Gone International: mobile students and their outcomes

Report on the 2012/13 graduating cohort

go international

All you need to know about study and work abroad

Contents

ABOUT THE GO INTERNATIONAL PROGRAMME

Supported by the Government, the UK HE International Unit (IU) launched the UK Strategy for Outward Mobility in December 2013. The IU has also established the Go International programme to work with universities and colleges, government, sector organisations and students to help tackle the current barriers to UK outward student mobility. Its aim is to help increase the proportion of UK students with some international experience. For more information about the programme visit www.go.international.ac.uk

ABOUT THE UK HIGHER EDUCATION INTERNATIONAL UNIT

The UK Higher Education International Unit (IU) represents and promotes the interests of the UK higher education institutions (HEIs) at home and abroad. It does this by influencing UK policy on HE and international issues as well as influencing both European policy and other government's policies on international issues. The IU also delivers high profile programmes. The IU consults with the sector; facilitates the exchange of best practice; provides intelligence and advice; and identifies opportunities for UK HEIs to expand their work internationally. The International Unit was founded on 1 August 2010.

Foreword

Higher education systems and governments worldwide are recognising the importance of giving more students an international experience as part of their undergraduate or postgraduate study, particularly through work and study placements abroad. Many countries, including the US and Germany, have invested in national strategies to raise awareness and increase participation by a wide range of students. With this investment, it is increasingly important to demonstrate the impact of outward student mobility in higher education to the individual and to the sector to ensure continued strategic support.

The UK Government's own International Education Strategy in July 2013 tasked the UK Higher Education International Unit with the implementation of a UK Strategy for Outward Mobility. The International Unit established the Go International programme to deliver the UK Strategy in conjunction with the UK higher education sector and to commission a programme of research that demonstrates the scope and the impact of outward student mobility from the UK.

While qualitative evidence of the benefits of international experience is widely available through anecdote and personal testimony, there is little quantitative evidence in this area. Of the many factors that may influence a student's outcomes, it is important for the Go International programme to identify as far as possible the specific impact of outward mobility.

This analysis is the first step in testing the hypothesis that mobility has a positive impact on the academic and employment outcomes of undergraduate students. As a cohort study, it provides an intriguing snapshot of outcomes for a particular group of mobile students compared to their non-mobile peers. It also provides a baseline for further studies to describe trends and demonstrate impact, helping the UK higher education sector to develop and market new mobility opportunities.

Vivienne Stern
Director, UK Higher Education International Unit
March 2015

Executive Summary and Key Findings

This report by the UK Higher Education International Unit's Go International programme compares the academic attainment and employment outcomes of mobile and non-mobile first degree undergraduate students who completed their studies at the end of the 2012/13 academic year[1]. It provides the first national outline of who goes abroad, where they go and considers what currently available data can tell us about the outcomes of international experience as part of a UK undergraduate programme.

The principal objective of this report is to establish a national baseline from which the Go International programme can track any mobility trends and to identify areas for further research. The findings in this report also seek to inform discussions within the sector about increasing participation of underrepresented groups in outward mobility opportunities. This report only considers the outcomes for UK-domiciled students as the UK Strategy for Outward Mobility[2] aims to increase the proportion of these students working, studying or volunteering abroad.

This report outlines:

1. The profiles of UK-domiciled first degree undergraduate students who graduated in 2012/13 who spent time abroad during their degree programme studying, working or volunteering, and where they went.

2. The academic attainment, salary and employment outcomes of these students when compared with their non-mobile peers six months after graduation.

In comparing mobile and non-mobile students' outcomes, data from the 2012/13 graduating cohort of UK undergraduates shows that, six months after graduating:

- A lower proportion of graduates who were mobile were unemployed (5.4% compared to 6.7%), a significant difference based on the sample sizes.

- A higher proportion of graduates who were mobile were working abroad, if in employment (11% of those in full-time work compared to 2%).

- On average, graduates who were mobile earned more across 11 out of 17 subject areas and earned more if they remained in the UK to work.

- Graduates who were mobile were earning more in 40 out of 67 subjects (with available data), with the highest disparities in salary (of at least £3,000) being in Sociology; Computer Science; Theology and Religious Studies; Electronic and Electrical Engineering, and Physical Geographical Sciences.

In terms of academic outcomes, a higher proportion of mobile students achieved a First Class (1st) or Upper Second Class (2.i) in their degree (87%) compared with non-mobile students (69%), although it is expected that many mobile students should perform well given eligibility for in some mobility opportunities is based on academic performance.

Looking at specific groups of graduates who were mobile who completed their studies in 2012/13:

- Those from non-language disciplines had a slightly higher average starting salary (£20,760 compared to £20,340) and a significantly lower proportion were unemployed (5.3% compared to 6.7%) compared to graduates who were not mobile.

- 5.2% of STEM graduates who were mobile were unemployed, whereas 6.1%[3] of STEM graduates who were not mobile were unemployed. STEM graduates who were mobile had a slightly higher average starting salary if they were in employment (£22,440 compared to £21,800 for graduates who were not mobile). 39% of STEM graduates who were mobile had 1st Class degrees compared with 21% of STEM graduates who were not mobile.

- A significantly lower proportion of graduates who were mobile from disadvantaged backgrounds were unemployed (5.0% compared to 7.6%).

- More mobile students were female than male[4].

- Among those who gained employment, a higher proportion of graduates who were mobile entered employment sectors classed as 'Professional, Scientific and Technical', 'Education', and 'Finance and Insurance'.

While the report outlines what mobile students' outcomes were, it does not seek to imply or demonstrate causation between outward mobility and students' outcomes. This is explained in more detail in the next section.

Methodology

Statistics contained within this report are based on an analysis linking together two Higher Education Statistics Agency (HESA) datasets. These are the **Student Record,** which contains details of the profiles of students registered at higher education providers across the UK, and the **Destinations of Leavers from Higher Education** (DLHE) survey, which asks graduates what they are doing six months after completing their degree.

From the 2012/13 DLHE data, we can identify which activities these graduates were engaged in at six months after graduation, (e.g. full-time employment, further study), as well as certain aspects of their profile such as gender, ethnic and socioeconomic background. By linking these graduates back to the Student Record to determine whether they undertook a period of mobility of at least three months in any of 2010/11, 2011/12 or 2012/13, we can outline differences in outcomes for mobile and non-mobile students.

In total, there were 233,185 UK-domiciled first degree completers included in this analysis, of which 10,520 were identified as being mobile at some point during their course. Instances of mobility are identifiable by fields within the Student Record stating that they took part in an exchange programme or a work or study placement, as well as the country to which the student travelled.

A note on students from advantaged and disadvantaged backgrounds

In this report, we outline differences in outcomes for mobile and non-mobile students from disadvantaged backgrounds. There are many ways to measure the number of students from relatively disadvantaged backgrounds. For the purposes of this report we have divided students into 'advantaged' and 'disadvantaged' based on Socioeconomic Classification Codes.

HESA collects socioeconomic data through UCAS which it then organises into seven classifications. The data is generated from information students included in their

UCAS application forms and reflects the occupation of the student (if they're over the age 21) or of the student's parents or guardians[5] (if under the age of 21). For the purposes of this report, 'students from disadvantaged backgrounds[6] ' refers to students whose parents' or guardians' occupations fall within the following HESA categories:

- 'lower supervisory and technical occupations'
- 'semi-routine occupations'
- 'routine occupations'
- 'never worked/long-term unemployed'

While 'advantaged students' refers to students whose parents' or guardians' occupations fall within the following HESA categories:

- 'higher managerial and professional occupations'
- 'lower managerial and professional occupations'
- 'intermediate occupations'
- 'small employers and own account workers'

Limitations to this research

The following limitations to this research should be noted:

1. Not all graduates respond to the DLHE survey. This means that there are some disparities in the sample sizes by discipline.

2. The DLHE data only provides details of the activities graduates are engaged in six months after completing their course.

3. This report only refers to UK-domiciled graduates who completed their undergraduate first degrees in 2012/13 and does not include graduates of other levels of study.

4. There may be some instances of mobility not captured by higher education institutions within the Student Record. Therefore, the results produced here, whilst fairly comprehensive, are based on incomplete populations.

5. Some of the findings are based on the number of instances of mobility rather than the number of students. This means that students who spent time in more than one country during their studies are counted more than once in the figures in this report.

6. The data analysed in this report represents one graduating cohort. It therefore does not seek to identify trends over time. The outcomes outlined in this report, however, will be complemented by future research with data from future cohorts.

7. The HESA dataset did not allow us to disaggregate outcomes by type or by period of mobility. The report therefore cannot draw conclusions about the relationship between the length of time spent abroad or by the type of placement (for example, work or study) and graduates' outcomes.

8. The minimum period of mobility captured by HESA up to and including 2012/13 was three months.

9. There are other factors which could influence graduate outcomes which are not possible to capture from the Student Record or the DLHE survey, including the academic selectivity of some mobility opportunities.

10. We have performed statistical significance studies where possible and have indicated where differences were or were not statistically significant.

This report is a crucial snapshot of the profiles of students who went abroad who graduated in 2012/13, where they went and what their outcomes were. It does not seek to identify causal links between students going abroad and particular outcomes but identifies interesting outcomes that provide a necessary baseline to compare with data from successive graduating cohorts. It will enable the Go International programme to identify trends and patterns to create a more complete picture of which students go abroad and the relationships between mobility and outcomes for different kinds of students.

Introduction

'Outward mobility is essential if UK higher education is to develop graduates who are equipped to compete on the global labour market, and can promote UK business and diplomatic interests worldwide. It also enhances the international profile of UK higher education, as students on overseas placements are excellent ambassadors for the UK'

- UK Strategy for Outward Mobility

The number of students UK higher education institutions send abroad is increasing year-on-year. For example, the number of students participating in the Erasmus programme has steadily risen from 10,278 in 2007/8 to 14,572 students in 2012/13 overall [7], while the number of UK-domiciled students taking part has increased from 9,212 in 2010/11 to 10,284 in 2012/13[8]. However, the UK still lags behind many of its European neighbours. For example France sent 44,910 students abroad through the Erasmus programme in 2012/13 while Germany and Spain sent out over 50,000 students. The UK governments have stated their commitment to contribute to the European Union's target of 20% of students in the European Higher Education Area being mobile as part of their studies by 2020. To achieve this, the UK must continue to be ambitious and increase the number of students it sends abroad each year. This means the UK higher education sector and the UK Government, as well as the devolved administrations, must work together and with other relevant stakeholders to demonstrate and promote the benefits of mobility to the individual (employability, intercultural awareness and language skills) and to the economy (building global networks for UK higher education and industry).

Although the unemployment rate in the UK is falling[9], more students are graduating from UK higher education institutions than ever before, resulting in an increasingly competitive graduate job market. Students are seeking to identify what will give them the necessary edge to compete successfully in the global job market and fulfil the expectations of employers. Undertaking a mobility period abroad, whether for work or study, is seen by many students as a way to achieve this. Research to date on the benefits and outcomes of student mobility suggests that mobile students' intercultural and language skills improve, personal skills and confidence grow and that they develop other attributes[10] valued by employers. However, many are discouraged by real or perceived barriers including the lack of awareness of opportunities, cost of opportunities and the effect of mobility on degree length[11].

Many employers[12] seek graduates with these transferrable skills. The CBI's 2013 *Changing the Pace* report shows that 47% of employers surveyed expressed concern with UK graduates' intercultural awareness and 55% were dissatisfied with their foreign language skills, both of which have been shown to be sought after by employers[13]. Complementing this, the October 2014 interim findings of the British Academy's *Born Global* report outlines that 51% of employers surveyed are dissatisfied with foreign language skills and that only 8% were satisfied with intercultural skills.

Based on the findings of 233,185 students who graduated in 2012/13, this report's objectives are threefold. Firstly, it seeks to establish a baseline describing which students go abroad and what their outcomes are six months after graduation, compared with non-mobile students. Secondly, it seeks to inform the UK higher education sector and policy makers about the underrepresentation of certain groups in mobility opportunities. Finally, it identifies how further data could complement these findings and allow the Go International Programme to identify trends, correlations and causal relationships between mobility and outcomes.

This report is divided into five parts and outlines differences in academic attainment and employment outcomes who graduated in 2012/13 who went abroad (mobile) and students who did not (non-mobile). Firstly, the report defines the profiles of students who take up the opportunity to be mobile, taking socioeconomic background, ethnic background, gender, discipline and location of study into account. Section two gives an insight into where mobile students study or work abroad. The third section examines the academic attainment of mobile and non-mobile students. The two final sections of the report describe the outcomes of mobile students as graduates, six months after having completed their studies, in terms of the roles and employment sectors they went into and their respective salary outcomes. Where statistically significant and possible, each section outlines the different outcomes for different groups of students.

1. Who goes abroad?

This section provides an overview of the students who completed their studies at the end of the 2012/13 academic year and who were mobile during their degree. Understanding the profiles of UK students is helpful to understand where there is underrepresentation of certain groups. The information in this section describes the graduates who were mobile by group or identity.

Overall participation in outward mobility

Data shows that of the 233,185 students who graduated in 2012/13 and responded to the DLHE survey, 4.5% (10,520) had at least one period of mobility[14] between 2010/11 and 2012/13.

4.5%
Of students that graduated in 2012/13 had at least one period of mobility
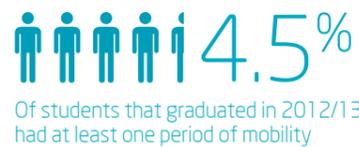
What do mobile students study?

While the number of students enrolled on language degree programmes decreased by just over 10% between 2007/8 and 2012/13 – from 115,210 to 102,965 – there has been an annual increase in participation in outward mobility. Language students[15] made up the largest proportion (38%) of mobile students. The next largest groups were business and administration students (11%) followed by linguistics and social studies (both 8%) and those studying creative arts and design (6%).

38%
of mobile students were language students

60+%
of mobile students were non-language students

Top 10 subject areas:

French Studies

Spanish Studies

Business Studies

German Studies

English Studies

Law by area[16]

Other European languages, literature & related subjects

Politics

History by period

American Studies

Science, technology, engineering and mathematics (STEM) students are underrepresented in mobility opportunities; 16.2% of mobile students who graduated in 2012/13 studied STEM subjects and 1.7%% of STEM students were mobile, while the overall proportion of students enrolled in STEM courses was 42.6%. The top five STEM subjects mobile students who graduated in 2012/13 studied were:

Chemistry

Mathematics

Biology

Physics

Physical geographical sciences

Where are they in the UK?

The number of mobile students is increasing in each of the UK nations. The highest participation rate in outward mobility programmes was amongst students from Scotland (6.2%) followed by Northern Ireland (5.4%), England (4.4%) and Wales (3.4%).

6.2%

5.4%

4.4%

3.4%
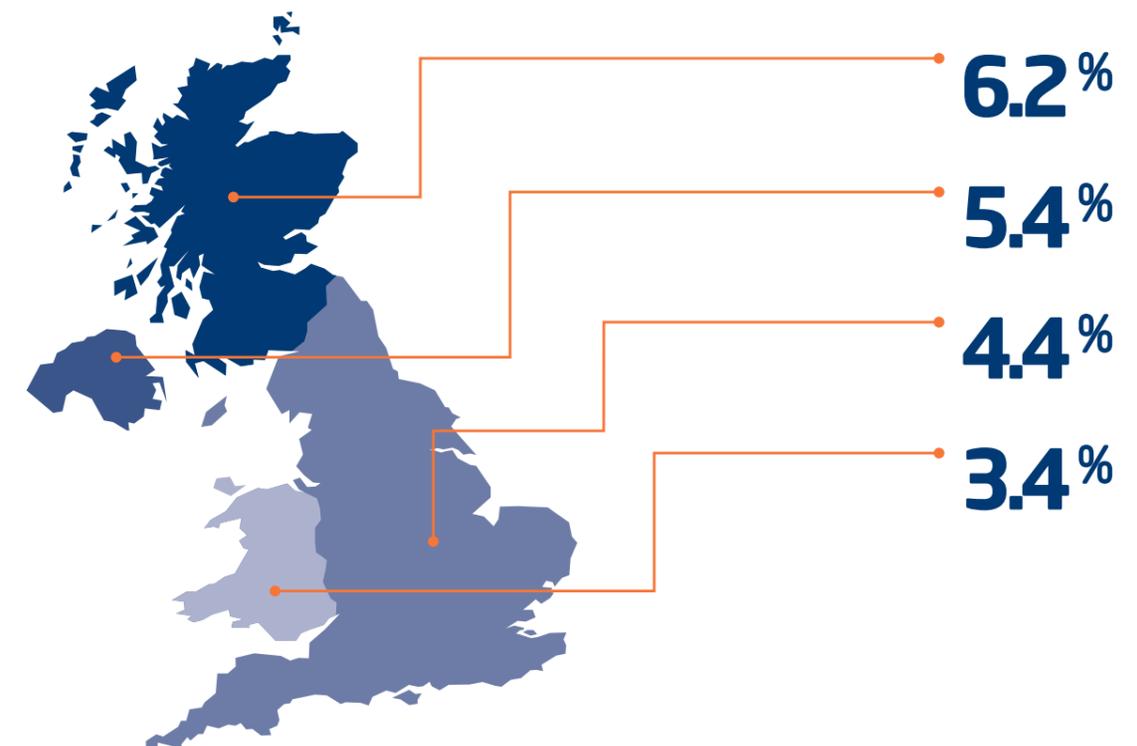
Socioeconomic backgrounds

Studies show that students from disadvantaged backgrounds tend to be more financially risk averse[17] than their advantaged peers. Despite the availability of financial support for mobility, the number of students from these backgrounds taking part in mobility programmes has remained low. For example, the proportion of students from disadvantaged backgrounds who were mobile who graduated in 2002/3 was 2.8%[18] and increased to 3.2% in 2012/13[19].

Participation in mobility amongst the 2012/13 graduating cohort ranges from 6.6% among students whose parents/guardians had "higher managerial & professional occupations" to 2.2% among those whose parents/guardians had "never worked or were long-term unemployed".

Socioeconomic Classification (SEC Code)	Proportion of students by SEC code who were mobile between the 2010/11 and 2012/13 academic years
Higher managerial & professional occupations	6.6%
Lower managerial & professional occupations	5.3%
Intermediate occupations	4.5%
Small employers & own account workers	3.8%
Lower supervisory & technical occupations	3.4%
Semi-routine occupations	3.0%
Routine occupations	2.8%
Never worked & long-term unemployed	2.2%

Table 1: Socioeconomic Classification and participation in outward mobility

Gender[20]

Overall, more female students who responded to the DLHE survey were mobile compared with male students. This is reflected in both the proportion of language and non-language male and female students, 70% of mobile language students were female and 30% were male while 59% of mobile non-language students were female and 41% were male.

There was also a higher proportion of female students participating in mobility opportunities overall and amongst non-language students:

female and male mobile students overall

♀ 5.1%
♂ 3.8%

female and male non-language students

♀ 3.0%
♂ 2.6%
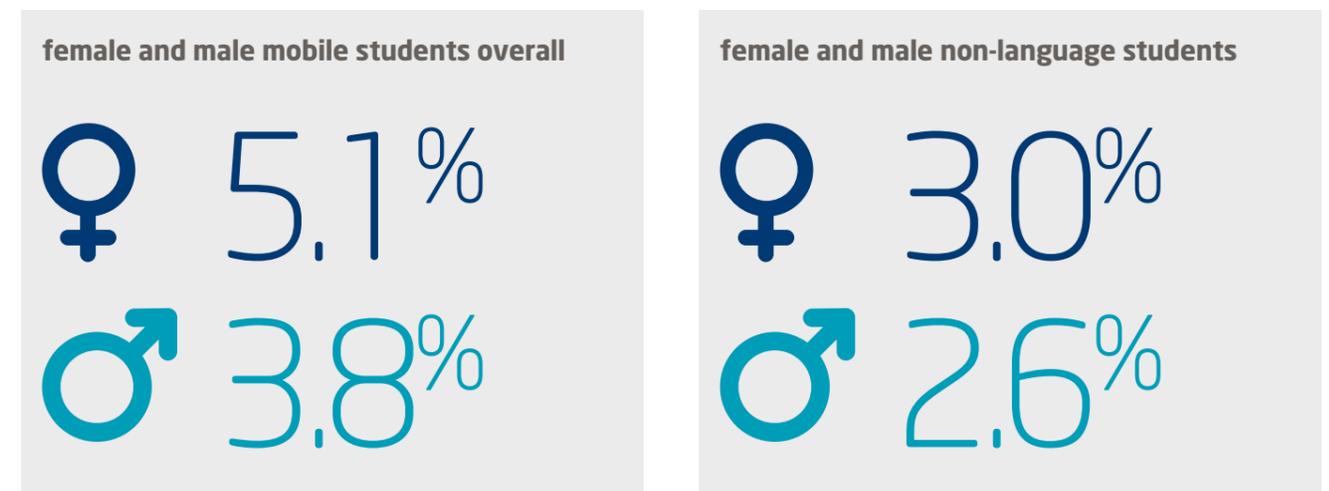
Ethnic background

Rates of participation varied among students from different Black and Minority Ethnic (BME) groups. The average proportion of BME students who spent time abroad was 2.9% of the total BME cohort who graduated in 2012/13, compared with 4.8% of the White student cohort. By contrast, students identifying as 'other'[21] were overrepresented, with 5.8% of this student group spending time abroad during their degree. Black and Asian participation was 2.2% and 2.1% respectively. Overall, 12% of all mobile students who graduated in 2012/13 were from BME backgrounds. As a proportion of all mobile students, Black, Asian and 'other' students represented 2.3%, 4.6% and 5.1% respectively.

2.3%
Black students

4.6%
Asian students

5.1%
'Other' students

OVERALL
12%
of the mobile students who graduated in 2012/13.
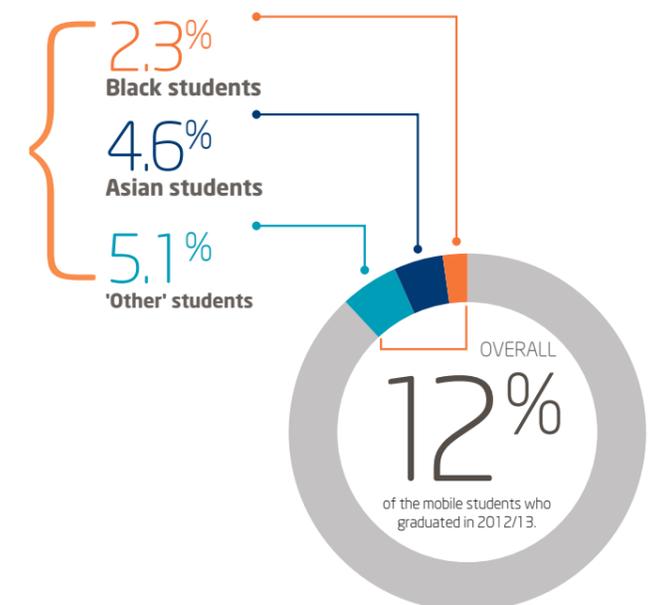
2. Where do they go?

Mobile students are taking advantage of opportunities in Europe, and the rest of the world. This is a reflection of the growth in institution-to-institution student exchanges and in programmes run by third party organisations in collaboration with institutions (for example, UK India Education and Research Initiative's Study India programme and the Study China programme). This growth has also been partly due to an increase in opportunities for students to spend time in Anglophone countries and in English language medium courses in institutions in non-Anglophone countries[22].

Worldwide breakdown- the global picture

70% of mobilities took place in Europe[23], (around 7,750) versus 30% in countries beyond Europe, (around 3,340). These proportions were similar for students from disadvantaged backgrounds, 750 of whom participated in mobility opportunities in Europe while 310 went further afield.

of mobilities take place in Europe, versus **70**%

30% in countries beyond Europe
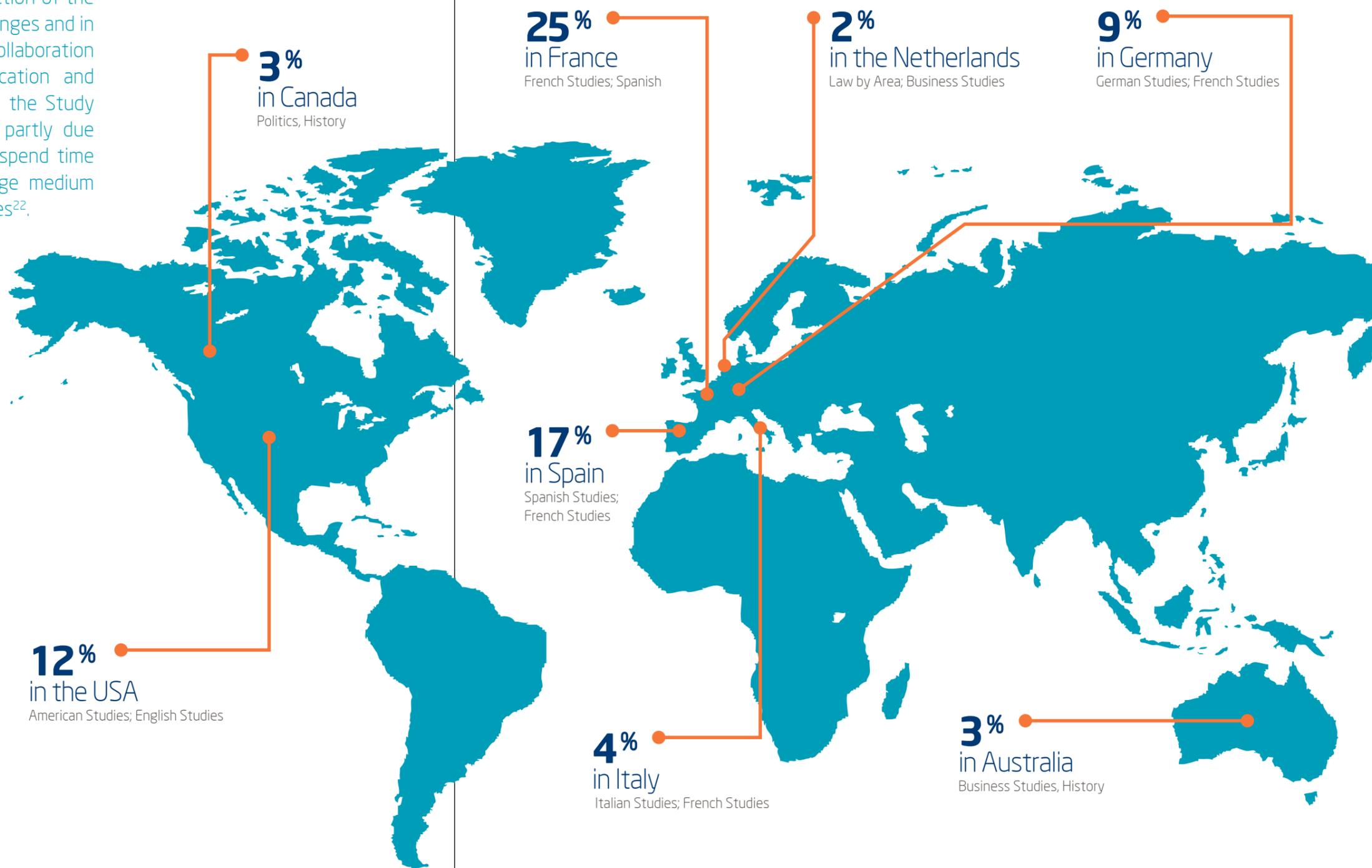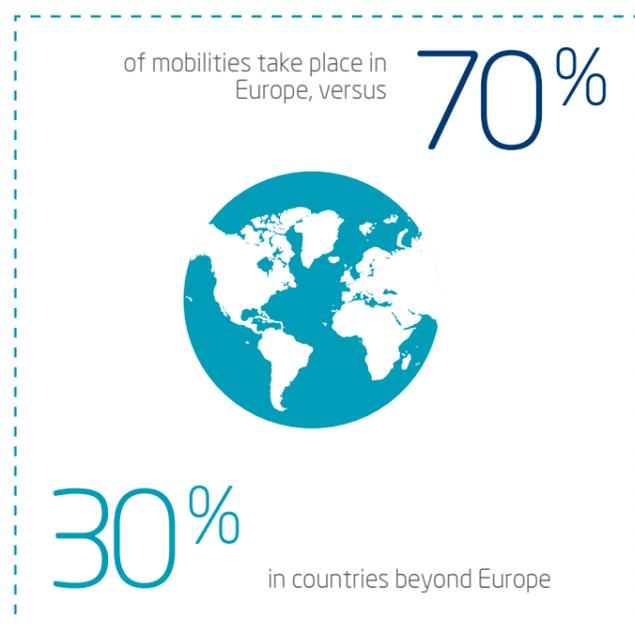
Three-quarters of mobilities from UK-domiciled students took place in just 8 countries, with two-thirds taking place in 5 countries between the 2010/11 and 2012/13 academic years. The most popular destinations as well as the most popular subjects studied by mobile students by destination, were:

3% in Canada
Politics, History

25% in France
French Studies; Spanish

2% in the Netherlands
Law by Area; Business Studies

9% in Germany
German Studies; French Studies

17% in Spain
Spanish Studies; French Studies

12% in the USA
American Studies; English Studies

4% in Italy
Italian Studies; French Studies

3% in Australia
Business Studies, History

The most popular destinations by continent for mobile students beyond than Europe were:

North America - USA
1,311

Africa - Egypt
57

Asia - China
219

South America- Argentina
81

Oceania - Australia
333
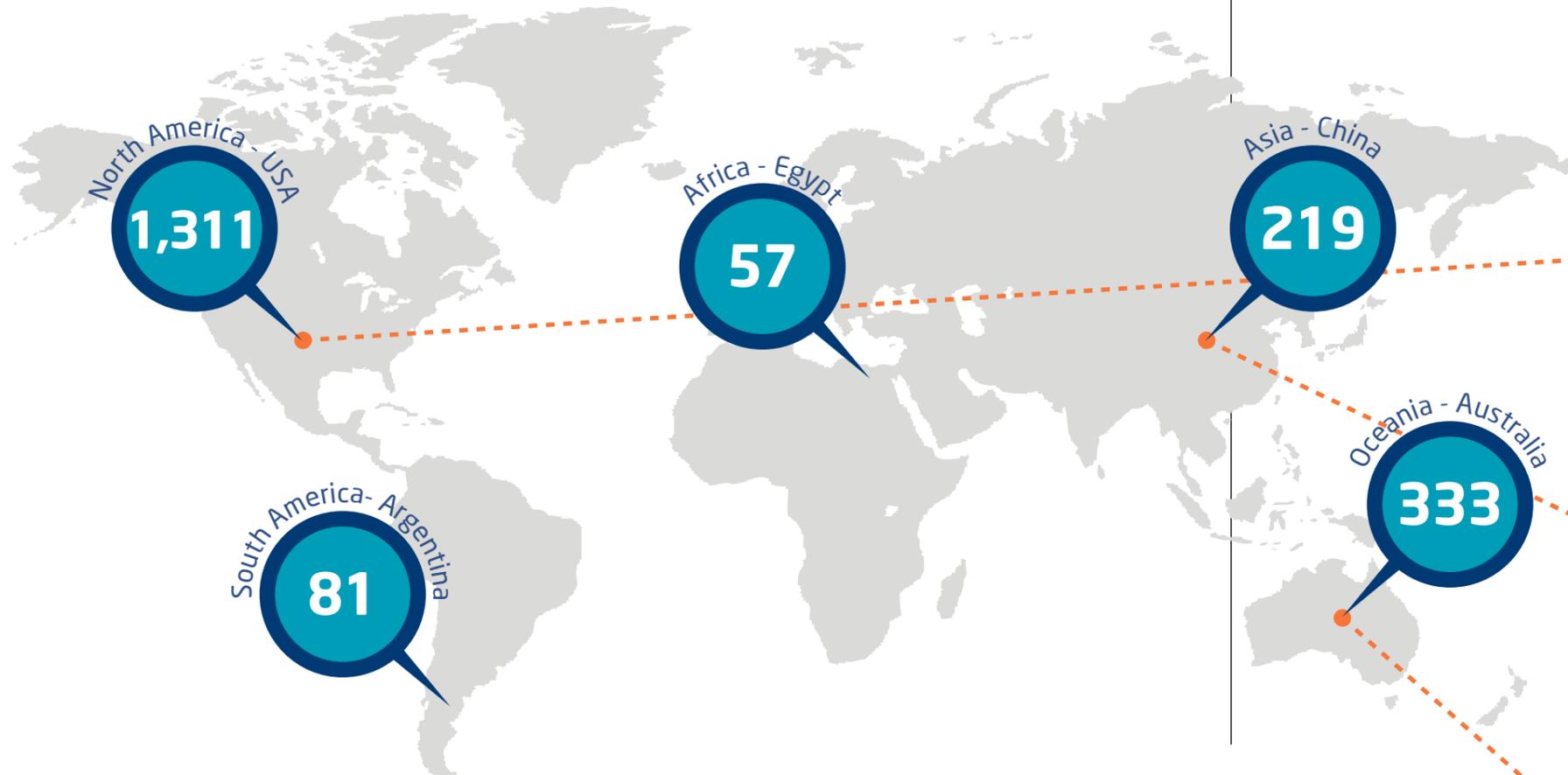
Beyond Europe

Between 2010/11 and 2012/13, the United States, Australia, Canada and China were the four largest recipients of mobile UK students beyond Europe. The spread of subjects studied by students travelling to these destinations varied more than those going to Europe.

18% of mobility placements to the USA were by American studies students. 10% studied English studies, and 6% studied History.

41% of mobility placements to China were by Chinese Studies students. 12% were studying Business-related subjects.

11% of mobility placements to Australia studied Business Studies, 4% studied History, and another 4% English Studies.

European destinations

Europe is the preferred destination for UK students overall. Over a third of European mobility took place in France, with around a quarter in Spain, followed by Germany, Italy and the Netherlands.

France
25%

Spain
17%

Germany
9%

Italy
4%

Netherlands
2%
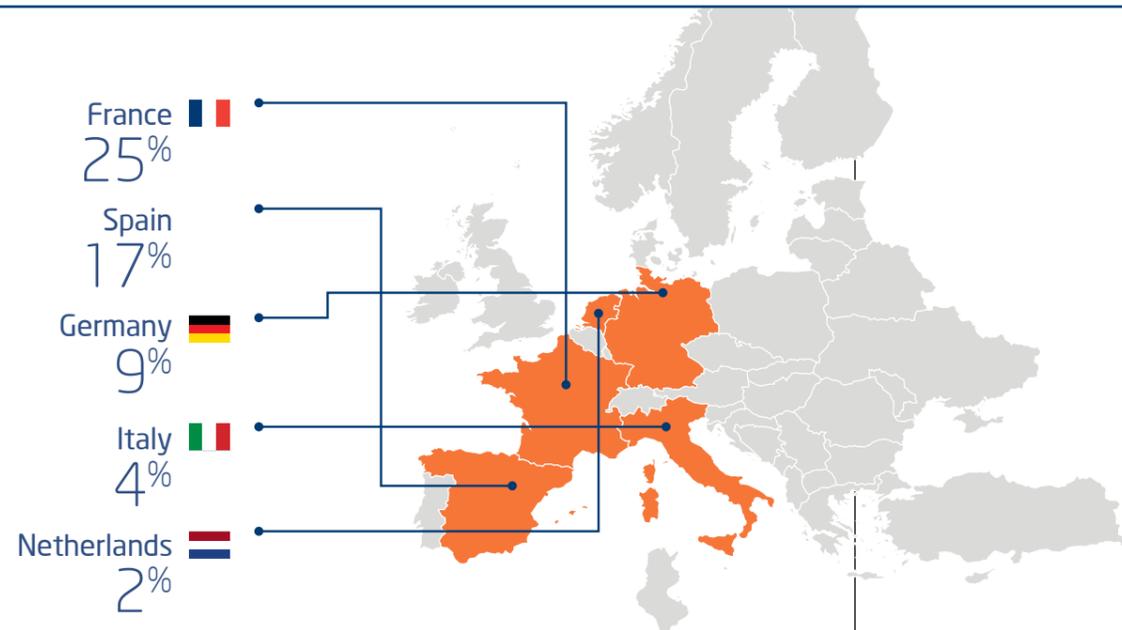
3. How well do they do in their studies?

A higher proportion of mobile students who graduated in 2012/13 achieved a 1st or a 2.i compared with their non-mobile peers.

A higher proportion of mobile students achieved a 1st or 2.i compared with their non-mobile peers:

87%   69%

In addition, a higher proportion of mobile students achieved a 1st (27%) compared with non-mobile students (19%)

83% of mobile students from disadvantaged backgrounds achieved a 1st or a 2.i compared to 66% of those who were not mobile:

83%   66%

In addition, 24% of mobile students from disadvantaged backgrounds achieved a 1st compared with 18% of non-mobile students from similar backgrounds

The proportion of mobile STEM students who achieved a 1st or a 2.1 was 83% compared to 64% for non-mobile peers:

83%   64%

In addition, the proportion of mobile STEM students who achieved a 1st was 39% compared with 21% of non-mobile STEM students

87% of mobile non-language students achieved a 1st or a 2.i compared to 69% of non-mobile students:

87%   69%

In addition, 30% of mobile non-language students achieved a 1st compared with 19% of their non-mobile peers

Table 2 below shows that a higher proportion of mobile students achieved a 1st than non-mobile students in every discipline, with the exception of Medicine and dentistry.

Subject group	% achieving a 1st	% of mobile students who achieved a 1st
Creative Arts and Design	19%	30%
Business and Administrative studies	17%	26%
Subjects allied to medicine	19%	38%
Biological Sciences	16%	30%
Social studies	14%	29%
Engineering	27%	51%
Physical sciences	22%	46%
Computer sciences	23%	44%
Historical and Philosophical studies	17%	29%
Linguistics, Classics and related subjects	18%	28%
Education	15%	20%
Mathematics	34%	41%
Law	11%	22%
Architecture, Building and Planning	18%	24%
Mass Communications and Documentation	14%	26%
European Languages, Literature and related subjects	19%	21%
Combined studies	10%	30%
Eastern, Asiatic, African, American and Australasian Languages, Literature and related subjects	19%	24%

Table 2[24] : Proportion of all students achieving a 1st Class degree compared with mobile students (excludes those with 'classification not applicable')

4. What do they do next?

This section outlines the employment outcomes of graduates who were mobile and those who were not. It includes details on unemployment rates, the sectors which employed graduates and the roles graduates had six months after graduation.

Employment

A smaller proportion of graduates who were mobile were unemployed compared with graduates who did not spend time abroad. Among those graduates entering full-time paid employment within six months of graduating, a higher percentage of those who were mobile were living and working abroad, 11% (7% in Europe and 4% rest of the world) compared with 2% of those who were not mobile (with 1% in both Europe and the rest of the world).

Overall, data shows that a lower proportion of graduates from underrepresented groups who were mobile were unemployed within six months of graduating compared with those who were mobile.

There were similar rates of unemployment for mobile and non-mobile students from underrepresented backgrounds when considering those who achieved 1st Class degrees.

Disadvantaged students

A significantly lower proportion of graduates from disadvantaged backgrounds who were mobile were unemployed compared with those from the same backgrounds who were not mobile:

MOBILE **5.0%**   NON-MOBILE **7.6%**

When considering disadvantaged students who received 1st Class degrees, 3.0% of mobile students and 4.7%[25] of non-mobile students were unemployed.

Female students

A lower proportion of female graduates who were mobile were unemployed compared with those who were not mobile:

MOBILE **4.5%**   NON-MOBILE **5.3%**

When considering female students who received 1st Class degrees, 2.8% of mobile students and 3.5%[26] of non-mobile students were unemployed.

Black and Minority Ethnic students

A lower proportion of graduates from BME backgrounds who were mobile were unemployed compared with those who were not mobile:

MOBILE **8.6%**   NON-MOBILE **11.0%**

When considering BME students who received 1st Class degrees, 5.3% of mobile students and 8.2%[27] of non-mobile students were unemployed.

Non-language students

A lower proportion of non-language graduates who were mobile were unemployed compared with those who were not mobile:

MOBILE **5.3%**   NON-MOBILE **6.7%**

When considering non-language students who received 1st Class degrees, 3.5% of mobile students and 4.2%[28] of non-mobile students were unemployed.

Role[29]

Within six months of completing their studies, a slightly higher proportion of graduates with international experience who were in employment[30] were 'Managers and senior officials'; in 'Professional occupations'; 'Associate professionals [or] in technical occupations' than graduates who were not mobile.

79%[31] vs. **77%**

The average salaries of graduates who were 'Managers and senior officials' as well as those who were in 'Associate professional and technical occupations' were higher for graduates who were mobile compared with those who were not. In addition, graduates who were mobile earned more in six out of nine occupations overall.

A lower proportion of graduates who were mobile were employed in technical occupations compared with graduates without an international experience. This includes 'skilled trades; 'personal service occupations'; 'sales and customer service'; 'process; plant and machine operatives' and 'elementary occupations'.

Sectors of employment

A higher proportion of employed graduates who were mobile were concentrated in six sectors out of the 21 that were analysed compared with those in employment who were not mobile. Table 3 below shows the top employment sectors for mobile graduates and compares their salaries with those of graduates who were not mobile. In four of these six sectors, mobile graduates had a higher average salary within six months of graduating. This is complemented by analysis of salary outcomes in the following section.

Sector	% of employed graduates who were mobile	Salaries of employed graduates who were mobile	% of employed graduates who were not mobile	Salaries of employed graduates who were not mobile
Professional, scientific and technical activities	19%[32] (20%)[33]	£20,668[34] (£20,726)[35]	13%	£20,545
Education	14% (10%)	£15,984 (£17,808)	12%	£18,132
Information and communication	10% (10%)	£21,261 (£21,419)	7%	£21,389
Wholesale and retail trade	9% (9%)	£19,478 (£19,130)	10%	£17,026
Manufacturing	8% (8%)	£21,864 (£21,856)	6%	£22,098
Financial and insurance activities	8% (8%)	£24,115 (£23,898)	6%	£23,652
Human health and social work activities	7% (7%)	£20,157 (£20,316)	20%	£22,456

Table 3: Proportion of graduates who were mobile employed by sector and their relative salaries

5. How much do they earn?

This section compares the salaries of graduates who were mobile and those who were not who were employed six months after completing their studies in 2012/13. It also looks at differences by academic discipline.

Although the 2012/13 graduates who were mobile earned slightly less in the short-term, it is important to note that higher salaries for specific mobile groups of students could be signals for greater divergence in future. For example, those who were mobile and work in the UK within 6 months of graduating earned slightly more than those who had not been mobile, £20,420 and £20,350 respectively.

In addition, 11% of those who were mobile who worked outside of the UK after graduating earned less than the overall average but in many cases earned more than the average graduate salary in the countries in which they work. The average starting salaries of graduates who worked in China, India and the USA were higher than the overall average salaries in these countries[36]. In China, for example, the average starting salary for graduates in 2010 was £4,152 while the average starting salary for graduates from UK institutions was £9,675.

Mobile students studying courses in 11 subject areas had higher average salaries than their non-mobile counterparts.

Non-language graduates who were mobile and who worked in the UK within six months of graduating earned more than non-language graduates who were mobile and worked abroad: £21,030 to £17,910 respectively.

Overall, graduates who were mobile earned more than those who were not, if they studied courses allied to the following subject areas:

- Biological sciences
- Physical sciences
- Computer science
- Engineering & technology
- Social studies
- Law
- Business & administrative studies
- Historical & philosophical studies
- Languages
- Creative arts & design

Non-language graduates who were mobile outside of Europe earned, on average, £20,750 within six months of graduating, whereas those who were not mobile earned, on average, £20,340.

When only considering those who achieved 1st Class degrees, students who were mobile who were working in the UK had an average salary of £21,780 whereas non-mobile students' earned, on average, £21,590.

6. Spotlight on STEM students

STEM students represent a smaller proportion of mobile students (16%) than other disciplines and only 1.7% of STEM students go abroad. Yet the outcomes for those who were mobile merit going into further detail, given the disparities between these outcomes and those of their non-mobile peers.

This spotlight briefly compares the academic attainment and employment outcomes of STEM students who graduated in 2012/13 and outlines these for students of particular subjects.

STEM graduates who were mobile had higher salaries (£22,440) than those who were not mobile (£21,800). In addition, 88% of full-time jobs attained by STEM graduates who were mobile were in the higher three levels ('managers and senior officials', 'professional roles' and 'associate professional and technical occupations') compared with 82% of graduates who weren't mobile. Unemployment was also lower among STEM graduates who were mobile (5.2%) compared to those who were not (6.1%[37]).

STEM graduates who were mobile who had studied in Europe had a slightly higher average salary: £22,190 versus £21,800 among the non-mobile cohort.

When only considering STEM students who achieved 1st Class degrees, 3.1% of mobile STEM students were unemployed whereas 3.6% of non-mobile students were unemployed.

Unemployment rate

	Mobile	Not Mobile
All STEM subjects	5.2%	6.1%
Computer Science	6.8%	12.3%
Engineering Technology	4.1%	7.8%

% employed in SOC 1 – 3[38]

	Mobile	Not Mobile
All STEM subjects	88%	82%
Computer Science	100%	86%
Engineering Technology	94%	88%

Average salary

	Mobile	Not Mobile
All STEM subjects	£22,440	£21,800
Computer Science	£25,260	£22,690
Engineering Technology	£26,070	£24,530

% with a 1st/2:1

	Mobile	Not Mobile
All STEM subjects	83%	64%
Computer Science	81%	67%
Engineering Technology	86%	71%

Conclusion

This report provides a snapshot of UK-domiciled mobile undergraduate students who completed their studies in 2012/13 and compares their academic and employment outcomes (including sector of employment, role and salary) with those of their non-mobile peers. In doing so it describes outcomes by student profile, taking ethnic and socioeconomic background, gender and academic field of study into consideration. This report establishes the first national baseline which will be compared with future data to establish trends in the profiles and outcomes of mobile students. Identifying trends and relationships between outward mobility and outcomes will enhance policy makers' and institutions' understanding of the benefits of international experience.

Through this useful exercise we have appreciated that additional data would allow us to perform further tests for statistical significance. In particular, it would be helpful to use more comprehensive, additional data to identify whether mobile disadvantaged, STEM and non-language students have higher outcomes than their non-mobile peers at least in part due to having spent time abroad. Data we have considered suggests that mobile students from disadvantaged backgrounds and STEM students have better outcomes, considering some of their subsequent salaries, academic attainment as well as their employment status compared to their non-mobile peers. Monitoring trends within these groups in particular will be critical to determine the relationship between mobility and their outcomes. Indeed, it would be useful to be able to track data longitudinally, to determine whether modest differences in the short term lead to a significant difference in the medium to long term. For example, it would be particularly interesting to compare the findings in this report with the results of the DLHE Longitudinal survey which will capture the 2012/13 graduating cohort's outcomes three years after graduation.

While language, White and advantaged students made up the largest proportion of mobile students, there are signs that many higher education institutions are successfully increasing the number and proportion of mobile students from underrepresented groups. It is the annual growth rate of these groups' participation in mobility opportunities, however, which stands to increase if institutions continue to support them in overcoming real and perceived barriers of student mobility, including concerns about finance, degree length and language requirements[39]. Monitoring underrepresented students' participation in mobility over time will allow us to ascertain their behaviours and how they stand to benefit from being mobile.

A significant contributing factor to recent growth in UK student mobility are increases in non-language students spending time abroad, complementing the relatively static number of language students going abroad year-on-year. There are several possible explanations for why the proportion of non-language students spending time abroad is increasing. In part, this may be due to more students benefitting from the increasing availability of English-taught courses in non-Anglophone countries[40]. These students may be motivated to learn the local language, before departure or during their placement. More generally, increases in the number of students taking optional language classes through institutions' language centres are also a likely contributing factor to growth in student mobility[41]. Further increasing non-language student mobility is critical to the success of the UK Strategy for Outward Mobility. Understanding these students' behaviours, as well as their respective outcomes will help institutions to increase the number of their students spending time abroad.

In terms of destination, the majority of mobile students between 2009/10 and 2012/13 went to European destinations, but institutions also want to increase the number of mobile students spending time outside of Europe. The lack of funding opportunities for students wishing to study outside of Europe, a disparity in funding available for some Erasmus and non-Erasmus opportunities and a lack of awareness of overseas government-funded opportunities[42] may limit the number of students attracted to such opportunities. The Go International website[43] aims to support institutions to overcome these barriers by coordinating information on mobility opportunities worldwide, as well as latest research and data, case studies of student and staff mobility, resources which various audiences can access to support their activities in increasing student mobility and future capacity building events.

This report highlights many areas where mobile students experienced better outcomes than their non-mobile peers. As noted in the introduction, whilst the existing data can enable us to verify whether this is directly related to being mobile to some extent, access to new datasets would allow us to more confidently identify causal relationships between student mobility and their outcomes. A variety of factors will influence employment outcomes of graduates; it is difficult to determine the relationship between these and international experience from the available data. The lack of current data on the relationship between mobility, rate of employment, sector of employment and type of role means that this report forms the basis for identifying trends and relationships in future.

Evidencing the relationship between mobility and academic attainment is difficult to do. Although we have shown that across all disciplines a higher proportion of mobile students gain 1st Class degrees compared with the average, we have not been able to show correlation. Additional data would allow us to perform statistical significance studies to show the extent to which mobility influences students' likelihood of achieving a 1st. The proportion of mobile students achieving 1sts and 2.is is not surprising due to mobility programmes generally being competitive and academic performance often determining who can undertake a placement abroad. It would therefore also be helpful to collect data from institutions on students' academic performance at the time of selection in percentage terms. This would give us a clear base to which we could compare final outcomes. This could be similar to the GLOSSARI study[44], which showed that mobile students studying in institutions in the US state of Georgia achieved higher results irrespective of their attainment at the point of beginning their mobility period. To demonstrate this, UK institutions would have to compare individual students' academic performance before going abroad with their performance upon graduation, a practice which is not currently widespread[45]. In the longer-term it would be helpful if institutions collected academic attainment information from students by discipline, in percentage terms, at the point of being offered a mobility placement and when they complete their studies. Understanding this relationship in the UK context could be used to motivate more students from underrepresented disciplines to take up mobility opportunities.

It is also difficult to discern the extent to which mobile students' interests and ambitions change as a result of spending time abroad. It would be helpful to understand this to identify whether studying abroad increases the likelihood of students working in particular sectors. The current data suggests that the experience of studying abroad may better prepare mobile students to work in six sectors outlined in Section 4 regardless of subject area. It would be useful to explore further whether employers in these sectors employ a high proportion of graduates who were mobile specifically because of the skills these graduates gained abroad.

The present analysis shows that in many cases graduates who had been mobile earn slightly more than those who had not been mobile, for example those who work in the UK. Although in most cases the salary differences are slight, they could be signals for greater divergence in the future. Measuring this divergence over time, particularly tracking students by profession and sector of employment, would help to outline the extent to which mobility influences earning potential.

The datasets used in this report have been used to fulfil the first step in identifying the relationships between mobility and outcomes of a graduating cohort. With reference to those who graduated in 2012/13, these datasets have allowed us to identify who went abroad, where they went and what their outcomes were. Following an intervention from the UK Higher Education International Unit, HESA will report a wider range of mobilities from 2013/14, including those with shorter durations. The Go International programme should therefore have more comprehensive data to create a more complete picture of the trends of outward student mobility in the future. With this new data, we will compare successive cohorts' outcomes and perform deeper statistical significance studies to identify the strength of relationships between outcomes and mobility. This will enable the Go International programme, the sector and policy makers to identify both the role of mobility in determining divergent outcomes for different groups of students and trends in the type of students that go abroad as well as where they go. Further research would support institutions in increasing the number of mobile UK-domiciled students through demonstrating the benefits of mobility.

International experience is an asset which should be available to all students, not only those who make up the largest proportion of mobile students, namely language, socioeconomically advantaged and White students. Increasing outward student mobility from the UK benefits the individual, institutions and the economy[45] but depends on growth in underrepresented student participation by subject and identity.

This report is an important step towards achieving the objectives of the UK Strategy for Outward Mobility and supports institutions' ambitions to increase the number of students going abroad.

Notes and References

1. For the purposes of this report, the data collected includes graduates who completed their studies in the summer of 2013.

2. *UK Strategy for Outward Mobility*. UK HE International Unit, December 2013.

3. This is not statistically significant in this dataset.

4. The gender split for all mobile language students was 70% female to 30% male while for mobile non-language students it was 59% female to 41% male.

5. In cases where the parents or guardians were retired at the time of application, a student's socioeconomic background is determined by their last occupation.

6. A term widely used by HEFCE in its publications.

7. *Number of out-bound Erasmus students by country*. European Commission July 2014.

8. *Further up the Road. Six years of growth for outward student mobility (from 2007/8 to 2012/13)*. Joan-Anton Carbonell, November 2014.

9. UK Labour Market. Office for National Statistics, October 2014.

10. *The Erasmus impact Study*. European Commission, September 2014.

11. *Recommendations to support UK Outward Student Mobility*. UK Higher Education International Unit, March 2012.

12. The Erasmus Impact Study. European Commission, September 2014.

13. Changing the Pace: CBI/Pearson Education and Skills survey 2013. CBI, 2013

14. Counted as at least three consecutive months spent abroad.

15. This includes 'European languages, literature and related subjects' and 'Eastern, Asiatic, African, American and Australasian languages, literature and related subjects'.

16. The study of law as defined in particular geographic regions.

17. *International Student Mobility Literature Review*. HEFCE, 2010.

18. *Attainment in Higher Education: Erasmus and Placement Students*. HEFCE, 2009.

19. According to DLHE data.

20. It should be noted that HESA also collects information about students who identify as 'other'. In this study, the number of UK-domiciled 'other' students in the 2012/13 graduating cohort was 16. None of these spent time abroad during their studies.

21. Used when a student indicates their ethnicity as something not included in the available coding frame.

22. Academic Cooperation Association publication: *English-Taught Programmes in European Higher Education. The State of Play in 2014*. Bernd Wächter, Friedhelm Maiworm (eds). This is also evidenced by the growth in English language Masters courses in Europe: www.studyportals.eu/research/etp-in-Europe/

23. Students participating in Erasmus programmes.

24. This excludes 'Medicine and dentistry'; 'Veterinary Sciences, Agriculture and related subjects' and 'Technologies' which had fewer than 20 mobile students between 2009/10 and 2012/13.

25. This is not statistically significant in this dataset.

26. This is not statistically significant in this dataset.

27. This is not statistically significant in this dataset.

28. This is not statistically significant in this dataset.

29. HESA categorises graduates' occupations into 9 categories or Standard Occupational Classifications (SOC codes): 'Managers and senior officials'; 'Professional occupations'; 'Associate professional and technical occupations'; 'Administrative and secretarial occupations'; 'Skilled trades occupations'; 'Personal service occupations'; 'Sales and customer service occupations'; 'Process, plant and machine operatives'; 'Elementary occupations'. For more detail see www.hesa.ac.uk/content/view/2521.

30. Standard Occupational Classifications of those in full-time paid employment, as defined by HESA.

31. This is statistically significant in this dataset.

32. Figures without brackets represent the proportion of graduates who were mobile working in the named sectors in the UK and overseas.

33. Figures in brackets represent the proportion of graduates who were mobile working in the named sectors in the UK only.

34. Figures without brackets represent the salaries of graduates who were mobile working in the named sectors in the UK and overseas.

35. Figures in brackets represent the salaries of graduates who were mobile working in the UK only.

36. *Tracking International Graduate Outcomes 2011*. BIS, 2011.

37. This is not statistically significant in this dataset.

38. Of those in full-time employment, including those where salary details were not provided/applicable. This refers to managers and senior officials, professional roles and associate professional and technical occupations as defined by HESA.

39. Recommendations to support UK Outward Student Mobility. UK Higher Education International Unit, March 2012.

40. Academic Cooperation Association publication: *English-Taught Programmes in European Higher Education. The State of Play in 2014*. Bernd Wächter, Friedhelm Maiworm (eds).

41. UCML-AULC survey of Institution-Wide Language Provision in universities in the UK (2013-2014).

42. Many of which can be found on the Go International website.

43. www.go.international.ac.uk

44. The GLOSSARI Project: Initial Findings from a System-Wide Research Initiative on Study Abroad Learning Outcomes. Richard Sutton and Donald Rubin, June 2010.

45. Academic perspectives on the outcomes of outward student mobility. Kath Bridger, January 2015.

46. *International student mobility literature review*. Russell King, Allan Findlay and Jill Ahrens, November 2010.

go international

All you need to know about study and work abroad