# PATTERNS <br> AND TRENDS 

IN UK HIGHER EDUCATION 2018

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# INTRODUCTION 

In 2016-17 there were 2,316,475 students at UK higher education institutions, of which $76.2 \%$ were undergraduates and $23.8 \%$ were postgraduates.

## ABOUT THIS REPORT

Patterns and trends in UK higher education 2018 presents an overview of the sector in the last 10 years.

## CHAPTER 1: STUDENTS

Analysis of student applications, entrants, study levels, study modes and demographics, including information on graduate employment and outcomes.

## CHAPTER 2: STAFF

Details of staff roles, nationalities and subjects of expertise.

## CHAPTER 3: FINANCE

Income and expenditure of higher education institutions, including funding generated for teaching, research, and knowledge exchange activities.

## THE UK HIGHER EDUCATION SECTOR

In the 2016-17 academic year, there were 2,316,475 students at higher education institutions in the UK. 1,764,895 (76.2\%) were undergraduates and $551,580(23.8 \%)$ were postgraduates. $77.6 \%(1,797,545)$ were studying full time, with $\mathbf{2 2 . 4} \%(518,925)$ studying part time. Figure 1 breaks down the student cohort further; undergraduates are divided into 'first degree' and 'other undergraduates', ${ }^{1}$ while postgraduates have 'taught' and 'research' groupings. ${ }^{2}$

In the same academic year, UK higher education institutions employed 419,585 staff, of whom $49.3 \%$ were on academic contracts, $11.9 \%$ were from EU (non-UK) countries, and $8.1 \%$ from non-EU countries (where nationalities were known).

[^0]FIGURE 1
Students at higher education institutions by level and mode of study, 2016-17


Source: HESA Student Record [2016-17]

## NOTE ON THE DATA

In 2016-17, there were 162 higher education institutions in the UK, excluding further education colleges, in receipt of public funding via one of the UK funding councils. This report features aggregated data from all 162, plus the University of Buckingham, largely based on institutional returns to the Higher Educations Statistics Agency (HESA). Unless explicitly stated otherwise, the analysis in this report excludes other higher education providers, including alternative providers or further education colleges that currently do not return consistent and full data to HESA. ${ }^{3}$

The report also excludes data for the University of Wales (central functions), which has staff but no students. To ensure that figures for the number of students studying in each country reflect the actual number of students studying in that country for each year, students enrolled at The Open University have been split out to their country of study.

Although this report focuses on the 163 institutions that have provided comprehensive HESA returns, HESA has collected headline information on alternative providers. Table 1 outlines higher education student enrolments at higher education institutions, further education colleges and designated courses at alternative providers, for 2015-16 and 2016-17.

[^1]TABLE 1
Higher education student enrolments at higher education, further education colleges and designated courses at alternative providers by level of study and higher education provider type, 2015-16 and 2016-17

| LEVEL OF STUDY | HIGHER EDUCATION PROVIDER TYPE | 2015-16 | 2016-17 |
| :---: | :---: | :---: | :---: |
| FIRST DEGREE | Higher education institutions* | 1,563,900 | 1,597,615 |
|  | Further education colleges | 23,635 | 24,195 |
|  | Alternative providers (designated courses) | 31,815 | 32,685 |
| OTHER UNDERGRADUATE | Higher education institutions* | 183,955 | 167,275 |
|  | Further education colleges | 161,485 | 162,250 |
|  | Alternative providers (designated courses) | 21,070 | 19,245 |
| POSTGRADUATE | Higher education institutions* | 532,975 | 551,585 |
|  | Further education colleges | 2,625 | 2,820 |
|  | Alternative providers (designated courses) | 0 | 6,805 |
| TOTAL |  | 2,521,460 | 2,564,470 |

* Includes University of Buckingham

Source: HESA (2018), Statistical First Release 249

All HESA figures quoted in the report that relate to student and staff numbers have been rounded to the nearest five in accordance with HESA data protection protocols. All percentages have been calculated using raw figures and rounded, and therefore rounded figures may not sum precisely. Owing to changes in financial reporting from 2015-16, data on UK higher education institutions' finances is no longer comparable with previously published HESA finance data that has been used in earlier editions of Patterns and trends in UK higher education. Data on university finances is therefore provided for 2015-16 and 2016-17 only, with broad comparisons made with previous years where appropriate.

## CHAPTER 1

## STUDENTS

In 2016-17, there were 1,012,425 entrants to higher education institutions in the UK, 56,400 fewer than in 2007-08. However, total student numbers have fluctuated over the period and across different types of study, with record numbers of full-time undergraduates and postgraduates in 2016-17.

### 1.1 UNDERGRADUATE APPLICATIONS TO UK HIGHER EDUCATION INSTITUTIONS

By 15 January 2018, the deadline for which most prospective students submit undergraduate applications, there was a $0.9 \%$ reduction in the total number of people applying to undergraduate courses, compared to 2017. This figure of 559,030 applicants reflects a $2.5 \%$ fall in the 18-year-old population in the UK, and falling demand from 19-year-olds and the mature ( 25 and over) age groups.

18-year-olds, however, were more likely than ever to apply, and 1\% more likely than in 2017. EU applicants also increased by $3.4 \%$ from the previous year to 43,510 , and the number of international (non-EU) applicants increased to its highest ever number of 58,450 (up 11\%). It is worth noting that UCAS undergraduate application figures provide only a partial picture regarding international students; nearly half of international students study at postgraduate level so will not apply via the UCAS undergraduate route. Furthermore, only a proportion of international students applying to undergraduate courses do so through UCAS.

FIGURE 2
18-year-old application rates by the January deadline, 2009 to 2018


Source: UCAS (2017), UK application rates by the January deadline
Application rates for 18 -year-olds living in areas in England with low participation in higher education ${ }^{4}$ increased to the highest levels recorded (22.6\%). Equivalent application rates also increased in Northern Ireland (24.5\%), and remained constant in Wales (19.7\%). Application rates of 18 -year-olds living in disadvantaged areas in Scotland, defined using the latest 2016 version of the Scottish Index of Multiple Deprivation, decreased to $16.7 \%$ in 2018 - the first decrease since 2008. Note, however, that in Scotland, there is a substantial component (around one third of young full-time undergraduate study) where admissions are not processed through UCAS.

[^2]FIGURE 3
Application rates from the most disadvantaged 18-year-olds, 2009 to 2018


Source: UCAS (2017), UK application rates by the January deadline

### 1.2 ENTRANTS TO UK HIGHER EDUCATION INSTITUTIONS

The total number of entrants to UK higher education institutions has decreased by $5.3 \%$ since 2007-08. Entrant numbers varied according to the level of study (undergraduate and postgraduate levels) and the modes of study (full-time and part-time). These variances are highlighted in Table 2, while the 10-year trends of entrants by mode and level of study are shown in Figure 4.

TABLE 2
Entrants to UK higher education institutions by mode and level of study, 2016-17, and changes since 2007-08

| LEVEL OF |  | MODE OF STUDY | ENTRANTS 2016-17 | CHANGE SINCE 2007-08 |
| :---: | :---: | :---: | :---: | :---: |
|  | First degree | Full-time | 503,720 | 27.6\% |
|  |  | Part-time | 44,575 | -31.8\% |
|  | Other undergraduate | Full-time | 31,175 | -51.7\% |
|  |  | Part-time | 88,640 | -66.8\% |
|  | Taught | Full-time | 201,105 | 45.2\% |
|  |  | Part-time | 107,870 | -2.0\% |
|  | Research | Full-time | 29,190 | 28.9\% |
|  |  | Part-time | 6,140 | -1.9\% |

FIGURE 4
Undergraduate and postgraduate entrants by level and mode of study, 2007-08 to 2016-17




The cross-border flows of entrants to higher education also differed across the UK. Table 3 shows how the total number of entrants to higher education from each of the four UK nations, the EU and the rest of the world has varied according to country of institution, between 2007-08 and 2016-17. Overall, in 2016-17, non-UK students accounted for $23.2 \%$ of all entrants ( $6.2 \%$ from other EU countries and $17.0 \%$ from non-EU countries).

In 2016-17, non-UK students accounted for $23.2 \%$ of all entrants.

TABLE 3
Entrants by domicile and country of institution, 2007-08 and 2016-17
2007-08
COUNTRY OF INSTITUTION

| DOMICILE | ENGLAND | N. IRELAND | SCOTLAND | WALES |
| :--- | :---: | :---: | :---: | :---: |
| ENGLAND | 700,895 | 410 | 7,045 | 13,465 |
| N. IRELAND | 4,665 | 20,065 | 1,460 | 190 |
| SCOTLAND | 5,155 | 55 | 72,120 | 280 |
| WALES | 9,630 | 15 | 250 | 40,075 |
| EU | 44,740 | 1,765 | 6,485 | 4,760 |
| NON-EU | 105,850 | 590 | 12,205 | 7,825 |

2016-17

|  | COUNTRY OF INSTITUTION |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| DOMICILE | ENGLAND | N. IRELAND | SCOTLAND | WALES |
| ENGLAND | 612,550 | 1,360 | 9,075 | 15,090 |
| N. IRELAND | 5,060 | 18,880 | 1,310 | 230 |
| SCOTLAND | 4,365 | 105 | 63,765 | 165 |
| WALES | 11,595 | 65 | 320 | 31,455 |
| EU | 49,310 | 1,040 | 9,310 | 3,375 |
| NON-EU | 144,950 | 1,505 | 17,405 | 8,420 |

CHANGE BETWEEN 2007-08
COUNTRY OF INSTITUTION

| DOMICILE | ENGLAND | N. IRELAND | SCOTLAND | WALES |
| :--- | :---: | :---: | :---: | :---: |
| ENGLAND | $-12.6 \%$ | $231.7 \%$ | $28.8 \%$ | $12.1 \%$ |
| N. IRELAND | $8.5 \%$ | $-5.9 \%$ | $-10.3 \%$ | $21.1 \%$ |
| SCOTLAND | $-15.3 \%$ | $90.9 \%$ | $-11.6 \%$ | $-41.1 \%$ |
| WALES | $20.4 \%$ | $333.3 \%$ | $28.0 \%$ | $-21.5 \%$ |
| EU | $10.2 \%$ | $-41.1 \%$ | $43.6 \%$ | $-29.1 \%$ |
| NON-EU | $36.9 \%$ | $155.1 \%$ | $42.6 \%$ | $7.6 \%$ |

Source: HESA Student Record [multiple years]

### 1.3 STUDENTS BY LEVEL AND MODE OF STUDY

Between 2007-08 and 2016-17, the total number of students at higher education institutions increased by $0.4 \%$, from 2.31 million to 2.32 million. Table 4, however, shows that trends in student numbers differ across different modes and levels of study. There has been a decrease (66.4\%) in the number of students on other undergraduate courses while all other levels of study increased over the same period. First degree students increased by $22.3 \%$, postgraduate research students by $20.3 \%$, and postgraduate taught students by $7.7 \%$.

TABLE 4
Annual change in student population, 2007-08 to 2016-17

|  | UNDERGRADUATE |  | POSTGRADUATE |  | MODE OF STUDY |  | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FIRST DEGREE | OTHER | TAUGHT | RESEARCH | FULL-TIME | PART-TIME |  |
| 2007-08 | - | - | - | - | - | - | - |
| 2008-09 | 3.4\% | 1.9\% | 8.5\% | 1.2\% | 4.0\% | 3.7\% | 3.9\% |
| 2009-10 | 5.2\% | -2.8\% | 8.5\% | 4.5\% | 6.0\% | 0.6\% | 4.1\% |
| 2010-11 | 3.0\% | -9.1\% | 1.1\% | 5.0\% | 2.8\% | -4.3\% | 0.3\% |
| 2011-12 | 5.3\% | -13.8\% | -5.2\% | 5.0\% | 2.6\% | -5.9\% | -0.2\% |
| 2012-13 | -0.8\% | -28.8\% | -7.0\% | 0.1\% | -2.3\% | -15.1\% | -6.3\% |
| 2013-14 | 0.4\% | -17.9\% | 0.1\% | 2.2\% | 0.8\% | -8.3\% | -1.7\% |
| 2014-15 | -0.6\% | -9.9\% | -0.6\% | 1.3\% | 0.1\% | -5.7\% | -1.4\% |
| 2015-16 | 2.6\% | -9.7\% | -1.3\% | 0.2\% | 2.6\% | -5.0\% | 0.7\% |
| 2016-17 | 2.2\% | -9.1\% | 4.6\% | -0.6\% | 3.3\% | -4.0\% | 1.6\% |

Source: HESA Student Record [multiple years]
While full-time enrolments have increased by $21.4 \%$ since 2007-08, with growth resuming after a fall in 2012-13, part-time enrolments remained broadly stable until 2009-10, after which they have fallen year on year. Part-time registrations are now $37.2 \%$ lower than in 2007-08. The decrease in other undergraduate provision over this period has been a contributing factor in the decline of part-time study; in 2007-08, other undergraduates represented $45.4 \%$ of all part-time numbers, yet in 2016-17, they accounted for $23.3 \%$. Following the introduction of student loans for masters courses in 2016-17 however, there was an increase in postgraduate (taught) study of $4.6 \%$ compared to 2015-16.

FIGURE 5
Students by level and mode of study, 2007-08 to 2016-17



Part-time registrations are now $37.2 \%$ lower

### 1.4 INTERNATIONAL STUDENTS

In 2007-08, $14.8 \%$ of students were from non-UK domiciles ( $4.9 \%$ from other EU countries and $10.0 \%$ from non-EU countries). In 2016-17, the proportion of non-UK students had increased to $19.1 \%$ ( $5.8 \%$ other EU and $13.3 \%$ non-EU respectively). Figure 6 shows that, after a period
of growth between 2006-07 and 2011-12, the number of EU students EU and $13.3 \%$ non-EU respectively). Figure 6 shows that, after a period
of growth between 2006-07 and 2011-12, the number of EU students fell by $13.3 \%$ in 2012-13 compared with the previous year. This largely reflects funding changes in England, where tuition fees increased in 2012-13. In Scotland, for example, where EU students have the same fee status as home students and therefore do not pay any tuition fees, the number of EU entrants increased by 6\% in 2012-13. EU student
numbers in England have since recovered and are $12.3 \%$ higher than in the number of EU entrants increased by 6\% in 2012-13. EU student 2012-13.

Source: HESA Student Record [multiple years]

FIGURE 6
Non-UK entrants to UK higher education institutions, 2007-08 to 2016-17


The distribution of non-UK students also varies across levels of study, as shown in Table 5. Between 2007-08 and 2016-17, the proportion of non-UK, undergraduate students increased from $9.7 \%$ to $14.0 \%$, while the proportion of non-UK postgraduates increased from $33.4 \%$ to $35.5 \%$.

In 2016-17, the EU was the biggest source of non-UK students.

TABLE 5
Students by domicile and level of study, 2007-08 and 2016-17

|  | UK |  | OTHER EU |  | NON-EU |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $2007-08$ | $2016-17$ | $2007-08$ | $2016-17$ | $2007-08$ | $2016-17$ |
| FIRST DEGREE | $1,163,270$ | $1,367,305$ | 56,820 | 84,460 | 86,750 | 145,850 |
| \% SHARE | $89.0 \%$ | $85.6 \%$ | $4.3 \%$ | $5.3 \%$ | $6.6 \%$ | $9.1 \%$ |
| OTHER <br> UNDERGRADUATE | 467,390 | 150,765 | 13,045 | 4,385 | 17,695 | 12,125 |
| \% SHARE | $93.8 \%$ | $90.1 \%$ | $2.6 \%$ | $2.6 \%$ | $3.6 \%$ | $7.2 \%$ |
| POSTGRADUATE <br> (TAUGHT) | 280,195 | 290,540 | 29,540 | 31,000 | 97,835 | 117,155 |
| \% SHARE | $68.7 \%$ | $66.2 \%$ | $7.2 \%$ | $7.1 \%$ | $24.0 \%$ | $26.7 \%$ |
| POSTGRADUATE <br> (RESEARCH) | 53,455 | 65,115 | 12,745 | 14,980 | 27,365 | 32,410 |
| \% SHARE | $57.1 \%$ | $57.9 \%$ | $13.6 \%$ | $13.3 \%$ | $29.2 \%$ | $28.8 \%$ |

Source: HESA Student Record [multiple years]

Table 6 shows the region of origin of non-UK students in 2007-08 and 2016-17. In 2016-17, the EU was the biggest source of non-UK students (30.5\%), followed by China (21.5\%) and the rest of Asia excluding India and China (18.3\%).

TABLE 6
Regional share of non-UK students, 2007-08 and 2016-17

|  | 2007-08 |  | 2016-17 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | STUDENTS | \% SHARE OF TOTAL NON-UK | STUDENTS | \% SHARE OF TOTAL NON-UK |
| EU | 112,150 | 33.0\% | 134,830 | 30.5\% |
| OTHER EUROPE | 12,070 | 3.6\% | 19,030 | 4.3\% |
| AFRICA | 32,295 | 9.5\% | 30,020 | 6.8\% |
| ASIA (EXCL. INDIA AND CHINA) | 66,225 | 19.5\% | 80,875 | 18.3\% |
| CHINA | 45,355 | 13.3\% | 95,090 | 21.5\% |
| INDIA | 25,905 | 7.6\% | 16,550 | 3.7\% |
| AUSTRALASIA | 2,285 | 0.7\% | 2,755 | 0.6\% |
| MIDDLE EAST | 16,690 | 4.9\% | 29,125 | 6.6\% |
| NORTH AMERICA | 22,810 | 6.7\% | 28,750 | 6.5\% |
| SOUTH AMERICA | 4,160 | 1.2\% | 5,350 | 1.2\% |

Source: HESA Student Record [multiple years]

### 1.5 STUDENT PROFILES

There are significant variances of student gender and age groups across different levels of study. In 2016-17, 57.5\% of students were female. At first degree level, $55.2 \%$ of students were female, while at postgraduate research level, $46.9 \%$ of students were female. Table 7 outlines student genders and domiciles, and shows that the proportion of male students was highest for non-EU students.

TABLE 7
Gender of students by domicile, 2016-17

|  | FEMALE |  | MALE |  |
| :--- | :---: | :---: | :---: | :---: |
| STUDENTS | \% OF TOTAL | STUDENTS | \% 0F TOTAL |  |
| UK | $1,076,165$ | $57.5 \%$ | 796,735 | $42.5 \%$ |
| OTHER EU | 74,415 | $55.2 \%$ | 60,295 | $44.8 \%$ |
| NON-EU | 162,470 | $52.8 \%$ | 144,990 | $47.2 \%$ |

Source: HESA Student Record [2016-17]

Since 2007-o8, there has been general growth in the younger age groups (18-24 years for undergraduates, and 21-24 years for postgraduates). Older age groups declined across both levels of study, but there has been a slight pickup over the last academic year. Figure 7 outlines these differences.

FIGURE 7
Students by age group and level of study, 2007-08 to 2016-17


Source: HESA Student Record [multiple years]
Figure 8 shows the trend in school leavers from areas with the lowest levels of young participation in higher education that have accepted a place on a full-time undergraduate course via UCAS. Both the number of 18-year-olds from these areas and the proportion of total acceptances have increased between 2008 and 2017, but the annual rate of growth has varied considerably.

FIGURE 8
18-year-old, full-time, undergraduate acceptances from low participation areas (POLAR 3, quintile 1), 2008 to 2017


Figure 9 shows the proportion of undergraduate, full-time, first year students that are no longer in higher education one year after entry. Non-continuation rates for full-time, first degree students from low participation areas have been higher than those for all young full-time, first degree entrants over the period, but considerably lower than the rate for young, full-time entrants on other undergraduate courses, such as foundation degrees, Higher National Certificates or Higher National Diplomas.

FIGURE 9
Undergraduate, full-time, first-year students no longer in higher education one year after entry, 2006-07 to 2015-16


### 1.6 STUDENTS BY SUBJECT OF STUDY

Between 2007-08 and 2016-17, changing student demand has been reflected in the courses universities offer. Table 8 shows that veterinary science, biological sciences and mathematical sciences were the subjects with the most significant increases in student numbers ( $47 \%$, 40\% and $29 \%$ respectively). Conversely, combined subjects, education, and languages had the largest decrease in students ( $67 \%, 26 \%$ and $21 \%$ respectively). The growth in some subjects may be attributable to greater proportions of non-UK students undertaking them; in 2016-17, the highest proportions of non-UK students by subject were business and administrative studies (36.5\%), engineering and technology (31.8\%), and law (25.7\%).

TABLE 8
Students by subject of study, 2007-08 and 2016-17

|  | $2007-08$ | $2016-17$ | \% CHANGE |  |
| :--- | :---: | :---: | :---: | :---: |
| VETERINARY SCIENCE | 4,850 | 7,145 | $\uparrow$ | $47.3 \%$ |
| BIOLOGICAL SCIENCES | 161,600 | 226,370 | $\uparrow$ | $40.1 \%$ |
| MATHEMATICAL SCIENCES | 34,120 | 43,880 | $\uparrow$ | $28.6 \%$ |
| ENGINEERING AND TECHNOLOGY | 139,435 | 165,090 | $\uparrow$ | $18.4 \%$ |
| PHYSICAL SCIENCES | 82,130 | 95,170 | $\uparrow$ | $15.9 \%$ |
| SOCIAL STUDIES | 198,875 | 221,515 | $\uparrow$ | $11.4 \%$ |
| CREATIVE ARTS AND DESIGN | 158,890 | 175,595 | $\uparrow$ | $10.5 \%$ |
| BUSINESS AND ADMINISTRATIVE STUDIES | 310,455 | 333,075 | $\uparrow$ | $7.3 \%$ |
| COMPUTER SCIENCE | 95,575 | 101,045 | $\uparrow$ | $5.7 \%$ |
| AGRICULTURE AND RELATED SUBJECTS | 17,680 | 18,630 | $\uparrow$ | $5.4 \%$ |
| MEDICINE AND DENTISTRY | 61,810 | 65,110 | $\uparrow$ | $5.3 \%$ |
| MASS COMIMUNICATIONS AND DOCUMENTATION | 47,965 | 50,375 | $\uparrow$ | $5.0 \%$ |
| SUBJECTS ALLIED TO MEDICINE | 287,125 | 290,770 | $\uparrow$ | $1.3 \%$ |
| LAW | 89,245 | 89,730 | $\uparrow$ | $0.5 \%$ |
| HISTORICAL AND PHILOSOPHICAL STUDIES | 96,620 | 85,455 | $\downarrow$ | $-11.6 \%$ |
| ARCHITECTURE, BUILDING AND PLANNING | 63,085 | 51,185 | $\downarrow$ | $-18.9 \%$ |
| LANGUAGES | 136,050 | 107,015 | $\downarrow$ | $-21.3 \%$ |
| EDUCATION | 202,300 | 150,675 | $\downarrow$ | $-25.5 \%$ |
| COMBINED | 118,300 | 38,640 | $\uparrow$ | $-67.3 \%$ |
|  |  |  |  |  |

The highest proportion of non-UK students were found in subjects such as business (37\%), engineering (32\%) and law (26\%)

Subjects with the lowest proportions of black and minority ethnic (BME) students included veterinary science (4.9\%) and agriculture and related subjects (5.8\%), while the highest proportions of BME students were found in the subjects of medicine and dentistry (35.5\%), law (34.1\%) and business and administrative studies (32.7\%).

FIGURE 10
Students by subject of study and ethnicity, 2016-17


Gender profiles varied greatly for some subjects, notably computer science ( $17.2 \%$ female and $82.8 \%$ male) and engineering and technology ( $17.6 \%$ female and $82.4 \%$ male). Subjects with the highest overall proportions of females were subjects allied to medicine (79.1\%), veterinary science (77.3\%) and education (76.6\%).

FIGURE 11
Students by subject of study and gender, 2016-17


### 1.7 STUDENT OUTCOMES AND EMPLOYMENT

Between 2007-08 and 2016-17, the number of higher education qualifications awarded each year increased by 8o,480 (11.9\%), to a total of 757,300 (Figure 12). However, growth mainly occurred between 2006-07 to 2012-13 when the number of qualifications awarded increased by $21 \%$ ( 136,835 ), peaking at 787,900 qualifications awarded in the academic year 2012-13. Following this, numbers decreased year on year until 2015-16, after which there was a slight increase in qualifications awarded.

FIGURE 12
Qualifications awarded by level, 2007-08 to 2016-17


Source: HESA Student Record [multiple years]

The 2016-17 Destinations of Leavers from Higher Education (DLHE) survey showed that six months after completing their courses, $91 \%$ of respondents were in work or further study (Figure 13).

FIGURE 13
Destinations of UK and other EU domiciled leavers by activity, 2016-17


Source: HESA DLHE survey 2018

The Department for Education (DfE) publishes annual graduate labour market statistics for England. Graduates of all age groups continue to have higher average salaries and lower unemployment rates than non-graduates (Figure 14). In 2017, the average salary was $£_{33,000}$ for graduates and $£ 39,000$ for postgraduates, compared to $£ 23,000$ for non-graduates.

FIGURE 14
Unemployment rates and median salaries in England, 2017



[^3]

The 2008 recession had a significant impact on employment rates for both graduates and non-graduates, but rates have generally been declining since 2012 (Figure 15).

FIGURE 15
Trends in unemployment rates in England, 2008 to 2017


Source: DfE (2018), Graduate labour market statistics 2017

## CHAPTER 2

## STAFF

In 2016-17, there were 419,590 staff members employed by higher education institutions, an increase of $12.7 \%$ since 2007-08. Non-UK nationals have played an important role in supporting the growth of staff over the period, accounting for $58.7 \%$ of the increase in academic staff numbers at UK universities since 2007-18.

### 2.1 OVERVIEW

Between 2007-o8 and 2016-17, the total number of staff at UK higher education institutions increased by $12.7 \%$, from 372,340 to 419,590 . The number of staff on academic contacts has also increased over this 10year period, accounting for $49.3 \%$ of all staff in 2016-17. As Figure 16 demonstrates, the difference between academic and non-academic staff numbers has narrowed over this period.

In this report, 'academic staff' includes both teaching and research staff.
FIGURE 16
Staff by employment function, 2007-08 to 2016-17


### 2.2 ACADEMIC STAFF BY NATIONALITY AND COST CENTRE

Figure 17 outlines how the numbers of UK, EU (non-UK) and non-EU staff have changed over the last 10 years. In 2016-17, EU staff accounted for $17.5 \%(35,920)$ of all academic staff, with non-EU staff accounting for $12.5 \%(25,655)$. Since $2007-08$, these proportions have increased from $11.6 \%$ and $11.5 \%$ respectively, demonstrating the importance of non-UK nationals towards the growth in academic staff numbers. Between 2007-o8 and 2016-17, non-UK nationals accounted for 58.7\% of the total academic staff growth.

FIGURE 17
Academic staff by nationality, 2007-08 to 2016-17


Between 2007-08 and 2016-17, non-UK nationals accounted for 58.7\% of the total academic staff growth.

In 2016-17, nearly a quarter ( $24.5 \%$ ) of academic staff were associated with the cost centre ${ }^{5}$ for medicine, dentistry and health. This is followed by academic staff of administrative, business and social studies (20.6\%), and biological, mathematical and physical sciences staff (15.6\%). Except for education staff numbers, which have reduced by $4.5 \%$ since 2007-08, numbers have grown across all cost centres, particularly design, creative and performing arts staff (up $51.5 \%$ ), and staff of administrative, business and social studies (up 39.1\%).

Since 2007-08, the proportion of EU nationals has increased across all cost centres. Proportions of EU staff are particularly high for biological, mathematical and physical Sciences ( $23.7 \%$ ) and humanities and language-based studies and archaeology (22.7\%). Non-EU staff have decreased in the costs centres of medicine, dentistry and health, architecture and planning, and education.

[^4]TABLE 9
Academic staff by nationality and cost centre, 2006-07 to 2015-16

|  | 2007-08 |  |  |  | 2016-17 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% UK NATIONALS |  |  |  | $\begin{aligned} & \text { n } \\ & \frac{1}{2} \\ & \text { 은 } \\ & 2 \\ & \frac{1}{2} \\ & \therefore 0 \end{aligned}$ |  |  |
| MEDICINE, DENTISTRY AND HEALTH | 40,495 | 81\% | 10\% | 9\% | 49,520 | 75\% | 16\% | 9\% |
| AGRICULTURE, FORESTRY AND VETERINARY SCIENCE | 1,980 | 83\% | 10\% | 8\% | 2,530 | 72\% | 19\% | 9\% |
| BIOLOGICAL, MATHEMATICAL AND PHYSICAL SCIENCES | 25,105 | 68\% | 17\% | 15\% | 31,560 | 61\% | 24\% | 15\% |
| ENGINEERING AND TECHNOLOGY | 20,385 | 68\% | 12\% | 20\% | 24,425 | 57\% | 20\% | 23\% |
| ARCHITECTURE AND PLANNING | 3,355 | 78\% | 10\% | 12\% | 4,015 | 72\% | 16\% | 11\% |
| ADMINISTRATIVE, BUSINESS AND SOCIAL STUDIES | 30,000 | 76\% | 12\% | 12\% | 41,730 | 67\% | 18\% | 14\% |
| HUMANITIES AND LANGUAGE-BASED STUDIES AND ARCHAEOLOGY | 15,770 | 71\% | 18\% | 11\% | 17,730 | 65\% | 23\% | 13\% |
| DESIGN, CREATIVE AND PERFORMING ARTS | 11,865 | 88\% | 6\% | 6\% | 17,970 | 84\% | 10\% | 6\% |
| EDUCATION | 13,245 | 90\% | 5\% | 4\% | 12,675 | 88\% | 8\% | 4\% |
|  | IN TOTA <br> 2007 |  | ge <br> MIC S 2016- | AFF, 7 | TOTAL |  |  |  |
| MEDICINE, DENTISTRY AND HEALTH |  | 22.3 |  |  |  | 24.5 |  |  |
| AGRICULTURE, FORESTRY AND VETERINARY SCIENCE | 27.9\% |  |  |  | 1.3\% |  |  |  |
| BIOLOGICAL, MATHEMATICAL AND PHYSICAL SCIENCES | 25.7\% |  |  |  | 15.6\% |  |  |  |
| ENGINEERING AND TECHNOLOGY | 19.8\% |  |  |  | 12.1\% |  |  |  |
| ARCHITECTURE AND PLANNING | 19.7\% |  |  |  | 2.0\% |  |  |  |
| ADMINISTRATIVE, BUSINESS AND SOCIAL STUDIES | 39.1\% |  |  |  | 20.6\% |  |  |  |
| HUMANITIES AND LANGUAGE BASED STUDIES AND ARCHAEOLOGY | 12.4\% |  |  |  | 8.8\% |  |  |  |
| design, creative and performing ARTS | 51.5\% |  |  |  | 8.9\% |  |  |  |
| EDUCATION | -4.3\% |  |  |  | 6.3\% |  |  |  |

Note: excludes academic staff with unknown nationality
Source: HESA Staff Record [multiple years]

### 2.3 PROFESSORIAL POSTS BY GENDER AND ETHNICITY

Between 2009-10 and 2016-17, the number of BME and female professors increased by $59.2 \%$ and $50.0 \%$ respectively. This compares to a $13.3 \%$ increase in white professors and an $8.4 \%$ increase in male professors. In 2016-17, BME staff accounted for $9.6 \%$ of all professorial posts, and females accounted for $25.0 \%$. However, as Figure 18 shows, white males continued to account for the majority of professorial posts (more than two thirds at 67.5\%).

FIGURE 18
Professorial posts by gender and ethnicity, 2009-10 and 2016-17


In 2016-17, BME staff accounted for $9.6 \%$ of all professorial posts, and females accounted for 25.0\%."

### 2.4 AGE PROFILE

Between 2006-07 and 2016-17, academic staff numbers also increased across all age groups and modes of employment, except for full-time staff aged 25 and under. Overall, the number of full-time academic staff has increased by $21.7 \%$ to 138,405 , while part-time numbers have increased by $21.9 \%$ to 68,465 . The age group with the highest growth rate was 31 -35 , which has increased $37.7 \%$ since 2006-07. This age group accounted for $29.7 \%$ of the overall growth in full-time numbers. For part-time academic staff, the largest increases have been from staff aged 61-65 (up 41.2\%) and 66 and over (up 169.0\%). Figure 19 suggests a shift towards younger full-time staff and older part-time staff.

FIGURE 19
Change in age profile of academic staff by mode of employment, 2006-07 to 2016-17

Full-time


Part-time


Note: excludes academic staff with unknown nationality
Source: HESA Staff Record [multiple years]

## CHAPTER 3

## FINANCES

In 2016-17, total income of the higher education sector was $£ 35.7$ billion with just under half of this coming from tuition fees. In the same year, Universities spent $£ 34.5$ billion on a range of student-related activities including teaching and research (55\%), maintaining campuses (12\%), and libraries and IT (9\%).

### 3.1 CHANGES TO FINANCE DATA

Owing to changes in accounting rules for higher education institutions, ${ }^{6}$ finance data returned to HESA by UK higher education institutions after the academic year 2015-16 is no longer comparable with previously published HESA data for some measures.

The new financial reporting standard has resulted in significant changes to the reporting of financial data, including the way in which some income, expenses, assets and liabilities appear on university financial statements. Patterns and trends in UK higher education 2017 provides further details. ${ }^{7}$

### 3.2 INCOME OF HIGHER EDUCATION INSTITUTIONS

In 2016-17, the total reported income of UK higher education institutions was $£_{35.7}$ billion; an increase of $£ 1$ billion from the previous year. As shown in Figure 20, just under half of total income came from fees and health education contracts related to teaching ( $£ 17.7$ billion), while UK government funding for teaching represented $6.3 \%$. Income from research represented around a fifth ( $22.1 \%, £ 7.9$ billion) of the total, while endowments and investments (2.4\%) and other income ${ }^{8}$ (19.4\%) made up the remainder.

## FIGURE 20

Total income to UK higher education institutions, 2016-17


Source: Universities UK analysis of HESA Finance Record [2016-17]

[^5]In 2016-17, the total teaching income for UK higher education institutions was $£ 20.0$ billion, which was higher than 2015-16 ( $£ 19.1$ billion). $60.6 \%$ of this was from home and EU fees and health education contracts, while a further quarter (23.4\%) was from non-EU fees. It should be noted, however, that there are different policies across the four home nations in terms of funding for teaching. Therefore, proportions will vary significantly across the devolved administrations.

FIGURE 21
Teaching income by source, 2016-17


Source: UUK analysis of HESA Finance Record 2016-17

### 3.3 INCOME FROM RESEARCH AND KNOWLEDGE EXCHANGE

In 2016-17, the total research income for UK higher education institutions was $£ 7.9$ billion, a slight increase of around $£ 0.1$ billion from the previous year. $17.1 \%$ ( $£ 1.3$ billion) came from non-UK sources (just under of third from the EU) and included non-UK-based charities, industries, commerce and public corporations.

FIGURE 22
Research income by source, 2016-17

17.1\% (£1.3 billion) of research income came from non-UK sources.

HESA undertakes an annual Higher Education Business and Community Interaction (HE-BCI) survey, which measures the volume and direction of interactions between UK higher education institutions and business and the wider community. This includes income generated from the sharing of expertise and collaboration through the provision of continuing professional development, consultancy services, facilities and equipment-related services, and income from intellectual property.

In 2016-17, income from these knowledge exchange activities totalled $£ 4.2$ billion; a similar total to the previous year (also $£ 4.3$ billion). Of this total, about a third (32.9\%) was through activities with public and third sector organisations, and about a fifth (19.3\%) was through activities with large businesses. In terms of specific activities, $30.1 \%$ of knowledge exchange income was generated through contract research, with $11.1 \%$ through consultancy, $9.6 \%$ through CPD, $4.8 \%$ through facilities and equipment related services, $2.6 \%$ through intellectual property income, and the remainder through other activities.

FIGURE 23
Income from knowledge-exchange activities by partner, 2016-17


Source: UUK analysis of HESA HE-BCI Record 2016-17

### 3.4 OPERATING EXPENDITURE

In 2016-17, the total operating expenditure of UK higher education institutions was $£_{34.5}$ billion, up from $£_{33}$ billion in 2016-17. Figure 24 provides a breakdown of this expenditure, using the expenditure categories mapped in Universities UK's University spending explained (2016). ${ }^{9}$ Expenditure included the following:

- $55.1 \%$ ( $£ 19.0$ billion) on teaching and research such as spending on teaching, research and support staff working in academic departments
- $11.5 \%$ ( $£ 4.0$ billion) on maintaining campuses, such as costs related to repairs, cleaning, energy, and water and business rates
- $9.1 \%$ ( $£ 3.1$ billion) on libraries, IT and museums
- $7.3 \%$ ( $£ 2.5$ billion) on running universities, such as promoting universities to employers, managing admissions and the costs of recruiting staff
- $5.2 \%$ ( $£ 1.8$ billion) on accommodation and conferences
- $3.6 \%$ ( $£ 1.2$ billion) on financial support to students and outreach
- $3.5 \%$ ( $£ 1.2$ billion) on student and staff facilities, such as student unions, on-campus healthcare services and careers advisory services
- $4.6 \%$ ( $£ 1.6$ billion) related to other expenditure

[^6]FIGURE 24
Operating expenditure by area of activity, 2016-17


Source: UUK analysis of HESA Finance Record [2016-17]

# CONCLUSION 

Over the last 10 years, there has been significant change in the number of staff and students at universities, as well as their finances. This includes shifts in the range of courses offered and characteristics of student and staff.

FIGURE 25
Annual percentage change in students and staff, 2008-09 to 2016-17


Source: UUK analysis of HESA Finance Record [2016-17]

Changes to students and staff at UK higher education institutions include the following:

- In 2007-08, 14.8\% of students were from non-UK domiciles. In 2016-17, the proportion of non-UK students increased to $19.1 \%$ (5.8\% other EU and $13.3 \%$ non-EU respectively).

Between 2007-08 and 2016-17, the total number of staff at UK higher education institutions increased by $12.7 \%$, from 372,340 to 419,590 .

In 2016-17, total income for higher education institutions was $£ 35.7$ billion, while total expenditure was $£ 34.5$ billion.

Despite challenges over the next few years, the UK higher education sector will endeavour to maintain its globally-competitive teaching and research quality, collaborate nationally and internationally, and attract students and staff from across the globe.

## SOURCES

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[^0]:    1 Undergraduate degrees which are not first degrees, including foundation degrees and Higher National Diplomas.
    2 Postgraduate degrees include doctorates, masters degrees and postgraduate diplomas or certificates.

[^1]:    3 Neither the Higher Education Statistics Agency Limited nor HESA Services Limited can accept responsibility for any inferences or conclusions derived by third parties from data or other information obtained from HESA sources.

[^2]:    4 Participation of Local Areas (POLAR) is a widening participation measure which classifies local areas or 'wards' into five groups, based on the proportion of 18 -year-olds who enter higher education aged 18 or 19 . These groups range from quintile 1 areas, with the lowest young participation (most disadvantaged), up to quintile 5 areas with the highest rates (most advantaged).

[^3]:    *High-skill employment includes: managers, directors and senior officials; professional occupations and associate professional and technical occupations.

[^4]:    5 'Cost centre' is a financial concept which groups staff members to specific related cost centres which enables analysis between the student, staff and finance streams. The cost centre groups are separate to other subject groupings used in this report, and therefore are not directly comparable.

[^5]:    6 Financial Reporting Standard (FRS) 102 is the latest financial reporting framework for higher education institutions, coming into effect for the period starting on or after 1 January 2015.
    7 Universities UK (2017), Patterns and trends in UK higher education 2017
    8 'Other income' includes income in respect of services rendered from outside bodies, including the supply of goods and services, from local authorities, residencies and catering operations, and intellectual property rights.

[^6]:    9 Universities UK (2016), University spending explained

