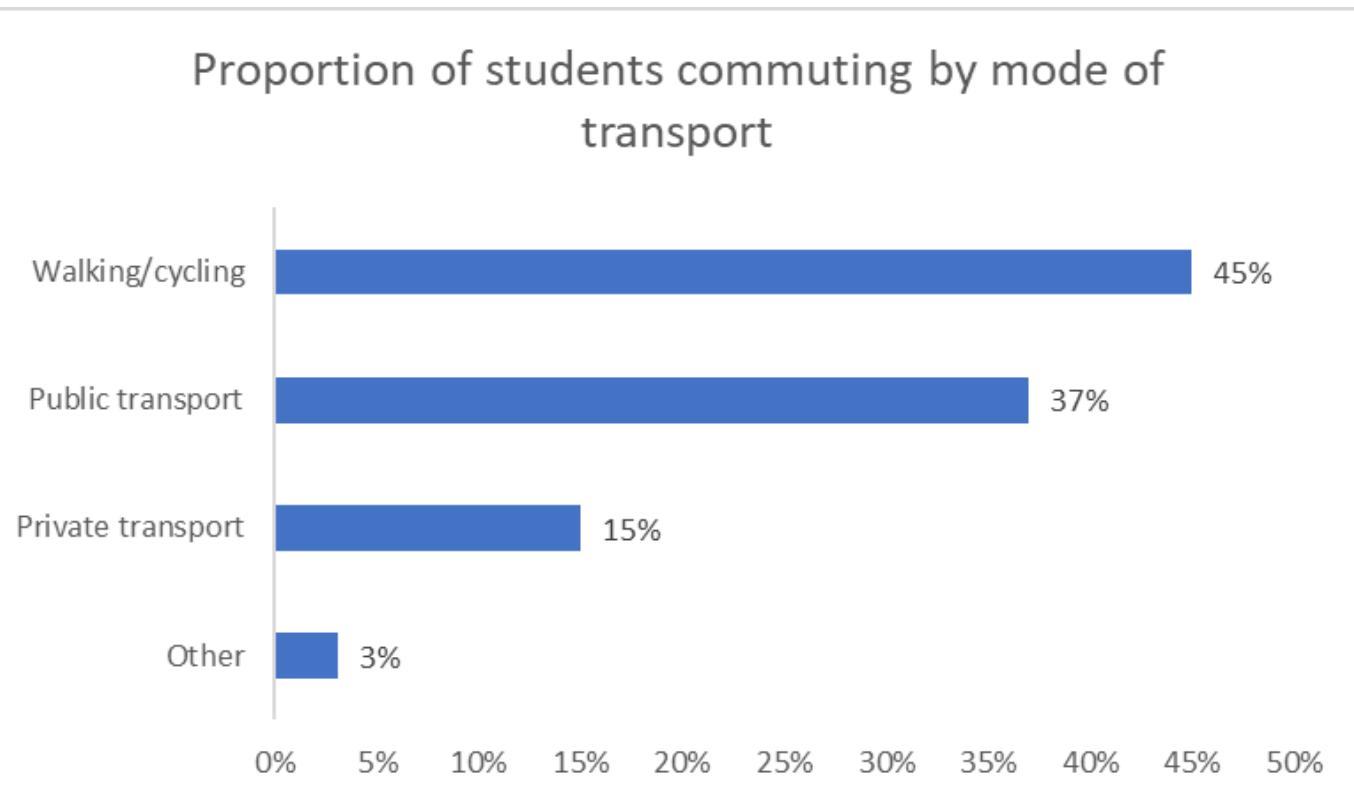
Top 20 providers with the highest proportions of students living in their own residence¹, 2018/19 (full-time, UK domiciles)

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

Source: HESA Student Record 2018/19 (unpublished DfE analysis)

¹ 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.

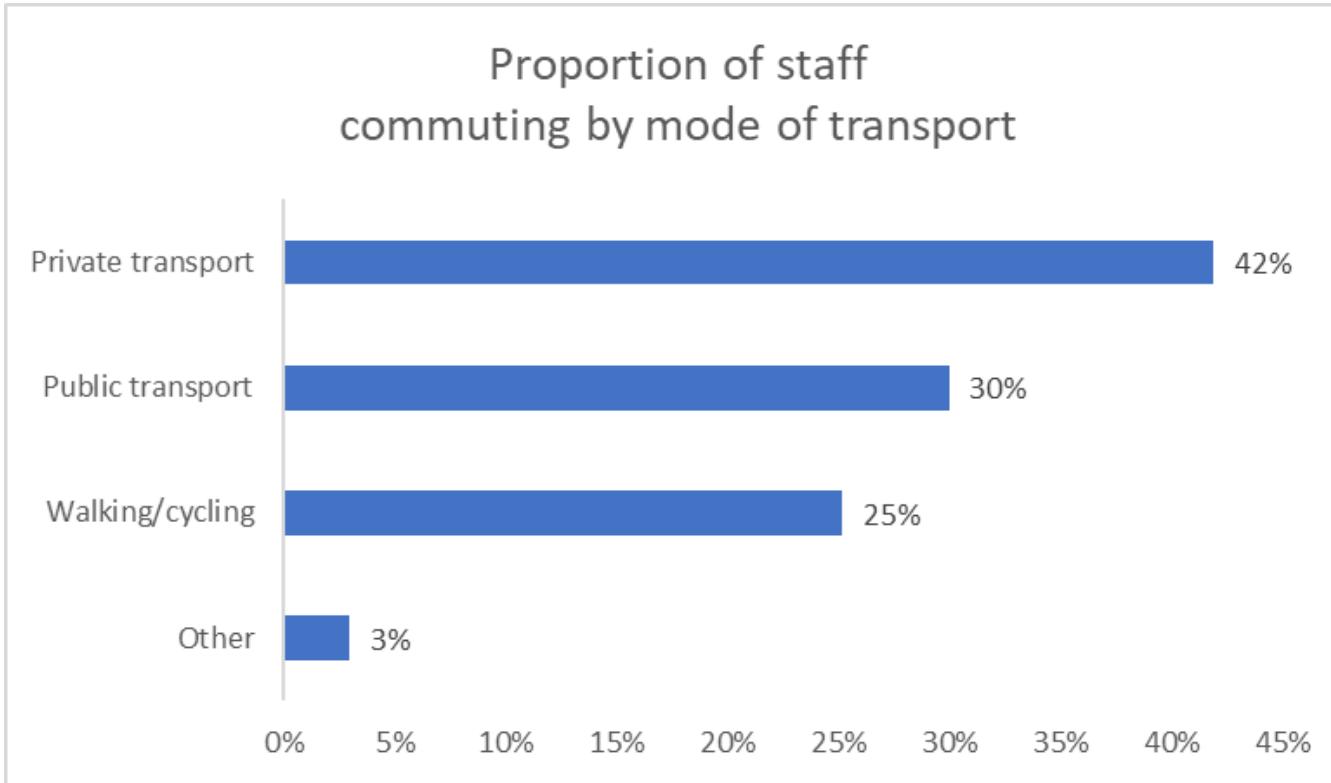
¹Figures are inflated due to inclusion of students who are distance learners and do not often attend campus in person. In 2018/19, there were 92,985 distance learners at the Open University.

- 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, the general trend is supported by findings from the National Travel Survey 2018, which 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 weighted averages are scaled up to the 1.9 million¹ 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.

- 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). The National Travel Survey 2018 reports 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.

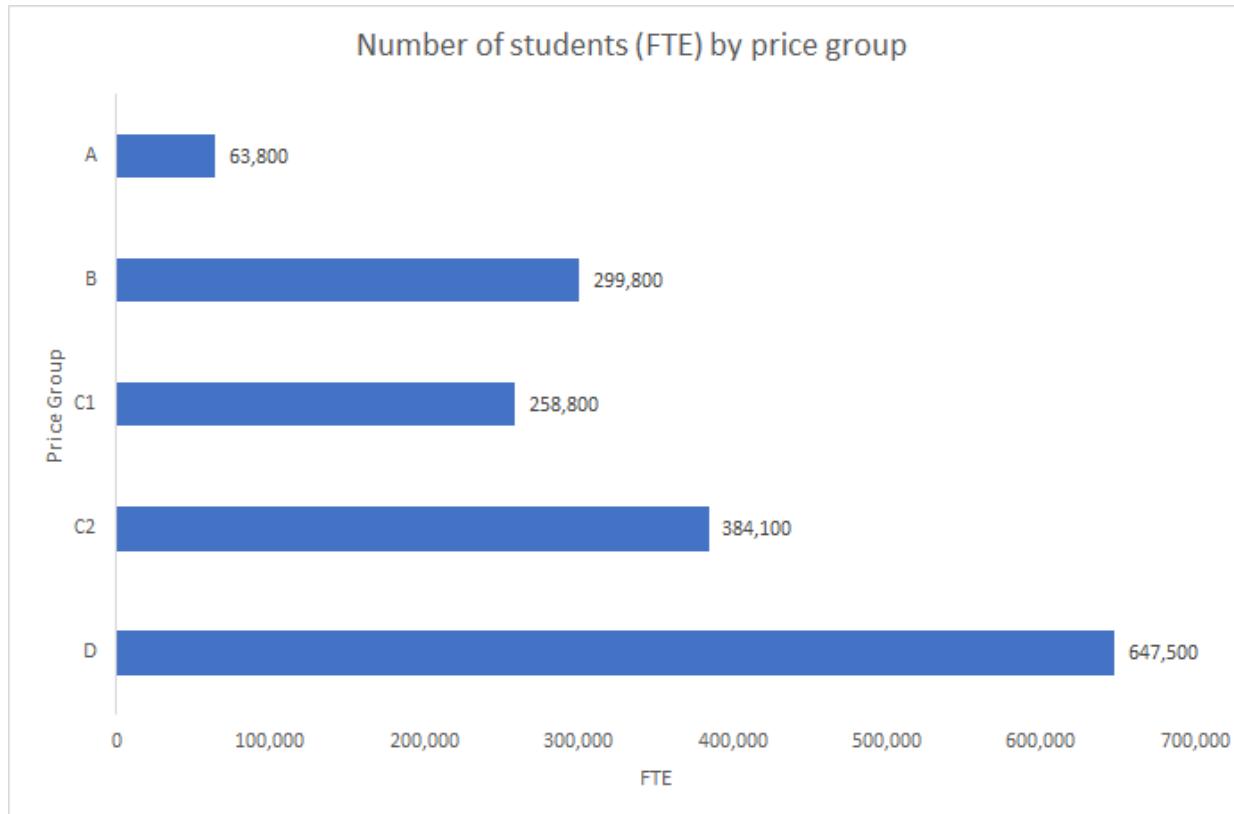
If the weighted averages are scaled up to the 362,475 staff at English HEIs then we estimate that the numbers traveling by each mode would be:

- **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)

Internal DfE analysis suggests that **22%** of students' total full time equivalence¹ 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 **39%** is in subjects that are classroom based (D) and may therefore be more adaptable to online only delivery.



Price group details with example subjects

Price group	Cost profile	Example subjects
A	Medical degrees, involving lab work, practical instruction and placement inside hospitals	Medicine, Dentistry, Veterinary science
B	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

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

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)

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 to analysis on face-to-face provision (slides 19 and 20):

- Unpublished analysis based on English Higher Education Institutions only (does not cover Alternative Providers or Further Education Colleges)
- Some cost centres can be placed in different price groups depending on provider, specific subject studied, or year of study. Where there is not one-to-one matching, we have used the price group with the largest FTE to describe the typical cost profile of the subject.
- 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.

Source: unpublished internal DfE analysis. Student FTE counts taken from 2018/19 HESA data. Price groups assigned using cost centres in OfS 2017/18 TRAC data

Class sizes and contact hours in HE

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

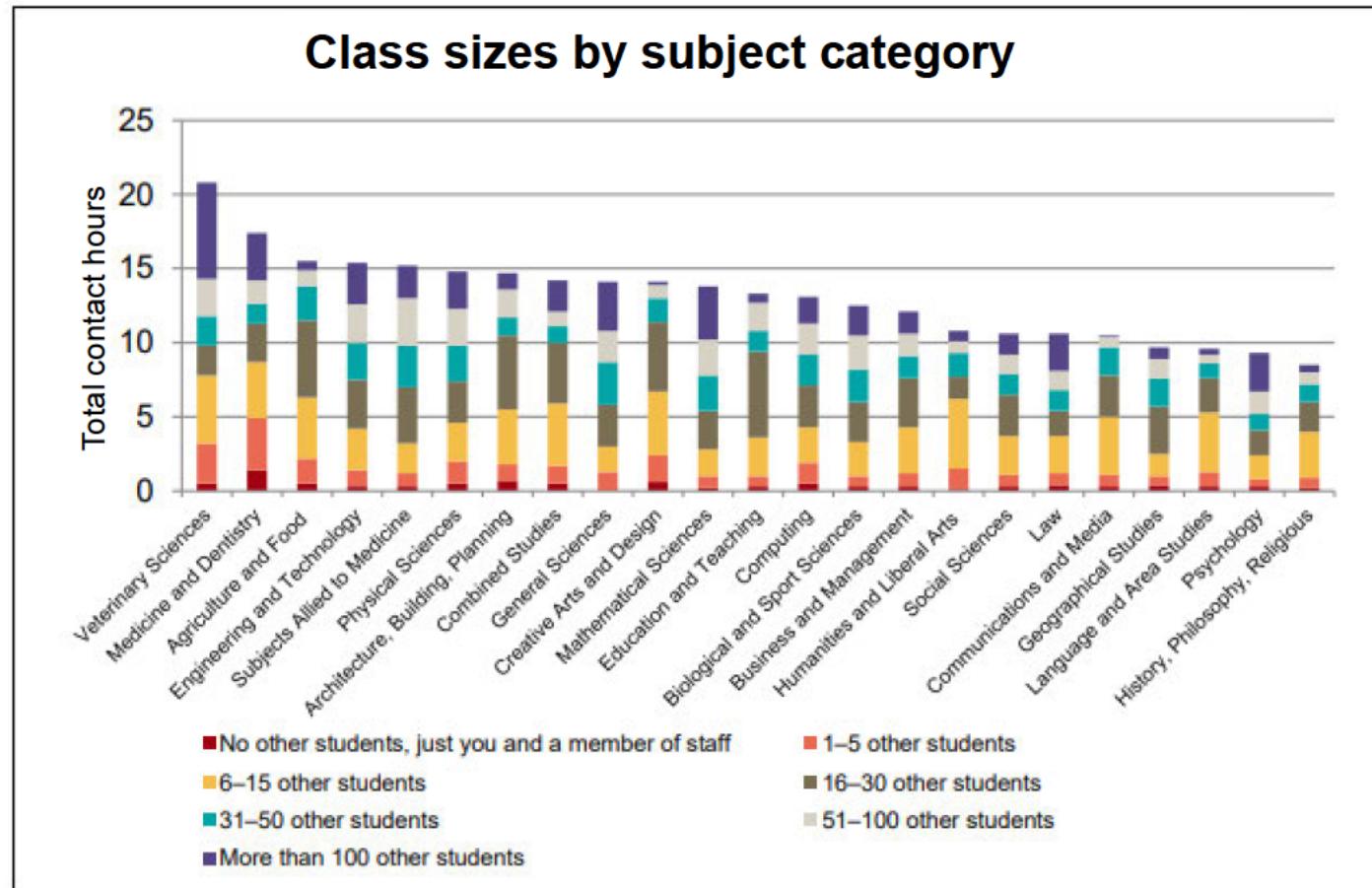
Average hours per week spent in different class sizes

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.

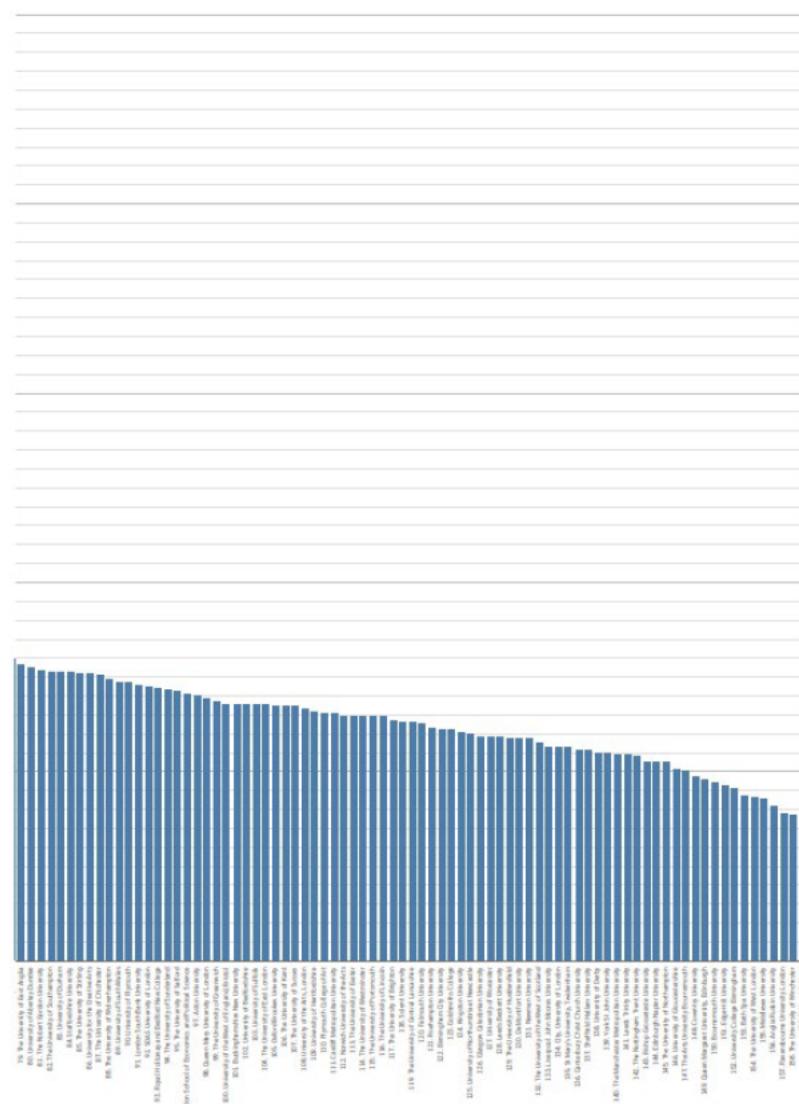
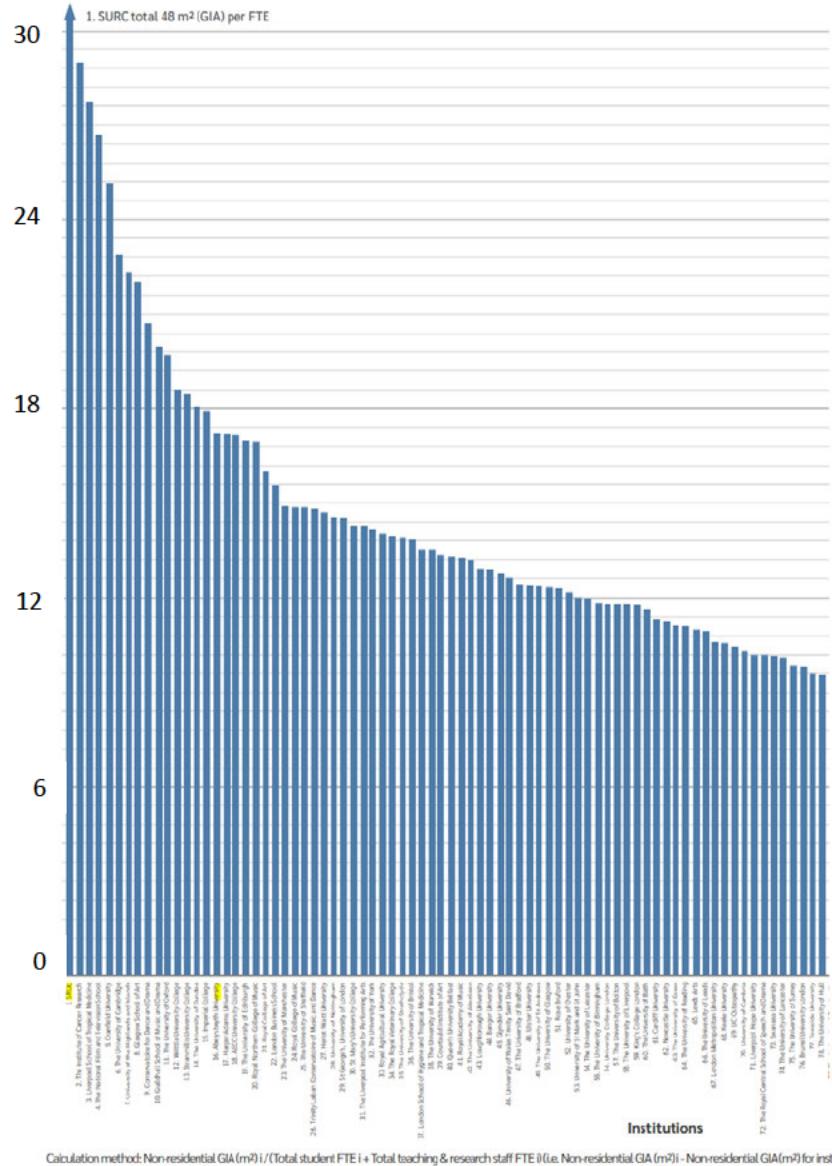
There is also variation in contact hours, with veterinary students having over 20 contact hours compared to history, philosophical and religious studies students (under 10 contact hours per week).

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



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

Campus density (m^2 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.

5 – Impact of Covid-19

What does September look like for providers

As of 29th June, the majority (93%) of universities have confirmed their intentions for starting in September/October¹:

- **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

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

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

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

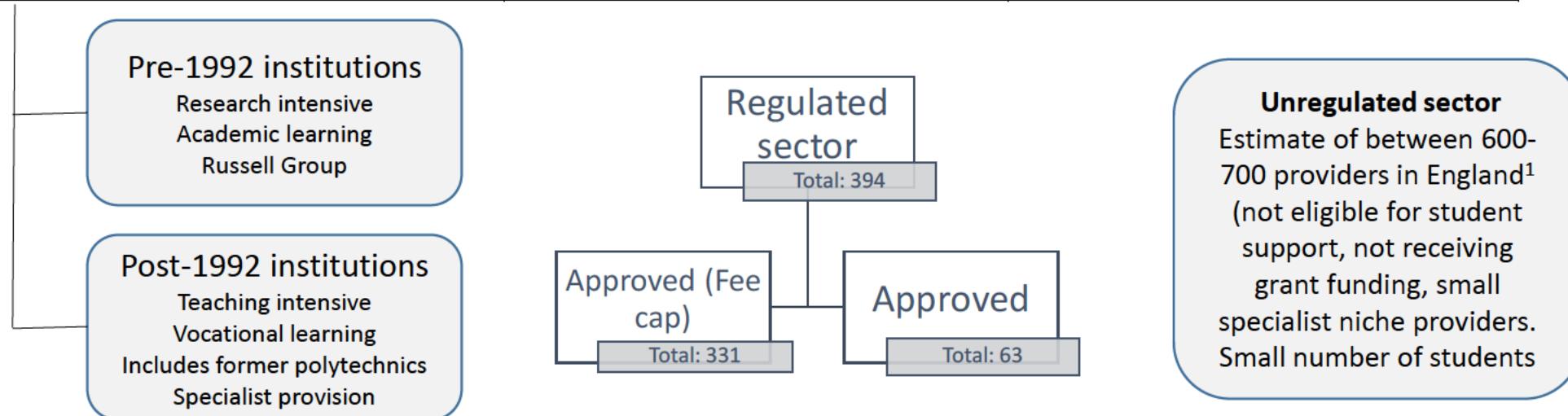
What this looks like: lockdown measures are imposed and reversed in a clinical way to control outbreaks

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

DIFFERENT TYPES OF REGULATED HE PROVIDER (394 on OfS Register as at 27th Feb 2020)		
University Title (115) <i>(1.54m FTE students)</i>	Further Education Colleges (168) <i>(89,000 FTE students)</i>	Other providers (111) <i>(160,000 FTE students)</i>
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.	A mix of: – Medium sized providers (London based colleges and institutions) – Specialist providers (e.g. creative and performing arts) – Private providers



The regulatory system in place since August 2019 treat providers consistently irrespective of what type of body they are.

Source: Office for Students and ¹CGHE (2019) Private providers of higher education in the UK: mapping the terrain