

# **The outcomes associated with the BTEC route of degree level acquisition**

A Report for Pearson

Prepared by



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## Executive summary

London Economics were commissioned by Pearson to undertake an analysis of a number of issues associated with the acquisition of BTEC qualifications. In particular, we are asked to augment the evidence base relating to BTEC qualification attainment by

- comparing the personal characteristics of individuals in possession of BTEC qualifications and GCE 'A' Levels;
- understanding the progression rate to undergraduate degree level qualifications depending on the route of prior qualification attainment;
- comparing the personal characteristics of individuals in possession of BTEC qualifications and GCE 'A' Levels who go on to achieve degree level qualifications;
- comparing the academic outcomes at degree level depending on the route of prior qualification attainment; and
- comparing the earnings and employment outcomes following degree level attainment depending on the route of prior qualification attainment.

Information from the Labour Force Survey between 1996 and 2011 suggests that:

- There is a strong gender bias in the composition of the group holding BTECs at Level 3/4 *plus a degree*: the proportion of men is almost **70%** compared to **50%** in the group of those attaining degrees through the 'A' Level route.
- The observed patterns indicate that the educational path of those attaining degrees through the '**A' level**' route is typically '**linear**'. A very large proportion of learners (almost **90%**) complete continuous FT education between the age of 19 and 25 and around **88%** achieve their highest qualification by the age of 26, suggesting that A-level holders enrol in a university course straight after A-level attainment. In contrast, the educational path of those attaining degrees via the **BTEC** route is typically '**non-linear**'. These learners normally complete FT education at a younger age, and then attain the degree after a break in education. Almost **43%** of learners are aged 27 or above when they attain their undergraduate degree. Although the data does not allow us to tell whether these learners stop their continuous education before or after attaining the BTEC, almost **32%** of the sample quit their first episode of full-time education before the age of 16, suggesting that a significant number may leave full-time education before undertaking and attaining their BTEC.
- The BTEC route typically leads to specific degree subject areas. For men, the top four subjects (Mathematical Sciences and Computing, Engineering, Architecture and Related Subjects, Business and Financial Studies) account for around **73%** of all degrees. For women, Medical Related Subjects, Business and Financial Studies, Arts, and Education account for almost **70%** of all degrees.
- In aggregate, **a slightly higher proportion of men undertaking degrees through the BTEC route obtain a first class honours degree than those obtaining a degree through the 'A' Level route**.
- **A higher proportion of BTECs plus degree holders are in employment compared to 'A' Level plus degree holders (90% vs. 88%).** The result is valid across gender (**91%** vs. **90%** for men and **87%** vs. **86%** for women) and when looking at full-time employment only (**80.4%** vs. **73.6%**).
- Although individuals with BTECs *plus* degrees earn approximately **8.3%** less per hour compared to individuals in possession of 'A' levels *plus* degrees, these differences are driven by sector of industrial activity, occupation and *especially* region of residence. There are a number of regions, occupations and industries where the BTEC degree route offers better earnings compared to the 'A' level degree route.



# 1 Introduction and Background

Following on from London Economics' previous analysis assessing the economic benefits to the individual and Exchequer associated with the acquisition of BTEC qualifications ([here](#)), London Economics were commissioned by Pearson International to undertake a further analysis of a number of issues associated with the acquisition of BTEC qualifications. In particular, we are asked to augment the evidence base relating to BTEC qualification attainment by

- comparing the personal characteristics of individuals in possession of BTEC qualifications and GCE 'A' Levels;
- understanding the progression rate to undergraduate degree level qualifications depending on the route of prior qualification attainment;
- comparing the personal characteristics of individuals in possession of BTEC qualifications and GCE 'A' Levels who go on to achieve degree level qualifications;
- comparing the academic outcomes at degree level depending on the route of prior qualification attainment; and
- comparing the earnings and employment outcomes following degree level attainment depending on the route of prior qualification attainment.

## 1.1 Data and methodological approach

One of the primary difficulties associated with this analysis is the potential lack of consistent or sufficient data that combines individuals' full educational history, their personal characteristics and economic outcomes in the labour market. Therefore, given the high degree of specificity of the analysis, we merged Labour Force Survey information between 1996 and 2011. In each year, we have used each of the four quarters of LFS data to increase the available sample size. In total, 64 quarterly data sets were combined, re-coded and analysed to generate the findings.

### 1.1.1 Labour Force Survey

The Labour Force Survey is made up from a revolving panel of respondents (approximately 150,000 per quarter across 47,000 UK-wide households). Approximately 20% of respondents drop out each quarter (having participated in the survey on 5 occasions (Wave 1 to Wave 5)) and are replaced by a new wave of participants (Wave 1). Some questions have been added to the LFS over time meaning that not all questions are available for all quarters of the Labour Force Survey. In addition, a number of question modules are not asked of all respondents on all occasions<sup>1,2</sup>.

Nominal variables used in the analysis, such as hourly earnings, were deflated and expressed in August 2012 values, so we always refer to real hourly earnings and wage gaps.

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<sup>1</sup> For instance, income questions are asked only of individuals in Wave 1 and Wave 5, we ensure that duplicate earnings information from Wave 1/Wave 5 respondents are removed.

<sup>2</sup> It is important to note that there are a number of significant issues relating to the availability and comparability of some of the Labour Force Survey over time. In particular, we have noted that in 2005/2006 there was a fundamental change in the administration and collection of Labour Force Survey data following the movement from seasonal to quarterly data. In particular, information relating to a number of the variables (including the location where the qualification was attained) prior the change in data collection method became unavailable on a consistent basis, making some comparisons with other academic work difficult.

### 1.1.2 Definition of qualifications

Throughout the analysis, we split the data into three distinct groups of learner

- Individuals in possession of a BTEC at Level 3 or Level 4 (and no GCE 'A' Level), consisting of
  - Individuals in possession of **BTEC qualifications at Level 4** (known as **BTEC 4**) – including SCOTVECs at higher level, and HNCs/HNDs
  - Individuals in possession of **BTEC qualifications at Level 3** (known as **BTEC 3**) – including SCOTVECs at national level, and ONCs/ONDs
- Individuals in possession of at least **1 GCE 'A' Level** or equivalent qualification (and no **BTEC 3/4**)
- Individuals in possession of at least **one GCE 'A' Level** or equivalent qualification **and a BTEC 3/4)**

### 1.1.3 Effective sample sizes

Throughout the analysis, only individuals in working age (males aged between 16 and 64 and females aged between 16 and 59) were retained for the analysis. In addition, except where explicitly stated, current full-time students were excluded from the analysis in order to present a 'clean' picture of the outcomes associated with qualification and skills acquisition. In total, there were **229,577** observations available for further analysis, with **42,604** individuals indicating that they were in possession of BTEC Level 3 or 4 qualifications<sup>3</sup> and no GCE 'A' levels (possibly in addition to other qualifications at a higher or lower level; **168,681** individuals indicating that they were in possession of GCE 'A' Levels (possibly in addition to other qualifications at a higher or lower level) but not possessing BTEC qualifications at Level 3 or 4. For further comparison, we also identified **18,292** individuals that were in possession of BTEC Level 3 or 4 qualifications and GCE 'A' levels (possibly in addition to other qualifications at a higher or lower level).

**Table 1: Total sample sizes associated with analysis**

	BTEC Level 3/4 & No A-Levels	A-Levels & No BTEC Level 3/4	A-Levels <i>plus</i> BTEC Level 3/4
<b>Total number</b>	<b>42,604</b>	<b>168,681</b>	<b>18,292</b>

*Source: London Economics' analysis of the Labour Force Survey 1996-2011*

Given the large quantities of data, we can have a substantial degree of confidence in relation to the findings presented; however, it is important to be aware that for a number of the more disaggregated analyses, the sample sizes become particularly small, and care should be taken when extrapolating the results presented. Throughout, we present as much information as possible in relation to the sample sizes under consideration.

### 1.1.4 Caveats

As described in the following sections, the group of individuals achieving a degree via the BTEC route is dissimilar in various aspects from the group of individuals following the 'A' levels route: learners attaining degrees through the BTEC route are more likely to be male, typically tend to follow a non-linear educational path (not enrolling on a degree course directly after finishing FT education) and thus are older, on average, when achieving their degree qualification. Moreover, they tend to concentrate in

<sup>3</sup> Despite the fact that 16 years of Labour Force Surveys were merged together, to ensure that the results presented were as robust as possible, the decision was taken to combine individuals in possession of BTEC Level 3 and Level 4 for the subsequent comparison with individuals in possession of 'A' Levels.

specific degree subject areas (with pronounced differences across males and females) and there are also significant differences in terms of occupational structure, sector of activity and region of residence.

All results should be interpreted bearing in mind these differences, and the fact that some variables (e.g. occupation, sector of activity and region of residence) are probably interrelated with the choice of degree subject areas.

When specifically considering labour market outcomes, a series of considerations should be taken into account, for example:

- Given the educational patterns it is reasonable to assume that those following the BTEC route are more likely to spend some time in the labour market before enrolling in a degree course. Their previous experience in the labour market could explain their subsequent employment outcomes: for example they may have a pre-existing relationship with an employer or may be better able to select courses pertinent to their abilities or may try to re-qualify in some other sector or occupation if there is limited labour demand in their original activity. In other words, thanks to their previous experience in the labour market, learners attaining a degree through the BTEC route may be able to find the degree course better matching their skills and providing them with the best perspectives in the labour market after graduation.
- There may be a motivational and ability bias: only around 13% of individuals holding a BTEC subsequently enrol in a first degree course, compared to around 50% for the 'A' levels holders. Hence, BTEC holders may be more motivated than the average individual attaining a degree via the 'A' levels route and also are probably those who can reasonably expect to gain the most from it.
- On the other hand, those following the BTEC route generally attain the degree at a later stage than learners following the 'A' levels route: if some occupations are typically reserved for graduates, and learners following the BTEC route graduate later than the comparison group, they may experience a disadvantage in terms of access to specific roles with a subsequent impact on lifetime earnings.

## 2 Findings

### 2.1 Learner characteristics

Looking at the entire pool of learners with the qualifications necessary to potentially go onto university, the analysis suggests that there are some fundamental differences in the personal characteristics of learners going down the different routes of attainment. Some of these differences will be important when the economic outcomes associated with the different routes of attainment are considered more fully.

In Table 2, the findings indicate that approximately **68%** of individuals in possession of BTEC Level 3/4 qualifications are male compared to **48%** of those in possession of GCE 'A' Levels, while male individuals in possession of both GCE 'A' Levels and BTEC Level 3/4 qualifications are approximately **59%** of the relevant group. The observed ethnic distribution is quite similar across the different groups considered, with a slightly lower proportion of BTEC Level 3/4 qualifications holders coming from a BME background, compared to 'A' Level holders.

**Table 2: Characteristics of learners along different qualification routes**

	BTEC Level 3/4 & No A-Levels		A-Levels & No BTEC Level 3/4		A-Levels plus BTEC Level 3/4	
	<b>42,604</b>		<b>168,681</b>		<b>18,292</b>	
<b>Gender</b>						
Male	29,017	<b>68.1%</b>	81,303	<b>48.2%***</b>	10,800	<b>59.0%***</b>
Female	13,587	<b>31.9%</b>	87,378	<b>51.8%</b>	7,492	<b>41.0%</b>
<b>Ethnicity</b>						
White	39,278	<b>94.0%</b>	154,551	<b>93.3%***</b>	17,051	<b>95.0%***</b>
Other ethnic origin	2,503	<b>6.0%</b>	11,137	<b>6.7%</b>	900	<b>5.0%</b>

*Source: London Economics' analysis of the Labour Force Survey 1996-2011* Note: Results from a T-test of equality of means difference with the case of BTEC Level 3/4 & No A-Levels. Significance thresholds at \*\*\*1% level, \*\* 5% level, \*10% level of confidence.

### 2.2 Progression to degree level qualifications

In Table 3, we present the progression rates depending on the different routes of prior attainment. The analysis indicates that approximately 13% of learners in possession of BTEC Level 3/4 qualifications progress further and complete an undergraduate degree. There is a very slight gender split with a higher proportion of men completing degree level qualifications compared to women (**14%** compared to **12%**).

**Table 3: Progression rates by route of attainment**

	BTEC Level 3/4 & No A-Levels			A-Levels & No BTEC Level 3/4			A-Levels plus BTEC Level 3/4		
	<b>42,604</b>			<b>168,681</b>			<b>18,292</b>		
	All	M	F	All	M	F	All	M	F
<b>Undergraduate degree</b>	<b>5,620</b>	<b>3,991</b>	<b>1,629</b>	<b>85,810</b>	<b>45,012</b>	<b>40,798</b>	<b>4,538</b>	<b>2,708</b>	<b>1,830</b>
<i>Proportion of route</i>	13.2%	13.8%	12.0%	50.9%	55.4%	46.7%	24.8%	25.1%	24.4%
<b>Higher degree</b>	<b>834</b>	<b>665</b>	<b>169</b>	<b>19,097</b>	<b>11,653</b>	<b>7,444</b>	<b>807</b>	<b>545</b>	<b>262</b>
<i>Proportion of route</i>	2.0%	2.3%	1.2%	11.3%	14.3%	8.5%	4.4%	5.0%	3.5%
<b>Prof/voc qual at higher level</b>	<b>587</b>	<b>355</b>	<b>232</b>	<b>11,043</b>	<b>4,275</b>	<b>6,768</b>	<b>531</b>	<b>266</b>	<b>265</b>
<i>Proportion of route</i>	1.4%	1.2%	1.7%	6.5%	5.3%	7.7%	2.9%	2.5%	3.5%

*Source: London Economics' analysis of the Labour Force Survey 1996-2011*



As expected the progression rate amongst those individuals taking the ‘A’ Level route is higher than those taking the BTEC route, with almost **51%** of learners on this route further progressing to and undertaking degree level qualifications. Interestingly, a higher proportion of men carries on and completes degree level qualifications (**55%** compared to **47%** of women). As before, when considering those individuals in possession of both BTEC qualifications and ‘A’ Levels, the results lie in-between the previous results, with about **25%** of these learners progressing to degree level.

The results relating to postgraduate study and higher professional or vocational qualification attainment mirrors the analysis relating to undergraduate degree level attainment, and re-iterates the positive outcomes that are achieved by many individuals who attain BTEC qualifications.

### 2.3 Personal characteristics of learners with degree level attainment

In Table 4, we replicate the analysis presented in Table 2 to understand the personal characteristics of learners who have progressed to degree level (as their highest qualification). The analysis indicates that of those individuals that progressed along the BTEC route of attainment, approximately **70%** of learners are male, while the proportion of degree holders progressing along the ‘A’ Level route who are male stands at approximately **50%**. These results indicate that there has been a slight shift towards men in relation to degree level attainment (irrespective of the route of attainment).

Perhaps more interestingly, Table 4 provides information on the age band of respondents. The analysis suggests that individuals with degree level qualifications who attained these qualifications through the BTEC route are older than those attaining their degree through the ‘A’ Level route. Compared to the **14.6%** of individuals in possession of ‘A’ levels and undergraduate degrees aged below 25, the corresponding proportion of BTEC and degree holders stood at just **9.6%**. The proportion of BTEC plus degree holder in 26-35 year old category was **6 percentage points** higher than the proportion of ‘A’ level plus degree holders in the corresponding category. In terms of age category, those learners who attained degree level qualifications and were in possession of both ‘A’ Levels and BTEC qualifications displayed a similar age structure to those in possession of BTEC qualifications only.

**Table 4: Learner characteristics by route of attainment**

	BTEC Level 3/4 & No A-Levels			A-Levels & No BTEC Level 3/4			A-Levels plus BTEC Level 3/4		
	All	M	F	All	M	F	All	M	F
<b>Total</b>	<b>4,701</b>	<b>3,281</b>	<b>1,420</b>	<b>65,166</b>	<b>32,788</b>	<b>32,378</b>	<b>3,674</b>	<b>2,143</b>	<b>1,531</b>
<b>Gender</b>		69.8%	30.2%		50.3***	49.7%		58.3***	41.7%
<b>BME background</b>	10.4%	8.6%	14.7%	7.2%***	7.2%***	7.3%***	6.5%***	6.0%***	7.1%***
<b>Current age band</b>									
less than 25	9.6%	8.1%	13.2%	14.6%	12.9%	16.3%	10.1%	7.9%	13.1%
26-35	38.0%	33.4%	48.6%	31.7%	28.8%	34.5%	36.9%	33.1%	42.1%
36-45	26.9%	27.9%	24.7%	26.8%	26.3%	27.3%	27.9%	28.5%	27.0%
46-55	16.9%	19.3%	11.5%	19.2%	20.6%	17.8%	18.4%	20.4%	15.6%
56+	8.6%	11.4%	2.0%	7.7%	11.3%	4.1%	6.8%	10.0%	2.3%
$\chi^2$ p-value				0	0	0	0.041	0.717	0.006

*Source: London Economics' analysis of the Labour Force Survey 1996-2011.* Note that the analysis is restricted to just those individuals in possession of an undergraduate degree. We exclude those individuals that have higher academic or vocational qualifications. Results from a T-test of equality of means difference with the case of BTEC Level 3/4 & No A-Levels. Significance thresholds at \*\*\*1% level, \*\* 5% level, \*10% level of confidence. Chi-squared ( $\chi^2$ ) p-value: reporting the p-value for the hypothesis that the rows and columns in the two-way tables considered are independent.

Further demonstrating the differences in the personal characteristics between the learners on different routes, in Table 5, we provide information on the age at which individuals completed full-time education and (in Table 6) the age at which they obtained their highest qualification. The analysis

further re-iterates the findings in the previous section and suggests that the BTEC route of qualification attainment appears to provide learners a second chance into higher educational attainment. Specifically, the analysis indicates that learners who embarked on the BTEC qualification route followed by a degree were substantially younger when they completed full time education compared to those learners following the 'A' Level route. In particular, **31.8%** of learners on the BTEC route completed full time education at or below the age of 16, compared to only **2.8%** of learners on the 'A' Level route who completed full time education at or below the minimum school leaving age.

Similarly, the analysis suggests that the age at which learners on the BTEC route attained their highest qualification was also significantly higher than those on the 'A' Level route. Compared to just **6.8%** of these learners attaining their highest qualification at the age of 27 or above, more than three times this proportion (**24.3%**) of learners on the BTEC route of attainment achieved their highest qualification at or above the age of 30. Interestingly though, approximately **58%** of learners adopting the BTEC route appear to have attained their highest qualification relatively 'straight through' compared to **88%** of learners on the 'A' Level route.

**Table 5: Age completing full time education by route of attainment**

	BTEC Level 3/4 & No A-Levels			A-Levels & No BTEC Level 3/4			A-Levels plus BTEC Level 3/4		
	All	M	F	All	M	F	All	M	F
<b>Age completed full time education (incl. school, 6<sup>th</sup> form, College, or HE) in first instance</b>									
Average	19.6	19.4	20.0	21.4	21.5	21.2	20.7	20.7	20.7
16 or below	31.8%	36.4%	21.1%	2.8%	2.4%	3.1%	7.6%	8.0%	7.2%
17-18	15.8%	14.6%	18.6%	9.0%	7.8%	10.2%	22.8%	22.9%	22.7%
19-26	50.0%	46.5%	58.1%	87.3%	88.7%	85.9%	67.1%	66.4%	68.2%
27 or above	2.4%	2.5%	2.1%	0.9%	1.1%	0.8%	2.4%	2.7%	2.0%
$\chi^2$ p-value				0	0	0	0	0	0

*Source: London Economics' analysis of the Labour Force Survey 1996-2011.* Note that the analysis is restricted to just those individuals in possession of an undergraduate degree. We exclude those individuals that have higher academic or vocational qualifications. In terms of the age at which the highest qualification was attained, the Labour Force Survey only contains information from 2001. Chi-squared ( $\chi^2$ ) p-value: reporting the p-value for the hypothesis that the rows and columns in the two-way tables considered are independent.

**Table 6: Age of highest qualification attained by route of attainment**

	BTEC Level 3/4 & No A-Levels			A-Levels & No BTEC Level 3/4			A-Levels plus BTEC Level 3/4		
	All	M	F	All	M	F	All	M	F
<b>Age obtained highest qualification</b>									
Average	27.3	27.5	27.1	23.1	22.8	23.4	26.4	26.2	26.7
22 or below	30.2%	26.3%	37.9%	70.8%	71.2%	70.3%	37.8%	36.4%	39.5%
23-25	27.1%	29.6%	22.0%	17.5%	19.0%	16.2%	27.1%	28.7%	25.2%
26-30	18.4%	19.5%	16.4%	4.9%	4.9%	4.9%	15.0%	16.3%	13.3%
31 or above	24.3%	24.7%	23.7%	6.8%	4.9%	8.6%	20.1%	18.6%	22.0%
$\chi^2$ p-value				0	0	0	0	0	0.140

*Source: London Economics' analysis of the Labour Force Survey 1996-2011.* Note that the analysis is restricted to just those individuals in possession of an undergraduate degree. We exclude those individuals that have higher academic or vocational qualifications. In terms of the age at which the highest qualification was attained, the Labour Force Survey only contains information from 2001. Chi-squared ( $\chi^2$ ) p-value: reporting the p-value for the hypothesis that the rows and columns in the two-way tables considered are independent.



### What does this mean?

The results indicate that the educational path of those attaining degrees through the **A-level** route is typically ‘linear’: on other words, a very large proportion (almost **90%**) progress directly from ‘A’ Levels to undergraduate degrees and complete their continuous FT education between the age of 19 and 25. Supporting this evidence, **88%** achieve their highest qualification by the age of 25, suggesting that ‘A’ level holders enrol in a university course straight after ‘A’ level attainment.

In contrast, the educational path of those attaining degrees via the **BTEC** route is typically ‘non-linear’. Learners on the BTEC route normally complete FT education at a younger age (either compulsory schooling only or their BTEC), and then attain their degree after a break in education. Almost **43%** are aged 26 or above when they attain their undergraduate degree. Although the data does not allow us to tell whether these learners stop their continuous education before or after attaining the BTEC, almost **32%** of the sample quit their continuous full-time education before or at the age of 16, suggesting that a significant minority may cease full-time education before undertaking and attaining their BTEC.

Re-iterating this conclusion, we present below the numbers of those **currently** studying for a degree level course, with their average age. As expected, those studying for a degree through the BTEC route are older on average than those studying through the ‘A’ level route. Moreover, they tend to finish full time education earlier and achieve their (current) highest qualification at an older age. These findings support the earlier analysis demonstrating the importance of BTEC qualifications in offering learners – especially older learners - a chance to re-engage in learning and fulfil their potential.

**Table 7: Characteristics of learners enrolled in a first degree course, by prior qualification**

	Current Age	Age completed FT education	Age achieved current highest qual.
<b>BTECs &amp; enrolled in a degree course</b>	29.2	17.7	22.9
<b>A-levels &amp; enrolled in a degree course</b>	22.3	18.2	18.6
<b>BTECs + A-levels &amp; enrolled in a degree course</b>	29.2	18.7	22.0

*Source: London Economics' analysis of the Labour Force Survey 1996-2011.* Note that the analysis is restricted to those individuals currently enrolled on an undergraduate degree. In terms of the age at which the highest qualification was attained, the Labour Force Survey only contains information from 2001.

### 2.4 Learner choices

In Table 8, we present information on the degree level subjects chosen by learners depending on the route of attainment. The findings suggest that there is a substantial element of subject concentration amongst those learners adopting the BTEC route of degree level attainment. There is also a clear pattern by gender for those achieving degrees through the BTEC route. Specifically, more than **27%** of learners undertake Engineering degrees (38% of men and 1.4% of women), **19%** undertake degrees in Business and Financial Studies (14.3% of men and 31.4% of women), and **9.5%** undertake degrees in Mathematical Sciences/Computing (12.1% of men and 3.3% of women).

**Table 8: Degree subjects undertaken**

	BTEC Level 3/4 & No A-Levels			A-Levels & No BTEC Level 3/4			A-Levels plus BTEC Level 3/4		
	All	M	F	All	M	F	All	M	F
<b>Medicine</b>	0.2%	0.2%	0.4%	2.8%	2.8%	2.8%	0.3%	0.2%	0.4%
Medical related subjects	3.7%	0.9%	10.5%	6.1%	2.6%	9.9%	3.4%	1.5%	6.3%
Biological sciences	2.3%	1.6%	3.9%	6.7%	5.4%	8.1%	5.7%	4.2%	8.1%
Veterinary science	0.2%	0.0%	0.5%	0.4%	0.3%	0.4%	0.2%	0.1%	0.3%
Agriculture	1.1%	1.3%	0.5%	1.1%	1.3%	0.9%	1.1%	1.4%	0.6%
Physical Sciences	4.3%	5.3%	2.0%	7.5%	10.0%	4.7%	7.8%	9.6%	5.2%
Math sci./computing	9.5%	12.1%	3.3%	7.3%	10.4%	4.0%	8.6%	10.5%	5.7%
Engineering	27.2%	38.0%	1.4%	8.3%	14.8%	1.2%	16.1%	26.2%	0.8%
Technology	2.3%	2.8%	1.4%	0.9%	1.2%	0.6%	2.0%	2.5%	1.2%
Architecture	6.6%	8.6%	1.8%	2.4%	3.6%	1.1%	5.7%	7.9%	2.2%
Social sciences	4.3%	2.5%	8.5%	10.5%	10.0%	11.0%	6.5%	4.8%	9.2%
Law	1.4%	0.7%	3.2%	5.2%	5.2%	5.2%	2.2%	1.8%	2.9%
Business/financial studies	19.4%	14.3%	31.4%	11.2%	11.8%	10.7%	18.6%	13.4%	26.4%
Information studies	1.2%	1.0%	1.6%	1.7%	1.4%	2.0%	1.4%	1.4%	1.4%
Linguistics	0.3%	0.2%	0.5%	4.8%	2.9%	6.8%	1.4%	0.8%	2.2%
European languages	0.1%	0.0%	0.2%	2.1%	1.1%	3.2%	0.4%	0.2%	0.6%
Other languages	0.0%	0.0%	0.0%	0.4%	0.3%	0.5%	0.0%	0.1%	0.0%
Humanities	1.4%	1.1%	2.0%	6.0%	5.9%	6.2%	2.4%	2.3%	2.6%
Arts	9.2%	6.0%	16.7%	7.6%	6.1%	9.1%	12.4%	9.1%	17.4%
Education	5.4%	3.4%	10.1%	7.1%	2.9%	11.6%	3.9%	2.3%	6.4%
<b>Total</b>	<b>3,719</b>	<b>2,614</b>	<b>1,105</b>	<b>50,916</b>	<b>26,363</b>	<b>24,553</b>	<b>2,935</b>	<b>1,769</b>	<b>1,166</b>

Source: London Economics' analysis of the Labour Force Survey 1996-2011.

For men, Architecture is also a relevant subject area (accounting for almost 9%), while for women the main subject areas are, apart from Business and Financial Studies, Arts (17%), Education (10%), Medical related subjects (more than 10%), Social sciences (above 8%). For the group of individuals achieving degrees through the 'A' level route, there are also differences by gender, but they are less pronounced than for the group attaining degrees via the BTEC route. The proportions for the group holding both 'A' levels and BTECs typically lie between the proportions observed for the other two groups.

## 2.5 Degree Level outcomes

Turning to academic achievement, the analysis of the different attainment routes indicates that on average, a higher proportion of learners completing university degrees through the BTEC route achieve a first class honours degree (**12.2%**) compared to individuals following the A Level route (**11.4%**) - although the result is not statistically significant. This result might reflect the fact that there is a difference in the gender composition of the two attainment routes, and when considering the findings at a more disaggregated level, the results appear to support this hypothesis. Specifically, **13.5%** of men undertaking degree level qualification through the BTEC route achieve a first class honours compared to **11.8%** of men selecting the 'A' Level route (with the difference statistically significant at the 10% level of confidence).

In aggregate, compared to **82%** of students on the 'A' Level route attaining either a first class or a second class honours degree, **79.3%** of students adopting the BTEC route attain either a first or a second class honours degree (which is the same proportion of those individuals in possession of both BTEC Level 3/4 qualification and 'A' Levels).



**Table 9: Degree level outcomes**

	BTEC Level 3/4 & No A-Levels			A-Levels & No BTEC Level 3/4			A-Levels plus BTEC Level 3/4		
	All	M	F	All	M	F	All	M	F
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
<b>First</b>	12.2%	13.5%	9.7%	11.4%	11.8%*	11.1%	12.1%	12.2%	12.1%
<b>Upper second / 2i / 2:1</b>	37.6%	35.5%	41.6%	43.4%	39.8%	46.9%	39.4%	37.7%	41.4%
<b>Lower second / 2ii / 2:2</b>	29.5%	28.0%	32.3%	27.2%	28.2%	26.3%	27.7%	26.9%	28.5%
<b>Third</b>	4.3%	4.8%	3.4%	4.1%	5.4%	2.8%	3.6%	4.2%	2.9%
<b>Pass</b>	9.3%	10.3%	7.4%	6.0%	6.1%	6.0%	10.5%	10.9%	10.1%
<b>Other</b>	7.1%	7.9%	5.6%	7.8%	8.7%	6.9%	6.6%	8.0%	5.0%
<b>N</b>	2,062	1,331	731	29,644	14,453	15,191	1,626	872	754
$\chi^2$ p-value				0	0	0.001	0.462	0.808	0.204

**Source:** London Economics' analysis of the Labour Force Survey 1996-2011. Note: Results from a T-test of equality of means difference with the case of BTEC Level 3/4 & No A-Levels. Significance thresholds at \*\*\*1% level, \*\* 5% level, \*10% level of confidence. Equality of means reported for First Class degrees only. Chi-squared ( $\chi^2$ ) p-value: reporting the p-value for the hypothesis that the rows and columns in the two-way tables considered are independent.

However, from the evidence on degree subject areas, we know that individuals enrolling and achieving an undergraduate degree through the BTEC route are more likely to be concentrated in specific subject areas. To ensure we are comparing like for like and results are not driven by the distribution across degree subject areas, we also restricted the analysis to those subject areas where there was a greater incidence of learners adopting the BTEC route, divided by gender. For men the subjects considered were Mathematical Sciences and Computing, Engineering, Architecture and Related Subjects, Business and Financial Studies. For women the subject areas included were Medical Related Subjects, Business and Financial Studies, Arts, Education.

The results are very similar to those presented in Table 9, with **14.7%** of men on the BTEC route attaining a first class honours degree compared to 13.4% of men on the 'A' Level route. In contrast, **9.0%** of women on the BTEC route attain a first class honours degree compared to **11.8%** of women on the 'A' Level route.

Perhaps as interesting is the fact that men on the BTEC route of attainment are also more likely to achieve either a first class honours or a second class honours degree in these four subject areas compared to men on the 'A' Level route (**78.7%** compared to **77.3%**), while a similar result is demonstrated for women. In Medical Related Subjects, Business and Financial Studies, Arts, and Education degrees, **85.2%** of women achieve either a first or a second class honours degree, compared with **81.9%** of degree completers that had followed the 'A' Level route. This information is presented in Table 10.

**Table 10: Degree level outcomes in core subject areas**

	Male			Female		
	BTEC 3/4 & No A-Levels	A- Levels & No BTEC 3/4	BTEC 3 /4 + A-Levels	BTEC 3/4 & No A-Levels	A- Levels & No BTEC 3/4	BTEC 3 /4 + A-Levels
<b>First</b>	14.7%	13.4%	12.9%	9.0%	11.8%*	10.9%
<b>Upper second / 2i / 2:1</b>	36.5%	38.3%	38.6%	44.0%	46.3%	41.8%
<b>Lower second / 2ii / 2:2</b>	27.5%	25.6%	25.2%	32.2%	23.8%	28.0%
<b>Third</b>	4.2%	6.3%	3.8%	3.5%	2.1%	2.7%
<b>Pass</b>	9.4%	6.3%	10.7%	5.9%	7.5%	11.7%
<b>Other</b>	7.6%	10.0%	8.8%	5.4%	8.5%	4.9%
<b>N</b>	<b>788</b>	<b>5,016</b>	<b>420</b>	<b>423</b>	<b>5,072</b>	<b>368</b>
$\chi^2$ p-value		0.763	0.622		0.001	0

**Source:** London Economics' analysis of the Labour Force Survey 1996-2011. Note: Top 4 subjects by size for BTECs plus degree holders. Male: Mathematical Sciences and Computing, Engineering, Architecture and Related Subjects, Business and Financial Studies. Female: Medical Related Subjects, Business and Financial Studies, Arts, Education. Results from a T-test of equality of means difference with the case of BTEC Level 3/4 & No A-Levels. Significance thresholds at \*\*\*1% level, \*\* 5% level, \*10% level of confidence. Equality of means reported for First Class degrees only. Chi-squared (X2) p-value: reporting the p-value for the hypothesis that the rows and columns in the two-way tables considered are independent.

## 2.6 Outcomes after graduation - employment

As part of the analysis, we were interested in understanding both what happened to students in terms of their academic achievement, but also what outcomes were achieved by learners in the labour market post-graduation. In part reflecting the fact that learners who undertook degree level qualification through the BTEC route were older than those learners on the 'A' Level route, the analysis demonstrated that the employment rate for graduates on the BTEC route were higher than for those graduates who followed the 'A' Level route. As presented in Table 11, **90.9%** of male graduates from the BTEC route were in employment at the time of the survey response compared to **90.2%** of males on the 'A' Level route. The comparable estimates for women were **87.3%** and **86.0%** respectively.

Both men and women on the BTEC route of degree level attainment were also less likely to be economically inactive compared to learners from the 'A' Level route (**5.6%** and **9.0%** compared to **6.5%** and **11.4%** respectively). This further re-iterates the fact that those learners that attained their degree level qualification through the BTEC route are more integrated into the labour market compared to those individuals attaining their degree via the 'A' Level route.

**Table 11: Employment outcomes post graduation**

	BTEC Level 3/4 & No A-Levels			A-Levels & No BTEC Level 3/4			A-Levels plus BTEC Level 3/4		
	All	M	F	All	M	F	All	M	F
<b>Employed</b>	89.8%	90.9%	87.3%	88.1%	90.2%	86.0%	88.6%	89.4%	87.4%
<b>Unemployed</b>	3.6%	3.5%	3.7%	2.9%	3.2%	2.6%	3.7%	3.8%	3.5%
<b>Inactive</b>	6.6%	5.6%	9.0%	9.0%	6.5%	11.4%	7.8%	6.8%	9.2%
$\chi^2$ p-value				0	0.105	0.001	0.133	0.185	0.912

**Source:** London Economics' analysis of the Labour Force Survey 1996-2011. Note: Chi-squared (X2) p-value: reporting the p-value for the hypothesis that the rows and columns in the two-way tables considered are independent

Within those individuals that are employed, in Table 12, we have also presented the proportion of respondents that were engaged in full time work (by age band). The analysis reinforces the previous analysis and further highlights the degree to which individual in possession of degrees through the



BTEC route are more likely to be integrated into the active labour market compared to those attaining degree level qualifications through the 'A' level route.

**Table 12: Employment outcomes post graduation (% of FT employees)**

	BTEC Level 3/4 & No A-Levels			A-Levels & No BTEC Level 3/4			A-Levels plus BTEC Level 3/4		
	All	M	F	All	M	F	All	M	F
21-25	78.3%	79.1%	77.2%	77.4%	76.6%	78.0%	75.9%	77.6%	74.4%
26-30	85.7%	92.5%	75.4%	85.8%	92.0%	80.8%	86.8%	93.0%	79.9%
31-35	83.7%	95.3%	64.2%	76.0%	93.9%	60.2%	79.5%	91.5%	66.4%
36-40	82.1%	93.5%	54.0%	71.1%	94.1%	49.2%	77.7%	91.2%	57.6%
41-45	81.9%	89.7%	60.1%	72.1%	92.2%	51.8%	76.3%	91.5%	53.8%
46-50	88.2%	92.6%	72.9%	73.1%	89.4%	54.9%	78.3%	88.4%	61.3%
51-55	80.6%	85.0%	60.6%	70.5%	82.6%	55.3%	70.4%	77.1%	56.9%
56-60	59.7%	60.8%	50.0%	52.9%	60.0%	40.6%	56.6%	58.6%	48.6%
61-64	29.3%	29.3%		31.0%	31.0%		32.0%	32.0%	
<b>Total</b>	<b>80.4%</b>	<b>86.2%</b>	<b>66.8%</b>	<b>73.6%***</b>	<b>84.6%**</b>	<b>62.4%***</b>	<b>76.9%***</b>	<b>84.6%</b>	<b>65.9%</b>

*Source: London Economics' analysis of the Labour Force Survey 1996-2011.* Note: Results from a T-test of equality of means (difference with the case of BTEC Level 3/4 & No A-Levels). Significance thresholds at \*\*\*1% level, \*\* 5% level, \*10% level of confidence.

## 2.7 Outcomes after graduation - earnings

Finally, we assessed the hourly earnings associated with the different routes of qualification attainment. The results presented are in 2011 prices (which means that the hourly earnings achieved in previous survey have been inflated using Consumer Price Index). In terms of hourly wages, individuals with BTECs plus degrees receive approximately 9% less per hour compared to individuals in possession of 'A' levels plus degrees (despite the high proportion of males undertaking BTECs), although a large proportion of these differences are driven by *occupation, industry* and *especially region of residence*.

**Table 13: Real hourly earnings post graduation**

(£)	BTEC Level 3/4 & No A-Levels			A-Levels & No BTEC Level 3/4			A-Levels plus BTEC Level 3/4		
	All	M	F	All	M	F	All	M	F
21-25	10.9	11.3	10.3	11.5	12.0	11.2	10.4	10.8	10.1
26-30	14.6	15.4	13.2	16.3	17.3	15.6	14.2	15.6	12.7
31-35	18.0	19.4	15.4	20.9	22.9	19.0	17.3	18.6	15.8
36-40	20.7	22.5	15.9	23.2	26.0	20.4	19.3	21.3	16.1
41-45	20.8	22.4	16.9	23.7	27.2	20.1	18.9	20.8	16.2
46-50	21.6	23.1	16.4	23.3	26.7	19.7	20.4	22.5	17.1
51-55	21.9	23.3	15.1	23.1	26.5	19.2	20.7	23.6	15.9
56-60	21.1	21.6	16.8	22.9	25.6	18.8	20.3	21.5	16.5
61-64	19.5	19.5		24.0	24.0		21.2	21.2	
<b>Total</b>	<b>18.2</b>	<b>19.8</b>	<b>14.5</b>	<b>19.9%***</b>	<b>22.4%***</b>	<b>17.4%***</b>	<b>17.3%***</b>	<b>19.3</b>	<b>14.6</b>

*Source: London Economics' analysis of the Labour Force Survey 1996-2011. Hourly earnings in August 2012 values*

Note: Results from a T-test of equality of means (difference with the case of BTEC Level 3/4 & No A-Levels). Significance thresholds at \*\*\*1% level, \*\* 5% level, \*10% level of confidence.

To illustrate this point, in Table 14, we have presented information on the distribution of occupation by route of qualification attainment. The analysis illustrates that there are limited differences in the distribution of occupation by route of attainment (in the sense that individuals with degrees achieved

through the BTEC route are as likely to be employed as managers and senior officials as an individual attaining a degree through the GCE 'A' route). However, the analysis also suggests that there is some significant variation in the average wage gap between the two routes of attainment. Although on average, the wage gap stands at £2.64, for some occupations (e.g. Administrative and Secretarial, Skilled Trades Occupations and Sales and Customer Service Occupations for men) there is a wage premium associated with the BTEC route of attainment.

**Table 14: Occupation by route of attainment and wage gap**

	All		Male			Female		
	BTEC 3/4 & No A-Levels	A- Levels & No BTEC 3/4	BTEC 3/4 & No A-Levels	A- Levels & No BTEC 3/4	Wage Gap (£)	BTEC 3/4 & No A-Levels	A- Levels & No BTEC 3/4	Wage Gap (£)
Managers and senior officials	26.0%	22.8%	29.0%	28.7%	-4.14	18.7%	16.5%	-5.11
Professional occupations	32.2%	36.8%	35.9%	37.1%	-2.43	23.2%	36.5%	-2.50
Associate professional and technical	22.9%	22.3%	19.3%	19.7%	-3.66	31.7%	25.1%	-1.58
Administrative and secretarial	6.6%	8.6%	3.8%	5.3%	0.26	13.6%	12.1%	-1.26
Skilled trades occupations	4.3%	1.7%	5.7%	2.7%	1.17	0.7%	0.7%	0.28
Personal service occupations	2.4%	2.8%	1.1%	1.3%	-1.74	5.7%	4.3%	-0.67
Sales and customer service occs.	3.1%	3.0%	2.4%	2.6%	4.65	4.9%	3.4%	-1.37
Process, plant and machine ops.	1.1%	0.7%	1.4%	1.1%	3.04	0.3%	0.3%	-1.91
Elementary occupations	1.4%	1.3%	1.5%	1.5%	1.26	1.2%	1.1%	0.04
<b>Total</b>	<b>4,136</b>	<b>56,280</b>	<b>2,926</b>	<b>28,964</b>	<b>-2.64</b>	<b>1,210</b>	<b>27,316</b>	<b>-2.88</b>

*Source: London Economics' analysis of the Labour Force Survey 1996-2011.* Note: Wage gap in August 2012 values

It is also the case that the wage gap is partially driven by the industries in which individuals are employed post-graduation. As presented in Table 15, some of the largest wage gaps between the routes of attainment are driven by those industries where there may be either a high incidence of employees of BTEC qualifications or where there may be either a high incidence of employees of BTEC qualifications may be seen as non-traditional. In particular, there is a larger than average hourly wage gap for those individuals working in the Banking and Finance industry (although compared to 'A' level plus degree holders, there are proportionately fewer BTEC plus degree holders in employment), while there is a smaller than average wage gap for those individuals in possession of BTEC plus degree working in the manufacturing sector of the economy.

**Table 15: Industry by route of attainment and wage gap**

	Male			Female		
	BTEC 3/4 & No A-Levels	A- Levels & No BTEC 3/4	Wage Gap (£)	BTEC 3/4 & No A-Levels	A- Levels & No BTEC 3/4	Wage Gap (£)
Agriculture, forestry and fishing	0.6%	0.8%	-10.75	0.3%	0.4%	-0.37
Energy and water	3.0%	1.8%	-1.11	1.6%	0.7%	-1.95
Manufacturing	23.8%	13.7%	-2.09	7.5%	6.9%	-3.47
Construction	10.2%	4.2%	-1.17	2.3%	1.1%	-1.97
Distribution, hotels and restaurants	7.0%	8.9%	-3.50	10.4%	8.4%	-2.63
Transport and communication	8.4%	6.6%	-2.52	5.3%	3.3%	-3.42
Banking and finance	24.8%	32.8%	-5.03	18.6%	20.4%	-3.34
Public admin, education and health	18.5%	25.0%	-2.06	49.4%	52.8%	-2.53
Other services	3.7%	6.2%	-1.42	4.7%	6.0%	-3.38
<b>Total</b>	<b>2,974</b>	<b>29,517</b>	<b>-2.64</b>	<b>1,236</b>	<b>27,756</b>	<b>-2.88</b>

*Source: London Economics' analysis of the Labour Force Survey 1996-2011.* Note: Wage gap in August 2012 values

Finally, we assessed the extent to which the differences in earnings might be simply attributable to the relative geographic location of qualification holders. The most striking difference in the analysis of region of residence (presented in Table 16) is the difference in the concentration in London and the



South East for men holding A-levels plus degree compared to men holding BTECs plus degree. Specifically, almost 39% of men in the former group reside in London and the South East, compared to around 29% in the latter group, with a large difference especially for the proportion residing in Inner London (6.8% vs. 2.6%). For women the gap is slightly smaller, but still substantial (37% vs. 29%).

The wage gap is particularly relevant in these areas, ranging from around £4 per hour to more than £8.00 per hour for men and between £3.70 and £5.40 for women compared to national averages of about £2.63 and £2.88 respectively.

**Table 16: Region of residence by route of attainment and wage gap**

	Male			Female		
	BTEC 3/4 & No A-Levels	A- Levels & No BTEC 3/4	Wage Gap (£)	BTEC 3/4 & No A-Levels	A- Levels & No BTEC 3/4	Wage Gap (£)
Tyne & Wear	1.7%	1.4%	1.00	3.1%	1.4%	-4.16
Rest of Northern Region	3.8%	2.4%	1.96	3.5%	2.5%	-1.46
South Yorkshire	2.0%	1.4%	-0.83	1.7%	1.6%	4.34
West Yorkshire	4.0%	3.6%	0.03	4.9%	3.7%	-2.62
Rest of Yorkshire & Humberside	3.4%	2.2%	-2.57	3.4%	2.4%	-2.51
East Midlands	7.9%	6.6%	-1.98	7.2%	6.7%	-3.00
East Anglia	3.1%	3.4%	0.10	2.8%	3.3%	-0.37
Inner London	2.6%	6.8%	-8.35	5.6%	7.2%	-5.38
Outer London	6.6%	9.0%	-4.03	7.7%	8.3%	-3.67
Rest of South East	20.2%	23.1%	-4.20	16.0%	21.3%	-3.92
South West	7.5%	8.2%	-1.18	8.5%	8.1%	-0.36
West Midlands (Met County)	4.5%	2.9%	-0.06	4.0%	2.9%	-2.76
Rest of West Midlands	6.3%	4.1%	0.91	4.2%	4.1%	-2.81
Greater Manchester	5.5%	4.1%	-1.02	5.4%	4.0%	-0.61
Merseyside	1.9%	1.7%	-1.78	2.8%	1.6%	-1.49
Rest of North West	5.5%	4.0%	-1.52	4.9%	3.8%	-3.18
Wales	5.4%	3.9%	-1.51	5.3%	4.4%	-1.56
Strathclyde	2.0%	3.0%	-2.20	2.6%	3.4%	-3.41
Rest of Scotland	3.5%	5.4%	-1.61	4.2%	5.8%	-3.31
Northern Ireland	2.6%	3.0%	0.38	2.4%	3.4%	-3.26
<b>Total</b>	<b>3,279</b>	<b>32,771</b>	<b>-2.63</b>	<b>1,417</b>	<b>32,342</b>	<b>-2.88</b>

*Source: London Economics' analysis of the Labour Force Survey 1996-2011.* Note: Wage gap in August 2012 values

In stark contrast, the average hourly earnings of men in possession of BTEC plus degrees exceed the earnings of learners who achieved their degree through the 'A' Level route. Men who took the BTEC route to degree level attainment living in Tyne & Wear, the rest of the Northern region, West Yorkshire, East Anglia Rest of the West Midlands and Northern Ireland earn more than those taking the 'A' level route.

### 3 Conclusions – what does the analysis mean?

#### Progression routes to higher education

The analysis of sixteen years of Labour Force Survey data demonstrates that individuals in possession of BTEC Level 3/4 qualifications and a degree tend to achieve their degree qualification at an older age than learners with 'A' Levels; are more likely to have left full time education earlier than their 'A' Level counterparts; and more likely to have experienced a break in their learning. Given learners' subsequent outcomes, BTECs appear to offer learners both a route back into learning, and a realistic opportunity of progressing further up the qualification ladder and into higher education. While many BTEC learners tend to be older, in relation to 'A' Level graduates, the majority (62%) still achieve their degree below the age of 27 with approximately half progressing straight from college and sixth form.

#### Degree subject selection and attainment

Perhaps as a result of the specific focus of BTEC qualifications, there is a strong selection effect into higher education subject areas (mathematics, computing, engineering, business and financial studies for men, and medical related subjects, arts, education and business and financial studies for women). This suggests that BTEC qualifications are strong and established progression routes onto those university degree courses that are also acknowledged as being vital for economic growth.

Potentially as a result of this subject selection effect, the degree outcomes achieved by men and women following the BTEC route in these subject areas are at least as good as those who complete degrees via the 'A' Level route. It is important to note that the explanation for this result could cover a range of factors, including the potentially higher levels of motivation and commitment amongst those following the BTEC route (given the higher opportunity costs), the greater life and work experience that they may have accumulated, or the specific nature of the subjects undertaken at degree level. In subjects such as business or computing, the real life work examples experienced during their BTEC study may have provided valuable context and knowledge for their higher level study.

#### Post degree employment outcomes

The findings also demonstrate the very strong employment outcomes achieved by those adopting the BTEC route of degree level qualification attainment. Specifically, both men and women in possession of BTECs plus degrees are more likely to be employed, and amongst those that are employed, more likely to be employed on a full-time basis. The analytical findings suggest that an employment 'premium' exists across the entire age spectrum, and that there is a difference in the degree of labour market 'integration' between the paths of attainment. While more mature learners are likely to perform better in the jobs market given their greater work experience, this would not explain younger graduates better relative performance. As such, it is entirely possible that the BTEC route offers their holders these strong employment outcomes in the labour market, which reflects the value of the qualification to learners.

#### Post degree earnings

Lower average national earnings outcomes compared to individuals on the 'A' Level route are largely explained by a combination of the educational and working path experienced, the sector of industrial activity, the occupation and the region of residence. For example, there is a high concentration of A-Level graduates based in London, who can command higher wages through schemes such as *London Weighting*. However, the picture is also mixed, with some sectors and regions showing a greater earnings premium for BTEC graduates.

#### Post degree occupation progression

Reflecting the skills, training and qualifications embodied in the BTEC route of degree level attainment, approximately 85% of these learners are managers, senior officials or working as professionals or



associate professionals. This supports the idea that irrespective of the route of qualification attainment, learners are being trained appropriately for their subsequent occupation and recognised accordingly in the workplace.

