

# The impact of a work placement or internship year on student final year performance: An empirical study

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## Abstract

This study investigated the impact of taking a work placement (internship) year on the final year degree mark and hence classifications achieved by a cohort of students on an undergraduate degree in business studies. In addition, evidence on the impact of total tariff points on entry, the prior study of A-level business studies, gender, prior year degree performance, and the relationship between placement achievement and final degree mark, was examined. The results suggest that the completion of a placement year, second-year degree performance and the prior study of business studies at school level (A-level) contribute positively and in a statistically significant way in explaining the final degree mark achieved. Further, whilst placement marks on this programme of study do not contribute towards the final degree mark, they are positively and significantly related to the final degree mark achieved. The evidence presented suggests that the completion of a placement year on average, improves the final classification award achieved by students from 2.2 to 2.1.

*Keywords:* work placement; degree classification; entry criteria; gender

## Introduction

The premise that work experience enhances student employability is central to the rationale for the inclusion of a work placement (or internship) in full-time undergraduate degree programmes. Whilst a single definition of “employability” has proved elusive from an educationalists point of view (see, for example, Ballantine & McCourt Larres, 2007; Jones, 2008), it may be argued that from a students’ perspective the “currency” of employability is their final year degree classification award (Tomlinson, 2008). It is important to note that this concept of “employability” is promulgated from a students’ perspective rather than that of educationalists or employers. Knight and Yorke (2006), for example, would argue that employability is much more than a learner’s degree classification.

The current economic environment has made it necessary for many students to work part time. A survey of full-time first year business studies and accounting undergraduate students in 2008 at the University of Ulster, indicated that over 80% of students ( $n = 94$  for each degree) were working part time. If students attribute little “value-added” to taking a work placement year they may opt not to engage in a placement period, despite the claims of educationalists and employers about the benefits of full-time work experience. Certainly, Brennan and Shah (2003) found that a prolonged period of work experience was positively related to employment outcomes, whereas term-time working has a negative relationship. Studies by Hunt, Lincoln and Walker (2004), and Hofman and Berg (2000) provided further support for the contention that term-time employment has a significant negative effect on academic performance. Although it should be noted that whilst Halpern (2007) also found that term-time work had a significant negative impact on academic achievement, he found that the impact may be outweighed by the positive impact of the nature of such work, that is to say its relevance to the nature of the degree being studied.

What is undeniable, at least in the UK, is the decline in the relative number of students taking a placement year. Nationally, in the period from 1999 to 2003, the number of graduates increased by 9.1% whilst those graduating with placement fell by 7.1% (Higher Education Funding Council for England [HEFCE], 2009). In 2007, over 50% of University of Ulster graduates had undertaken a recognised placement but in the BSc Business Studies degree, for example, the proportion fell from 65% in 2007 to 45% in 2009. An international comparison of trends is difficult due to both differences in the definition of placement (or internship), and labour laws with regard to paid and unpaid employment. For example, in Denmark, France, Germany and the Netherlands, internships are typically less than six months duration, compared with the one year period typical within the UK (HEFCE, 2009). In Spain and India, it is uncommon for an internship to be taken during the period of academic study. Indeed, in Germany in recent years, given the relatively high level of unemployment, there has been a growth in post-graduation internships. Essentially, graduates offer to do an

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internship with a desired employer for little or no remuneration in the hope of securing future full-time employment. In the USA not all internships are paid and different States have their own regulatory framework. In California, for example, if a student receives college credit for an internship then they need not be paid by their employer. Such differences in the duration, timing and payment status of interns make it difficult to contextualise placement within an international setting. However, it is noteworthy that Arthur and Little (2010) reported that 55% of all European graduates had undertaken a placement period, with over 80% in Finland, Germany and the Netherlands, whilst the observed figure for the UK was 29%.

Given the importance of placements claimed by both educationalists' and employers, the downward trend in the UK is clearly undesirable (Confederation of British Industry, 2009). Little (2006a), in the context of a declining number of students taking a work placement or internship year, posed two important questions: Will students be able to afford to do placements? Can they afford not to? At the University of Ulster, whilst the focus on "employability" is of paramount importance, the taking of a work placement year is now optional on many undergraduate degrees. As the BSc Business Studies degree placement is optional, the mark awarded for such a placement does not contribute towards final year classification, which is currently determined exclusively on performance in modules taken in the final year. In the UK, degrees are generally classified according to the average marks a student achieves in designated modules/courses which are typically second or final year modules (Table 1).

Classification	Average marks
First	At least 70%
Class 2.1	At least 60% and less than 70%
Class 2.2	At least 50% and less than 60%
Class 3rd	At least 40% and less than 50%

**Table 1:** Degree classification criterion

The successful completion of a placement year at the University of Ulster (which is representative of the current UK educational model) is not a designated classification module, but successful students receive an additional award of a Diploma in Industrial Studies (DIS).

An important research question, from both an educationalist's and student's perspective, is whether the completion of a work placement year (despite not contributing directly to the final degree classification) has a positive and significant impact upon final year performance and consequently upon degree classification, and there is some empirical evidence on this issue.

Bourner and Hamed (1987; see also Davies, 2003) provided evidence that taking a work placement year is associated with improved degree results, having controlled for tariff points on degree entry, in other words prior school level academic achievement. Gomez, Lush and Clements (2004) found that, on average, students who took a year-long placement gained an advantage of 4% in the final year compared to students who did not. Similarly, Rawlings, White and Stephens (2006) concluded that internship or placement has a significant positive impact upon academic performance (see also Wallace, 2002; Mendez, 2008). None of the aforementioned studies specifically investigated the impact of a work placement year on business-related degrees.

Duignan (2002) compared the academic performance of business undergraduates undertaking a placement year with those not, and reported no difference between them. The failure to produce evidence of a beneficial effect was attributed to a failure to fully exploit the learning potential of placement. In particular, the structure and management of the placement were contributory factors. Essentially, Duignan (2002) argued that the placement student is a "transient" between the workplace and university, each of which has its own value and reward system. Consequently, on return to university and study a student may be demotivated, losing any potential learning transfer from the workplace. Certainly Gomez *et al.* (2004) alluded to the relevance of the work placement to academic study as an important factor with regard to academic performance, which was echoed by Halpern (2007), albeit in the context of relevant term-time working.

However, Gracia and Jenkins (2003) provided some evidence that students on an undergraduate degree programme in accounting and finance at the University of Glamorgan who opted to take a year of supervised work experience before their final year performed better than those who did not. In the context of an undergraduate degree in Economics, at the University of Surrey, Mandilaras (2004) similarly found that there was a statistically significant positive relationship between the completion of a placement year and academic achievement. Surridge (2008) provided evidence from a study of accounting and finance degree students at the University of the West of England, employing the data from three graduating cohorts, and concluded that placement students perform significantly better. A recent HEFCE (2009) report also provided some interesting

descriptive statistics which are informative to this study, namely that 71% of students graduating with a placement year in 2003 achieved a 2.1 or above, compared with 60% of other students (based upon classified degrees).

Little and Harvey (2006) investigated the effects of work experience placement on learning, as perceived by a group of 82 students who had recently returned from a period of work experience, via face to face semi-structured interviews. With regard to higher-level academic skills they noted:

Despite the positive message provided by students about their personal development and indication of the enhancement of subject knowledge in various ways, there was little indication of a feeling of having developed "higher order" academic abilities, such as critique, synthesis or analysis. Perhaps, students were not aware of this development, maybe they took it for granted, or perhaps the placement provided so much else by way of enhancement that intellectual development did not stand out. (p. 46)

Whilst students may fail to perceive the development of higher order academic abilities, it may be argued that any such tangible gains should be observed in the final year degree mark and hence classification.

This study investigated the impact of a work placement year on the final degree classification achieved by a cohort of 92 students on the BSc Business Studies degree at the University of Ulster. A number of control variables were explored: total tariff points on entry (a measure of prior school level achievement), second year degree performance, gender, and the prior study of business studies at A-level (that is prior school level study of business studies).

The remainder of this paper is organised as follows. The next section describes the data collection process and the methodology employed. The detailed results of the study are then presented. The paper concludes by considering the implications of the study for both educationalists and students.

## Data collection and methodology

The empirical evidence presented is based on data gathered relating to the graduating cohort of students on the BSc Business Studies degree in 2008. Only students who entered on the basis of UK entry tariff points were included, thus students entering with Irish Leaving Certificate or joining the programme of study either in second year or third year (via franchise or alternative qualifications such as HND) were excluded. In addition, students were excluded if extenuating circumstances prevented them from taking all of the final year modules. Students who had repeat assessment to complete in final year modules were included on the basis of their first attempt results. Similarly when gathering data on second year degree marks, for those students who had to complete repeat assessment before either proceeding to work placement or directly into final year the mark used was that achieved on the first attempt. The final sample thus consisted of 92 students.

A combination of both parametric and non-parametric statistical tests were employed to investigate the issues of interest because of the relatively small sample sizes which may invalidate any standard assumptions regarding the distribution of the variables investigated when employing parametric tests.

In addition, multivariate models were developed to explain final year degree mark. Specifically the following models were investigated:

$$Y = \alpha_0 + \alpha_1 X + \alpha_2 M + \alpha_3 DIS + \alpha_4 BS + \mu \quad (1)$$

$$Y = \beta_0 + \beta_1 X + \beta_2 M + \beta_3 MDIS + \beta_4 BS + \sigma \quad (2)$$

Where:

Y = final year degree mark;  $\alpha_0$  and  $\beta_0$  = constant terms introduced as a way of capturing the impact of omitted variables; X = total tariff points on entry to the degree; M = second year degree mark achieved; DIS = dummy variable which takes the value of 1 if a work placement is completed, 0 otherwise; MDIS = actual mark achieved on placement, thus only students taking placement are included in the estimation of this model (equation 2 above); BS = dummy variable which takes the value of 1 if A-level business studies is taken prior to degree entry, 0 otherwise;  $\mu$  and  $\sigma$  = stochastic error terms

The selection of independent variables was derived from the preliminary investigations undertaken.

The generic form of the first model employed effectively permits structural changes in the intercept in the relationship between the dependent (final degree mark) and the independent (total entry tariff points, and

second year degree mark) variables deriving from the completion of a work placement year and the prior study of A-level business studies. Similarly, the generic form of the second model employed effectively permits structural changes in the intercept in the relationship between the dependent (final degree mark) and the independent (total entry tariff points, second year degree mark and placement mark achieved) variables deriving from the study of A-level business studies, prior to degree entry.

## Results

As a starting point for the empirical section of this study, a basic framework was established for academic performance at a tertiary level, and given that the selection process in the UK is usually based on total tariff points (a measure of prior school level achievement) this appeared to be a logical place to start. Certainly, prior UK studies investigating the explicit impact of work placement on degree performance have controlled for tariff points on entry (see, for example, Bourner & Hamed, 1987). To investigate this issue a correlation analysis was performed between final degree mark and total entry tariff points (Table 2).

Pearson correlation coefficient	0.25 (0.014)*
Kendall tau-b correlation coefficient	0.17 (0.021)*
Spearman rho correlation coefficient	0.25 (0.017)*

**Table 2:** Correlation coefficients between final year degree mark and total tariff points on entry n = 92; figures in brackets represent two-tailed significance levels: \* = significant at the 5% level

From Table 2 it is clear that there was a statistically significant and positive correlation between final degree mark and total entry tariff points.

The next premise tested was did the completion of a work placement year result in a higher final year degree mark (despite the fact that for this cohort the placement mark does not contribute in a mathematical sense)? This was a fundamental question to be answered as, if the answer was no, further investigation in the context of this study would not be justified.

To address this question students were grouped into those who had completed a placement year (variable DIS = 1) and those who opted to proceed directly into final year (variable DIS = 0). Both parametric and non-parametric tests were then performed to determine whether statistically significant differences existed with regard to the average final year degree mark of the two groups thus formed (Table 3).

	DIS	Number of students	Mean	Standard deviation	Standard error mean
Final degree mark	1	60	61.19	4.24	0.55
	0	32	56.96	6.61	1.17
t-test on equality of means: 3.28 (0.002)**					
Mann-Whitney Z: -3.48 (0.00)**					

**Table 3:** Mean difference in final year degree mark between students taking a work placement year and those opting to proceed directly to final year  
Figures in brackets represent two-tailed significance levels: \* = significant at the 5% level; \*\* = significant at the 1% level. Levene's test on the equality of variance indicated that the variance of the two groups was not equal, therefore t-tests on the equality of the means for the two groups were based on non-equality of variance.

From Table 3 it can be seen that the final degree mark for those students who completed a work placement year was higher than that for students proceeding directly into final year. The difference was statistically significant and on average represented an increase in degree classification from 2.2 to 2.1.

The analysis so far has demonstrated that the final degree mark was related to total tariff points on entry and was higher for those students who complete a placement year. A logical progression given these two findings was to investigate whether students who completed a placement year had higher total tariff points on entry compared to those students who proceeded directly into the final year. If students proceeding to a placement year have higher general academic ability then the finding that students who complete a placement year perform "better" in final year may be attributed merely to placement acting as a surrogate for academic ability on entry.

Recent research also questions if total tariff points on entry is an appropriate measure of academic ability (Fee, Greenan, & Wall, 2010). Certainly in the context of an undergraduate degree in accounting, Bartlett,

Peel and Pendlebury (1993) suggested that “the overall A-level points score of students and the study of mathematics at A-level, which are widely perceived to be indicators of general academic ability and the ability to cope with the numerical aspects of accountancy respectively, did not have a significant impact on examination performance” (p. 119). They noted that the best predictor of university examination performance was the performance of students in earlier university examinations. Gomez *et al.* (2004) also found that second year degree performance was significant in explaining the final year degree mark. Given such assertions this study employed another measure of general academic ability, namely the average mark achieved in the second year of the degree.

To investigate this issue students were again grouped into those who had completed a placement year (variable DIS = 1) and those who opted to proceed directly into final year (variable DIS = 0). Parametric and non-parametric tests were then performed to determine whether statistically significant differences existed with regard to general academic ability as measured by both total tariff points on entry and the average mark achieved in second year (Table 4).

Mean difference in total entry tariff points					
	DIS	Number of students	Mean	Standard deviation	Standard error mean
Total tariff points	1	60	305.83	39.54	5.11
	0	32	309.69	41.15	7.27
t-test on equality of means: -0.44+ (0.66) Mann-Whitney Z: -0.24 (0.81)					
Mean difference in second year average mark					
	DIS	Number of students	Mean	Standard deviation	Standard error mean
Average mark	1	60	57.81	4.92	0.64
	0	32	54.50	7.22	1.37
t-test on equality of means: 2.20++ (0.03)* Mann-Whitney Z: -2.56 (0.01)**					

**Table 4:** Comparisons between students taking a work placement year and those opting to proceed directly to final year. Figures in brackets represent two-tailed significance levels: \* = significant at the 5% level; \*\* = significant at the 1% level. + Levene’s test on the equality of variance indicated that the variance of the two groups was equal, therefore t-tests on the equality of the means for the two groups was based upon the equality of variance. ++ Levene’s test on the equality of variance indicated that the variance of the two groups was not equal, therefore t-tests on the equality of the means for the two groups were based upon non-equality of variance.

On average the total tariff points on entry for students proceeding to a work placement year was actually lower than that for students proceeding directly to final year (Table 4). This finding was consistent with the HEFCE (2009) report “that . . . placement students entered with lower qualifications than other students” (p. 25). Further, the difference was not statistically significant. There was therefore no evidence to support the contention that “better” final year performance for those students taking placement derived from such students having better general academic ability (as measured by total tariff points on degree entry).

It is also clear that students taking a work placement year had a statistically significant higher average mark in their second year than those opting to progress directly to the final year. On the basis of this result, it could be argued that better students completed placements and therefore achieved higher final year marks. On more detailed review, it should be noted that whilst on average the marks in the second year for students completing placements were higher, and the difference was statistically significant, the difference did not cross a classification boundary.

To investigate further, the sample was sub-divided into two groups: those students completing the placement year and those opting to proceed directly to the final year. Specifically, the change in the average year mark from second to final year was considered individually for the two groups. In other words, the hypothesis tested was whether the average final degree mark was higher than the average mark students achieved in the second year, both for students completing a placement year and those not. Table 5 presents the results from the analysis which show that the average mark achieved by students completing a work placement between the second and final year was higher in the final year, statistically significant and represented an increase in classification from 2.2 to 2.1. The average mark achieved by students opting not to take a placement year between the second and final year were also higher in the final year and statistically significant, but the increase did not cross a classification boundary. The finding that the average final year marks were higher than the second year marks for both groups is perhaps not surprising given that second year marks did not contribute towards classification. Higher final year marks overall may merely reflect an increase in student “effort” but an increase in classification was only observed for students completing a placement year.

Paired samples statistics for students completing a work placement year					
		Number of students	Mean	Standard deviation	Standard error mean
Pair	Year 3	60	61.19	4.24	0.55
	Year 2	60	57.81	4.92	0.64
t-test on equality of means: 5.40 (0.00)**					
Paired samples statistics for students opting not to complete a work placement year					
		Number of students	Mean	Standard deviation	Standard error mean
Pair	Year 3	32	56.96	6.61	1.17
	Year 2	32	54.50	7.72	1.37
t-test on equality of means: 2.34 (0.03)*					

**Table 5:** Mean difference in average final and average second year degree mark  
 Figures in brackets represent two-tailed significance levels: \* = significant at the 5% level; \*\* = significant at the 1% level.

As noted earlier, some studies have investigated other factors which may affect degree performance, albeit not specifically a degree in business studies. Such studies investigated the impact of gender (McNabb, Pal & Sloan, 2002; Richardson & Woodley, 2003; Naylor & Smith, 2004; Smith, 2004; Woodfield, Earl-Novell, & Solomon, 2005; Higher Education Academy and Equality Challenge Unit, 2008) and the study of certain subject areas prior to university (Bartlett, Peel, & Pendlebury, 1993). In this study the impact of gender and the prior study of A-level business studies were investigated. To do this students were assigned to groups: For gender, males were assigned the value of 1 and females the value of 0. Similarly, students were assigned to groups depending on whether they studied A-level business studies (BS=1) or not (BS=0). The results are reported in Table 6.

Male (1) and female (0) students					
	Gender	Number of students	Mean	Standard deviation	Standard error mean
Final degree mark	1	24	59.97	5.49	1.12
	0	68	59.63	5.58	0.68
t-test on equality of means: 0.25+ (0.80) Mann-Whitney Z: -0.33 (0.75)					
Students entering with A-level business studies (1) and those not possessing an A-level in business studies (0)					
	A-Level Business Studies (BS)	Number of students	Mean	Standard deviation	Standard error mean
Final degree mark	1	62	61.04	5.51	0.70
	0	30	56.99	4.55	0.83
t-test on equality of means: 3.48+ (0.001)** Mann-Whitney Z: -3.57 (0.00)**					

**Table 6:** Mean difference in final degree mark  
 Figures in brackets represent two-tailed significance levels: \* = significant at the 5% level; \*\* = significant at the 1% level  
 + Levene's test on the equality of variance indicated that the variance of the two groups was equal, therefore t-tests on the equality of the means for the two groups were based upon equality of variance.

From Table 6 it can be seen that gender did not have a statistically significant impact on the final year degree mark, but the study of A-level business studies (at school) prior to degree entry had a positive and statistically significant impact. Further, the difference in the average mark also crossed a degree classification boundary. This result raises another question. Namely, is the finding that a placement year improves average final year degree mark by a degree classification merely acting as a surrogate for the study of A-level business studies at entry point, which may reflect a pre-degree interest in business?

To investigate this issue correlation analysis was performed between the grouping variables employed for the taking of a placement year (DIS) and the study of A-level business studies (BS). In essence what was being tested was whether those students studying A-level business studies were generally the same students who proceeded to take a placement year. The results of the correlation (note that as the variable values were restricted to 1 or 0, both parametric and non-parametric measures of association were identical) did not support the contention that there was a statistically significant relationship between the two grouping variables (Spearman's rho correlation coefficient 0.076, with two-tailed significance of 0.470). Hence it was clear that the taking of a placement year was not a surrogate for the study of A-level business studies prior to degree entry.

The findings reported are consistent with the contention that total entry tariff points, the taking of a work

placement year, second year degree performance and the prior study of A-level business studies, all impact positively upon degree classification. The question remains however, how well do these factors explain the final year degree mark? To address this question, the following multivariate model was estimated, using OLS regression:

$$Y = \alpha_0 + \alpha_1 X + \alpha_2 M + \alpha_3 DIS + \alpha_4 BS + \mu \quad (1)$$

The results are reported in Table 7.

$\alpha_0$	$\alpha_1$	$\alpha_2$	$\alpha_3$	$\alpha_4$	$R_A^2$
28.52 (0.00)**	0.02 (0.21)	0.41 (0.00)**	2.74 (0.01)**	2.57 (0.01)**	0.44

**Table 7:** Ordinary least squares estimation of multivariate model (full sample)  
n = 92; figures in brackets represent two-tailed significance levels: \* = significant at the 5% level, \*\* = significant at the 1% level;  $R_A^2$  is the adjusted R-square

Note that this model was also estimated using stepwise regression. The results are qualitatively similar with the only independent variable excluded being total tariff points on entry (X) and all other variables and constant term, being statistically significant as noted above. The adjusted R-square is 0.44 and the estimated coefficients are  $\alpha_0 = 31.10$ ,  $\alpha_2 = 0.45$ ,  $\alpha_3 = 2.56$  and  $\alpha_4 = 2.48$  respectively.

From Table 7 it is evident that many of the factors explicitly investigated in this study were statistically significant factors in explaining the mark achieved by students in the final year of study. Indeed, the only independent variable which was not statistically significant was the actual entry point requirement: the total tariff points. Whilst it is important to note that there was a positive and statistically significant relationship between total tariff points on entry and final year degree performance (Table 2) this study provides strong support for the notion that entry tariff points do not explain subsequent degree performance. This finding is consistent with the HEFCE (2009) observation with regard to entry and classifications that “the higher overall [classification] rate for those who studied abroad or did a placement cannot be entirely explained by differences in entry qualifications” (p. 27). The overall explanatory power of the model was quite high at 44.3% but the constant term was highly significant and since it was incorporated in the model as a surrogate for omitted variables it is likely that these existed.

This study specifically aimed to investigate the impact of a work placement year on the final year degree mark. Thus the final question addressed was do students who perform better on placement also achieve higher final year degree marks? To provide evidence on this question the following multivariate model was estimated, using OLS regression:

$$Y = \beta_0 + \beta_1 X + \beta_2 M + \beta_3 MDIS + \beta_4 BS + \sigma \quad (2)$$

The results are reported in Table 8.

$\beta_0$	$\beta_1$	$\beta_2$	$\beta_3$	$\beta_4$	$R_A^2$
34.50 (0.00)**	0.02 (0.21)	0.19 (0.08)	0.13 (0.02)*	3.46 (0.00)**	0.33

**Table 8:** Ordinary least squares estimation of multivariate model (placement students)  
n = 60; figures in brackets represent two-tailed significance levels: \* = significant at the 5% level; \*\* = significant at the 1% level;  $R_A^2$  is the adjusted R-square

Note that this model was also estimated using stepwise regression. The only independent variable excluded was total tariff points on entry (X). Interestingly both the second year degree mark and the placement mark were statistically significant at the 5% level. The adjusted R-square was 0.33 and the estimated coefficients were  $\beta_0 = 36.178$ ,  $\beta_2 = 0.223$ ,  $\beta_3 = 0.138$ ,  $\beta_4 = 3.419$ , respectively.

From Table 7 it can be seen that the mark achieved on the placement year superseded the second year degree mark as a statistically significant variable in explaining the final year degree mark. However, stepwise estimation of this model revealed that both the mark achieved on placement and the second year degree mark were significant at the 5% level. From a correlation analysis between these two variables it was evident that co-linearity might exist (Pearson correlation coefficient 0.33, Kendall tau-b correlation coefficient 0.25, Spearman rho correlation coefficient 0.34, all significant at the 5% level). The existence of co-linearity restricts the testing of the individual statistical significance of independent variables but it is reassuring that both estimation procedures indicated that the actual placement mark was statistically significant in explaining the average final year mark. It should be noted that neither this study nor the HEFCE (2009) report provide a definitive causality link between placement and degree classification, although the actual placement mark is statistically significant in explaining the average mark achieved in the final year.

## Conclusions and implications for educationalists

The empirical evidence presented in this paper indicates that a work placement year results in tangible gains which “translate into the hard currency of ‘better’ degree classifications” (Little, 2006b, p. 29). As Little (2006b) noted, many educationalists have perceived this to be the case but to date there has been a lack of empirical evidence to confirm such perceptions, notable exceptions being Gomez *et al.* (2004), Rawlings *et al.* (2005) and SurrIDGE (2008). Although the evidence presented relates to a single cohort of students on one programme of study in one country, it adds empirical rigour to the conclusions reached from a descriptive statistical consideration of UK national data (HEFCE, 2009). More research needs to be undertaken but the policy implications are potentially significant, particularly in the context of a harsh economic environment and a decline in the percentage of students electing to take a work placement year. This despite the claimed benefits, by both educationalists and employers, from doing so.

Currently in the UK many universities levy a placement fee on students’ equivalent to half a year’s tuition fee. This fee is charged as a student on placement is equated to half a full-time student for public sector funding purposes, but the total number of students is capped (i.e., each university has a set maximum number of students for which it will receive public sector funding). In effect, two students on placement equate to the public sector funding of one student but count as two with regard to the maximum number of students allowable for such funding. Failure to charge a placement fee in those institutions which have a significant proportion of students taking placement would have a dramatic negative effect on overall funding. The waiving of a placement fee (at the time of writing, £1,535 charged to each University of Ulster student on placement) may certainly make placements a more affordable option for students but clearly this would have a significant impact upon any UK university’s business model.

It is not possible within the confines of this paper to explore the various business models employed by all universities but the question of “affordability” must be addressed if the benefits to be derived from placements, by both students and employers, are to be realised. However, in addressing the issue of “affordability” it is essential to re-visit the business model employed by individual tertiary level institutions within the context of each institution’s mission statement, and also the regulatory framework for public sector funding. If this process is ignored the result may be a continued decline in the number of students opting to take a placement year and the emergence of a socio-economic barrier preventing some students from effectively having a choice.

Interestingly, the results of semi-structured interviews undertaken with students from a variety of courses at the University of Ulster suggest that the placement fee itself is not a major influencing factor with regard to taking a placement year. Students appear to be more concerned that a placement year extends their period of study which is a particular dimension of affordability (i.e., the opportunity cost of taking a placement). Perhaps the answer to the question of affordability lies in more innovative ways of incorporating placement within the curriculum design of undergraduate degrees which explicitly recognise the contribution of a work placement year to student learning and employability. This is not a new concept within the context of foundation degrees in the UK and internationally, for example in the USA, where internships can be credit-bearing. However, on the basis of the results of this study, further reflection for all undergraduate degree programmes deserves consideration.

The second question which Little (2006a) raised - can students afford not to complete a work placement year? - in one way is relatively easy to answer and in another way rather difficult to implement. The finding that a work placement, on average, results in a higher degree classification clearly implies that students cannot afford to opt out of a placement year if they perceive the currency of employability to be degree classification. This finding is also consistent with the much larger report of HEFCE (2009), which notes that a higher proportion of placement students obtain a 2.1 classification. The HEFCE report (2009) also provides descriptive statistics which further support the benefits to students from completing a placement, namely that “placement students were more likely to be employed six months after graduating and to have higher salaries than the average” (p. 4).

The implementation issue relates to the extent that students are aware of the importance of placement to their personal and professional development, final degree classification and subsequent employment. In other words, there is a need to actively market the benefits of placement to an audience which is currently faced with a variety of economic pressures that may well prevent any informed cost-benefit analysis.

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## References

- Arthur, L., & Little, B. (2010). The REFLEX study: Exploring graduates' views on the relationship between higher education and employment. In *Higher education and society: A research report* (pp. 13-19). London: Centre for Higher Education Research and Information, The Open University.
- Ballantine, J., & McCourt Larres, P. (2007). Co-operative learning: A pedagogy to improve students' generic skills? *Education + Training*, 49, 126-137. doi:10.1108/00400910710739487
- Bartlett, S., Peel, M. J., & Pendlebury, M. (1993). From fresher to finalist. *Accounting Education*, 2, 111-122. doi:10.1080/09639289300000013
- Bourner, T., & Hamed, M. (1987). *Entry qualifications and degree performance: Summary report*. London: Council for National Academic Awards.
- Brennan, J., & Shah, T. (2003). *Access to what? Converting education opportunity into employment opportunity*. London: Centre for Higher Education Research and Information, The Open University.
- Confederation of British Industry (2009). *Future fit: Preparing graduates for the world of work*. London: Confederation of British Industry Higher Education Task Force.
- Davies, L. (2003). *Experience-based learning within the curriculum: A synthesis study*. Sheffield, England: ASET.
- Duignan, J. (2002). Undergraduate work placement and academic performance: Failing by doing. In *Quality Conversations: Proceedings of the 25th HERDSA Annual Conference* (pp. 214-221). Australia: Edith Cowan University, Perth, Western Australia.
- Fee, H., Greenan, K., & Wall, A. (2010). An investigation into secondary school exit standards: Implications for university lecturers. *International Journal of Management Education*, 8(2), 43-52. doi:10.3794/ijme.82.269
- Gomez, S., Lush, D., & Clements, M. (2004). Work placements enhance the academic performance of bioscience undergraduates. *Journal of Vocational Education and Training*, 56, 373-385. doi:10.1080/13636820400200260
- Gracia, L., & Jenkins, E. (2003). A quantitative exploration of student performance on an undergraduate accounting programme of study. *Accounting Education*, 12, 15-32. doi:10.1080/0963928032000049375
- Halpern, N. (2007). The impact of attendance and student characteristics on academic achievement: Findings from an undergraduate business management module. *Journal of Further and Higher Education*, 31, 335-349. doi:10.1080/03098770701626017
- Higher Education Academy and Equality Challenge Unit (2008). *Ethnicity, gender and degree attainment: Final Report*. York, England: The Higher Education Academy.
- Higher Education Funding Council for England (2009). *Attainment in higher education: Erasmus and placement students*. Bristol, England: HEFCE.
- Hofman, A., & Berg, M. van den (2000). Determinants of study progress: The impact of student, curricular, and contextual factors on study progress in university education. *Higher Education in Europe*, 25, 93-110. doi:10.1080/03797720050002242
- Hunt, A., Lincoln, I., & Walker, A. (2004). Term time employment and academic attainment. *Journal of Further and Higher Education*, 28, 3-18. doi:10.1080/0309877032000161788
- Jones, C. (2008, April). *Employers, educationalists, students and government: Stakeholders' expectations in a changing environment*. Paper presented at the BMAF Annual Conference, Edinburgh, Scotland.
- Knight, P., & Yorke, M. (2006). *Embedding employability into the curriculum: Learning & Employability Series One*. York, England: Higher Education Academy.
- Little, B. (2006a, October). *Work placements: adding value to education?* Paper presented at the second BMAF/HLST employability workshop, Oxford Brookes University, England.
- Little, B. (2006b). Teaching and sandwiches. *Exchange Magazine*, 4, 28-29.
- Little, B., & Harvey, L. (2006). *Learning through work placements and beyond: A report for HECSU and the Higher Education Academy's Work Placements Organisation Forum*. Sheffield, England: Centre for Research and Evaluation.
- Mandilaras, A. (2004). Industrial placement and degree performance: Evidence from a British higher institution. *International Review of Economics Education*, 3, 39-51.
- McNabb, R., Pal, S., & Sloane, P. (2002). Gender differences in educational attainment: The case of university students in England and Wales. *Economica*, 69, 481-503. doi:10.1111/1468-0335.00295
- Mendez, R. (2008, September). *The correlation between industrial placements and final degree results: A study of engineering placement students*. Paper presented at the ASET Annual Conference, Plymouth, England.
- Naylor, R., & Smith, J. (2004). Degree performance of Economics students in UK universities: Absolute and relative performance in prior qualifications. *Scottish Journal of Political Economy*, 51, 250-265. doi:10.1111/j.0036-9292.2004.00305.x
- Rawlings, P., White, P., & Stephens, R. (2005). Practice-based learning in information systems: The advantages for students. *Journal of Information Systems Education*, 16, 455-463.
- Richardson, J. T. E., & Woodley, A. (2003). Another look at the role of age, gender and subject as predictors of academic attainment in higher education. *Studies in Higher Education*, 28, 475-493. doi:10.1080/0307507032000122305
- Smith, F. (2004). "It's not all about grades": Accounting for gendered degree results in geography at Brunel University. *Journal of Geography in Higher Education*, 28, 167-178. doi:10.1080/0309826042000242422
- SurrIDGE, I. (2008). Accounting and finance degrees: Is the academic performance of placement students better? *Accounting Education*, 18, 471-485. doi:10.1080/09639280802008498.
- Tomlinson, M. (2008). "The degree is not enough": Students' perceptions of the role of higher education credentials for graduate work and employability. *British Journal of Sociology of Education*, 29, 49-61. doi:10.1080/01425690701737457
- Wallace G. (2002, September). *A sandwich year can seriously damage your chances of obtaining a poor degree!* Paper presented at the ASET Annual Conference 2002: Integrating Work and Learning in Europe, Cambridge, England.
- Woodfield, R., Earl-Novell, S., & Solomon, L. (2005). Gender and mode of assessment at university: Should we assume female students are better suited to coursework and males to unseen examinations? *Assessment & Evaluation in Higher Education*, 30(1), 35-50. doi:10.1080/0260293042003243887