University and College Union

$8=$
How choice has declined in higher education

## Contents

Summary ..... 3
Introduction ..... 4
OVERVIEW
All full-time and principal subject courses ..... 5
PRINCIPAL SUBJECT SAMPLE
Data analysis ..... 11
STEM subjects ..... 12
Social sciences ..... 15
Arts and humanities ..... 18
Restriction of choice and the impact on UK HE ..... 23
Appendix: Sample of principal subject degrees ..... 25

## UCU

The University and College Union (UCU) is the largest trade union and professional association for academics, lecturers, trainers, researchers and academic-related staff working in further and higher education throughout the UK. It has more than 120,000 members.

[^0]
## Summary

- The aim of this report is to investigate the provision of full-time undergraduate degree courses in the UK, and in particular a sample of principal, or single subject, degree courses in the UK between 2006 and 2012 to see if there was any marked change in provision following widespread public funding cuts.
- There has been a sharp reduction in the total number of full-time degree courses provided in the UK. Between 2006 and 2012, the number of full-time undergraduate courses decreased by $27 \%$, with courses in England falling by 31\%, contrasted with Scotland, which only had a reduction of $3 \%$.
- Over the period there was a reduction of $14 \%$ in the provision of all principal subject degree courses in the UK, although the number rose slightly in 2012.
- The number of principal subject courses provided in England, where tuition fees of up to $£ 9,000$ are being introduced in 2012 , showed a similar pattern, with an overall drop of $14 \%$, but slight rise in provision in 2012. There was a slightly bigger fall for STEM and arts and humanities courses, compared with social science courses.
- There was a decline of almost one quarter in the number of principal subjects provided in Wales between 2006 and 2012, with the falls slightly sharper in social sciences (25\%) and arts and humanities (25\%) than in STEM (22\%).
- The fall in principal subjects provided in Scotland, of 8\% overall between 2006 and 2012, was around half the rate of decrease in England, and three times less than in Wales.
- Northern Ireland, like Scotland, showed only a relatively small decline in the provision of principal subjects.
- There was wide variety in the reduction of provision of principal subjects in the regions of England. Although all regions had an overall decrease, the range was relatively small (less than 10\% reduction in the North East, and Yorks \& Humber) to significant, with nearly $30 \%$ in Eastern region, and nearly one quarter in the West Midlands.
- In terms of the balance of provision, in 2012 around $44 \%$ of principal subjects provided in England are in the STEM group, while one quarter are social sciences, and just over 30\% are arts and humanities. The pattern broken down by English region is fairly similar. The other countries of the UK have a greater proportion of STEM provision than England, with 47\% of principal subjects being in the STEM group in Wales, $51 \%$ in Northern Ireland and 52\% in Scotland.
- In the sample of STEM principal subjects provided in England, some single subject provision was cut between 2006 and 2012, particularly in biology, physical geographical sciences and computer science.
- In the sample of social studies principal subjects provided in England, there was some reduction in provision between 2006 and 2012 in some subjects, particularly human and social geography, and sociology.
- In the sample of arts and humanities principal subjects provided in England, there was a reduction in the number of institutions providing some single subject courses, particularly French studies, German studies, and history by topic. Some of these subjects were not provided in some English regions in 2012, with Eastern England and South West England particularly affected by non-provision of single subjects.
- The report also features commentary from four leading academics:

Sir Richard Roberts: chief scientific officer at the New England Biolabs and Nobel Laureate for Medicine or Physiology
James Ladyman: professor of philosophy and head of the department of philosophy at the University of Bristol Donald Braben: honorary professor in life sciences at University College London (UCL) Philip Schofield: professor of the history of legal and political thought and director of the Bentham Project at University College London (UCL).

- UCU general secretary, Sally Hunt, said: 'Although students in England are expected to pay up to $£ 9,000$ a year to study, there is much less choice for them. We fear that shifting the burden of funding from the state to the student means nervous universities will look to axe even more courses that they worry won't make a profit.
'However, we simply cannot have areas of the country where local students do not have access to the courses they want to study. The increasing cost of university means many students will consider studying closer to home. How have we allowed a situation to develop where potential bright students cannot realise their full potential because they cannot afford to, or are unable to, move to another part of the country?'


## Introduction

## Degree courses provision between 2006 and 2012

The aim of this report is to investigate the provision of full-time undergraduate degree courses in the UK, and in particular a sample of principal, or single subject, degree courses in the UK between 2006 and 2012 to see if there was any marked change in provision following widespread public funding cuts. The report provides an overview of course provision in the UK, and then focuses on the provision of a sample of principal degree courses in the base year, 2006 - the earliest year for which Universities and Colleges Admissions Service (UCAS) data were available and in 2010, 2011 and 2012. The sample of
subjects is from the STEM (science, technology, engineering and mathematics); social studies; and arts and humanities subject groupings. Data on provision of these subjects was provided by UCAS; further analysis was by University and College Union.

Clinical subjects, subjects allied to medicine, and education in England were not investigated in the principal subject sample because provision is regulated to a lesser or greater extent. The unit of measurement is the UCAS principal subject, which includes single honours degree courses, as well as Foundation degrees and Higher National Diploma/Certificate courses.

## Overview

## All full-time undergraduate courses: UK

There has been a sharp reduction in the number of full-time undergraduate degree courses provided in the UK. The total numbers of full-time undergraduate courses in the UK offered via UCAS are shown in the table below, which shows that between 2006 and 2012, the number of these courses decreased by $-27 \%$. While the reduction has been sharpest in England ( $-31 \%$ ) and Northern Ireland ( $-24 \%$ ), it is much lower in Wales (-11\%) and Scotland ( $-3 \%$ ). While tuition fees for full-time undergraduates from the UK at HEls in England will be up to $£ 9,000$ a year in 2012-13, Northern Ireland-domiciled students studying in Northern Ireland will only have to pay $£ 3,465$, Welsh-domiciled undergraduates studying throughout the UK will only have to pay £3,465, and Scottish-domiciled undergraduates studying in Scotland will not have to pay any fees. So England, the country with the highest rates of tuition fees, is facing the biggest reduction in the number of undergraduate courses, and the country with the most benign fee regime - Scotland - has much the lowest level of course cutting.

Nevertheless, within the regions England there is a wide range in the extent of course cutting. Nearly half ( $-47 \%$ ) of undergraduate courses are being cut in the South West, but only -1\% of courses are being cut in the East Midlands.

PROVISION OF FULL-TIME UNDERGRADUATE DEGREE COURSES, UK

|  | 2006 | 2010 | 2011 | 2012 | Change: <br> 2006 to 2012 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| England | 59,068 | 51,099 | 45,230 | 41,060 | $-30.5 \%$ |
| - North East | 2,809 | 2,774 | 2,630 | 2,463 | $-12.3 \%$ |
| - North West | 10,953 | 8,427 | 7,406 | 6,587 | $-39.9 \%$ |
| - Greater London | 10,762 | 8,826 | 7,821 | 7,222 | $-32.9 \%$ |
| - Eastern | 4,053 | 3,035 | 2,635 | 2,397 | $-40.9 \%$ |
| - East Midlands | 4,505 | 5,533 | 5,082 | 4,442 | $-1.4 \%$ |
| - West Midlands | 6,778 | 6,444 | 5,011 | 4,570 | $-32.6 \%$ |
| - South East | 9,367 | 8,027 | 7,391 | 6,562 | $-29.9 \%$ |
| - South West | 5,585 | 3,656 | 3,248 | 2,956 | $-47.1 \%$ |
| - Yorkshire \& Humberside | 4,256 | 4,377 | 4,006 | 3,861 | $-9.3 \%$ |
| Wales | 4,673 | 4,765 | 4,540 | 4,184 | $-10.5 \%$ |
| Scotland | 5,143 | 5,553 | 5,108 | 4,981 | $-3.1 \%$ |
| Northern Ireland | 1,168 | 1,042 | 1,016 | 891 | $-23.7 \%$ |
| UK | 70,052 | 62,459 | 55,894 | 51,116 | $-27.0 \%$ |

Source: UCAS; \% calculation by UCU

## All principal subjects: UK

In 2006, UK higher education institutions and further education colleges provided 7,002 principal subject degree courses, across 141 subjects from A100 Pre-Clinical Medicine, to X900 Others in Education. This number fell to 6,182 courses in 2010, a reduction of $11.7 \%$, then to 5,968 in 2011, before rising slightly to 6,024 in 2012. In all, between 2006 and 2012, there was a $14.0 \%$ reduction in provision of these single subject degree courses. While single subject STEM degree courses fell by $14.6 \%$, there were slightly lower reductions in social sciences (12.8\%) and arts \& humanities (14.0\%). Although student numbers continued to rise through this period, the prospect and implementation of public spending cuts from the financial crisis of 2008 onwards, will have had a significant impact on single subject course provision, as HEls and further education colleges providing higher education sought to reduce costs.

PROVISION OF FULL-TIME UNDERGRADUATE DEGREE COURSES, UK

| UK | 2006 | 2010 | 2011 | 2012 | Change: <br> 2006 to 2012 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| STEM | 3,194 | 2,796 | 2,694 | 2,729 | $-14.6 \%$ |
| Social science | 1,661 | 1,460 | 1,417 | 1,448 | $-12.8 \%$ |
| Arts \& humanities | 2,147 | 1,926 | 1,857 | 1,847 | $-14.0 \%$ |
| Total | 7,002 | 6,182 | 5,968 | 6,024 | $-14.0 \%$ |

Source: UCAS; \% calculation by UCU

## All principal subjects: England

Over the period 2006 to 2012 a very similar pattern of single subject (or principal subject) degree provision was seen in England, with an overall 14.0\% drop, but with provision picking up slightly between 2011 and 2012. There was a slightly bigger fall for STEM and arts and humanities courses, compared with social science courses.

## PROVISION OF PRINCIPAL SUBJECT DEGREE COURSES IN ENGLAND

| England | 2006 | 2010 | 2011 | 2012 | Change: <br> 2006 to 2012 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| STEM | 2,548 | 2,173 | 2,126 | 2,172 | $-14.8 \%$ |
| Social science | 1,368 | 1,184 | 1,169 | 1,203 | $-12.1 \%$ |
| Arts \& humanities | 1,798 | 1,570 | 1,526 | 1,541 | $-14.3 \%$ |
| Total | 5,714 | 4,927 | 4,821 | 4,916 | $-14.0 \%$ |

STEM (Science, Technology, Engineering and Mathematics)
Source: UCAS; \% calculation by UCU

## All principal subjects: Wales

There was a decline of almost one quarter in the number of principal subjects provided in Wales between 2006 and 2012, with the falls slightly sharper in social sciences (25\%) and arts and humanities (25\%) than in STEM (22\%). There was a particularly sharp fall in the total number of principal subjects provided between 2010 and 2011, with a reduction of nearly 60.

## PROVISION OF PRINCIPAL SUBJECT DEGREE COURSES IN WALES

| Wales | 2006 | 2010 | 2011 | 2012 | Change: <br> 2006 to 2012 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| STEM | 239 | 223 | 194 | 187 | $-21.8 \%$ |
| Social science | 126 | 108 | 94 | 94 | $-25.4 \%$ |
| Arts \& humanities | 154 | 152 | 136 | 115 | $-25.3 \%$ |
| Total | 519 | 483 | 424 | 396 | $-23.7 \%$ |

STEM = science, technology, engineering and mathematics
Source: UCAS; \% calculation by UCU

## All principal subjects: Scotland

The fall in principal subjects provided in Scotland, of $8 \%$ overall between 2006 and 2012, was around half the rate of decrease in England, and more than three times less than in Wales. While STEM and social science subjects were reduced by $9 \%$ each, arts and humanities subjects only fell by $2 \%$.

PROVISION OF PRINCIPAL SUBJECT DEGREE COURSES IN SCOTLAND

| Scotland | 2006 | 2010 | 2011 | 2012 | Change: <br> 2006 to 2012 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| STEM | 346 | 342 | 317 | 314 | $-9.2 \%$ |
| Social science | 139 | 143 | 129 | 126 | $-9.4 \%$ |
| Arts \& humanities | 165 | 175 | 166 | 161 | $-2.4 \%$ |
| Total | 650 | 660 | 612 | 601 | $-7.5 \%$ |

STEM (Science, Technology, Engineering and Mathematics)
Source: UCAS; \% calculation by UCU

## All principal subjects: Northern Ireland

Northern Ireland, like Scotland, showed only a relatively small decline in the provision of principal subjects. This may be linked to the small number of HE institutions in Northern Ireland, and a sense that, because of the greater separation of the province from the rest of the UK, its HEls have an obligation to maintain a breadth in provision for home students.

## PROVISION OF PRINCIPAL SUBJECT DEGREE COURSES IN NORTHERN IRELAND

| Northern Ireland | 2006 | 2010 | 2011 | 2012 | Change: <br> 2006 to 2012 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| STEM | 61 | 58 | 57 | 56 | $-8.2 \%$ |
| Social science | 28 | 25 | 25 | 25 | $-10.7 \%$ |
| Arts \& humanities | 30 | 29 | 29 | 30 | $0.0 \%$ |
| Total | 119 | 112 | 111 | 111 | $-6.7 \%$ |

STEM (Science, Technology, Engineering and Mathematics)
Source: UCAS; \% calculation by UCU

## All principal subjects: English regions

There was wide variety in the reduction of provision of principal subjects in the regions of England. Although all regions had an overall reduction, the range was relatively small (less than 10\% in the North East, and Yorks \& Humber) to significant, with nearly 30\% in Eastern region, and nearly one quarter in the West Midlands. There was a considerable range in the extent to which subject groups were affected, with STEM falling by $25 \%$ in Eastern and $26 \%$ in West Midlands, compared with less than $10 \%$ in North East and Yorks \& Humber; social science provision only fell by 1\% in London, but by 26\% in Eastern and 22\% in West Midlands; arts and humanities provision fell by more than one third in Eastern, but only 4\% in North East, South East, and Yorks \& Humber.

## PROVISION OF PRINCIPAL SUBJECT DEGREE COURSES IN ENGLISH REGIONS

| Principal subject degree <br> course provision | 2006 | 2010 | 2011 | 2012 | Change <br> 2006 to 2012 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| East Midlands |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| STEM | 218 | 199 | 193 | 192 | $-11.9 \%$ |
| Social science | 122 | 101 | 101 | 103 | $-15.6 \%$ |
| Arts \& humanities | 145 | 138 | 124 | 124 | $-14.5 \%$ |
| Total | 485 | 438 | 418 | 419 | $-13.6 \%$ |


| Eastern |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| STEM | 203 | 144 | 144 | 153 | $-24.6 \%$ |
| Social science | 119 | 85 | 84 | 88 | $-26.1 \%$ |
| Arts \& humanities | 188 | 120 | 118 | 119 | $-36.7 \%$ |
| Total | 510 | 349 | 346 | 360 | $-29.4 \%$ |


| Principal subject degree course provision | 2006 | 2010 | 2011 | 2012 | Change $2006 \text { to } 2012$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| London |  |  |  |  |  |
| STEM | 395 | 353 | 353 | 351 | -11.1\% |
| Social science | 229 | 221 | 222 | 226 | -1.3\% |
| Arts \& humanities | 305 | 270 | 262 | 253 | -17.0\% |
| Total | 929 | 844 | 837 | 830 | -10.7\% |
| North East |  |  |  |  |  |
| STEM | 135 | 124 | 125 | 122 | -9.6\% |
| Social science | 76 | 69 | 70 | 69 | -9.2\% |
| Arts \& humanities | 82 | 77 | 83 | 79 | -3.7\% |
| Total | 293 | 270 | 278 | 270 | -7.8\% |
| North West |  |  |  |  |  |
| STEM | 397 | 339 | 333 | 346 | -12.8\% |
| Social science | 206 | 186 | 173 | 176 | -14.6\% |
| Arts \& humanities | 268 | 227 | 230 | 234 | -12.7\% |
| Total | 871 | 752 | 736 | 756 | -13.2\% |
| South East |  |  |  |  |  |
| STEM | 342 | 287 | 276 | 301 | -12.0\% |
| Social science | 176 | 139 | 138 | 150 | -14.8\% |
| Arts \& humanities | 242 | 215 | 211 | 233 | -3.7\% |
| Total | 760 | 641 | 625 | 684 | -10.0\% |
| South West |  |  |  |  |  |
| STEM | 267 | 219 | 219 | 221 | -17.2\% |
| Social science | 125 | 103 | 109 | 120 | -4.0\% |
| Arts \& humanities | 185 | 166 | 157 | 159 | -14.1\% |
| Total | 577 | 488 | 485 | 500 | -13.3\% |
| West Midlands |  |  |  |  |  |
| STEM | 294 | 245 | 222 | 218 | -25.9\% |
| Social science | 151 | 134 | 124 | 118 | -21.9\% |
| Arts \& humanities | 175 | 153 | 141 | 141 | -19.4\% |
| Total | 620 | 532 | 487 | 477 | -23.1\% |
| Yorks \& The Humber |  |  |  |  |  |
| STEM | 297 | 263 | 261 | 268 | -9.8\% |
| Social science | 164 | 146 | 147 | 153 | -6.7\% |
| Arts \& humanities | 208 | 204 | 200 | 199 | -4.3\% |
| Total | 669 | 613 | 608 | 620 | -7.3\% |

STEM = science, technology, engineering and mathematics
Source: UCAS; \% calculation by UCU

## Balance of provision

In general terms, in 2012 around 44\% of principal subjects provided in England are in the STEM group, while one quarter are social sciences, and just over $30 \%$ are arts and humanities. The pattern broken down by English regions is fairly similar. The other countries of the UK have a greater proportion of STEM provision than England, with 47\% of principal subjects being in the STEM group in Wales, 51\% in Northern Ireland and $52 \%$ in Scotland. These three countries have proportionately less provision in social science principal subjects. In the English regions, provision in 2012 was relatively similar, with small variations; for example, STEM subjects were $46 \%$ of provision in East Midlands, West Midlands and North West, but $42 \%$ in London. Over the period 2006 to 2012, the pattern of principal subject provision was fairly stable, with perhaps the largest changes in the Eastern region of England, with an increase in STEM from 40\% to $43 \%$, and a decrease in arts and humanities from $37 \%$ to $33 \%$.

THE BALANCE OF PRINCIPAL SUBJECT PROVISION IN THE UK

| Principal subject degree course: <br> balance of provision | 2006 | 2010 | 2011 | 2012 |
| :--- | :--- | :--- | :--- | :--- |
| East Midlands |  |  |  |  |
| STEM | $44.9 \%$ | $45.4 \%$ | $46.2 \%$ | $45.8 \%$ |
| Social science | $25.2 \%$ | $23.1 \%$ | $24.2 \%$ | $24.6 \%$ |
| Arts \& humanities | $29.9 \%$ | $31.5 \%$ | $29.7 \%$ | $29.6 \%$ |
| Total | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |


| Eastern |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| STEM | $39.8 \%$ | $41.3 \%$ | $41.6 \%$ | $42.5 \%$ |
| Social science | $23.3 \%$ | $24.4 \%$ | $24.3 \%$ | $24.4 \%$ |
| Arts \& humanities | $36.9 \%$ | $34.4 \%$ | $34.1 \%$ | $33.1 \%$ |
| Total | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |


| London |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| STEM | $42.5 \%$ | $41.8 \%$ | $42.2 \%$ | $42.3 \%$ |
| Social science | $24.7 \%$ | $26.2 \%$ | $26.5 \%$ | $27.2 \%$ |
| Arts \& humanities | $32.8 \%$ | $32.0 \%$ | $31.3 \%$ | $30.5 \%$ |
| Total | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |


| North East |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| STEM | $46.1 \%$ | $45.9 \%$ | $45.0 \%$ | $45.2 \%$ |
| Social science | $25.9 \%$ | $25.6 \%$ | $25.2 \%$ | $25.6 \%$ |
| Arts \& humanities | $28.0 \%$ | $28.5 \%$ | $29.9 \%$ | $29.3 \%$ |
| Total | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |


| North West |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| STEM | $45.6 \%$ | $45.1 \%$ | $45.2 \%$ | $45.8 \%$ |
| Social science | $23.7 \%$ | $24.7 \%$ | $23.5 \%$ | $23.3 \%$ |
| Arts \& humanities | $30.8 \%$ | $30.2 \%$ | $31.3 \%$ | $31.0 \%$ |
| Total | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |


| Principal subject degree course: balance of provision | 2006 | 2010 | 2011 | 2012 |
| :---: | :---: | :---: | :---: | :---: |
| South East |  |  |  |  |
| STEM | 45.0\% | 44.8\% | 44.2\% | 44.0\% |
| Social science | 23.2\% | 21.7\% | 22.1\% | 21.9\% |
| Arts \& humanities | 31.8\% | 33.5\% | 33.8\% | 34.1\% |
| Total | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| South West |  |  |  |  |
| STEM | 46.3\% | 44.9\% | 45.2\% | 44.2\% |
| Social science | 21.7\% | 21.1\% | 22.5\% | 24.0\% |
| Arts \& humanities | 32.1\% | 34.0\% | 32.4\% | 31.8\% |
| Total | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| West Midlands |  |  |  |  |
| STEM | 47.4\% | 46.1\% | 45.6\% | 45.7\% |
| Social science | 24.4\% | 25.2\% | 25.5\% | 24.7\% |
| Arts \& humanities | 28.2\% | 28.8\% | 29.0\% | 29.6\% |
| Total | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| Yorks \& The Humber |  |  |  |  |
| STEM | 44.4\% | 42.9\% | 42.9\% | 43.2\% |
| Social science | 24.5\% | 23.8\% | 24.2\% | 24.7\% |
| Arts \& humanities | 31.1\% | 33.3\% | 32.9\% | 32.1\% |
| Total | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| England |  |  |  |  |
| STEM | 44.6\% | 44.1\% | 44.1\% | 44.2\% |
| Social science | 23.9\% | 24.0\% | 24.2\% | 24.5\% |
| Arts \& humanities | 31.5\% | 31.9\% | 31.7\% | 31.3\% |
| Total | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| Wales |  |  |  |  |
| STEM | 46.1\% | 46.2\% | 45.8\% | 47.2\% |
| Social science | 24.3\% | 22.4\% | 22.2\% | 23.7\% |
| Arts \& humanities | 29.7\% | 31.5\% | 32.1\% | 29.0\% |
| Total | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| Scotland |  |  |  |  |
| STEM | 53.2\% | 51.8\% | 51.8\% | 52.2\% |
| Social science | 21.4\% | 21.7\% | 21.1\% | 21.0\% |
| Arts \& humanities | 25.4\% | 26.5\% | 27.1\% | 26.8\% |
| Total | 100.0\% | 100.0\% | 100.0\% | 100.0\% |


| Principal subject degree course: <br> balance of provision | 2006 | 2010 | 2011 | 2012 |
| :--- | :--- | :--- | :--- | :--- |


| Northern Ireland |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| STEM | $51.3 \%$ | $51.8 \%$ | $51.4 \%$ | $50.5 \%$ |
| Social science | $23.5 \%$ | $22.3 \%$ | $22.5 \%$ | $22.5 \%$ |
| Arts \& humanities | $25.2 \%$ | $25.9 \%$ | $26.1 \%$ | $27.0 \%$ |
| Total | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |


| UK |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| STEM | $45.6 \%$ | $45.2 \%$ | $45.1 \%$ | $45.3 \%$ |
| Social science | $23.7 \%$ | $23.6 \%$ | $23.7 \%$ | $24.0 \%$ |
| Arts \& humanities | $30.7 \%$ | $31.2 \%$ | $31.1 \%$ | $30.7 \%$ |
| Total | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |

STEM = science, technology, engineering and mathematics
Source: UCAS; \% calculation by UCU

## Principal subject sample: data analysis

## Summary

## STEM

In the sample studied, some principal or single subject provision was cut between 2006 and 2012, particularly in biology, physical geographical sciences and computer science.

## SOCIAL SCIENCES

In the sample studied, there was some reduction in provision between 2006 and 2012 in some subjects in England, particularly human and social geography and sociology.

## ARTS AND HUMANITIES

In the sample studied, there was a reduction in the number of institutions providing some single subject courses in England, particularly French studies, German studies and history by topic. Some of these subjects were not provided in some English regions in 2012, with Eastern and South West England particularly affected by non-provision of single subjects.

## STEM subjects

## Biology

| C100 Biology | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 5 | 6 | 7 | 7 |
| Eastern | 5 | 4 | 4 | 5 |
| London | 14 | 8 | 8 | 7 |
| North East | 4 | 4 | 4 | 4 |
| North West | 12 | 11 | 11 | 12 |
| Northern Ireland | 2 | 2 | 2 | 2 |
| Scotland | 14 | 11 | 10 | 10 |
| South East | 11 | 9 | 9 | 10 |
| South West | 10 | 9 | 10 | 10 |
| Wales | 6 | 5 | 5 | 5 |
| West Midlands | 9 | 9 | 8 | 8 |
| Yorks \& The Humber | 7 | 7 | 8 | 8 |
| Total | 99 | 85 | 86 | 88 |
| England | 77 | 67 | 69 | 71 |

## Chemistry

| F100 Chemistry | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 5 | 4 | 5 | 5 |
| Eastern | 2 | 1 | 1 | 1 |
| London | 8 | 7 | 7 | 7 |
| North East | 4 | 5 | 6 | 6 |
| North West | 8 | 6 | 7 | 8 |
| Northern Ireland | 1 | 1 | 1 | 1 |
| Scotland | 8 | 8 | 8 | 8 |
| South East | 8 | 6 | 6 | 6 |
| South West | 3 | 3 | 3 | 3 |
| Wales | 3 | 3 | 3 | 3 |
| West Midlands | 6 | 4 | 4 | 4 |
| Yorks \& The Humber | 6 | 6 | 7 | 7 |
| Total | 62 | 54 | 58 | 59 |
| England | 50 | 42 | 46 | 47 |

## Physics

| F300 Physics | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 4 | 4 | 4 | 5 |
| Eastern | 1 | 1 | 1 | 1 |


| London | 5 | 5 | 5 | 4 |
| :--- | ---: | ---: | ---: | ---: |
| North East | 1 | 1 | 2 | 2 |
| North West | 5 | 5 | 5 | 6 |
| Northern Ireland | 1 | 1 | 1 | 1 |
| Scotland | 8 | 8 | 8 | 8 |
| South East | 6 | 6 | 6 | 7 |
| South West | 3 | 3 | 3 | 3 |
| Wales | 3 | 3 | 3 | 3 |
| West Midlands | 3 | 4 | 3 | 3 |
| Yorks \& The Humber | 4 | 4 | 4 | 4 |
| Total | 44 | 45 | 45 | 47 |
| England | 32 | 33 | 33 | 35 |

Physical geographical sciences

| F800 Physical |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| geographical sciences | 2006 | 2010 | 2011 | 2012 |
| East Midlands | 6 | 6 | 6 | 6 |
| Eastern | 2 | 1 | 2 | 2 |
| London | 9 | 8 | 8 | 8 |
| North East | 3 | 3 | 3 | 3 |
| North West | 12 | 9 | 9 | 9 |
| Northern Ireland | 2 | 2 | 2 | 2 |
| Scotland | 9 | 7 | 6 | 6 |
| South East | 8 | 7 | 7 | 8 |
| South West | 8 | 6 | 6 | 6 |
| Wales | 10 | 6 | 5 | 5 |
| West Midlands | 8 | 6 | 5 | 5 |
| Yorks \& The Humber | 9 | 5 | 5 | 5 |
| Total | 86 | 66 | 64 | 65 |
| England | 65 | 51 | 51 | 52 |

## Mathematics

| G100 Mathematics | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 5 | 5 | 5 | 5 |
| Eastern | 4 | 4 | 4 | 4 |
| London | 10 | 10 | 10 | 9 |
| North East | 3 | 3 | 3 | 3 |
| North West | 9 | 9 | 8 | 8 |
| Northern Ireland | 1 | 1 | 1 | 1 |
| Scotland | 11 | 8 | 8 | 8 |
| South East | 9 | 9 | 9 | 10 |
| South West | 5 | 5 | 5 | 5 |


| Wales | 5 | 4 | 4 | 4 |
| :--- | ---: | ---: | ---: | ---: |
| West Midlands | 8 | 8 | 7 | 7 |
| Yorks \& The Humber | 5 | 4 | 4 | 4 |
| Total | 75 | 70 | 68 | 68 |
| England | 58 | 57 | 55 | 55 |

Computer science

| I100 Computer science | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 13 | 11 | 9 | 9 |
| Eastern | 15 | 11 | 11 | 11 |
| London | 30 | 25 | 25 | 22 |
| North East | 7 | 8 | 8 | 9 |
| North West | 26 | 22 | 21 | 24 |
| Northern Ireland | 2 | 2 | 2 | 2 |
| Scotland | 15 | 15 | 14 | 14 |
| South East | 23 | 19 | 17 | 19 |
| South West | 17 | 14 | 12 | 13 |
| Wales | 14 | 15 | 13 | 13 |
| West Midlands | 22 | 19 | 19 | 17 |
| Yorks \& The Humber | 23 | 18 | 16 | 16 |
| Total | 207 | 179 | 167 | 169 |
| England | 176 | 147 | 138 | 140 |

## Civil engineering

| H200 Civil engineering | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 5 | 6 | 6 | 6 |
| Eastern | 3 | 4 | 3 | 3 |
| London | 7 | 9 | 10 | 10 |
| North East | 4 | 5 | 5 | 4 |
| North West | 9 | 9 | 8 | 9 |
| Northern Ireland | 2 | 2 | 2 | 2 |
| Scotland | 11 | 12 | 11 | 11 |
| South East | 7 | 6 | 6 | 6 |
| South West | 7 | 6 | 6 | 6 |
| Wales | 6 | 6 | 5 | 5 |
| West Midlands | 5 | 5 | 5 | 4 |
| Yorks \& The Humber | 5 | 7 | 7 | 7 |
| Total | 71 | 77 | 74 | 73 |
| England | 52 | 57 | 56 | 55 |

## Social sciences

## Economics

| L100 Economics | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 5 | 5 | 5 | 6 |
| Eastern | 5 | 5 | 5 | 5 |
| London | 15 | 14 | 15 | 14 |
| North East | 4 | 2 | 2 | 2 |
| North West | 7 | 5 | 5 | 5 |
| Northern Ireland | 2 | 2 | 2 | 2 |
| Scotland | 13 | 10 | 10 | 8 |
| South East | 8 | 7 | 7 | 8 |
| South West | 5 | 5 | 6 | 6 |
| Wales | 5 | 5 | 5 | 5 |
| West Midlands | 4 | 4 | 3 | 3 |
| Yorks \& The Humber | 7 | 7 | 7 | 7 |
| Total | 80 | 71 | 72 | 71 |
| England | 60 | 54 | 55 | 56 |

## Politics

| L200 Politics | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 7 | 7 | 7 | 7 |
| Eastern | 2 | 3 | 3 | 3 |
| London | 16 | 18 | 16 | 15 |
| North East | 3 | 3 | 3 | 3 |
| North West | 8 | 9 | 9 | 9 |
| Northern Ireland | 2 | 2 | 2 | 2 |
| Scotland | 6 | 7 | 7 | 7 |
| South East | 9 | 9 | 9 | 10 |
| South West | 7 | 4 | 4 | 4 |
| Wales | 6 | 4 | 4 | 3 |
| West Midlands | 7 | 7 | 7 | 6 |
| Yorks \& The Humber | 8 | 9 | 10 | 10 |
| Total | 81 | 82 | 81 | 79 |
| England | 67 | 69 | 68 | 67 |

## Sociology

| L300 Sociology | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 8 | 8 | 8 | 8 |
| Eastern | 7 | 6 | 5 | 6 |

Degree course provision in the UK 2006-2012

| London | 15 | 14 | 15 | 15 |
| :--- | ---: | ---: | ---: | ---: |
| North East | 5 | 5 | 5 | 5 |
| North West | 15 | 13 | 11 | 11 |
| Northern Ireland | 2 | 2 | 2 | 2 |
| Scotland | 11 | 10 | 10 | 9 |
| South East | 10 | 7 | 7 | 7 |
| South West | 6 | 8 | 8 | 8 |
| Wales | 8 | 5 | 3 | 3 |
| West Midlands | 9 | 9 | 9 | 9 |
| Yorks \& The Humber | 10 | 9 | 9 | 9 |
| Total | 106 | 96 | 92 | 92 |
| England | 85 | 79 | 77 | 78 |

Human \& social geography

| L700 Human \& social geography | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 5 | 3 | 3 | 3 |
| Eastern | 2 | 1 | 1 | 1 |
| London | 8 | 7 | 7 | 6 |
| North East | 4 | 4 | 3 | 3 |
| North West | 9 | 7 | 7 | 7 |
| Northern Ireland | 1 | 0 | 0 | 0 |
| Scotland | 5 | 6 | 6 | 5 |
| South East | 6 | 6 | 6 | 7 |
| South West | 5 | 4 | 3 | 3 |
| Wales | 5 | 4 | 4 | 5 |
| West Midlands | 6 | 5 | 5 | 5 |
| Yorks \& The Humber | 7 | 5 | 5 | 5 |
| Total | 63 | 52 | 50 | 50 |
| England | 52 | 42 | 40 | 40 |

Law by area

| M100 Law by area | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 8 | 8 | 8 | 8 |
| Eastern | 7 | 6 | 6 | 6 |
| London | 20 | 20 | 20 | 21 |
| North East | 5 | 5 | 5 | 5 |
| North West | 14 | 13 | 12 | 12 |
| Northern Ireland | 2 | 2 | 2 | 2 |
| Scotland | 12 | 12 | 11 | 10 |
| South East | 13 | 14 | 14 | 15 |
| South West | 5 | 6 | 6 | 6 |


| Wales | 5 | 5 | 6 | 6 |
| :--- | ---: | ---: | ---: | ---: |
| West Midlands | 9 | 9 | 8 | 8 |
| Yorks \& The Humber | 9 | 11 | 11 | 11 |
| Total | 109 | 111 | 109 | 110 |
| England | 90 | 92 | 90 | 92 |

Law by topic

| M200 Law by topic | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 1 | 3 | 4 | 4 |
| Eastern | 2 | 1 | 2 | 2 |
| London | 6 | 5 | 6 | 6 |
| North East | 1 | 2 | 2 | 2 |
| North West | 5 | 6 | 5 | 5 |
| Northern Ireland | 0 | 0 | 0 | 0 |
| Scotland | 3 | 3 | 3 | 3 |
| South East | 3 | 2 | 1 | 1 |
| South West | 6 | 5 | 5 | 4 |
| Wales | 4 | 3 | 1 | 2 |
| West Midlands | 6 | 2 | 3 | 2 |
| Yorks \& The Humber | 5 | 4 | 4 | 4 |
| Total | 42 | 36 | 36 | 35 |
| England | 35 | 30 | 32 | 30 |

## Arts and humanities

## Business studies

| N100 Business studies | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 11 | 10 | 9 | 10 |
| Eastern | 14 | 10 | 10 | 10 |
| London | 24 | 25 | 27 | 30 |
| North East | 7 | 8 | 8 | 8 |
| North West | 23 | 14 | 14 | 14 |
| Northern Ireland | 1 | 1 | 1 | 1 |
| Scotland | 12 | 14 | 12 | 13 |
| South East | 20 | 15 | 17 | 17 |
| South West | 12 | 12 | 13 | 14 |
| Wales | 10 | 12 | 11 | 10 |
| West Midlands | 15 | 13 | 11 | 11 |
| Yorks \& The Humber | 13 | 15 | 14 | 13 |
| Total | 162 | 149 | 147 | 151 |
| England | 139 | 122 | 123 | 127 |

## English studies

| Q300 English studies | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 9 | 9 | 9 | 9 |
| Eastern | 9 | 8 | 8 | 8 |
| London | 16 | 14 | 14 | 14 |
| North East | 5 | 5 | 5 | 5 |
| North West | 14 | 14 | 13 | 13 |
| Northern Ireland | 2 | 2 | 2 | 2 |
| Scotland | 6 | 10 | 8 | 9 |
| South East | 12 | 13 | 13 | 15 |
| South West | 8 | 9 | 9 | 11 |
| Wales | 11 | 10 | 9 | 8 |
| West Midlands | 8 | 9 | 10 | 10 |
| Yorks \& The Humber | 12 | 12 | 12 | 12 |
| Total | 112 | 115 | 112 | 116 |
| England | 93 | 93 | 93 | 97 |

## Latin studies

| Q600 Latin studies | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 1 | 1 | 1 | 1 |
| Eastern | 0 | 0 | 0 | 0 |

Degree course provision in the UK 2006-2012

| London | 1 | 1 | 1 | 0 |
| :--- | :---: | :---: | :---: | :---: |
| North East | 0 | 0 | 0 | 0 |
| North West | 1 | 1 | 1 | 1 |
| Northern Ireland | 0 | 0 | 0 | 0 |
| Scotland | 3 | 3 | 3 | 3 |
| South East | 1 | 0 | 0 | 1 |
| South West | 1 | 1 | 0 | 0 |
| Wales | 1 | 1 | 2 | 1 |
| West Midlands | 0 | 0 | 0 | 0 |
| Yorks \& The | 1 | 1 | 1 | 1 |
| Humber | 10 | 9 | 9 | 8 |
| Total | 6 | 5 | 4 | 4 |
| England |  |  |  |  |

## Classical Greek studies

| Q700 Classical Greek studies | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 1 | 1 | 1 | 1 |
| Eastern | 0 | 0 | 0 | 0 |
| London | 1 | 1 | 1 | 0 |
| North East | 0 | 0 | 0 | 0 |
| North West | 1 | 1 | 1 | 1 |
| Northern Ireland | 0 | 0 | 0 | 0 |
| Scotland | 3 | 3 | 3 | 3 |
| South East | 0 | 1 | 1 | 2 |
| South West | 0 | 0 | 0 | 0 |
| Wales | 0 | 0 | 0 | 0 |
| West Midlands | 0 | 0 | 0 | 0 |
| Yorks \& The Humber | 1 | 1 | 1 | 1 |
| Total | 7 | 8 | 8 | 8 |
| England | 4 | 5 | 5 | 5 |

## French studies

| R100 French studies | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 2 | 3 | 2 | 2 |
| Eastern | 1 | 0 | 0 | 0 |
| London | 9 | 5 | 5 | 4 |
| North East* | 1 | 1 | 1 | 0 |
| North West | 6 | 6 | 6 | 6 |

[^1]| Northern Ireland | 2 | 2 | 2 | 2 |
| :--- | ---: | ---: | ---: | ---: |
| Scotland | 6 | 6 | 6 | 6 |
| South East | 5 | 7 | 6 | 6 |
| South West | 3 | 3 | 2 | 1 |
| Wales | 4 | 3 | 3 | 3 |
| West Midlands | 4 | 4 | 4 | 4 |
| Yorks \& The Humber | 4 | 3 | 3 | 3 |
| Total | 47 | 43 | 40 | 37 |
| England | 35 | 32 | 29 | 26 |

## German studies

| R200 German studies | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 1 | 2 | 1 | 1 |
| Eastern | 1 | 0 | 0 | 0 |
| London | 5 | 4 | 4 | 3 |
| North East* | 1 | 1 | 1 | 0 |
| North West | 5 | 5 | 4 | 4 |
| Northern Ireland | 1 | 0 | 0 | 0 |
| Scotland | 5 | 5 | 5 | 5 |
| South East | 5 | 5 | 5 | 6 |
| South West | 2 | 2 | 1 | 1 |
| Wales | 4 | 4 | 4 | 4 |
| West Midlands | 3 | 3 | 3 | 3 |
| Yorks \& The Humber | 3 | 3 | 3 | 3 |
| Total | 36 | 34 | 31 | 30 |
| England | 26 | 25 | 22 | 21 |

## Chinese studies

| T100 Chinese studies | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 1 | 2 | 1 | 1 |
| Eastern | 0 | 0 | 0 | 0 |
| London | 2 | 2 | 2 | 2 |
| North East | 0 | 0 | 1 | 1 |
| North West | 2 | 1 | 1 | 1 |
| Northern Ireland | 0 | 0 | 0 | 0 |
| Scotland | 1 | 1 | 1 | 1 |
| South East | 1 | 1 | 1 | 1 |

*It has subsequently come to UCU's attention that, contrary to the UCAS data, students at the Universities of Newcastle and Durham have the option to study French and German as single subjects as part of an undergraduate course called Modern Languages. We are happy to set the record straight and confirm that this means single subject study is available in the North East.

| South West | 0 | 0 | 0 | 0 |
| :--- | ---: | ---: | ---: | ---: |
| Wales | 0 | 1 | 2 | 1 |
| West Midlands | 0 | 0 | 0 | 0 |
| Yorks \& The Humber | 2 | 2 | 2 | 2 |
| Total | 9 | 10 | 11 | 10 |
| England | 8 | 8 | 8 | 8 |

## History by period

| V100 History by period | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 8 | 8 | 8 | 8 |
| Eastern | 7 | 6 | 6 | 6 |
| London | 17 | 16 | 16 | 15 |
| North East | 5 | 5 | 5 | 5 |
| North West | 11 | 10 | 9 | 9 |
| Northern Ireland | 2 | 2 | 2 | 2 |
| Scotland | 5 | 7 | 7 | 6 |
| South East | 11 | 11 | 11 | 12 |
| South West | 6 | 6 | 6 | 6 |
| Wales | 8 | 9 | 9 | 8 |
| West Midlands | 6 | 7 | 8 | 8 |
| Yorks \& The Humber | 9 | 9 | 9 | 9 |
| Total | 95 | 96 | 96 | 94 |
| England | 80 | 78 | 78 | 78 |

## History by area

| V200 History by area | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 0 | 0 | 0 | 0 |
| Eastern | 2 | 2 | 1 | 1 |
| London | 2 | 1 | 1 | 1 |
| North East | 0 | 0 | 1 | 1 |
| North West | 0 | 1 | 1 | 3 |
| Northern Ireland | 1 | 1 | 1 | 1 |
| Scotland | 7 | 6 | 6 | 5 |
| South East | 2 | 1 | 1 | 1 |
| South West | 0 | 0 | 0 | 0 |
| Wales | 2 | 2 | 2 | 2 |
| West Midlands | 2 | 1 | 0 | 0 |
| Yorks \& The Humber | 0 | 0 | 0 | 0 |
| Total | 18 | 15 | 14 | 15 |
| England | 8 | 6 | 5 | 7 |

## History by topic

| V300 History by topic | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 3 | 2 | 2 | 2 |
| Eastern | 6 | 4 | 3 | 3 |
| London | 10 | 6 | 6 | 7 |
| North East | 0 | 0 | 1 | 0 |
| North West | 4 | 3 | 4 | 4 |
| Northern Ireland | 0 | 0 | 0 | 0 |
| Scotland | 4 | 4 | 4 | 4 |
| South East | 7 | 6 | 6 | 6 |
| South West | 4 | 3 | 3 | 3 |
| Wales | 3 | 2 | 1 | 1 |
| West Midlands | 3 | 2 | 2 | 2 |
| Yorks \& The Humber | 3 | 2 | 2 | 2 |
| Total | 47 | 34 | 34 | 34 |
| England | 40 | 28 | 29 | 29 |

## Philosophy

| V500 Philosophy | 2006 | 2010 | 2011 | 2012 |
| :--- | ---: | ---: | ---: | ---: |
| East Midlands | 1 | 3 | 2 | 1 |
| Eastern | 5 | 5 | 5 | 5 |
| London | 8 | 8 | 7 | 7 |
| North East | 1 | 1 | 1 | 1 |
| North West | 7 | 5 | 5 | 5 |
| Northern Ireland | 1 | 1 | 1 | 1 |
| Scotland | 6 | 6 | 6 | 6 |
| South East | 4 | 5 | 5 | 5 |
| South West | 3 | 3 | 3 | 3 |
| Wales | 4 | 3 | 4 | 3 |
| West Midlands | 3 | 3 | 4 | 4 |
| Yorks \& The Humber | 5 | 5 | 5 | 4 |
| Total | 48 | 48 | 48 | 45 |
| England | 37 | 38 | 37 | 35 |

# Restriction of choice and the impact on UK higher education 

Professor Donald Braben, honorary professor in life sciences at University College London (UCL):

I fear that we are going backwards. Universities exist to challenge what we think we know and offer well-argued and coherent alternatives. They are unique in these respects. However, if we limit their scope and oblige them to concentrate on short-term practical problems their advice might be indistinguishable from that provided by many other sources. Meanwhile, the big problems would continue unresolved.

All major developments in the last century were unpredicted. Take the internet: were the universities being urged to offer lessons on the internet in the 70s and 80s? Industrial opinion notoriously changes with their balance sheets. If we gear institutions solely to what we perceive students and employers want then that is precisely what we will get. Stagnation will follow. But who was asking for the internet, for example, in the 70s or 80s?

Professor Philip Schofield, professor of the history of legal and political thought, and director of the Bentham Project at University College London (UCL):
The importance, and dare I say it the usefulness, of a course is not a function of the number of students who are prepared to take it. It is just as imperative at university as it is at primary school that the curriculum is not based simply on allowing students to take those topics that they think they will like. This is to give the less well informed control over the better informed on the very question of what they need to be informed about. If this sounds like nonsense, it is.

My own specialism attracts very few students, but deals with a philosopher of outstanding historical importance and contemporary significance. We may not need very many specialist philosophers, but we do need some.

Moreover, limiting the number of courses will diminish the student experience by curtailing their choice of subjects. It will adversely affect new and innovative research by taking away the opportunities for researchers to present their latest findings and discussing their latest theories to a receptive and inquisitive audience of students. It will close off sources of knowledge. To sum up, it will make UK universities a much less attractive proposition for both home and international students, who value the depth and diversity of our research and teaching.

Professor James Ladyman, professor of philosophy and head of the department of philosophy at the University of Bristol:
I am really concerned that under the new funding environment universities will look at concentrating their resources on courses which they believe will deliver the highest financial return. The loss of the block grant has taken away an important measure of financial security that allowed institutions to plan for the future.

Provision shouldn't be decided on the basis of short-term popularity contests but when you introduce a market that is what happens.

Institutions need to be able to offer a wide breadth of courses, especially with more students likely to study closer to home in the future. It is very easy to undermine capacity quickly but takes years to rebuild these knowledge bases. The intellectual culture of a university is massively enhanced by having students studying a range of disciplines living and studying together.

## Sir Richard Roberts, chief scientific officer at the New England Biolabs and Nobel Laureate for Medicine or Physiology:

When I was much younger the opportunities for further education after leaving school at 18 or so were fairly limited. A small percentage of kids went on to university while many more went on to some sort of technical training either on the job at a company or to a specialist technical or a teacher training college.

A key difference between a university education and these other forms of further education was that universities were not focused on technical training, but rather sought to educate the mind so that a graduate could tackle many different kinds of jobs. This was ensured by providing a very broad range of subjects covering a broad swath from specialist subjects such as chemistry to the wider range exemplified by the humanities.

Good students would thus encounter many different disciplines and be challenged to think critically on a wide front. These days it seems the universities are increasingly being treated as technical colleges from which graduates will emerge with some very specialised skills. This is a huge mistake.

As the Chief Scientific Officer of a small Biotech company I am not looking for someone to hire who has specialist skills, those they will acquire on the job. Rather I am looking for someone with good problem solving abilities, good critical thinking skills and an enthusiasm to learn more. Such skills are developed by exposure to many different topics during a university education, not by focusing in a single area.

The decisions currently being undertaken by many universities and encouraged by the British government seem completely contrary to the idea of providing a broad and balanced education for university students.

For instance, I notice that some universities have been closing chemistry departments where one of the key subject areas for understanding biology is taught. This just makes no sense. Others close humanities departments presumably because they are not viewed as profitable. In my mind such decisions need much greater thought than appears to be undertaken at present. Chemistry and the humanities need to be taught if students are to develop critical thinking skills and to acquire a broad knowledge about the world we live in.

One of the most outstanding scientists I know was trained in Russia when it was still the USSR. He probably knows English literature better than I do and has a very broad intellectual knowledge in many areas reflecting the educational prerogatives of the Soviet system. That he now studies molecular evolution, but with an incredibly broad perspective is due to his early training in Russia. We are no longer producing scholars of his ilk and are unlikely to do so until we realise and value the importance of broad educational opportunities.

One of the hallmarks of a British education in my earlier years was the very breadth of subject matter that could be studied and that our policies are now seeking to restrict. While this may make economic sense it is almost guaranteed to lead to the deterioration of the human mind and its opportunities for innovation.

Money should not be the national religion where the high priests are those with more money than anyone else. Money does not bring happiness unless it is used wisely and it is certainly not necessary for happiness. It is high time we considered the health of the mind as being more important than the opulence of the surroundings in which we live.

## Appendix

SAMPLE OF PRINCIPAL SUBJECT DEGREE COURSES IN THE STUDY

| Subject | JACS principal subject code* | JACS principal subject description | Type of subject |
| :---: | :---: | :---: | :---: |
| Biology | C100 | A broadly based scientific study of living organisms, both animal and vegetable. Includes their structure, functions, evolution, distribution and interrelationships. | STEM |
| Chemistry | F100 | The study of individual atoms and molecules and the way they react together naturally and synthetically. | STEM |
| Physics | F300 | The study of the properties of matter and energy and the relationships between them, making extensive use of mathematical techniques and models. May include mechanics, optics, electricity, magnetism and acoustics. May also include atomic, nuclear, particle and solid state studies. | STEM |
| Geography | F800 | Physical and Terrestrial Geographical and Environmental Sciences: The study of the natural features of the earth's surfaceand environmental interactions including topology, climate, soil and vegetation. | STEM |
| Maths | G100 | The rigorous analysis of quantities, magnitudes, forms and their relationships, using symbolic logic and language, both in its own right and as applied to other disciplines. | STEM |
| Computer science | G400 | The study of the design and application of electronic computer systems, including computer architectures, software and systems design. | STEM |
| Civil engineering | H200 | The study of the principles of engineering as they apply to the designing and construction of public works, eg buildings, bridges, pipelines etc. Involves the study and application of specialist mathematics. | STEM |
| Economics | L100 | The systematic study of the production, conservation and allocation of resources in conditions of scarcity, together with the organisational frameworks related to these processes. | Social science |
| Politics | L200 | The study of activities related to the institution of the state and the machinery of government or the method through which social conflict is expressed and attempts to resolve conflict are made. | Social science |
| Sociology | L300 | The systematic study of human social institutions and social relationships. | Social science |
| Geography | L700 | Human and Social Geography: The systematic study of the spatial distribution and inter-relationships of people, natural resources, plant and animal life. | Social science |
| Law | M100 | Law by area: The study of the law as defined in particular geographic regions. | Social science |


| Subject | JACS <br> principal <br> subject code* | JACS principal subject description |
| :--- | :--- | :--- | Type of subject

*http://www.hesa.ac.uk/dox/jacs/JACS_complete.pdf


[^0]:    www.ucu.org.uk

[^1]:    *It has subsequently come to UCU's attention that, contrary to the UCAS data, students at the
    Universities of Newcastle and Durham have the option to study French and German as single subjects as part of an undergraduate course called Modern Languages. We are happy to set the record straight and confirm that this means single subject study is available in the North East.

