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Research Report
November 2008

Graduate employment and earnings: Are universities meeting student expectations?

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**Graduate employment and earnings:
Are universities meeting student
expectations?**

This is a report by Tom Norton on behalf of the 1994 Group's
Student Experience Policy Group

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Executive Summary

1. Introduction

As the Higher Education (HE) marketplace develops, and the world of graduate employment becomes more competitive, it is important that we are able to have a better understanding of the value of a UK university education. Although certainly not the only measure of beneficial impact offered by HE to its students, the trends and characteristics of graduate employment and earnings and the satisfaction of graduates with their careers are very important aspects to consider. It is also important to take into account the attitudes of students to the kind of benefits they expect to receive from attending university. This report attempts to assess the relationship between students' expectations when they begin university, in terms of their perceptions of the benefits of HE on their levels of employment, earnings and career satisfaction with the reality of what is being achieved by graduates from the same universities.

The indicators of graduate destinations, levels of employment and earnings have been regularly measured six months after graduation by the *Destination of Leavers from Higher Education (DLHE) Early Survey*. Whilst providing a snapshot of graduate activity shortly after leaving university, the six month survey on its own does not produce a sufficient reflection of the longer-term employment prospects of graduates. Lord Sainsbury of Turville recognised this in his 2007 *Review of Government's Science and Innovation Policies*, where he encouraged 'a longer time period than the usual six months to be used in future to ensure the survey data are robust.'¹

Our report focuses on the *DLHE Longitudinal Survey*, a sample survey designed to provide information about the destinations of leavers from higher education after approximately 3½ years. This survey has, to date, been carried out on only one occasion in order to provide up-to-date information about students graduating in 2002/03.

¹ *The Race to the Top: A Review of Government's Science and Innovation Policies*, Lord Sainsbury of Turville, October 2007, pp6-7.

In his *Review*, Lord Sainsbury also recommended that more information is produced and publicised ‘detailing the number of students graduating in particular subjects, how easily graduates get jobs in particular areas, and in what areas industry foresees shortages of graduates arising.’² It is, of course, important to assess the information on employability and earnings by subject area, and the following report makes distinctions on this basis. However, we believe another important aspect, which is not mentioned in Sainsbury’s *Review*, is to better understand the variation of levels of employment and earnings between graduates from different types of university within the sector, and how these match to the expectations of students within these different types of university.

We have undertaken the following study to add to the information which is available on graduate employment and earnings. This report will analyse the relationship between the expectations of students at different types of university in terms of their perceptions of employment and earnings prospects, and the reality of what graduates from the same types of university receive 3½ years after they have graduated.

Firstly, to understand the attitudes and expectations of current students in regards to how they believe their choice of university will affect their employment and earnings potential, the 1994 Group has obtained data from Opinionpanel’s *Higher Expectations 2007/08: Module 1*.³ Secondly, in order to understand how these expectations are being met upon graduation, the 1994 Group has commissioned an analysis of the *DLHE Early and Longitudinal Surveys*.⁴ Specifically, the aim is to assess the variation between graduates from ‘Research-intensive universities’ and ‘Other institutions’.⁵ The relatively small size of the DLHE Longitudinal Survey sample means that it is not possible to go beyond this level of analysis within this report.

² *The Race to the Top: A Review of Government’s Science and Innovation Policies*, Lord Sainsbury of Turville, October 2007, pp6-7.

³ Opinionpanel Research, *Higher Expectations 2007/08: Module 1 Overview Report*.

⁴ For more details on the DLHE Survey methodology, see: http://www.hesa.ac.uk/dox/dlhe_longitudinal/0203/DLHE_Long_2002_03_FINAL.pdf

⁵ For the purposes of this study the member institutions of the 1994 Group and Russell Group are combined and referred to as ‘Research-intensive Universities’. The membership of each group can be found on their respective websites: www.1994group.co.uk/memberinstitutions; www.russellgroup.ac.uk. All other UK HEIs are referred to as ‘Other institutions.’ The sector benchmark, all UK HEIs, is referred to as ‘All institutions’.

2. Student Perceptions

Using information provided by Opinionpanel’s *Higher Expectations Survey 2007/08*, based on interviews with new full-time undergraduate students in the first few weeks of term, we can get a sense of the aspects which influenced students to apply to their particular university.

The most important factors to students across the sector were academic considerations, such as good teaching (56% rating this ‘very important’), the course content and structure being what they wanted (56%) and good course facilities (54%).

It seems that there is a variation in the perceptions of students within the two parts of the sector which are being examined in this study, as to the types of benefits they are receiving in terms of their employability and earnings potential. As the table below demonstrates, for those studying at Research-intensive universities, perceived benefits are brought by the connection to the university itself, whether because of the national and international reputation the university has obtained or because of the type of academic environment and teaching within which the student will learn.

To what extent was your future employability and earning potential a consideration when you were choosing which university to study at?			
	Research-intensive universities	Other Institutions	All Institutions
To a great extent	34%	25%	29%
To some extent	50%	52%	51%
Not a consideration at all	15%	21%	19%
Don't know	1%	2%	1%

While these aspects are considered to an extent by students at other UK HEIs, more importance is generally placed on the specific course studied and the benefits this will have on their employability and earnings potential, as demonstrated in the following table.

To what extent was your future employability and earning potential a consideration when you were choosing the course to study at university?			
	Research-intensive universities	Other Institutions	All Institutions
To a great extent	34%	43%	39%
To some extent	55%	47%	50%
Not a consideration at all	11%	8%	9%
Don't know	1%	2%	1%

3. Destinations, Employment and Earnings

Having gathered evidence on what students expect to receive when attending certain types of university this report then investigates how far these expectations are being met after they graduate.

Breaking the information contained in the *DLHE Longitudinal Survey* down into the two parts of the sector that we are examining shows us some very interesting comparisons. The analysis suggests that a relatively high level of employment and earnings is received by research-intensive graduates, suggesting a correlation between what students expect from these universities in terms of the employment and earnings potential gained, and what they achieve after graduating.

Destinations

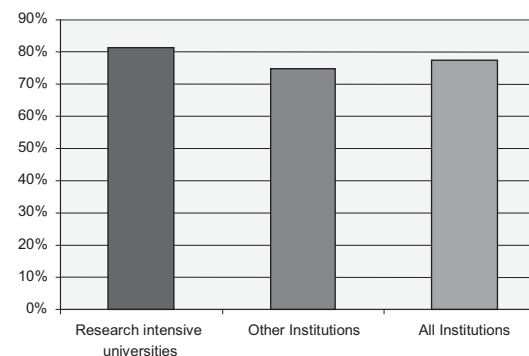
Almost 90% of graduates from all institutions were either employed or undertaking work and further study after 3½ years. The graduates of Research-intensive universities are more likely to be undertaking further study (only) after 3½ years. This is particularly marked within the Science and technology subject areas, as compared to the Arts and social sciences.

Occupational types

The large majority of graduates – almost 80% – from all UK HE institutions were identified as being in graduate level jobs after

3½ years. We can see from the table below that graduates from Research-intensive universities were more likely to be working in graduate level jobs than those from other institutions.

Percentage of employed graduates holding graduate level jobs after 3½ years

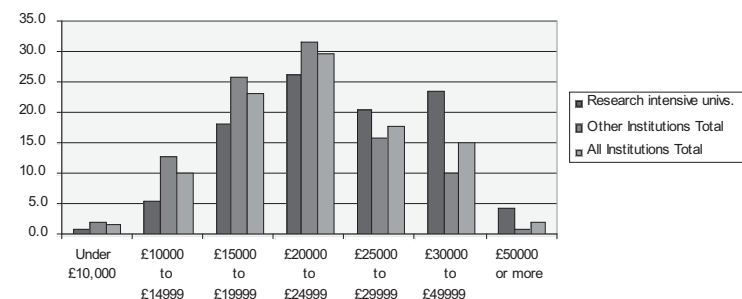


Institutions in both groupings were more likely to achieve graduate-level jobs if they studied in the Science and technology subject area than if they studied Arts and social sciences.

Salaries

An analysis of the salaries earned by 2002/03 graduates after 3½ years produces some very interesting comparative outcomes, as demonstrated in the table below.

Salary bands of full-time employees after 3½ years



Clearly, the most prominent salary band here for the sector as a whole is the £20,000 to £25,000 band, and this accords with the analysis undertaken by the National Centre for Social Research, on behalf of HESA, which shows the median salary of graduates responding to the longitudinal study as being £22,500.⁶

We can also see that within the highest three salary bands graduates from Research-intensive universities feature prominently. This is particularly the case within the £30,000 to £50,000 band, in which there is a notably high proportion of Research-intensive graduates.

The following table shows that two thirds of the UK's graduates can expect to earn over £20k after 3½ years, while 35% can expect to be earning over £25k.

Proportion of respondent graduates reported to be earning over £20K and over £25K after 3½ years

Institutional group	Over £20K	Over £25K
Research intensive univs.	75%	49%
Other Institutions	59%	27%
All Institutions	65%	35%

It is also demonstrated from this table that graduates from Research-intensive institutions are, on the whole, more likely to earn a higher wage after this period than those from Other institutions.

Across the sector, studying Science and technology is likely to attract higher earnings than studying Arts and social sciences.

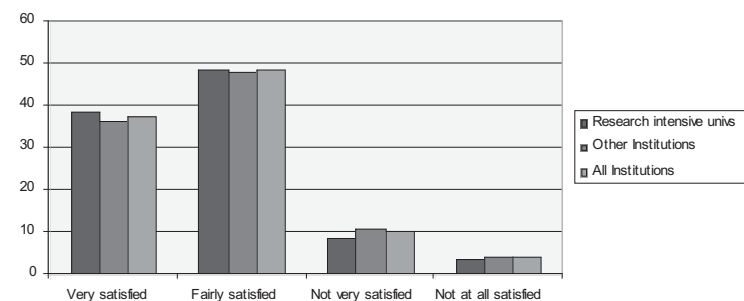
The prominent difference between the two university groupings is in the Science and technology subject areas, in which Research-intensive graduates attract higher earnings prospects than at Other institutions. This is most marked in the £30,000 to £50,000 band, in which 31.7% of graduates from Research-intensive universities were placed, compared with 16% of graduates from Other institutions. This trend is repeated to a less pronounced extent amongst Arts & social sciences graduates of both groups.

⁶ Kitchen, Lloyd, Vignoles and Finch, *Destinations of Leavers from Higher Education Comparative Report*, NCSR, 2008.

Graduates' level of satisfaction with their careers

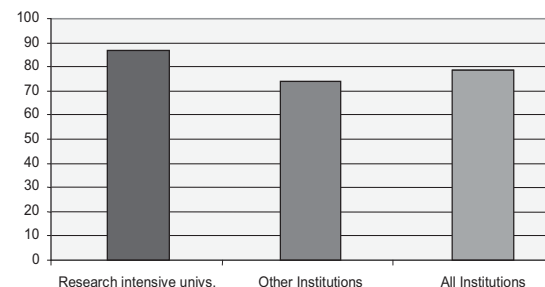
The *Longitudinal Survey* also provides information about the perceptions of graduates about both their career to date and their institution. It seems that despite achieving different levels of earnings, graduates from each university grouping are equally as satisfied with their careers to date, as we can see from the chart below.

DLHE Longitudinal respondents 2002/03 by overall satisfaction with career to date and institutional group



The chart below shows the percentage of graduates who would be unlikely to choose another institution in future. This shows that, when looking back at their choices of university, it is Research-intensive graduates that are most satisfied with the choices they made.

Percentage of graduates who would be unlikely to choose another institution in future



4. Conclusions

The overall conclusions of this report are:

1. There is a perception amongst students at Research-intensive institutions that their university will attribute them good employment and earnings prospects. To a large extent this is due to an appreciation of the reputation of these universities amongst employers and more broadly.
2. Students attending Other institutions place higher importance on employability and earnings potential when choosing their particular course than those attending Research-intensive universities.
3. It seems that the expectations of Research-intensive graduates are being met to a greater extent than those of graduates from Other institutions. This is due to the fact that:
 - (i) After 3½ years the earnings of graduates from research-intensive universities are likely to be higher than those of graduates from the rest of the sector. This is more pronounced within the Science and technology subject area, but is also the case within Arts and humanities.
 - (ii) Research-intensive universities have a higher proportion of graduates engaged in graduate-level jobs after 3½ years than Other institutions.
 - (iii) Graduates from Research-intensive universities are likely to be happier retrospectively with their choice of institution. However, there is little difference in the career satisfaction between graduates from each institutional grouping.
5. When assessing the impact that a university education has on graduates, this is not always a simple issue of employment. An important aspect which is often overlooked in public discourse on the benefits of university is the progression of graduates into further study. It is clear from this study that graduates from Research-intensive universities have a significantly higher propensity to continue into further study than those from Other institutions.
6. The availability, for the first time, of longitudinal information about graduate destinations and salaries is a major advance. We welcome the fact that this survey is currently being repeated, but feel that it should be extended in scope in order to enable analysis to be conducted at institutional level.

Graduate employment and earnings: Are universities meeting student expectations?

1. Introduction

- 1.1 As the Higher Education (HE) marketplace develops, and the world of graduate employment becomes more competitive, it is important that we are able to have a better understanding of the value of a UK university education. Although certainly not the only measure of beneficial impact offered by HE to its students, the trends and characteristics of graduate employment and earnings and the satisfaction of graduates with their careers are very important aspects to consider. It is also important to take into account the attitudes of students to the kind of benefits they expect to receive from attending university. This report attempts to assess the relationship between students' expectations when they begin university, in terms of their perceptions of the benefits of HE on their levels of employment, earnings and career satisfaction with the reality of what is being achieved by graduates from the same universities.
- 1.2 Much of current Government policy is focussed on the impact that university graduates will bring to the economic growth and international competitiveness of the UK. This impact can be understood in a variety of ways. One such way would be to assess the extent to which the high level skills obtained through HE, including critical thinking, enhanced communication and interaction abilities, are applied to the workplace through 'graduate level' employment. Another important way is to assess the level of earnings that are being achieved by university graduates, and to what extent there is an earnings premium attributed to the HE learning experience. It is also useful to consider the level of career satisfaction of graduates, and their views as to whether they are happy retrospectively with their choice of institution.

- 1.3 It is important to point out that, while the public discourse on the activities of graduates and the benefits they bring to the UK tends to focus on their levels of employment and earnings, it often underplays the importance of progression to further study. This is a vital element of the knowledge economy to which the HE sector is contributing, and will be considered in this report alongside employment and earnings as a key factor of the contribution of graduates to the wealth and wellbeing of the UK.
- 1.4 These above indicators of graduate destinations, levels of employment and earnings have been regularly measured six months after graduation by the *Destination of Leavers from Higher Education (DLHE) Early Survey*. Whilst providing a snapshot of graduate activity shortly after leaving university, the six month survey on its own does not produce a sufficient reflection of the longer-term employment prospects of graduates. Lord Sainsbury of Turville recognised this in his 2007 *Review of Government's Science and Innovation Policies*, where he encouraged 'a longer time period than the usual six months to be used in future to ensure the survey data are robust.'⁷
- 1.5 Our report focuses on the *DLHE Longitudinal Survey*, a sample survey designed to provide information about the destinations of leavers from higher education after approximately 3½ years. This survey has, to date, been carried out on only one occasion in order to provide up-to-date information about students graduating in 2002/03.
- 1.6 In November 2007, the 1994 Group published its *Student Experience Policy Report*,⁸ which identified enhancing the employability of graduates as one of the key challenges faced by the sector, and recommended that wider availability of information about graduate employment and earnings was necessary to achieving this. Lord Sainsbury's *Review* recommended that more information is produced 'detailing the number of students graduating in particular subjects, how easily graduates get jobs in particular areas, and in what areas industry foresees shortages of graduates arising.'⁹ It is, of

⁷ *The Race to the Top: A Review of Government's Science and Innovation Policies*, Lord Sainsbury of Turville, October 2007, pp6-7.

⁸ 1994 Group Student Experience Policy Report, 1994 Group, November 2007.

⁹ *The Race to the Top*, pp6-7.

course, important to assess the information on employability and earnings by subject area, and the following report makes distinctions on this basis. However, we believe another important aspect, which is not mentioned by Sainsbury, is to better understand the variation of levels of employment and earnings between graduates from different types of university within the sector.

- 1.7 We have undertaken the following study to add to the information which is available on graduate employment and earnings. This report will analyse the relationship between the expectations of students at different types of university in terms of their employment and earnings prospects, and the reality of what graduates from the same types of university receive 3½ years after they have graduated. Specifically, the aim is to assess the variation between graduates from 'Research-intensive universities' and 'Other institutions'.
- 1.8 We are presenting this report to demonstrate how far the varying expectations of students in different parts of the sector are being met when they graduate and also to provide this extra level of information to policy-makers and prospective students.

Notes on methodology

- 1.9 To understand the attitudes and expectations of current students in regards to how they believe their choice of university will affect their employment and earnings potential, the 1994 Group has undertaken an analysis of Opinionpanel's *Higher Expectations 2007/08: Module 1*.¹⁰ This information was disaggregated into the categories, 'Research-intensive universities', 'Other institutions' and 'All institutions'.¹¹ This information is based on over 13,000 interviews with the new

¹⁰ Opinionpanel Research, *Higher Expectations 2007/08: Module 1 Overview Report*.

¹¹ For the purposes of this study the member institutions of the 1994 Group and Russell Group are combined and referred to as 'Research-intensive Universities'. The membership of each group can be found on their respective websites: www.1994group.co.uk/memberinstitutions; www.russellgroup.ac.uk. All other UK HEIs are referred to as 'Other institutions.' The sector benchmark, all UK HEIs, is referred to as 'All institutions'.

2007/08 cohort of full-time undergraduate students in the first few weeks of term. The information received is analysed in Section 2, below.

- 1.10 In order to understand how these expectations are being met upon graduation, the 1994 Group commissioned Professor Brian Ramsden to conduct an analysis of the *DLHE Early and Longitudinal Surveys*.¹² This was disaggregated into the same university groupings as above, called 'Research-intensive universities', 'Other institutions' and 'All institutions'. The information received from Professor Ramsden is analysed in Section 3, below.
- 1.11 The HESA *DLHE Early Survey* contained all United Kingdom (UK) and European Union (EU) domiciled students reported to HESA for the reporting period 1 August 2002 to 31 July 2003 as obtaining relevant undergraduate and postgraduate qualifications and whose study was full-time or part-time (including sandwich students and those writing-up theses). Awards from dormant status were not included in the target population. The reference date for the 2002/03 *DLHE Early Survey* was 15 January 2004.
- 1.12 The *DLHE Longitudinal Survey* was a three-year follow-up of the 2003 DLHE census of students who left Higher Education between August 2002 and July 2003. The survey was based on a stratified sample of 62,040 respondents to the census questionnaire. In total 24,825 of the 62,040 selected graduates completed and returned a questionnaire a response rate of 40%. The *Longitudinal Survey* sample deliberately over-sampled some groups of students relative to others and the survey data has been weighted to adjust for this. The survey weights also include an adjustment for differential response rates across subgroups of students. The reference date for the *DLHE Longitudinal Survey* was 27 November 2006. The limited size of the sample and response rate restrict the level of analysis which can be undertaken using the survey data. We have chosen to disaggregate the sector into two university groupings, rather than undertake analysis at the level of individual institutions.

¹² For more details on the DLHE Longitudinal Survey methodology, see: http://www.hesa.ac.uk/dox/dlhe_longitudinal/0203/DLHE_Long_2002_03_FINAL.pdf

2. Students' Perceptions

- 2.1 The following section examines information provided by Opinionpanel, based on over 13,000 interviews with the new 2007/08 cohort of full-time undergraduate students in the first few weeks of term.

University choice factors

- 2.2 First year UK undergraduates were asked to rate the importance of specific attributes upon their choice of university. The most important factors to students across the sector were academic considerations, such as good teaching (56% rating this 'very important'), the course content and structure being what they wanted (56%) and good course facilities (54%).
- 2.3 There are interesting observations to be made regarding the different level of importance placed on certain choice factors by students within the different university categories being considered here. There are clear differences in perceived importance of certain aspects between students at Research-intensive universities and other UK HEIs. Table 1 (opposite) lists the university attributes which students at research-intensive institutions rated as more important than those at other institutions.
- 2.4 What is most noticeable is the relative importance of reputation factors in the minds of students at Research-intensive universities in comparison to those at Other institutions. Seven of the eleven choice factors (shaded in Table 1) are factors linked to reputation, and it is in these areas that there are the largest differences between the two parts of the sector. This includes the view that the course 'has a good reputation amongst employers', to which 43% of Research-intensive students replied was a very important attribute in choosing their university, compared to 30% of students at other institutions. This does not mean, however, that the course studied is vocational or even directly related to the field of future employment.
- 2.5 We see that students at institutions in both groupings give high importance to good teaching, but that this is given more importance at research-intensive universities. Importantly, the last factor listed, 'research reputation' suggests that an

Table 1.
Importance of attributes (% rating attribute as 'very important'):
attributes rated more important by students at Research-
intensive universities

(Factors linked to reputation are shaded)

	Research-intensive universities	Other Institutions	All Institutions
Good teaching	61%	53%	56%
University comes highly recommended	46%	16%	29%
Course has a good reputation among potential employers	43%	30%	35%
Guaranteed accommodation in a hall of residence	43%	29%	35%
High employability of graduates	42%	36%	39%
Open day – impressed by the city / location	39%	30%	33%
Reputation of course / department / lecturer	36%	18%	25%
Seen as being a prestigious place to go	33%	6%	17%
Strong in league tables	33%	6%	17%
Traditional and solid reputation	31%	9%	18%
Research reputation	24%	9%	15%

appreciation does exist amongst students from Research-intensive universities for the positive effect that an excellent research environment will have on their academic student experience.

- 2.6 Just as interesting are the factors which are considered more important by students at Other institutions than those at the Research-intensive universities. Table 2 (opposite) extracts these attributes.

Table 2.
Importance of attributes (% rating attribute as 'very important'):
attributes rated more important by students at Other institutions

	Research-intensive universities	Other Institutions	All Institutions
The course offered something very specific that I wanted to study	29%	45%	39%
Good learning resources (e.g. computers and libraries)	29%	36%	33%
Assessment, teaching and learning methods	25%	30%	28%
Strong links with industry	21%	30%	27%
Close to home	11%	27%	21%
Good bursaries and scholarships	11%	19%	16%
Lower tuition fees compared with alternatives	5%	10%	8%

- 2.7 A relatively important factor for students at Other institutions is that the course offered something very specific that the student wanted to study. The factor which sees the most difference in importance between students of the two university groupings is how close to a student's family home the university is, reflecting the way many of these universities attract students from within their local communities. Also, bursaries and fees are noted as more important considerations of students at Other institutions. Interestingly, students at these institutions rate good learning resources as more important than those at the research-intensive universities.

Employability and earning potential

- 2.8 We see from Table 1, above, that higher proportions of students at research-intensive universities place employability attributes, such as 'high employability of graduates' and 'course has a good reputation among potential employers', as 'very important' when influencing their choice of university. Two other questions asked by Opinionpanel investigated how important future employability and earning potential was to students when choosing: a) their course; and b) their university.

- 2.9 Students across the sector stated that future employability and earning potential was a consideration when choosing their particular course. However, as Table 3 demonstrates, it was a more important consideration for students at Other institutions, 43% of these students saying this was a consideration 'to a great extent', compared to 34% of students at research-intensive universities.

Table 3.
To what extent was your future employability and earning potential a consideration when you were choosing the course to study at university?

	Research-intensive universities	Other Institutions	All Institutions
To a great extent	34%	43%	39%
To some extent	55%	47%	50%
Not a consideration at all	11%	8%	9%
Don't know	1%	2%	1%

- 2.10 When it comes to choice of university, rather than course, students in the Research-intensive universities placed more importance than the other institutions on the consideration of future employability and earning potential, further demonstrating the reputation aspects students tend to associate with the more traditional universities. The table below demonstrates this:

Table 4.
To what extent was your future employability and earning potential a consideration when you were choosing which university to study at?

	Research-intensive universities	Other Institutions	All Institutions
To a great extent	34%	25%	29%
To some extent	50%	52%	51%
Not a consideration at all	15%	21%	19%
Don't know	1%	2%	1%

- 2.11 Also demonstrating the perceived effect of university reputation on future employability is what students across the sector saw as the fourth likeliest factor which would improve a graduate's employability (shaded below):

Table 5: What improves a graduate's employability?

Work placement or experience as part of degree	57%
A 'First' classification	52%
The subject of the course chosen	40%
The university attended is a 'top' university	37%

- 2.12 It seems that there is a variation in the perceptions of students within the two parts of the sector, as to the types of benefits they are receiving in terms of their employability and earnings potential. For those studying at research-intensive universities, perceived benefits are brought by the connection to the university itself, whether because of the national and international reputation the university has obtained or because of the type of academic environment and teaching within which the student will learn. While these aspects are considered to an extent by students at other UK HEIs, more importance is generally placed on the specific course studied and the benefits this will have on their employability and earnings potential.
- 2.13 The next section of this report will investigate how far the perceptions of students in the two university groupings are carried through to reality by investigating outcomes from the *DLHE Longitudinal Survey* of graduate employment and earnings after 3½ years.

3. Graduate Destinations, Employment and Earnings

- 3.1 Having gathered evidence on what students expect to receive when attending certain types of university we will now investigate how far these expectations are being met after they graduate.
- 3.2 Looking at the sector as a whole, the *DLHE Longitudinal Survey Key Findings Report*, published by HESA in 2007, tells us that 3½ years after graduation:
- Three quarters (74%) of graduates were in full time paid work only (including self employed) on 27 November 2006 while 6% were in part time paid work only;
 - 9% of graduates were combining work and further study while 5% were in further study only;
 - 2% of graduates were assumed to be unemployed;
 - Most graduates in employment (80%) were working in occupations that were classified as 'graduate occupations';
 - Graduates with postgraduate qualifications were more likely than those with a first degree or other undergraduate qualifications to be working in a graduate occupation;
 - The median salary of graduates in full time work was £23,000;
 - Graduates with a postgraduate qualification in full time work had a higher median salary than those with a first degree or other undergraduate qualifications (£28,000 compared with £22,000 and £20,000 respectively);
 - The majority of graduates did not think it was likely that they would, in retrospect, change their subject, institution, or qualification type or choose to do something else other than study;
 - 37% of graduates were 'very satisfied' with their career to date and 48% were 'fairly satisfied'.¹³

¹³ *Destination of Leavers from Higher Education Institutions, Longitudinal Survey of the 2002/03 cohort Key Findings Report*, HESA, 2007

- 3.3 Breaking this down into the two parts of the sector that we are examining in this report shows us some very interesting comparisons. The following analysis of the *DLHE Longitudinal Survey* suggests that a relatively high level of employment and earnings is achieved by research-intensive graduates, suggesting a correlation between what students expect from these universities in terms of the employment and earnings potential gained, and what they receive upon graduation.

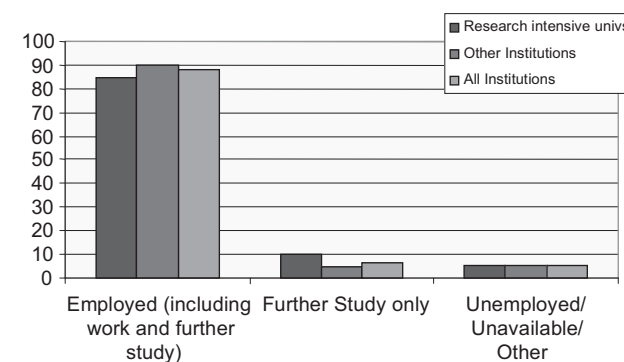
The main activities of graduates

- 3.4 We begin by considering the broad activities being undertaken by graduates after 3½ years. The categories into which the data fall are as follows:

Employed
Work and Further Study
Further Study only
Unemployed/Unavailable/Other

- 3.5 Chart 1 shows how the proportions of graduates in each university grouping were distributed across these categories.

Chart 1: Employment status of graduates after 3½ years



- 3.6 The different characteristics of the institutional groups are evident from this chart. For example:
- Almost 90% of graduates from All institutions were either employed or undertaking work and further study after 3½ years;

(ii) There is comparatively little difference in the proportion of graduates not in employment or further study after 3½ years across the institutional groups – the range is 5.1% at Research-intensive universities to 5.4% at Other institutions.

(iii) The graduates of Research-intensive universities are more likely to be undertaking further study (only) after 3½ years than graduates from elsewhere.

3.7 It will be of interest to compare these figures with the situation at the time of the *DLHE Early Survey*. The following table compares how the levels of unemployment changed across the different university groups in the period between the two surveys.

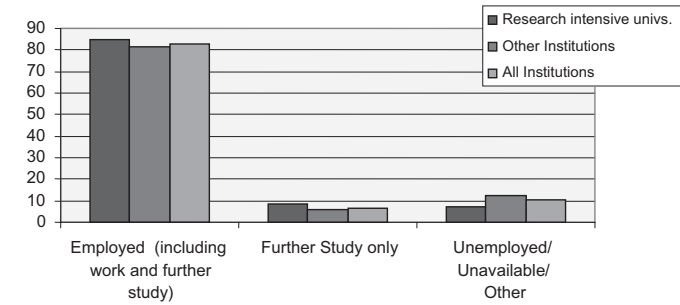
Table 6: Percentage of graduates not employed or in further study after 6 months and 3½ years

Not employed	After 6 months	After 3.5 years
Research intensive universities	11.9%	5.1%
Other institutions	12.9%	5.4%
All institutions	12.4%	5.3%

3.8 It will be seen that all the institutions show a significantly lower percentage of graduates not in employment or further study after the additional three years have elapsed.

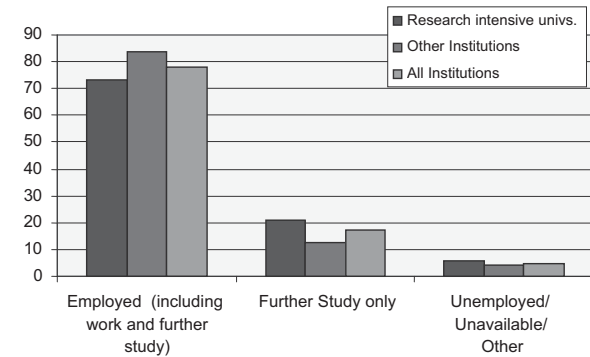
3.9 Another way of looking at the comparative data is to consider what happened to graduates in the intervening period. There are two analyses which follow: the first looks at the conversion of those not in employment to employment, and the second looks at the subsequent destinations of those who were solely in further study or training after six months.

Chart 2: Destinations after 3½ years of those not employed after 6 months (%)



3.10 It can be seen from the chart that in general over 80% of those who were not employed after six months were in employment after 3½ years (including those also engaged in further study). The Research-intensive universities show a marginally greater conversion rate into employment than Other institutions, and also a higher rate of conversion into further study only. As a consequence, Research-intensive universities show a lower rate of continuing unemployment than Other institutions.

Chart 3: Destinations after 3½ years of those in further study after 6 months



3.11 Here we see an interesting re-statement of the different characteristics of the institutional groupings. Overall, almost 80% of those who were exclusively engaged in further study or training six months after graduation were employed after 3½

years, while 18% were still engaged solely in study or training. Approximately 20% of those who were graduates of Research-intensive universities were still engaged in study or research after 3½ years: there is a slightly lower rate of unemployment among Other institutions than among Research-intensive universities.

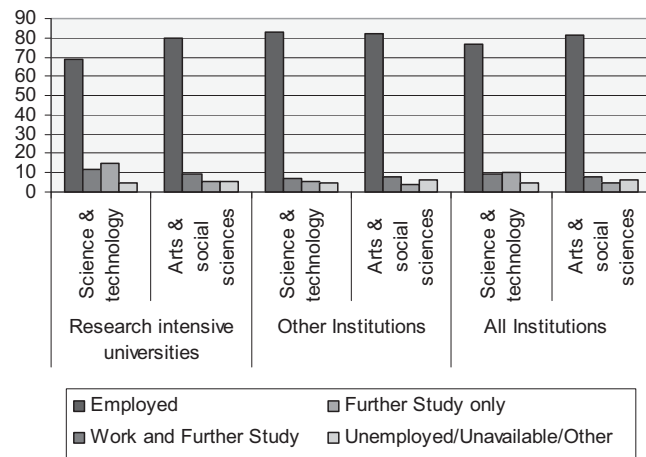
3.12 At this point, we should note that the different subject orientations of the different groupings will clearly have an impact on the behaviour of their graduates. The following section of this report therefore looks at a disaggregation by subject area.

Analysis by subject area

3.13 The previous paragraphs have looked at the main activities of graduates: this section of the report extends this analysis by looking at broad subject areas.

3.14 The following chart shows the percentage of first degree graduates reported as being in employment, further study and not in employment, split between science and arts-based subjects.

Chart 4: Destinations after 3.5 years, by institutional group and broad subject area



3.15 We see here that, in general, graduates in Arts and Social sciences were more likely to be in employment after 3½ years than those in Science and technology. This is notably the case among graduates from the Research-intensive universities, within which there is a markedly higher proportion undertaking further study in the Science and technology subject area than in the Arts and social sciences. The proportion of those in employment from Other institutions is similar for both subject area.

Occupational types

3.16 The processing of the HESA DLHE returns includes an assessment of the nature of jobs undertaken by those in employment. This is based on the methodology developed by Professors Peter Elias and Kate Purcell of the Institute of Employment Research at the University of Warwick.¹⁴

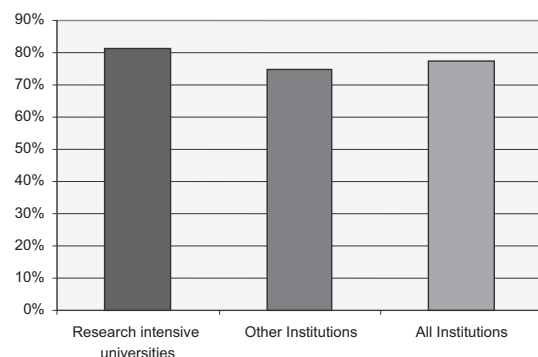
3.17 On the basis of this analysis, it is possible to assess the extent to which the graduates of institutions and groups of institutions are undertaking “graduate level jobs”. In broad terms, graduate jobs require at least one (and normally more than one) of the following:

- (i) Expertise deriving from higher education and subsequent employment experience
- (ii) The ability to play strategic or managerial roles
- (iii) High level interactive skills

3.18 The following chart sets out a simple analysis of all graduates, by institutional group.

¹⁴ Elias and Purcell (2004) SOC (HE): A Classification of Occupations for Studying the graduate Labour Market.

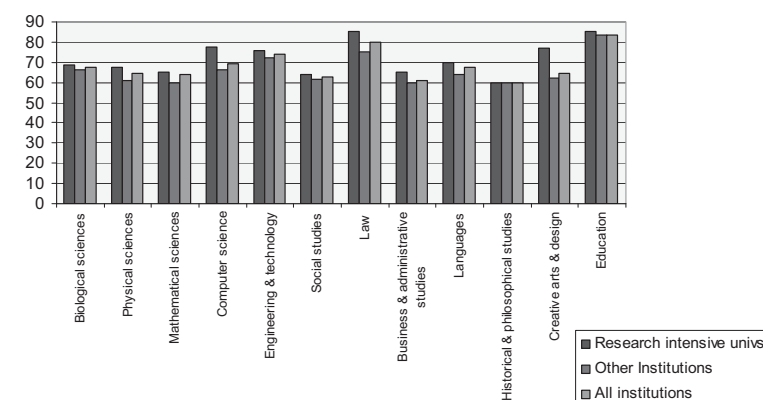
Chart 5: Percentage of employed graduates holding graduate level jobs after 3½ years



3.19 The chart shows that the large majority of graduates – almost 80% - from all UK HE institutions were identified as being in graduate level jobs after 3½ years. We can also see that graduates from Research-intensive universities were more likely to be working in graduate level jobs than those from other institutions.

3.20 The following chart shows a disaggregation of subject areas, limited to those subject groups which can robustly be disaggregated for the university groupings we are examining.¹⁵

Chart 6: Percentage of employed graduates in graduate level jobs by subject area and institutional type



3.21 This chart provides a better basis for considering the information which is available for graduates of particular institutional groups. In all subject areas, it can be seen that graduates from Research-intensive universities either exceed or at least equal the proportions in graduate jobs as compared with Other institutions. The differentiation is particularly notable in Law, Computer science and Creative arts and design.

¹⁵ In the tables and charts that are presented at subject level (Charts 6, 8 and 9; Table 7), there is included only a subset of the subject areas, excluding architecture, agriculture, medicine and subjects allied to medicine, on the grounds of limited numbers in one or other of the combined institutional groupings. These subject areas are however included in the aggregate subject groupings (architecture being within Arts and social sciences, and the others being within Science and technology).

3.22 The data underlying the chart can be seen in the following table.

Table 7: Percentage of employed graduates in graduate level jobs by subject area and institutional type

Subject area	Research intensive univs.	Other Institutions	All institutions
Biological sciences	68	67	67
Physical sciences	67	61	64
Mathematical sciences	65	60	64
Computer science	78	67	69
Engineering & technology	76	72	74
Social studies	64	61	63
Law	85	75	80
Business & administrative studies	65	60	61
Languages	70	64	68
Historical & philosophical studies	60	60	60
Creative arts & design	77	62	64
Education	85	83	84

3.23 These figures are aggregated into Science and Arts based subjects in the following table.

Table 8: Percentage of employed graduates in graduate and non-graduate level jobs by broad subject area and institutional type

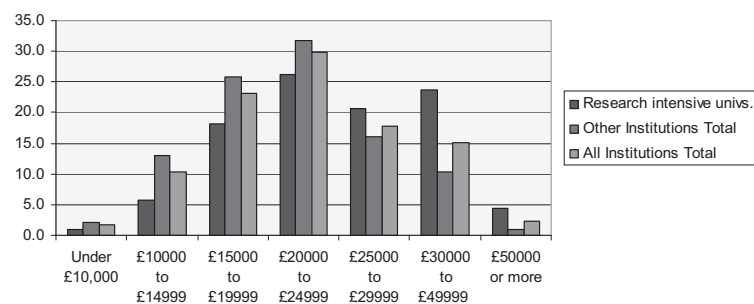
Institutional group	Subject Area	Graduate	Non-Graduate	Unknown
Research intensive univs.	Science and technology	76.6	13.9	9.5
	Arts & social sciences	67.6	18.4	14.1
Other Institutions	Science and technology	72.4	18.2	9.4
	Arts & social sciences	64.2	25.1	10.7
All Institutions	Science and technology	74.1	16.4	9.4
	Arts & social sciences	65.3	22.9	11.8

3.24 Graduates from institutions across the sector are more likely to receive graduate-level jobs if they studied in the Science and technology subject area than if they studied Arts and social sciences. In each subject area, a higher proportion of Research-intensive graduates are employed in graduate-level jobs than graduates from Other institutions.

Analysis of salaries after 3½ years

3.25 We now turn to the analysis of salaries reported by graduates from HE institutions. In order to provide a consistent base for this work, it is limited to graduates who report being in full-time employment.

3.26 The following chart summarises the salary bands reported by graduates in full-time employment in the longitudinal survey, i.e. approximately 3½ years after graduation.

Chart 7: Salary bands of full-time employees after 3½ years

3.27 Clearly, the most prominent salary band here for the sector as a whole is the £20,000 to £25,000 band, and this accords with the analysis undertaken by the National Centre for Social Research, on behalf of HESA, which shows the median salary of graduates responding to the longitudinal study as being £22,500.¹⁶

3.28 We can see that within the highest three salary bands graduates from Research-intensive universities feature prominently. This is particularly the case within the £30,000 to £50,000 band, in which a notably high proportion of Research-intensive graduates feature.

3.29 The following table shows that two thirds of the UK's graduates can expect to earn over £20k after 3½ years, while 35% can expect to be earning over £25k.

Table 9: Proportion of respondent graduates reported to be earning over £20K and over £25K after 3½ years

Institutional group	Over £20K	Over £25K
Research intensive univs.	75%	49%
Other Institutions	59%	27%
All Institutions	65%	35%

¹⁶ Kitchen, Lloyd, Vignoles and Finch, *Destinations of leavers from Higher Education, Comparative Report*, NCSR, 2008.

3.30 It is also demonstrated from this table that graduates from Research-intensive institutions are, on the whole, more likely to earn a higher wage after this period than those from Other institutions.

3.31 Of course, again there is an issue about the subject areas which are particularly featured within the academic provision of different types of institution. The following table and the subsequent two charts illustrate the differences between the subject areas.

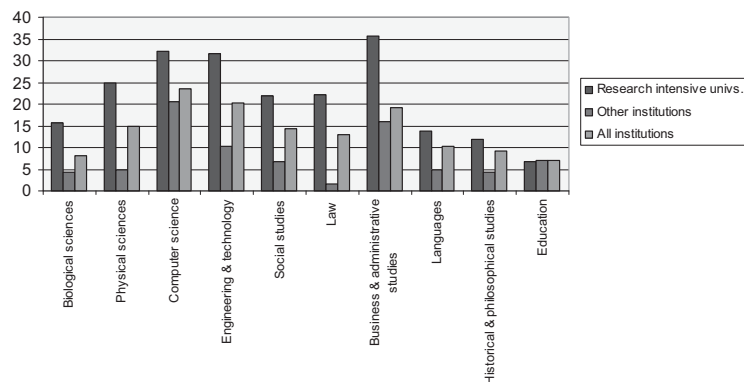
Table 10: Salary bands of 2002/03 graduates reported in the DLHE Longitudinal Survey, split by subject area

Institutional group	Subject Area	Salary Band at 27 November 2006 (percentages)						
		Under £10,000	£10000 to £14999	£15000 to £19999	£20000 to £24999	£25000 to £29999	£30000 to £49999	£50000 or more
Research intensive univs.	Science & technology	0.8	2.6	15.1	22.2	21.5	31.7	6.0
	Arts & social sciences	1.2	8.6	21.2	30.1	19.9	16.0	3.0
Other Institutions	Science & technology	1.6	11.8	21.6	34.2	17.0	12.4	1.3
	Arts & social sciences	2.5	13.7	28.8	30.2	15.4	8.8	0.7
All Institutions	Science & technology	1.3	8.0	18.9	29.2	18.9	20.4	3.3
	Arts & social sciences	2.1	12.0	26.2	30.2	16.9	11.2	1.5

3.32 We can see from this table that, across the sector, studying Science and technology is likely to attract higher earnings than studying Arts and social sciences. The prominent difference between the two university groupings is in the Science and technology subject areas, in which Research-intensive graduates attract higher earnings prospects than at Other institutions. This is most marked in the £30,000 to £50,000 band, in which 31.7% of graduates from Research-intensive universities were placed, compared with 16% of graduates from Other institutions. This trend is repeated to a less pronounced extent amongst Arts & social sciences graduates of both groups.

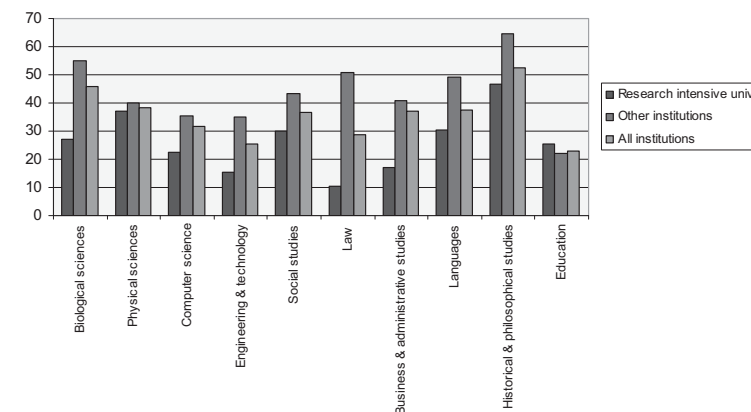
3.33 To break this down into the subject areas which can robustly be disaggregated for the university groupings we are examining, we can see from the two charts below the proportion of graduates earning over £30k after 3½ years, and the proportion earning under £20k.

Chart 8: Percentage of full-time employees earning over £30K after 3½ years



3.34 This chart shows that a relatively higher rate of earnings exists amongst Research-intensive graduates in almost every subject area, with the exception of Education. The difference between the two university groupings in the proportion of graduates earning over £30k are most prominent in the subject areas of Law, Business and administrative studies, Engineering and technology, and Physical sciences.

Chart 9: Percentage of full-time employees earning less than £20K after 3½ years



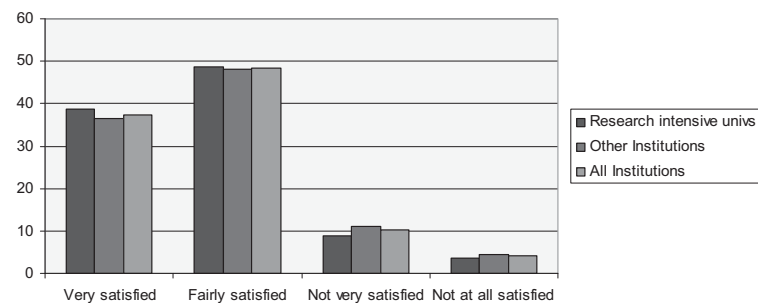
3.35 This chart demonstrates that over 50% of UK graduates from Historical and philosophical studies were earning under £20k after 3½ years. Across the UK, least likely to be earning under £20k were graduates within the Education subject area. In most of the subject areas, graduates from Research-intensive universities were less likely to earn under £20k than graduates from Other institutions.

Graduates’ level of satisfaction with their careers

3.36 The Longitudinal study also provides information about the perceptions of graduates about both their career to date and their institution. In this section we look at graduates’ level of satisfaction with their careers. It seems that despite achieving different levels of earnings, graduates from each university grouping are equally as satisfied with their careers to date.

3.37 The following chart shows the overall level of satisfaction with their career, among graduates from the various institutional groupings.

Chart 10: DLHE Longitudinal respondents 2002/03 by overall satisfaction with career to date and institutional group



3.38 As we can see, there is little difference in the overall satisfaction of graduates from each grouping with their career after 3½ years.

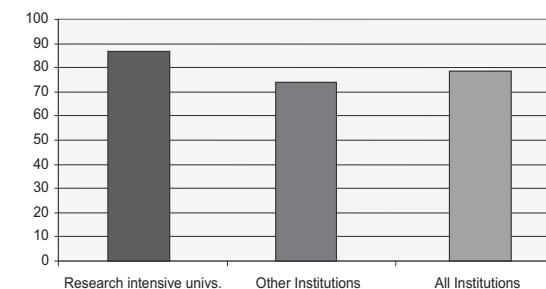
Graduates' level of satisfaction with their institution

3.39 Finally, we now turn our attention to the graduates' perception of their institutions, as reported through the longitudinal study 3½ years after graduation.

3.40 Perhaps rather oddly, this survey item is phrased as a "student dissatisfaction survey". The question asks graduates to identify how likely they would be to choose a different institution in the future.

3.41 The data have been adjusted in the following chart in order to indicate a measure of satisfaction, i.e. those who would be unlikely to choose another institution.

Chart 11: Percentage of graduates who would be unlikely to choose another institution in future



3.42 The chart shows almost 80% institutional satisfaction across the UK sector's graduates, when surveyed 3½ years after graduation. It also suggests that there is a relatively high level of institutional satisfaction among graduates of the Research-intensive institutions.

4. Conclusions

- 4.1 From the above study, we can draw the following conclusions.
- 4.2 There is a perception amongst students at Research-intensive institutions that their university will attribute them good employment and earnings prospects. To a large extent this is due to an appreciation of the reputation of these universities amongst employers and more broadly.
- 4.3 Students attending Other institutions place higher importance on employability and earnings potential when choosing their particular course than those attending Research-intensive universities.
- 4.4 It seems that the expectations of Research-intensive graduates are being met to a greater extent than those of graduates from Other institutions. This is due to the fact that:
- (i) After 3½ years the earnings of graduates from research-intensive universities are likely to be higher than those of graduates from the rest of the sector. This is more pronounced within the Science and technology subject area, but is also the case within Arts and humanities.
 - (ii) Research-intensive universities have a higher proportion of graduates engaged in graduate-level jobs after 3½ years than Other institutions.
 - (iii) Graduates from Research-intensive universities are likely to be happier retrospectively with their choice of institution. However, there is little difference in the career satisfaction between graduates from each institutional grouping.
- 4.5 When assessing the impact that a university education has on graduates, this is not always a simple issue of employment. An important aspect which is often overlooked in public discourse on the benefits of university is the progression of graduates into further study. It is clear from this study that graduates from Research-intensive universities have a significantly higher propensity to continue into further study than those from Other institutions.
- 4.6 The availability, for the first time, of longitudinal information about graduate destinations and salaries is a major advance. We welcome the fact that this survey is currently being repeated, but feel that it should be extended in scope in order to enable analysis to be conducted at institutional level.

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