

The University of Edinburgh Careers Service

First destinations of graduates from under-represented groups:

An analysis of University of Edinburgh graduates 2007/8-2008/9

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1. Introduction to the project

The Destination of Leavers of Higher Education (DLHE) survey is conducted each year on behalf of the Higher Education Statistics Agency (HESA). The survey collects information about the activities of graduates six months after their graduation. This includes work, further study, volunteering, job seeking or other activities. If graduates are employed, the survey gathers information about the type of work the graduate is doing, about the employer and how the graduate found their job. For graduates engaged in further study, the survey asks for a description of the course, the institution and their motivations for further study. This report compares the first destinations of students who entered Edinburgh University via a Widening Participation (WP) route and those who did not.

This report is presented in five sections:

- Section 1 provides an introduction, the background and context for the research
- Section 2 is the analysis and reporting of first destinations of first degree Group U and Group R graduates (see below for an explanation of these designations) of the University for the years 2007/08 and 2008/09
- **Section 3** compares this with the results from the 2008 pilot project which covered the years 2004/05-2006/07. (**Appendix 2** contains the executive summary from the pilot project report.)
- In the pilot project, it was observed that a number of students progressed to further study at the University of Edinburgh as their first destination. This enabled the destinations of these graduates *after* their course of further study to be captured and analysed. **Section 4** is a summary of these findings.
- Section 5 comprises the discussion and conclusions.

Graduates who have entered via widening participation are considered to be <u>under</u>-represented at the university and are referred to as 'Group U' throughout this report, while all other graduates more frequently <u>represented</u> are referred to as 'Group R'.

Widening Participation is a term generally used to define a category of students who enter university via routes aimed at expanding access to groups who are generally under-represented at institutions of Higher Education. These include individuals who may have come from schools with a low rate of university participation, or who come from families with little or no experience of university participation. For the purposes of the initial analysis of this report, WP graduates are disaggregated into the six main routes by which they entered the University of Edinburgh:

- Band D and E schools (i.e., schools with a record of low HE participation)
- Lothian Equal Access Programme for Schools (LEAPS)
- Scottish Wider Access Programme for Schools (SWAP)
- Pathways to the Professions (Pathways)
- Credit for Entry
- Access Bursary

By comparing the destinations of Group U and Group R graduates, the report builds on previous academic work, which has shown that the two groups differ in the characteristics of their destinations once they leave higher education.

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The numbers in this investigation do not necessarily reflect the destinations of all University of Edinburgh students who might potentially be categorised as Group U. Some of these groups will be discussed in the review of literature at the end of the report. There are several reasons for the partial representation of Group U graduates in this analysis:

- Students who did not enter via any of the six previously mentioned WP routes are not included within the Group U category
- Some students may be on track to graduate later than anticipated due to interrupted studies or changes in course
- Social groups such as certain ethnic groups or disabled students are not specifically addressed in this study

2. First destinations of Group U and Group R graduates 2007/08 -2008/09

2.1 Executive summary

- Despite concerns about the potential impact of the recession, the proportions of both groups entering work (compared with those seeking employment) continue to be robust.
- Likewise, in terms of the quality of work, the vast majority of both groups of graduates secured graduate-level employment.
- Slightly fewer Group R than Group U graduates entered work while slightly fewer Group U than Group R graduates achieved graduate level employment, but there are no dramatic differences apparent between the two groups of graduates.
- The results in **Section 2.8** highlight the role that differences in geographical mobility between the two groups may play in securing graduate level employment. Increased geographical mobility after graduation might be beneficial to both groups in obtaining first destination graduate level employment.
- In terms of how they found their jobs, intriguing patterns emerge between the two groups
 of graduates, especially when quality of work is taken into consideration. Perhaps
 surprisingly, given commonly held beliefs about non-traditional students, higher
 percentages of Group U graduates reported 'networking' as the means by which they found
 their job.
- Although a smaller proportion of Group R graduates reported using networking, they were
 more successful in using this approach to gain *graduate* level employment compared with
 Group U.
- For both groups, reactive approaches to job-hunting (e.g., press adverts, employers' websites, etc.) seem to have been a more successful means of achieving graduate level employment six months after graduation.
- While there is a slight decrease in the proportions of Group U graduates entering work
 and securing graduate level employment since the pilot project, Section 3 reveals that
 there are no dramatic changes or differences between the two groups. This suggests that,
 as yet, neither group has been especially vulnerable to the present challenging labour
 market conditions.
- Since the pilot, Group U graduates have become better represented in more diverse occupational areas including Law; Business and Finance; Advertising, Sales and Marketing.
- Of those graduates from the pilot project who went on to further study, over three quarters entered work, with 89% working in graduate level occupations. This may partly be explained by the numbers undertaking vocational qualifications such as Law and Education, but could also reflect a 'postgraduate premium', discussed in **Section 4**.
- Appendix 4 illustrates the diverse employers, job titles and further study institutions of Group U graduates.

This rest of this section summarises the findings of an analysis of two years DLHE survey data, 2007/08 and 2008/09. For this period, 975 Group U and 5793 Group R graduates were surveyed. The response rate was 769 (78.9%) for Group U and 4611 (79.6%) for Group R graduates (Table 1). Group U graduates made up 14.3% of the total respondent population for the survey years.

	Total Graduates	Total Respondents	Respondents as Percentage of Total Group Graduates
U Group Students	975	769	78.9%
R Group Students	5793	4611	79.6%

Table 1. Total Group U and R Graduates and Respondents for 2007/08 and 2008/09.

2.2. First Destinations – Group U graduates only

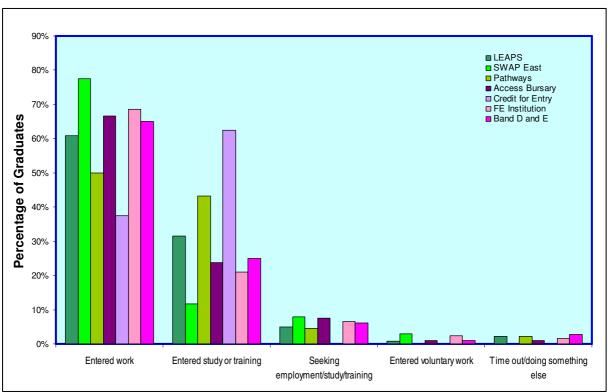


Figure 1: First destinations of Group U graduates by university entry route.

- Aside from Credit for Entry, the majority of graduates from the six other entry routes were known to have entered work
- SWAP East had the greatest proportion of those known to have entered work (77.5%)
- Only 37.5% Credit for Entry graduates were known to have entered work, while 62.5% of them went on to further study or training.

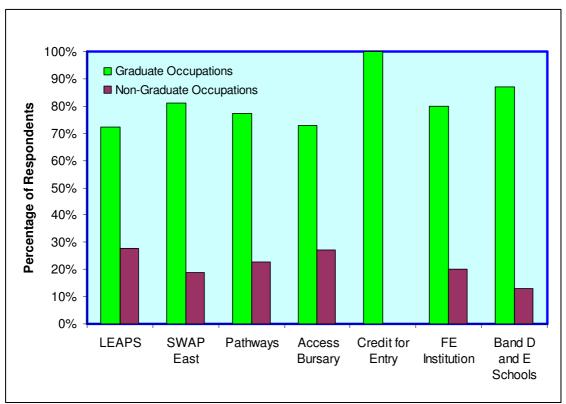


Figure 2: Graduate v. non-graduate level employment by university entry route

- All Credit for Entry graduates entered into Graduate occupations but Credit for Entry also had the lowest proportion of graduates who entered into work.
- For all the other entry routes more than 70% of graduates entered into work.

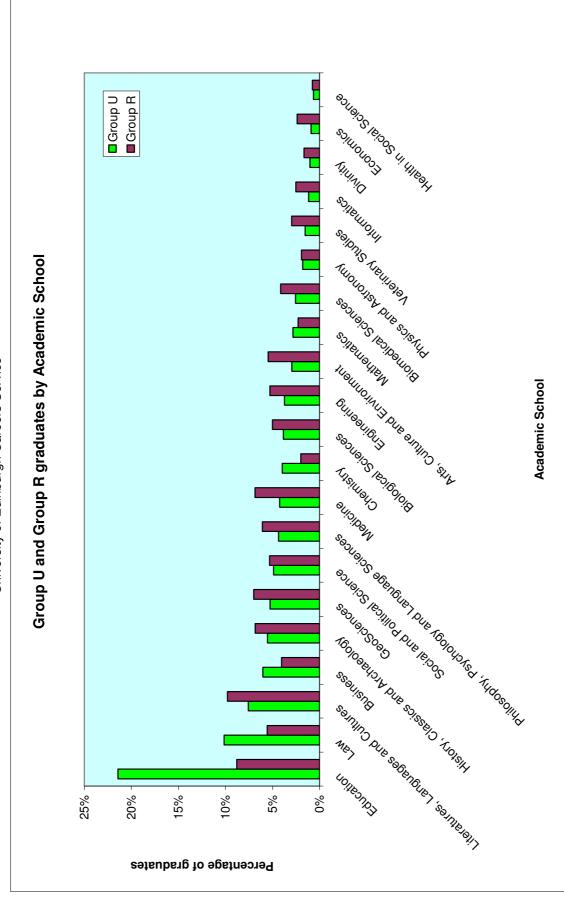


Figure 3. Group U and Group R graduates by Academic School.

2.3 What subjects were they studying?

Vocational subjects are often perceived by students entering university as 'safe' employment options with public sector roles such as teaching, medicine and nursing seen as particularly 'recession proof' (HECSU/UUK, 2010). Although investigation of the impact of subject choice is outwith the scope of this project, the significance of this should be borne in mind. This is particularly with regard to the occupations and sectors in which students might be more inclined to seek employment after graduation. It also raises questions about the potential accuracy of their perceptions and beliefs about 'safe' subject choices and 'safe' areas of employment - and the sources of information which shape those perceptions and beliefs.

- Figure 3 shows that over one fifth (21.4%) of Group U students graduated from the School of Education nearly two and a half times the proportion of Group R students undertaking a first degree in Education (8.8%).
- Ten percent of Group U students graduated with a Law degree, nearly double the proportion of Group R students (5.6%).
- Other Academic Schools with higher proportions of Group U students compared to Group R include:

Business: Group U (6.0%), Group R (4.0%)

o Chemistry: Group U (4.0%), Group R (2.0%)

o Mathematics: Group U (2.8%), Group R (2.3%)

2.4 What were they doing six months after graduation?

The recession that began in 2007 has created a challenging job market for graduates. While overall the percentage of graduates in the UK reporting being employed six months after graduation has declined by 4.8% (UUK, 2010), Edinburgh graduates have continued to perform well in the move from university into employment. Importantly for this project, there is no discernible significant difference between the proportions of Group U and Group R graduates entering work six months after graduation. This section also looks at what happens when School of Education graduates are removed from the analysis. Newly qualified teachers are guaranteed a probation year in Scotland, meaning most of these graduates will find themselves placed in a graduate level job.

• Figure 4 illustrates that higher proportions of Group U (64.1%) than Group R (61.4%) graduates entered employment. A recent advertisement for a PhD student to study the effects of the recession on the employment prospects of Group U-type graduates indicates that, some believe that it may be having a disproportionate effect on them (www.findaphd.com/search/ProjectDetails.aspx?PJID=27128 – accessed May 2011). The results of this survey indicate that the recession has not yet had a negative impact on the first destinations of graduates from under represented groups. Future research might reveal a lagged response.

^{*} NB: Up until the beginning of 2009, at least, some areas of public sector recruitment remained buoyant, particularly health, social and welfare and education-related occupations (WDGD, 2009). By 2010, increases in those obtaining work in health, social and welfare professions were more modest while those in education-related occupations decreased (WDGD, 2010).

- A slightly higher percentage of Group U graduates (25.2%) reported further study as their first destination, compared with Group R graduates (23.6%). The implications of this difference will be discussed later in the study in terms of Wakeling's (2005, 2010) work on the progression into further study of graduates from lower-socioeconomic groups.
- When further study destinations are controlled for Diplomas in Legal Practice (Dip LP), the proportion of Group U graduates entering further study declines to 20.1% and that of Group R graduates to 21.3%. A Dip LP is a requirement graduates must meet in order to qualify as a solicitor. The relatively higher proportion of Group U graduates entering further study, and largely accounted for by Dip LP, implies the success of programmes like Pathways to Professions in attracting students to careers in the legal professions.

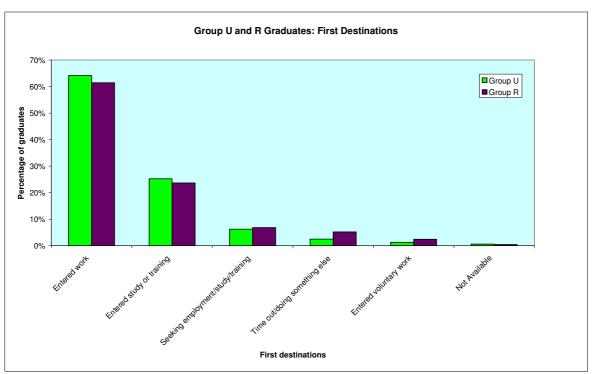


Figure 4: First destinations of Group U and Group R graduates.

Table 2 shows the character and pattern of first destinations changes markedly when graduates from the School of Education are removed.

First destination	Group U	Group R
Entered work	55.1%	59.3%
Entered study or training	31.4%	25.1%
Seeking		
employment/study/training	8.0%	7.2%
Time out/doing something else	3.2%	5.3%
Entered voluntary work	1.7%	2.6%
Not Available	0.7%	0.5%

Table 2. First destinations of Group U and Group R with School of Education graduates removed.

• The relative percentage of Group U graduate entering work is reduced and is now less than that of Group R. However, the good news is that most of the difference is accounted for by "further study" as a Group U destination, rather than "seeking" opportunities.

2.5 What was the quality of their employment?

Broadly speaking, graduate-level employment is work that requires at least a first degree.

- As Figure 5 shows, there are no dramatic differences in the quality of employment between Group U with 71.4% in graduate occupations and Group R with 72.6% in graduate level work.
- Nationally, for the 2008 graduating cohort, 65.7% of graduates were in graduate level work (WDGD, 2010) and for 2009 that percentage was 62.4% (WDGD, 2011) indicating that University of Edinburgh graduates are performing better than graduates nationally in this respect.

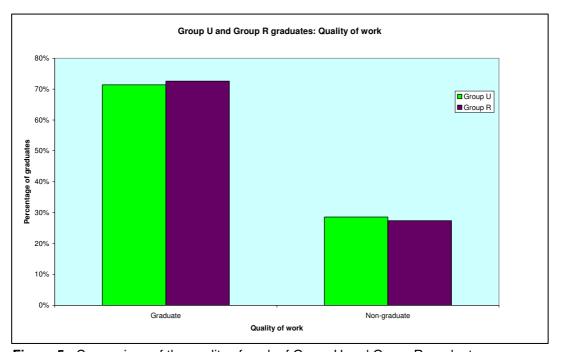


Figure 5: Comparison of the quality of work of Group U and Group R graduates.

Quality of work	Group U	Group R
Graduate Occupations	63.3%	70.8%
Non-graduate Occupations	36.7%	29.2%

Table 3. First destinations of Group U and Group R with School of Education graduates removed.

Table 3 shows the quality of work with School of Education graduates removed. While
there is little change for Group R graduates, the percentage of Group U graduates
obtaining graduate level work has decreass by 8.1%.

2.6 What type of work did they do?

Figure 6 compares the types of graduate-level work reported by Group U and Group R graduates. Some notable features emerge from the data:

- Over twice the number of Group U graduates (40.2%) entered education professions as Group R graduates (15.8%). The School of Education is the largest academic school in the University, so it is not surprising to see a very high percentage of University Edinburgh graduates entering education professions. It is the contrast between Group U and Group R graduates doing so which is so noticeable.
- In addition to School of Education graduates entering work as education professionals, a handful of Group U graduates from a range of other programmes also reported doing so: Fine Art, Japanese, Chemistry, Biological Sciences, Law, Music and Architectural Design. In the main, these graduates were working as TEFL teachers or private music teachers.
- Social and welfare professionals is another occupational group where a much higher percentage of Group U (6.3%) graduates reported working, compared to Group R (2.7%).
 Forty-five percent of the 22 Group U graduates were Social Work graduates. Just over a third (36.3%) were School of Education graduates from programmes such as Childhood Studies, Community Education and Applied Sports Science.

By way of comparison nationally, only 7.1% of graduates in 2008/09 reported entering education-related professions and 4.7% social and welfare professionals (WDGD, 2010). While the proportions of Group U graduates entering health and associated professions (13.1%) is slightly below the national percentage of 14.6%, at 25.6.% Group R graduates are considerably above it (WDGD, 2010).

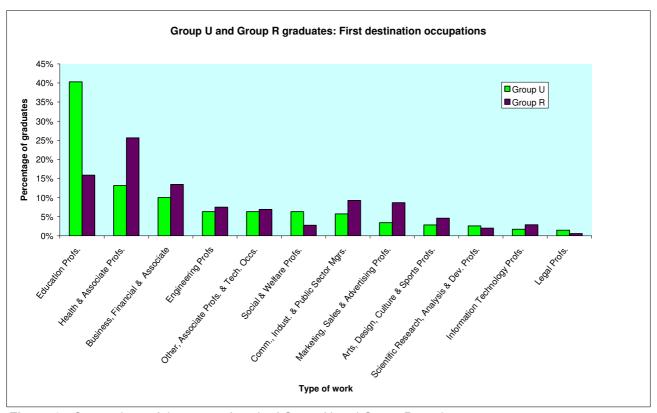


Figure 6: Comparison of the types of work of Group U and Group R graduates.

Type of work	Group U	Group R
Health Professionals and Associate Professionals	22.01%	30.45%
Business and Financial Professionals and Associate Professionals	16.75%	15.98%
Engineering Professionals	10.53%	8.89%
Other Professionals, Associate Professional and Technical		
Occupations	10.53%	8.19%
Social & Welfare Professionals	10.53%	3.25%
Commercial, Industrial and Public Sector Managers	9.57%	10.98%
Marketing, Sales and Advertising Professionals	5.74%	10.28%
Arts, Design, Culture and Sports Professionals	4.78%	5.46%
Scientific Research, Analysis & Development Professionals	4.31%	2.38%
Information Technology Professionals	2.87%	3.43%
Legal Professionals	2.39%	0.70%

Table 4: Comparison of the types of work of Group U and Group R graduates after removing 'Education Professionals'.

Table 4 highlights professional areas where more Group U than Group R graduates were working. With Education removed from the analysis, the differences between the two groups working as Social and Welfare professionals becomes more pronounced.

Differences are reduced in areas such as Commercial, Industrial and Public Sector Managers as well as Business Financial Professionals and, as already noted, Legal Professionals.

2.7 Analyses Based on Academic Colleges

Thus far the analysis has considered the DHLE respondents in terms of the University population as a whole. This section considers the destinations of respondents disaggregated into the three colleges: College of Humanities and Social Sciences, College of Medicine and Veterinary Medicine, and College of Science and Engineering. When looking at the data in more detail, some thought provoking patterns emerge.

2.7.1 College of Humanities and Social Science - employment

- Figure 7 shows that a much higher percentage of Group U (65.2%) than Group R (58.4%) graduates entered work. While higher percentages of Group R did report seeking employment, an intriguing difference are the greater numbers of this group also reporting "taking time out" (possibly to travel) or volunteering.
- Of those who entered work and whose occupations are known, Figure 8 shows that Group U graduates outperformed Group R graduates in the quality of employment, with 70.1% of Group U reporting graduate level jobs compared with just 66.1% of Group R.
- In terms of type of work, it is perhaps noteworthy that nearly twice the amount of Group R (9.4%) graduates entered work as commercial, industrial or public sector managers compared with Group U (4.9%) (Figure 9).

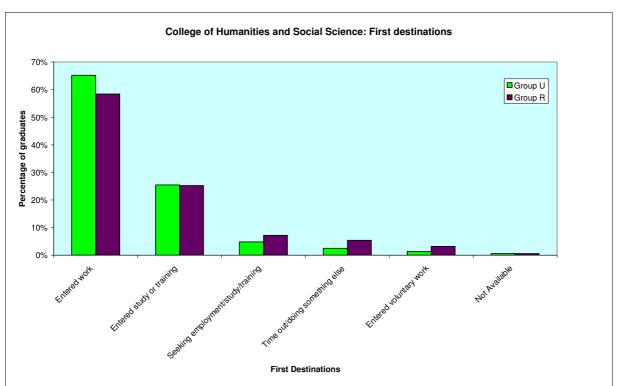


Figure 7: First destinations of the Group U and Group R graduates, College of Humanities and Social Science.

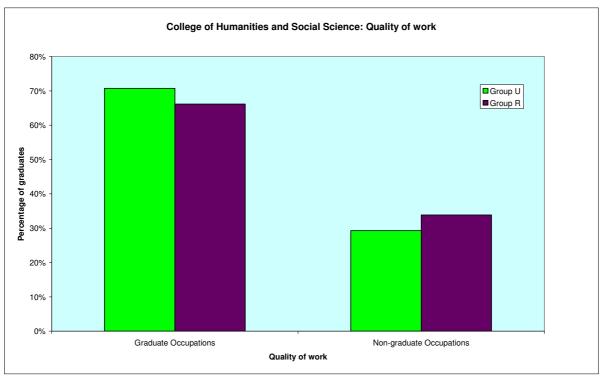


Figure 8: Quality of work of Group U and Group R graduates, College of Humanities and Social Science

• The picture changes when destinations are controlled for graduates of the Schools of Education (Table 5): more Group R graduates enter work compared to Group U, and the percentage of Group U doing so drops by 14.8%. The percentages of Group U graduates seeking employment or other opportunities rises substantially from 4.8% to 7.1%

First destinations	Group U	Group R
Entered work	50.4%	54.2%
Entered study or training	36.2%	28.1%
Seeking employment/study/training	7.1%	7.9%
Time out/doing something else	3.7%	5.6%
Entered voluntary work	2.0%	3.6%
Not Available	0.6%	0.6%

Table 5. First destinations of Group U and Group R graduates, with the School of Education removed.

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 Similarly, when looking at the quality of work (Table 6), the exclusion of School of Education graduates shows that a relatively higher percentage of Group R graduates enter graduate level work.

Quality of work	Group U	Group R
Graduate Occupations	54.8%	61.2%
Non-graduate Occupations	45.2%	38.8%

Table 6. Quality of work Group U and Group R graduates, with the School of Education removed.

• The Teacher Induction Scheme (TIS) guarantees one year's employment for graduates, enabling them to complete their compulsory probation year for full registration with the General Teaching Council of Scotland. It would be instructive to know what happens to graduates on completion of the TIS. The implications of this are addressed more fully in the Section 5, Discussion and Conclusions.

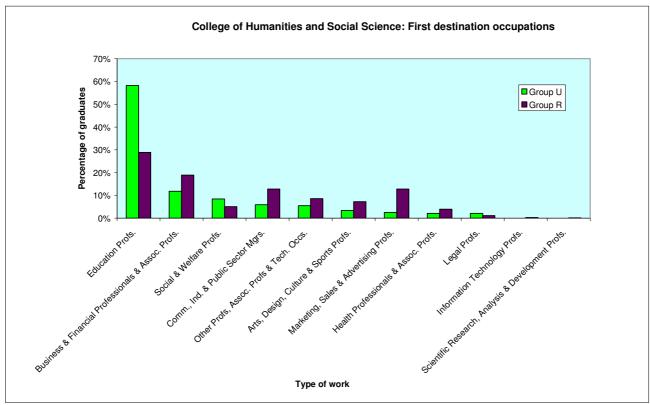


Figure 9: Comparison of types of work, Group U and Group R graduates, College of Humanities and Social Science.

Table 7 shows that, when the types of work are controlled for Education, proportionally more Group U graduates took on roles in the Business and Financial Professions compared with Group R. The difference between the two groups of the percentages entering work as Legal Professionals again becomes more apparent.

Type of Work	Group U	Group R
Business & Financial Profs. & Assoc. Profs.	28.28%	26.58%
Social & Welfare Profs.	20.20%	7.12%
Comm., Ind. & Public Sector Mgrs.	14.14%	18.08%
Other Profs, Assoc. Profs & Tech. Occs.	13.13%	12.05%
Arts, Design, Culture & Sports Profs.	8.08%	10.14%
Marketing, Sales & Advertising Profs.	6.06%	18.08%
Health Professionals & Assoc. Profs.	5.05%	5.62%
Legal Profs.	5.05%	1.64%
Information Technology Profs.	0.00%	0.41%
Scientific Research, Analysis & Dev. Profs.	0.00%	0.27%

Table 7: Comparison of the types of work of Group U and Group R graduates after removing 'Education Professionals'.

2.7.2 College of Science and Engineering - employment

- Proportionally, more Group U graduates than Group R reported entering work or further study 6 months after graduation. The percentage of Group U graduates reporting that they were still seeking work was higher but only by a very small percentage (Figure 10),
- Nearly six times as many Group R graduates reported that they were "taking time out or doing something else" (cf. Figure 7). Could this reflect an ability (both financially and dispositionally) of Group R graduates using travel and other activities to delay entry into the labour market? Or more positively, does it show a certain amount of self-awareness with graduates seeking to enhance their skills and experience before entering the labour market?
- Fewer Group U (65.1%) graduates reported being in graduate level work compared with Group R (70.4%) (Figure 11).
- As Engineering is the largest school in the College, it is not surprising that the greatest percentages in both groups reported entering work as Engineering Professionals. Although there are proportionally fewer Group U graduates in Engineering disciplines, a much higher percentage of these graduates reported working as Engineering Professionals 85.7% compared to 74.3% of Group R within the discipline and as Figure 12 shows 29.5% of Group U compared with 27.1% of Group R across the College.
- Geography, Mathematics and Zoology graduates showed the greatest inclination to be under-employed 6 months after graduation. Are these graduates less aware of the transferable skills in their degrees? Do they have unrealistic expectations of the labour market? Are they not, or perceive themselves, not to be, geographically mobile? Are they aware that the labour market can be spatially variable? Do they lack a plan or the motivation to make one? Or are they simply taking time out to consider their options? These particular graduates highlight the complicated nature of causality in terms of graduate destinations and how best to approach the difficult issue of graduate underemployment.

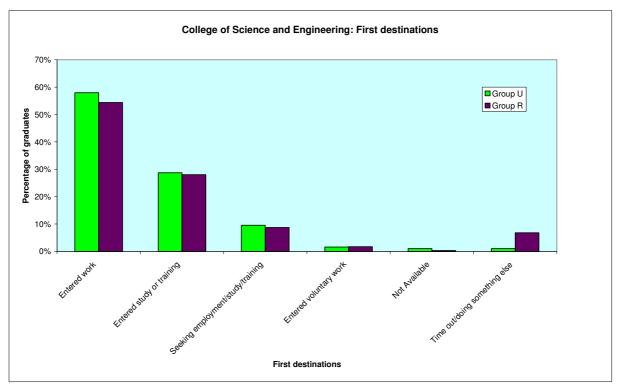


Figure 10: First destinations of the Group U and Group R graduates, College of Science and Engineering

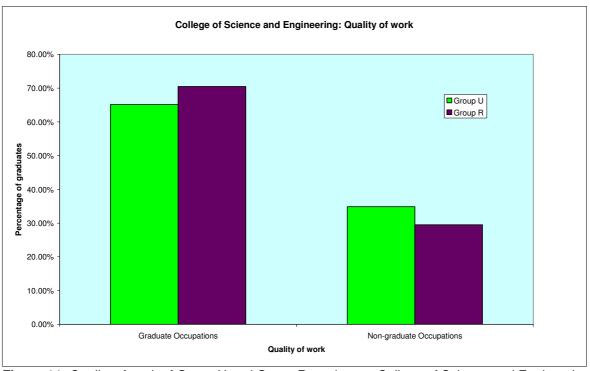


Figure 11: Quality of work of Group U and Group R graduates, College of Science and Engineering

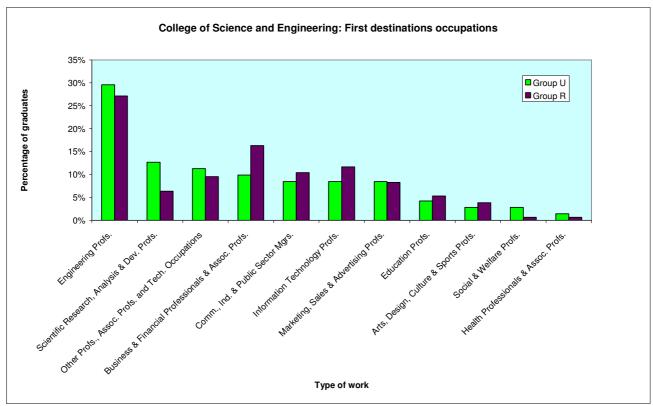


Figure 12: Comparison of the types of work of Group U and Group R graduates, College of Science and Engineering

2.7.3 College of Medicine and Veterinary Medicine - employment

Traditionally, most of these graduates will go into graduate employment because of the vocational nature of their courses of study. However, there may be small numbers each year that may choose not to pursue a career in Medicine or Veterinary Medicine or graduate with poor degree results which prevent them from continuing.

- Although the difference in percentages of those seeking employment between Group U and Group R seem significant as seen in Figure 13, the numbers involved are quite small and are mainly confined to graduates of Biological Sciences sub-disciplines (e.g., neuroscience, medical biology, etc.).
- Figure 14 shows that there is a negligible difference in the quality of work with 91.9% of Group U graduates and 91.3% Group R graduate obtaining graduate level work.
- Figure 15 shows that 97.6% of Group U graduates entered work as health and associated professionals compared with 92.4% of Group R.
- Almost no Group U graduates entered work outside of the Health Professions. Of those Group R graduates who entered work in occupational areas seemingly unrelated to their degrees e.g., Marketing, Sales and Advertising Professionals or Arts, Design, Culture and Sport Professionals. Closer inspection of the data reveals that they were working in organisations where their degree would have been helpful: e.g., medical publishing, life sciences advertising and a pharmaceutical consultancy. Are Group U graduates who might find themselves unwillingly working in non-graduate jobs equally aware of the wider value

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of their degree? Do they know that there are organisations who would value the knowledge Group U graduates gained during their studies because of the medical or life sciences angle to the work these organisations do?

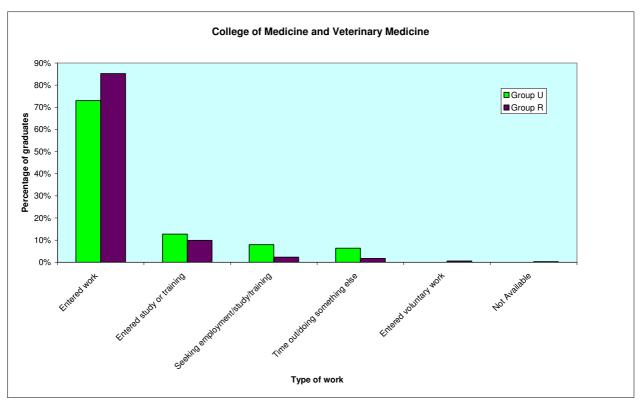


Figure 13: First destinations of the Group U and Group R graduates, College of Medicine and Veterinary Medicine

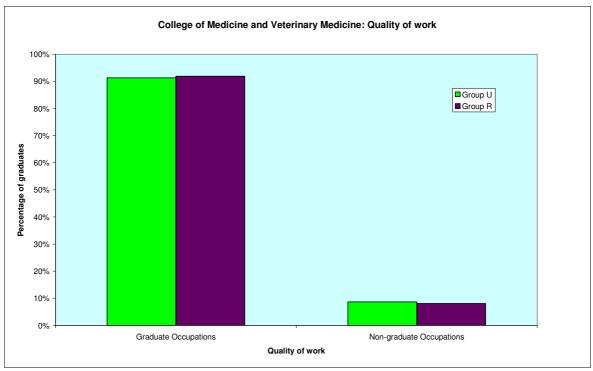


Figure 13: Quality of work of Group U and Group R graduates, College of Medicine and Veterinary Medicine

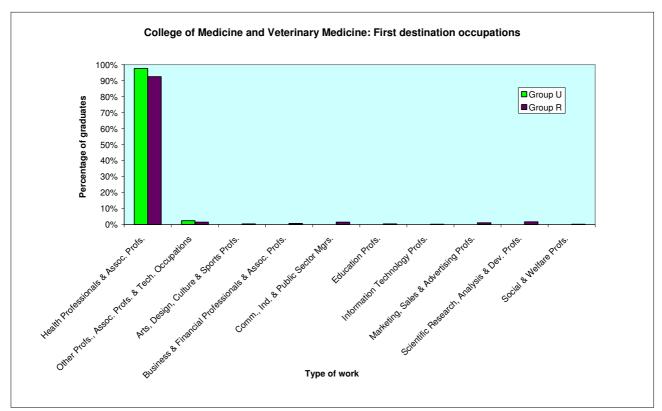


Figure 14: Comparison of the types of work of Group U and Group R graduates, College of Medicine and Veterinary Medicine

2.8 Further study destinations

This section provides an overview of the characteristics of all Group U and R graduates known to have gone into further study. Progression to further study for groups from lower socioeconomic groups is an emerging area of research (*cf.* Wakeling, 2005, 2010). The implications in terms of this report will be discussed at the end of this section and in section 4.

- Of the graduates who reported being on a course of further study 6 months after graduation, the vast majority were in the UK studying for a higher degree, with nearly equal proportions of both groups doing so: 71.2% of Group U and 71.4% of Group R (Figure 15).
- A slightly higher percentage of Group U than Group R graduates reported studying for a teaching qualification; 10.5% vs. 7.4%.
- Looking at types of further study qualifications in more detail, the high proportions of Group U graduates reporting professional diplomas as a further study destination mainly comprise those graduates undertaking a Dip. LP (52.8%) and teacher training; only 8 Group U graduates reported doing other Postgraduate Diplomas or Professional Qualifications unrelated to Law or Education (Figure 16).

 Amongst Group R graduates, there is more diversity in the types of postgraduate diplomas pursued: 31.4% were undertaking a Dip LP but other types of qualification included Diplomas in Architecture, Building Conservation, Journalism, Screenwriting, Child Nursing, Development and Marketing.

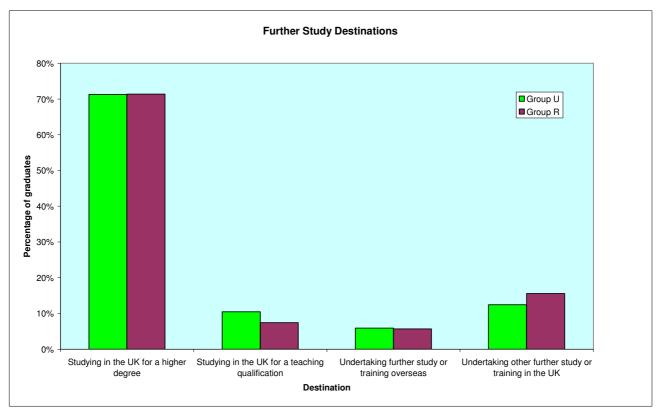


Figure 15: Comparison of Further Study destinations of Group U and Group R graduates

More Group U graduates reported doing higher degrees by research than Group R, 20.1% compared with 17.2%. Wakeling and Kyriacou's (2010) work suggest that undergraduate attendance at a "selective university" has a positive effect on progression to research degrees for Group U type graduates, regardless of any other "background characteristics" (see also Section 4).

Academic College	Group U	Group R
College of Humanities and Social Science	28.21%	15.96%
College of Medicine and Veterinary Medicine	5.13%	13.30%
College of Science and Engineering	66.67%	70.74%

Table 8. Higher degrees by research by Academic College

- Looking at research degrees in more detail, an interesting pattern emerges when broken down by College Only in CHSS did proportionally more Group U students undertake Higher Degrees by Research compared with Group R (Table 8).
- The proportions of the two groups going on to taught degrees are effectively equal within Academic Colleges: 62.0% of Group R and Group U CHSS graduates; 6.5% Group R and 6.9% of Group U CMVM graduates; and 31.5% of Group R and 31.0% of Group U CSE graduates.

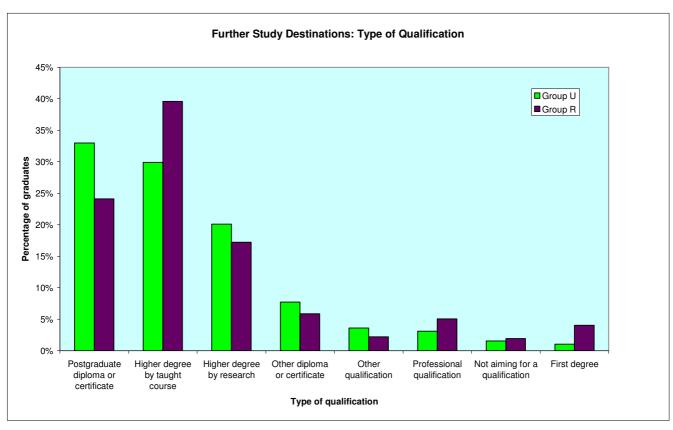


Figure 16: Comparison of Type of Further Study Qualifications sought

- The high percentages of both groups entering taught further study might be significant. For some time it has been noted that the graduate premium is declining and Master's degrees are often perceived, by students, to boost that premium¹ (cf. Elias & Purcell, 2001/03, 2004). In times of recession and challenging labour markets, graduates may choose to delay entering the market through further study in an attempt to 'wait out' the difficult circumstances (although vida infra). They may also be hoping that a further qualification may be an advantage in their later entry to the labour market, since the difficulty in funding taught places usually means it represents a personal investment. The smaller numbers of Group U graduates could reflect a wariness of the financial costs incurred in choosing to undertake a taught Master's and the relative uncertainty of the return on their investment.
- The high proportions of Group U graduates (36.8%) choosing to pursue further study in order to change or improve their career options may indicate an awareness that a degree alone is no longer enough (Figure 17). It also raises questions about graduates' understanding of the potential differences in monetary return on investment amongst different types of postgraduate qualification; and the awareness in the two groups of the imperative for making the most of any university experience, whether undergraduate or postgraduate, through extracurricular activities and work experience.

¹ See GlobalHigherEd's blogpost on the OECD's publication, *Education at A Glance 2008*. http://tinyurl.com/csp3zwa

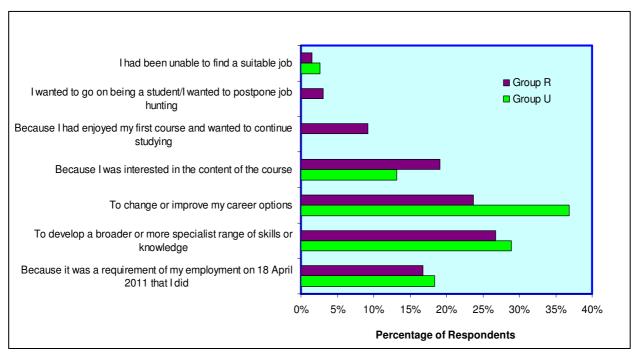


Figure 17: Why Group U and Group R graduates chose further study

- Group R graduates seem to have taken a less pragmatic approach to further study with 28.9% choosing to purse further study in order "to develop a broader or more specialised range of skills or knowledge".
- This interpretation appears to be supported both by the differences between Group R (19.1%) and Group U (13.2%) graduates choosing to pursue graduate studies because they were "interested in the content of the course" and by the complete absence of Group U graduates reporting that "they had enjoyed their first course and wanted to continue" or that they "wanted to go on being a student/wanted to postpone job-hunting".
- Surprisingly few graduates from either group reported using further study as a delaying tactic (Reasons one and two, Figure 17) to enter the job market despite persistent anecdotal claims (particularly in recessionary conditions) which might suggest the opposite (cf. Pollard et al. (2004) who argue that it is rare for individuals to make short-term decisions about further study in response to their labour market experiences).

2.9 Where do graduates go to work?

- Of Group U graduates whose destination is known, the vast majority remained in Scotland after graduation, and in Edinburgh in particular. Fifty-five point five percent of Group U entered work in Edinburgh compared with 39.2% Group R (Figure 18).
- Similarly, Figure 18 shows that a much higher percentage of Group U graduates reporting working elsewhere in Scotland compared to Group R; 33.5% compared with 19.8%.
- Of those who entered work, the geographical distribution between Group R and Group U in non-grad occupations is thought provoking – 73.6% Group U versus 49.3% Group R of those who reported working in non-graduate occupations were doing so in Edinburgh (Table 9). These percentages might be saying different things about each of the different

groups - Group U may be locally domiciled students who, for whatever reason, are not taking advantage of the national labour market. Group R may reflect students domiciled outside of Edinburgh, who really enjoy the city, want to stay for awhile and will take any job that enables them to do so.

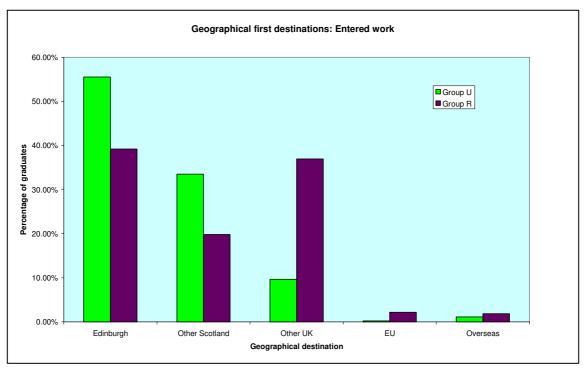


Figure 18. Geographical first destinations of Group U and Group R graduates

Location/non-Grad	Group R	Group U	
Edinburgh	49.3%	73.6%	
Other Scotland	15.1%	17.1%	
Other UK	31.9%	7.8%	
Overseas	2.4%	1.6%	
EU	1.3%	0.0%	

Table 9. Percentage of graduates in non-graduate level work by location.

- The upside of this for Group U graduates is that those in graduate occupations living in Edinburgh outperformed Group R graduates, 48.1% compared with 35.5% (Table 10).
- Overall, those Group U graduates working in graduate jobs tended to be working in Scotland: 88.3% compared with just 57.1.% of Group R.
- In terms of the rest of the UK, 38.8% of Group R graduates were working in graduate level work compared with 10.4% of Group U.

Location/Grad	Group R	Group U	
Edinburgh	35.4%	48.1%	
Other Scotland	21.6%	40.2%	
Other UK	38.8%	10.4%	
Overseas	1.7%	0.9%	
EU	2.5%	0.3%	

Table 10. Percentage of graduates in graduate level work by location

• Focusing on only those graduates living in Edinburgh, where the vast majority of Group U graduates are domiciled, and comparing the quality of work between the two groups, 66.0% of Group R graduates obtained graduate level work compared with 61.5% of Group U (Figure 19). This does not suggest that Group U graduates are at a dramatic disadvantage six months after graduation, whatever their reasons for wanting, or needing, to stay in Edinburgh. Increased geographical mobility in both groups after graduation might enable higher percentages to obtain graduate level work sooner.

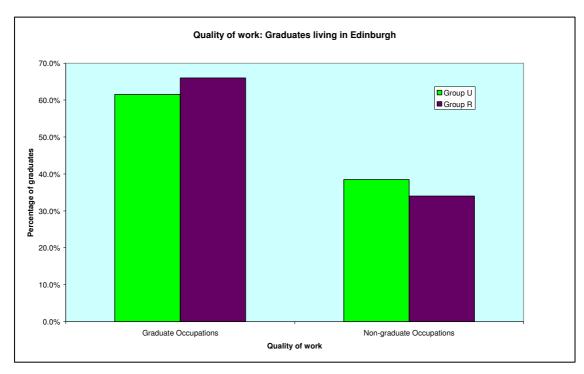


Figure 19. Quality of work of graduates employed in Edinburgh six months after graduation.

2.10 How Graduates Found their Jobs

The highest proportion of Group U graduates (22.8%) found their jobs through having already worked at their place of employment (Figure 20).

- The highest proportion of Group R graduates (26.2%) found their jobs through other means not specified within the survey.
- A similar proportion of Group U and R graduates found their jobs through personal contacts, 16.6% and 15.1%, respectively.

• Looking at differences in how those in graduate occupations *vs.* those in non-graduate occupations found their jobs, intriguing patterns emerge (when controlled for uninsightful responses such as "Don't remember" and "Other") in Figures 21a and b.

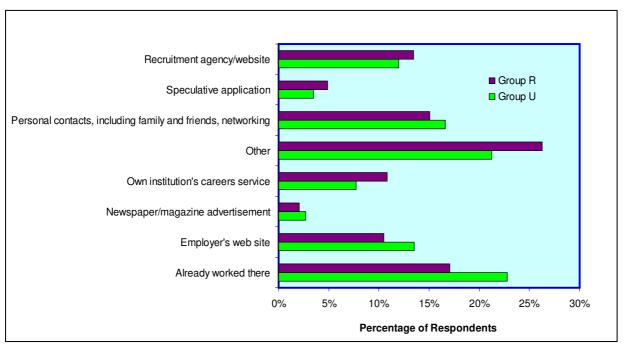


Figure 20. How graduates found their jobs

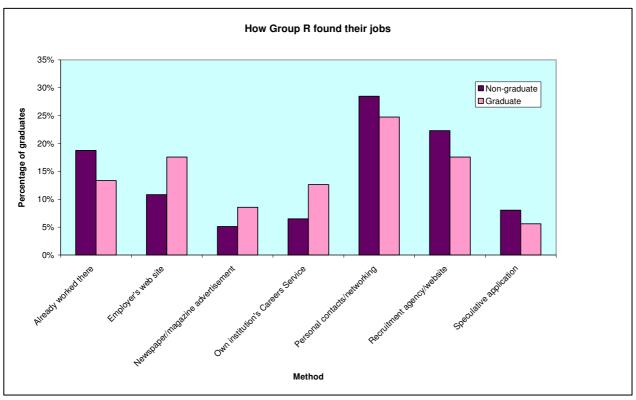


Figure 21a. Group R: Comparison of job finding strategies and quality of work

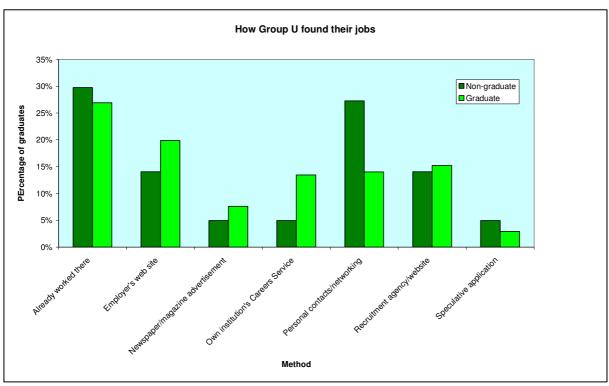


Figure 21b. Group U: Comparison of job finding strategies and quality of work

- Higher percentages of those using reactive job hunting strategies obtained graduate level work compared with those using more 'creative' or 'proactive' approaches such as speculative applications and networking (Figures 21a & b).
- Although much higher percentages of Group U graduates reported "Already worked there" as how they found their job (Figure 21b), this does not seem to have put them at a significant disadvantage in terms of the quality of work that they were doing.
- Although similar percentages reported personal contacts/networking as how they found their job, Figures 21 a and b show that one and a half times more Group R than Group U graduates found graduate-level work that way.

3. Comparisons with the previous study – some notable differences and similarities

A summary of key findings from the original study can be found in Appendix 2.

3.1 What subjects did they study?

- There are five subjects with higher percentages of Group U graduates than Group R: Education, Law, Business, Chemistry and Mathematics.
- The overall proportion of students from Group U graduating with an Education degree has dropped: 28.3% in the pilot to 21.4% in the current study.
- While in the pilot study, Moray House graduated nearly four times the number of Group U students as Group R, the factor has reduced to 2.4 but still a notable difference.

- The percentage of Group U Law graduates has doubled since the pilot from 5% to 10% while the proportion of Group R graduates remains unchanged (5%). This could indicate that programmes such as Pathways to Professions are enabling students to explore a wider range of degree options but this would need further investigation.
- While the percentage of Group U graduates studying business remained roughly the same, 6%, in the current study, there are proportionally fewer Group R graduates from business disciplines.
- Chemistry is the only other subject area with more Group U than Group R graduates both in the pilot and the current study, with relative percentages little changed between the two studies (4.0% Group U and 2.0% Group R).

3.2 First destinations and quality of work

- The percentage of Group U graduates entering work compared with the pilot is much reduced, 71.2% down to 64.1%. The percentage of Group R entering work is virtually unchanged: 65.0% in the pilot and 61.4% in the current study.
- This change in Group U is largely accounted for by the increased proportion of Group U graduates entering further study (Group U: 18.0% to 25.2%; Group R: 21.7% to 23.6%). When further study destinations in the current research are controlled for the Diploma in Legal Practice, the percentage of Group U graduates declines to 20.1% and Group R to 21.3%. This indicates that the increase in further study as a first destination for Group U graduates is likely to be linked to the rise in Group U graduates undertaking a first degree in Law; the Diploma in Legal Practice is a requirement graduates must meet.
- In the face of a perceived declining graduate premium many students (rightly or wrongly depending on particular circumstances) may believe that an advanced degree such as a Master's or Professional Diploma will improve their success in the job market. Could the results above indicate different attitudes or perceptions in the value or purpose of further study between the two groups? Should we be doing more to encourage Group U graduates to approach further study for the same reasons that Group R report (cf. Figure 17 above)?
- In terms of the quality of work, there are no drastic differences to the pilot, despite the onset of recessionary conditions: Group U: Pilot 73.2% graduate level employment; Current: 71.4%. Group R: Pilot- 70.4% graduate level employment; Current: 72.6%

3.3 What type of work did they do?

As Education Professionals are disproportionately represented in the data and the percentages of graduates working in this area is relatively unchanged (Table 11), they have been excluded from the following discussion. One feature worth noting, particular in context of Public Sector employment, is that, for the current study, there is no evidence that the contraction of this sector has had an impact on Education (*vida infra* Social and Welfare Professionals). It will be interesting to see what future data reveals in this respect.

		Group U	Group R
Pilot	Education Professionals	40.29%	15.84%
Current	Education Professionals	40.32%	16.58%

Table 11. Group U and Group R graduates working as Education Professionals: comparison between pilot and current study

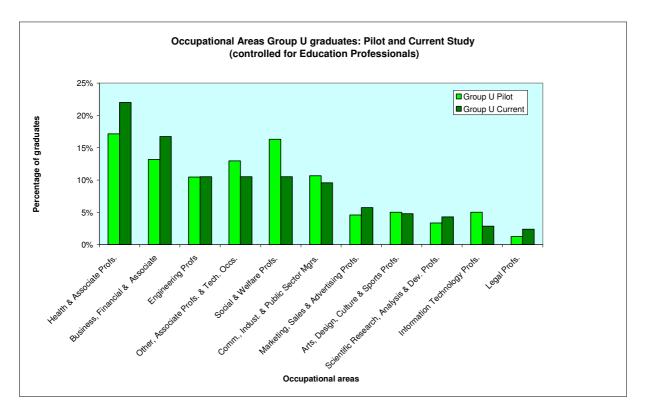


Figure 22a. Group U types of work, comparison between pilot and current study

Looking at specific occupations in graduate level employment, some interesting changes have occurred:

- The increase in the percentages of graduates entering employment for both Groups reflects national trends (WDGD, 2010). Both Group U and Group R buck the national trend of increasing numbers of graduates working as Social and Welfare Professionals – perhaps a reflection of the contracting public sector.
- The national decline in the percentage of graduates reporting working as Business and Financial Professionals is mirrored in the decline in Group R graduates doing so. Again, and more positively, Group U bucks the trend with proportionally more graduates working in this area.
- Other positive changes for Group U graduates include increases in Advertising, Sales and Marketing; Scientific Research and, as already noted previously in the report, Law.
- Overall, there seems to be a tendency towards greater occupational diversity (outside of Education) regarding Group U graduates and better representation in professions such as Law and Business since the pilot project.

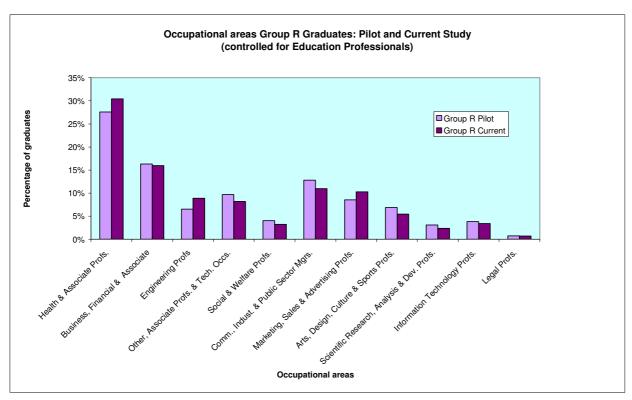


Figure 22b. Group R types of work, comparison between pilot and current study

Analyses Based on Academic Colleges

3.4.1 College of Humanities and Social Science

- Percentages of both groups entering work have declined, Group U from 73.3% to 65.2% and Group R from 64.1% to 58.4%.
- This decline has not resulted in a significant rise in the percentage of Group U graduates seeking employment or training. What is observed is a notable rise in the percentage of Group U graduates entering further study as a first destination: from 15.9% in the pilot to 25.4% in the current study. By contrast, the percentage Group R graduates entering further study rose only from 22.5% to 25.2%
- The percentages of Group R obtaining graduate level work remained roughly the same: Group R 65.6% in the pilot and 66.1% in this study. Group U experienced a slight decline 73.1% reporting graduate level employment in the pilot compared with 70.1% in this study.

3.4.2 College of Science and Engineering

- Percentages of both groups entering work are slightly reduced but nearly equal: Group U from 59.4% to 57.9% and Group R from 57.3% to 54.4%.
- An interesting change to note is that, in the pilot study, 6.6% of Group U graduates reported 'Taking time out/doing something else' as their first destination, as did 7.9% of

- Group R. In the current study, the percentage of Group R reporting this destination has decreased slightly to 6.8%; the percentage of Group U is reduced to 1.0%.
- A notable change is apparent when looking at the quality of work between the two groups. Whereas in the pilot study, the percentages obtaining graduate level work were nearly equally (Group U 65.2% and Group R 64.1%), in the current study the percentage of Group R students entering into graduate level work has increased to 71.4% and the percentage of Group U remains virtually unchanged at 65.7%.
- Sectors such as Construction (Construction Skills Council, 2010) and Manufacturing (Gregg and Wadsworth, 2010) continue to feel the pinch of the recession, along with other sectors such Chemicals where they rely on Construction and Manufacturing for their business (COGENT, 2010). However, businesses in these sectors along with those engaged in other scientific and technical activities were amongst the most common employers of both groups of graduates. As noted above, the Programmes of Study with the highest percentage of graduates entering non-graduate occupations are Biological Sciences; Mathematics and Geography.

3.4.3 College of Medicine and Veterinary Medicine

- The percentage of Group R graduates entering work is only slightly changed, increasing from 83.4% to 85.2%. However, since the pilot the percentage of Group U graduates entering work has declined by 13.6%. This difference is made up by increases in the percentage of Group U graduates reporting that they were 'taking time out/doing something else' (up 5.3%), 'seeking employment/study/training' (up 4.9%) and those undertaking further study (up 3.6%).
- The percentage of both Group U and Group R graduates obtaining graduate level work has remained roughly the same at 91%.

3.5 Further Study Destinations

- The percentage of Group U graduates studying for a higher degree in the UK remains relatively unchanged *ca.* 71% but there is a notable increase in the percentage of these graduates undertaking further study or training overseas, from 1.7% to 5.8%.
- The percentage of Group U graduates going on to a higher degree by taught course has increased from 26.7% to 29.9%, and Group R increased from 35.3% to 39.6%.
- While percentages of those undertaking postgraduate diplomas has decreased, those undertaking Professional Qualifications (which includes the Dip LP) along with other types of Diplomas and Certificates (Dip Adult Nursing, CELTA and others covering a range of life long learning opportunities) has increased.
- The surprise change is perhaps the increase in percentages of both groups choosing to undertake further study on taught courses during a time when funding opportunities for this type of study are being substantially reduced.
- Previously, the question "Why did you choose to go on to further study?" (which might have been able to shed some light on the above point) was an optional open text question which only a small number of respondents chose to answer. Useful comparison between the pilot and the current research on motivations for further study is therefore not possible.

3.6 Where do graduates go to work?

- The most pronounced change in destinations is amongst Group R graduates the percentages finding work outside of Scotland is over double that observed in the pilot (19.1% to 41.0%).
- In terms of Group U, the only change is a modest increase in those finding work in Scotland outside of Edinburgh from 28.6% to 33.5%.
- Overall, the percentage of Group U graduates who obtained graduate level employment in Edinburgh has declined by 6.6% from 68.1% while Group R graduates are up 3.9% from 61.2%.

3.7 How graduates found their jobs

- Comparisons between the two cohorts are difficult to make regarding this theme because
 the options on the DLHE questionnaire have changed for instance 'already worked there'
 seems to be quite an important way of finding jobs for this cohort (and substantially more
 Group Us reported this as a means for securing work), but this was not previously an
 option.
- Since the last study, the percentages of any student reporting networking as the means of finding employment has nearly halved. A surprise observation in the most recent study is a slightly higher proportion of Group U graduates reporting finding their job this way.
 Widening participation students are widely regarded to have poorer networking skills than their 'traditional' peers, due to lack of confidence etc. and be most in need of these skills to be successful in the labour market (Barrow, C., 2010; Heath, et al. 2007; Morey, et al., 2003)
- The percentage of graduates reporting using newspapers and magazine adverts has halved. However, given the decrease in newspaper and magazine circulation generally, this should not be surprising.

Since the pilot project, the world has been plunged into a global economic crisis. It is heartening to note that, despite fear mongering news headlines about graduate job prospects, that there is not yet evidence of a dramatic negative impact on graduates entering work or the quality of that work. However, the data in this report was collected early on in the crisis and it is unclear whether there may be a lag in response with the continuing economic instability only now having an effect on graduate first destinations. More detailed statistical analyses and qualitative research (*cf.* Carroll, 2011) could help identify correlations and causations which would be helpful for tailoring provision and support for students and graduates from under-represented groups.

4. First Destinations after Further Study

4.1 Group U graduates of the University of Edinburgh 2004/05-2008/09

The following analysis carries on from the pilot project carried out by the University of Edinburgh in 2008. The 2008 DLHE analysis examined the years 2004 to 2007. The current analysis assesses the subsequent destinations of Group U graduates who reported entering further study at the University of Edinburgh after earning their first degree. There was a follow-up response rate of 83.2%.

Of the 169 graduates who were known to have gone into further study from the 2008 analysis 38 of them were not included in the 2011 analysis either as respondents or non-respondents. These individuals might have been "lost" to the study for a variety of reasons; they may have changed degrees and are taking longer to graduate or they may have dropped out before completing the further study degree they stated in the 2008 analysis. Tables 12 and 13show their distribution by Academic College and School.

4.2 What subjects did they study for their first degree?

College of Humanities and Social Science	66%
College of Science and Engineering	31%
College of Medicine and Veterinary Medicine	3%

Table 12. Group U graduates who progressed to further study by Academic College

CHSS	Law	29%
	History, Classics and Archaeology	8%
	Arts, Culture and Environment	5%
	Literatures, Languages and Cultures	5%
	Philosophy, Psychology and Language Sciences	5%
	Education	4%
	Divinity	3%
	College Award (CHSS)	2%
	Social and Political Science	2%
	Business	1%
	Economics	1%
CMVM	Biomedical Sciences	2%
	Medicine	1%
CSCE	Chemistry	7%
	GeoSciences	5%
	Physics and Astronomy	4%
	Engineering	4%
	Mathematics	4%
	College Award (CSCE)	3%
	Informatics	3%
	Biological Sciences	2%

Table 13. Group U graduates who progressed to further study by Academic School

4.3 What they reported doing as a further study destination

- 44 (26%) reported doing a legal practice diploma
- 41 (24%) reported doing a PGDE a quarter of these did PGCE/DE primary education
 - 26 (15%) reported starting a PhD 5 of these were in Chemistry and 4 in Physics
- All PhDs for which there is first destination data were in the area of Science and Engineering or Biomedical Sciences
- 26 (15%) went on to do an MSc. In contrast to PhDs, a wider diversity of subject areas spanning the humanities, sciences and social sciences were reported: Archaeology, Marketing, Classics, Counselling, Environmental Protection and Management, Operational Research, Policy Studies, Informatics, Quantitative Genetics and Genome Research, Remote Sensing.
- The remaining 32 students reported a range of further study destinations: MArch, Accelerated LLB, Masters in Social Work and Divinity as well as several students who went on to complete another first degree.

4.4 Overall First Destinations of graduates who progressed to further study at the University of Edinburgh

Entered work	76%
Entered study or training	21%
Seeking employment/study/training	2%
Not Available	1%
Time out/doing something else	1%

Table 14. First destination of graduates of underrepresented groups identified in the pilot project as going on to further study.

By way of comparison with the data in Table 14, for the period 2004-2009, an average of 73% of higher degree graduates of the total university population entered work on completion of their qualification.

4.5 Graduate/non-Graduate

Graduate Occupations	89%
Non-graduate Occupations	11%

Table 15. Quality of work.

In terms of quality of work, postgraduates performed very well (Table 15). Part of this may be down to the percentages undertaking vocational qualifications (e.g. Law and Education; see Tables 14 and 15 below) but Lindley and Machin (2011) have identified a postgraduate 'premium' and they

also note a growing differential in wages between those with undergraduate and postgraduate qualifications.

4.6 Occupational areas

The majority of postgraduate students enter the labour market as 'professionals' (Table 16)—i.e., those "engaged in a profession, esp. one requiring special skill or training; belonging to the professional classes" (OED, sense II.4.b). A more insightful look at professional occupations is given by describing first destinations using the 'What do graduates do?' (WDGD, 2010) classification in Table 17.

Professional Occupations	78%
Associate Professional & Technical	
Occupations	9%
Managers & Other Senior Officials	2%
Administrative & Secretarial Occupations	6%
Sales & Customer Service Occupations	3%

Table 16. Simplified description of first destination occupations of postgraduates from underrepresented groups. Shaded rows denote graduate level occupations.

Education Professionals	39%
Legal Professionals	39%
Other Professionals, Associate Professional and Technical	
Occupations	9%
Scientific Research, Analysis & Development Professionals	4%
Arts, Design, Culture and Sports Professionals	3%
Marketing, Sales and Advertising Professionals	3%
Commercial, Industrial and Public Sector Managers	1%
Engineering Professionals	1%
Information Technology Professionals	1%
Social & Welfare Professionals	1%

Table 17. Detailed descriptions of graduate level work.

4.7 First destinations – a closer look at different areas of further study

4.7.1 Law

Of the 90 law students identified in the original study, 59 (66%) reported entering further study. This is because the vast majority will be doing a Diploma in Legal Practice to enable them to enter work as a solicitor – and 50 reported doing so. Other reported courses were PGDEs, LLMs in international law / innovation technology and law, MSc Criminology, PG Dip Russian Language. Eighty-eight percent (44) reported that they were planning on doing their Diploma at Edinburgh.

There is data for 39 graduates:

- Ninety-five percent (37) entered work, with only 1 graduate reporting that they were still seeking employment 6 months after graduation and another taking time out.
- Overall, 86% (32) of employed graduates reported working in graduate level jobs. Eighty-one percent of those reported working as a solicitor.

4.7.2 Education

Fifty-four Group U graduates reported doing a PGDE/CE (54). The majority, seventy-six percent (41) of graduates chose to do their PGDE at Edinburgh University. 23% (9) whose further study destination is known were beginning a primary PGDE, the remainder entered various secondary courses. Subject area is only available for some and includes Maths, English, Chemistry and Religious Education.

The first destinations of twenty six of these students were captured in subsequent DLHE surveys – 100% of whom entered graduate level work in the education sector, as is typical of these graduates. All of them reported entering employment in Scotland, with 12 in Edinburgh.

4.7.3 PhD students

Data is available for 7 of the 28 graduates who reported undertaking a PhD at the University of Edinburgh as their first destination directly after their first degree. Eight of them graduated from their first degree in 2005/06. Seven of these students have finished successfully and their subsequent destinations may be captured in future DLHE surveys. One is currently writing up

There are a number of reasons why students may not be captured by the DLHE data, or captured at anticipated times. Although PhDs are described as three year programmes, they more usually take 4 years, and occasionally longer, due to vagaries of research, funding problems or other difficulties and unforeseen circumstances. Tracking down the missing 21 students highlights this complexity:

- Students may have taken time out for a variety of reasons two of the graduates;
- Part-time PhDs, which one graduate is in the midst of, can take up to seven years;
- Postgraduates students may withdraw from a research degree for a variety of reasons not discernible from the data, as 6 of the graduates did;

The complexity of the PhD pathway and the challenges is tracking students is further illustrated by one student who, from the available data, appears to have decided to do a Masters before then taking up the PhD they reported after their first degree. Another reported undertaking a PhD, but seems to have decided to do an MSc instead and is now working in a graduate job in Engineering.

Only one graduate withdrew from their programme. Three students graduated but did not respond to the DLHE survey. Five are currently nearing the end of their full-time PhD studies which began in 2007/08 and will be captured in future surveys.

Of the 7 whose destination is known, all reported entering work 6 months after graduation and all reported entering graduate level occupations. Reported job titles included: Lecturer, Research Scientist, Postdoctoral Researcher and Teaching Fellow. The majority were employed by higher education institutions, with only one graduate working in industry. Of interest, a graduate was discovered in the dataset who undertook and successfully completed a PhD at another institution and later returned to Edinburgh to complete a PGDE.

4.7.4 Masters by Research

Data is available for 19 out of the 26 graduates reporting a Masters mainly by research as their first destination.

Further study

The majority, 69% (13), went on to further study and training. All of these reported doing a higher degree by research, with all directly related to the topics of the Masters' research: e.g., PhD Informatics, PhD Archaeology, PhD Divinity, PhD Social Policy and PhD Historical English Linguistics.

Seven of the thirteen responded to the question 'Why did you decide to undertake further study training or research?' Six wanted to establish a career in academic and research, one wanted an 'enjoyable job'.

Entered work

Twenty-one percent (4) entered work with three out of the 4 reporting a graduate level occupation as their first destination. Only one graduate was not in a job directly related to their post-graduate qualification. Job titles include GIS specialist, Mechanical Engineer and Sound Lab Technician. Sectors include Forestry, Engineering and Higher Education. Only one reported that they were still seeking employment 6 months after graduation and one reported being not available for work.

4.7.5 Taught Masters

Thirteen graduates who reported entering into a taught Masters responded to the subsequent DLHE survey.

Of these, four entered further study or training and nine entered employment.

Entered further study

Three out of the four reported going on to a PhD: Childhood Studies to a PhD in Social Policy; Criminology and Criminal Justice to PhDs in Law and Criminology. One student who did Quantitative Genetics and Genome Analysis, reported going on to an MSc in Applied Mathematics.

Entered work

Of those who entered employment, six reported working in a graduate level occupation. Job titles included research executive, environmental planner, mathematical modeller, prison education officer, procurement officer and researcher.

Industries include business management, human health and social work, public administration, professional scientific activities.

4.8 Progression into Further Study: discussion and questions for further research

Further study and widening participation is a relatively unexplored and potentially rewarding area of research. Some important characteristics have been observed and these have been summarised and discussed in recent work by Wakeling (2005, 2010) – who also points out there is surprisingly little research on access to postgraduate study. In contrast to progression into university of Group U-type students where inequalities of access and background effects persist, Wakeling highlights research that has shown these background effects decline with each successive educational transition.

Wakeling's research suggests:

- That background effects may decline to almost nothing after direct progression from a first degree to a research degree;
- For taught degrees, there is some continuation of background effects but these are weakened;
- If entry to postgraduate study is delayed, there is some evidence that background effects may 'reappear' "entry to postgraduate study becomes more exclusive in social class terms the longer the time since first graduation";
- Those from more advantaged backgrounds are able to use postgraduate study as a means of circumventing underemployment. Since a degree is 'no longer enough' a postgraduate qualification is one possible 'remedy' to give them a competitive edge in the job market.

4.9 Implications for University of Edinburgh data

The nature of and constraints on the research restrict inferences that can be made from the data because, as it stands, there are too many unknowns and variables unaccounted for. This study illustrates, however, that access to postgraduate study is fertile ground for research. A more accurate understanding of progress to further study would enable the institution to enhance and adapt as appropriate the support available to Group U students.

- The possibility of using our data to attempt to replicate Wakeling's results in terms of the interaction of variables such as social class, subject of study, and first degree achievement;
- Investigating in more detail the motivations for postgraduate study and perceived benefits in the move into the labour market;
- Examining delayed entry into postgraduate study and possible influences on first destinations:
- Is there a significant difference between first destinations of research and taught Masters that might be explained in terms of lingering 'background effects'?
- Motivations to do a PGDE/CE and the persistence of Education as a significant first destination after post-graduate study.

5. Discussion and Conclusions

Studies have found that the choice to attend a Higher Education institution is embedded in practices of family and networks, and not completely an individual decision (Archer and Hutchings, 2000; Bibbings, 2006; Heath et al., 2008; Jones, 2006; Sutton Trust, 2010; Watts and Bridges, 2006). As a product of their environments, individuals from disadvantaged backgrounds are often ambivalent towards attending Higher Education institutions (Heath et al., 2008). They can view vocational education as more likely to lead to a job as they are unaware of the wider career options that come with a university degree (Watts and Bridges, 2006). Students can develop the confidence and motivation to apply to university if they are part of Widening Participation (WP) program (Hatt et al., 2008; Maras et al., 2007).

WP participants are, however, self-selective and already have a certain amount of academic confidence that is lacking in many other individuals from the same backgrounds (Hatt et al., 2008; Maras et al., 2007). In this study an analysis was carried out on the collective and disaggregated data of six specifically selected non-traditional entry routes into the university. As a result the Group U data is a sample (albeit a large one) of the wider population of non-traditional graduates. The findings related to Group U in this study are therefore not a complete reflection of the choices that would be made by all individuals with backgrounds that under-represented in university attendance. It is, however, important to compare the destinations of Group U and Group R graduates so as to assess how their backgrounds might have influenced their choice of destination after earning a first degree.

Career options and prospects are enhanced by the calibre of university that one attends (Roberts, 2009). When students from disadvantaged backgrounds apply to university, they are more likely to attend low-ranked universities (David, 2010; Roberts, 2009). There appears to be a lack of understanding among students from backgrounds not disposed to attend universities that the mere fact of attending is not enough. These individuals generally lack the confidence to apply to university, particularly the Russell Group Universities such as the University of Edinburgh (Sutton Trust, 2010; Archer and Hutchings, 2000; Bibbings, 2006). However, as comparison of the Edinburgh dataset with *What do graduates do?* shows, both groups perform better than graduates nationally.

The 2008 project and the 2011 project both reveal that, when compared to Group R, the range of studies and occupations pursued by Group U graduates were more limited. Although as highlighted in section 3.3, there are indications of potentially growing diversity in course and occupational choice of Group Us that emerges in the current study.

Students from groups under-represented at universities often choose what they consider as clear career paths (Jones, 2006). Perhaps the high percentage of Group U graduates chose to pursue Education and Law for these same reasons. Research in Australia by Wilcoxson and Wynder (2010) found that students enrolled in specific bachelor degrees such as accounting were less likely to drop out of university halfway through their studies than students enrolled in a generic bachelor. Perhaps this likeliness of dropout for those in generic degrees derives from not understanding the wide range of graduate jobs that are independent of degree subject. Students who would be classified as Group U may not be aware of how the range of opportunities offered by

diverse universities and courses may lay the groundwork for as they progress through their careers (Archer and Hutchings, 2000; Sutton Trust, 2010).

An alternative explanation for why a disproportionate number of Group U graduates entered into Education professions might be because they view themselves as possessing the skills to be good teachers. In a study conducted at two Australian universities, Watt and Richardson (2007) explored the factors that influence students to pursue teaching. They found that most students chose a teaching career because they perceived themselves as being good teachers (Watt and Richardson, 2007).

A useful area of research would be the comparison of first destinations of Group U and Group R education graduates *after* the guaranteed probation year – would any differences emerge then in their abilities to secure employment? The labour market for newly qualified teachers, as the news headlines attest, is known to be extremely competitive. The percentage of probation teachers able to secure a full-time, permanent post directly after their probation year has been in steep decline since 2004/05 for a variety of reasons (Donaldson, 2010). There are a range of other professions such as business training, social and welfare management, and even sales that might call for skills similar to those sought in teachers. Group U students might be encouraged to explore a wider range of possible degree subjects and careers if they better understood how their skills can be applied to multiple fields before entering university.

It is worth quoting at length from what the report has to say about the transferability of education qualification to work in other sectors:

"It is clear from university prospectuses that, whilst students undertaking a general arts or humanities degree are encouraged to consider a wide range of careers, teacher education courses simply tell prospective students that there are plenty of opportunities to teach both in the UK and abroad.

A teaching qualification should be a guarantee of good communication skills, ability to think at a high academic level and ability to work well with others. As such, it should be valued more widely. However, representatives of the business community have indicated that a teaching qualification is not necessarily seen as an asset in a prospective employee in other employment sectors. This contrasts with the situation in Finland, for example, where individuals with teaching qualifications are seen as attractive to business and industry."

Teaching Scotland's Future: Report of a review of teacher education in Scotland by Graham Donaldson, The Scottish Government 2010

Should we be doing more, earlier to highlight the value and transferability of Education qualifications?

An analysis by Holscher et al. (2008) of students from the *Degrees of Success*, a widening participation programme in England, found that student choice of subject was often based on academic and social self-limitations. Students from the study viewed themselves as being less capable of certain types of subjects than the more traditional university students (Hoelscher et al., 2008). Research has also found that the subject choices that students make are dependent on where they come from (Mathers and Parry, 2009; Croll, 2008; Quimby and DeSantis, 2006; McHarg et al. 2007; Watts and Bridges, 2006; Goyette and Mullen, 2006; Bibbings, 2006). Analysis

of data from the *Young Person's Survey of the British Household Survey* found that young people with professional parents were more likely to have similar ideas for a career, and the same was true for young people whose parents were in manual occupations (Croll, 2008).

A study by Mathers and Parry (2009) found that students who come from a middle-class were more likely to go to medical school than those from working-class backgrounds. They found that knowing individuals who were doctors was more of a 'normal' experience for those with a middle-class background. Becoming a doctor was therefore a 'normal' aspiration for them than it was for students from a working-class background (Mathers and Parry, 2009). McHarg et al. (2007) also found that students who successfully apply to UK medical schools have strong academic and family support networks and self-belief in their ability to study medicine. Supporting the findings from these studies, the 2011 Analysis found that CMVM had the lowest representation of WP students. These studies reveal the importance of giving young people wider career choices from a young age, so their perception of career choices is not just based on a reflection of their surroundings.

An analysis of the U.S *National Education Longitudinal Study*, found that individuals with undecided care aspirations at a young age earned a significantly lower wage in young adulthood than those who had certain career aspirations when younger. This was true even when individuals did not enter into the careers that they aspired to (Staff et al., 2010). It would therefore be useful for activities aimed at widening participation to not only normalise the choice of attending a Higher Education institution, but to also normalise the diversity of careers options available to students. This 'normalisation' would be best carried out both before students make the choice to attend university and early on in their university experience.

University students from a working-class background had a lower knowledge and understanding of labour market when compared to students who are not from a working class background (Greenbank, 2009). This is because they are more reluctant to access formal sources of information such as careers services (Greenbank, 2009). This reluctance derives from the students' fear of being viewed as ignorant when they seek information in a formal way. It adds to their wrong assumptions that a degree in particular field of study can only lead them to one specific profession, i.e., a law degree can only lead to a legal profession. There is room for careers services to work with employers to not only attract students and provide with career options while at university, but even before they enter university as they consider their options a they consider whether to apply or not.

The Sutton Trust recommends that young people should be given guidance on choosing university courses and potential careers even before they choose their GCSE subjects during Year 9 (Sutton Trust, 2010). At whatever stage they are in their academic trajectory, it might also be also be worthwhile to provide students with data on financial returns of individual courses at University level (Sutton Trust, 2010). It is therefore important to ensure that when recruiting students for programs like Widening Participation, efforts should also be made to ensure that not only should students be encouraged to go to good universities, but should be given a clear direction on potential career choices. These findings speak to the importance of providing young people with career options even before they start the process of applying to universities. This is obviously beyond the scope of a university's careers services, but it can inform its relationships with high

schools and colleges. Carroll (2011) highlights a range of published research into strategies involving work experience placements, career development courses for non-traditional students and the establishment of mentoring programmes between employers and students.

Similar to the 2008 Analysis, the 2011 Analysis revealed that Group U graduates disproportionately stayed in Scotland for work as compared to Group R graduates. This can mostly be explained by the fact that a greater proportion of Group R graduates are domiciled outside Scotland. Previous studies have shown that young people from state schools and lower income homes are more likely to attend a university closer to home for financial reasons and a desire to maintain links with their families and friends (Sutton Trust, 2010; Hoelscher et al., 2008). It appears the trend remains true in terms of work destinations. The 2011 Analysis, however, showed that Group U Scottish domiciled graduates have a better chance of entering into a graduate occupation when working in other parts of Scotland besides Edinburgh.

The 2011 Analysis found that the highest proportion of Group U graduates had previously worked the place where they ended up taking full-time employment. There was not much difference between Group U and Group R graduates known to have found their jobs through networking. De Vos et al. (2009) studied the process of proactive career behaviours and career success of graduates making the transition from college to work at a university in Belgium. The study found recent graduates that engaged in proactive behaviours such seeking networking opportunities have higher potential for future career success and job satisfaction (De Vos et al., 2009).

In UK context, Greenbank and Hepworth (2008) examined how financial considerations, networking and values shaped the university experience of 'working class students. Their research offers insight into the perceptions and behaviours of students from non-traditional backgrounds, insight which could be helpful in shaping services and support. It might be worth replicating this research on a local basis to take into account and institutional effects or influences of particular entry routes, interventions (e.g., LEAPS, Pathways) and situations where there may be no direct interventions.

Greenbank and Hepworth's work highlights, there are a number of areas for work, mainly around the reasons that non-traditional students avoid or neglect to use their careers services. They suggest that services and the marketing of services may be designed with the assumption that users are rational decision-makers and value the same sorts of information in the same ways as the service conceives of them. Greenbank and Hepworth found that the students in their study did not approach career decision making in a rational way, preferred so called 'hot' information — information based on their own experience or the experiences of their friends and families and if not lacking in a future orientation, seemed unaware of how to prepare for their future, and took a 'serial' approach. In terms of the latter, it was found that non-traditional students did not engage in multiple tasks simultaneously. They prioritised them and then completed them one at a time in order. In this way, more pressing academic and work activities took precedence over career planning.

Their conclusions also offer a number of examples of activities successful in fostering engagement with career exploration and planning, potentially beneficial to students regardless of background: e.g., more hands-on activities and workshop-style approaches (especially addressing networking),

a range of ways to increase the visibility and awareness of the range of support services available and addressing the 'serial' approach through any means possible.

As illustrated by the findings and the supporting literature there are three main areas that universities can target to enhance the Higher Education experience of non-traditional graduates and these are outlined below. It is helpful to note that many of the recommendations made in the wider literature are activities already undertaken at the University by Widening Participation, the Careers Service, EUSA, the Employability Consultancy and other parts of the institution – working on their own and together for the benefit of all students and graduates:

- 1. Student support services can put greater emphasis on supporting the provision of career information, advice and guidance before students come to the University.
 - Pathways to Professions, Reach, ACES, LEAPS, Educated Pass, The Beath and Newbattle Easter School, the Primary and early Secondary Years Initiative and Kickstart are a representative sample of many of the opportunities offered prior to entry.
- 2. Both before and while non-traditional students are at the University, career services can offer guidance on the wider range of career options available independent of choice of qualification.

The Careers Service through offering individual support from advisers, school based work, careers information library staffed with information professionals, central programmes of events, Careers Fairs and other employer activities helps and supports all students in both making the most of university and exploring their options for after graduation.

3. Opportunities to improve the networking skills of students and provide them with opportunities to network for purposes of job seeking.

The Careers Service, Widening Participation, EUSA and academic departments provide many and diverse opportunities for students to engage with employers and other professionals.

References

Archer, L. & Hutchings, M., 2000. Bettering Yourself? Discourses of risk, cost and benefit in ethnically diverse, young working-class non-participants constructions of higher education. *British Journal of Sociology of Education*, 21(4), 555 - 574.

Barber, L., Pollard, E., Millmore, B. and Gerova, V. (2004) *Higher Degrees of Freedom: the Value of Postgraduate Study*. Report 410, Institute for Employment Studies

Barrow, C. (2010) When non-traditional is norm: A new set of challenges.

www.lancs.ac.uk/fss/events/hecu5/docs/Papers/Barrow,%20Charlotte.doc

Bibbings, L.S., 2006. Widening Participation and Higher Education. *Journal of Law and Society*, 33(1), 74-91.

Bingham, R. & O'Hara, M., 2007. Widening participation on early years degrees: 'I realised I could, and would, do this—and I have!'. *Journal of Further and Higher Education*, 31(4), 311 - 321.

Blasko, Z. & Robert, P., 2007. Graduates in the Labour Market: Does Socio-economic Background Have an Impact? The Case of Hungary. *Czech Sociological Review*, 43(6), 1149 - 1173.

Brooks, R. & Everett, G., 2009. Post-graduation reflections on the value of a degree. *British Educational Research Journal*, 35(3), 333-349.

Carroll, C. (2011) Accessing the graduate labour market: assessing the employability of Irish non-traditional graduates of Trinity College, Dublin. *Widening Participation and Lifelong Learning*, 13, 2, pp.86-104.

COGENT (2010) Recession Review – Cogent Sector Skills Council: The Impact of the Recession on the Chemical, Pharmaceutical, Nuclear, Polymers and Oil & Gas Industries

Construction Skills Council (2010) *Impact of the recession on construction professional services*Croll, P., 2008. Occupational choice, socio-economic status and educational attainment: a study of the occupational choices and destinations of young people in the British Household Panel Survey. *Research Papers in Education*, 23(3), 243 - 268.

David, M.E., 2009. Diversity, gender and widening participation in global higher education: a feminist perspective. *International Studies in Sociology of Education*, 19(1), 1-17.

De Vos, A., De Clippeleer, I. & Dewilde, T., 2009. Proactive career behaviours and career success during the early career. *Journal of Occupational and Organizational Psychology*, 82, 761 - 777.

Donaldson, G. (2010) *Teaching Scotland's Future: Report of a review of teacher education in Scotland.* The Scotlish Government.

Elias P. & Purcell, K. (2001/03) Seven Years on Graduates in the Changing Labour Market. ESRC/HECSU.

Elias, P. and Purcell, K. (2004) Is Mass Education Working? Evidence from the Labour Market Experiences of Recent Graduates. *National Institute Economic Review*, 190,60-74.

Forrester-Jones, R. & Hatzidimitriadou, E., 2006. Learning in the real world? Exploring widening participation student views concerning the 'fit' between knowledge

learnt and work practices. Assessment & Evaluation in Higher Education, 31(6), 611 - 624.

Goyette, K.A. & Mullen, A.L., 2006. Who Studies the Arts and Sciences? Social Background and the Choice and Consequences of Undergraduate Field of Study. *the Journal of Higher Education*, 77(3), 497-537.

Greenbank, P., 2009. An examination of the role of values in working-class students' career decision-making. *Journal of Further and Higher Education*, 33(1), 33-44.

Greenbank, P. & Hepworth, S. (2008) Working Class Students and the Career Decision-Making Process. HECSU: PROP report.

Gregg, P. & Wadsworth, J. (2010) The UK labour market and the 2008-09 recession. *National Institute Economic Review.* 212, R61-R72.

Hatt, S., Baxter, A. & Tate, J., 2008. 'The best government initiative in recent years'. Teachers' perceptions of the Aimhigher programme in the South West of England. *Journal of Further and Higher Education*, 32(2), 129 - 138.

Heath, S., Fuller, A. & Paton, K., 2008. Network-based ambivalence and educational decision-making: a case study of 'non-participation' in higher education. *Research Papers in Education*, 23(2), 219 - 229. HECSU/AGCAS (2010, 2011) *What do graduates do?*

HECSU/UUK (2010) From recession to recovery

Hoelscher, M. et al., 2008. The transition from vocational education and training to higher education: a successful pathway? *Research Papers in Education*, 23(2), 139 - 151.

Jones, K., 2006. Valuing Diversity and Widening Participation: The Experiences of Access to Social Work Students in Further and Higher Education. *Social Work Education*, 25(5), 485 - 500.

Kettley, N., 2007. The past, present and future of widening participation research. *British Journal of Sociology of Education*, 28(3), 333 - 347.

Lindley, J. and Machin, S. (2011) *Rising Wage Inequality and Postgraduate Education*. Discussion Paper No. 598. Institute for the Study of Labor (IZA), Bonn.

Maras, P. et al., 2007. 'The trouble with Year 10'. 13 – 16 year old school students' attitudes to higher education. *Social Psychology of Education*, 10, 375 - 397.

Mathers, J. & Parry, J., 2009. Why are there so few working-class applicants to medical schools? Learning from the success stories. *Medical Education*, 43, 219 - 228.

McClements, P.L., 2006. Tracking LEAPS students through their years in Higher Education.

www.docs.sasg.ed.ac.uk/SRA/WP/Tracking LEAPS students through their years in Higher Education 2006.pdf

McHarg, J., Mattick, K. & Knight, L.V., 2007. Why people apply to medical school: implications for widening participation activities. *Medical Education*, 41, 815 - 821.

Morey, A. and six others (2003) *HE Careers Services and Diversity* AGCAS, Centre for Research into Equality and HECSU

Quimby, J.L. & DeSantis, A.M., 2006. The Influence of Role Models on Women's Career Choices. *The Career Development Quarterly*, 54, 297 - 306.

Raggl, A. & Troman, G., 2008. Turning to teaching: gender and career choice. *British Journal of Sociology of Education*, 29(6), 581-595.

Roberts, K., 2009. Opportunity structures then and now. *Journal of Education and Work*, 22(5), 355-368. Staff, J. et al., 2010. Uncertainty in Early Occupational Aspirations: Role Exploration or Aimlessness? *Social Forces*, 89(2), 659-684.

Sutton Trust, 2010. Sutton Trust submission to Sir Martin Harris: *Widening access to selective universities.*

Taylor, Y., 2008. Good students, bad pupils: constructions of "aspiration", "disadvantage" and social class in undergraduate-led widening participation work. *Educational Review*, 60(2), 155 - 168.

Watt, H.M.G. & Richardson, P.W., 2007. Motivational Factors Influencing

Teaching as a Career Choice: Development and Validation of the

FIT-Choice Scale. The Journal of Experimental Education, 75(3), 167 - 202.

Watts, M. & Bridges, D., 2006. The value of non-participation in higher education. *Journal of Educational Policy*, 21(3), 267-290.

Wilcoxson, L. & Wynder, M., 2010. The relationship between choice of major and career, experience of university and attrition. *Australian Journal of Education*, 54(2), 175 - 189.

Wakeling, P (2005) La noblesse d'état anglaise? Social class and progression to postgraduate study. *British Journal of Sociology of Education*. 26 (4), 505-522.

Wakeling, P. (2010) Access to higher education after the first degree: do background effects continue to decline? *European Conference on Educational Research, University of Helsinki, Finland,* 24 – 27 August. Wakeling, P. & Kyriacou, C. (2010) *Widening participation from undergraduate to research degrees: a research synthesis.* ESRC and the National Centre for Public Engagement.

Appendix 1: Overview of Respondents

Table 1a: Total Population and Respondents of Widening Participation (Group U) Students for 2007/08 and 2008/09 DLHE

Entry Route	Total Students	Total Respondents	Respondents as Percentage of Total Entry Route Graduates
LEAPS	173	143	82.7%
SWAP East	136	104	76.5%
Pathways	50	44	88.0%
Access Bursary	139	106	76.3%
Credit for Entry	24	16	66.7%
FE Institution	170	125	73.5%
Band D and E Schools	711	564	79.3%

Table 1b: Total and Percentage of Group U Graduates (Based on Entry Route) by Academic College

Table 15. Total and	recentage of Group o Graduates (based on Entry Houte) by Academic Conege					
	College of Humanities and Social Sciences (CHSS)		College of Medicine and Veterinary Medicine (CMVM)		College of Science and Engineering (CSE)	
Entry Route	Total Students	Percentage of Total Graduates	Total Students	Percentage of Total Graduates	Total Students	Percentage of Total Graduates
LEAPS	96	12.1%	17	20.2%	30	13.4%
SWAP East	100	12.6%	0	0.0%	4	1.8%
Pathways	28	3.5%	9	10.7%	7	3.1%
Access Bursaries	87	11.0%	4	4.8%	15	6.7%
Credit for Entry	16	2.0%	0	0.0%	0	0.0%
FE Institution	108	13.6%	1	1.2%	16	7.1%
Band D and E						
Schools	359	45.2%	53	63.1%	152	67.9%

Table 1c: DLHE Response of Group U Graduates by Academic College

Academic College	Total Graduates	Total Respondents	Percentage of respondents per Academic College
CHSS	675	518	76.7%
CMVM	71	63	88.7%
CSE	229	188	82.1%

Table 1d: Group U Graduates and DLHE Response by Academic School

Academic School	Total Graduates	Total Respondents	Percentage of Respondents In Each Academic School
College of Humanities & Social Science (CHSS)			
(Ordinary Art)	12	11	91.7%
College of Science and Engineering (CSCE)			
(Ordinary Science)	15	12	80.0%

Management & Economics			
(ECON)	8	7	87.5%
Arts, Culture &			
Environment (ACE)	32	23	71.9%
,			
Divinity (DIV)	16	8	50.0%
Education (EDUC)	210	167	79.5%
Health in Social Science (HSS)	5	5	100.0%
History, Classics & Archaeology (HCA)	62	43	69.4%
Law (LAW)	92	78	84.8%
Literature, Languages & Cultures (LLC)	82	58	70.7%
Philosophy, Psychology &			
Language Sciences (PPLS)	51	34	66.7%
Social & Political Studies (SPS)	53	38	71.7%
Medicine (Medicine)	36	32	88.9%
Biomedical Sciences (SBMS)	22	19	86.4%
Veterinary Sciences (RDSVS)	13	12	92.3%
Biological Sciences (BIOLSCI)	34	30	88.2%
Chemistry (CHEM)	35	31	88.6%
Engineering & Electronics (ENG)	38	29	76.3%
GeoSciences (GEOS)	49	41	83.7%
Informatics (INF)	13	9	69.2%
Mathematics (MATHS)	24	22	91.7%
Physics & Astronomy (PHYSAST)	21	14	66.7%
Business School (BUS)	53	47	88.7%

Appendix 2: Pilot Project Executive Summary

- A higher proportion of group U graduates entered work (of all kinds).
- Slightly higher proportions of group U graduates entered graduate level occupations compared to
- group R.
- The Education sector employed the highest proportion of group U graduates who entered graduate level occupations, 40% of the total.
- A much higher proportion of group U graduates entered Social and Welfare occupations than group R, 9.7% compared to 3.4%.
- A noticeably lower proportion of group U graduates enter Health and Associated Professions than R graduates, 10.2% compared to 23.0%.
- A higher proportion of group U entered employment in Scotland. Of those who entered employment in Scotland, the majority did so in Edinburgh.
- A lower proportion of group U graduates entered further study or training, 18.0% compared to group R, 21.8%.
- Of those group U graduates who reported doing a postgraduate diploma or certificate, 49.5% were working towards a PGDE/CE, compared to just 29.5% of group R.
- Of those who went on to study for a higher degree, more group U graduates reported doing a higher degree by research.
- Comparatively fewer group U graduates went on to do a higher degree by taught course.
- Group U graduates seemed to rely more on newspaper and magazine adverts or employers' websites to find jobs; higher proportions of group R graduates reported using the Careers Service, speculative applications or personal contacts/networking.
- Group U graduates were recruited by a range of employers including the NHS, local councils, Deloitte, Standard Life, the Royal Bank of Scotland, the University of Edinburgh, Ova Arup and the Scotlish Government.

Appendix 3: Comparisons between main findings from 2008 pilot project and 2011 project

Comparison of Percentage First Destinations of Group U and R Graduates for Those Whose Destinations are Known (WP Analysis 2008 and 2011) Group U 2008 **Group U 2011** Group R 2008 Group R 2011 (%) (%) (%) (%) **Entered work** 71.5% 63.9% 65.3% 64.3% **Entered study or training** 18.2% 25.3% 21.9% 22.0% Seeking employment/study/traini 4.5% 6.3% 5.2% 5.8% **Entered voluntary work** 1.2% 1.3% 2.2% 2.1% Time out/doing something else 4.6% 2.6% 5.5% 5.3%

Comparison of Type of Work (SimpSoc) That Group U and R Graduates Entered Into (WP Analysis 2008 and 2011)						
-	Group U 2008 (%)	Group U 2011 (%)	Group R 2008 (%)	Group R 2011 (%)		
Associate						
Professional &						
Technical						
Occupations	17.5%	17.7%	21.5%	23.6%		
Professional						
Occupations	55.8%	60.1%	45.5%	51.1%		
Sales & Customer						
Service Occupations	7.0%	7.2%	5.6%	5.7%		
Administrative &						
Secretarial						
Occupations	11.3%	10.5%	14.3%	11.8%		
Managers & Other						
Senior Officials	4.5%	4.4%	7.9%	7.6%		
Unknown						
Occupations	3.9%	0.0%	5.3%	0.2%		

Appendix 4: Employers, job titles and further study by entry route

Access Bursary			
Employers	Job Titles	Further Study	Institutions
Aberdeenshire Council Anderson Strathern Audit Scotland Barnardo's Brinkworth Design BSkyB Camden Council Carlson Wagonlit Travel Charles River Chiene and Tait Citizen's Advice Bureau Clackmannanshire Council Crown Office And Procurator Fiscal Service Department for Work and Pensions East Coast Trains East Lothian Council Edinburgh City Council Edinburgh Wapier University Edinburgh University Enable Scotland EUSA Exxon Mobil Fife Council Forth Valley College George Hotel Green Party HBOS House of Commons IPSOS Mori John Lewis Johnston Carmichael Loch Ness Discovery Centre Matchpoint Mental Health Foundation Midlothian Council Midlothian Council Midlothian Womens Aid NHS Greater Glasgow and Clyde Nursery Progressive Scottish Court Service Scottish Widows St Leonards School The Fingerprint Inquiry Scotland Tods Murray Transave	Accommodation Assistant Administrative Officer Arboricultural Assistant Befriending Co-ordinator Business Travel Consultant CDT Teacher Chartered Accountant Clinical Scientist Corporate Banking Trainee Customer Service Assistant Diversity Facilitator Events Management Assistant Family Support Worker Fiscal Officer Foundation Doctor Inspection Engineer Jobcentre Adviser Legal Assistant LGV1 Driver Market Researcher Nursery Assistant Parliamentary Assistant PE Teacher Press Officer Primary Teacher Production Operative Project Manager Recruitment Consultant Research Assistant Research Scientist Resident Assistant Social Worker Solicitor Station Support Staff Support Assistant Teaching Assistant TEFL Teacher Underwriter	Beginners German BSc Medicine COSCA Counselling Creative Writing Criminology and Criminal Justice Diploma in Legal Practice Higher Spanish ICAS MA Archaeological Practice MBChB Molecular Cell Biology MSc Biomedical Science MSc Biotechnology MSc Business Management with Entrepreneurship MSc Classics MSc Criminology and Criminal Justice MSc Hydrogeology MSc Information Management MSc Operational Research PGCE Religious Studies PGDE English PGDE Primary Teaching in Adult Literacy TEFL Course Tennis Coaching	Aberdeen University Dundee University Edinburgh Napier University Edinburgh University Glasgow University ICAS Leeds University Roehampton Institute Sanchez-Casal Academy Stevenson College Strathclyde University Telford College Edinburgh UHI Millennium Institute

Band D and F Schools

Ballu D allu E 3	Band D and E Schools				
Employers	Job Titles	Further Study	Institutions		
ARUP	Accountant	Academic Foundation	Aberdeen University		
Bombadier Transport	Administrative	Programme	BPP		
Dorothy Perkins	Assistant	Ancient History	Cambridge University		
Edinburgh City	Cash Office Specialist	BA Business Studies	Dundee University		
Council	Civil Engineer	BDS Bachelor of Dental Surgery	East Anglia University		
Edward Abraham	Construction	Diploma in Legal Practice	Edinburgh College of Art		
Doherty Solicitors	Engineer	Diploma in Legal Practice	Edinburgh University		
Explore Learning	Customer Service	Diploma Personal Training	Glasgow University		
Falkirk Council	Adviser	HND Sports Therapy	Heriot-Watt University		
Fujifilm	Energy Adviser	Japanese	Institute of Chartered		
Gamestation	Event Manager	Law Conversion Course	Accountants Scotland		
Glasgow City Council	Field Engineer	MA History	Lancaster University		
Grant Thornton	Fiscal Officer	MA Museum Studies	Leeds University		
Greggs	Foundation Doctor	MA Theory and Practice of	Liverpool University		
Halliburton	Front of House	Translation	MTC, National Taiwan Normal		
Haven Veterinary	Supervisor	Mandarin Language course	University, Taipei		
Group HMV	Inspection Engineer	Masters Economics	Newcastle University		
Ikea	Legal Support Officer Marine Geophysicist	MPhil Accountancy and Finance	Nottingham University		
INEOS	Minister Minister	MSc Atmospheric Science MSc Biomedical Science	Open University Oxford University		
Manufacturing	Music Instructor	MSc by Research Linguistics	Queen Margaret University		
Scotland	PE Teacher	MSc Criminology and Criminal	College		
Midlothian Council	Primary Teacher	Iustice	School of Oriental and African		
Nessco	Project Worker	MSc Development Studies	Studies Studies		
NHS Ayrshire and	Research Scientist	MSc Global Environmental	Southampton University		
Arran	Sales and Contracts	Change	Strathclyde University		
NHS Fife	Manager	MSc Hydrogeology	Telford College		
Portsmouth City	Sales Coordinator	MSc Performance Psychology	Trinity College		
Teaching Primary	Service Quality	MSc Public Relations	University College London		
Care Trust	Manager	PG Dip Broadcast Journalism	York University		
Renewable Energy	Special Needs	PGDE RE	,		
Systems	Assistant	PGDE Secondary			
Royal Bank of	Station Support Staff	PhD Acoustics and Instrumental			
Scotland	Swimming Teacher	Research			
Sciennes Afterschool	Tax Associate	PhD Active Galactic Nuclei			
Care	Wedding Services	PhD Algebra			
Scottish Power	Adviser	PhD Archaeoentomology			
Scottish Widows		PhD Chemistry			
South Lanarkshire		PhD Cognitive Science			
Council		PhD Electronic and Elecotrical			
Stent		Engineering			
Ted Baker		PhD Inorganic Chemistry			
Tesco		Photography			
The Skipper Ness		Scottish Vocational			
Ceilidh House WA Fairhurst		Qualification			
wa ramurst		Surgical Sciences Online Learning			
		Learning			
	l				

FF Institution

FE Institution			
Employers	Job Titles	Further Study	Institutions
Aberdeenshire Council ASDA BSkyB Care Commission Chatteris Church of Scotland Citizen's Advice Bureau Clackmannanshire Council Crown Office and Procurator Fiscal Service Dundee City Council East Ayrshire Council East Ayrshire Council Edinburgh City Council Forth Valley College Glasgow University GlaxoSmithKline Gogen Green Tourism Business Scheme John Lewis KPMG Loch Ness Discovery Centre Marie Curie Care Centre Mental Health Foundation Midlothian Council Midlothian Womens Aid Moray Council News Corp NHS Lothian Perth and Kinross Council Roasters Royal Bank of Scotland Royal Blind School Scott Wilson Scottish Association of Mental Health Scottish Borders Council Scottish Government Scottish Government Scottish Government Scottish Water Self-employed Stepping Stones StreetSmart The Rock Trust Tods Murray Victim Support Scotland West Dumbartonshire Council West Lothian Council	Administrative Officer Assistant Archaeologist Befriending Co-ordinator Bowling Coordinator CDT Teacher Charity Fundraiser Chartered Accountant Civil Engineer Classroom Assistant Customer Service Adviser Development Administrator Development Officer Diversity Facilitator Early Years Manager Early Years Morker FE Lecturer Geography Teacher Management Information Specialist Manager/Lead Practitioner Mental Health Support Worker Minister Musician Nursery Manager Nursery Nurse PE Teacher Primary Teacher Process Chemist Production Operative Programme Co-ordinator Pupil Support Worker Research Assistant Social Worker Solicitor Support Assistant for Youth Offendering Service Support Worker Sustainable Tourism Grading Assessor TEFL Teacher Web Project Officer Witness Service Coordinator Wraparound Care Assistant	BA Community Education Butchery CELTA Chinese Language COSCA Counselling Diploma in Legal Practice From Enlightenment to Romanticism Graduate Diploma Speech and Language Therapy Institute Of Chartered Accountants Scotland LLM Public International Law MA Performance, Screen and Visual Cultures Mentoring - Childcare Students MSc Creative Writing MSc Urban Design PGDE English PGDE Geography PGDE Primary PhD Anthropology of Health and Illness PhD Dark Matter PhD Physical Organic Chemistry PhD Sociology PhD Structural Geology Religious Studies Teaching in Adult Literacy	Cambridge University Dundee University Edinburgh College of Art Edinburgh Napier University Edinburgh University Glasgow University ICAS Manchester University Open University Other non-UK institution Queen Margaret University College Southampton University Stevenson College Unknown Institution Yunnan Normal University

LEAPS

Employers	Job Titles	Further Study	Institutions
Action Group	Account Administrator	ACCA Accountancy	ACCA
Autism Initiatives	Assistant Curator	Chinese Language	Dundee University
Basketball Scotland	Autism Support Worker	Diploma in Legal	Edinburgh Napier University
and Great Britain	Chartered Accountant	Practice	Edinburgh University
Wheelchair	Computer Support Officer	Latin	Queen Margaret University
Association	Customer Services Assistant	LLB	College
Boots	Education Assistant	LLB (Accelerated)	Strathclyde University
Clyde Veterinary	Executive	MA Law Research	
Group	Financial Crime Associate	MBChB	
Debenhams	Foundation Doctor	MSc Accounting and	
East Lothian	Front of House Server	Finance	
Council	Geography Teacher	MSc Public Health	
Edinburgh City	Gold Consultant	MSc Public Health	
Council	Highways Engineer	Nutrition	
Edinburgh	Law Tutor	PGDE Biology	
University	Library Assistant	PGDE Geography	
Greggs	Network Analyst	PhD Medical	
Guardian Jewellery	PE Teacher	Research	
Hyaltech	Play Leader		
Iformis	Primary Teacher		
Institute of	Public Relations Intern		
Occupational	Quality Control Technician		
Medicine	Receptionist		
Jaeger	Referee		
Lloyds TSB	Retail Manager		
Morrisons	Software Developer		
Next	Support Worker		
NHS Forth Valley	TEFL Teacher		
NHS Greater	Veterinary Surgeon		
Glasgow and Clyde	, 3		
NHS Lothian			
Pizza Hut			
River Island			
Royal Bank of			
Scotland			
RSM Tenon			
Scotia Gas			
Networks			
Scott Wilson			
Stirling Council			
Tesco			
West Lothian			
Council			
YBM			

Pathways

Employers	Job Titles	Further Study	Institutions
Anderson Strathern Crown Office and Procurator Fiscal Service Debenhams Dickson Minto Earth Calling Edinburgh City Council Edinburgh University Faithful and Gould Forestry Commission Game Station Hennes and Mauritz Ikea Midlothian Council NHS 24 NHS Forth Valley NHS Grampian NHS Greater Glasgow and Clyde NHS Lothian PricewaterhouseCoopers Royal Bank of Scotland Scotch Whisky Heritage Scottish Water Scottish Widows Search Shepherd and Wedderburn Tesco	Administrative Assistant Assistant Project Manager Call Handler Cash Office Specialist Chartered Accountant Customer Service Adviser Customer Services Supervisor Environmental Educator Financial Assistant Foundation Doctor General Assistant Human Resources Officer Legal Support Officer Primary Teacher Recruitment and Admissions Officer Retail Manager Solicitor	BA Business Studies Chartered Accountancy Diploma in Legal Practice Law Conversion Course LLB MSc Construction Project Management MSc Criminology and Criminal Justice PhD Medical Research Surgical Sciences Online Learning	BPP Dundee University Edinburgh University Heriot-Watt University Institute of Chartered Accountants Open University

SWAP Fast

SWAP East			
Employers	Job Titles	Further Study	Institutions
Access to Industry An archaelogical group Audit Scotland BSkyB Capital Groups Challenges Worldwide Chamberlain McBain Church of Scotland Citizen's Advice Bureau Clackmannanshire Council Collins Dictionaries East Lothian Council Edinburgh City Council Edinburgh Young Carers Project Enable Scotland Events in Partnership Falkirk Council Fife Council Forestry Commission Freelance Gap Haifa Council Heriot-Watt University Ipsos MORI Karydis Jewellery Lancashire County Council Midlothian Council National Trust for Scotland Next NHS Lothian North Lanarkshire Council Project Scotland Royal Bank of Scotland Scott Wilson Scottish and Newcastle Scottish Government Self-employed Skyscanner StreetSmart Tods Murray Unknown Organisation West Lothian Council	Account Handler Administrative Officer Administrator Anatomical Pathology Technician Assistant Archaeologist Assistant Manager Bar Supervisor Catering Supervisor Civil Engineer Community Education Worker Conference and Event Organiser Customer Relations Adviser Customer Service Assistant Educational Psychologist Events Co-ordinator Family Support Worker Fiction Writer Financial Assistant Geography Teacher Junior Administrator Lead Support Worker Library Assistant Management Information Specialist Marketing Executive Material Masterdata Controller Minister Museum Shop Manager Musician Occupations Officer Paralegal Policy Officer Primary Teacher Project Worker	Further Study Creative Writing Diploma in Legal Practice MSc Classics MSc Counselling Studies MSc History Of Science And Technology Specialism MSc Linguistics PGDE English PGDE Geography PGDE Secondary PHD Social Anthropology PhD Sociology Psychology Russian Language	Edinburgh University Glasgow University Open University Russian Institute University College London

Credit for Entry

Employers	Job Titles	Further Study	Institutions
Aitken Nairn	Administrative Manager	Creative writing	Cambridge University
An events company	Freelance Researcher	Criminology and	Edinburgh Napier
An off-license	Language Assistant	Criminal Justice	University
Dabex	LGV1 Driver	Microsoft Office	Edinburgh University
Edinburgh City Council	Project Co-ordinator	Intermediate	Glasgow University
Edinburgh University	Sales Assistant	MLit Professional	Leith Academy
Higher Education	Self-Employed	Archaeology	-
Academy	Information Architect	MRes Philosophy	
Ipsos MORI	Solicitor	MSc Finance	
John Lewis	Staff Nurse	MSc Osteoarchaeology	
NHS Lothian	Telephone Interviewer	MSc Translation Studies	
	Trainer	PGCE Secondary	
		Politics and History	