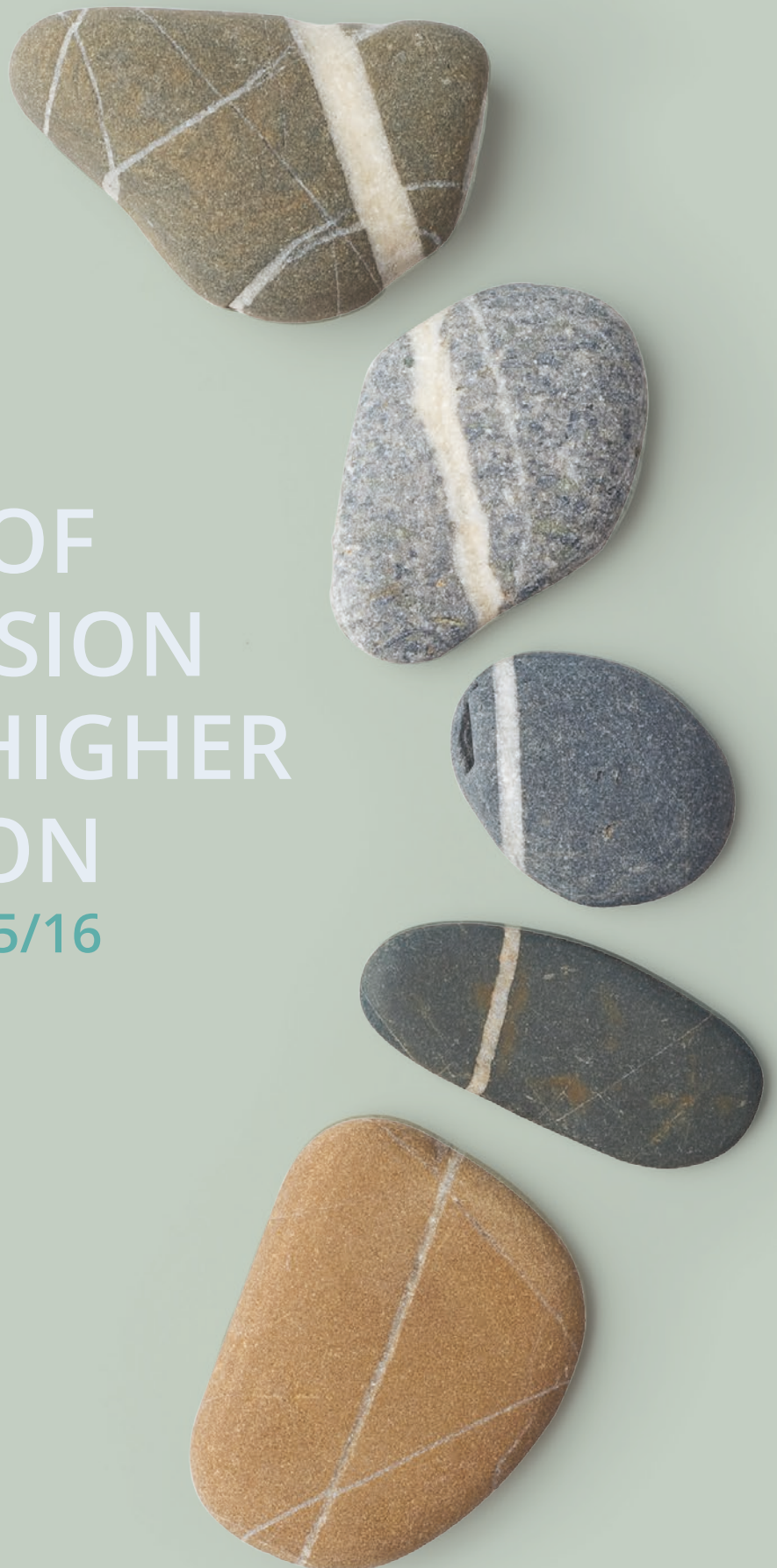


A STUDY OF PROGRESSION IN IRISH HIGHER EDUCATION 2014/15 TO 2015/16



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2014/15 TO 2015/16

A report by the Higher Education Authority

May 2018

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Foreword

This report is the sixth in a series of publications by the Higher Education Authority on the progression of undergraduate students in our higher education institutions. It examines the progression of students entering our higher education system in the academic year 2014/15 and is intended to underpin constructive and collective engagement on the challenges faced by the system in ensuring progression and successful completion of undergraduate students. The report shows that 86% of the 2014/15 first year undergraduate new entrants to publicly funded higher education institutions progress to second year.

International research has shown that if a student progresses to second year, he or she is more likely to complete their programme. It is important for the higher education system that we seek to address reasons as to why a student may not progress, as this has significant personal and possible financial implications for the student, but also for the institution and for the State in funding the course.

The importance of academic preparedness prior to admission on entry to higher education is highlighted in the findings. Differences in progression rates across levels, sectors and disciplines are observed with students obtaining the highest Leaving Certificate points entering the university sector resulting in a marked difference in progression rates to those entering the institutes of technology. The diverse student profile and academic preparedness of the new entrant cohort entering the institutes of technology is negatively impacting on the sector's overall progression rates.

However, their new entrant profile is in line with national priorities to increase participation of students from underrepresented groups, such as those from lower socio-economic backgrounds, mature students and students transferring from further education institutions. When one considers these factors, the chances of progressing in many institutes of technology are as high as in many universities. In fact, given the lower points on entry and more diverse profile of those entering the institutes of technology, 79% of students' progressing is a good performance for the students, for the sector and for Ireland.

Informed decisions on subject choice on entering higher education is vital to success at third level for those considering higher education as an option. Below average progression rates reported for technical disciplines, in particular, Computer Science and Engineering, highlight potential gaps in the availability of information and the guidance provided to students on post Leaving Certificate education and training options. This needs to be addressed in the context of the information provided by higher education institutions but also through advice that is given to students at second level.

A student not progressing is not always a negative experience if the student is not suited to their original course choice. To make an early decision to leave and take up a more suitable course can have a major impact on the future academic and work career of a student. The National Strategy for Higher Education to 2030 emphasises the importance of a positive first year experience to achieving the goals of higher education. Strong guidance pre-entry and early intervention post-entry are vital to the improvement of progression rates.

A number of policy initiatives are currently underway that will in the future have a positive impact on progression rates in higher education. In line with the Government's agenda to support a better transition from second level to higher education, a new progressive points system came into effect in 2017, aimed at rewarding students for taking higher level papers and reducing the risk of random selection becoming a feature of college entry. This coincides with moves by higher education institutions towards broader entry, thus preventing students from having to decide, at an early stage, what specialism might suit them later in life. Allowing students to enter broad-based courses, and to specialise further into their degree, should reduce the number of people dropping out of college, and further ease the unnecessary pressure on final year Leaving Certificate students.

Additionally, a review of career guidance led by the Department of Education and Skills is currently underway in Ireland that will encompass, not only information received by students at second level, but throughout their lives as they progress through the education and training system. The higher education system has a key role to play here as a provider of information and in the early identification of first year students that may be struggling due to poor or ill-informed subject choices.

Successful participation and completion is a priority goal in the National Plan for Equity of Access to Higher Education, 2015-2019 (NAP). The plan includes an aim to address the issue of non-completion in the under-represented target groups. The Department of Education and Skills High-Level Implementation Group has established a Working Group on Student Success chaired by the HEA to progress initiatives that will support HEIs in delivering student success for all students and especially students in the target groups. On foot of this work, the System Performance Framework, 2018-2021 includes a requirement that each higher education institution produce a student success strategy by 2020.

The improvement of data gathering systems is an explicit objective in the implementation of the HEA's Data and Knowledge Management Strategy 2015-2018. Advances in the quality of data gathered as well as collaborating with other agencies to share data, is resulting in continuous improvements in the evidence base underpinning such quantitative analysis.

Finally, I would like to thank the higher education institutions for their assistance in developing this report.



Dr Graham Love
Chief Executive

May 2018

Executive Summary

This report examines successful participation and progression in Irish higher education institutions. The data reflects whether a student is present in his/her institution in the year following entry. The findings of this report corroborate previous evidence that certain groups of students are more at risk, than their peers, of not progressing in their studies. The report aims to provide benchmark data, fill in the gaps in knowledge and offer a comprehensive overview of progression in the higher education sector in Ireland.

The study is quantitative in nature and reports the findings of an analysis of a full-time first-year undergraduate cohort of 41,441 new entrants from March 1st 2015 to March 1st 2016 in their enrolled institution. The main analysis of this report draws from data returned by HEA-funded institutions to the *Student Record System* (SRS) and examines the issue of non-progression across a range of fields of study, NFQ levels (6-8) and institutions. Non-progression rates in selected profession-oriented courses are also investigated. Significant attention is paid to the extent to which individual student characteristics, such as gender, age, nationality and socio-economic background may influence non-progression. This report also examines differences between the student cohort entering the institute of technology, university and college sectors. Furthermore, Chapter 6 provides findings of multivariate regression models which highlight the importance of prior educational attainment on successful progression.

This study provides a purely statistical analysis. It does not account for factors around motivation, financial well-being, study patterns, student views on teaching methodologies and staff, attendance and participation in extra-curriculum activities as well as the work practices of students.

The report is structured into seven chapters, the key findings of which are summarised below.

CHAPTER 2

Non-Progression of 2014/15 Full-Time Undergraduate New Entrants

- The proportion of new entrants in 2014/15 who did not progress is 14% across all sectors and NFQ levels. This compares to 15% in 2013/14.
- The rates of non-progression in 2014/15 varied within and between sectors ranging from 27% and 25% at levels 6 and 7 compared to 15%, 10% and 8% at level 8 in institutes of technology, universities and colleges respectively.
- Between 2013/14 – 2014/15 and 2014/15 – 2015/16, non-progression rates increased by one percentage point for level 6 courses and dropped by two percentage points at level 7. While a percentage drop is evident at level 8 in the institute of technology and university sectors, there is a two percentage point increase in non-progression rates at level 8 in the college sector.
- In general, courses at NFQ level 6 (305-350) and level 7 (255-300) admit students on a lower points range than NFQ level 8 programmes (405-450). The most common points attained at NFQ level 8 was 455-500 in both universities and colleges compared to 355-400 in the institute of technology sector.
- While these findings suggest a link between prior educational attainment on entry and successful progression after the first year of study, more detailed analysis (see Chapter 6) confirmed this relationship. Those with higher prior educational attainment are more likely to progress to the second year of study than those with lower educational attainment, when individual and institution-related variables are controlled for in a model.
- 2.9% of all new entrants in 2014/15 were classified as repeat in 2015/16. As in recent years, the institute of technology sector, at level 7, has the greatest proportion of repeat students.

CHAPTER 3

Non-Progression Rates by Field of Study

- Rates of non-progression vary across fields of study. *Construction and Related* disciplines have the highest non-progression rate at 23%. However, this is down five percentage points from the year previous. *Education* disciplines have the lowest rate at 6%, up two percentage points from the previous year.
- Except for a very small number at level 7, most students entering the *Education* field of study did so at level 8, while 38% of new entrants to the field of *Construction and Related*, entered at level 6 or level 7 (compared to 43% of new entrants at level 6 or 7 in the previous year).
- At level 6 in the institutes of technology, *Construction and Related* disciplines had the highest rate of non-progression. Together with *Computer Science*, the same discipline had the highest rate of non-progression at level 7. *Computer Science* disciplines also had the highest rate of non-progression at level 8 in the institutes of technology sector.
- Non-progression rates for *Education* disciplines at level 8 in both universities (8%) and colleges (6%) increased from the previous year. At level 8 for all sectors, students in the disciplines of *Services* disciplines have the highest non-progression rate (17%), followed by *Computer Science* (16%) and *Construction and Related* (15%).
- Like previous years, *Medicine* has the lowest non-progression rate of all 2014/15 new entrants in profession-oriented courses, at two percent, while *Architecture* has the highest rate at 20%.

CHAPTER 4

Non-Progression Rates by Student Characteristics

- Females are more likely than males to progress to the following year, across all NFQ levels and sectors. This relationship holds true across the majority of prior educational attainment categories in all sectors. Additional multivariate regression analysis (see Chapter 6) supports the finding that males are less likely than females to progress, while controlling for other individual and institution-related variables.
- In the institute of technology sector at level 6, level 7 and level 8, mature students are more likely to progress to the following year of study than a new entrant who is under the age of 23. The opposite is true at level 8 in the university and colleges sector, where traditional students are more likely to progress than mature students.
- Across all levels and sectors, Irish students had a non-progression rate of 15% compared to 14% among non-Irish students.
- In relation to socio-economic groups, the lowest level of non-progression is found among *Farmers* at 8%. The highest level of non-progression is among the *Unskilled and All others gainfully employed and unknown* groups, at 16%.

CHAPTER 5

Trends in Non-Progression Rates

- The overall new entrant non-progression rate has reduced by one percentage point between 2013/14 – 2014/15 and 2014/15 – 2015/16, from 15% to 14%.
- At level 8, for all sectors, the non-progression rate across *All Fields of Study* was 11% in 2010/11 and 2011/12. It was at 12% in 2012/13 and 2013/14 before dropping back to 11% in 2014/15.
- At level 8 in the institutes of technology sector, there was a slight decrease in the most recent proportion of students who did not progress to the following year of study – from 16% in 2013/14 to 15% in 2014/15.
- At level 8 in the university sector, the non-progression rate for *All Fields of Study* was 9% in 2010/11 and 10% in 2014/15. The *Computer Science* field of study had a 16% non-progression rate in 2010/11 compared to a 11% non-progression rate in 2014/15.

CHAPTER 6

Non-Progression Logistic Regression Models

➤ Prior academic attainment (Leaving Certificate points) is the strongest predictor of non-progression. Those entering with lower points are much more likely to not progress compared to those entering with higher points, even after controlling for the set of student and course/institute characteristics.

➤ Gender and NFQ level are also strong predictors of non-progression. Males are more likely to not progress compared to females and NFQ level 6 & 7 students are more likely to not progress compared to NFQ level 8 students, even after controlling for the set of student and course/institute characteristics.

➤ Although headline rates of non-progression are generally much higher in institutes of technology than in universities, after controlling for the set of student and course/institute characteristics, particularly prior academic attainment of the student intake (Leaving Certificate points), the odds ratios are quite close across most institutes with the odds of not progressing actually higher in some universities than in some of the institutes of technology.

➤ The typical profile of students most likely to not progress includes the following characteristics: relatively low points on entry, male, NFQ level 6 or 7, studying in an Institute of Technology, studying *Computer Science, Construction or Engineering*.

➤ The typical profile of students least likely to not progress includes the following characteristics: relatively high points on entry, female, NFQ level 8, studying in a university or college, studying *Education or Healthcare*.

The following report (the sixth in a series) represents a full study of progression in HEA-funded Irish higher education institutions from 2014/15 – 2015/16. Future research directions will include a comprehensive study of completion in higher education at institute, sector, discipline and NFQ level.

CHAPTER 1

Introduction



1.1 Introduction

Year-on-year, a steady increase in students entering higher education is reported. Non-progression rates continue to be cause for concern for students with certain prior educational attainment, studying certain disciplines and at certain levels of award. Recently, in Ireland, there has been an important policy shift in highlighting the negative consequences of non-progression. The *National Strategy for Higher Education to 2030* emphasises the importance of a positive first-year student experience to achieving the goals of higher education, as ‘failure to address the challenges encountered by some students in their first year contributes to high drop-out and failure rates, with personal and system-wide implications’¹.

Internationally, there has also been a notable shift towards analysing how students fare after entry into higher education with international research² emphasising that having a better understanding of which students are more likely to withdraw is vital in order to maximise the use of resources in higher education and support the development of retention strategies. To date, the HEA have developed three national plans for enhancing equity of access to higher education³. Importantly, the concept of ‘access’ is understood to encompass not only entry to higher education, but also retention and successful completion. One of the actions in the National Plan for Equity of Access to Higher Education 2015-2019 is to address the issue of non-completion of higher education programmes particularly for those in under-represented target groups⁴. As a sub-group of the Department of Education and Skills Steering Committee for the National Access Plan, the HEA have established a Working Group to consider the factors that contribute to student success in higher education. This Working Group draws on a wide membership from across the higher education sector and is working with the National Forum for Teaching and Learning. In 2017, the HEA Working Group, in conjunction with the National Forum of Teaching and Learning, undertook a series of scoping sessions to help advise the development of proposals for new measures to support the success of students from target groups. The proposed measures will be considered by the Steering Committee for the National Access Plan and further work will be progressed in 2018.

*The National Forum for the Enhancement of Teaching and Learning in Higher Education*⁵ funded a series of focused research projects under the theme of “Teaching for Transitions” during the 2014 to 2016 period. This research provides invaluable insights into transitions to higher education and student completion and retention in Ireland. Furthermore, in 2013, Ireland launched its first *Irish Survey of Student Engagement* (ISSE) to take the views of students into account, particularly when looking at discipline data and rates of non-progression. The annual results of the ISSE survey will continue to guide future policy decisions on improving student experience and retention across all years of higher education. Retention is connected with other key issues in higher education, ranging from the promotion of equality to the pursuit of greater efficiency for producing high calibre graduates to meet the demands of a ‘knowledge economy’⁶.

1 DES, *National Strategy*, 56.

2 See Gérard Lassibille and Lucía Gomez, “Why do higher education students drop out? Evidence from Spain”, *Education Economics* 16, no. 1 (2008): 89-105; Glenda Crosling and Margaret Heagney, “Improving Student Retention in Higher Education: Improving Teaching and Learning”, *Australian Universities Review*, 51, no. 2 (2009): 9-18.

3 The first plan is *Achieving Equity of Access to Higher Education: Action Plan 2005-2007* (Dublin: HEA, 2004), the second is the *National Access Plan for Equity of Access to Higher Education 2008-2013* (Dublin: HEA, 2008) and the third is the *National Equity of Access to Higher Education 2015-2019* (Dublin: HEA, 2015).

4 HEA, *National Plan for Equity of Access to Higher Education 2015-2019* (Dublin: HEA, 2015).

5 See <http://www.teachingandlearning.ie/>.

6 Higher Education Authority (HEA), *A Study of Progression in Irish Higher Education* (Dublin: HEA, 2010). Available at: <http://hea.ie/assets/uploads/2017/06/A-Study-of-Progression-in-Higher-Education.pdf>.

1.2 Data Sources and Methodology

The student data used in this analysis was extracted from the HEA's in-house database, the *Student Record System* (SRS), which contains an individual record for each student, in 27 HEA-funded institutions. The SRS gathers data from the university and colleges sector since the 2004/2005 academic year, and from the institutes of technology since the 2007/08 academic year. The data on which this analysis is based was extracted from the SRS by tracking student IDs within institutions and across academic years. This report focuses on 27 higher education institutions, including seven universities, 14 institutes of technology and six colleges⁷.

The census dates used for this analysis – 1st March 2015 and 1st March 2016 – span the academic years 2014/15 and 2015/16. Students who repeated a year or who changed course or programme type within their original institution were identifiable and are grouped with those deemed to be still present. For the purposes of this report, only student data pertaining to full-time undergraduates (NFQ levels 6-8) was analysed: student records pertaining to undergraduates studying at NFQ levels 6 and 7 in the universities and other colleges were not included.

The socio-economic data in the SRS was collected by surveying the student body during the registration process in the 2014/15 academic year.

1.3 Categorisation of Students

New Entrants

A first-year full-time undergraduate new entrant is defined as a student entering an undergraduate higher education programme for the first time.

Re-Enrolling Students

Students classified as re-enrolling are those students progressing to the next year of study on the same course without any interruptions. This category does not include repeat or transfer students.

Repeat Students

A repeat student is classified as being present in the institution on their original course the following year, but enrolled in the same year of study as the previous year.

Internal Transfer Students

Students transferring from their original mode or course of study to another programme within an institution, at the start of the new academic year, are described as internal transfer students.

External Transfer Students

Students transferring from a course of study in their institution to another institution are described as external transfer students. These students are not tracked in this study and are deemed as having 'not progressed'.

Non-Progression

In instances in which a new entrant student ID does not appear in their institution's data return for the following academic year, the student is described as 'non-progressed'. While re-enrolling, repeat and internal transfer students are identified separately in the analysis, it is not possible to distinguish external transfer students from those described as 'non-progressed'.

In summary, this study examines the non-progression of full-time 1st year undergraduate new entrants in the academic year 2014/15 to the academic year 2015/16 in their institution. The data for this cohort is examined by sector, NFQ level, field of study, gender, age, socio-economic background and nationality.

⁷ See Appendix A (Table A1) for a list of HEIs.

1.4 Limitations

The reader should be aware of the limitations that the dataset poses for analysis. The HEA non-progression study provides a purely statistical analysis. It does not provide information on the motivation for enrolling in higher education, the financial well-being of students, study patterns, student views on teaching methodologies and staff, attendance and participation in extra-curriculum activities as well as the work practices of non-progressing students.

Furthermore, since the census dates used are 1st March 2015 and 1st March 2016, this analysis does not take into account those students who left their institution prior to 1st March 2015. However, previous analysis of the data set undertaken by the HEA showed that just 4% of new entrants de-register from their original course of study prior to 1st March of the academic year in which their course commenced. Reasons for this may include disliking a course or in order to prevent a student paying full fees. In addition, the study does not take into account differing progression practices across institutions. For example, some institutions may allow students to progress into second year carrying failed modules while others will not allow this practice.

CHAPTER 2

Non-Progression of 2014/15 Full- Time Undergraduate New Entrants



2.1 Introduction

This section examines the non-progression rates among full-time 2014/15 new entrants to HEA-funded institutions by sector, NFQ level and prior educational attainment. Details of the breakdown of students who have not progressed in the academic year 2014/15, are also provided. New entrants are classified as 'non-progressed' if they do not appear in the statistical returns of that institution in the following academic year (2015/16). Overall, there were 41,441 new entrants across all sectors in 2014/15. While the majority of students (86%) progressed into the following academic year, 6,007 (14%) students did not.

2.2 Non-Progression of New Entrants by Sector and NFQ Level

Table 2.1 illustrates the non-progression rates of first year new entrants by sector and NFQ level. The column entitled 'Level (% New Entrants in IOTs 2014/15)' shows the percentage of new entrants, at each NFQ level, that make up the overall new entrants in that sector. For example, 13% of new entrants within the institute of technology sector are studying at level 6. The '% Non-Progressed' columns show the percentage of new entrants who did not progress to the following year of study by NFQ level within each sector for both 2014/15 and 2013/14. The table shows that the rates of non-progression varied within and between sectors. The overall non-progression rate in 2014/15 is 14%, compared to 15% in 2013/14.

Table 2.1 *Non-Progression Rates by Sector and NFQ Level, 2014/15 vs 2013/14*

SECTOR	LEVEL (% OF NEW ENTRANTS IN IOTS IN 2014/15)	% NON-PROGRESSED (2014/15)	% NON-PROGRESSED (2013/14)
Institutes of Technology	Level 6 (13%)	27%	26%
	Level 7 (38%)	25%	27%
	Level 8* (49%)	15%	16%
	All Levels	21%	21%
Universities	Level 8	10%	11%
Colleges	Level 8	8%	6%
All Institutions	Level 8	11%	12%
	All Levels	14%	15%

* There were 32,010 new entrants at level 8 across all sectors in 2014/15. 64% of these students are in the university sector (n=20,626), 29% in the institute of technology sector (n=9,134) and 7% in the college sector (n=2,250).

Table 2.2 provides further detail of new entrants in 2014/15 and 2013/14. The column 'Most Common Points Attained' shows the most common prior educational attainment in the Leaving Certificate examination by students entering higher education by sector and NFQ level.

Table 2.2 *Most Common Points Attained by Sector and NFQ Level 2014/15 vs 2013/14*

SECTOR	LEVEL	MOST COMMON POINTS ATTAINED (2014/15)	MOST COMMON POINTS ATTAINED (2013/14)
Institutes of Technology	Level 6	305-350	255-300
	Level 7	255-300	255-300
	Level 8	355-400	355-400
	All New Entrants	305-350	305-350
Universities	Level 8	455-500	455-500
Colleges	Level 8	455-500	455-500
All Institutions	Level 8	405-450	405-450
All Institutions	All New Entrants	355-400	355-400

The most common points attained differs across sectors and levels. There is a gap of 150 points between entrants at level 6 into institutes of technology and level 8 entrants to both universities and colleges. Within the institute of technology sector alone in 2014/15, there is a difference of 50 most common points attained between entrants at level 6 (305-355) and entrants at level 8 (355-400 points) while there is a difference of 100 most common points attained between entrants at level 7 (255-300 points) and level 8. These findings, perhaps unsurprisingly, suggest that those on a lower points range enter the sector on a lower NFQ level. Differences in most common points attained also vary across sectors at the same NFQ level. The most common points attained by level 8 entrants in universities and colleges in 2014/15 was 455-500 in comparison to 355-400 attained by level 8 new entrants in the institute of technology sector. As shown in table 2.2, there has been only one change from 2013/14 in the most common points attained. An increase is seen in most common points attained by level 6 new entrants in the institute of technology sector to 305-350 from 255-300 in 2013/14.

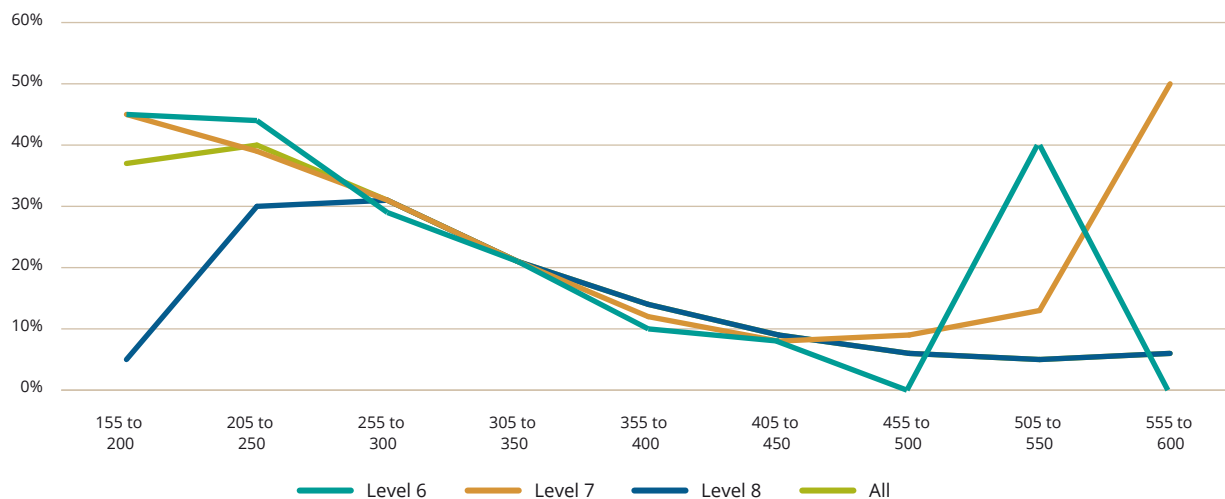
Non-progression rates by prior educational attainment are outlined in Table 2.3. The findings show that those with higher prior educational attainment at almost all levels and sectors, are more likely to progress to the following year of study than those with lower educational attainment. For example, while 37% of all new entrants in the lowest points range did not progress into year two of their studies, this decreased to 6% among those attaining between 555 and 600 points. Figure 2.1 further depicts non-progression rates by prior educational attainment and NFQ level.

Table 2.3 Non-Progression Rates by Prior Educational Attainment

POINTS RANGE	ALL NEW ENTRANTS % NON-PROGRESSED	INSTITUTES OF TECHNOLOGY				UNIVERSITIES L8 % NON-PROGRESSED	COLLEGES L8 % NON-PROGRESSED	ALL L8 % NON-PROGRESSED
		IOT L6 % NON-PROGRESSED	IOT L7 % NON-PROGRESSED	IOT L8 % NON-PROGRESSED	ALL IOT % NON-PROGRESSED			
155 to 200	37%	45%	45%	3%	38%	5%^	50%^	5%
205 to 250	40%	44%	39%	34%	40%	0%^	21%^	30%
255 to 300	31%	29%	31%	32%	31%	21%	31%	31%
305 to 350	21%	21%	21%	21%	21%	22%	15%	21%
355 to 400	14%	10%	12%	14%	13%	16%	8%	14%
405 to 450	9%	8%	8%	10%	10%	9%	4%	9%
455 to 500	6%	0%^	9%	8%	8%	7%	4%	6%
505 to 550	5%	40%^	13%^	6%	7%	6%	4%	5%
555 to 600	6%	0%^	50%^	8%	11%	6%	3%	6%
Other	15%	27%	24%	15%	20%	11%	13%	12%
Total	14%	27%	25%	15%	21%	10%	8%	11%

^Points range with 25 or fewer students enrolled in year 1.

Figure 2.1 Non-Progression Rates by Prior Educational Attainment and NFQ Level*



*Data of 25 or fewer students enrolled in year 1 is not included in this figure.

2.3 Categorisation of Students in the Academic Year 2014/15

In the academic year 2015/16, students who progressed were categorised as re-enrolling, repeat or internal transfer. The breakdown of students in year two can be seen in Table 2.4. After those who re-enrolled, repeat students form the largest number of students who progressed.

Table 2.4 *Breakdown of Students on March 1st 2015/16*

STUDENT BREAKDOWN BY CODE IN 2015/16	NUMBER OF STUDENTS
Re-enrolled (RE)	33,590
Repeat (RP)	1,195
Transfer Internally (TI)	649
Non-Progressed	6,007
Total	41,441

There were 41,441 new entrants across all sectors in 2014/15. As of March 1st 2015/16, in total, 35,434 students were categorised as progressing given that these students re-enrolled, repeated or transferred internally. The remaining students did not progress.

Table 2.5 examines new entrants who are classified as repeat students in the following academic year (2015/16). 2.9% of all 2014/15 new entrants are repeat students in 2015/16. In total, 4.0% of students in the institute of technology sector are repeat students compared to 2.1% in the universities and 0.8% in the college sector.

Table 2.5 *Percentage of New Entrants by Sector in 2014/15 Classified as Repeat in 2015/16*

SECTOR	NO. OF NEW ENTRANTS	NO. OF 'REPEAT' STUDENTS	% OF NE BY SECTOR WHO ARE 'REPEAT' STUDENTS IN 2015/16
Institutes of Technology	18,565	747	4.0%
Universities	20,626	429	2.1%
Colleges	2,250	19	0.8%
All Sectors	41,441	1,195	2.9%

Table 2.6 provides a breakdown of repeat students by NFQ level and sector. The largest proportion of repeat students in 2015/16 were at level 7 in the institute of technology sector at 5.8%, followed by level 8 students in the institutes of technology sector at 3.3%.

Table 2.6 *Breakdown of Repeat Students by NFQ Level and Sector*

NFQ LEVEL	SECTOR	NUMBER OF NE (2014/15)	NO. OF 'REPEAT' STUDENTS IN 2015/16	% OF NE WHO ARE 'REPEAT STUDENTS'
Level 6	Institutes of Technology	2,460	80	3.3%
Level 7	Institutes of Technology	6,971	404	5.8%
Level 8	Institutes of Technology	9,134	263	2.9%
	Universities	20,626	429	2.1%
	Colleges	2,250	19	0.8%
Total	All Sectors	41,441	1,195	2.9%

2.4 Key Points

- ▶ The proportion of new entrants in 2014/15 who did not progress is 14% across all sectors and NFQ levels. This compares to 15% in 2013/14.
- ▶ The rates of non-progression in 2014/15 varied within and between sectors ranging from 27% and 25% at levels 6 and 7 compared to 15%, 10% and 8% at level 8 in institutes of technology, universities and colleges respectively.
- ▶ Between 2013/14 – 2014/15 and 2014/15 – 2015/16, non-progression rates increased by one percentage point for level 6 courses and dropped by two percentage point at level 7. While a percentage drop is evident at level 8 in the institute of technology and university sectors, there is a two percentage point increase in non-progression rates at level 8 in the college sector.
- ▶ In general, courses at NFQ level 6 (305-350) and level 7 (255-300) admit students on a lower points range than NFQ level 8 programmes (405-450). The most common points attained at NFQ level 8 was 455-500 in both universities and colleges compared to 355-400 in the institute of technology sector.
- ▶ While these findings suggest a link between prior educational attainment on entry and successful progression after the first year of study, more detailed analysis (see Chapter 6) confirmed this relationship. Those with higher prior educational attainment are more likely to progress to the second year of study than those with lower educational attainment, when individual and institution-related variables are controlled for in a model.
- ▶ 2.9% of all new entrants in 2014/15 were classified as repeat in 2015/16. As in recent years, the institute of technology sector, at level 7, has the greatest proportion of repeat students.

CHAPTER 3

Non-Progression Rates by Field of Study



3.1 Introduction

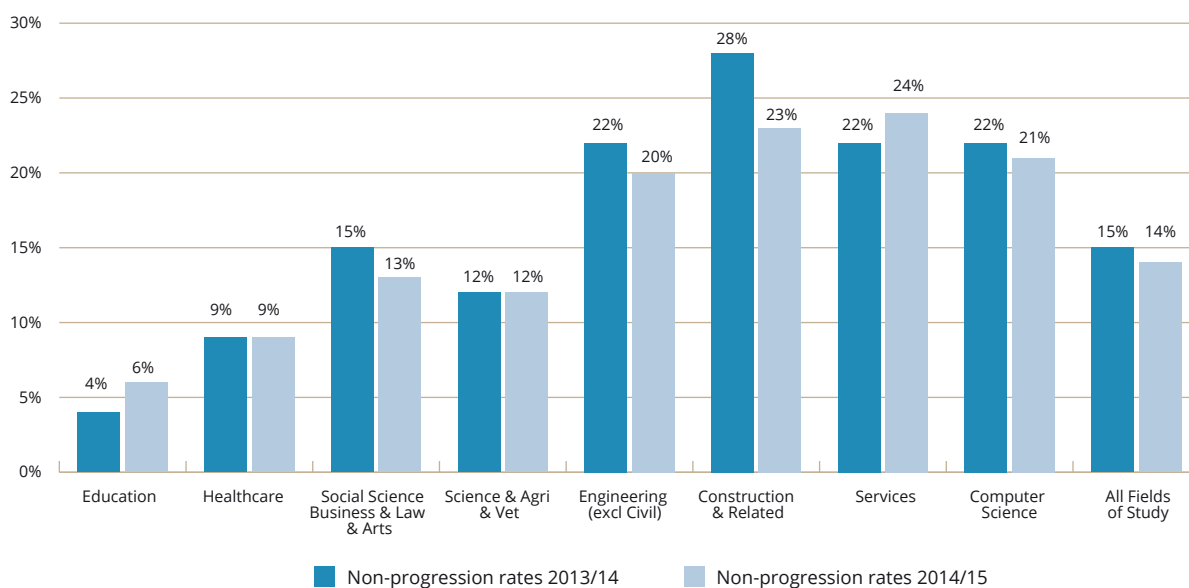
This chapter examines the non-progression rates of new entrants in Irish higher education by field of study. The classification system used is based primarily on the International Standard Classification of Education (ISCED) (See Appendix B for ISCED details).

3.2 Non-Progression among 2014/15 Undergraduate New Entrants by Field of Study across all Sectors and NFQ Levels

There is significant variation in non-progression rates across fields of study, as can be seen in Figure 3.1. Non-progression rates in 2014/15 range from 6% in *Education* to 24% in *Services*. In line with the two previous years' analysis, 2014/15 students on *Services*, *Construction and Related*, *Computer Science* and *Engineering* programmes display non-progression rates above the national average of 14%.

Non-progression rates in the fields of *Education* and *Services* increased from 2013/14 while *Social Science, Business, Law & Arts*, *Engineering, Construction & Related*, *Services* and *Computer Science* have all experienced percentage decreases. Non-progression rates in 2014/15 remained the same to that in 2013/14 in *Healthcare* and *Science, Agriculture & Veterinary* fields of study.

Figure 3.1 Non-Progression Rates by Field of Study 2013/14 vs 2014/15



3.3 Non-Progression among 2014/15 Undergraduate New Entrants by Field of Study, NFQ Level and Institute Type

Differences in non-progression rates also vary across institute type. Looking firstly at the institutes of technology, Table 3.1 provides further detail of the non-progression rates of new entrants in 2014/15 by field of study and NFQ level for this sector.

Table 3.1 *Non-Progression Rates by Field of Study and NFQ Level in Institutes of Technology*

SECTOR	LEVEL	EDUCATION	HEALTH-CARE	SOCIAL SCIENCE BUSINESS & LAW & ARTS	SCIENCE & AGRI & VET	ENGINEERING (EXCL CIVIL)	CONSTRUCTION & RELATED	SERVICES	COMPUTER SCIENCE	ALL
Institutes of Technology	Level 6	n/a	12%	24%	20%	34%	48%	32%	24%	27%
	Level 7	25%	16%	25%	20%	30%	32%	24%	32%	25%
	Level 8	8%	9%	15%	18%	19%	18%	17%	22%	15%
All IoTs		9%	11%	18%	19%	28%	26%	24%	17%	21%

As observed above, there are three disciplines above the level 6 national average of 27%, with the *Construction and Related* discipline having the highest rate of non-progression at 48% (identical to the previous year's non-progression rate). Together with *Computer Science*, the same discipline had the highest rate of non-progression at level 7 (32%) which was above the sectoral average of 25%. At level 8 in the institutes of technology, there were five fields of study that were above the average non-progression rate of 15% (*Computer Science, Engineering, Science, Agriculture and Veterinary, Construction and Related* and *Services*) with *Computer Science* having the highest rate, at 22%. Across all institutes of technology, the rate of non-progression is 21%, 7 percentage points above the overall national average of 14%.

Table 3.2 outlines non-progression rates by field of study and NFQ level in universities and colleges. In the university sector at level 8, higher than average (10%) non-progression rates are evident in two fields of study: *Computer Science* and *Social Science, Business, Law & Arts*. Furthermore, in the college sector, two fields of study have higher than average (8%) non-progression rates: *Healthcare* and *Social Science, Business, Law & Arts*. It is important to consider the number of students enrolled in each discipline and the number of students who did not progress when interpreting findings (details are provided in Appendix C).

Table 3.2 *Non-Progression Rates by Field of Study and NFQ Level in Universities and Colleges*

SECTOR	LEVEL	EDUCATION	HEALTH-CARE	SOCIAL SCIENCE BUSINESS & LAW & ARTS	SCIENCE & AGRI & VET	ENGINEERING (EXCL CIVIL)	CONSTRUCTION & RELATED	SERVICES	COMPUTER SCIENCE	ALL
Universities	Level 8	8%	7%	11%	8%	9%	10%	6%	11%	10%
Colleges	Level 8	6%	13%	10%	n/a	n/a	n/a	n/a	n/a	8%

Non-progression rates at level 8 across all three sector types by field of study and NFQ level are reported on in Table 3.3. In line with the previous year, three fields of study (*Science, Agriculture and Veterinary, Healthcare* and *Education*) have below average non-progression rates, at 10%, 8% and 6%.

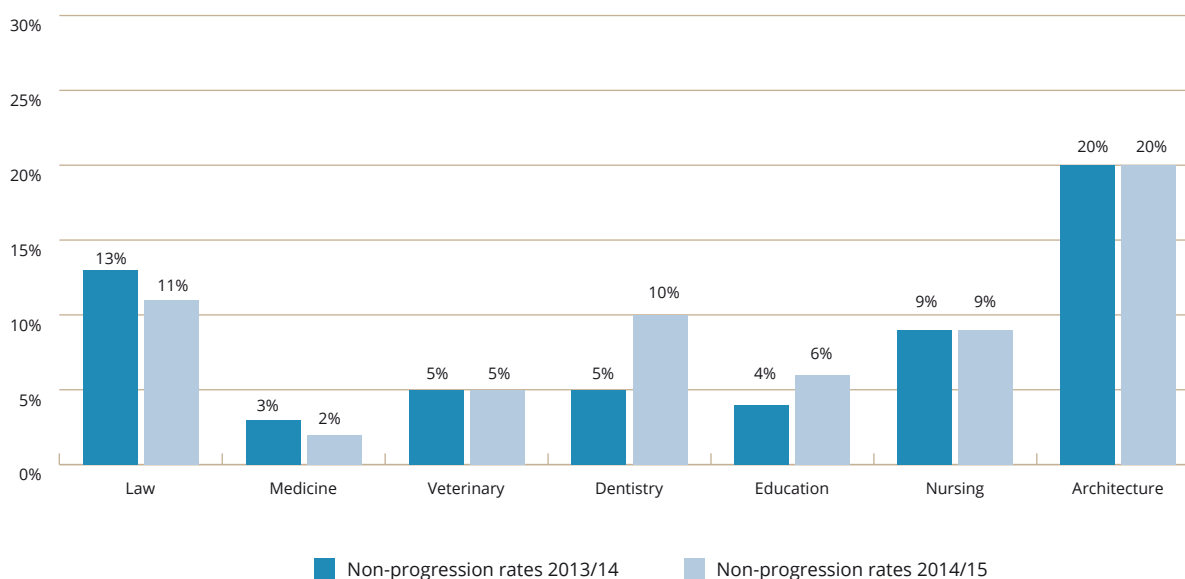
Table 3.3 Non-Progression Rates by Field of Study for Level 8 in all Sectors

SECTOR	LEVEL	EDUCATION	HEALTH-CARE	SOCIAL SCIENCE & BUSINESS & LAW & ARTS	SCIENCE & AGRI & VET	ENGINEERING (EXCL CIVIL)	CONSTRUCTION & RELATED	SERVICES	COMPUTER SCIENCE	ALL
All Sectors	All Level 8	6%	8%	12%	10%	11%	15%	17%	16%	11%

3.4 Profession-Oriented Courses

This section examines selected courses that lead to qualifications in a particular career, such as *Medicine* or *Law*. In general, Figure 3.2 illustrates that students enrolled in this type of profession-oriented course are likely to progress to their second year of study. Interestingly, it is only those studying *Architecture* that experience higher levels of non-progression than the national average (14%). The non-progression rate in 2014/15 for students enrolled in *Architecture* courses is 20%, an identical figure to that of 2013/14. *Veterinary* and *Nursing* students' non-progression rates have also remained the same over the time period. The non-progression rates for *Law* and *Medicine* students have decreased slightly from the previous year. Interestingly, non-progression rates in *Dentistry* have increased by five percentage points from 5% in 2013/14 to 10% in 2014/15. Non-progression rates for *Education* have also increased to 6% in 2014/15 from 4% in 2013/14.

Figure 3.2 Non-Progression Rates in Profession-Oriented Courses, 2013/14 vs 2014/15



3.5 Key Points

- ▶ Rates of non-progression vary across fields of study. *Construction and Related* disciplines have the highest non-progression rate at 23%. However, this is down five percentage points from the year previous. *Education* disciplines have the lowest rate at 6%, up two percentage points from the previous year.
- ▶ Except for a very small number at level 7, most students entering the *Education* field of study did so at level 8, while 38% of new entrants to the field of *Construction and Related*, entered at level 6 or level 7 (compared to 43% of new entrants at level 6 or 7 in the previous year).
- ▶ At level 6 in the institutes of technology, *Construction and Related* disciplines had the highest rate of non-progression. Together with *Computer Science*, the same discipline had the highest rate of non-progression at level 7. *Computer Science* disciplines also had the highest rate of non-progression at level 8 in the institutes of technology sector.
- ▶ Non-progression rates for *Education* disciplines at level 8 in both universities (8%) and colleges (6%) increased from the previous year. At level 8 for all sectors, students in the disciplines of *Services* disciplines have the highest non-progression rate (17%), followed by *Computer Science* (16%) and *Construction and Related* (15%).
- ▶ Like previous years, *Medicine* has the lowest non-progression rate of all 2014/15 new entrants in profession-oriented courses, at 2%, while *Architecture* has the highest rate at 20%.

CHAPTER 4

Non-Progression Rates by Student Characteristics



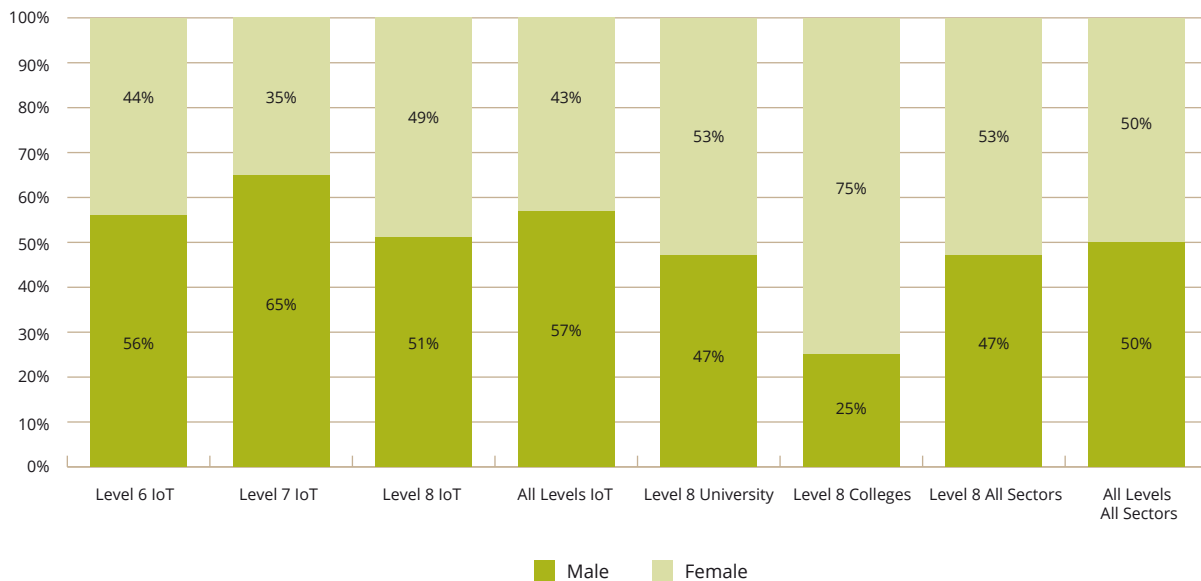
4.1 Introduction

This chapter examines non-progression across a range of student characteristics such as gender, age, nationality and socio-economic background.

4.2 Non-Progression and Gender

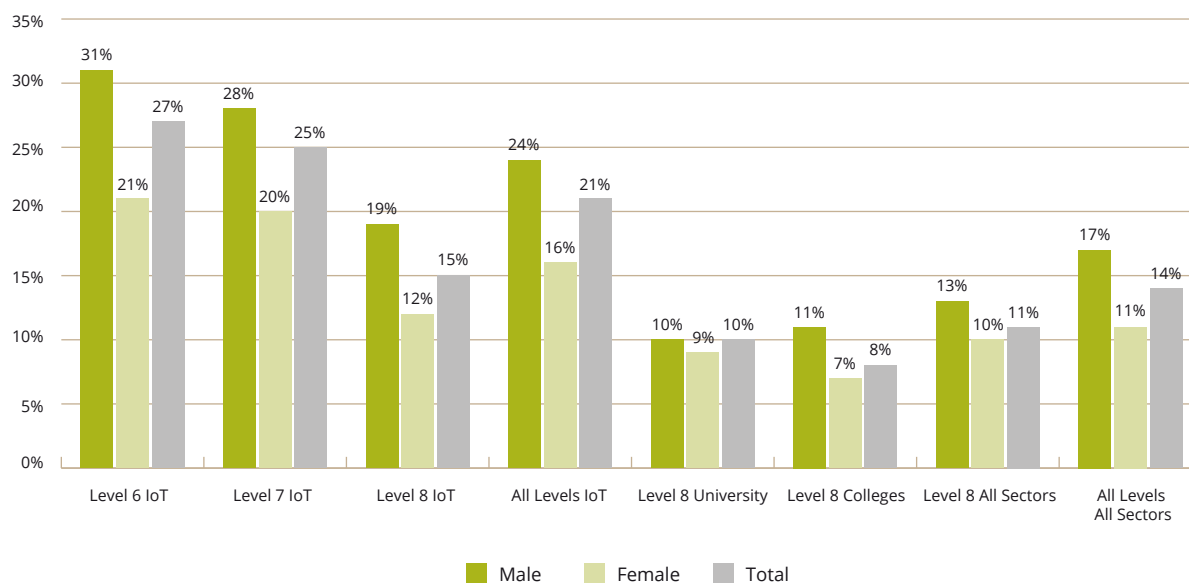
The gender balance of new entrants varies according to level and sector, as outlined in Figure 4.1. The most notable gender difference is at level 8 in the colleges, with females representing 75% of all students. Another interesting gender difference emerges in the institutes of technology, at level 7, whereby males account for 65% of the student intake. There is a 50% gender split of all new entrants in 2014/15.

Figure 4.1 Gender Balance of New Entrants by Sector and NFQ Level



Non-progression rates of new entrants by gender, sector and NFQ level are detailed in Figure 4.2. Across all NFQ levels and sectors, 17% of males and 11% of females are not progressing. This compares to 19% of males and 12% of females in the year previous. At level 8 for all sectors, this changes to approximately one in eight males and one in ten females. The largest discrepancy between males and females appears to be at level 6 in the institutes of technology, whereby 31% of males are not progressing in comparison to 21% of females.

Figure 4.2 *Non-Progression by Gender, Sector and NFQ Level*



Figures 4.3 – 4.5⁸ highlight non-progression by gender at level 8 in each sector. It is evident that gender differences vary considerably across sector, level and prior educational attainment (see Appendix D for further details). The reader must also be aware of low new entrant numbers across both low and high points categories, to avoid reaching misleading conclusions about non-progression rates.

At level 8, in the institute of technology sector, the largest gender discrepancy appears to be amongst those who attained 205-250 Leaving Certificate points (see Figure 4.3). At level 8, in the university sector, the greatest difference in male and female non-progression rates is among those students who attained between 305 and 350 Leaving Certificate points (see Figure 4.4). These are similar findings to the previous year. For the college sector where females make up the majority of new entrants (at 75%), Figure 4.5 shows the largest gender disparity is among those attaining between 355 to 400 points in their exams.

Further analysis (detailed in Chapter 6) supports the finding that gender significantly influences the likelihood of non-progression, with males being 1.2 times more likely than females not to progress when controlling for individual (e.g. age, Leaving Certificate points) and institution-related (e.g. institute, NFQ level) variables.

⁸ Please note that due to low numbers, results are not presented for those students who attained less than 255 points at level 8 in the university sector and the college sector.

Figure 4.3 *Non-Progression by Gender at Level 8 in Institutes of Technology*

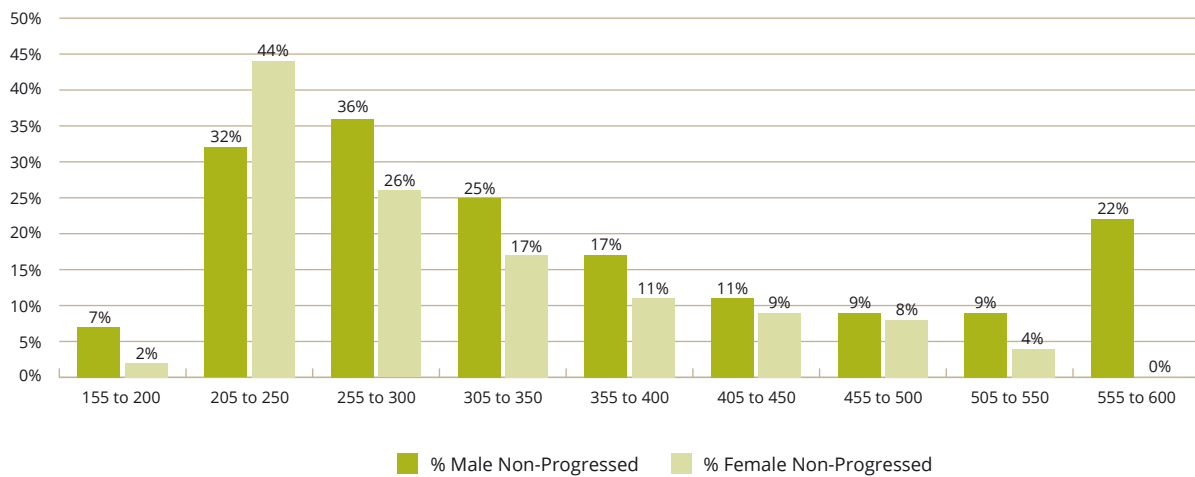


Figure 4.4 *Non-Progression by Gender at Level 8 in Universities*

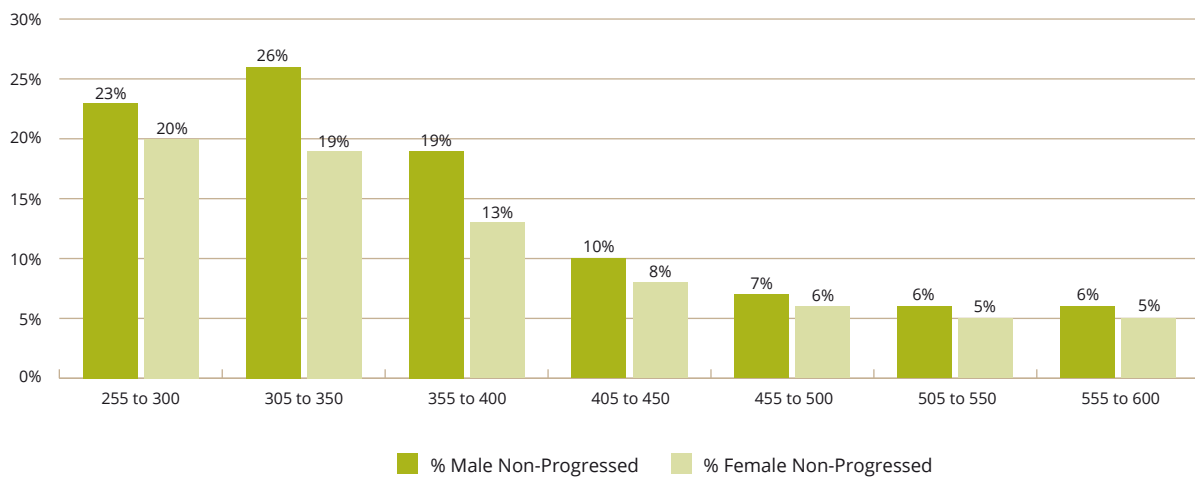
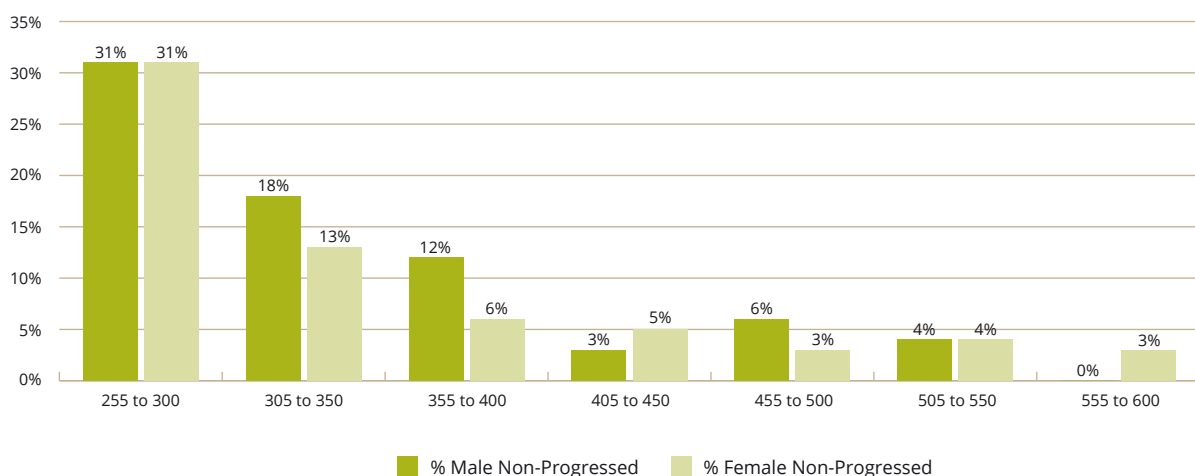


Figure 4.5 *Non-Progression by Gender at Level 8 in Colleges*



4.3 Non-Progression and Age

In 2014/15, 15.9% of all new entrants (n= 41,439⁹) are mature¹⁰ students (n= 6,576). The proportion of new entrants who are mature varied across sectors, as shown in Table 4.1.

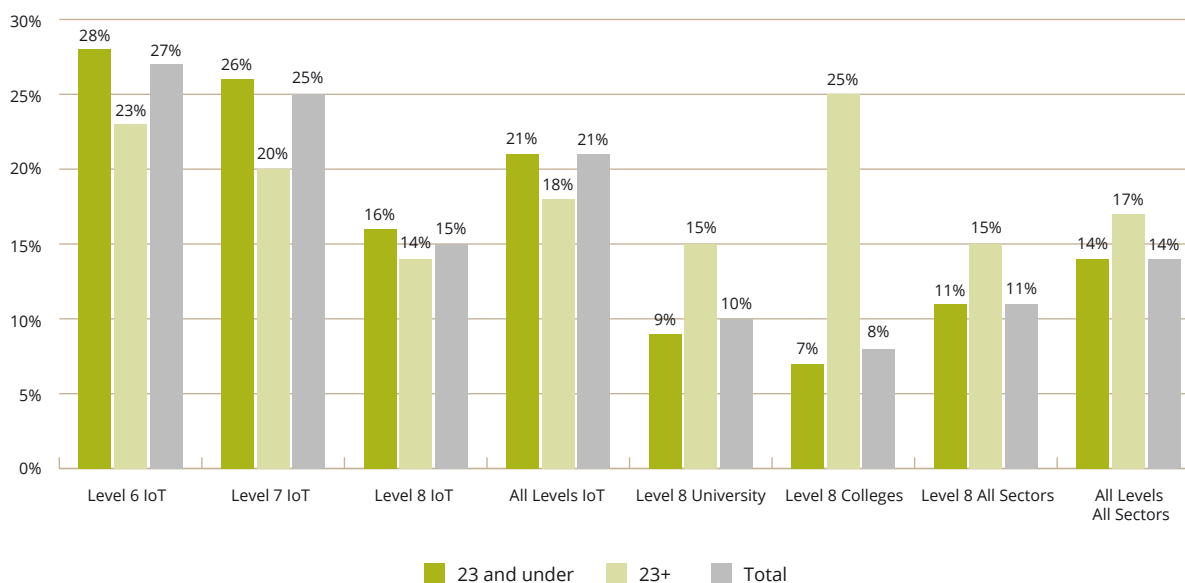
Table 4.1 Breakdown of Mature New Entrants by Sector 2014/15

SECTOR	MATURE STUDENTS AS A % OF ALL NE
Institutes of Technology	7.1%
Universities	3.7%
Colleges	5.0%
Total	15.9%

It should be noted that the above mature proportions of new entrants are based only on NFQ levels 6-8 for new entrants and will therefore differ from national proportions previously reported by the HEA.

Figure 4.6 outlines non-progression rates of students under 23 versus mature students. Across all sectors and levels, mature students have a 17% non-progression rate while there is a 14% non-progression rate among traditional students under the age of 23.

Figure 4.6 Non-Progression by Age Category



There is evidence of variation in non-progression rates by age across all sectors and levels. The greatest disparity is in the colleges sector where students over the age of 23 appear to be less likely to progress than traditional students under the age of 23. The same is true in the university sector where the non-progression rate for students over the age of 23 is 15% compared to 9% for those under the age of 23. The opposite appears to be the case in the institute of technology sector across each NFQ level where non-progression rates are higher for students under the age of 23 than students over the age of 23.

⁹ Age data was not returned for two students so therefore this figure does not match the 41,441 new entrant figure.

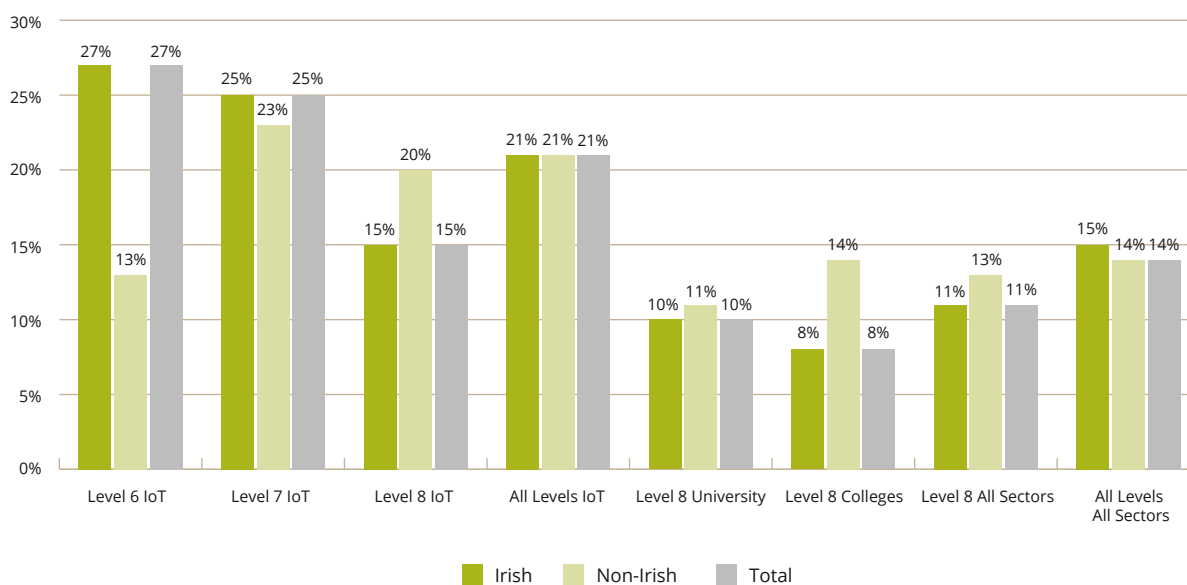
¹⁰ Mature students are defined as students aged 23 or over on 1st January 2014.

4.4 Non-Progression and Nationality

Figure 4.7 outlines non-progression rates by nationality. Across all sectors and all levels, Irish students have a 15% non-progression rate in comparison to 14% for non-Irish students.

At level 6 and level 7 in the institute of technology sector, Irish students appear less likely to progress to the following year than non-Irish students. However, it must be noted that non-Irish numbers at this level and sector are very low and can therefore be misleading. A notable disparity appears at level 8 in the colleges sector, with a non-progression of 14% among non-Irish students in 2014/15, compared to 8% among Irish students. Again, it is important to bear in mind that the number of non-Irish students is low. At level 8 in the university sector, Irish students had a 10% non-progression rate compared to 11% among non-Irish students.

Figure 4.7 Non-Progression Rates by Nationality



4.5 Non-Progression and Socio-Economic Group

This section examines the non-progression rates of students according to their socio-economic group. It should be noted that 68% of new entrants responded to the socio-economic group questions in the Equal Access Survey¹¹, 2014/15.

As shown in Figure 4.8, the lowest level of non-progression is found among *Farmers* at 8%, followed by *Higher Professionals* at 9%. This is perhaps not surprising given that these are the two groups with the highest level of access to higher education in Ireland¹². The highest level of non-progression is among the *Unskilled* and *All others gainfully employed and Unknown* groups, at 16%. Appendix E (Table E1) provides a breakdown of new entrant numbers and the number of students who did not progress from the academic year 2014/15 to 2015/16 for each socio-economic group.

11 RCSI are not included in the Equal Access Survey.

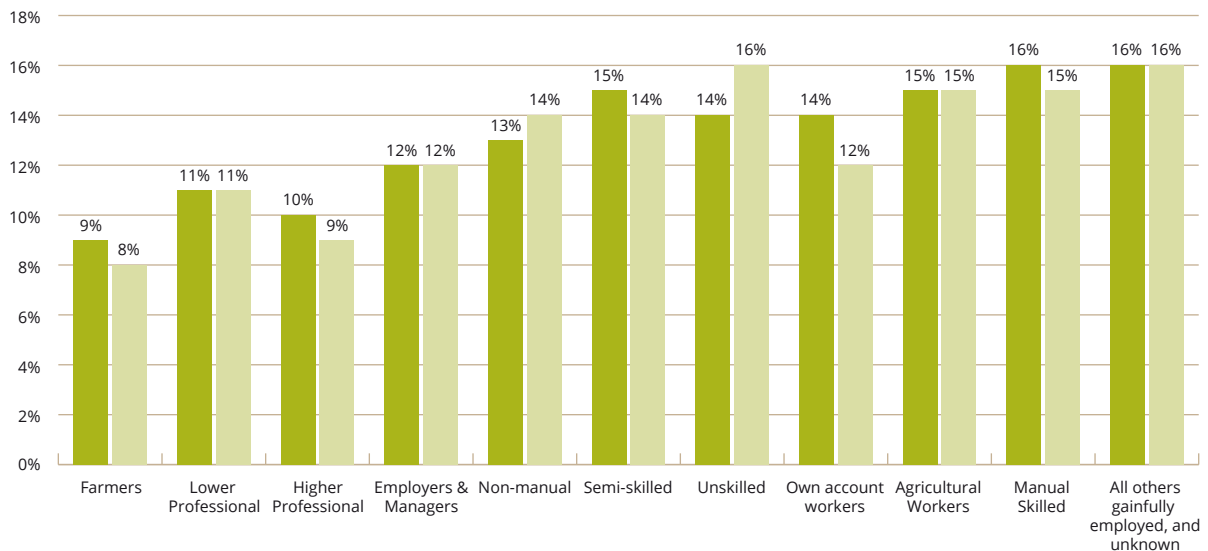
12 See Philip O'Connell, David Clancy and Selina McCoy, *Who Went to College in 2004? A National Survey of New Entrants to Higher Education* (Dublin: Higher Education Authority, 2006).

Figure 4.8 *Non-Progression Rates by Socio-Economic Group*



When comparing 2014/15-2015/16 progression rates to progression rates from 2013/14-2014/15, some differences are observed. As shown in Figure 4.9, four of the eleven groups (*Farmers, Higher Professionals, Semi-Skilled and Manual Skilled*) show a one percentage point decrease in non-progression rates in 2013/14 while *Own Account Workers'* non-progression rates dropped by two percentage points in the same time frame. Four groups (*Lower Professional, Employers and Managers, Agricultural Workers and All Others Gainfully Employed and Unknown*) have remained at the same non-progression rate, while there has been between a one and two percentage increase in non-progression rates for the remaining groups respectively (*Non-Manual and Unskilled*).

Figure 4.9 *A Comparison of Non-Progression Rates by Socio-Economic Groups 2013/14 vs 2014/15*



4.6 Key Points

- ▶ Females are more likely than males to progress to the following year, across all NFQ levels and sectors. This relationship holds true across the majority of prior educational attainment categories in all sectors. Additional multivariate regression analysis (see Chapter 6) supports the finding that males are less likely than females to progress, while controlling for other individual and institution-related variables.
- ▶ In the institute of technology sector at level 6, level 7 and level 8, mature students are more likely to progress to the following year of study than a new entrant who is under the age of 23. The opposite is true at level 8 in the university and colleges sector, where traditional students are more likely to progress than mature students.
- ▶ Across all levels and sectors, Irish students had a non-progression rate of 15% compared to 14% among non-Irish students.
- ▶ In relation to socio-economic groups, the lowest level of non-progression is found among *Farmers* at 8%. The highest level of non-progression is among the *Unskilled and All others gainfully employed and unknown* groups, at 16%.

CHAPTER 5

Trend in Non-Progression Rates



5.1 Introduction

This chapter provides an overview of non-progression rates by sector, NFQ level and fields of study from 2010/11 to 2014/15¹³.

5.2 Trend in Non-Progression Rates by Sector and NFQ Level from 2010/11 to 2014/15

Table 5.1 shows trends in non-progression rates by sector and NFQ level. The overall new entrant non-progression rate remained constant at 16% from 2010/11 to 2012/13, with a one percentage point reduction (to 15%) in 2013/14 and a further one point percentage decrease to 14% in 2014/15. Non-progression rates from 2010/11 to 2014/15 declined across all levels in the institutes of technology sector. Of note, the rate of non-progression at level 8 in colleges sector has seen a rise in non-progression from 4% in 2010/11 and 2011/12 to 6% in 2012/13 and 2013/14 to 8% in 2014. Non-progression rates at level 8 in universities increased by one percentage point each year from 2010/11 (9%) to 2012/13 (11%) where they remained at 11% in 2013/14. There is a one percentage point decrease to 10% in 2014/15.

Table 5.1 Trends in Non-Progression Rates by Sector and NFQ Level from 2010/11 to 2014/15

SECTOR	LEVEL	2010/11-2011/12	2011/12-2012/13	2012/13-2013/14	2013/14-2014/15	2014/15-2015/16
Institutes of Technology	Level 6	30%	30%	26%	26%	27%
	Level 7	28%	29%	28%	27%	25%
	Level 8	17%	17%	17%	16%	15%
	All New Entrants	24%	24%	23%	21%	21%
Universities	Level 8	9%	10%	11%	11%	10%
Colleges	Level 8	4%	4%	6%	6%	8%
All institutions	Level 8	11%	11%	12%	12%	11%
All institutions	All New Entrants	16%	16%	16%	15%	14%

5.3 Trend in Non-Progression Rates by Field of Study, Sector and NFQ Level from 2010/11 to 2014/15

The trend in non-progression rates by field of study for level 8 across all sectors is outlined in Table 5.2. Across *All Fields of Study*, the rates of non-progression at level 8, across all sectors, have remained relatively consistent at 11% in 2010/11 and 2011/12 and 12% the two subsequent years. This figure has declined by one percentage point back to 11% in 2014/15.

There has been some fluctuation over time in fields of study such as *Education, Construction and Related* and *Computer Science*. While non-progression for *Education* students was 3% in 2010/11 and 2011/12, the rate increased to 5% in 2012/13 before reducing to 4% in 2014/15 and increasing again in 2014/15 to 6%. Non-progression rates peaked in the field of *Computer Science* in 2012/13 (20%) but dropped by two percentage points to 16% in both 2013/14 and 2014/15. A five point percentage decline is noteworthy between 2013/14 (20%) and 2014/15 (15%) in the *Construction and Related* field of study.

¹³ It is important to note that this analysis does not account for fluctuations in student numbers over time.

Non-progression rates in the field of *Science, Agriculture and Veterinary* remain the same in 2010/11 and 2014/15, at 10%. Four fields of study show a decline in the rates of non-progression over the five-year period (*Engineering, Construction and Related, Services and Computer Science*) while there has been an increase in the proportion of non-progression in the same period for students in *Education, Healthcare and Social Science, Business, Law and Arts & Humanities* fields of study.

It is important to bear in mind that the numbers of new entrants to certain fields of study, as well as the numbers who do not progress, have fluctuated over time and this analysis does not account for such changes.

Table 5.2 *Trend in Non-Progression Rates by Field of Study for Level 8 across All Sectors*

FIELD OF STUDY	2010/11- 2011/12	2011/12- 2012/13	2012/13- 2013/14	2013/14- 2014/15	2014/15- 2015/16
Education	3%	3%	5%	4%	6%
Healthcare	7%	8%	8%	8%	8%
Combined & Other Disciplines	12%	11%	-	-	-
Social Science, Business, Law and Arts & Humanities	11%	12%	13%	13%	12%
Science, Agriculture & Veterinary	10%	11%	11%	11%	10%
Engineering (excl Civil)	12%	12%	13%	13%	11%
Construction and Related	17%	19%	19%	20%	15%
Services	22%	19%	20%	16%	17%
Computer Science	19%	18%	20%	16%	16%
All Fields of Study	11%	11%	12%	12%	11%

Due to low numbers in the colleges sector, the subsequent analysis focuses specifically on the institutes of technology and universities, at level 8. The non-progression rates, in each field of study, at level 8 in the institute of technology sector are presented in Table 5.3.

Across all fields of study at level 8 in the institutes of technology sector, there is a one percentage point decrease in the most recent proportion of students who did not progress to the following year of study – from 16% in 2013/14 to 15% in 2014/15. There is evidence of fluctuation in non-progression rates over time, across various disciplines. For example, in the field of *Construction and Related*, the non-progression rate increased from 21% in 2010/11 to 24% in 2011/12 before decreasing once again to 21% in 2012/13 and back up to 24% in 2013/14. A notable drop is then evident in 2014/15 to 18%.

The rate of non-progression for *Education* students in 2014/15 is the same as that in 2010/11 (8%). It peaked at 11% in 2012/13 before dropping to 5% in 2013/14 and increasing again in 2014/15. Once again, it is important to note that this analysis does not account for fluctuations in student numbers over time.

Table 5.3 *Trend in Non-Progression Rates by Field of Study for Level 8 in Institutes of Technology from 2010/11 to 2014/15*

FIELD OF STUDY	2010/11-2011/12	2011/12-2012/13	2012/13-2013/14	2013/14-2014/15	2014/15-2015/16
Education	8%	4%	11%	5%	8%
Healthcare	11%	11%	10%	10%	9%
Combined & Other Disciplines	17%	-	-	-	-
Social Science, Business, Law and Arts & Humanities	18%	17%	17%	16%	15%
Science, Agriculture & Veterinary	16%	19%	18%	16%	18%
Engineering (excl Civil)	22%	21%	20%	21%	19%
Construction and Related	21%	24%	21%	24%	18%
Services	21%	19%	20%	17%	17%
Computer Science	23%	23%	26%	20%	22%
All Fields of Study	17%	17%	17%	16%	15%

Table 5.4 presents the non-progression rates in each field of study at level 8 in the university sector.

The non-progression rate for *All Fields of Study* was 9% in 2010/11 and 10% in 2014/15. It should be noted that the large variance observed in the *Service* discipline is most likely due to very low numbers, in this field of study.

The *Computer Science* discipline had a 16% non-progression rate in 2010/11 at level 8 in the university sector and a 11% non-progression rate in 2014/15. The *Education* and *Social Science, Business, Law and Arts & Humanities* fields of study both had a three percentage point increase from 2010/11 to 2014/15.

Table 5.4 *Trend in Non-Progression Rates by Field of Study for Level 8 in Universities from 2010/11 to 2014/15*

FIELD OF STUDY	2010/11-2011/12	2011/12-2012/13	2012/13-2013/14	2013/14-2014/15	2014/15-2015/16
Education	5%	5%	8%	5%	8%
Healthcare	5%	6%	6%	7%	7%
Combined & Other Disciplines	11%	11%	-	-	-
Social Science, Business, Law and Arts & Humanities	8%	11%	12%	12%	11%
Science, Agri & Vet	9%	9%	10%	10%	8%
Engineering (excl Civil)	9%	10%	11%	11%	9%
Construction and Related	9%	9%	16%	13%	10%
Services	23%	20%	23%	0%	6%
Computer Science	16%	12%	15%	12%	11%
All Fields of Study	9%	10%	11%	11%	10%

5.4 Key Points

- ▶ The overall new entrant non-progression rate has reduced by one percentage point between 2013/14 – 2014/15 and 2014/15 – 2015/16, from 15% to 14%.
- ▶ At level 8, for all sectors, the non-progression rate across *All Fields of Study* was 11% in 2010/11 and 2011/12. It was at 12% in 2012/13 and 2013/14 before dropping back to 11% in 2014/15.
- ▶ At level 8 in the institutes of technology sector, there was a slight decrease in the most recent proportion of students who did not progress to the following year of study – from 16% in 2013/14 to 15% in 2014/15.
- ▶ At level 8 in the university sector, the non-progression rate for *All Fields of Study* was 9% in 2010/11 and 10% in 2014/15. The *Computer Science* field of study had a 16% non-progression rate in 2010/11 compared to a 11% non-progression rate in 2014/15.

CHAPTER 6

Non-Progression Logistic Regression Models



6.1 Introduction

This section employs multivariate logistic regression models to determine the key student and institute level factors driving non-progression by isolating the effect of individual factors on non-progression, holding all other factors constant. This provides for a more thorough understanding of non-progression rates than a simple analysis of rates does not. Importantly, these models allow for a direct comparison of non-progression rates across sectors and institutes. For instance, a simple analysis of rates does not account for the heterogeneity of the student intake across institutes. Similar analyses were presented in the 2010 and 2017 reports on non-progression (HEA, 2010 and 2017). As was the case with those analyses, explanatory variables are limited to those available in the Student Record System administrative database and from the Equal Access Survey.

6.2 Interpretation and Explanatory Variables

The following analysis uses multivariate logistic regression to analyse the probability of not progressing from year 1 into year 2 across HEIs between academic year 2014/15 and academic year 2015/16, based on a specific set of explanatory variables. The outcome variable is binary – 1 for not progressed and 0 for progressed. Therefore, the estimates for each of the explanatory variables (since they are expressed as odds ratios) are the odds of not progressing versus a base reference category in each instance. For example, if an odds ratio of 1.5 is estimated for 'male' in any model, and the estimate is statistically significant¹⁴, that means males are 1.5 times more likely to not progress than females, since female is the reference category for the gender variable. Different combinations of the explanatory variables are used in the various models to control for student characteristics, previous educational attainment, course level/field and institute. The following explanatory variables have been used and/or tested in various models:

- ▶ Age Group (5 categories with 25-29 years the base category in all instances)
- ▶ Gender (2 categories with female the base category in all instances)
- ▶ Nationality (2 categories with non-Irish the base category in all instances)
- ▶ Socio-economic Group¹⁵ (12 categories with Semi-Skilled the base category in all instances)
- ▶ Grant Recipient (2 categories with no as the base category in all instances)
- ▶ Leaving Certificate Points¹⁶ (10 categories with 305 to 350 points the base category in all instances)
- ▶ School Type¹⁷ (4 categories with standard school as the base category in all instances)
- ▶ Free Fees¹⁸ (2 categories with no as the base category in all instances)
- ▶ NFQ level (3 categories with level 8 as the base category in all instances)
- ▶ ISCED Field of Study (8 categories with *Social Science, Business, Law and Arts & Humanities* as the base category in all instances)
- ▶ Institute Type (3 categories with universities as the base category in all instances)
- ▶ Institute¹⁹ (the institute closest to the mean non-progression rate in the specific model is used as the base in all instances)

14 Statistical significance reported in this analysis is based on $p < 0.05$. Results not statistically significant are presented in red.

15 This is based on Equal Access Survey data. All other data are based on Student Record System administrative data. N/A in this data refers to non-respondents to the Equal Access Survey.

16 Referred to as LC Points in the analysis below.

17 CAO entrants from standard second level school, DEIS school or fee paying school, unknown is largely comprised of non-CAO entrants and students from second level systems in other Countries.

18 Whether the student qualified for free fees or not.

19 There are 27 institutes in total in this analysis, 14 institutes of technology, 7 universities and 6 colleges.

6.3 Selected Cross Tabulations

For context, the tables below show basic relationships²⁰ between many of the explanatory variables used in the models²¹. This provides an indication of levels of inter-relationships in the models due to strong relationships between categories across variables (e.g. 85% of *Computer Science* students are male).

Table 6.1 Rates of Non-Progression by Second Level School Type

SCHOOL TYPE	% PROGRESSED	% NOT PROGRESSED	TOTAL
DEIS	81	19	100
Fee Paying	90	10	100
Standard	86	14	100
Unknown	85	15	100
All School Types	86	14	100

Table 6.1 shows that the rates of non-progression are almost double for students from DEIS schools compared to students from fee paying schools (19% v 10%). Rates for students from standard schools are equal to the overall mean non-progression rate of 14%.

20 All relationships in these tables are expressed in % and are read across rows not down columns.

21 Actual rates of non-progression in the case of school type. Non-progression rates by the other variables are detailed elsewhere in this report, e.g. Table 2.3 shows non-progression rates by entry points.

Table 6.2 *Cross Tabulation – Institute by School Type*

INSTITUTE	SCHOOL TYPE PROPORTION (%)				TOTAL
	DEIS	FEE PAYING	STANDARD	UNKNOWN	
Athlone IT	13.9	0.8	70.2	15.2	100
Cork IT	10.0	3.5	72.3	14.2	100
DCU	9.7	7.8	68.9	13.5	100
DIT	11.2	15.1	62.4	11.2	100
DIADT	7.1	24.0	55.7	13.2	100
Dundalk IT	18.0	2.4	59.7	19.9	100
Galway-Mayo IT	14.1	0.7	69.1	16.1	100
IT Blanchardstown	20.8	3.7	60.0	15.5	100
IT Carlow	13.6	3.2	65.7	17.5	100
IT Sligo	14.1	2.2	70.8	12.9	100
IT Tallaght	22.9	7.7	60.5	8.9	100
IT Tralee	20.7	0.6	59.3	19.4	100
Letterkenny IT	28.4	0.1	51.0	20.5	100
Limerick IT	12.0	1.8	59.5	26.7	100
Mary Immaculate College	6.8	1.2	81.4	10.5	100
Mater Dei Institute	8.6	3.2	85.0	3.2	100
Maynooth University	10.6	7.0	73.1	9.2	100
NCAD	7.2	16.6	50.4	25.9	100
NUI Galway	0.0	0.0	0.0	100.0	100
Royal College of Surgeons	0.0	0.0	0.0	100.0	100
St. Angela's College	3.9	3.4	56.7	36.0	100
St. Patrick's College	7.8	5.0	84.7	2.5	100
Trinity College Dublin	5.1	23.9	47.7	23.3	100
UCC	4.8	8.2	72.3	14.7	100
UCD	5.1	23.1	55.8	16.1	100
UL	10.7	2.2	78.8	8.3	100
Waterford IT	15.1	0.9	69.2	14.8	100
Total	10.0	8.2	60.1	21.7	100

Table 6.2 shows that, for instance, over 20% of students in DIADT, TCD and UCD come from fee paying schools. The comparable figures for Athlone IT, GMIT, IT Tralee, Letterkenny IT and Waterford IT are all below 1%. Geography is a key factor here since the vast majority of second level fee paying students are in Dublin. However, the figures for IT Blanchardstown and IT Tallaght are only 3.7% and 7.7% respectively²². The institutes with the highest proportions of second level DEIS school students are Letterkenny IT, IT Tallaght, IT Blanchardstown and IT Tralee. The institutes with the lowest proportion of second level DEIS school students are St. Angela's College, UCC, TCD and UCD.²³

22 The unknown proportions should also be taken into account here (largely non-CAO entrants and international students). For example, 23.3% of TCD students are from unknown school type compared to 8.9% of IT Tallaght students.

23 NUIG and the RCSI did not return school roll number for 2014/15.

Table 6.3 *Cross Tabulation – School Type by Grant Recipient*

SCHOOL TYPE	GRANT RECIPIENT (%)		TOTAL
	NO	YES	
DEIS	33.7	66.3	100
Fee Paying	85.0	15.1	100
Standard	52.1	47.9	100
Unknown	57.3	42.7	100
Total	54.1	45.9	100

Table 6.3 shows that 66% of DEIS second level school students received a grant compared to only 15% of fee paying second level school students.

Table 6.4 *Cross Tabulation – LC Points by School Type*

LC POINTS	SCHOOL TYPE PROPORTION (%)				TOTAL
	DEIS	FEE PAYING	STANDARD	UNKNOWN	
155 to 200	27.5	0.9	59.6	12.0	100
205 to 250	23.8	2.9	68.4	4.9	100
255 to 300	17.9	4.0	73.1	5.1	100
305 to 350	14.6	5.7	75.0	4.7	100
355 to 400	11.5	7.7	74.6	6.2	100
405 to 450	8.0	10.4	76.5	5.1	100
455 to 500	5.4	14.2	74.9	5.5	100
505 to 550	4.1	17.1	71.3	7.6	100
555 to 600	3.0	22.1	65.0	9.9	100
Other	9.5	4.0	34.7	51.8	100
Total	10.0	8.2	60.1	21.7	100

Table 6.4 shows that a relatively high proportion of students entering with lower points come from DEIS second level schools and a relatively high proportion of students entering with higher points come from fee paying second level schools.

Table 6.5 *Cross Tabulation – Socio-Economic Group by School Type*

SOCIO-ECONOMIC GROUP	SCHOOL TYPE PROPORTION (%)				TOTAL
	DEIS	FEE PAYING	STANDARD	UNKNOWN	
Agricultural Workers	13.9	3.5	69.6	13.0	100
All Others Gainfully Occupied	12.2	7.9	58.2	21.8	100
Employers and Manager	5.7	15.1	63.3	15.9	100
Farmers	9.3	5.2	73.6	12.0	100
Higher Professional	4.3	21.0	55.1	19.6	100
Lower Professional	7.3	12.1	63.3	17.3	100
Manual Skilled	14.8	2.8	69.5	12.9	100
N/A	10.0	5.3	51.7	33.0	100
Non-Manual	9.1	8.0	68.5	14.4	100
Own Account Workers	10.3	7.0	68.7	14.0	100
Semi-Skilled	16.9	3.9	66.5	12.7	100
Unskilled	17.2	1.7	68.4	12.7	100
Total	10.0	8.2	60.1	21.7	100

Table 6.5 shows that a relatively high proportion of students from lower socio-economic groups (Unskilled, Semi-Skilled and Manual Skilled) come from DEIS second level schools and a relatively high proportion of students from higher socio-economic groups (Higher Professional, Employers and Managers and Lower Professional) come from fee paying second level schools.

Table 6.6 *Cross Tabulation – Socio-Economic Group by Grant Recipient*

SOCIO-ECONOMIC GROUP	GRANT RECIPIENT (%)		TOTAL
	NO	YES	
Agricultural Workers	36.5	63.5	100
All Others Gainfully Occupied	39.7	60.3	100
Employers and Manager	73.1	26.9	100
Farmers	53.6	46.4	100
Higher Professional	82.4	17.6	100
Lower Professional	72.5	27.6	100
Manual Skilled	42.5	57.6	100
N/A	51.9	48.1	100
Non-Manual	56.0	44.1	100
Own Account Workers	37.7	62.3	100
Semi-Skilled	40.5	59.5	100
Unskilled	32.8	67.2	100
Total	54.1	45.9	100

Table 6.6 shows that the majority of students from lower socio-economic groups are in receipt of a grant and that the majority of students from higher socio-economic groups are not in receipt of a grant. For instance, only 17.6% of students from the Higher Professional socio-economic group are in receipt of a grant compared to 67.2% of students from the Unskilled socio-economic group.

Table 6.7 *Cross Tabulation – LC Points by Grant Recipient*

LC POINTS	GRANT RECIPIENT (%)		TOTAL
	NO	YES	
155 to 200	33.3	66.7	100
205 to 250	35.0	65.0	100
255 to 300	38.8	61.2	100
305 to 350	43.0	57.0	100
355 to 400	50.7	49.3	100
405 to 450	58.6	41.5	100
455 to 500	67.1	32.9	100
505 to 550	73.9	26.2	100
555 to 600	80.7	19.3	100
Other	49.6	50.4	100
Total	54.1	45.9	100

Table 6.7 shows that the majority of students entering with lower points are in receipt of a grant and that the majority of students entering with higher points are not in receipt of a grant.

Table 6.8 *Cross Tabulation – LC Points by Institute Type*

LC POINTS	INSTITUTE TYPE (%)			TOTAL
	COLLEGES	IOTS	UNIVERSITIES	
155 to 200	0.9	95.1	4.1	100
205 to 250	1.2	98.5	0.3	100
255 to 300	1.7	96.5	1.8	100
305 to 350	2.8	83.7	13.6	100
355 to 400	5.1	57.2	37.8	100
405 to 450	6.8	33.8	59.5	100
455 to 500	11.5	13.3	75.2	100
505 to 550	8.4	5.2	86.4	100
555 to 600	3.7	3.3	92.9	100
Other	4.5	43.6	52.0	100
Total	5.4	44.8	49.8	100

Table 6.8 shows that the majority of students entering with lower points go to institutes of technology and the majority of students entering with higher points go to universities.

Table 6.9 *Cross Tabulation – LC Points by Gender*

LC POINTS	GENDER (%)		TOTAL
	FEMALE	MALE	
155 to 200	39.4	60.7	100
205 to 250	31.7	68.3	100
255 to 300	36.3	63.8	100
305 to 350	42.9	57.1	100
355 to 400	49.8	50.2	100
405 to 450	54.5	45.5	100
455 to 500	55.1	44.9	100
505 to 550	55.6	44.4	100
555 to 600	55.5	44.5	100
Other	50.4	49.6	100
Total	49.8	50.2	100

Table 6.9 shows that the majority of students entering with lower points are male and the majority of students entering with higher points are female.

Table 6.10 *Cross Tabulation – Institute Type by Gender*

INSTITUTE TYPE	GENDER (%)		TOTAL
	FEMALE	MALE	
Colleges	75.3	24.7	100
Institutes of Technology	43.2	56.8	100
Universities	53.0	47.0	100
Total	49.8	50.2	100

Table 6.10 shows that over 75% of students entering colleges are female and that universities have more female entrants than male (53% v 47%). Conversely, institutes of technology have more male entrants than female (57% v 43%).

Table 6.11 *Cross Tabulation – ISCED Field of Study by Gender*

ISCED	GENDER (%)		TOTAL
	FEMALE	MALE	
Computer Science	14.9	85.1	100
Construction and Related	16.4	83.6	100
Education	75.0	25.0	100
Engineering (excl Civil)	14.1	85.9	100
Healthcare	79.1	20.9	100
Science and Agri and Vet	48.6	51.4	100
Services	46.0	54.0	100
Social Science, Business, Law and Arts & Humanities	54.0	46.1	100
Total	49.8	50.2	100

Table 6.11 shows that *Education, Healthcare and Social Science, Business, Law and Arts & Humanities* courses have more female entrants and that *Computer Science, Construction, Engineering, Science and Services* courses have more male entrants. *Education* and *Healthcare* courses both have over 75% female entrants. *Computer Science, Construction* and *Engineering* courses all have over 83% male entrants.

6.4 Models and Findings

The models are broken into six distinct groups²⁴:

- ▶ Models 1A – 1C (all institutes)
- ▶ Models 2A – 2C (universities and colleges only)
- ▶ Models 3A – 3C (institutes of technology only, all levels)
- ▶ Models 4A – 4C (institutes of technology only, NFQ levels 6 and 7 combined)
- ▶ Models 5A – 5C (institutes of technology only, NFQ level 8)
- ▶ Models 6A – 6C (institute types rather than individual institutes)

Findings are discussed first followed by the detailed model results.

Findings

The main findings from this analysis, which are largely in line with the 2010 and 2017 analyses, are:

The headline rates of non-progression do not account for student and institute heterogeneity, therefore they do not provide for in-depth analysis and comparison of like with like. A multivariate analysis of this nature allows for a more direct comparison of non-progression rates across institutes and sectors.

For instance, the rates of non-progression, across all NFQ levels, in TCD and UCD are 9% and 11% respectively. The rates of non-progression, across all NFQ levels, in Letterkenny IT and Limerick IT are both 22%. However, once age, gender, nationality, socio-economic group, grant status, free fees status, school type, NFQ level, ISCED and LC points are controlled for, non-progression is more likely for a student from TCD or UCD than it is for a student from Letterkenny IT or Limerick IT, using Cork IT as a base²⁵, all things being equal. LC points is the key driver of this effect. It is the prior educational attainment of the student intake that largely determines the probability of not progressing and institute of technology students have far lower points on average than both university and college students upon entry. Model 1C below clearly shows this.

The two figures below illustrate this effect. Figure 6.1 shows the odds ratios of not progressing versus Cork IT students, with no controls, i.e. results from model 1A. Figure 6.2 below illustrates the results from model 1C, i.e. with controls for student intake²⁶. Statistically significant results only are included in both figures and Mater Dei and St Angela's are not shown in Figure 6.2 – both are outliers with relatively high probabilities of non-progression in this model.

24 To reiterate – statistical significance reported in this analysis is based on $p < 0.05$. Results not statistically significant are presented in red.

25 Cork IT has an overall non-progression rate of 14.4% and is therefore closest to the overall mean non-progression rate.

26 Controlling for age, gender, nationality, socio-economic group, grant, free fees, school type, NFQ level, ISCED and LC points. The estimates for eight HEIs are not statistically significant in this model and Mater Dei and St Angela's are not shown in this instance – both have relatively high probabilities of non-progression in this model (odds ratios of 2.8 and 5.2 respectively).

Figure 6.1 Odds Ratio of Not Progressing by Institute, Base = Cork IT, without Controls

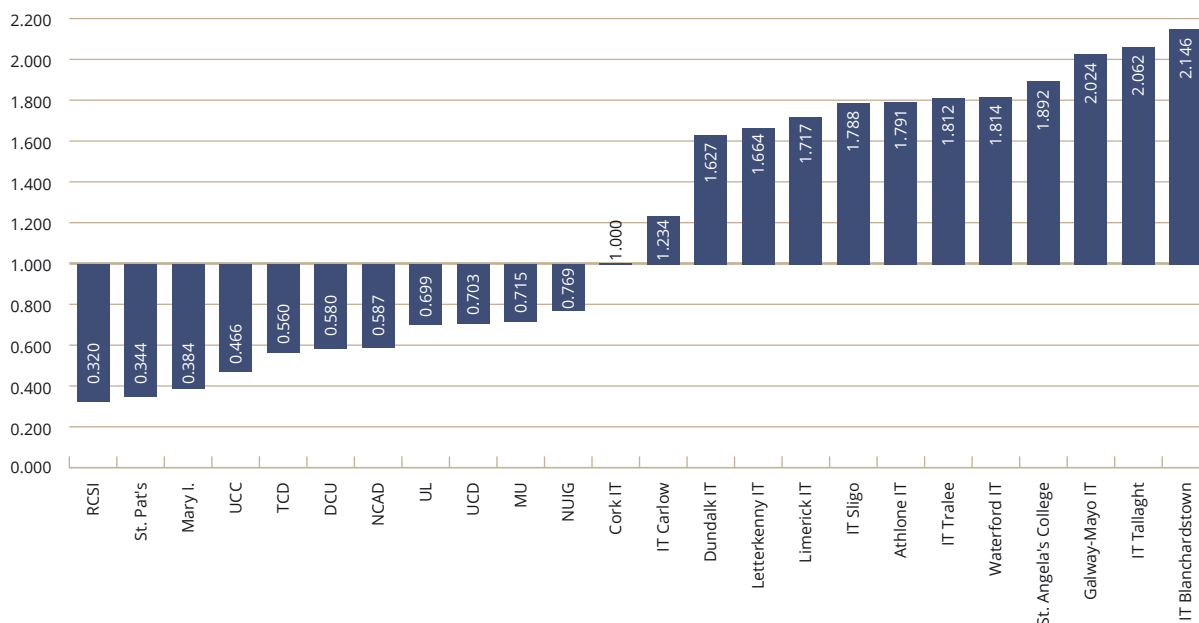
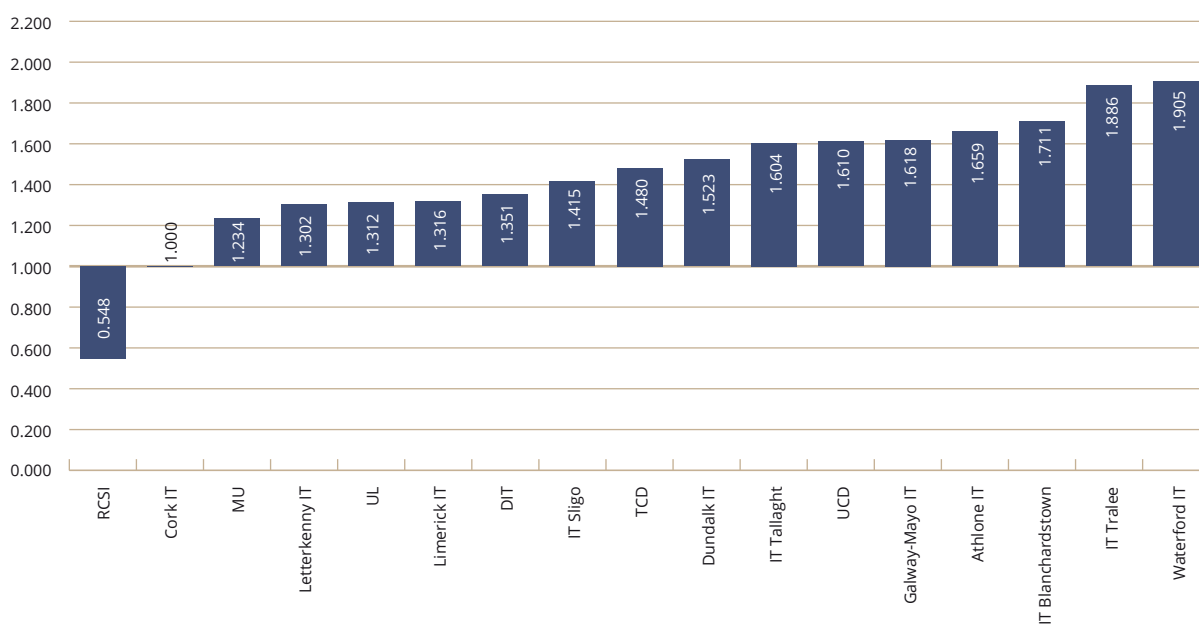


Figure 6.2 Odds Ratio of Not Progressing by Institute, Base = Cork IT, with Controls

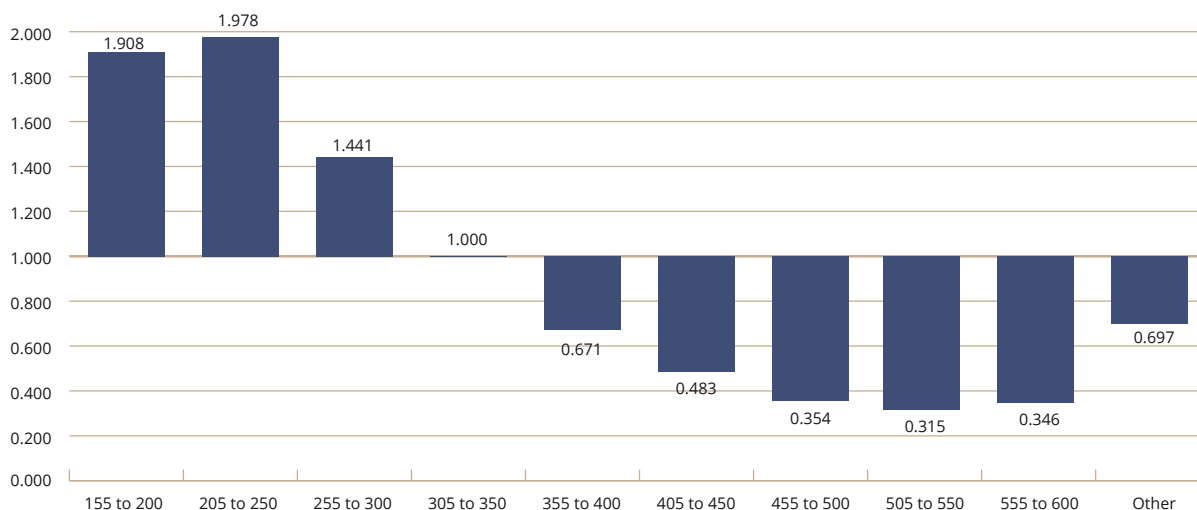


The effect is clear, without controls, the odds ratios of not progressing are far higher in institutes of technology and St. Angela's College. With controls for student intake, although many of the institutes of technology still have high odds ratios, some of the universities also have relatively high odds ratios, higher than some of the institutes of technology.

This is also shown at institute type level in model 6C. As discussed above, although the headline rates of non-progression are generally much higher in institutes of technology than in universities or colleges, once the set of student and course characteristics are controlled for, the odds of not progressing are not that far apart – students from institutes of technology are 1.16 times more likely to not progress than university students. The odds ratio is 2.42 without controlling for the set of student and course characteristics. Again, LC points is the key driver of this effect.

The strongest predictor of non-progression is prior educational attainment. This is shown to be consistent across multiple models. Those with higher points upon entry are less likely to not progress compared to those with lower points upon entry. Model 6C shows this clearly. Controlling for institute type, age, gender, nationality, socio-economic group, grant status, free fees status, school type, NFQ level and ISCED field of study, compared to students with 305-350 points, students in all the lower points ranges are more likely to not progress, students in all the higher points ranges are less likely to not progress. The sliding scale is illustrated in the Figure 6.3 below, based on the results from model 6C.

Figure 6.3 Odds Ratio of Not Progressing by LC Points Range, Base = 305-350 Points, with Controls



As per Figure 6.3, a student entering with over 500 points is only a third as likely to not progress as a student entering with 305-350 points. A student with less than 250 points is almost twice as likely to not progress compared to a student entering with 305-350 points. These results are after controlling for institute type, age, gender, nationality, socio-economic group, grant status, free fees status, school type, NFQ level and ISCED field of study.

Gender is also a key predictor of non-progression. In the two strongest models presented here (models 1C and 6C), the odds ratios for males not progressing compared to females are 1.23 and 1.22 respectively, i.e. males are 1.2 times more likely to not progress than females. This is after controlling for institute or institute type, age, nationality, socio-economic group, grant status, free fees status, school type, NFQ level, ISCED field of study and LC points. This is borne out in the headline non-progression rates by gender – males have a non-progression rate of 17.5% compared to 11.5% for females, across all institutes and course levels.

NFQ level is also shown to be a key predictor of non-progression in these models, level 6 students are more likely to not progress than level 7 students and level 7 students are more likely to not progress than level 8 students, even after controlling for the set of student and course characteristics. The three key predictors set out above (points, gender and NFQ level) are all highly interrelated in that males have lower points on average on entry compared to females and there are more males on level 6 and 7 courses and more females on level 8 courses.

Of the other variables analysed, results are less clear than is the case for points, gender and NFQ level. Many estimates are not statistically significant. Consistent results that are statistically significant include:

- ▶ Students from farming backgrounds are less likely to not progress compared to students from other backgrounds, using the Semi-Skilled socio-economic group as the base.
- ▶ Although students from DEIS schools are shown in some models to be more likely to not progress compared to students from standard schools and students from fee paying schools are shown to be less likely to not progress, the strongest result arising from the school type variable is that the 'unknown' group are consistently shown to be more likely to not progress compared to students from standard schools. This is interesting since the unknown group is largely comprised of non-CAO entrants and international students.
- ▶ Across the fields of study, in general and with *Social Science, Business, Law and Arts & Humanities* as a base, *Education* and *Healthcare* students are less likely to not progress, *Computer Science, Construction, Engineering, Science* and *Services* students are more likely to not progress. There are also interrelationships at play here – more males are in the fields of study less likely to not progress while females comprise the majority of *Education* and *Healthcare* students. The fields of study less likely to not progress are also more numerous in terms of courses in institutes of technology at levels 6 and 7. *Education* and *Healthcare* courses are more common in universities and colleges at level 8.

Looking at the relative performance of institutes within sector, controlling for the set of student and course characteristics, with DCU as a base, Mater Dei, St Angela's, Trinity College Dublin and UCD students are more likely to not progress, NCAD students are less likely to not progress (Model 2C). In the institutes of technology sector, with Dundalk IT as a base, students from IT Tralee and Waterford IT are more likely to not progress, students from Cork IT, DIADT and IT Carlow are less likely to not progress (Model 3C).

Table 6.12 *Logistic Regression Models – All Institutes*

	MODEL 1A			MODEL 1B			MODEL 1C		
	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE
Institute									
Athlone IT	1.791	0.174	0.000	1.708	0.169	0.000	1.659	0.172	0.000
Cork IT	1.000	(base)		1.000	(base)		1.000	(base)	
DCU	0.580	0.056	0.000	0.541	0.053	0.000	1.094	0.116	0.397
DIT	1.134	0.090	0.113	1.017	0.085	0.838	1.351	0.118	0.001
DIADT	1.093	0.150	0.515	0.985	0.138	0.916	1.043	0.151	0.771
Dundalk IT	1.627	0.153	0.000	1.534	0.147	0.000	1.523	0.149	0.000
Galway-Mayo IT	2.024	0.172	0.000	1.776	0.154	0.000	1.618	0.144	0.000
IT Blanchardstown	2.146	0.222	0.000	1.863	0.198	0.000	1.711	0.188	0.000
IT Carlow	1.234	0.127	0.041	1.108	0.116	0.327	1.145	0.123	0.206
IT Sligo	1.788	0.175	0.000	1.567	0.158	0.000	1.415	0.147	0.001
IT Tallaght	2.062	0.213	0.000	2.019	0.211	0.000	1.604	0.174	0.000
IT Tralee	1.812	0.199	0.000	1.899	0.211	0.000	1.886	0.215	0.000
Letterkenny IT	1.664	0.172	0.000	1.447	0.154	0.001	1.302	0.143	0.016
Limerick IT	1.717	0.153	0.000	1.417	0.130	0.000	1.316	0.125	0.004
Mary Immaculate College	0.384	0.062	0.000	0.431	0.070	0.000	0.993	0.175	0.968
Mater Dei Institute	1.234	0.348	0.456	1.411	0.401	0.225	2.839	0.874	0.001
Maynooth University	0.715	0.066	0.000	0.760	0.071	0.003	1.234	0.124	0.036
NCAD	0.587	0.129	0.015	0.668	0.147	0.068	0.794	0.180	0.308
NUI Galway	0.769	0.066	0.002	0.610	0.059	0.000	0.862	0.090	0.156
Royal College of Surgeons	0.320	0.094	0.000	0.224	0.067	0.000	0.548	0.166	0.047
St. Angela's College	1.892	0.353	0.001	2.048	0.389	0.000	5.164	1.084	0.000
St. Patrick's College	0.344	0.064	0.000	0.436	0.081	0.000	1.173	0.236	0.427
Trinity College Dublin	0.560	0.052	0.000	0.614	0.059	0.000	1.480	0.157	0.000
UCC	0.466	0.043	0.000	0.512	0.047	0.000	1.066	0.107	0.523
UCD	0.703	0.058	0.000	0.783	0.066	0.004	1.610	0.150	0.000
UL	0.699	0.066	0.000	0.691	0.066	0.000	1.312	0.135	0.008
Waterford IT	1.814	0.157	0.000	1.741	0.154	0.000	1.905	0.174	0.000
Age Group									
16-18 yrs				1.116	0.082	0.136	0.987	0.077	0.867
19-20 yrs				1.192	0.086	0.015	1.100	0.083	0.208
21-24 yrs				1.342	0.109	0.000	1.274	0.105	0.003
25-29 yrs				1.000	(base)		1.000	(base)	
30 yrs +				0.891	0.079	0.193	0.904	0.080	0.258
Gender									
Female				1.000	(base)		1.000	(base)	
Male				1.491	0.044	0.000	1.231	0.040	0.000
Nationality									
Irish				1.207	0.098	0.020	1.296	0.107	0.002
Non-Irish				1.000	(base)		1.000	(base)	

Table 6.12 *Logistic Regression Models – All Institutes (continued)*

	MODEL 1A			MODEL 1B			MODEL 1C		
	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE
Socio-economic Group									
Agricultural Workers				1.072	0.298	0.802	1.111	0.316	0.712
All Others Gainfully Occupied				1.204	0.103	0.031	1.176	0.103	0.063
Employers and Managers				1.033	0.093	0.719	1.073	0.098	0.443
Farmers				0.585	0.068	0.000	0.662	0.078	0.000
Higher Professional				0.869	0.088	0.168	0.936	0.096	0.518
Lower Professional				0.968	0.098	0.746	1.032	0.107	0.760
Manual Skilled				1.117	0.105	0.236	1.117	0.106	0.247
N/A				1.298	0.106	0.001	1.303	0.108	0.001
Non-Manual				1.097	0.104	0.331	1.114	0.108	0.262
Own Account Workers				0.947	0.097	0.594	0.984	0.102	0.877
Semi-Skilled				1.000	(base)		1.000	(base)	
Unskilled				1.174	0.127	0.140	1.171	0.129	0.152
Grant Recipient									
No				1.000	(base)		1.000	(base)	
Yes				1.088	0.035	0.008	0.983	0.032	0.607
Free Fees									
No				1.000	(base)		1.000	(base)	
Yes				0.778	0.038	0.000	0.927	0.049	0.150
School Type									
DEIS				1.117	0.051	0.015	1.017	0.047	0.723
Fee Paying				0.875	0.055	0.035	0.916	0.059	0.172
Standard				1.000	(base)		1.000	(base)	
Unknown				1.292	0.064	0.000	1.284	0.066	0.000
NFQ Level									
Level 6							1.292	0.080	0.000
Level 7							1.196	0.056	0.000
Level 8							1.000	(base)	
ISCED									
Computer Science							1.214	0.066	0.000
Construction and Related							1.218	0.094	0.011
Education							0.601	0.079	0.000
Engineering (excl Civil)							1.142	0.062	0.015
Healthcare							0.602	0.034	0.000
Science and Agri and Vet							0.967	0.048	0.506
Services							1.098	0.060	0.089
Social Science, Business, Law and Arts & Humanities							1.000	(base)	

Table 6.12 *Logistic Regression Models – All Institutes (continued)*

	MODEL 1A			MODEL 1B			MODEL 1C		
	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE
LC Points									
155 to 200							1.850	0.202	0.000
205 to 250							1.931	0.147	0.000
255 to 300							1.451	0.091	0.000
305 to 350							1.000	(base)	
355 to 400							0.668	0.039	0.000
405 to 450							0.476	0.032	0.000
455 to 500							0.350	0.028	0.000
505 to 550							0.289	0.027	0.000
555 to 600							0.309	0.038	0.000
Other							0.737	0.040	0.000
Students		41,441			41,441			41,441	
HE Institutions		27			27			27	
Pseudo R Squared		0.0386			0.0515			0.0801	
Chi Square		1325.47***			1766.94***			2747.05***	

*** p<0.001

Table 6.13 Logistic Regression Models – Universities and Colleges

	MODEL 2A			MODEL 2B			MODEL 2C		
	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE
Institute									
DCU	1.000	(base)		1.000	(base)		1.000	(base)	
Mary Immaculate College	0.662	0.108	0.012	0.749	0.124	0.081	0.768	0.134	0.131
Mater Dei Institute	2.129	0.604	0.008	2.490	0.714	0.001	2.075	0.650	0.020
Maynooth University	1.234	0.119	0.029	1.315	0.132	0.007	1.013	0.104	0.900
NCAD	1.013	0.224	0.955	1.037	0.234	0.872	0.581	0.138	0.022
NUI Galway	1.327	0.121	0.002	1.088	0.124	0.456	1.035	0.123	0.770
Royal College of Surgeons	0.553	0.162	0.043	0.405	0.122	0.003	0.549	0.169	0.052
St. Angela's College	3.264	0.616	0.000	2.927	0.568	0.000	3.755	0.791	0.000
St. Patrick's College	0.593	0.111	0.005	0.761	0.146	0.154	0.970	0.194	0.877
Trinity College Dublin	0.967	0.094	0.728	1.063	0.108	0.551	1.321	0.140	0.008
UCC	0.804	0.077	0.023	0.869	0.087	0.158	0.845	0.086	0.098
UCD	1.214	0.105	0.026	1.393	0.128	0.000	1.345	0.127	0.002
UL	1.206	0.119	0.058	1.276	0.129	0.016	1.112	0.117	0.315
Age Group									
16-18 yrs				0.583	0.071	0.000	0.545	0.070	0.000
19-20 yrs				0.666	0.080	0.001	0.623	0.078	0.000
21-24 yrs				1.038	0.149	0.794	0.917	0.135	0.557
25-29 yrs				1.000	(base)		1.000	(base)	
30 yrs +				0.956	0.141	0.761	0.963	0.142	0.800
Gender									
Female				1.000	(base)		1.000	(base)	
Male				1.214	0.056	0.000	1.149	0.056	0.004
Nationality									
Irish				1.018	0.107	0.863	1.060	0.114	0.584
Non-Irish				1.000	(base)		1.000	(base)	
Socio-economic Group									
Agricultural Workers				1.301	0.641	0.593	1.515	0.752	0.402
All Others Gainfully Occupied				1.172	0.174	0.283	1.254	0.187	0.130
Employers and Managers				1.180	0.177	0.267	1.301	0.196	0.082
Farmers				0.589	0.114	0.006	0.702	0.137	0.070
Higher Professional				0.934	0.148	0.665	1.112	0.178	0.504
Lower Professional				1.107	0.178	0.528	1.270	0.206	0.142
Manual Skilled				1.320	0.211	0.084	1.417	0.229	0.031
N/A				1.336	0.191	0.042	1.447	0.208	0.010
Non-Manual				1.283	0.202	0.113	1.372	0.218	0.047
Own Account Workers				0.896	0.157	0.532	0.991	0.175	0.958
Semi-Skilled				1.000	(base)		1.000	(base)	
Unskilled				1.551	0.284	0.017	1.627	0.301	0.009
Grant Recipient									
No				1.000	(base)		1.000	(base)	
Yes				1.154	0.059	0.005	1.071	0.056	0.191

Table 6.13 Logistic Regression Models – Universities and Colleges (continued)

	MODEL 2A			MODEL 2B			MODEL 2C		
	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE
Free Fees									
No				1.000	(base)		1.000	(base)	
Yes				0.904	0.072	0.209	0.876	0.073	0.112
School Type									
DEIS				1.044	0.101	0.654	0.945	0.093	0.564
Fee Paying				0.921	0.079	0.335	0.906	0.079	0.256
Standard				1.000	(base)		1.000	(base)	
Unknown				1.294	0.106	0.002	1.251	0.106	0.008
ISCED									
Computer Science							1.054	0.113	0.623
Construction and Related							1.001	0.238	0.996
Education							0.602	0.082	0.000
Engineering (excl Civil)							0.863	0.091	0.161
Healthcare							0.624	0.053	0.000
Science and Agri and Vet							0.918	0.066	0.236
Services							0.641	0.303	0.346
Social Science, Business, Law and Arts & Humanities							1.000	(base)	
LC Points									
155 to 200							0.407	0.261	0.160
205 to 250							0.834	0.567	0.790
255 to 300							1.422	0.408	0.219
305 to 350							1.000	(base)	
355 to 400							0.671	0.079	0.001
405 to 450							0.387	0.046	0.000
455 to 500							0.276	0.034	0.000
505 to 550							0.228	0.030	0.000
555 to 600							0.237	0.037	0.000
Other							0.396	0.048	0.000
Students		22,876			22,876			22,876	
HE Institutions		13			13			13	
Pseudo R Squared		0.0085			0.0239			0.0454	
Chi Square		121.95***			343.7***			653.95***	

Table 6.14 Logistic Regression Models – Institutes of Technology, All Levels

	MODEL 3A			MODEL 3B			MODEL 3C		
	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE
Institute									
Athlone IT	1.101	0.110	0.337	1.118	0.114	0.276	1.064	0.113	0.561
Cork IT	0.615	0.058	0.000	0.627	0.061	0.000	0.654	0.065	0.000
DIT	0.697	0.058	0.000	0.640	0.056	0.000	0.868	0.081	0.128
DIADT	0.672	0.093	0.004	0.621	0.090	0.001	0.684	0.102	0.011
Dundalk IT	1.000	(base)		1.000	(base)		1.000	(base)	
Galway-Mayo IT	1.244	0.109	0.013	1.110	0.101	0.248	1.029	0.096	0.755
IT Blanchardstown	1.319	0.140	0.009	1.198	0.131	0.098	1.118	0.126	0.320
IT Carlow	0.758	0.080	0.009	0.715	0.077	0.002	0.768	0.085	0.017
IT Sligo	1.099	0.111	0.346	1.003	0.105	0.979	0.927	0.100	0.479
IT Tallaght	1.268	0.134	0.025	1.284	0.139	0.021	1.054	0.118	0.641
IT Tralee	1.114	0.125	0.335	1.261	0.145	0.044	1.277	0.151	0.038
Letterkenny IT	1.023	0.108	0.831	0.956	0.105	0.683	0.886	0.100	0.282
Limerick IT	1.055	0.097	0.557	0.893	0.086	0.242	0.849	0.085	0.100
Waterford IT	1.115	0.100	0.222	1.165	0.107	0.096	1.355	0.129	0.001
Age Group									
16-18 yrs				1.561	0.143	0.000	1.451	0.142	0.000
19-20 yrs				1.592	0.144	0.000	1.554	0.147	0.000
21-24 yrs				1.584	0.156	0.000	1.576	0.158	0.000
25-29 yrs				1.000	(base)		1.000	(base)	
30 yrs +				0.866	0.095	0.192	0.883	0.098	0.259
Gender									
Female				1.000	(base)		1.000	(base)	
Male				1.715	0.067	0.000	1.307	0.057	0.000
Nationality									
Irish				1.543	0.206	0.001	1.512	0.204	0.002
Non-Irish				1.000	(base)		1.000	(base)	
Socio-economic Group									
Agricultural Workers				0.995	0.335	0.988	0.968	0.334	0.925
All Others Gainfully Occupied				1.262	0.134	0.029	1.176	0.128	0.136
Employers and Managers				0.941	0.110	0.600	0.966	0.115	0.775
Farmers				0.590	0.086	0.000	0.658	0.098	0.005
Higher Professional				0.880	0.128	0.378	0.917	0.136	0.561
Lower Professional				0.864	0.120	0.291	0.894	0.127	0.432
Manual Skilled				1.025	0.119	0.832	0.989	0.118	0.923
N/A				1.285	0.129	0.012	1.230	0.126	0.044
Non-Manual				1.003	0.122	0.980	0.992	0.124	0.950
Own Account Workers				0.998	0.128	0.988	1.013	0.132	0.921
Semi-Skilled				1.000	(base)		1.000	(base)	
Unskilled				1.009	0.136	0.950	0.980	0.135	0.883
Grant Recipient									
No				1.000	(base)		1.000	(base)	
Yes				0.988	0.041	0.765	0.894	0.038	0.009

Table 6.14 Logistic Regression Models – Institutes of Technology, All Levels (continued)

	MODEL 3A			MODEL 3B			MODEL 3C		
	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE
Free Fees									
No				1.000	(base)		1.000	(base)	
Yes				0.795	0.051	0.000	0.995	0.069	0.939
School Type									
DEIS				1.124	0.059	0.025	1.035	0.056	0.518
Fee Paying				0.879	0.084	0.178	0.969	0.095	0.751
Standard				1.000	(base)		1.000	(base)	
Unknown				1.351	0.085	0.000	1.326	0.086	0.000
NFQ Level									
Level 6							1.272	0.081	0.000
Level 7							1.135	0.055	0.009
Level 8							1.000	(base)	
ISCED									
Computer Science							1.369	0.090	0.000
Construction and Related							1.325	0.112	0.001
Education							0.736	0.320	0.481
Engineering (excl Civil)							1.396	0.094	0.000
Healthcare							0.655	0.050	0.000
Science and Agri and Vet							1.179	0.084	0.021
Services							1.210	0.071	0.001
Social Science, Business, Law and Arts & Humanities							1.000	(base)	
LC Points									
155 to 200							2.075	0.236	0.000
205 to 250							2.074	0.164	0.000
255 to 300							1.522	0.100	0.000
305 to 350							1.000	(base)	
355 to 400							0.588	0.042	0.000
405 to 450							0.467	0.045	0.000
455 to 500							0.393	0.063	0.000
505 to 550							0.423	0.125	0.004
555 to 600							0.693	0.305	0.406
Other							0.977	0.061	0.716
Students		18,565			18,565			18,565	
HE Institutions		14			14			14	
Pseudo R Squared		0.01			0.0301			0.0674	
Chi Square		188.81***			568.06***			1273.29***	

Table 6.15 Logistic Regression Models – Institutes of Technology, NFQ levels 6 & 7

	MODEL 4A			MODEL 4B			MODEL 4C		
	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE
Institute									
Athlone IT	1.000	(base)		1.000	(base)		1.000	(base)	
Cork IT	0.534	0.064	0.000	0.521	0.064	0.000	0.626	0.080	0.000
DIT	0.700	0.080	0.002	0.576	0.089	0.000	0.737	0.118	0.057
DIADT	1.255	0.288	0.323	0.931	0.221	0.765	0.968	0.239	0.895
Dundalk IT	1.046	0.126	0.711	1.042	0.129	0.739	1.041	0.132	0.752
Galway-Mayo IT	1.138	0.125	0.239	0.988	0.111	0.912	0.945	0.109	0.625
IT Blanchardstown	1.245	0.171	0.111	1.074	0.151	0.608	0.987	0.143	0.930
IT Carlow	0.886	0.119	0.367	0.815	0.111	0.134	0.890	0.125	0.405
IT Sligo	1.066	0.129	0.600	0.867	0.109	0.256	0.856	0.111	0.229
IT Tallaght	1.174	0.168	0.263	1.139	0.167	0.374	0.950	0.144	0.733
IT Tralee	1.267	0.171	0.078	1.387	0.193	0.019	1.574	0.226	0.002
Letterkenny IT	0.890	0.112	0.357	0.848	0.112	0.213	0.837	0.115	0.195
Limerick IT	1.119	0.133	0.343	0.860	0.106	0.221	0.877	0.112	0.307
Waterford IT	1.181	0.139	0.155	1.209	0.148	0.121	1.335	0.170	0.023
Age Group									
16-18 yrs				1.701	0.197	0.000	1.672	0.209	0.000
19-20 yrs				1.702	0.194	0.000	1.710	0.205	0.000
21-24 yrs				1.389	0.174	0.008	1.403	0.179	0.008
25-29 yrs				1.000	(base)		1.000	(base)	
30 yrs +				0.804	0.112	0.116	0.832	0.116	0.188
Gender									
Female				1.000	(base)		1.000	(base)	
Male				1.575	0.082	0.000	1.273	0.075	0.000
Nationality									
Irish				2.154	0.404	0.000	2.326	0.441	0.000
Non-Irish				1.000	(base)		1.000	(base)	
Socio-economic Group									
Agricultural Workers				0.943	0.399	0.889	1.030	0.447	0.946
All Others Gainfully Occupied				1.320	0.192	0.056	1.298	0.193	0.080
Employers and Managers				1.127	0.180	0.454	1.200	0.196	0.266
Farmers				0.709	0.130	0.061	0.917	0.173	0.646
Higher Professional				0.908	0.189	0.644	0.983	0.209	0.935
Lower Professional				0.927	0.180	0.695	1.030	0.205	0.882
Manual Skilled				1.310	0.204	0.084	1.340	0.214	0.067
N/A				1.514	0.209	0.003	1.518	0.214	0.003
Non-Manual				1.048	0.176	0.782	1.078	0.186	0.663
Own Account Workers				1.146	0.198	0.431	1.231	0.218	0.241
Semi-Skilled				1.000	(base)		1.000	(base)	
Unskilled				1.115	0.200	0.546	1.153	0.212	0.440
Grant Recipient									
No				1.000	(base)		1.000	(base)	
Yes				0.927	0.052	0.176	0.874	0.050	0.019

Table 6.15 Logistic Regression Models – Institutes of Technology, NFQ Levels 6 & 7 (continued)

	MODEL 4A			MODEL 4B			MODEL 4C		
	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE
FreeFees									
No				1.000	(base)		1.000	(base)	
Yes				0.869	0.093	0.192	0.903	0.100	0.354
School Type									
DEIS				1.075	0.071	0.276	0.978	0.067	0.748
Fee Paying				1.031	0.149	0.830	1.160	0.173	0.320
Standard				1.000	(base)		1.000	(base)	
Unknown				1.361	0.110	0.000	1.309	0.110	0.001
ISCED									
Computer Science							1.267	0.113	0.008
Construction and Related							1.575	0.183	0.000
Education							1.167	1.365	0.895
Engineering (excl Civil)							1.426	0.116	0.000
Healthcare							0.676	0.080	0.001
Science and Agri and Vet							1.057	0.100	0.554
Services							1.248	0.093	0.003
Social Science, Business, Law and Arts & Humanities							1.000	(base)	
LC Points									
155 to 200							2.831	0.365	0.000
205 to 250							2.391	0.220	0.000
255 to 300							1.618	0.136	0.000
305 to 350							1.000	(base)	
355 to 400							0.535	0.062	0.000
405 to 450							0.364	0.074	0.000
455 to 500							0.303	0.131	0.006
505 to 550							1.000	0.571	0.999
555 to 600							2.209	1.927	0.364
Other							1.391	0.121	0.000
Students		9,431			9,431			9,431	
HE Institutions		14			14			14	
Pseudo R Squared		0.0108			0.0294			0.0661	
Chi Square		115.74***			315.35***			710.67***	

Table 6.16 Logistic Regression Models – Institutes of Technology, NFQ level 8

	MODEL 5A			MODEL 5B			MODEL 5C		
	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE
Institute									
Athlone IT	1.111	0.246	0.634	1.124	0.255	0.608	1.214	0.284	0.407
Cork IT	0.738	0.151	0.137	0.761	0.161	0.196	0.825	0.181	0.380
DIT	0.872	0.161	0.459	0.866	0.165	0.451	1.088	0.217	0.673
DIADT	0.708	0.164	0.136	0.699	0.169	0.138	0.719	0.180	0.186
Dundalk IT	0.841	0.181	0.421	0.840	0.185	0.431	0.963	0.218	0.868
Galway-Mayo IT	1.296	0.259	0.195	1.199	0.249	0.382	1.143	0.247	0.537
IT Blanchardstown	1.476	0.318	0.071	1.385	0.308	0.142	1.258	0.286	0.313
IT Carlow	0.650	0.143	0.050	0.605	0.137	0.027	0.620	0.143	0.039
IT Sligo	0.877	0.204	0.573	0.912	0.221	0.705	0.974	0.242	0.917
IT Tallaght	1.546	0.323	0.037	1.507	0.324	0.057	1.090	0.242	0.698
IT Tralee	0.636	0.167	0.086	0.692	0.186	0.171	0.729	0.201	0.253
Letterkenny IT	1.000	(base)		1.000	(base)		1.000	(base)	
Limerick IT	1.063	0.211	0.757	0.962	0.201	0.852	0.896	0.191	0.607
Waterford IT	1.188	0.230	0.375	1.272	0.252	0.225	1.437	0.293	0.076
Age Group									
16-18 yrs				1.338	0.205	0.057	1.036	0.171	0.829
19-20 yrs				1.448	0.218	0.014	1.193	0.190	0.267
21-24 yrs				1.965	0.319	0.000	1.747	0.291	0.001
25-29 yrs				1.000	(base)		1.000	(base)	
30 yrs +				0.982	0.181	0.923	1.023	0.190	0.902
Gender									
Female				1.000	(base)		1.000	(base)	
Male				1.665	0.101	0.000	1.304	0.088	0.000
Nationality									
Irish				0.871	0.169	0.476	0.940	0.185	0.755
Non-Irish				1.000	(base)		1.000	(base)	
Socio-economic Group									
Agricultural Workers				0.972	0.548	0.960	1.020	0.582	0.972
All Others Gainfully Occupied				1.142	0.180	0.398	1.066	0.171	0.691
Employers and Managers				0.755	0.130	0.103	0.743	0.130	0.089
Farmers				0.346	0.093	0.000	0.374	0.102	0.000
Higher Professional				0.820	0.168	0.330	0.793	0.165	0.265
Lower Professional				0.785	0.157	0.225	0.749	0.152	0.153
Manual Skilled				0.685	0.124	0.036	0.627	0.115	0.011
N/A				0.992	0.147	0.955	0.911	0.138	0.538
Non-Manual				0.944	0.168	0.747	0.882	0.159	0.486
Own Account Workers				0.844	0.162	0.375	0.817	0.159	0.299
Semi-Skilled				1.000	(base)		1.000	(base)	
Unskilled				0.852	0.178	0.444	0.792	0.168	0.271
Grant Recipient									
No				1.000	(base)		1.000	(base)	
Yes				0.991	0.068	0.892	0.917	0.065	0.220

Table 6.16 Logistic Regression Models – Institutes of Technology, NFQ Level 8 (continued)

	MODEL 5A			MODEL 5B			MODEL 5C		
	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE
Free Fees									
No				1.000	(base)		1.000	(base)	
Yes				1.046	0.134	0.727	1.036	0.135	0.786
School Type									
DEIS				1.163	0.101	0.082	1.139	0.101	0.139
Fee Paying				0.800	0.105	0.090	0.847	0.113	0.213
Standard				1.000	(base)		1.000	(base)	
Unknown				1.232	0.127	0.043	1.241	0.132	0.042
ISCED									
Computer Science							1.424	0.140	0.000
Construction and Related							0.998	0.130	0.986
Education							0.628	0.298	0.327
Engineering (excl Civil)							1.300	0.176	0.052
Healthcare							0.691	0.072	0.000
Science and Agri and Vet							1.405	0.156	0.002
Services							1.056	0.113	0.611
Social Science, Business, Law and Arts & Humanities							1.000	(base)	
LC Points									
155 to 200							0.160	0.118	0.013
205 to 250							1.632	0.526	0.128
255 to 300							1.699	0.202	0.000
305 to 350							1.000	(base)	
355 to 400							0.585	0.054	0.000
405 to 450							0.437	0.052	0.000
455 to 500							0.345	0.062	0.000
505 to 550							0.269	0.096	0.000
555 to 600							0.438	0.234	0.122
Other							0.599	0.058	0.000
Students		9,134			9,134			9,134	
HE Institutions		14			14			14	
Pseudo R Squared		0.0093			0.0299			0.0572	
Chi Square		72.70***			234.71***			448.93***	

Table 6.17 Logistic Regression Models – Institute Type

	MODEL 6A			MODEL 6B			MODEL 6C		
	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE
Institute Type									
Colleges	0.815	0.066	0.012	0.879	0.072	0.115	0.947	0.088	0.559
Institutes of Technology	2.420	0.072	0.000	2.159	0.070	0.000	1.156	0.050	0.001
Universities	1.000	(base)		1.000	(base)		1.000	(base)	
Age Group									
16-18 yrs				1.045	0.075	0.543	0.879	0.066	0.086
19-20 yrs				1.106	0.079	0.155	0.979	0.072	0.770
21-24 yrs				1.327	0.107	0.000	1.200	0.098	0.025
25-29 yrs				1.000	(base)		1.000	(base)	
30 yrs +				0.898	0.079	0.223	0.945	0.083	0.524
Gender									
Female				1.000	(base)		1.000	(base)	
Male				1.481	0.043	0.000	1.224	0.039	0.000
Nationality									
Irish				1.153	0.091	0.069	1.137	0.090	0.105
Non-Irish				1.000	(base)		1.000	(base)	
Socio-economic Group									
Agricultural Workers				1.097	0.304	0.737	1.115	0.316	0.700
All Others Gainfully Occupied				1.222	0.104	0.019	1.190	0.103	0.045
Employers and Managers				1.016	0.091	0.861	1.081	0.099	0.391
Farmers				0.600	0.069	0.000	0.673	0.079	0.001
Higher Professional				0.864	0.087	0.146	0.957	0.098	0.669
Lower Professional				0.949	0.096	0.606	1.032	0.106	0.760
Manual Skilled				1.124	0.105	0.210	1.120	0.106	0.231
N/A				1.290	0.103	0.001	1.268	0.103	0.004
Non-Manual				1.090	0.103	0.364	1.111	0.107	0.275
Own Account Workers				0.939	0.096	0.537	0.973	0.101	0.788
Semi-Skilled				1.000	(base)		1.000	(base)	
Unskilled				1.173	0.127	0.140	1.165	0.128	0.165
Grant Recipient									
No				1.000	(base)		1.000	(base)	
Yes				1.100	0.034	0.002	0.996	0.032	0.904
Free Fees									
No				1.000	(base)		1.000	(base)	
Yes				0.874	0.039	0.003	0.923	0.043	0.087
School Type									
DEIS				1.154	0.052	0.002	1.031	0.048	0.511
Fee Paying				0.835	0.051	0.004	0.940	0.059	0.322
Standard				1.000	(base)		1.000	(base)	
Unknown				1.246	0.053	0.000	1.136	0.052	0.005

Table 6.17 Logistic Regression Models – Institute Type (continued)

	MODEL 6A			MODEL 6B			MODEL 6C		
	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE	ODDS RATIO	STANDARD ERROR	P VALUE
NFQ Level									
Level 6							1.320	0.079	0.000
Level 7							1.208	0.055	0.000
Level 8							1.000	(base)	
ISCED									
Computer Science							1.244	0.067	0.000
Construction and Related							1.199	0.092	0.018
Education							0.731	0.087	0.009
Engineering (excl Civil)							1.148	0.062	0.010
Healthcare							0.633	0.034	0.000
Science and Agri and Vet							0.992	0.049	0.875
Services							1.133	0.061	0.020
Social Science, Business, Law and Arts & Humanities							1.000	(base)	
LC Points									
155 to 200							1.908	0.205	0.000
205 to 250							1.978	0.149	0.000
255 to 300							1.441	0.090	0.000
305 to 350							1.000	(base)	
355 to 400							0.671	0.039	0.000
405 to 450							0.483	0.032	0.000
455 to 500							0.354	0.028	0.000
505 to 550							0.315	0.029	0.000
555 to 600							0.346	0.041	0.000
Other							0.697	0.037	0.000
Students		41,441			41,441			41,441	
HE Institutions		27			27			27	
Pseudo R Squared		0.0298			0.0433			0.0736	
Chi Square		1021.38***			1484.86***			2522.99***	

6.5 Key Points

- ▶ Prior academic attainment (Leaving Certificate points) is the strongest predictor of non-progression. Those entering with lower points are much more likely to not progress compared to those entering with higher points, even after controlling for the set of student and course/institute characteristics.
- ▶ Gender and NFQ level are also strong predictors of non-progression. Males are more likely to not progress compared to females and NFQ level 6 & 7 students are more likely to not progress compared to NFQ level 8 students, even after controlling for the set of student and course/institute characteristics.
- ▶ Although headline rates of non-progression are generally much higher in institutes of technology than in universities, after controlling for the set of student and course/institute characteristics, particularly prior academic attainment of the student intake (Leaving Certificate points), the odds ratios are quite close across most institutes with the odds of not progressing actually higher in some universities than in some of the institutes of technology.
- ▶ The typical profile of students most likely to not progress includes the following characteristics: relatively low points on entry, male, NFQ level 6 or 7, studying in an institute of technology, studying *Computer Science*, *Construction* or *Engineering*.
- ▶ The typical profile of students least likely to not progress includes the following characteristics: relatively high points on entry, female, NFQ level 8, studying in a university or college, studying *Education* or *Healthcare*.

CHAPTER 7

Conclusion



This HEA report provides a quantitative overview of the non-progression of students between 2014/15 and 2015/16. The findings of this report show that non-progression rates have reduced slightly over the last few years (from 16% in 2010/11, 2011/12 and 2012/13 to 15% in 2013/14 and to 14% in 2015/16). However, while the data have shown that the majority of new entrants (86%) progress to the following academic year, the fact remains that 6,007 students did not progress in their institutions. In line with international attention on how students fare after entry to high education, and as argued extensively in the literature, it is important to analyse the characteristics of students who are not advancing in their studies in order to identify those most 'at-risk' of non-progression. Early intervention in the undergraduate cycle is vital to ensure that students have the academic & social supports and guidance that they need to enhance their motivation, engagement and performance.

Not surprisingly, a student's level of prior educational achievement in their Leaving Certificate plays an important role in shaping later pathways. This research finds that students with higher prior educational attainment in their Leaving Certificate are more likely (than those with lower educational attainment) to progress into the subsequent year. While the overall non-progression rate is 14%, this rises to 40% for students who attained between 205 and 250 points in their Leaving Certificate. Only 5% of students who attained 505 to 550 points and 6% of students who attained 550 to 600 points do not progress to the following year of study. Further evidence of this relationship is demonstrated in the multivariate regression models presented in Chapter 6. These results highlight the importance of academic preparedness prior to admission as well as adequate learning supports on entry to higher education. Recent policy developments have been formulated to address such concerns. In line with the Government's agenda to support a better transition from second level to higher education, the recent launch of the report *Supporting a Better Transition from Second to Higher Education (2015)* outlines the proposal for a new progressive points system which aims to reward students for taking higher level papers and reduce the risk of random selection becoming a feature of college entry. This coincides with moves by higher education institutions towards broader entry, thus preventing students from having to decide, at an early stage, what specialism might suit them later in life. Minister Jan O'Sullivan (2015) contends that 'by allowing students to enter broad-based courses, and to specialise further into their degree, we should reduce the number of people dropping out of college, and further ease the unnecessary pressure on sixth-year students'.

Interesting gender differences also emerged from this research. Females are more likely than males to progress the following year of study, for the majority of NFQ levels across all sectors. Findings from a multivariate regression model (see Chapter 6) supports this finding in that males are 1.2 times more likely (than females) to not progress, controlling for age, nationality, socio-economic group, grant receipt, school type, free fees, Leaving Certificate points, NFQ level, institute type and field of study. This report has shown that non-progression is highest at level 8 in the fields of *Services*, *Computer Science* and *Construction and Related* disciplines. In 2014/15, male students make up the majority of new entrants in *Computer Science* (84%) and *Construction and Related* (77%) courses. Males also account for 55% of *Service* enrolments (compared to 45% of females), in the same academic year.

In terms of age, across all sectors and levels, mature students have a 17% non-progression rate while there is a 14% non-progression rate among traditional students under the age of 23 (down one percentage point from the year previous). In the university sector, the non-progression rate for students over the age of 23 is 15% compared to 9% for those under the age of 23. The same is true in the colleges sector where students over the age of 23 appear to be less likely to progress than traditional students. The opposite appears to be the case in the institute of technology sector across each NFQ level where non-progression rates are higher for students under the age of 23 than students over the age of 23. With regard to nationality, this research shows that across all sectors and NFQ levels, Irish students have a 15% non-progression rate (the same figure as the year previous) in comparison to 14% for non-Irish students (down four percentage points from last year). At level 8 in the colleges sector, Irish students experienced a 14% non-progression rate in 2014/15, compared to 8% for non-Irish students. It is important to bear in mind that the number of non-Irish students is low here. At level 8 in the university sector, Irish students have a non-progression rate of 10% compared to 11% among non-Irish students.

In summary, this report highlights that while the majority of students are successfully transitioning to the following year of study, 14% of students are not, with strong variation across sector and NFQ level. This report recognises the importance of qualitative data to further understand the processes around why students choose to leave their course. Gaining a better understanding of which students are more likely to withdraw is therefore important in order to maximise the use of resources and to better support those students most 'at-risk'.

Future work and use of progression data

- ▶ Successful participation and completion is a priority goal in the National Plan for Equity of Access to Higher Education, 2015 – 2019 (NAP). Goal 1 of the NAP is concerned with mainstreaming equity of access within every faculty and service in a HEI and objective 1.4 is specifically targeted at addressing the issue of non-completion in the under-represented target groups. The Department of Education and Skills High-Level Implementation Group that is overseeing the implementation of the NAP has established a Working Group on Student Success that is chaired by the HEA to progress initiatives that will support HEIs in delivering student success for all students and especially students in the target groups. Over the past 18 months this Group has overseen a detailed scoping study. Listening to, and understanding, the student perspective was core to this work which sought to identify the key issues and interventions that will contribute to further support student success. These include:
 - The use of data to inform faculty and administration so that they can better support students. The National Forum for Teaching and Learning Data Enabled Student Success Project (DESSI) is working with HEIs to assist them in enhancing their use of data to support students.
 - The implementation of a Strategy for Student Success in every HEI that involves a whole-of-institution approach. Accordingly, the System Performance Framework, 2018-2021 has now included a requirement for this Strategy in every HEI. The HEA in conjunction with the National Forum for Teaching and Learning will assist HEIs in kickstarting its development at a Strategy for Student Success Development Seminar.
 - THEA is to commence a longitudinal study of the experience and outcomes of students who commence Level 6 and 7 programmes to identify issues that emerge for these students and that can be addressed by the HEIs.
 - The HEA will facilitate dissemination seminars to assist HEIs in sharing good practice and student success initiatives that are being applied across the higher education system.
- ▶ The evidence shows that progression rates for students undertaking *Computer Science* courses particularly at Levels 6 and 7, although showing some improvements, remains a concern. Funding will continue to be provided for retention initiatives such as Maths enabling courses and pre-Maths courses to universities and institutes of technology, through the Information Technology Investment Fund. Provision for this funding will be outlined in the forthcoming ICT Action Plan 2018-2020. Findings as they emerge from the THEA longitudinal study outlined above will also inform appropriate future interventions.
- ▶ The HEA is commissioning an audit of the procedures and processes in place within higher education institutions to verify the accuracy of student numbers returned at the annual census date for the Student Record System. The audit will seek to focus on the reliability of the HEI's processes in removing students from the record who did not progress in the first academic year. In conjunction with the audit, Higher Education Institutions are required to confirm in their Annual Statement of Governance and Internal Control to the HEA that "the university/institution has satisfied itself as to the integrity and robustness of any data on student numbers provided to the HEA for the purpose of calculating and allocating the core grant". This formal confirmation will be extended in the 2017/18 Statement such that it will explicitly include all student-number data, including data returned to the Student Record System (SRS) and information submitted for Free Fees purposes. This clarification will ensure that data returned to the SRS for the March census will have any student not progressing excluded.
- ▶ The System Performance Framework 2018-2020 sets out in Objective 4, as a high level strategic target, that "Completion rates for students from disadvantaged cohorts will be specifically targeted for improvement" and for Objective 6 to "Improve problematic non-progression rates by 10% (overall baseline of 15% for 2014/15) and "Improve non-progression rates in STEM disciplines by 10%". The evidence produced in this report sets the baseline and continued data for the evaluation of such targets.
- ▶ To date the analysis has been based on full-time students only. It is our intention that future analysis of progression rates will also include part-time students.
- ▶ Improvements are being sought to the coverage and validity of PPSN data to allow tracking of students across institutes. This will allow us to identify if a student leaves one higher education institution and re-enrols in another higher education institution in the same academic year. It is the intention that such students would be considered as progressing.

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Appendices



Appendix A

List of Higher Education Institutions

Table A1 *Higher Education Sector and Institutions involved in Non-Progression Study 2014/15 to 2015/16*

HIGHER EDUCATION SECTOR/INSTITUTION
Universities
University College Dublin
University College Cork
National University of Ireland, Galway
Trinity College Dublin
University of Limerick
Dublin City University
Maynooth University
Institutes of Technology
Dublin Institute of Technology
Cork Institute of Technology
Waterford Institute of Technology
Institute of Technology Carlow
Galway-Mayo Institute of Technology
Limerick Institute of Technology
Institute of Technology Sligo
Athlone Institute of Technology
Institute of Technology Tallaght
Dundalk Institute of Technology
Institute of Technology Blanchardstown
Letterkenny Institute of Technology
Institute of Technology Tralee
Dún Laoghaire Institute of Art, Design and Technology
Colleges
Mary Immaculate College
St. Patrick's College, Drumcondra
National College of Art and Design
St. Angela's College, Sligo
Mater Dei Institute of Education
Royal College of Surgeons in Ireland

Appendix B: ISCED Codes

DISCIPLINE	ISCED CODES INCLUDED IN DISCIPLINE
Education	0110, 0111, 0112, 0113, 0114
Healthcare	0910, 0911, 0912, 0913, 0914, 0915, 0916, 0917, 0920, 0921, 0922, 0923
Science, Agriculture & Veterinary	0510, 0511, 0512, 0520, 0521, 0522, 0530, 0531, 0532, 0533, 0540, 0541, 0542
Social Science, Business, Law, Arts & Humanities	0210, 0211, 0212, 0213, 0214, 0215, 0220, 0221, 0222, 0223, 0230, 0231, 0232, 0310, 0311, 0312, 0313, 0314, 0320, 0321, 0322, 0410, 0411, 0412, 0413, 0414, 0415, 0416, 0417, 0421
Engineering excl Civil	0710, 0711, 0712, 0713, 0714, 0715, 0716, 0720, 0721, 0722, 0723, 0724
Construction and Related	0730, 0731, 0732
Services	1010, 1011, 1012, 1013, 1014, 1015, 1020, 1021, 1022, 1030, 1031, 1032, 1041
Computer Science	0610, 0611, 0612, 0613

Appendix C Details of Non-Progression Rates by Field of Study, Sector and NFQ Level (2014/15 to 2015/16)

Table C1 Number of 'Students who did not progress in the academic year 2015/16' and the Number of 'New Entrants' by Field of Study, Sector and NFQ Level*

SECTOR	LEVEL	EDUCATION	HEALTHCARE	SOCIAL SCIENCE, BUSINESS, LAW AND ARTS & HUMANITIES	SCIENCE AND AGRI AND VET	ENGINEERING (EXCL CIVIL)	CONSTRUCTION AND RELATED	SERVICES	COMPUTER SCIENCE	ALL DISCIPLINES
Institutes of Technology	Level 6	n/a	29 (243)	193 (821)	32 (159)	81 (235)	41 (86)	239 (747)	41 (169)	656 (2,460)
	Level 7	^	95 (599)	380 (1,547)	206 (1,037)	380 (1,284)	121 (376)	307 (1,256)	275 (868)	1,765 (6,971)
	Level 8	^	163 (1,750)	550 (3,708)	143 (817)	93 (479)	95 (537)	146 (838)	211 (943)	1,406 (9,134)
All IoT		^	287 (2,592)	1,123 (6,076)	381 (2,013)	554 (1,998)	257 (999)	692 (2,841)	527 (1,980)	3,827 (18,565)
Universities	Level 8	33 (432)	194 (2,876)	1,227 (11,125)	285 (3,481)	117 (1,372)	21 (218)	5 (77)	117 (1,045)	1,999 (20,626)
Colleges	Level 8	64 (1,148)	43 (326)	74 (776)	n/a	n/a	n/a	n/a	n/a	181 (2,250)
All Level 8		102 (1,642)	400 (4,952)	1,851 (15,609)	428 (4,298)	210 (1,851)	116 (755)	151 (915)	328 (1,988)	3,586 (32,010)
Total		103 (1,646)	524 (5,794)	2,424 (17,977)	666 (5,494)	671 (3,370)	278 (1,217)	697 (2,918)	644 (3,025)	6,007 (41,441)

*Note: The number of students who did not progress in the academic year 2015/16 is provided with the number of new entrants given in brackets.

^ indicates a cell count too low to report.

Appendix D Non-Progression by Gender and Prior Educational Attainment

Table D1 *Non-Progression by Gender and Prior Educational Attainment at Level 6 and 7 in Institutes of Technology*

SECTOR LEVEL	INSTITUTE OF TECHNOLOGY LEVEL 6			INSTITUTE OF TECHNOLOGY LEVEL 7		
POINTS RANGE	% OF MALES IN EACH CATEGORY	% MALE NON-PROGRESSION	% FEMALE NON-PROGRESSION	% OF MALES IN EACH CATEGORY	% MALE NON-PROGRESSION	% FEMALE NON-PROGRESSION
155 to 200	71%	53%	25%	71%	48%	38%
205 to 250	59%	53%	32%	71%	42%	32%
255 to 300	54%	33%	24%	67%	35%	23%
305 to 350	57%	25%	15%	64%	23%	17%
355 to 400	55%	11%	9%	58%	13%	10%
405 to 450	47%	18%	0%	63%	8%	8%
455 to 500	33%	0%	0%	52%	6%	13%
505 to 550	80%	0%	50%	63%	10%	17%
555 to 600	0%	n/a	0%	25%	0%	67%
Other	55%	29%	24%	64%	26%	21%
Total	56%	31%	21%	25%	28%	20%

Table D2 *Non-Progression by Gender and Prior Educational Attainment at Level 8 and All Levels in Institutes of Technology*

SECTOR LEVEL	INSTITUTE OF TECHNOLOGY LEVEL 8			INSTITUTE OF TECHNOLOGY ALL LEVELS		
POINTS RANGE	% OF MALES IN EACH CATEGORY	% MALE NON-PROGRESSION	% FEMALE NON-PROGRESSION	% OF MALES IN EACH CATEGORY	% MALE NON-PROGRESSION	% FEMALE NON-PROGRESSION
155 to 200	19%	7%	2%	62%	47%	22%
205 to 250	81%	32%	44%	69%	44%	33%
255 to 300	66%	36%	26%	64%	35%	24%
305 to 350	56%	25%	17%	59%	24%	17%
355 to 400	49%	17%	11%	52%	15%	10%
405 to 450	48%	11%	9%	51%	11%	9%
455 to 500	50%	9%	8%	50%	8%	8%
505 to 550	37%	9%	4%	39%	9%	7%
555 to 600	36%	22%	0%	34%	21%	5%
Other	49%	17%	12%	56%	23%	17%
Total	51%	19%	12%	57%	24%	16%

Table D3 *Non-Progression by Gender and Prior Educational Attainment at Level 8 in Universities and Colleges*

SECTOR LEVEL		UNIVERSITIES LEVEL 8		COLLEGES LEVEL 8		
POINTS RANGE	% OF MALES IN EACH CATEGORY	MALE % NON-PROGRESSION	FEMALE % NON-PROGRESSION	% OF MALES IN EACH CATEGORY	% MALE NON-PROGRESSION	% FEMALE NON-PROGRESSION
155 to 200	21%	25%	0%	50%	50%	50%
205 to 250	33%	0%	0%	50%	14%	29%
255 to 300	52%	23%	20%	33%	31%	31%
305 to 350	48%	26%	19%	42%	18%	13%
355 to 400	50%	19%	13%	30%	12%	6%
405 to 450	45%	10%	8%	22%	3%	5%
455 to 500	48%	7%	6%	18%	6%	3%
505 to 550	47%	6%	5%	17%	4%	4%
555 to 600	6%	6%	5%	8%	0%	3%
Other	11%	11%	11%	30%	15%	12%
Total	47%	10%	9%	25%	11%	7%

Table D4 *Non-Progression by Gender and Prior Educational Attainment at Level 8 in all Sectors and for all New Entrants*

SECTOR LEVEL		ALL LEVEL 8		ALL NEW ENTRANTS		
POINTS RANGE	% OF MALES	% MALE NON-PROGRESSION	% FEMALE NON-PROGRESSION	% OF MALES	% MALE NON-PROGRESSION	% FEMALE NON-PROGRESSION
Total	47%	13%	10%	50%	17%	11%

Appendix E Details of Non-Progression Rates by Socio-Economic Group (2014/15 to 2015/16)

Table E1 *Number of 'Students who did not progress from the academic year 2014/15 to 2015/16' and the Number of 'New Entrants' by Socio-Economic Group*

SOCIO-ECONOMIC GROUP	% NON-PROGRESSION	NUMBER OF STUDENTS WHO DID NOT PROGRESS 2014/15 TO 2015/16	NEW ENTRANTS
Farmers	8%	150	1,902
Lower Professional	11%	266	2,417
Higher Professional	9%	276	3,018
Employers and Managers	12%	556	4,766
Non-Manual	14%	378	2,799
Semi-Skilled	14%	205	1,476
Unskilled	16%	210	1,305
Own Account Workers	12%	255	2,068
Agricultural Workers	15%	17	115
Manual Skilled	15%	419	2,794
All Others Gainfully Occupied, and Unknown	16%	847	5,402
Total	13%	3579	28,062

* It should be noted that 68% of new entrants responded to the socio-economic group questions in the Equal Access Survey, 2014/15. RCSI are not included

Appendix F Overall Non-Progression Rates by Institution and NFQ Level

Table F1 2014/15 Full-Time Undergraduate New Entrant Non-Progression Rates by Institute of Technology & NFQ Level

INSTITUTE OF TECHNOLOGY	LEVEL 6 NON-PROGRESSION	LEVEL 7 NON-PROGRESSION	LEVEL 8 NON-PROGRESSION	ALL LEVELS NON-PROGRESSION
Athlone IT	26%	27%	17%	23%
IT Blanchardstown	47%	29%	22%	27%
Cork IT	25%	15%	12%	14%
IT Carlow	29%	21%	11%	17%
Dundalk IT	32%	27%	14%	22%
Dun Laoghaire Institute of Art, Design and Technology	<i>n/a</i>	31%	12%	16%
Dublin Institute of Technology	16%	23%	14%	16%
Galway-Mayo IT	24%	30%	20%	25%
Limerick IT	30%	28%	17%	22%
Letterkenny IT	20%	26%	16%	22%
IT Sligo	38%	27%	14%	23%
IT Tallaght	36%	27%	22%	26%
IT Tralee	37%	30%	11%	23%
Waterford IT	36%	28%	18%	23%
All Institutes of Technology	27%	25%	15%	21%
National Average	27%	25%	11%	14%

Table F2 2014/15 Full-Time Undergraduate New Entrant Non-Progression Rates by University & NFQ Level

UNIVERSITY	LEVEL 8 NON-PROGRESSION
Dublin City University	9%
University College Dublin	11%
University College Cork	7%
National University of Ireland, Galway	11%
University of Limerick	11%
Maynooth University	11%
Trinity College Dublin	9%
All Universities	10%
National Average	11%

Table F3 2014/15 Full-Time Undergraduate New Entrant Non-Progression Rates by Colleges & NFQ Level

COLLEGES	LEVEL 8 NON-PROGRESSION
St. Patrick's College Drumcondra	5%
Mary Immaculate College Limerick	6%
Mater Dei Institute of Education	17%
National College of Art and Design	9%
St. Angela's College, Sligo	24%
Royal College of Surgeons	5%
All Colleges	8%
National Average	11%

Appendix G Overall Non-Progression Rates by Institution and NFQ Level and Field of Study

Table G1 2014/15 Institute of Technology Level 6 Non-Progression Rates by Field of Study

FIELD OF STUDY	AIT	ITB	CIT	ITC	DKIT	DIT	GMIT	LIT	LYIT	ITS	ITTA	ITTRA	WIT	ALL INSTITUTES
Healthcare	10%	n/a	n/a	12%	n/a	4%	n/a	n/a	18%	n/a	36%	n/a	n/a	12%
Social Science, Business, Law, Arts & Humanities	26%	64%	7%	41%	n/a	13%	n/a	31%	13%	35%	n/a	n/a	31%	24%
Science, Agriculture and Veterinary	42%	n/a	n/a	9%	0%	n/a	n/a	30%	15%	33%	19%	50%	n/a	20%
Engineering (excl Civil)	36%	71%	22%	n/a	n/a	17%	n/a	27%	n/a	n/a	n/a	n/a	38%	34%
Construction and Related	41%	n/a	n/a	83%	n/a	42%	18%	35%	n/a	80%	47%	n/a	67%	48%
Services	32%	n/a	28%	n/a	51%	30%	26%	28%	22%	n/a	n/a	41%	35%	32%
Computer Science	42%	19%	n/a	22%	n/a	n/a	20%	29%	24%	n/a	39%	21%	n/a	24%
All Fields of Study	26%	47%	25%	29%	32%	16%	24%	30%	20%	38%	20%	37%	36%	27%

AIT	Athlone Institute of Technology	WIT	Waterford Institute of Technology
ITB	Institute of Technology Blanchardstown	DCU	Dublin City University
CIT	Cork Institute of Technology	UCD	University College Dublin
ITC	Institute of Technology Carlow	UCC	University College Cork
DKIT	Dundalk Institute of Technology	NUIG	National University of Ireland, Galway
IADT	Institute of Art, Design and Technology	UL	University of Limerick
DIT	Dublin Institute of Technology	MU	Maynooth University
GMIT	Galway-Mayo Institute of Technology	TCD	Trinity College Dublin
LIT	Limerick Institute of Technology	NCAD	National College of Art and Design
LYIT	Letterkenny Institute of Technology	MDEI	Mater Dei Institute of Education
ITS	Institute of Technology Sligo	MIC	Mary Immaculate College
ITTA	Institute of Technology Tallaght	SPD	St. Patrick's College, Drumcondra
ITTR	Institute of Technology Tralee	St. Angela's	St. Angela's College, Sligo
		RCSI	Royal College of Surgeons Ireland

Table G2 2014/15 Institute of Technology Level 7 Non-Progression Rates by Field of Study

FIELD OF STUDY	AIT	ITB	CIT	ITC	DKIT	IADT	DIT	GMIT	LIT	LYIT	ITS	ITTA	ITTRA	WIT	ALL INSTITUTES
Education	n/a	n/a	25%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	25%
Healthcare	0%	14%	8%	15%	16%	n/a	n/a	n/a	n/a	18%	13%	n/a	27%	20%	16%
Social Science, Business, Law and Arts & Humanities	26%	31%	16%	29%	26%	30%	20%	23%	22%	29%	18%	30%	35%	21%	25%
Science and Agri and Vet	32%	40%	7%	14%	26%	n/a	20%	15%	30%	19%	30%	23%	29%	16%	20%
Engineering (excl Civil)	28%	46%	26%	16%	23%	n/a	24%	42%	28%	25%	31%	29%	40%	47%	30%
Construction and Related	25%	n/a	18%	45%	30%	n/a	21%	43%	19%	43%	27%	n/a	33%	63%	32%
Services	29%	23%	13%	17%	22%	n/a	24%	37%	28%	10%	24%	26%	29%	28%	24%
Computer Science	35%	16%	19%	23%	39%	38%	n/a	28%	44%	25%	33%	29%	37%	44%	32%
All Fields of Study	27%	29%	15%	21%	27%	31%	23%	30%	28%	26%	27%	27%	30%	28%	25%

Table G3 2014/15 Institute of Technology Level 8 Non-Progression Rates by Field of Study

FIELD OF STUDY	AIT	ITB	CIT	ITC	DKIT	IADT	DIT	GMIT	LIT	LYIT	ITS	ITTA	ITTRA	WIT	ALL INSTITUTES
Education	n/a	n/a	n/a	n/a	n/a	n/a	9%	6%	n/a	n/a	n/a	n/a	n/a	n/a	8%
Healthcare	7%	11%	11%	7%	10%	n/a	7%	7%	9%	2%	13%	14%	9%	12%	9%
Social Science, Business, Law, Arts & Humanities	26%	28%	11%	12%	9%	12%	14%	21%	14%	29%	14%	21%	11%	17%	15%
Science, Agriculture and Veterinary	21%	25%	14%	21%	n/a	n/a	20%	17%	23%	0%	13%	16%	15%	16%	18%
Engineering (excl Civil)	10%	48%	8%	10%	22%	n/a	13%	27%	n/a	n/a	n/a	27%	n/a	43%	19%
Construction and Related	n/a	n/a	15%	14%	7%	n/a	19%	17%	22%	30%	22%	n/a	n/a	12%	18%
Services	12%	24%	16%	10%	n/a	n/a	14%	29%	10%	24%	19%	41%	10%	26%	17%
Computer Science	32%	18%	15%	12%	34%	9%	14%	32%	32%	16%	n/a	26%	9%	38%	22%
All Fields of Study	17%	22%	12%	11%	14%	12%	14%	20%	17%	16%	14%	22%	11%	18%	15%

Table G4 2014/15 Institute of Technology All Levels Non-Progression Rates by Field of Study

FIELD OF STUDY	AIT	ITB	CIT	ITC	DKIT	IADT	DIT	GMIT	LIT	LYIT	ITS	ITTA	ITTRA	WIT	ALL INSTITUTES
Education	n/a	n/a	25%	n/a	n/a	n/a	9%	6%	n/a	n/a	n/a	n/a	n/a	n/a	9%
Healthcare	7%	12%	9%	9%	10%	n/a	7%	7%	9%	11%	13%	14%	19%	15%	11%
Social Science, Business, Law, Arts & Humanities	26%	31%	12%	23%	17%	15%	14%	22%	19%	29%	21%	24%	18%	19%	18%
Science, Agriculture and Veterinary	30%	33%	10%	14%	18%	n/a	20%	16%	28%	19%	22%	20%	26%	16%	19%
Engineering (excl Civil)	28%	50%	21%	13%	23%	n/a	20%	37%	28%	25%	31%	34%	40%	42%	28%
Construction and Related	36%	n/a	16%	41%	25%	n/a	21%	26%	24%	41%	29%	n/a	33%	35%	26%
Services	27%	23%	17%	13%	34%	n/a	20%	33%	20%	22%	24%	35%	25%	30%	24%
Computer Science	34%	18%	17%	17%	36%	19%	14%	28%	33%	23%	33%	27%	25%	42%	27%
All Fields of Study	23%	27%	14%	17%	22%	16%	16%	25%	22%	22%	23%	26%	23%	23%	21%

Table G5 2014/15 University Level 8 Non-Progression Rates by Field of Study

FIELD OF STUDY	DCU	UCD	UCC	NUIG	UL	MU	TCD	ALL UNIVERSITIES
Education	9%	n/a	4%	11%	9%	4%	0%	8%
Healthcare	6%	5%	7%	5%	3%	15%	9%	7%
Social Science, Business, Law, Arts & Humanities	9%	14%	9%	13%	9%	11%	10%	11%
Science, Agriculture and Veterinary	10%	7%	4%	13%	11%	8%	7%	8%
Engineering (excl Civil)	12%	7%	3%	8%	12%	11%	5%	9%
Construction and Related	n/a	10%	10%	10%	9%	n/a	n/a	10%
Services	n/a	n/a	n/a	17%	5%	n/a	n/a	6%
Computer Science	11%	12%	5%	6%	20%	12%	10%	11%
All Fields of Study	9%	11%	7%	11%	11%	11%	9%	10%

Table G6 2014/15 Colleges Level 8 Non-Progression Rates by Field of Study

FIELD OF STUDY	NCAD	MDEI	MIC	SPD	ST. ANGELA'S	RCSI	ALL COLLEGES
Education	9%	11%	3%	6%	12%	n/a	6%
Healthcare	n/a	n/a	n/a	n/a	42%	5%	13%
Social Science, Business, Law, Arts & Humanities	9%	47%	12%	4%	n/a	n/a	10%
All Fields of Study	9%	17%	6%	5%	24%	5%	8%



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