



Northern Ireland
Assembly

Research and Library Service Briefing Paper

Paper 000/00

1st December 2010

NIAR 588-2010

Eoin Murphy

Student Non-Continuation Rates in Northern Ireland and the UK

1 Introduction

This paper was commissioned by the Committee for Employment and Learning and examines the student non-continuation rate in Northern Ireland, Scotland, Wales and England.

The paper provides data on student enrolment and non-continuation rates in Northern Ireland and a comparison with the other UK regions. It concludes by discussing factors in non-continuation.

Non-continuation rates track students who enter a third level course in a specific year. In the following year, that student may continue at the same institution, either on the same course or elsewhere in the institution, transfer to another institution, or be absent from higher education completely.

2 Key Points

- There were 9,130 full time first degree entrants to Northern Irish Higher Education Institutions (HEI) in 2007/08;
- 935 students failed to complete their first year at University in this same period;
- The University of Ulster has both the highest number of entrants in first year and the highest percentage of non-continuation;
- Engineering and Technology, Computer Science and Combined Studies have the highest non-completion rates for subjects across the UK;
- Engineering and Technology has the highest dropout rate for Northern Ireland;
- Projected outcomes suggest that Northern Ireland has the highest level of students leaving University without an award; and
- Factors involve in students not completing first year of their degree include socio-economic class; gender (females more likely to complete a course than males); course type; and poor academic progress.

3 Student Non-Continuation Rates

Table 1 shows the number of full time first degree students in their first year of Higher Education (HE)¹. As can be seen on the table this figure fluctuates from year to year with NI seeing a fall of almost a thousand students between 2005/06 and 2006/07.

Table 1: UK entrants to Higher Education (Full Time First Degree) 2004 - 2008²

	2004/05	2005/06	2006/07	2007/08
UK Total	314,025	333,285	319,325	332,460
England	255,820	273,430	261,175	273,600
Wales	19,090	19,425	19,840	20,105
Scotland	29,875	30,915	29,815	29,625
Northern Ireland	9,245	9,510	8,500	9,130

This drop is reflected in the UK as a whole with a fall of 13,960 students in the same period, with it and the NI figures showing signs of recovery in 2007/08.

It should be noted that the drop in enrolments between 2005/06 and 2006/07 coincides with the introduction of Variable Fees in 2006.

Tables 2 and 3 following provide details on student non-continuation rates. Non-continuation rates track students who enter a third level course in a specific year. In the following year, that student may continue at the same institution, either on the same

¹ Please note: In tables 1 2, 3, and 4, as per HESA methodology 0, 1 and 2 are rounded to 0. All other numbers are rounded up or down to the nearest multiple of 5. Percentages are not subjected to rounding. In addition, the data used is for 'All Entrants'.

² Higher Education Statistics Agency, Performance Indicators Non-Continuation Rates Table 3a 2007/08,2006/07,2005/06,2004/05 <http://www.hesa.ac.uk/index.php/content/category/2/32/141> (first accessed 17th November 2010)

course or elsewhere in the institution, transfer to another institution, or be absent from higher education completely.

In Table 2, Northern Ireland has a higher percentage of dropout rates than the other UK regions, although in 2007/08 this is by only 0.3% (between NI and Scotland, the next highest dropout rate).

Table 2: Number no longer in Higher Education following year of entry³

	Year of Entry							
	2004/05		2005/06		2006/07		2007/08	
	Number	%	Number	%	Number	%	Number	%
UK Total	27,605	8.8	28,825	8.6	28,785	9	28,635	8.6
England	21,475	8.4	22,765	8.3	22,685	8.7	22,935	8.4
Wales	1,970	10.3	1,850	9.5	2,165	10.9	1,850	9.2
Scotland	3,205	10.7	3,135	10.1	3,150	10.6	2,920	9.9
Northern Ireland	955	10.3	1,080	11.3	785	9.2	935	10.2

Using the data on Table 2, Figure 1 above plots the yearly percentage change for Northern Ireland and the UK total. As can be seen, Northern Ireland's drop-out rate is continuously higher than that of the UK total. NI also has significant variation with a low of 9.2% and a high dropout rate of 11.3% (the highest for all regions over the four year period described). The UK rate, however, remains relatively stable varying between a low of 8.6% and a high of 9%.

Figure 1: Percentage no longer in Higher Education following year of entry in the UK and NI

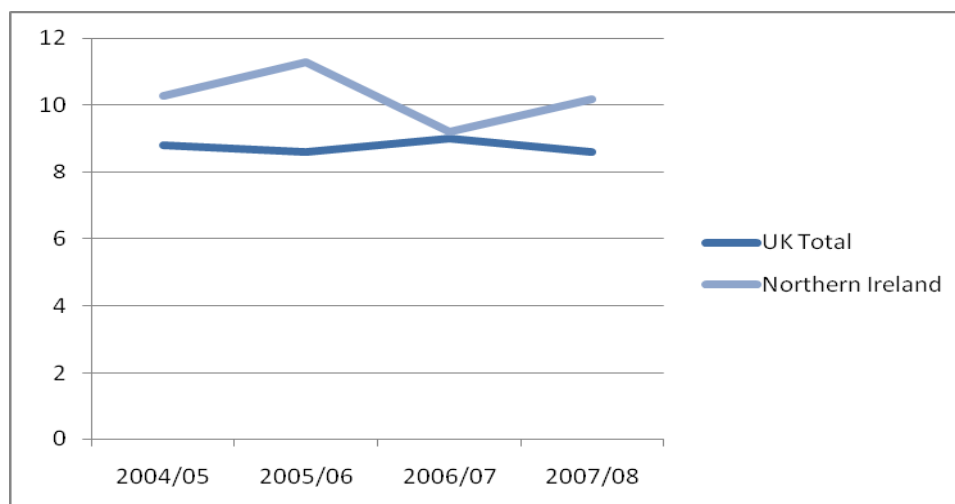


Table 3 on the page following provides data on entrants to Northern Ireland Universities, with 9,130 students beginning their first degree in 2007/08, 630 more students than the previous academic year.

³ Ibid

Table 3: Northern Ireland entrants to Higher Education (Full time first degree) by University⁴

	2004/05	2005/06	2006/07	2007/08
Queen's University Belfast	3,905	3,995	3,815	3,940
St. Mary's University College	240	250	300	235
Stranmillis University College	285	275	260	240
University of Ulster	4,815	4,990	4,125	4,720
Northern Ireland	9,425	9,510	8,500	9,130

Between the four HEI's of Northern Ireland, the University of Ulster has the highest yearly enrolment rate. Stranmillis and St. Mary's University Colleges have the lowest enrolment rate, but this is a result of the much smaller size of the two University Colleges in comparison to QUB and UU.

Table 4: Number no longer in Higher Education in Northern Ireland University following year of entry⁵

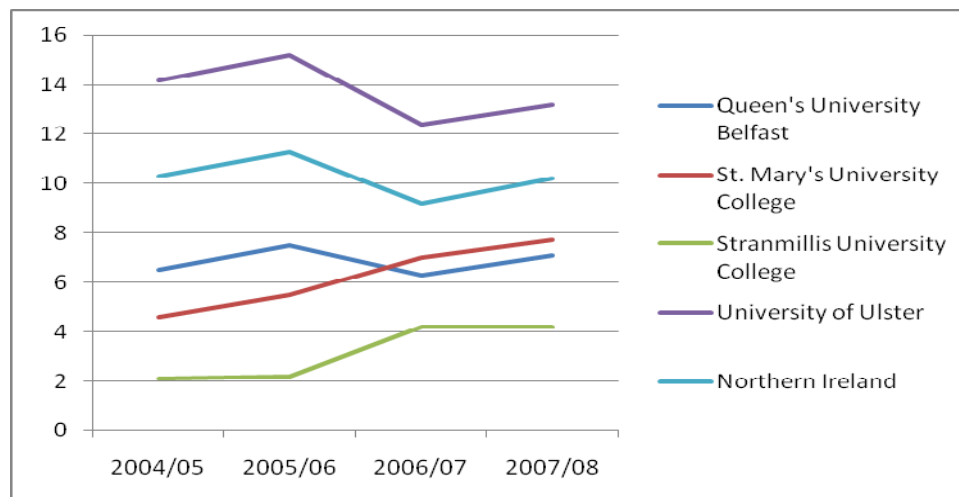
	2004/05		2005/06		2006/07		2007/08		Average over 4 years	
	Number	%	Number	%	Number	%	Number	%	Number	%
Queen's University Belfast	255	6.5	300	7.5	240	6.3	280	7.1	268.75	6.87
St. Mary's University College	10	4.6	15	5.5	20	7	20	7.7	16.25	6.34
Stranmillis University College	5	2.1	5	2.2	10	4.2	10	4.2	7.50	2.83
University of Ulster	685	14.2	760	15.2	510	2.4	625	13.2	645.00	13.83
Northern Ireland	955	10.3	1,080	11.3	785	9.2	935	10.2	938.75	10.27

⁴ Ibid⁵ Ibid

Table 4 shows the non-completion rates for NI's HEI's over four academic years.

The University of Ulster has a much higher percentage of non-completion rates than the other NI Universities, varying between 12.4% in 2006/07 and 14.2% in 2004/05. On average over four years this amounts to a non-completion rate of 11.25%, 1% higher than the NI average and almost double that of Queen's University Belfast.

Figure 2: Percentage no longer in Higher Education in Northern Ireland University following year of entry



In Figure 2 it can be seen that UU's non-continuation rate is much higher than the other HEI's.

It should also be noted that QUB and UU experienced a fall in the non continuation rate between 2005/06 and 2006/07 once variable fees were introduced – as such, once students had to pay more for their degrees, less of them failed to complete their first year of University having invested £3,000 in the course.

Table 5 provides data on non-continuation rates at UK HEIs by subject for students entering University in 2007/08 and continuation rates on to 2008/09. As can be seen Engineering and Technology has the highest dropout rate in Northern Ireland with 17.9% of students failing to complete their first year. This equates to 100 students not completing first year (out of 555 entrants). The other regions also have a high non-completion rate for engineering, although it must be noted that a Combined Degree has the highest dropout rate for the other regions (28.7% in Welsh institutions – 35 out of 130 students).

In the UK as a whole, however, Computer Science has the highest non-completion rate of non-combined subjects at 13.2% (2,040 students of 15,415).

Northern Ireland Institutions have an overall dropout rate of 10.2% with 935 students out of 9,130 failing to complete first year of University.

Table 5: Non-continuation rates for full time, first degree entrants to Regional HEI's by subject in 2008/09⁶

Subject Area	English institution			Northern Irish institution			Scottish institution			Welsh institution			UK		
	FT FD Entrants	Not in HE	% Not in HE	FT FD Entrants	Not in HE	% Not in HE	FT FD Entrants	Not in HE	% Not in HE	FT FD Entrants	Not in HE	% Not in HE	FT FD Entrants	Not in HE	% Not in HE
Medicine & dentistry	7,625	175	2.3%	285	5	1.1%	1,160	15	1.1%	470	10	1.7%	9,540	200	2.1%
Subjects allied to medicine	20,315	1,635	8.0%	1,360	105	7.6%	2,690	210	7.8%	2,030	175	8.6%	26,395	2,120	8.0%
Biological sciences	28,880	2,345	8.1%	690	70	9.9%	3,590	425	11.9%	2,725	230	8.4%	35,885	3,070	8.5%
Agriculture & related subjects	1,930	160	8.4%	100	10	11.8%	65	10	12.5%	185	15	7.0%	2,285	195	8.5%
Physical sciences	12,620	820	6.5%	310	25	8.7%	1,800	160	8.9%	1,210	115	9.3%	15,940	1,120	7.0%
Mathematical sciences	5,545	305	5.5%	110	15	11.6%	590	55	9.4%	280	15	5.4%	6,525	385	5.9%
Computer science	12,505	1,615	12.9%	670	105	15.9%	1,475	235	15.8%	765	80	10.7%	15,415	2,040	13.2%
Engineering & technology	14,345	1,430	10.0%	555	100	17.9%	2,215	275	12.4%	990	115	11.7%	18,100	1,920	10.6%
Architecture, building & planning	6,605	650	9.8%	560	50	9.1%	840	85	10.3%	310	30	10.0%	8,315	820	9.8%
Social studies	27,370	2,115	7.7%	955	105	10.8%	2,640	260	9.9%	1,660	160	9.6%	32,625	2,640	8.1%
Law	13,030	1,080	8.3%	485	25	5.3%	1,420	110	7.7%	900	85	9.2%	15,835	1,300	8.2%
Business & administrative studies	32,380	3,165	9.8%	1,150	125	11.0%	3,870	460	11.9%	1,710	185	10.7%	39,105	3,930	10.0%
Mass communications and documentation	10,025	1,020	10.2%	245	35	14.6%	635	85	13.4%	550	55	10.0%	11,460	1,195	10.4%
Languages	18,485	1,140	6.2%	480	50	10.3%	1,720	125	7.1%	1,470	110	7.3%	22,155	1,420	6.4%
Historical and philosophical studies	13,425	795	5.9%	330	30	9.5%	1,345	100	7.3%	1,090	75	6.7%	16,190	995	6.2%
Creative arts & design	34,675	3,230	9.3%	495	65	12.7%	2,300	215	9.3%	2,545	270	10.7%	40,015	3,780	9.4%
Education	12,010	935	7.8%	345	15	4.3%	1,255	100	7.8%	1,085	95	8.9%	14,695	1,145	7.8%
Combined	1,830	320	17.5%	0	0		20	5	27.8%	130	35	28.7%	1,980	365	18.4%
Total	273,600	22,935	8.4%	9,130	935	10.2%	29,625	2,920	9.9%	20,105	1,850	9.2%	332,460	28,635	8.6%

⁶ Department for Employment and Learning Tertiary Education Analytical Services providing data sourced from the Higher Education Statistics Agency. Please note: Figures have been rounded to the

nearest 5 and percentages are based on unrounded figures.

Providing research and information services to the Northern Ireland Assembly

Table 6⁷ provides further detail on NI's non-continuation rates by Institutions for Northern Ireland's two main Universities by subject⁸. As can be seen, UU has a consistently higher dropout rate for its courses than QUB, with Engineering and Technology having a 26.9% non-continuation rate in 2007/08 in comparison to 10.7% for QUB.

Computer Science and Historical studies also have high non-completion rates.

Table 6: Non-continuation rate for QUB and UU by Subject Area

Subject Area	Queen's University, Belfast (%)			University of Ulster (%)		
	2005/06	2006/07	2007/08	2005/06	2006/07	2007/08
Medicine and Dentistry	0.7	0	1.1	-	-	-
Subjects allied to Medicine	7.1	3.6	6.5	13	9.1	8.9
Biological Sciences	9.5	9.8	8.6	6.7	8.7	11.1
Agriculture and related subjects	6.3	1.5	9.4	11.1	3.1	15.8
Physical sciences	11.2	8.6	9.6	7.8	12.4	7.4
Mathematical sciences	9.6	7.8	11.6	-	-	-
Computer Science	13.7	13.6	11.3	19.6	16.5	18.1
Engineering and Technology	7.6	11.6	10.7	20.9	21.7	26.9
Architecture, Building and Planning	6.8	7.8	4.7	15.8	14.2	10.4
Social Studies	5.9	5.9	8.9	19.4	11.1	11.9
Law	4.8	5.1	2.5	15.9	11.4	8.2
Business and Administrative Studies	5.2	2.9	3.1	15.8	11	13.3
Mass Communications and Documentation	11.8	13	17.1	15	9.7	14.1
Languages	7.4	6.1	6	18.6	10.2	17.4
Historical and Philosophical Studies	8.7	8.7	6.5	11.8	13.8	18.3
Creative Arts and Design	11	4.3	11.6	14.8	16.2	13.1
Education	-	-	-	17.6	10.7	17.4
Total	7.5	6.3	7.1	15.2	12.4	13.2

4 Projected Learning Outcomes

HESA provides projections as to how many first year entrants in a specific year will, after fifteen years, arrive at a certain outcome. HESA uses a fifteen year period for the analysis as an over-estimate of the amount of time that the majority of full-time first

⁷ Northern Ireland Assembly Questions, 1st November 2010, HESA data provided by the Minister for Employment and Learning in response to a written question by Michelle McIlveen, MLA

⁸ Please note, Table 6 shows non-continuation rates in percentages rather than figures as a result of the form the data was received in.

degree students should have reached one of these end states⁹. This method is used rather than tracking entrants directly as it is not possible to keep an accurate record of hundreds of thousands of students who may take gap years, participate in four year degree course or leave University for a time and then return to complete their degree.

The projected outcomes are based on a methodology¹⁰ that takes into consideration the current progression rates within individual Universities.

The outcomes examine four main areas – the percentage of students within each entry year to gain a degree, the number who transfer to other Universities, those who receive a different award from a degree, and the percentage of students who receive neither an award or transfer to another institution.

Table 7 provides details on the percentage of students in the UK regions who receive neither an award nor transfer. The table shows that in 4 out of the 5 academic years, Northern Ireland has the highest level of this variable. In 2007/08 NI has a projected rate 3.1% higher than the next highest region (Wales at 14.5% in comparison to NI's level of 17.6%).

Table 7: Full time students starting first degree courses receiving neither an award nor transfer¹¹

	Year				
	2003/04	2004/05	2005/06	2006/07	2007/08
Total UK	14.9%	14.2%	14.1%	13.8%	13%
Total England	14.4%	13.8%	13.9%	13.4%	12.7%
Total Wales	15.4%	16.5%	15.9%	17.4%	14.5%
Total Scotland	17.5%	15.4%	14.3%	14.4%	13.8%
Total Northern Ireland	19.1%	17.3%	17.6%	16.3%	17.6%

Table 8 on the page following provides figures on NI HEI's and as can be seen the University of Ulster has a much higher rate than the other third level colleges. In 2007/08 UU has a level of 21.7% in comparison to QUB's 13.8%. This is a projected 7.9% higher rate of students leaving UU with no award or transferring to another University.

⁹ HESA Non-Continuation Rates (including projected outcomes)

http://www.hesa.ac.uk/index.php?option=com_content&task=view&id=1695&Itemid=141 (first accessed 30th November 2010)

¹⁰ Which may be viewed in detail here - http://www.hesa.ac.uk/index.php?option=com_content&task=view&id=1697&Itemid=141

¹¹ Higher Education Statistics Agency, Performance Indicators Non-Continuation Rates Projected outcomes Table 5 2007/08,2006/07,2005/06,2004/05,2003/04 (first accessed 30th November 2010)
http://www.hesa.ac.uk/index.php?option=com_content&task=view&id=1695&Itemid=141

Table 8: Full time students attending NI University starting first degree courses receiving neither an award nor transfer¹²

	Year				
	2003/04	2004/05	2005/06	2006/07	2007/08
Total Northern Ireland	19.1%	17.3%	17.6%	16.3%	17.6%
Queen's University Belfast	Not available	12.9%	14.5%	15.2%	13.8%
St. Mary's University College	11.5%	4.9%	12.1%	10.4%	12.3%
Stranmillis College	5.9%	4.1%	3.9%	5.9%	6%
University of Ulster	22%	22.5%	21.3%	18.6%	21.7%

5 Potential Factors in Non-Continuation

A 2007 study by Bailey and Borooah¹³ examined the attrition rate of students at the University of Ulster. It focused on how the probability of a first year student proceeding to the second year of his or her studies was influenced by their personal characteristics and circumstance.

The study used data from 15,123 first year students enrolled in October 2002, 2003 and 2004, with the University providing the following information:

- Programme of study and course type;
- Whether the student proceeded or did not proceed to the next year of his or her programme of study; and
- Sex, social class, religion, ethnicity, disability (if any), domicile, marital status, year of entry and basis for acceptance to the University (A-levels, HND, etc).

The study found that a number of variables have an impact on retention rates, including:

- **Gender:** the probability of women surviving the first year was 3.7% points higher than that for men (all things remaining equal);
- **Socio-economic class:** compared to students coming from an unskilled or semi-skilled social background, the probability of surviving the first year was 4.1 points higher for students from a professional social class; however, there was no significant difference between the survival rates of students from unskilled and skilled backgrounds;
- **Religion:** compared to students from 'other' religions, Catholic students were less likely to survive their first year by 4 points; however, there was no significant

¹² Ibid

¹³ Department of Employment and Learning January 2007, Bailey, M and Borooah, V Staying the Course: An Econometric Analysis of the Characteristics most Associated with Student Attrition beyond the First Year of higher Education http://www.delni.gov.uk/staying_the_course.pdf (first accessed 18th November 2010)

difference between the survival rates of students from 'other' religions and Protestant students;

- **Usual Domicile:** compared to students whose domicile was outside Northern Ireland, students from NI were less likely to survive their first year by 8.4 points;
- **Offer Basis:** The probability of survival was not significantly affected by the quality of the students school leaving grades or by the fact that he or she had made a 'non-traditional' offer based on other than A-levels;
- **Course Type:** Compared to the probability of surviving the first year of an Accounting course (the residual category¹⁴ of course type), the probability of:
 - Surviving an Art and Design Course was 10.8 points lower;
 - Surviving a Business and Management Course was 11.5 points lower;
 - Surviving an Engineering Course was 26.2 points lower;
 - Surviving a Humanities Course Type was 16.7 points lower;
 - Surviving a Computer and Information Technology Course was 22.4 points lower;
 - Surviving a Science type course was 14.0 points lower;
 - Surviving a Social Science type course was 18.4 points lower;
 - Surviving a Nursing type course was not significantly different from the survival rate for Accounting type courses;
 - Surviving a Social Work type course was not significantly different from the survival rate for Accounting type courses; and
 - Surviving a Health type course was not significantly different from the survival rate for Accounting type courses.

In response to a written question regarding the reasons found for the non-continuation rates at QUB, the Minister of Employment and Learning responded that:

Research carried out by the University has identified a range of reasons, common across the higher education sector, as to why students withdraw from their courses. These include poor compatibility between the student, and their course and institution; lack of preparation for the higher education experience; lack of commitment to the course; lack of social integration and poor academic progress. The University's research also found that, whilst a contributing factor, financial hardship is not the primary reason for the failure of students to complete their course¹⁵.

¹⁴ The 'Residual' is what each variable is compared against – as such course types are compared against the attrition rate for Accounting, Domicile is outside Northern Ireland and Religion is Other.

¹⁵ Northern Ireland Assembly Questions, 1st November 2010, response by the Minister for Employment and Learning in response to a written question by Michelle McIlveen, MLA

6 Summary

Northern Ireland has the highest non-continuation rates for third level students in the UK regions, with the University of Ulster having the highest dropout rate in Northern Ireland.

Technical courses, such as Engineering and Technology and Computer Science have the highest subject dropout rates with non-completion rates of 13.2% and 10.6% respectively. It should be noted that Combined degrees have a much higher non-completion rate of 18.4% across the UK. However, only 0.59% (1,980) of the total first year entrants take on a Combined degree in comparison to 5.4% (18,100) of entrants starting an Engineering course.

In a further reflection of the higher non-continuation rate for first year students entering the second year of their course, HESA projections show that Northern Ireland students are less likely to have an award or have transferred to another University after fifteen years of entering University.

There are a number of factors associated with students not completing their first year of University, including their Socio-economic background, with those from unskilled or semi-skilled background more likely to dropout and gender with females more likely to complete first year than males.