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Inclusion or Diversion in Higher Education in the Republic of Ireland?

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Abstract: In this paper I investigate the extent to which the Irish higher education system promotes inclusion or diversion in relation to social selectivity. In doing so, stratification processes are examined for two educational outcomes: inequality in the type of higher education institution attended (institutional differentiation) and the level of qualification pursued at higher education (qualification differentiation). The paper considers the individual and school level influences on these two educational outcomes and concludes that the Irish system is inclusive, but class disparities remain in terms of both institutional differentiation and qualification differentiation. Class disparities are largely mediated through educational attainment at the individual level and diversion is particularly evident in relation to the non-manual and skilled manual groups. Furthermore, school effects have a particular influence on those who do not obtain their preference of higher education course.

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Introduction

The main questions being addressed in this paper relate to sociological arguments as to whether educational expansion and differentiation in the Higher Education sector has reduced socio-economic inequality by providing more opportunities for those from less privileged backgrounds or, alternatively, whether educational expansion and differentiation has magnified inequality by expanding opportunities disproportionately for those from advantaged backgrounds. In doing so, stratification processes are examined for two educational outcomes: inequality in the type of higher education institution attended (institutional differentiation) and the level of qualification pursued at higher education (qualification differentiation), paying particular attention to individual and school level influences. Similar to most Western societies, Ireland has experienced considerable expansion in higher education, but particularly since the 1980s. Over this time the Irish HE system has experienced rapid expansion and change and like other countries, institutional differentiation has been a key feature (Huisman 1995; Teichler 1988). While much of the Irish research to date has been concerned with inequality in access to and participation in Higher Education, little Irish research has focused on social differentiation in relation to the different sectors of HE that students can attend or the type of qualification pursued by different social groups once entry into Higher Education has been attained. Specifically this paper asks the following research questions: Are working-class students diverted away from university education in a diversified system of Higher Education? Are working-class students diverted away from degree entry qualifications in a diversified system of Higher Education? Furthermore, is there an influence of previous second level school effects on educational outcomes at HE?

The remainder of the paper is outlined as follows. The next section provides an overview of the Irish HE system and its development and demonstrates that the structure of HE in Ireland has been transformed as it has expanded. The theoretical framework and some hypotheses are then outlined, followed by a description of the

data, variables and methods used. The results are then presented and the paper concludes with an overview and summary of the findings.

Overview of the Irish Higher Education System and its Development

As with other HE systems, the system became more complex as expansion was encouraged. Shavit et al., (2007) outline that the mode of differentiation varies across institutional contexts and countries. However, the story of the long-term development of the Irish Higher Education system is one based on religion and politics, and since its inception, the system has adopted various modes of differentiation. The Irish system of HE can generally be categorised into four sub-sectors: the Universities, Institutes of Technology, Colleges of Education and other colleges some of which are private. The University of Dublin, Trinity College represents an ‘ancient’ university based on the Oxbridge model and has always had university status since its inception in 1591. It was governed by the Church of Ireland, fee-paying, and offered a mainly liberal education which was viewed as providing curricular flexibility. At this time there was pressure for a state endowed and supported denominational university for Catholics, however, the would not give support to a denominational university¹ (Coolahan 1981). The alternative was to establish a non-denominational university and in 1845 the Irish Colleges Bill was passed. The Queens University (1850) was established as a degree awarding body for three state built colleges with practical emphasis; Queens College Cork, Galway and Belfast. These were non denominational colleges, based on the ‘red brick university’ model in England and at the time were often referred to as ‘godless colleges’². (These colleges were shunned by the Catholic church because of their lack of religious ethos). In 1879 the Royal University was established as an examining body and was later replaced by the Queens University in 1882. In 1908 the University of Dublin was left intact and two new universities were established: the federal National University of Ireland was established in Cork and Galway and the Queens College in Belfast became a university. By the early 1900s, the Republic of Ireland had four universities: University of Dublin Trinity College, University College Dublin, NUI Cork, and NUI Galway. Like earlier

¹ In 1795 the Government agreed to give direct funding for the establishment of a Catholic College at Maynooth and in 1854 a Catholic University was established at St. Stephens’ Green. The Catholic University later became University College Dublin.

² These colleges were inter-denominational, non-residential and governed by management committees and had a curriculum similar to London University (Arts, Law, Medicine) and had low fees.

recommendations, the 1960s Commission on Higher Education recognised the need for intermediate education to serve as a preparatory ground for students aspiring to university-type education and so a binary system was established with the provision of non-university third level institutions which would be linked for degree-awarding purposes with the universities. Over the period of the late 1960s/ early 1970s, eight Regional Technical Colleges were established nationally which provided technical education providing awards at Certificate and Diploma level. These colleges had a wide remit and provided a very wide range of education including apprenticeships, technical courses, adult education, professional courses, post Leaving Certificate courses and education for occupations in technical, scientific, commerce and catering. Later in 1980 further colleges in Dublin and Limerick were established (Dublin City University, National Institute for HE (Limerick)) and both were awarded university status in 1989. Between 1997 and 1998 the Regional Technical Colleges became Institutes of Technology. At present, there are seven universities and thirteen Institutes of Technology. Apart from these two systems of Higher Education, the Irish system also has Colleges of Education and other colleges of higher education.

Participation in Higher Education has risen steadily since the 1960s to current rates of 60-70 per cent (O'Connell et al., 2006; Byrne, McCoy and Watson 2008; McCoy and Byrne forthcoming). The growth of non university third level grew from a small base in the 1960s. In 2004 the national admission rate to higher education was 55 per cent. This represents an increase of 1 percentage point on the 2003 admission rate and 10 percentage points on the rate in 1998. The admission rate has steadily increased over the past two-and-a-half decades to the extent that the admission rates in 2003 and 2004 are well over twice the rate in 1980. The corresponding CAO acceptance rate has increased over time from 42 per cent in 1990 to 66 per cent in 2006.

How the Irish System of Entry to Higher Education Works

As in other institutional contexts, the Irish system is centrally regulated and expansion is tightly controlled. The Central Applications Office (CAO) was established in 1976 and is financed by application fees, not receiving any support from the State. It began work in 1977 for five participant higher education institutions and over time it has incorporated the Institutes of Technology, Colleges of Education and other Higher Education Colleges. It began with Degrees and later in 1991 Diplomas and

Certificates were introduced into its remit. The Irish HE system operates by *numerus clausus* meaning that not all applicants are offered a place. Recent data from the Central Admissions Office show that more recently acceptances to HE are on the increase and that the rate of acceptances are at almost 70%. In relation to choice and preferences, the percentage of new entrants who traditionally get their first preference is highest in the Institutes of Technology, followed by the Universities and then other HE colleges (own calculations). The social composition of HE sectors based on a parental social class dominance approach also greatly varies, with students from professional/managerial backgrounds being more likely to attend universities than any other HE institution.

Theory and Hypotheses

The previous section has outlined how the structure of HE in Ireland has been transformed as it has expanded. I now discuss the contrasting views of differentiation and expansion in Higher Education in the sociological literature. The literature raises a number of interesting questions and explanations for social class inequalities in HE. Does educational expansion reduce inequality by providing more opportunities for persons of disadvantaged backgrounds or magnify inequality by expanding opportunities disproportionately for those who are already privileged? Furthermore, does qualitative differentiation replace inequality in the quantity of education attained? It is argued that higher education expansion when accompanied by institutional (hierarchical) differentiation is a process of diversion, whereby members of the working class are diverted from elite opportunities and are channelled to positions of lower status (Brint and Karabel 1989). On the other hand, does any participation represent an enhanced opportunity so that the important effect of expansion may be one of inclusion (Dougherty 1994)?

Expansion

The literature asks how class inequalities in education are reduced, and indicates that inequalities are not necessarily reduced by processes of expansion. Raftery and Hout (1993) in their thesis of 'Maximally Maintained Inequality' argue that inequality between any two social strata in the odds of attaining a given level of education persist until the advantaged class reaches a point of saturation (when nearly all the sons and daughters of advantaged origins attain the level of education under

consideration). According to this view, until that point, the advantaged group are better equipped to take advantage of any new and attractive educational opportunities and thus, class inequalities will persist or even increase. This thesis has been tested in a number of countries. In their study, Shavit and Blossfeld (1993) found that in most countries, educational expansion did not reduce educational inequality. However, there has been some decline in class inequalities in attainment at primary and secondary education levels (Jonsson, Mills and Muller 1996; Shavit and Westerbeek 1998).

Institutional and Qualification Differentiation

However, the MMI hypothesis and the Mare model of educational transitions both ignore tracking and other forms of qualitative differentiation within education (Breen and Jonsson 2000; Lucas 2001; Ayalon and Shavit 2004; Byrne 2008). As outlined by Shavit et al., (2007), most educational systems like Ireland are tracked at some degree, and students have the option to choose from tracks within the system. Some have argued that with educational expansion, qualitative differentiation replaces inequalities in the quantity of education attained (Shavit 1984; Gamoran and Mare 1989). Lucas (2001) argues that once saturation has been reached with regard to a given level of education, inequalities in the odds of this levels attainment may be replaced by inequalities in the odds of placement in the more selective track. The 'diversion thesis' (Hillmert and Jacob 2003) further asserts that working-class children are distracted from the direct path to university by non-academic institutions which affect individuals' educational choices and provide attractive education and training in non-academic areas (Becker and Hecken 2009). This view follows a rational action perspective and argued that working-class childrens' educational choices are most influenced by negative estimates of prospective success in university education, which causes them to refrain from attendance at a university institution. Furthermore, the main mechanisms responsible for the fact that working-class children are very likely to favour alternative forms of higher education are related to prior academic performance, the probability of success at school and the subjectivity of expected costs.

School Effects

Previous research has indicated significant variation between schools in the proportion of their students who go on to higher education (Iannelli 2004; Pustjens et al., 2004; Smyth and Hannan 2007). This paper extends the empirical literature on entry to higher education and considers the specific individual and school characteristics influencing institutional and qualitative differentiation among a representative sample of new entrants to higher education. Previous research has found that application rates of students across schools varies in relation to the background characteristics of students (in terms of gender, social class and prior ability) along with the ‘institutional habitus’ of the school, and that successful entry to tertiary education is related to general academic effectiveness in the school (Smyth and Hannan 2007). The international research indicates that students attending school with a middle class student intake are more likely to go on to higher education, even when accounting for their own social class background. Such effects have mainly been attributed to peer influences rather than school policy and practice (Alwin and Otto 1977; Bain and Anderson 1974), with school practice seen as influencing college entry mainly through its impact on academic achievement. A further body of research in the UK has extended the ‘school effects’ perspective in terms of college entry, by case-study research on ‘institutional habitus’ that is, through the impact of a social group on an individual’s behaviour as is mediated through organisations such as schools (Reay et al., 2001; 2005). By focusing on the concrete ways in which social class becomes embedded into the school organisation and culture, the concept of ‘institutional habitus’ provides a more precise way of describing such processes than the broader notion of school context (Smyth and Hannan 2007).

Hypotheses/Expectations based on Literature Review

Based on a review of the literature and the historical development of the Irish HE system, the expectation is that clear socio-economic disparities continue to exist in relation to both the type of institution attended and the level of course attempted at higher education. Based on a review of the literature, we expect that students from higher social class backgrounds are likely to pursue university institutions that they perceive to be more prestigious and which offer the highest level of qualification. It is also likely that school effects will have an influence on the type of institute attended and the type of course pursued given the qualitative research on institutional habitus

and school culture, but also the expected importance of previous experiences at second-level education.

Data, Variables and Models

The analyses conducted in this paper are based on a national survey of all new entrants to higher education in the Republic of Ireland in October 2004. The survey was conducted by the Economic and Social Research Institute (ESRI) in conjunction with Fitzpatrick Associates and is the fifth national survey of new entrants to higher education that has been undertaken on behalf of the HEA since 1980. The ESRI managed and coordinated a postal survey of a representative sample of the entire population of 34,700 individuals who had entered higher education through the CAO system in 2004, to collect information on parents' socio-economic characteristics and previous educational attainment. The CAO undertook the fieldwork for the survey, posting the questionnaire to each of the new entrants between November 2004 and January 2005. The overall response rate was 42%. This data was then merged to the CAO administrative data, resulting in a representative sample of 12,422 students in 702 second-level schools³.

Variables

Two dependent variables are used in the paper to capture institutional differentiation and qualitative differentiation.

- *Institutional Differentiation*: A categorical variable coding respondents who attend an Institute of Technology as 1, those who attend Colleges of Education or other Colleges of Higher Education as 2 and those who attend a University as the base category.
- *Qualification Differentiation*: This dummy variable was coded 1 for all respondents who were pursuing a degree level course (Level 8 NQAI courses) and 0 for those pursuing a diploma/certificate level course (Level 6/7 NQAI courses).

The independent variables used are as follows:

³ As is standard practice the data was re-weighted using sampling control parameters. The definition of new entrant excludes repeat students, students who previously enrolled in higher education on another programme in the same college or in another higher education college.

- *Male*: A dummy variable was coded 1 for males, 0 for females.
- *Age*: A series of dummy variables were coded for those aged 18, age 19, age 20-24 with the omitted reference category being those aged 16-17.
- *Previous Educational Attainment*: An ordinal variable measuring the number of honours achieved in the Leaving Certificate, ranging from 0-8.
- *Parental Social Class*: A series of dummy variables measuring parental social class (based on the dominance approach) with the following categorisations: Managerial, Non Manual, Skilled Manual, Semi-skilled manual, and the omitted reference category being Professional.
- *Parental Education*: A dummy variable coded 1 if either parent (or parents present) had achieved third level education, the reference category being a household in which either parent had not attained a third level qualification.
- *Proximity to a University*: A dummy variable coded 1 if there is a university in the county in which the new entrant lives.

The following school level variables are also used:

- *Second-Level School Sector*: A series of dummy variables representing the type of second-level school attended: Vocational, Community/Comprehensive with the omitted reference category being a Secondary school.
- *Disadvantaged Status of School*: A dummy variable coded 1 if the second-level school attended was assigned disadvantaged status by the Department of Education and Science, and 0 otherwise.
- *Fee-Paying Status*: A dummy variable coded 1 if the second-level school attended was fee-paying, and 0 otherwise.
- *Average School Attainment*: An ordinal variable derived from individual attainment levels of new entrants from each school.
- *School Social Mix*: A variable derived from individual social class background of new entrants from each school indicating the percentage of students from a professional class background in each school.

Models

In this paper, differentiation/stratification processes are examined for two educational outcomes, considering inequality in the type of higher education institution attended

and the level of course pursued at higher education in particular. For the former, a series of multinomial logit regression models are estimated followed by a series of binary logit regressions for the latter. Each of the models are clustered by the school id to produce robust standard errors and each model is conditional on eligibility and entry into Higher Education. A series of models for each educational outcome are conducted as the first set of models considers all new entrants while the second set of models considers only those who have obtained their number one preference through the CAO system. This method has been used to examine the role of class inequalities among those who achieve their preference as well as among all new entrants to Higher Education. This results in 12,000 pupils in 702 schools for the first set of models and 7,000 pupils in 679 schools in the second set

Results

Institutional Differentiation

Table 1 presents the multinomial models for the type of higher education institution attended by all new entrants and Table 2 presents the multinomial model for the type of HE institution attended by those who attained their number one preference in the CAO system. Table 1 indicates that there are clear gender differences: males are more likely than females to attend an institute of technology than a university, but less likely to attend another HE college. Older students, those with higher previous attainment at second level, those attending fee-paying schools, those attending schools with higher average attainment, and those attending schools with a higher social class mix are all less likely to attend an Institute of Technology. Clear individual social class differences are evident, with all social class groups being more likely to attend an Institute of Technology than those from a professional class background. Furthermore, social class effects are reduced when the social mix of the school is added to the model. Table 2 then considers only those who obtained their first preference from their CAO application. Again we see a similar pattern in relation to gender, age, previous educational attainment and social class background. However, for this group, school effects do not exert an influence on institutional differentiation.

Qualification Differentiation

Table 3 presents the logistic regression model for the type of qualification pursued at higher education for all new entrants while Table 4 presents the same model for those who obtained their number one preference in the CAO system. Table 3 indicates that males are less likely to pursue a degree than females while older students, those whose parents have higher levels of education, those who live in proximate distance to a university, those with higher previous educational qualifications are all more likely to pursue a degree level course than a diploma/certificate level course, once entry into higher education has been achieved. Furthermore, we see that there are clear social class differences and we find that individual attainment has a clear influence on social class. School effects are less evident in this model than in the model on institutional differentiation, but students attending schools with a higher proportion of students from professional class backgrounds are more likely to pursue a degree qualification. These results are also reflected in Table 4, reflecting no differences in the factors influencing qualification differentiation for the whole new entrant group and the group who attained their preference on entry.

Summary and Discussion

This paper attempts to empirically consider whether the Irish HE system upon expansion promotes inclusion or diversion by examining stratification processes for two educational outcomes: inequality in the type of higher education institution attended (institutional differentiation) and the level of qualification pursued at higher education (qualification differentiation). The analyses lead to the conclusion that the Irish system is an inclusive system but that clear class disparities remain in terms of both institutional differentiation and qualification differentiation. In terms of institutional differentiation, this is true of all new entrants and those who obtained their preference of institution and course. While social class disparities are largely mediated through educational attainment at the individual level, diversion is particularly evident in relation to non-manual and skilled manual groups, particularly in relation to qualification differentiation. This paper has aimed to advance current empirical work on the area of differentiation in Higher Education by considering the influence of school effects. The analyses indicate that school effects are particularly evident among the whole new entrant group as opposed to those who obtained their preference. This finding emphasises the importance of school organisation or culture

(institutional habitus) particularly for those who are not achieving their preference, furthermore, it leads to the recommendation of further examination of school effects in relation to differentiation at higher education.

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**Table 1: Multinomial Regression of the probability of attending an Institute of Technology v University, Other FE College v University
(Models clustered for robust standard errors, all new entrants)**

	Model 1				Model 2				Model 3				Model 4			
	Institute of Technology		Other HE		Institute of Technology		Other HE		Institute of Technology		Other HE		Institute of Technology		Other HE	
	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z
Constant	2.778	0.000	-0.449	0.013	2.776	0.000	-0.448	0.014	3.120	0.000	-0.169	0.525	2.997	0.000	-0.256	0.173
Male <i>Ref: Female</i>	0.341	0.000	-0.965	0.000	0.354	0.000	-0.944	0.000	0.317	0.000	-0.983	0.000	0.358	0.000	-0.948	0.000
Age 18	-0.105	0.128	-0.009	0.937	-0.089	0.198	0.016	0.884	-0.085	0.221	0.006	0.954	-0.083	0.225	0.013	0.902
Age 19	-0.183	0.020	0.044	0.701	-0.148	0.057	0.090	0.434	-0.149	0.063	0.072	0.532	-0.136	0.079	0.090	0.429
Age 20-24 <i>Ref: Age 16-17</i>	-0.335	0.006	0.245	0.116	-0.307	0.013	0.281	0.072	-0.308	0.012	0.265	0.090	-0.288	0.019	0.285	0.067
Managerial	0.258	0.001	0.509	0.000	0.232	0.003	0.464	0.000	0.247	0.001	0.500	0.000	0.141	0.079	0.400	0.000
Non Manual	0.350	0.000	0.623	0.000	0.310	0.001	0.559	0.000	0.330	0.000	0.607	0.000	0.213	0.021	0.495	0.000
Skilled Manual	0.398	0.000	0.354	0.016	0.357	0.000	0.289	0.050	0.370	0.000	0.332	0.025	0.251	0.016	0.217	0.148
Semi-Skilled Manual <i>Ref: Professional</i>	0.307	0.009	0.554	0.001	0.268	0.023	0.495	0.004	0.276	0.018	0.532	0.002	0.147	0.220	0.410	0.018
Parent 3rd level education <i>Ref: 2nd level or higher</i>	-0.244	0.000	-0.032	0.668	-0.227	0.000	-0.009	0.909	-0.234	0.000	-0.025	0.741	-0.212	0.000	-0.003	0.967
Attainment at 2nd Level	-0.741	0.000	-0.279	0.000	-0.737	0.000	-0.274	0.000	-0.727	0.000	-0.268	0.000	-0.734	0.000	-0.272	0.000
Geographic location to Uni <i>Ref: Uni not in county</i>	-0.410	0.000	0.079	0.400	-0.353	0.000	0.164	0.087	-0.396	0.000	0.092	0.324	-0.337	0.000	0.153	0.098
School Effects																
Fee Paying School <i>Ref: Public School</i>					-0.357	0.002	-0.529	0.000								
School Mean Attainment LC % Professional Class Backgrounds									-0.094	0.009	-0.077	0.127				
													-0.015	0.000	-0.013	0.001
	12423/702 2845.40*** 0.2223					12423/702 2891.09*** 0.2223					12423/702 2883.2*** 0.2227					12423/702 2858.99*** 0.2243

Table 2: Multinomial Regression of the probability of attending an Institute of Technology v University, Other FE College v University (Models clustered for robust standard errors, those who obtained 1st preference)

	Model 1				Model 2				Model 3				Model 4			
	Institute of Technology		Other HE		Institute of Technology		Other HE		Institute of Technology		Other HE		Institute of Technology		Other HE	
	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z
Constant	-0.690	0.000	-2.106	0.000	3.249	0.000	-0.361	0.193	3.352	0.000	-0.426	0.126	3.342	0.000	-0.435	0.117
Male <i>Ref: Female</i>	0.594	0.000	-0.958	0.000	0.257	0.000	-1.068	0.000	0.260	0.000	-1.071	0.000	0.269	0.000	-1.055	0.000
Age 18	-0.142	0.076	0.141	0.385	-0.109	0.222	0.157	0.347	-0.088	0.321	0.152	0.364	-0.079	0.374	0.168	0.317
Age 19	0.024	0.793	0.269	0.126	-0.122	0.219	0.239	0.176	-0.071	0.470	0.222	0.212	-0.048	0.621	0.255	0.152
Age 20-24 <i>Ref: 16-17</i>	0.552	0.000	0.751	0.000	-0.595	0.000	0.342	0.095	-0.526	0.000	0.322	0.118	-0.503	0.001	0.352	0.088
Managerial	0.490	0.000	0.675	0.000	0.253	0.009	0.595	0.000	0.230	0.018	0.611	0.000	0.216	0.027	0.582	0.000
Non Manual	0.816	0.000	0.765	0.000	0.435	0.000	0.629	0.000	0.405	0.000	0.652	0.000	0.384	0.001	0.612	0.001
Skilled Manual	1.103	0.000	0.480	0.026	0.430	0.001	0.267	0.227	0.391	0.003	0.290	0.194	0.369	0.005	0.249	0.266
Semi-Unskilled Manual <i>Ref: Professional</i>	1.057	0.000	0.730	0.003	0.327	0.030	0.467	0.063	0.263	0.083	0.508	0.046	0.245	0.109	0.475	0.063
Parent 3rd level education <i>Ref: 2nd level or lower</i>	-0.585	0.000	-0.179	0.080	-0.271	0.000	-0.037	0.734	-0.243	0.001	-0.043	0.689	-0.231	0.002	-0.023	0.833
Attainment at 2nd Level <i>Ref: No Uni in county</i>					-0.796	0.000	-0.316	0.000	-0.799	0.000	-0.314	0.000	-0.796	0.000	-0.310	0.000
Lives near university <i>Ref: No Uni in county</i>									-0.557	0.000	0.192	0.088	-0.525	0.000	0.246	0.033
School Effects																
Fee-Paying School <i>Ref: Public</i>													-0.250	0.095	-0.407	0.052
		7372/697				7372/697				7372/697				7372/697		
		692.24***				2020.7***				2029.28***				2037.92***		
		0.0601				0.247				0.252				0.0253		

Table 3: Logistic regression of probability of entering a degree course v course leading to a diploma or certificate (all new entrants, all institutions)

	Model 1: Individual		Model 2: Individual		Model 3: Individual		Model 4: School Type		Model 5: DEIS Status		Model 6: Private		Model 7: School Attainment		Model 8: Student Intake	
	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z
Constant	2.013	0.000	1.526	0.000	-2.247	0.000	-2.186	0.000	-2.221	0.000	-2.248	0.000	-2.274	0.000	-2.413	0.000
Male	-0.705	0.000	-0.732	0.000	-0.427	0.000	-0.415	0.000	-0.430	0.000	-0.434	0.000	-0.424	0.000	-0.438	0.000
<i>Ref: Female</i>																
Age 18	0.168	0.019	0.133	0.062	0.175	0.024	0.165	0.034	0.172	0.027	0.166	0.033	0.174	0.026	0.160	0.039
Age 19	0.076	0.339	0.001	0.987	0.271	0.002	0.255	0.004	0.269	0.002	0.253	0.004	0.270	0.002	0.244	0.005
Age 20-24	-0.629	0.000	-0.712	0.000	0.582	0.000	0.563	0.000	0.577	0.000	0.564	0.000	0.579	0.000	0.548	0.000
<i>Ref: 16-17</i>																
Managerial	-0.513	0.000	-0.372	0.000	-0.115	0.213	-0.113	0.223	-0.112	0.225	-0.100	0.276	-0.114	0.218	-0.030	0.754
Non Manual	-1.014	0.000	-0.673	0.000	-0.249	0.017	-0.242	0.020	-0.242	0.020	-0.227	0.029	-0.247	0.017	-0.151	0.157
Skilled Manual	-1.416	0.000	-1.039	0.000	-0.331	0.002	-0.317	0.004	-0.321	0.003	-0.308	0.005	-0.329	0.003	-0.226	0.042
Semi Unskilled Manual	-1.366	0.000	-0.928	0.000	-0.168	0.190	-0.152	0.237	-0.153	0.229	-0.145	0.257	-0.163	0.205	-0.052	0.693
<i>Ref: Professional</i>																
Parent 3rd Level Education			0.491	0.000	0.240	0.000	0.231	0.000	0.236	0.000	0.228	0.000	0.239	0.000	0.216	0.001
<i>Ref: Second Level or Lower</i>																
Lives near University			0.620	0.000	0.810	0.000	0.807	0.000	0.806	0.000	0.779	0.000	0.809	0.000	0.769	0.000
<i>Ref: Uni not in county</i>																
Attainment at 2nd level					0.854	0.000	0.852	0.000	0.853	0.000	0.852	0.000	0.853	0.000	0.849	0.000
School Effects																
Vocational							-0.154	0.037								
Comm/Comp							-0.121	0.156								
<i>Ref: Secondary</i>																
Disadvantaged School									-0.095	0.178						
<i>Ref: Non DEIS school</i>																
Private Fee-Paying School											0.253	0.078				
<i>Ref: Public School</i>																
Average School Attainment													0.007	0.840		
% Professional Background															0.011	0.000
University																
<i>Ref: Other Institution</i>																
	12,397/702		12,397/702		12,397/702		12,397/702		12,397/702		12,397/702		12,397/702		12,397/702	
	622.10***		766.81***		2624.84***		2661.09***		2622.85***		2629.89***		2629.89***		2629.89***	
	0.056		0.0736		0.3672		0.3676		0.3673		0.3675		0.3671		0.3682	

Table 4: Logistic regression of probability of entering a degree course v course leading to a diploma or certificate (preference, all institutions)

	Model 1: Individual		Model 2: Individual		Model 3: Individual		Model 4: School Type		Model 5: DEIS Status		Model 6: Private		Model 7: School Attainment		Model 8: Student Intake	
	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z
Constant	1.708	0.000	1.228	0.000	-2.761	0.000	-2.728	0.000	-2.754	0.000	-2.758	0.000	-2.692	0.000	-2.892	0.000
Male	-0.661	0.000	-0.688	0.000	-0.328	0.000	-0.320	0.000	-0.328	0.000	-0.334	0.000	-0.333	0.000	-0.337	0.000
Ref: Female																
age18	0.185	0.026	0.154	0.062	0.139	0.121	0.135	0.132	0.138	0.122	0.132	0.140	0.144	0.111	0.127	0.155
age19	0.085	0.375	0.015	0.876	0.245	0.018	0.237	0.022	0.244	0.018	0.228	0.028	0.253	0.015	0.221	0.033
age2024	-0.464	0.000	-0.538	0.000	0.704	0.000	0.694	0.000	0.702	0.000	0.685	0.000	0.710	0.000	0.674	0.000
Ref: Age 16-17																
Managerial	-0.605	0.000	-0.468	0.000	-0.207	0.080	-0.205	0.084	-0.206	0.081	-0.196	0.099	-0.209	0.077	-0.139	0.252
Non Manual	-1.060	0.000	-0.714	0.000	-0.279	0.030	-0.274	0.033	-0.278	0.031	-0.263	0.043	-0.284	0.028	-0.201	0.131
Skilled Manual	-1.502	0.000	-1.128	0.000	-0.413	0.003	-0.405	0.004	-0.411	0.003	-0.395	0.005	-0.419	0.003	-0.327	0.023
Semi-Unskilled Manual	-1.372	0.000	-0.933	0.000	-0.114	0.471	-0.106	0.502	-0.110	0.486	-0.098	0.538	-0.117	0.463	-0.019	0.908
Ref: Professional																
Parent 3rd level education			0.525	0.000	0.230	0.004	0.225	0.005	0.228	0.004	0.220	0.005	0.232	0.004	0.209	0.009
Ref: 2nd level or less																
Lives near Uni			0.575	0.000	0.802	0.000	0.801	0.000	0.801	0.000	0.781	0.000	0.802	0.000	0.770	0.000
Ref: No Uni in county																
Attainment at 2nd Level					0.857	0.000	0.856	0.000	0.857	0.000	0.855	0.000	0.861	0.000	0.853	0.000
School Effects																
Vocational							-0.092	0.312								
Comm/Comp							-0.053	0.585								
Ref: Secondary																
DEIS									-0.024	0.773						
Ref: Non DEIS																
Fee Paying School											0.229	0.224				
Ref: Public school																
School Mean Attainment													-0.019	0.662		
% Students from Professional																
Backgrounds															0.009	0.017
	7359/679		7358/679		7358/679		7358/679		7358/679		7358/679		7358/679		7358/679	
	418.85***		514.10***		1856.68***		1879.73***		1858.39***		1863.24***					
	0.054		0.07		0.373		0.373		0.373		0.3733		0.373		0.3737	

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