

A STUDY OF PROGRESSION IN IRISH HIGHER EDUCATION

2012/13 TO 2013/14



A STUDY OF PROGRESSION IN IRISH HIGHER EDUCATION

2012/13 TO 2013/14

A report by the Higher Education Authority

January 2016

Dr Miriam Liston, Ms Denise Frawley and Dr Vivienne Patterson

Acknowledgements

The Authority wishes to thank higher education institution staff involved in returning student record data to the Higher Education Authority

ISBN 1-905135-46-7

Foreword

Ensuring the successful participation of an increasing diversity of students in Irish higher education institutions is a key policy-priority for the Higher Education Authority and for the Government of Ireland. The progression of students into, and through, higher education is supported at national level through a range of initiatives, including the on-going reform of the transition from second-level to higher education, the *National Plan for Equity of Access to Higher Education 2015–2019*, and the *National Forum for the Enhancement of Teaching and Learning*. As this report highlights, the adoption of a whole-of-education approach to policy-making in this area is crucially important given the strong correlation between students' prior academic attainment and their success in higher education. Further to the establishment of Quality and Qualifications Ireland in 2012 and SOLAS in 2013, and with the development of a new national skills strategy in train, we are well-positioned to ensure that all students reach their full potential as they progress through Ireland's education system.

As this report—the fourth in the series on progression in Irish higher education—shows, our higher education institutions are already adept in supporting students' successful participation. That the overall proportion of new entrants in 2012/13 who did not progress one year later was 16% compares favourably internationally—and that this proportion has remained stable since 2007/08—is testament to the resilience of a sector which has accommodated rising student-numbers within a challenging fiscal climate. We now need to build upon this achievement to support all those who enter higher education to achieve success.

In the age of 'big data' the scope for the development of the evidence-base for policy-making is almost boundless. The HEA's *Data Development and Knowledge Management Strategy for 2015–2018* sets out how we are responding to emerging developments and challenges in this area to establish data-gathering mechanisms which are fit-for-purpose for the twenty-first century. Drawing on the data collected through the student record system, this report provides an analysis of the progression of full-time students in the Irish higher education system between 2012/13 and 2013/14, providing a solid basis for institutional strategic planning and for the exchange of good practice in this multifaceted area. Enriching our understanding of the challenges we face, the report will inform our strategic dialogue with institutions and will ultimately help to ensure that all our students benefit from an excellent learning-experience.



Tom Boland
Chief Executive
Higher Education Authority

Contents

List of Tables	3
List of Figures	4
List of Appendix Tables	4
<i>Executive Summary</i>	5
Chapter 2 Non-Progression of 2012/13 Full-Time Undergraduate New Entrants	6
Chapter 3 Non-Progression Rates by Field of Study	6
Chapter 4 Non-Progression Rates by Student Characteristics	7
Chapter 5 Trends in Non-Progression Rates	7
<i>Chapter 1 Introduction</i>	8
1.1 Introduction	9
1.2 Defining Non-Progression	10
1.3 Factors influencing Non-Progression and Retention	10
1.4 Differences in Student Intake across Sectors in Ireland	12
1.5 Data Sources and Methodology	14
1.6 Categorisation of Students	14
1.7 Limitations	15
<i>Chapter 2 Non-Progression of 2012/13 Full-Time Undergraduate New Entrants</i>	16
2.1 Introduction	17
2.2 Non-Progression of New Entrants by Sector and NFQ Level	17
2.3 Categorisation of Students in the Academic Year 2013/14	20
2.4 Key Points	21
<i>Chapter 3 Non-Progression Rates by Field of Study</i>	22
3.1 Introduction	23
3.2 Non-Progression among 2012/13 Undergraduate New Entrants by Field of Study across all Sectors and NFQ Levels	23
3.3 Non-Progression among 2012/13 Undergraduate New Entrants by Field of Study, NFQ Level and Institute Type	24
3.4 Profession-Oriented Courses	25
3.5 Key Points	26
<i>Chapter 4 Non-progression Rates by Student Characteristics</i>	28
4.1 Introduction	29
4.2 Non-Progression and Gender	29
4.3 Non-Progression and Age	32
4.4 Non-Progression and Nationality	33
4.5 Non-Progression and Socio-Economic Group	34
4.6 Key Points	35

<i>Chapter 5 Trends in Non-Progression Rates</i>	36
5.1 Introduction	37
5.2 Trends in Non-Progression Rates by Sector and NFQ Level from 2007/08 to 2012/13	37
5.3 Trends in Non-Progression Rates by Field of Study, Sector and NFQ Level from 2007/08 to 2012/13	37
5.4 Key Points	39
<i>Chapter 6 Conclusion</i>	40
6.1 Introduction	41
6.2 The Importance of Prior Educational Achievement	41
6.3 Mature Students and Nationality	42
6.4 Student Intake and Diversity	42
6.5 Summary	43
6.6 Future Research Directions	44
<i>Bibliography</i>	46
<i>Appendices</i>	50
Appendix A List of Higher Education Institutions	51
Appendix B ISCED Codes	52
Appendix C Details of Non-Progression Rates by Field of Study, Sector and NFQ Level (2012/13 to 2013/14)	52
Appendix D Non-Progression by Gender and Prior Educational Attainment	53
Appendix E Details of Non-Progression Rates by Socio-Economic Group (2012/13 to 2013/14)	55
Appendix F Overall Non-Progression Rates by Institution and NFQ Level	55
Appendix G Overall Non-Progression Rates by Institution and NFQ Level and Field of Study	56
<i>List of Tables</i>	
Table 1.1 CAO Net Acceptances by 2014 LC Results for all Levels: HEI Types and Points Band	12
Table 1.2 CAO Net Acceptances by 2014 LC Results for Level 8: HEI Types and Numbers of HL Subjects Presented	13
Table 2.1 Non-Progression Rates by Sector and NFQ Level 2012/13 v's 2011/12	17
Table 2.2 Most Common Points Attained by Sector and NFQ Level 2012/13 v's 2011/12	18
Table 2.3 Non-Progression Rates by Prior Educational Attainment	19
Table 2.4 Breakdown of Students on March 1 st 2013/14	20
Table 2.5 Percentage of New Entrants by Sector in 2012/13 Classified as Repeat in 2013/14	20
Table 2.6 Breakdown of Repeat Students by NFQ Level and Sector (2013/14)	21
Table 3.1 Non-Progression Rates by Field of Study and NFQ Level in Institutes of Technology	24
Table 3.2 Non-Progression Rates by Field of Study and NFQ Level in Universities and Colleges	24
Table 3.3 Non-Progression Rates by Field of Study for Level 8 in all Sectors	25
Table 4.1 Re-Categorisation of Prior Educational Attainment	31
Table 4.2 Breakdown of Mature New Entrants by Sector 2012/13	32
Table 5.1 Trends in Non-Progression Rates by Sector and NFQ Level from 2007/08 to 2012/13	37
Table 5.2 Trends in Non-Progression Rates by Field of Study for Level 8 across All Sectors	38
Table 5.3 Trends in Non-Progression Rates by Field of Study for Level 8 in Institutes of Technology from 2007/08 to 2012/13	38
Table 5.4 Trends in Non-progression Rates by Field of Study for Level 8 in Universities from 2007/08 to 2012/13	39

List of Figures

Figure 2.1	Non-Progression Rates by Prior Educational Attainment and NFQ Level	19
Figure 3.1	Non-Progression Rates by Field of Study 2011/12 v/s 2012/13	23
Figure 3.2	Non-Progression Rates in Profession-Oriented Courses	26
Figure 4.1	Gender Balance of New Entrants by Sector and NFQ Level	29
Figure 4.2	Non-Progression by Gender, Sector and NFQ Level	29
Figure 4.3	Non-Progression by Gender at Level 8 in Institutes of Technology	30
Figure 4.4	Non-Progression by Gender at Level 8 in Universities	31
Figure 4.5	Non-Progression by Gender at Level 8 in Colleges	31
Figure 4.6	Non-Progression by Age Category	32
Figure 4.7	Non-Progression Rates by Nationality	33
Figure 4.8	Non-Progression Rates by Socio-Economic Group	34
Figure 4.9	A Comparison of Non-Progression Rates by Socio-Economic Groups 2011/12 v/s 2012/13	35

List of Appendix Tables

Table A1	Higher Education Sector and Institutions involved in the Non-Progression Study 2012/13 to 2013/14	51
Table C1	Number 'Students who did not progress in the academic year 2013/14' and the Number of 'New Entrants' by Field of Study, Sector and NFQ Level	52
Table D1	Non-Progression by Gender and Prior Educational Attainment at Level 6 and 7 in Institutes of Technology	53
Table D2	Non-Progression by Gender and Prior Educational Attainment at Level 8 and All Levels in Institutes of Technology	53
Table D3	Non-Progression by Gender and Prior Educational Attainment at Level 8 in Universities and Colleges	54
Table D4	Non-Progression by Gender and Prior Educational Attainment at Level 8 in all Sectors and for all New Entrants	54
Table E1	Number 'Students who did not progress from the academic year 2012/13 to 2013/14' and the Number of 'New Entrants' by Socio-Economic Group	55
Table F1	2012/13 Full-Time Undergraduate New Entrant Non-Progression Rates by Institute of Technology & NFQ Level	55
Table F2	2012/13 Full-Time Undergraduate New Entrant Non-Progression Rates by University & NFQ Level	56
Table F3	2012/13 Full-Time Undergraduate New Entrant Non-Progression Rates by Colleges & NFQ Level	56
Table G1	2012/13 Institute of Technology Level 6 Non-Progression Rates by Field of Study	56
Table G2	2012/13 Institute of Technology Level 7 Non-Progression Rates by Field of Study	57
Table G3	2012/13 Institute of Technology Level 8 Non-Progression Rates by Field of Study	57
Table G4	2012/13 Institute of Technology All Levels Non-Progression Rates by Field of Study	58
Table G5	2012/13 University Level 8 Non-Progression Rates by Field of Study	58
Table G6	2012/13 Colleges Level 8 Non-Progression Rates by Field of Study	59

Executive Summary

The successful progression and retention of students in higher education is at the forefront of national policy frameworks. The *National Strategy for Higher Education to 2030* and the *System Performance Framework 2014-2016* emphasise fostering the coherence, and maximising the performance, of the higher education system – as a system. The HEA has a key role in ensuring transparency of performance in our higher education institutions. The development of a *Strategy for Data Development and Knowledge Management in Irish Higher Education, 2015-2018* proposes a way to strengthen accountability and ensure that policy developments in higher education continue to be underpinned by appropriate data sets and informed by structured, evidence-based decision making. The collection of student records and the detailed analysis of the progression of our new entrant cohort, on an annual basis, is one such important data set.

The concept of ‘successful participation’ is a fundamental premise of Ireland’s National Framework of Qualifications (NFQ), which aims to ensure that ‘the learner [is] able to enter and successfully participate in a programme, or series of programmes, leading to an award, or series of awards, in pursuit of their learning objectives’. Ensuring that all students in higher education participate successfully is a core aim of the *National Forum for the Enhancement of Teaching and Learning*, which has, since its inception in 2012, focused its activities on the ‘teaching for transitions’ enhancement themes. Since the launch of the *Irish Survey for Student Engagement* (ISSE) in 2013, it provides, on an annual basis significant data on first and final year students’ views of their higher education experience and will further enhance the evidence base for analysing the student experience. In addition a new *National Plan for the Equity of Access to Higher Education, 2015-2019* focuses on achieving equity of educational opportunity for all. This incorporates the participation and progression of students with a disability, students from target socio-economic groups and mature students.

In line with the overall mission of higher education in Ireland, and in the context of volatility in the labour market, there has been a steady increase in student enrolments over recent decades, with an increase of 14% over the last five years. Furthermore, the number of full-time undergraduate new entrants to higher education now exceeds 41,400 – a figure that is 7% higher than five years ago, thus reflecting an increasing demand for higher education in Ireland. The higher education graduate is the product of the entire higher education system and the HEA is committed to producing high quality graduates by ensuring a positive student experience and supporting their transition through higher education.

The context of 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. This 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.

This quantitative study reports the findings of an analysis of a full-time first year undergraduate cohort of almost 40,000 new entrants from March 1st 2013 to March 1st 2014 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 students’ characteristics, such as gender, age, nationality and socio-economic background have an impact on non-progression. This report also examines differences between the student cohort entering the institute of technology sector and the university and colleges sectors.

This study provides a purely statistical analysis. It does not present 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 students.

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

CHAPTER 2

Non-Progression of 2012/13 Full-Time Undergraduate New Entrants

- The proportion of new entrants in 2012/13 who do not progress to the following year of study is 16% across all sectors and NFQ levels.
- The rates of non-progression in 2012/13 varied within and between sectors ranging from 26% and 28% at levels 6 and 7 to 17%, 11% and 6% at level 8 in universities, institutes of technology and colleges respectively.
- A strong relationship exists between prior educational attainment based on Leaving Certificate points and non-progression rates. This is true for all sectors and NFQ levels. Students with higher prior educational attainment are more likely to progress to the following year than those with lower educational attainment.

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 29% while *Education* disciplines have the lowest rate at 5%.
- Within NFQ level and sector, *Construction and Related* have the highest rate of non-progression in the university sector at level 8. Within the institute of technology sector at level 6 and 7, *Construction and Related* also has the highest non-progression rate, while *Computer Science* presents the highest non-progression rate at level 8.



CHAPTER 4

Non-Progression Rates by Student Characteristics

- Females are more likely to progress to the following year in all sectors – this is true at all NFQ levels and all levels of prior educational attainment.
- In the institute of technology sector at level 6 and level 7, mature students are more likely to progress to the following year than a new entrant who is under the age of 23. However, at level 8 in the university sector, mature students are more likely not to progress to the following year in comparison with students under the age of 23.
- At level 8 in the institutes of technology sector, a relationship between nationality and non-progression does exist whereby Irish students are more likely to progress to the following year than non-Irish students. In the university and college sectors, nationality does not have an impact on non-progression rates.
- In relation to socio-economic group (SEG), statistics reveal that a student's non-progression rate is linked to their socio-economic group. The lowest level of non-progression is found among *Farmers* and *Higher Professionals* at 10%. The *Others Gainfully Occupied and Unknown* group had the highest non-progression rate at 17%.

CHAPTER 5

Trends in Non-Progression Rates

- The overall new entrant non-progression rate was 15% in 2007/08 and has remained constant at 16% from 2010/11 to 2012/13. The number of new entrants, in addition to the number of students who did not progress to the following year, increased from 2007/08 to 2012/13.
- Focusing on fields of study at level 8 across all sectors, the rates of non-progression across *All Fields of Study* have remained relatively consistent at 11% in 2007/08 and 12% in 2012/13.
- At level 8 in the university sector, the *Construction and Related* field of study had a 5% non-progression rate in 2007/08 compared to a 16% non-progression rate in 2012/13. In this instance, the number of new entrants to the field in 2007/08 was more than that in 2012/13, while the number of students who did not progress more than doubled over that same period.

The following report is the fourth in a series of progression reports and represents a full study of progression in HEA funded Irish higher education institutions from 2012/13–2013/14. Future research direction, as outlined in the conclusion, will include a comprehensive study of completion in higher education at institute, sector, discipline and NFQ level.

CHAPTER 1

Introduction



1.1 Introduction

In line with the overall mission of higher education in Ireland¹, there has been a steady increase in student enrolments over recent decades, with over 202,000 full-time and part-time students enrolled in Higher Education Authority (HEA) funded institutions in 2012/13. This represents an increase of 14% over the last five years. Furthermore, the number of full-time new entrants to undergraduate higher education now exceeds 41,400 – a figure that is 7% higher than five years ago, thus reflecting an increasing demand for higher education in Ireland. The expansion of opportunities for higher education in Ireland is further reflected in the attainment levels of young adults (aged 25-34 years), 49% of whom have now acquired a higher education qualification², which is well above the OCED average of 39%.

Despite these improvements, non-progression rates continue to give cause for concern, particularly for students studying certain disciplines and at certain levels of award. It has been widely argued that in addition to increasing enrolment numbers, higher education must also be concerned with the success of these students. Internationally, there has been a notable shift towards analysing how students fare after entry into higher education. Likewise, in Ireland, there has been an important policy shift in highlighting the negative consequences of non-progression, not just on a societal level, but also for the students themselves. 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 implications³. Moreover, it states that:

If Ireland is to achieve its ambitions for recovery and development within an innovation-driven economy, it is essential to create and enhance human capital by expanding participation in higher education. The scale of the projected widening and growth in participation over the period of this strategy demands that Ireland's higher education system become much more flexible in provision in both time and place, and that it facilitates transfer and progression through all levels of the system⁴.

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. While this report is primarily concerned with the progression of students between first and second year, the 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 for a 'knowledge economy'⁵.

International research⁶ emphasises 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, there have been two national plans for enhancing equity of access to higher education, developed by the HEA⁷. The HEA is currently co-ordinating on the development of a new *National Plan for Equality of Access to Higher Education, 2015-2019*, which aims to further 'promote access for disadvantaged groups and to put in place coherent pathways from second-level education, from further education and other non-traditional entry routes'⁸. Importantly, in these plans, the concept of 'access' is understood to encompass not only entry to higher education, but also retention and successful completion⁹.

1 Department of Education and Skills (DES), *National Strategy for Higher Education to 2030: Report of the Strategy Group* (Dublin: Government Publications Office, 2011).

2 DES, *Education at a Glance 2014: A Country Profile for Ireland* (Dublin: DES, 2014). Available at <https://www.education.ie/en/Publications/Statistics/International-Statistical-Reports/Education-at-a-Glance-OECD-Indicators-2014-Briefing-Note.pdf>.

3 DES, *National Strategy*, 56.

4 *Ibid.*, 10, 11.

5 Higher Education Authority (HEA), *A Study of Progression in Irish Higher Education* (Dublin: HEA, 2010). Available at: http://www.heai.ie/sites/default/files/study_of_progression_in_irish_higher_education_2010.pdf.

6 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.

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

8 HEA, *Consultation Paper: Towards the development of a new national plan for equality of access to higher education* (Dublin: HEA, 2014), 5.

9 HEA, *National Plan for Equity of Access to Higher Education 2008-2013* (Dublin: HEA, 2008).

1.2 Defining Non-Progression

What is non-progression and retention?

Student progression and retention are terms that are used interchangeably in the literature and refer to the extent to which learners remain within a higher education institution and complete their programme of study in a pre-determined period of time¹⁰. A wide range of terms are used both in Ireland and internationally to describe retention. Some emphasise the student dimension¹¹ (e.g. 'persistence', 'withdrawal', 'drop-out' and student 'success'), while others focus on the place (e.g. those retained in a particular institution) or the system (e.g. graduation rates)¹². More recently there has been evidence of a move towards a more nuanced and holistic understanding of non-progression, which involves shifting the focus, and thus responsibility, from the student to the wider institution or government. Student non-progression has been the focus of much research for many years, particularly in a US context. However, the findings have had limited value due to definitional issues around what non-progression actually means. Terms such as attrition, withdrawal, non-persistence, non-completion and drop-out have been used in different contexts. Tinto¹³ (1975) argues that researchers may 'lump together, under the rubric of dropout, forms of behaviour that are very different in character... because of the failure to make such distinctions, past research has often produced findings contradictory in character and/or misleading in implication'. As highlighted in a previous HEA report on non-progression¹⁴, internationally comparable measures of student progression are difficult to develop due to the variety of systems in place and the variety of definitions used across countries. As a result of definitional issues and given how different countries arrive at their statistics, it is clear that they do not compare like with like¹⁵. Moreover, internationally comparable measures of student progression and completion in higher education are difficult to develop because of the variety of systems of entry and access to higher education that exist between countries. Therefore, while non-progression rates for students in higher education are of widespread interest, they need to be carefully defined and interpreted.

This progression report, using Irish data focusing on the transition from first year to the following academic year (March 2013 to March 2014), finds that on average, 16% of students did not progress from first to second year. UK data (in looking at the same time frame and the transition from first to second year) estimate that approximately 7% of all new entrants did not progress¹⁶. Caution must be shown, however, when comparing Ireland and the UK, due to the huge diversity of the student intake in the institute of technology (IoT) sector in Ireland. Moreover, UK statistics show that almost 12% of mature entrants (aged 21 and over) did not continue after their first year. Using a slightly higher age bracket for mature students (those aged 23 and over), Irish data shows that 17% of mature students did not progress to their second year.

1.3 Factors influencing Non-Progression and Retention

As argued widely in the literature, the factors contributing to non-completion are varied and complex to disentangle. For example, individual factors (such as age, gender, family background, living arrangements, finances and personality) have, for a long time, been used to explain the differences between students who stay in higher education and those who do not¹⁷. At the institutional level, there has been much focus on the type of institution¹⁸, size¹⁹ and institution

10 Robert Jones, *Student retention and success: A synthesis of research* (UK: Evidence Net, 2008). Available at https://www.heacademy.ac.uk/sites/default/files/wp_retention_synthesis_for_pdf_updated_090310_0.pdf.

11 Gérard Lassibille and Lucía Gomez.

12 Liz Thomas, "Student retention in higher education: the role of institutional habitus", *Journal of Education Policy* 17, no. 4 (2002): 423-442.

13 Vincent Tinto, "Dropout from higher education: A theoretical synthesis of recent research", *Review of Educational Research* 45, no. 1 (1975): 89-125.

14 HEA, *A Study of Progression*.

15 European Lifelong Learning Project 2008-10, *Access and retention: Experiences of Non-Traditional Learners in Higher Education* (Funded by the EU Commission on Lifelong Learning Programme Project, 2011). Available at http://www.dsw.edu.pl/fileadmin/www-ranlhe/files/Literature_Review_upd.pdf.

16 For more information, see: <https://www.hesa.ac.uk/pis/summary1314>.

17 Eemer Eivers, Rita Flanagan & Mark Morgan. *Non-completion in institutes of technology: An investigation of preparation, attitudes and behaviours among first year students* (Dublin: Education Research Centre, 2002).

18 For example, see Ernest T. Pascarella & Patrick T. Terenzini, *How college affects students* (San Francisco: Jossey-Bass, 1991).

19 For example, Feldman and Newcomb (1969) found that large institutions are less likely to be regarded as friendly. See Kenneth A. Feldman & Theodore M. Newcomb, *The impact of college on students* (San Francisco: Jossey-Bass, 1969).

selectivity²⁰. More recently, however, there has been a move towards a more holistic and process-based approach to non-progression, that takes into account the interplay of these individual, societal and institutional factors. Much evidence shows that drop-out rates peak in first year, while the withdrawal risks decline steadily as students progress through their courses. For example, Porter (1990)²¹ and Smith and Naylor (2001)²² found that in the US and the UK, more than half of student attrition occurs in the first year of higher education.

Two dominant theories stemming from the research on non-progression are concerned with social integration and academic preparedness. Much of the early literature on retention and integration stems from the work of Tinto (1975, 1987)²³ in the US. Tinto's (1975) Student Integration Model highlights the importance of positive social interactions for students, in order to increase their levels of institutional commitment. According to Tinto (1993)²⁴ 'it is the interplay between the individual's commitment to the goal of college completion and his commitment to the institution that determines whether or not the individual decides to drop out.'

Academic preparedness is another widely acknowledged factor for why some students are better suited to higher education than others. Factors such as lack of information on course content often leads to students making ill-informed decisions on higher education²⁵. Many students entering higher education directly from school may not have developed the component skills to cope with the often unfamiliar academic demands of higher education²⁶. The quality of a student's academic performance in second-level is positively related to achievement in higher education²⁷ and the less well-prepared students are more likely to drop out²⁸. In the UK, Johnes and Taylor (1990)²⁹ found that students with higher A-level performance were less likely to withdraw from higher education. Likewise, research in Ireland shows a significant relationship between points required for admission to courses (based on state examination results) and course completion at undergraduate level³⁰. Recent longitudinal qualitative work undertaken by Crowley et al. (2012)³¹ highlights the importance of institutions providing adequate supports that are specifically tailored to meet the needs of students at-risk of non-progression, as a result of academic disengagement.

The *National Forum for the Enhancement of Teaching and Learning in Higher Education*³² has funded a series of focused research projects focusing on transitions to higher education, student completion and retention, open education resources and open access, recognition of prior learning and research on higher education teaching and learning in Ireland. Findings from the qualitative research on student completion and non-retention (2015)³³ identified five core themes which are most significant in terms of student non-completion. These include course, personal, financial,

20 Tinto (1975) argues that the perceived social status of an institution is an important factor for retaining students. See Vincent Tinto, *Dropout from higher education*.

21 Oscar Porter, *Undergraduate completion and persistence at four-year colleges and universities: Detailed Findings* (Washington, DC: National Institute of Independent Colleges and Universities, 1990).

22 Jeremy P. Smith, & Robin Naylor, "Dropping out of university: A statistical analysis of the probability of withdrawal for UK university students", *Journal of the Royal Statistical Society: Series A (Statistics in Society)* 164, no. 2 (2001): 389-405.

23 See Vincent Tinto, 'Dropout from higher education' and Vincent Tinto, *Leaving College* (Chicago, IL: University of Chicago Press, 1987).

24 Vincent Tinto, *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.), (Chicago: University of Chicago Press, 1993), 96.

25 *Ibid.*

26 Una Crowley & Catherine Mahon, "Exploring Spaces for Learning: Using Narrative Mediation Path to Improve the Academic Performance of Underachieving Undergraduate Students", in *Proceedings of the IADIS International Conference on Cognition and Exploratory Learning in Digital Age* (Spain: IADIS Press, 2012), 278-292.

27 Keith Chapman, "Entry qualifications, degree results and value-added in UK universities", *Oxford Review of Education* 22, (1996): 251-264; Sherria L. Hoskins, Stephen E. Newstead & Ian Dennis "Degree performance as a function of age, gender, prior qualifications and discipline studied", *Assessment and Evaluation in Higher Education* 22, (1997): 317-328; Ian Peers & Margaret Johnston "Influence of learning context on the relationship between A-level attainment and final degree performance: A meta-analytic review", *British Journal of Educational Psychology* 64, (1994): 1-18.

28 Alexander Astin, William Korn, & Kenneth Green, "Retaining and satisfying students", *Educational Record* 68, no. 1 (198): 36-42.

29 Jill Johnes J and Jim Taylor, *Performance indicators in higher education* (Buckingham: SRHE and Open University Press, 1990).

30 Mark Morgan, Rita Flanagan and Thomas Kellaghan, *A Study of Non-Completion in Undergraduate University Courses* (Dublin: Higher Education Authority, 2001); Selina McCoy and Delma Byrne "Non Progression among Higher Education New Entrants" in *A Study of Progression in Higher Education* (Higher Education Authority: Dublin, 2010).

31 Una Crowley & Catherine Mahon.

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

33 National Forum for the Enhancement of Teaching and Learning in Higher Education, *Why Students Leave: Findings from Qualitative Research into Student Non-Completion in Higher Education in Ireland* (Dublin: National Forum/UCD, 2015).

medical/health and family. The study calls for a more holistic and positive interpretation of non-completion (in that it can often be part of a student's broader career plan) and also emphasises the importance of collecting systematic and standardised information (for example, through a standardised exit form) on why students choose to leave higher education.

1.4 Differences in Student Intake across Sectors in Ireland

Given that academic achievement is crucial in determining the non-progression of students, it is important to understand the sectoral differences (between universities and institutes of technology) in terms of the student intake and their Leaving Certificate results. As highlighted by the HEA (2010)³⁴, much of the apparently wide variation in progression rates across institutions is accounted for by 'student quality' measures of prior achievement.

Recent analysis³⁵ carried out on those applying to the CAO based on their Leaving Certificate performance in 2014 highlight the differences between students accepting a place at university and institutes of technology. Table 1.1 shows the number of acceptances to university and institutes of technology (excluding DIT) and the 2014 Leaving Certificate points attained. In 2014, 17,329 students accepted places on institutes of technology programmes, across NFQ levels 6-8. Of these, 48% were made on the basis of the 2014 Leaving Certificate results only. This compares to 21,694 students who accepted a place in universities, 73% of which were made on the basis of Leaving Certificate results only. In relation to all programme levels, nearly 60% of students accepting a university place have 450 plus points, compared to just 5.6% for institutes of technology. Furthermore, over 90% of students accepting an institute of technology programme (all award levels) had 200-449 points, while the percentage for the universities for the same points range was just under 42%.

Table 1.1 CAO Net Acceptances by 2014 LC Results for all Levels: HEI Types and Points Band

HEI TYPE	≥ 600	550 - 599	500 - 549	450 - 499	400 - 449	350 - 399	300 - 349	250 - 299	200 - 249	150 - 199	100 - 149	< 100	TOTAL
IoTs (excl. DIT)	1	22	117	328	960	1,836	2,218	1,664	881	276	51	2	8,356
	0.01%	0.26%	1.4%	3.93%	11.48%	21.97%	26.54%	19.91%	10.54%	3.3%	0.61%	0.02%	
TOTAL IoT Acceptances (excl. DIT)													17,329
Universities	449	1,673	3,249	3,832	3,461	2,309	729	57	1	0	0	0	15,760
	2.8%	10.61%	20.61%	24.31%	21.96%	14.65%	4.62%	0.36%	0%	0%	0%	0%	
TOTAL University Acceptances													21,694

The difference in second level attainment, based on 2014 Leaving Certificate results, across the two sectors is further reflected in the number of higher level subjects undertaken by students accepting a university or institute of technology place on a level 8 programmes in 2014. Just over 95% of students accepting places in a university on the basis of their 2014 Leaving Certificate results presented 5 or 6 higher level subjects, compared to just under 60% in the institutes of technology. Based on the 2014 Leaving Certificate results, it is evident that very few students admitted into universities present ordinary level subjects, compared to the institute of technology sector where nearly 75% of students present at least one and 41% present at least two.

34 HEA, *A Study of Progression*, 33.

35 Institutes of Technology Ireland, *Transitions and allocating points regarding bands, Draft 2*. (Unpublished, 2015).

Table 1.2 CAO Net Acceptances by 2014 LC Results for Level 8: HEI Types and Numbers of HL Subjects Presented

HEI TYPE	6 HL SUBJECTS	5 HL SUBJECTS	4 HL SUBJECTS	3 HL SUBJECTS	2 HL SUBJECTS	1 HL SUBJECTS	0 HL SUBJECT	TOTAL
IoTs (excl. DIT)	984	1,266	1,073	415	86	1	0	3,285
	(25.7%)	(33.1%)	(28.1%)	(10.8%)	(2.2%)	(0%)	(1%)	
Universities	11,769	3,037	783	136	12	0	0	15,737
	(74.8%)	(19.3%)	(5%)	(0.9%)	(0.1%)	(0%)	(0%)	

In addition to prior educational attainment, there are also notable differences in terms of gender, age and social mix of students attending universities and institutes of technology. In the academic year 2013/14, females comprised 55% of full-time undergraduate new entrants to the university sector, compared to 43% in the institute of technology sector³⁶. Moreover, a greater proportion of mature students entered the institutes of technology (18%) than the universities (8%). A further difference between universities and institutes of technology is the socio-economic intake. As argued by the HEA³⁷ (2010):

Given the inequalities that persist in the extent to which different socio-economic groups derive benefit from second-level education in terms of school completion and in terms of the attainment of Leaving Certificate points, the lower entry requirements for most institutes of technology programmes results in contrasting socio-economic profiles among the students between the universities and institutes of technology.

Students from the traditionally under-represented groups (such as: the non-manual, semi-skilled manual and unskilled backgrounds) are more numerous in the institutes of technology, the student composition in the university sector tends to be skewed towards the middle and upper ends of the socio-economic spectrum. For instance, in 2012/13, 17% of new entrants to university are from the target socio-economic groups, while 21% of IoT new entrants are from these groups³⁸. Recent research by McCoy and Byrne (2010)³⁹ highlights the importance of taking into account the student intake when assessing the effectiveness of institutions in student retention. The wide overall differences across institutions to a large extent reflect differences in the types of students enrolling in different sectors. As argued by McGuinness et al. (2012)⁴⁰, it is paramount to consider how the expansion in the numbers enrolled in the institutes of technology has played an important role in greater numbers of disadvantaged students and students with lower levels of Leaving Certificate attainment accessing higher education. In addition to differences in prior educational attainment of students and in the composition of the student body across the universities and institutes of technology, the sectors also differ substantially in terms of the balance of programmes and disciplines which they teach and in the NFQ levels of the programmes.

36 HEA, *Key Facts and Figures: Higher Education 2013/14* (Dublin: HEA, 2015).

37 HEA, *A Study of Progression*, 12.

38 See HEA, *Key Facts and Figures: Higher Education 2013/14*, 26. Note: The target socioeconomic groups include: non-manual, semi-skilled, unskilled and agricultural workers. The IoT figures also include National College of Ireland data.

39 Selina McCoy and Delma Byrne.

40 Seamus McGuinness, Adele Bergin, Eilish Kelly, Selina McCoy, Emer Smyth and Kevin Timoney, *A Study of Future Demand for Higher Education in Ireland. Research Series Number 30* (ESRI: Dublin, 2012).

1.5 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 26 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 26 Higher Education Institutions, including 7 universities, 14 institutes of technology and 5 colleges⁴¹.

The census dates used for this analysis – 1st March 2013 and 1st March 2014 – span the academic years 2012/13 and 2013/14. 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 analysed.

The socio-economic data in the SRS was collected by surveying the student body during the registration process in the 2012/13 academic year.

A first level of analysis, investigating frequencies and percentages, was carried out on the SRS data using Oracle's Business Intelligence tool. A second level of analysis (inferential statistics) was also undertaken, where applicable, to check for statistical significance between two variables using Pearson's chi-square. A chi-square test for independence, also called Pearson's chi-square test or the chi-square test of association, is used to discover if there is a relationship between two categorical variables. Statistical significance (whereby $p < .05$) means the difference in the results did not occur by random chance. It must be noted that a chi-square test does not give any information about the strength of a relationship, instead it conveys the existence or non-existence of a relationship between the variables under investigation. For this level of analysis, the statistical software package Statistical Package for the Social Sciences (SPSS), Version 22 for Windows, was used. Where necessary, items were coded/re-coded (e.g. Leaving Certificate points range).

1.6 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 student

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 Student

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 Student

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'.

⁴¹ See Appendix A (Table A1) for a list of HEIs.

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 first year undergraduate new entrants in the academic year 2012/13 to the academic year 2013/14 in their institution. The data for this cohort is examined by sector, NFQ level, field of study, gender, age, socio-economic background and nationality.

1.7 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 2013 and 1st March 2014, this report does not take into account those students who left their institution prior to 1st March 2013. 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 2012/13 Full-Time Undergraduate New Entrants



2.1 Introduction

This chapter examines the non-progression rates among full-time 2012/13 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 2013/14, 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 (2013/14). Overall, there were 39,904 new entrants across all sectors in 2012/13. While the majority of students (84%) progress to the following academic year, 6,415 (16%) students do 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* 2012/13)' shows the percentage of new entrants, at each NFQ level, that make up the overall new entrants in that sector. For example, 14% 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 2012/13 and 2011/12. The table shows that the rates of non-progression varied within and between sectors. The overall non-progression rates remained the same at 16%.

Table 2.1 *Non-Progression Rates by Sector and NFQ Level 2012/13 v's 2011/12*

SECTOR	LEVEL (% OF NEW ENTRANTS IN <i>IoTs</i> IN 2012/13)	% NON-PROGRESSED (2012/13)	% NON-PROGRESSED (2011/12)
Institutes of Technology	Level 6 (14%)	26%	30%
	Level 7 (42%)	28%	29%
	Level 8 (44%)	17%	17%
	All New Entrants	23%	24%
Universities	Level 8*	11%	10%
Colleges	Level 8	6%	4%
All institutions	Level 8	12%	11%
All institutions	All New Entrants	16%	16%

* There were 3,587 new entrants at level 8 across all sectors in 2012/13. 58% of these students are in the university sector (N=2,075), 39% in the institute of technology sector (N=1,415) and 3% in the college sector (N=97).

Table 2.2 provides further detail of new entrants in 2012/13 and 2011/12. 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 2012/13 v's 2011/12*

SECTOR	LEVEL	MOST COMMON POINTS ATTAINED (2012/13)	MOST COMMON POINTS ATTAINED (2011/12)
Institutes of Technology	Level 6	255 – 300	255 – 300
	Level 7	255 – 300	305 – 350
	Level 8	355 – 400	355 – 400
	All New Entrants	305 – 350	305 – 350
Universities	Level 8	455 – 500	405 – 450
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 200 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 2012/13, there is a difference of 100 most common points attained between entrants at level 6 and 7 (255-300 points) and entrants at level 8 (355-400 points). 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 2012/13 was 455-500 in comparison to 355-400 attained by level 8 new entrants in the institute of technology sector. It is interesting to note that although the most common points attained in the university sector increased from 405-450 to 455-500, the non-progression rate in this sector was 10% in 2011/12 and 11% in 2012/13. At the same time, in the institute of technology sector, the most common points attained at level 7 declined from 305-350 to 255-300 while the non-progression rate was 29% in 2011/12 and 28% in 2012/13.

As outlined in Table 2.1, rates of non-progression varied within and between sectors. Within the institute of technology sector, the highest rate of non-progression was 28% at level 7. In 2011/12, the highest non-progression rate was 30% at level 6. All new entrants in 2012/13 and 2011/12 achieved the same most common points (355-400). The non-progression rate of 17% at level 8 in the institute of technology sector in 2012/13 (17% also in 2011/12) is in comparison to 11% and 6% at level 8 in the university and colleges' sectors respectively. These descriptive statistics suggest that there is evidence of a link between prior educational attainment on entry and non-progression rates. This hypothesis is further investigated later on. Non-progression rates by prior educational attainment are firstly elaborated in Table 2.3 by showing the non-progression rates by points bracket across all sectors. Undergraduate new entrant non-progression rates by NFQ level and prior educational attainment across all sectors are highlighted. In this table, the column entitled 'Points Range' refers to the actual points attained by new entrants in contrast with the 'Most Common Points Attained' column in Table 2.2.

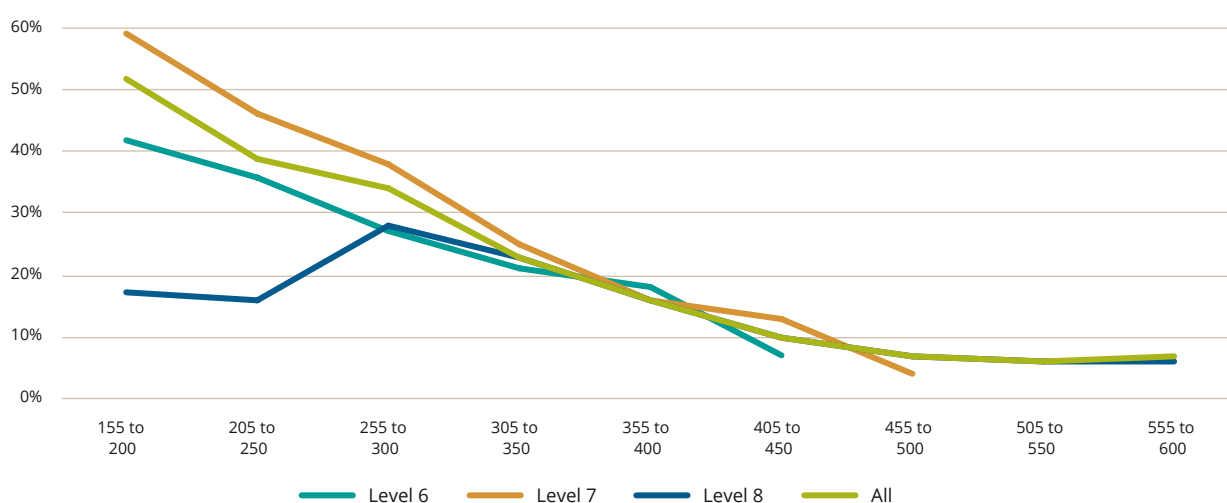
Table 2.3 *Non-Progression Rates by Prior Educational Attainment*

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	52%	42%	59%	0^%	53%	0^%	50^%	17%
205 to 250	39%	36%	46%	24%	41%	2%	8^%	16%
255 to 300	34%	27%	38%	28%	34%	24^%	28^%	28%
305 to 350	23%	21%	25%	24%	24%	22%	11%	23%
355 to 400	16%	18%	16%	16%	16%	17%	5%	16%
405 to 450	10%	7%	13%	9%	10%	11%	10%	10%
455 to 500	7%	21^%	4%	7%	7%	8%	3%	7%
505 to 550	6%	33^%	18^%	11%	12%	6%	3%	6%
555 to 600	7%	0^%	38^%	8%	10%	6%	4%	6%
Other	16%	24%	21%	17%	19%	12%	6%	14%
Total	16%	26%	28%	17%	23%	11%	6%	12%

* In order to focus on meaningful findings, points below 155 are not reported on here

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

Further testing⁴² was carried out in order to determine if there is a statistically significant relationship between prior educational attainment and non-progression rates. Results indicate that for all sectors and NFQ levels, prior educational attainment is related to non-progression rates ($p < 0.05$ ⁴³). We can conclude that those with higher prior educational attainment at all levels and sectors, are more likely to progress to the following year of study than those with lower educational attainment. Figure 2.1 depicts this finding.

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

42 See methodology section in the Introduction Chapter for further information. This will be the case for all inferential statistics highlighted throughout this report.

43 A significance level of 5% was used for all statistical tests.

2.3 Categorisation of Students in the Academic Year 2013/14

In the academic year 2013/14, 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 2013/14*

STUDENT BREAKDOWN BY CODE IN 2013/14	NUMBER OF STUDENTS
Re-enrolled (RE)	31,785
Repeat (RP)	1,344
Transfer Internal (TI)	360
Non-Progressed	6,415
Grand Total of Students	39,904

There were 39,904 new entrants across all sectors in 2012/13. 33,489 students were categorised as progressing given that these students re-enrolled, repeated or transferred internally. The remaining students did not progress.

Table 2.5 looks at new entrants who are classified as repeat students in the following academic year (2013/14). This constitutes 3.4% of all new entrants (1,344 out of 39,904). The following table presents the repeat student breakdown by sector. 3.7% of all new entrants to the institute of technology sector are repeat students (684 out of 18,670) compared to 3.3% in the universities and 0.7% in the colleges sector.

Table 2.5 *Percentage of New Entrants by Sector in 2012/13 Classified as Repeat in 2013/14*

SECTOR	NUMBER OF NEW ENTRANTS	NUMBER OF 'REPEAT' STUDENTS	% OF NEW ENTRANTS BY SECTOR WHO ARE 'REPEAT' STUDENTS IN 2013/14
Institutes of Technology	18,670	684	3.7%
Universities	19,500	647	3.3%
Colleges	1,734	13	0.7%
All Sectors	39,904	1,344	3.4%

Table 2.6 now breaks repeat students down by NFQ level and sector. The largest number of repeat students in 2013/14 was at level 7 in the institute of technology sector at 4.7% (360 students out of 7,687), followed by level 6 students in the institutes of technology sector at 3.4%. At level 8, the university sector had the highest rate of non-progression at 3.3%.

Table 2.6 *Breakdown of Repeat Students by NFQ Level and Sector (2013/14)*

NFQ LEVEL	SECTOR	NUMBER OF NEW ENTRANTS	NUMBER OF 'REPEAT' STUDENTS IN 2013/14	% OF ALL NEW ENTRANTS STUDENTS WHO ARE 'REPEAT' STUDENTS
Level 6	Institutes of Technology	2,535	87	3.4%
Level 7	Institutes of Technology	7,687	360	4.7%
Level 8	Institutes of Technology	8,448	237	2.8%
	Universities	19,500	647	3.3%
	Colleges	1,347	13	1.0%
Total	All Sectors	39,904	1,344	3.4%

2.4 Key Points

- ▶ The proportion of new entrants in 2012/13 who did not progress is 16% across all sectors and NFQ levels. This is an identical figure to that in 2011/12.
- ▶ The rates of non-progression in 2012/13 varied within and between sectors ranging from 26% and 28% at levels 6 and 7 compared to 17%, 11% and 6% at level 8 in universities, institutes of technology and colleges respectively.
- ▶ Between 2011/12 and 2012/13, non-progression rates dropped by 4 percentage points and 1 percentage point at level 6 and level 7 respectively. Non-progression rates remained unchanged in the same period at level 8 in the institute of technology sector (17%), while there was a 1 percentage point increase in non-progression at level 8 in the university sector and a 2 percentage point increase in the colleges sector.
- ▶ Courses at NFQ level 6/7 generally tend to enter students on a lower points (255-300) range than NFQ level 8 programmes (405-450). The most common points attained at NFQ level 8 varied across the sectors with a 100 point difference between universities/colleges and institutes of technology.
- ▶ Early indications suggested a link between prior educational attainment on entry and successful progression after the first year of study. Lower educational attainment on entry appeared to be associated with a greater likelihood of non-progression.
- ▶ More detailed analysis confirmed that there is a strong relationship between prior educational attainment and the non-progression rate for all sectors and NFQ levels. Those with higher prior educational attainment are more likely to progress to the second year of study than those with lower educational attainment.
- ▶ 3.4% of all students are repeat students. The institute of technology sector, at level 7, has the greatest percentage of all new entrants by sector who are classified as repeat students in the following academic year (2013/14).

CHAPTER 3

Non-Progression Rates by Field of Study



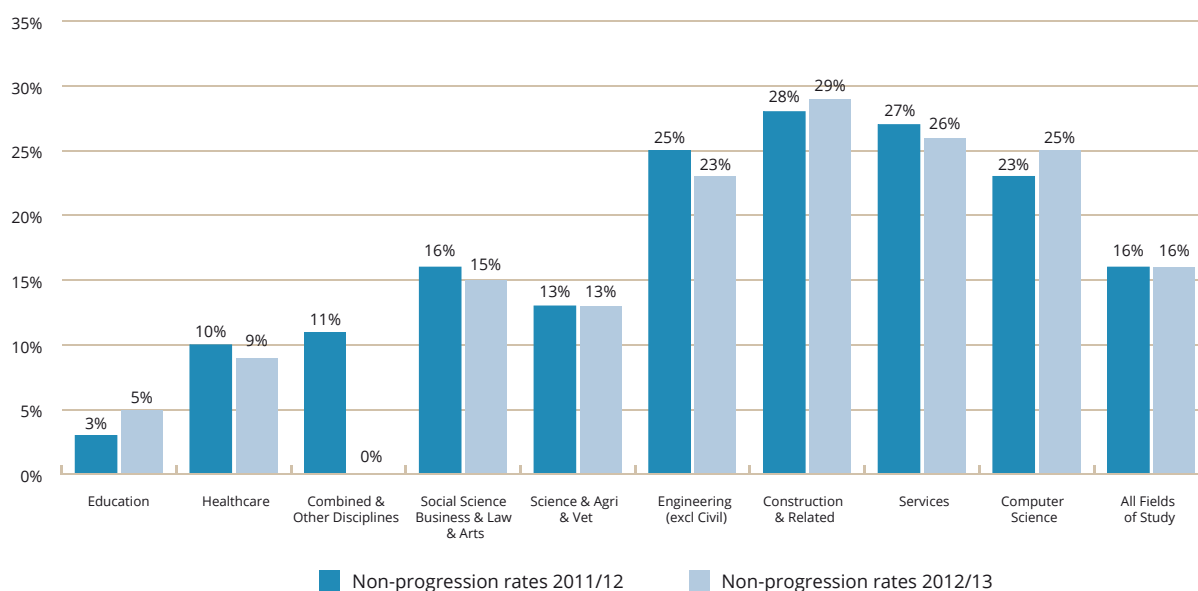
3.1 Introduction

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) level 2 (See Appendix B for ISCED details).

3.2 Non-Progression among 2012/13 Undergraduate New Entrants by Field of Study across all Sectors and NFQ Levels

Significant variation in non-progression rates across fields of study is evident in Figure 3.1 which shows that across all levels and sectors, non-progression rates in 2012/13 range from 5% in *Education* to 29% in *Construction and Related* fields of study. In line with 2011/12, 2012/13 students on *Construction*, *Services*, *Computer Science* and *Engineering* programmes, display non-progression rates above the national average of 16%. Non-progression rates in *Education*, *Construction and Related* and *Computer Science* have increased since 2011/12 while they have decreased in *Healthcare*, *Social Science Business and Law* and *Arts and Humanities*, *Engineering* and *Services*.

Figure 3.1 *Non-Progression Rates by Field of Study 2011/12 v's 2012/13*



Using further testing, it was found that the differences (between field of study and non-progression rates for all levels and sectors) are statistically significant ($p < 0.05$). Higher non-progression rates in 2012/13 are linked to *Construction and Related*, *Services*, *Computer Science* and *Engineering* disciplines.

The technical nature and mathematical content associated with of the disciplines of *Computer Science* and *Engineering* may be a contributing factor to higher levels of non-progression. At level 8, the overall non-progression rate for *Computer Science* vary between institutes of technology (26%) and universities (15%). The non-progression rate at level 8 also varies between institutions, with the highest rate at 51% in an institute of technology and 21% in a university. This 21% non-progression rate compares to a 3% non-progression rate in another university offering *Computer Science* programmes. At level 6 and level 7, there are also differences in *Computer Science* non-progression rates between institutes of technology. The highest rate of non-progression at level 6 is 44% compared to the lowest rate of 19% while the highest rate at level 7 is 43% compared to the lowest rate of 22%.

Non-progression rates in the field of *Engineering* also vary between sectors and institutions. At level 8, the highest non-progression rate in an institute of technology is 59% compared to 15% in two universities. The lowest rate of non-progression in *Engineering* at level 8 in the institutes of technology is 9% while it is 6% in a university. Similar to the field of *Computer Science*, variation exists between level 6 and 7 non-progression rates in *Engineering* ranging from a high of 56% to 17% at level 6 and 58% to 19% at level 7.

3.3 Non-Progression among 2012/13 Undergraduate New Entrants by Field of Study, NFQ Level and Institute Type

Differences in non-progression rates also vary across institute types. Looking firstly at institutes of technology, Table 3.1 provides further detail of the rates of non-progression of new entrants in 2012/13 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	HEALTHCARE	SOCIAL SCIENCE BUSINESS AND LAW AND ARTS AND HUMANITIES	SCIENCE AND AGRI AND VET	ENGINEERING (EXCL CIVIL)	CONSTRUCTION AND RELATED	SERVICES	COMPUTER SCIENCE	ALL
Institutes of Technology	Level 6	n/a	13%	25%	24%	34%	44%	28%	32%	26%
	Level 7	9%	16%	28%	19%	34%	41%	28%	32%	28%
	Level 8	11%	10%	17%	18%	20%	21%	20%	26%	17%
All IoT		11%	12%	21%	19%	32%	33%	26%	29%	23%

As observed above, there are four disciplines above the level 6 national average of 26%, with the *Construction and Related* discipline having the highest rate of non-progression at 44%. The same discipline had the highest rate of non-progression at level 7 (41%) which was above the sectoral average of 28%. At level 8 in institutes of technology, there were five fields of study that were above the national average non-progression rate of 17% (*Science, Agriculture and Veterinary, Engineering, Construction and Related, Services* and *Computer Science*) with *Computer Science* having the highest rate, at 26%. Across all institutes of technology, the rate of non-progression is 23%, 7 percentage points above the overall national average of 16%.

At level 8 in the institute of technology sector, *Computer Science* has a 26% non-progression rate while the rate of non-progression for the same discipline in the university sector is 15%, as can be seen in Table 3.2.

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

SECTOR	LEVEL	EDUCATION	HEALTHCARE	SOCIAL SCIENCE BUSINESS AND LAW AND ARTS AND HUMANITIES	SCIENCE AND AGRI AND VET	ENGINEERING (EXCL CIVIL)	CONSTRUCTION AND RELATED	SERVICES	COMPUTER SCIENCE	ALL
Universities	Level 8	8%	6%	12%	10%	11%	16%	23%	15%	11%
Colleges	Level 8	3%	18%	9%	0%	0%	n/a	n/a	n/a	6%

In the university sector at level 8, deviations from the sectoral average of 11% are seen in four fields of study namely *Services, Construction and Related, Computer Science* and *Social Science, Business and Law* and *Arts and Humanities*. However, it is important to interpret such findings with caution and consider the number of students enrolled in each discipline and the number of students who did not progress (details are provided in Appendix C). The same is true for the 18% non-progression rate in the *Healthcare* field of study for the colleges sector which reflects one institutions provision of a small number of Healthcare programmes.

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.

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

SECTOR	LEVEL	EDUCATION	HEALTHCARE	SOCIAL SCIENCE BUSINESS AND LAW AND ARTS AND HUMANITIES	SCIENCE AND AGRI AND VET	ENGINEERING (EXCL CIVIL)	CONSTRUCTION AND RELATED	SERVICES	COMPUTER SCIENCE	ALL
All Level 8		5%	8%	13%	11%	13%	19%	20%	20%	12%

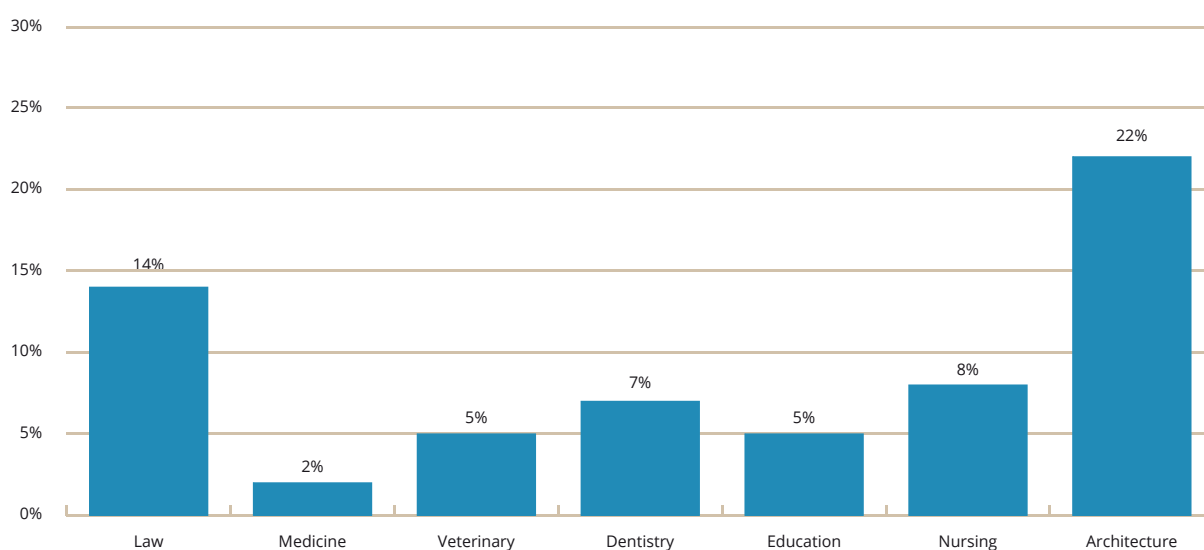
The same four disciplines, as mentioned in the above paragraph, in addition to *Engineering*, have non-progression rates that are higher than the overall level 8 national average of 12%. It should be noted that the two fields of study with the lowest non-progression rates – *Education and Healthcare* – are marked by stringent academic requirements on entry and strong competition between students for places. Many programmes within these fields of study also provide clear career paths and tangible employment. Previous research has shown that disciplines with more stringent academic entry requirements have lower non-progression rates.

3.4 Profession-Oriented Courses

This section looks at selected courses that lead to qualifications in a particular career, such as *Medicine* or *Law*. As Figure 3.2 shows, in general, students enrolled in this type of profession-oriented course are likely to progress to their second year of study. There is evidence of some volatility, however in these courses. The non-progression rates in 2012/13 for students enrolled in *Architecture* courses was 22%. This figure has risen from 20% in 2011/12 and 9% in 2010/11. There has been a steady decrease in new entrants enrolled in *Architecture* courses over the past number of years. Since 2007/08, new entrants have reduced from 1.9% of total full-time undergraduate new entrants to 1.1% of total full-time undergraduate new entrants in 2012/13.

The non-progression rate for *Law* students at 14% has also increased from previous years. It compares to 11% in 2012/13 and 5% in 2010/11. The new entrant figures studying *Law* courses has increased from 2.5% of total full-time undergraduate new entrants in 2007/08 to 2.9% of total full-time undergraduate new entrants in 2012/13.

Figure 3.2 *Non-Progression Rates in Profession-Oriented Courses*



Further detailed testing shows that a statistically significant relationship exists ($p < 0.05$) between the profession-oriented course a student is enrolled in and his/her likelihood of non-progression in the following year of study. Therefore, this relationship is generalisable to the population.

Considering Leaving Certificate points attainment, a relatively low non-progression rate is observed across the profession-oriented courses for those students with high educational attainment; all such students had a non-progression rate below the 16% national average rate. Detailed testing also revealed that this relationship is a statistically significant one. Students with higher Leaving Certificate points attainment on entry to a profession-oriented course are more likely to progress to their second year of study than students with lower Leaving Certificate points attainment.

3.5 Key Points

- ▶ Rates of non-progression vary across fields of study. *Construction and Related* disciplines have the highest non-progression rate at 29% while *Education* disciplines have the lowest rate at 5%.
- ▶ Rates of non-progression vary across levels, sectors and institutions for *Computer Science* and *Engineering* disciplines.
- ▶ Almost all students entering the *Education* field of study did so at level 8 while just less than half of new entrants in the field of *Construction and Related*, entered at level 6 or level 7.
- ▶ Within NFQ level and sector, *Construction and Related* once again had the highest rate of non-progression in the university sector at level 8.
- ▶ At the same level in the colleges sector, 18% of students in the *Healthcare* field of study did not progress. However, such a figure reflects one institutions provision of a small number of Healthcare programmes.
- ▶ At level 8 for all sectors, students in the disciplines of *Computer Science* and *Services* have the highest non-progression rates.
- ▶ *Medicine* has the lowest rate of non-progression at 2% of all 2012/13 new entrants in profession-oriented courses while *Architecture* has the highest rate at 22%.

CHAPTER 4

Non-progression Rates by Student Characteristics



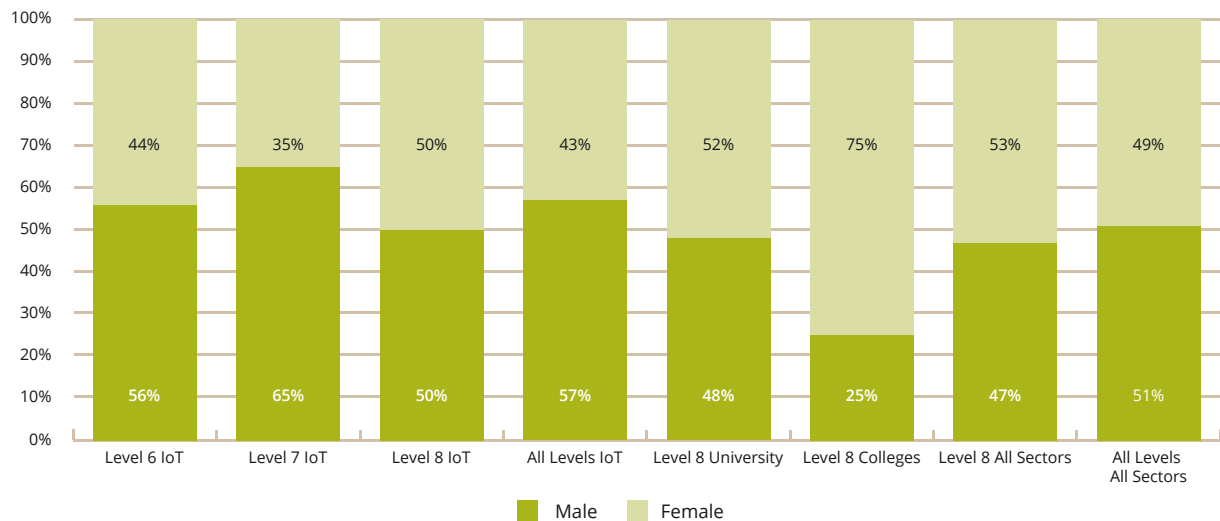
4.1 Introduction

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

4.2 Non-Progression and Gender

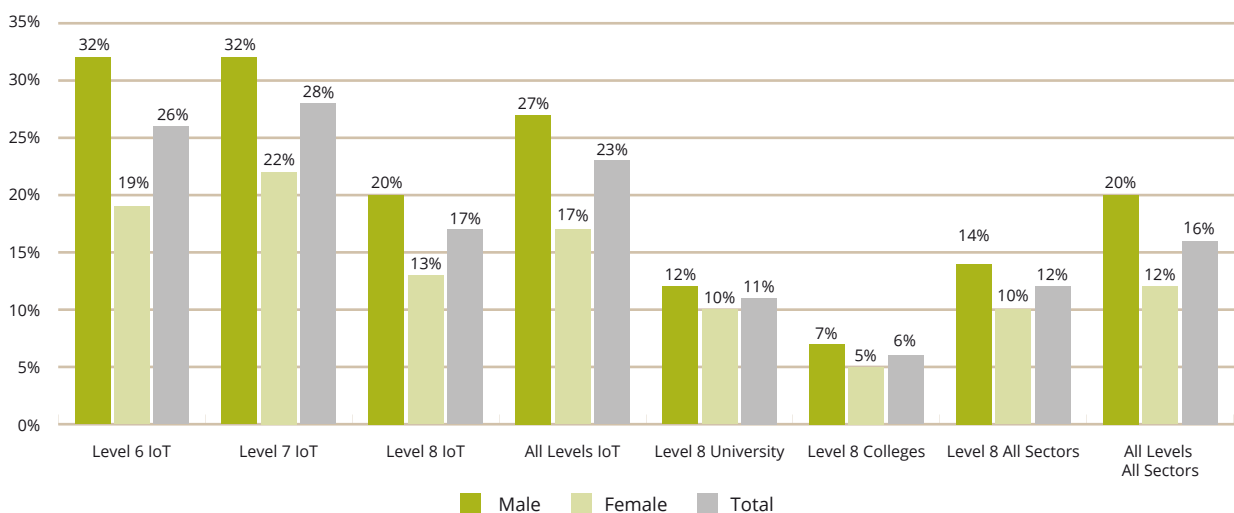
The gender balance of new entrants varies according to level and sector as outlined in Figure 4.1. The most notable difference in gender is at level 8 in the colleges, with 75% female students compared to 25% male students. This finding is consistent with other years and is not surprising given the large presence of females in teacher education programmes across these institutions. Following on from this, the largest difference in male and female students is at level 7 in the institute of technology sector where males make up 65% of new entrants. 51% of all new entrants in 2012/13 are males while 49% are females.

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.

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



At all NFQ levels and all sectors, one in five males, compared to one in eight females, are not progressing. At level 8 for all sectors, this changes to approximately one in seven males and one in ten females. The largest discrepancy between males and females appears to be at level 6 in the institutes of technology where 32% of males are not progressing in comparison to 19% of females.

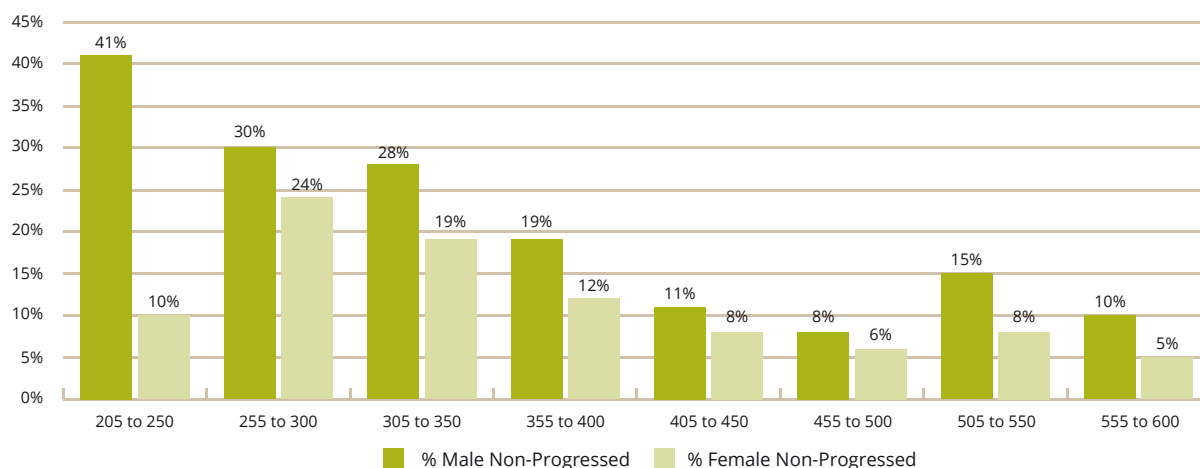
Detailed analysis confirmed that females are more likely to progress to the following year than males ($p < 0.05$). The highest rate of non-progression is 32% for males at level 6 and level 7 in the institutes of technology sector. As highlighted, variances between male and female non-progression figures are most evident across the institutes of technology sector with only a 2% difference between genders at level 8 in university and colleges.

The gender differences within Science, Technology, Engineering and Mathematics (STEM) disciplines are worth noting since these programmes make up 30% of all new entrants in 2012/13. 16% of all new entrants in 2012/13 are studying in STEM disciplines in the institute of technology sector. Of those 16%, 21% are female in comparison to 79% males.

27% of all new entrants in 2012/13 are studying in the field of STEM in the university sector. 35% of these students are females while 65% are males.

Gender differences in non-progression rates vary considerably across sector, level and prior educational attainment (see Appendix D). The low number of new entrants within the lower points range and indeed, the higher points range, can lead to misleading conclusions about non-progression rates. Therefore, caution should be observed when examining this information. Level 8 programmes are common across all sectors. At level 8 in the institute of technology sector, the largest discrepancy appears to be amongst males and females who attained 205-250 Leaving Certificate points*.

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



* Please note that only meaningful results are presented in figures 4.3–4.5. For further information, see Appendix D.

At level 8 in the university and colleges sectors, the greatest difference in male and female non-progression rates seems to be for students who attained 255-300 Leaving Certificate points (See Figure 4.4 and Figure 4.5).

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

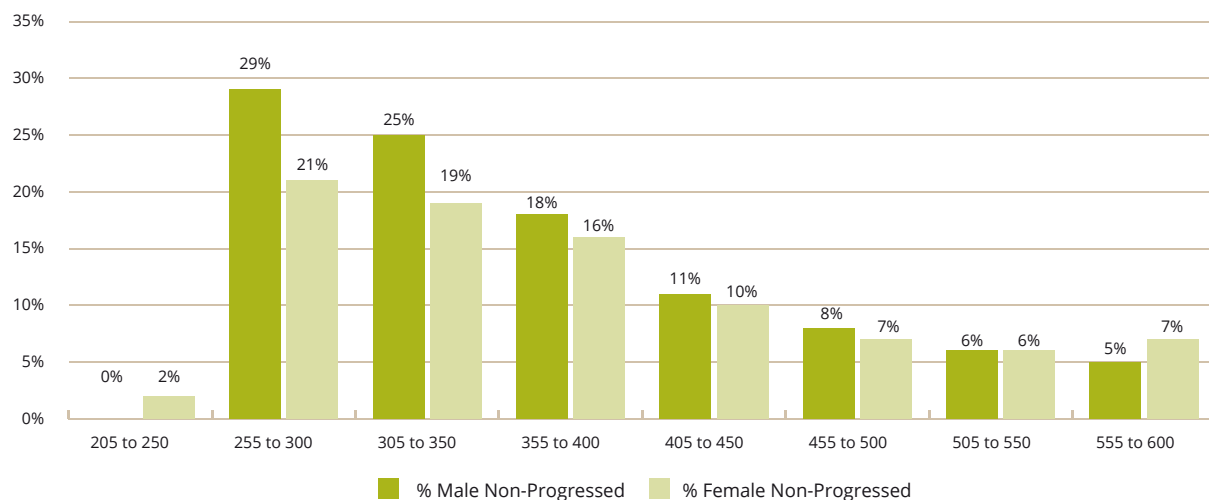
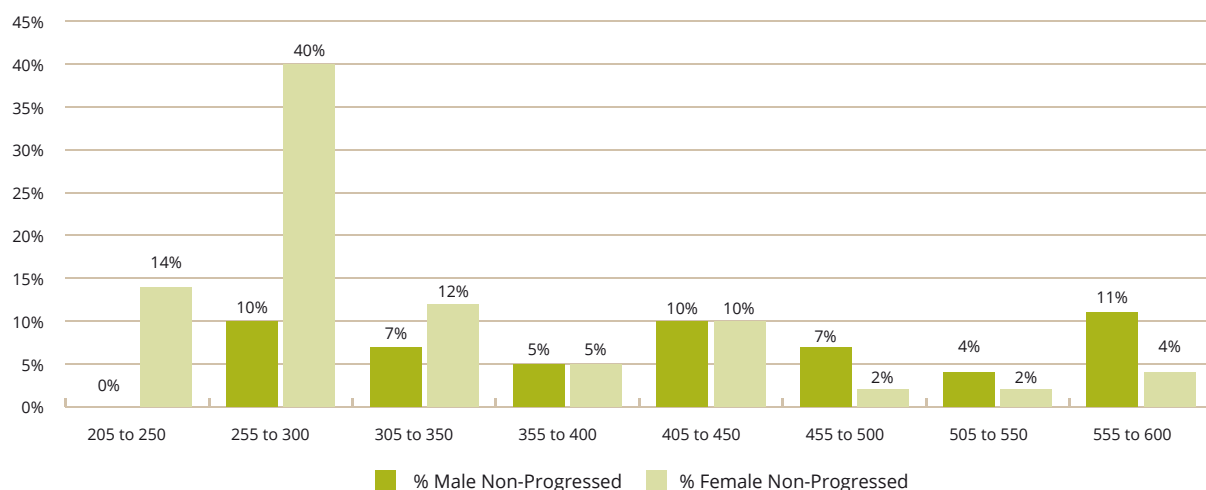


Figure 4.5 *Non-Progression by Gender at Level 8 in Colleges*



Given the low number of new entrants within the lower points range and the higher points range, Leaving Certificate points were also recoded into three categories to allow for further, more accurate analysis of the data as can be seen in Table 4.1.

Table 4.1 *Re-Categorisation of Prior Educational Attainment*

Low Points Range	0 - 200 points
Medium Points Range	205 - 400 points
High Points Range	405 - 600 points

Further testing, using these three classifications of Leaving Certificate points, revealed that for institutes of technology and universities, there is a statistically significant relationship between gender and non-progression across all prior educational attainment categories ($p < 0.05$). This was the case across all sectors (with the exception of colleges), highlighting that females are more likely than males to progress to their second year of study for all prior educational attainment. As noted, the only exception to this is within the colleges sector where the relationship between low or medium Leaving Certificate prior attainment and non-progression is not statistically significant. This is most likely due to the very low frequency of students studying in colleges with either low or medium points. Within the high points range in the colleges sector, the relationship between gender and non-progression is statistically significant.

4.3 Non-Progression and Age

In 2012/13, 12.7% of all new entrants ($N = 39,904$) were mature⁴⁴ students ($N = 5,052$). The proportion of new entrants who are mature students varied across sectors as can be seen in Table 4.2.

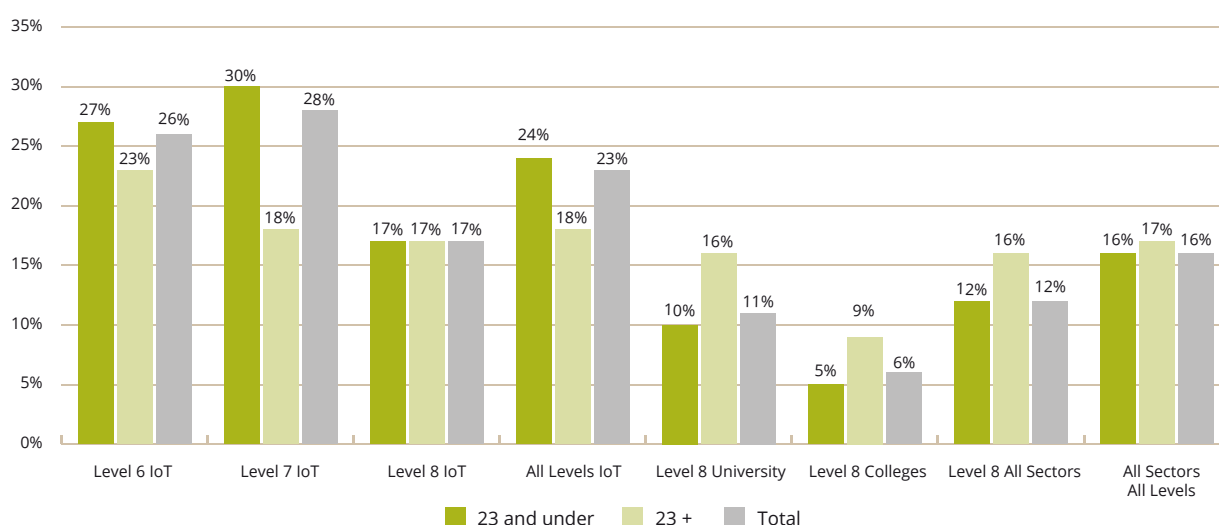
Table 4.2 Breakdown of Mature New Entrants by Sector 2012/13

SECTOR	MATURE STUDENTS AS A % OF ALL NE
Institutes of Technology	8.5%
Universities	4.0%
Colleges	0.2%
Grand Total	12.7%

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

Figure 4.6 outlines non-progression rates of students under 23 versus mature students. Mature students have a 17% non-progression rate while there is a 16% non-progression rate among traditional students under the age of 23.

Figure 4.6 Non-Progression by Age Category



⁴⁴ Mature students are defined as students aged 23 or over on 1st January 2012.

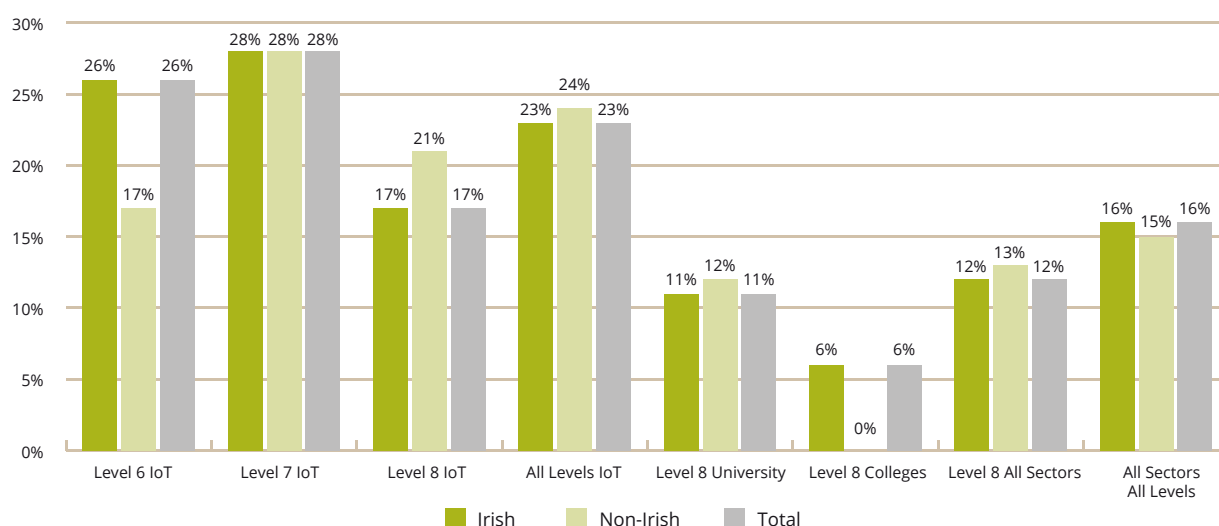
There is variation in non-progression rates by age across most sectors and levels. The exception to this is at level 8 in the institute of technology sector, where there is a 17% non-progression rate for both students under 23 and for mature students. Also, in the institute of technology sector, it appears that at level 6 and level 7, mature students are more likely to progress to the following year than a new entrant who is under the age of 23. Further analysis revealed that this relationship is statistically significant ($p < 0.05$) allowing us to conclude that students over the age of 23, in this sector, are more likely to progress than traditional students.

At level 8 in the university sector, there is evidence to suggest the contrary ($p < 0.05$), where mature students are less likely to progress to their second year of study in comparison to students under the age of 23. The relationship between age and non-progression rates is not statistically significant for the colleges sector.

4.4 Non-Progression and Nationality

Figure 4.7 outlines the non-progression rates of Irish and non-Irish students.

Figure 4.7 *Non-Progression Rates by Nationality*



Across all sectors and all levels, Irish students have a 16% non-progression rate in comparison to 15% for non-Irish students.

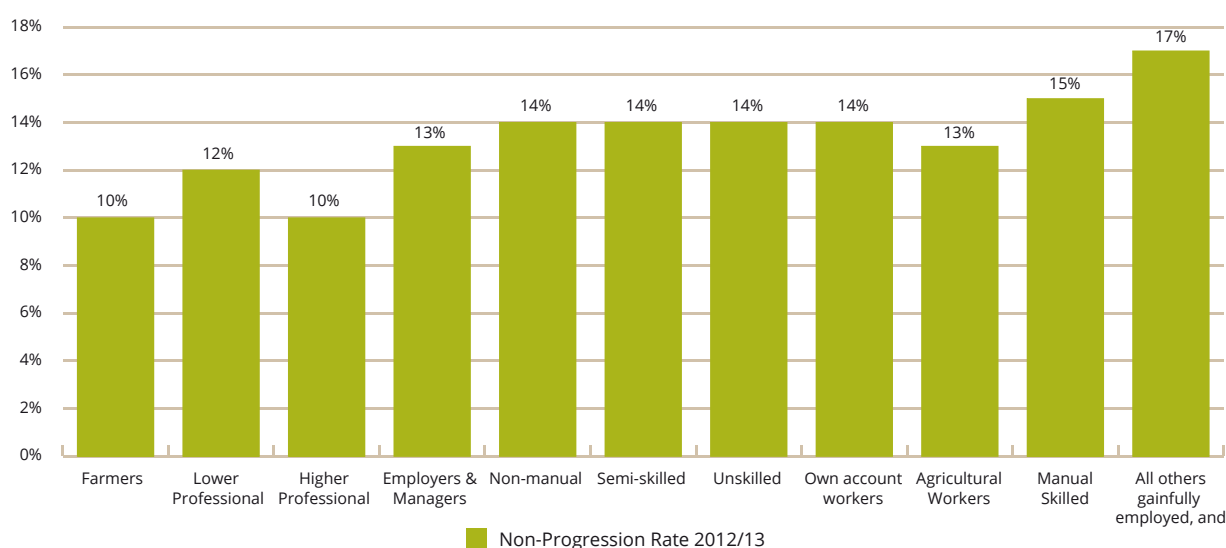
At level 6 in the institute of technology sector, non-Irish students in this sample appear more likely to progress to the following year than Irish students. However, a closer look reveals that non-Irish numbers are very low and can therefore be misleading. The opposite seems true at level 8 in this sector where non-Irish students have a higher rate of non-progression than Irish students while there is no difference in non-progression rates at level 7. Little differences are observed in non-progression rates of Irish and non-Irish students at level 8 in the university sector while there is a very low number of non-Irish students in the colleges sector.

Further testing was again carried out to allow more conclusions to be made in relation to Irish and non-Irish students. Testing revealed that there is no statistically significant relationship ($p < 0.05$) between nationality and non-progression rates at level 6 and level 7 in the institutes of technology sector or for universities or colleges at level 8. At level 8 in the institutes of technology sector, a relationship between nationality and non-progression does exist ($p < 0.05$). In this case, Irish students are more likely to progress to their second year of study than non-Irish students.

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 the response rate to the Equal Access Survey was 64% resulting in some missing data in relation to socio-economic group. The lowest level of non-progression is found among *Farmers* and *Higher Professionals* at 10% as can be seen in Figure 4.8 (See Appendix E, Table E1 for a breakdown of new entrant numbers and the number of students who did not progress from the academic year 2012/13 to 2013/14 for each socio-economic group). This is perhaps not surprising given that these are the two groups with the highest level of access to higher education in Ireland⁴⁵.

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



The lowest levels of non-progression are found among *All others gainfully occupied and unknown* and *Manual skilled*. Under-represented socio-economic groups are classified as *Non-manual*, *Semi-skilled*, *Unskilled* and *Agricultural workers*. Figure 4.8 shows that these groups, along with *Manual skilled* group and *All others gainfully occupied and unknown*, have the highest non-progression rates.

The category classified as *All others gainfully occupied and unknown* has been increasing its participation in higher education over the last few years. In 2007/08, this group made up approximately 11% of all new entrants to higher education. This increased to 17% in 2012/13. It is now known that a large proportion of this group are considered socially disadvantaged with reasons for non-classification that they are so removed from the labour market that they are unclassifiable. The *Manual skilled* category demonstrated a consistent downward trend in enrolments from 2007/08 to 2012/13. In 2007/08, it was 13.4% compared to 11.3% in 2012/13.

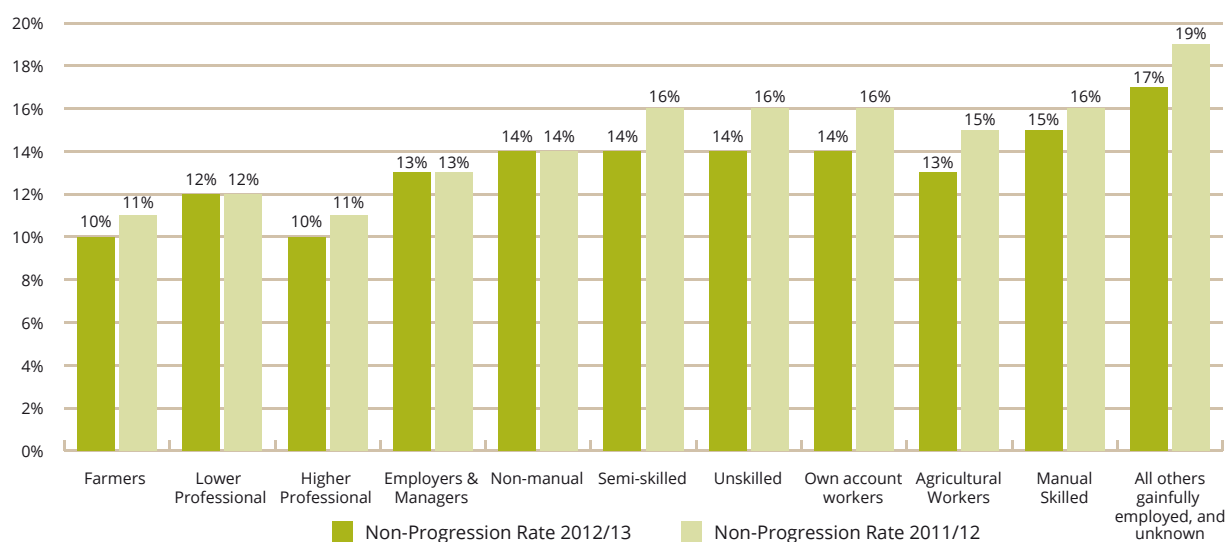
The institutes of technology have a much higher proportion of these under-represented groups enrolled as new entrants. In 2012/13, 21% of all new entrants in the institutes of technology were classified as *Semi-skilled* and *Unskilled*, *Non-manual* and *Agricultural workers* while in the university and colleges sector, it was 17%.

Further testing was used to investigate the relationship between non-progression rates and socio-economic group. It revealed this relationship is a statistically significant one ($p < 0.05$) and so a student's non-progression rate is linked to their socio-economic group.

⁴⁵ 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).

When comparing 2012/13 to 2013/14 progression rates to progression rates from 2011/12 to 2012/13, some differences are observed. Eight of the eleven groups show a one or two percentage point decrease in non-progression rates in 2011/12 versus 2012/13 (See Figure 4.9). All other groups have remained at the same non-progression rate over these two periods.

Figure 4.9 A Comparison of Non-Progression Rates by Socio-Economic Groups 2011/12 v's 2012/13



4.6 Key Points

- ▶ Females are more likely than males to progress to the following year, at all NFQ levels and sectors.
- ▶ This relationship holds through across all prior educational attainment categories in the institute of technology and universities sector.
- ▶ Significant relationships exist between non-progression and age across certain sectors and levels. In the institute of technology sector at level 6 and level 7, 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 sector, where traditional students are more likely to progress than mature students.
- ▶ The only sector and level where a relationship exists between nationality and non-progression rates is at level 8 in institutes of technology. Irish students studying at this level and in this sector are more likely to progress to their second year of study than non-Irish students.
- ▶ In relation to socio-economic groups, the lowest level of non-progression is found among *Farmers* and *Higher Professionals* at 10%. The highest levels of non-progression are found among *All others gainfully occupied and unknown* and *Manual skilled*. Further analysis revealed that the differences between socio-economic group and non-progression are statistically significant.

Chapter 5

Trends in Non-Progression Rates



5.1 Introduction

This chapter provides an overview of non-progression rate trends by sector, NFQ level and fields of study from 2007/08 to 2012/13. Analysis was not carried out in 2008/09 to 2009/10 and 2009/10 to 2010/11.

5.2 Trends in Non-Progression Rates by Sector and NFQ Level from 2007/08 to 2012/13

Table 5.1 shows trends in non-progression rates by sector and NFQ level.

Table 5.1 Trends in Non-Progression Rates by Sector and NFQ Level from 2007/08 to 2012/13

SECTOR	LEVEL	2007/08–2008/09	2010/11–2011/12	2011/12–2012/13	2012/13–2013/14
Institutes of Technology	Level 6	25%	30%	30%	26%
	Level 7	26%	28%	29%	28%
	Level 8	16%	17%	17%	17%
	All New Entrants	22%	24%	24%	23%
Universities	Level 8	9%	9%	10%	11%
Colleges	Level 8	4%	4%	4%	6%
All institutions	Level 8	11%	11%	11%	12%
All institutions	All New Entrants	15%	16%	16%	16%

The overall new entrant non-progression rate was 15% in 2007/08 and has remained constant at 16% from 2010/11 to 2012/13. While the number of new entrants increased from 2007/08 to 2012/13, the number of students who did not progress to the following year of study, also increased between these periods.

Of note, the rate of non-progression at level 6 in the institute of technology sector shows an incline from 2007/08 of 25% to 30% in 2010/11 and 2011/12. This declined to 26% in 2012/13. In the colleges sector (level 8), the non-progression rate remains consistent at 4% with the exception of 2012/13 where a two percentage point difference is observed. However, the numbers remain very small overall for this sector and so small differences may appear significant.

5.3 Trends in Non-Progression Rates by Field of Study, Sector and NFQ Level from 2007/08 to 2012/13

Due to low numbers in the colleges sector, we focus on the institute of technology and university sectors at level 8. The trend in non-progression rates by field of study for level 8 across all sectors is outlined in Table 5.2.

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

FIELD OF STUDY	2007/08–2008/09	2010/11–2011/12	2011/12–2012/13	2012/13–2013/14
Education	5%	3%	3%	5%
Healthcare	10%	7%	8%	8%
Combined & Other Disciplines	12%	12%	11%	–
Social Science, Business and Law & Arts and Humanities	10%	11%	12%	13%
Science, Agriculture & Vet	12%	10%	11%	11%
Engineering (excl Civil)	9%	12%	12%	13%
Construction and Related	16%	17%	19%	19%
Services	15%	22%	19%	20%
Computer Science	20%	19%	18%	20%
All Fields of Study	11%	11%	11%	12%

Across *All Fields of Study* the rates of non-progression have remained relatively consistent at level 8 across all sectors. A decline in non-progression rates in the *Healthcare* field of study can be seen between 2007/08 and 2012/13. While the number of new entrants to this discipline increased over the period indicated, the number of students who did not progress to the following year of study decreased. The opposite was the case in the field of *Construction and Related* with a decrease in new entrants from 2007/08 to 2012/13. While the number of students who did not progress to the following year of their study also decreased, the difference was not as significant as the number of students who entered the field of study.

Within the *Engineering* field of study, the number of students who entered the discipline in 2012/13 was almost twice that of those who entered in 2007/08. However, the number of students who did not progress to the following year of study in 2012/13, was more than two and half times that in 2007/08.

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 this sector, there was an increase in new entrants in 2007/08 to 2012/13. The number of students who did not progress to the following year of study also increased from 2007/08 to 2012/13.

Table 5.3 Trends in Non-Progression Rates by Field of Study for Level 8 in Institutes of Technology from 2007/08 to 2012/13

FIELD OF STUDY	2007/08–2008/09	2010/11–2011/12	2011/12–2012/13	2012/13–2013/14
Education	11%	8%	4%	11%
Healthcare	14%	11%	11%	10%
Combined & Other Disciplines	20%	17%	–	–
Social Science, Business and Law & Arts and Humanities	15%	18%	17%	17%
Science, Agriculture & Vet	22%	16%	19%	18%
Engineering (excl Civil)	11%	22%	21%	20%
Construction and Related	22%	21%	24%	21%
Services	15%	21%	19%	20%
Computer Science	25%	23%	23%	26%
All Fields of Study	16%	17%	17%	17%

Across most fields of study in this sector, the trend in non-progression rates by field of study is in line with the increase in new entrants and the increase in the number of students who do not progress. *Healthcare* appears to be an exception to this. From 2007/08 to 2012/13, the number of new entrants to this field of study increased while the number of students who did not progress to their second year of study, did not increase to the same extent.

A noticeable drop in the *Education* non-progression rate to 4% in 2011/12 is also observed. However, it should be noted that there are a low number of new entrants to this discipline each year in the institute of technology sector.

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

Table 5.4 Trends in Non-progression Rates by Field of Study for Level 8 in Universities from 2007/08 to 2012/13

FIELD OF STUDY	2007/08–2008/09	2010/11–2011/12	2011/12–2012/13	2012/13–2013/14
Education	8%	5%	5%	8%
Healthcare	6%	5%	6%	6%
Combined & Other Disciplines	11%	11%	11%	–
Social Science, Business and Law & Arts and Humanities	9%	8%	11%	12%
Science, Agriculture & Vet	11%	9%	9%	10%
Engineering (excl Civil)	8%	9%	10%	11%
Construction and Related	5%	9%	9%	16%
Services	7%	23%	20%	23%
Computer Science	16%	16%	12%	15%
All Fields of Study	9%	9%	10%	11%

The non-progression rate for *All Fields of Study* was 9% in 2007/08 and 11% in 2012/13. New entrants in this sector increased by over 4,000 students in 2007/08 to 2012/13. It should be noted that the large variance observed in the *Service* discipline is most likely due to the very low numbers in this field of study.

The *Computer Science* discipline had a 16% non-progression rate in 2007/08 at level 8 in the university sector and a 15% non-progression rate in 2012/13. The number of new entrants to this field of study more than doubled in that time as did the non-progression numbers. The field of study *Construction and Related* had a 5% non-progression rate in 2007/08. This compared with a 16% non-progression rate in 2012/13. In this instance, the number of new entrants to the field in 2007/08 was more than that in 2012/13, while the number of students who did not progress more than doubled over that same period.

5.4 Key Points

- ▶ The overall new entrant non-progression rate has remained constant at 16% from 2010/11 to 2012/13.
- ▶ At level 8, for all sectors, the non-progression rate across *All Fields of Study* was 11% in 2007/08, 2010/11 and 2011/12. It was at 12% in 2012/13. These figures were lower each year at level 8 in the university sector and higher each year at level 8 in the institute of technology sector.
- ▶ At level 8 in the university sector, the *Construction and Related* field of study had a 5% non-progression rate in 2007/08 compared to a 16% non-progression rate in 2012/13. In this instance, the number of new entrants to the field in 2007/08 was more than that in 2012/13, while the number of students who did not progress more than doubled over that same period.

Chapter 6

Conclusion



6.1 Introduction

Within the context of rapid expansion in higher education, this HEA report provides a quantitative overview of the non-progression of students, between 2012/13 and 2013/14. The findings of this report show that non-progression rates have remained stable (at approximately 16%) over the last number of years, despite the harsh economic climate, financial constraints on both institutions and students, and an ongoing increase in student numbers in the system. However, while the data has shown that the majority of new entrants (84%) in 2012/13 progress to the following year (3.3% of which are repeat students), there remains 6,415 students who do 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 literature⁴⁶, 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 performance⁴⁷.

6.2 The Importance of Prior Educational Achievement

Not surprisingly, a student's level of prior educational achievement in their Leaving Certificate plays a significant role in shaping later pathways. This research finds that students with higher prior educational attainment in their Leaving Certificate are more likely to progress into the subsequent year, than those with lower educational attainment. While the overall non-progression rate is 16%, this rises to 34% for students who attained between 255 and 300 points in their Leaving Certificate. Only 7% of students who obtained 555 to 600 points do not progress to the following year of study. This evidence is significant and has important implications for ongoing expansion of the higher education system. In particular, the results highlight the importance of academic preparedness prior to admission as well as adequate learning supports on entry to higher education. As argued by Eivers et al. (2002)⁴⁸, students leaving the second-level system and enrolling in higher education should be fully equipped for doing so, in terms of academic preparedness, knowledge and understanding of course content. They should also be familiar with the requirements of the course and have an understanding of potential career paths. The strong connection between Leaving Certificate achievement and subsequent academic success underlines the need for both second level and higher education to take a joint approach to transitions work. 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)⁴⁹ 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'.

As highlighted in the introduction, previous educational attainment has knock-on effects for the intake of students across the higher education sectors, with those obtaining higher points more likely to attend universities and colleges. As a result, the highest rate of non-progression exists in the institutes of technology (23% across all levels) where the most common points attained in the Leaving Certificate are also significantly lower than the university and college sector. Given the sectoral differences in both Leaving Certificate points and non-progression rates, these descriptive statistics point to an overall link between academic preparedness, non-progression and sector. In addition, this research looked at NFQ level across the sectors. In the institutes of technology, non-progression rates are highest at level 6 and 7. Moreover, at level 8 the non-progression rate in this sector is also higher than the universities and colleges. This analysis highlights the importance of taking account of student intake in assessing the effectiveness of institutions in terms of student retention. Furthermore, such sectoral differences in progression warrant further research and policy attention.

46 For example, see Una Crowley & Catherine Mahon; Gérard Lassibille and Lucía Gomez.

47 Seamus McGuinness, Adele Bergin, Eilish Kelly, Selina McCoy, Emer Smyth and Kevin Timoney.

48 Eemer Eivers, Rita Flanagan & Mark Morgan.

49 DES, *Supporting a Better Transition from Second Level to Higher Education: Implementation and Next Steps* (Dublin: DES, 2015), 3.

Interesting gender differences also emerged from this research. Females are more likely than males to progress the following year of study, for all sectors, levels and prior educational attainment. While these findings support international literature around the apparent academic underachievement of males, caution must be shown not to oversimplify such a relationship, as additional factors are at play. For instance, higher rates of non-progression among males is most likely exacerbated by their chosen fields of study. This report has shown that non-progression is highest in the fields of *Construction and Related*, *Computer Science* and *Service* disciplines. In examining the total enrolment figures for 2012/13, it is clear that males make up the majority of these courses. Males also account for 56% of *Service* enrolments (compared to 44% of females), in the same academic year. Previous research by McGuinness et al. (2012⁵⁰) has shown that once account is taken of Leaving Certificate attainment, field of study and course level, males are no less likely to progress than their female counterparts. Therefore, the relationship between gender and non-progression needs further interrogation in terms of subject choice at second-level and the disciplines chosen for study at higher level. Another factor that is worth investigating further is the mathematical content of the programmes studied by both males and females. In disciplines such as *Computer Science*, students are required to study some form of mathematics. Despite the increase in the percentage of males (19.6% in 2003 and 28.7% in 2014) and the percentage of females (15.3% in 2003 and 26% in 2014) studying higher level mathematics over the past eleven years, the non-progression rates in male dominated disciplines remain a concern. Recent research⁵¹ focusing on trends in basic mathematical competencies of undergraduates in an Irish university, between 2003 and 2013, provides evidence that such skills are in decline. The proportion of students deemed to be 'at risk' of failing their mathematics modules in Science-based and Technology-based courses has increased over this period. As highlighted by this research, it will be important to assess whether the introduction of the new Project Maths curricula to second-level mathematics education will be influential in improving mathematical competencies in higher education.

6.3 Mature Students and Nationality

In the institutes of technology, at levels 6 and 7, mature students (those aged 23 and over) are more likely to progress than a new entrant who is under the age of 23. However, the reverse is true for the university sector in that mature students at level 8 are more likely than non-mature students at level 8 to progress to the following year. Further research is required to tease out the processes at play. In terms of nationality, this research shows that at level 8 in the institute of technology sector, there is a relationship between nationality and non-progression, whereby Irish students are more likely to progress to the following year. Interestingly, however, the reverse is true for universities and colleges whereby the differences between Irish and non-Irish students is not statistically significant, suggesting that nationality does not have an impact on non-progression rates, in these sectors.

6.4 Student Intake and Diversity

This report highlights the importance of taking account of student intake in assessing the effectiveness of institutions in student retention. The wide overall differences across the institutions reflect, to a large extent, the differences in the types of students enrolling in different higher education institutions. Institutions differ in terms of the characteristics of students they enrol and therefore, as argued by McCoy and Byrne (2010), it is of utmost importance to assess inter-institutional variation in student non-progression⁵². The sectoral differences in non-progression warrant considerable research and policy attention. Rapid expansion in the numbers enrolled in the institutes of technology has played an important role in that greater numbers of non-traditional students and those with lower levels of attainment in the Leaving Certificate examination are now accessing higher education⁵³. Findings from this study show that while target socio-economic groups (*Non-manual*, *Semi-skilled*, *Unskilled* and *Agricultural workers*) have non-progression rates below the national average of 16%, the rate is still one or two percentage points below that of *Farmers*, *Lower Professionals* and *Higher Professionals*. In addition, research has long shown that the socio-economic

50 Seamus McGuinness, Adele Bergin, Eilish Kelly, Selina McCoy, Emer Smyth & Kevin Timoney.

51 Páraic Treacy and Fiona Faulkner, "Trends in basic mathematical competencies of beginning undergraduates in Ireland, 2003-2013", *International Journal of Mathematical Education in Science and Technology*, DOI: 10.1080/0020739X.2015.1050707 (2015).

52 HEA, *A Study of Progression*, 43-53.

53 See Selina McCoy and Emer Smyth, "Higher education expansion and differentiation in the Republic of Ireland" in *Higher Education* 61, (2011): 243-260.

background of a student is associated with their likelihood of non-progression in higher education. Students from lower socio-economic groups are less likely to have access to the social and culture capital networks associated with higher education, and by consequence often have a less smooth transition to higher education, when compared to their more affluent peers⁵⁴. It is therefore important to ask if enough is being done to support the transition of educationally disadvantaged students from second level to higher education. Moreover, we need to move towards a value-added approach that does not negatively label institutions with more diverse student intakes. Instead, there needs to be a focus on institutional effectiveness, taking account of student intake.

6.5 Summary

In summary, this report highlights that while the majority of students (84%) are successfully transitioning to the following year of study, 16% of students are not, with strong variation across sector and NFQ level. Non-progression in higher education has consequences not only for the individuals involved, but for the society which finances the cost of service delivery. 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. Numerous economic and sociological studies are devoted to students' non-progression⁵⁵ and the research evidence⁵⁶ indicates that there is no single solution. Recent qualitative research in Ireland supports previous evidence from the UK⁵⁷ that the majority of students do not withdraw on impulse. The decision to leave a course is most likely resulting from a 'bundle of influences'⁵⁸.

The higher education sector in Ireland must continue to address the challenges of non-progression by providing the appropriate supports for students at an early stage (particularly in the initial transition from second level and throughout the student's first year of study) to ensure positive social integration and educational engagement. The first year in higher education can be a particularly challenging period for students and as noted by Wilcoxson et al. (2011)⁵⁹ early attrition is often linked to choice, personal factors and academic preparedness, while attrition in later years can be more closely linked to institutional factors. Recent research⁶⁰ suggests that supports in first year must be mainstreamed into core modules and not developed as separate interventions. Additionally, findings from the *National Forum for the Enhancement of Teaching and Learning in Higher Education* qualitative report on transitions highlight suggestions made by students. In order to better equip their move into higher education, they suggested the inclusion of a 'college experience', similar to work experience, at second-level. This would enable a student to get a better sense of a chosen higher education institution and course, before making their final decision⁶¹.

Ireland needs students and graduates who are successful in their transition from post-primary to higher education. In order to succeed, these students need to develop the critical thinking and problem solving skills 'with an intrinsic enjoyment of acquiring and using knowledge'⁶². The proposed changes to the Junior and Leaving Certificate examinations, at second-level, aims to build critical thinking skills and reduce over-reliance on rote learning which

54 Trevor Hussey and Patrick Smith, "Transitions in higher education. Innovations", in *Education and Teaching International*, (2010): 155-164; Hazel Christie, Moira Munro and Tania Fisher, "Leaving University early: Exploring the differences between continuing and non-continuing students", *Studies in Higher Education* 29, no. 5, (2004): 617-636.

55 Gérard Lassibille and Lucía Gomez.

56 Robert Jones; Glenda Crosling and Margaret Heagney. See also Mantz Yorke and Bernard Longden, *The First Year Experience of Higher Education in the UK*. (York: Higher Education Academy, 2008). Available at: <http://www.heacademy.ac.uk/ourwork/research/surveys/fye>.

57 Liz Thomas.

58 Jocey Quinn, Liz Thomas, Kim Slack, Lorraine Casey, Wayne Thexton and John Nobel, *From life crisis to lifelong learning: rethinking working class 'drop-out' from higher education* (Staffordshire University: Joseph Rowntree Foundation, 2005).

59 Lesley Willcoxson, Mark Manning, Monte Wynder, Ray Hibbins, Sally Joy, Jan Thomas, Betty Leask, Antonia Girardi, Tristana Sidoryn, Julie Cotter, MarieKavanagh, David Troedson & Bernadette Lynch, *The whole of university experience: retention, attrition, learning and personal support interventions during undergraduate business studies*. Project Report. (Australian Learning and Teaching Council, Sydney, Australia, 2011).

60 Liz Thomas, *Building student engagement and belonging in Higher Education at a time of change: final report from the What Works? Student Retention and Success Programme*, 2012. Available at https://www.heacademy.ac.uk/sites/default/files/what_works_final_report.pdf.

61 National Forum for the Enhancement of Teaching and Learning in Higher Education, *Transition from second level and further education to higher education. Focused Research Report No. 6*, 2015. Available at <http://www.teachingandlearning.ie/focused-research-report-no-6-transition-from-second-level-and-further-education-to-higher-education/>.

62 DES, *Supporting a better transition*, 3.

have been shown to inhibit progression outcomes. In addition to making improvements at second-level, it is equally important that students integrate successfully within the higher education environment. While our research findings emphasise the importance of academic preparedness, prior to higher education entry, the qualitative research carried out by the *National Forum*⁶³ takes a broader focus in looking at general 'student preparedness' – which combines both academic and emotional factors. As a consequence, both second-level and higher education institutions need to consider ways in which they can build resilience within students to deal with interpersonal, intrapersonal and demographic factors that may affect their educational experiences. Such an approach is not only beneficial for those students who are risk of withdrawal, but for students more generally.

Lastly, there needs to be a further move away from negative connotations that associate non-progression with 'failure'. It must also be acknowledged that there can be positive as well as negative consequences to non-completion. In such cases, a negative term such as 'dropout' is inappropriate as students' choices, aspirations and circumstances change. As Tinto (1987) observed, 'if the leaver does not define his/her own behaviour as representing a form of failure, neither should the institution'⁶⁴. Findings from the *National Forum* emphasise the importance of taking 'a fine-grained and open-minded approach to the issue of student non-completion' because 'often student withdrawal can be part of a bigger career plan'⁶⁵. It is therefore important to have mobility structures in place (with links to further education) for students who wish to change course, institution or sector, as an alternative to dropping out of education completely.

6.6 Future Research Directions

The HEA in partnership with the *National Forum for Teaching and Learning* and the higher education institutions is committed to the further exploration and deepening of the evidence-base for progression in higher education. The main areas of interest are:

1. A further exploration of academic preparedness and the entry points associated with successful engagement with studies across all disciplines and levels is required. Continued research in this area will include a full analysis of completion in higher education which has not been examined at a national level since 2001 when Morgan et al.⁶⁶ examined the 1992-1993 university student cohort. The recent work of the Student Led Learning (SLL) team across institutes of technology, private colleges and universities as well as the work by the *National Forum* has, and will continue to, produce research of both a qualitative and quantitative nature. Furthermore, three years of data has been gathered through the Irish Survey of Student Engagement (ISSE)⁶⁷, with an improving response rate each year, which provides valuable information at a national and local level by discipline.
2. Further research is required to unpack the processes underlying pre-entry guidance and its influence on students' decision making. The role of career guidance teachers at second level is vital. Students need to know what subjects are required to successfully progress in the disciplines they are choosing. A cut to the numbers of career guidance teachers during the recession years has been reversed in the recent budget (October 2015) and this is very much welcomed. Continuing to strengthen links between second-level and higher education institutions will encourage innovative strategies that enable informed decision making on the part of the student. Open days and graduate talks at second level should be encouraged by all schools and institutions. Moreover, as suggested by the *National Forum* report (2015) on non-completion, 'college experience' (similar to work experience) options should be introduced.

63 National Forum, *Why Students Leave*, 17.

64 Vincent Tinto, *Leaving College*, 141.

65 National Forum, *Why Students Leave*, 12.

66 Mark Morgan, Rita Flanagan and Thomas Kellaghan, *A Study of Non-Completion in Undergraduate University Courses* (Dublin: Higher Education Authority, 2001);

67 For more information, see <http://studentsurvey.ie/wordpress/>.

3. Further development of clear transition links between further and higher education sectors is key. The potential pathways and progression routes available to students needs to be clearly communicated, with the option of mobility within and between institutions. We need to continue to convey the message that higher education is not the only post second-level option available to students. The introduction of new apprenticeships in areas such as Financial Services, Information Technology and Arts, Craft and Media amongst others that are more appealing to female students is a positive development. Improvements in further education provision with the establishment of SOLAS are all positive and encouraging developments whose outcomes can be examined in the coming years.
4. A continued broadening of our understanding of students' personal issues and experiences that influence non-progression, is required. Higher education institutions need to address ways in which first year students can be better supported, both academically and emotionally. Such an approach should be introduced as mainstream or core modules so that all students can benefit. Institutions should be encouraged to gather standardised and survey-based information on student withdrawal. This would involve the use of a common exit form for students to fill out upon withdrawal. In addition, as recommended by the *National Forum*, these students should be traced over time, to ascertain information on later educational decisions.

Such further research will help to highlight those most at-risk of non-progression. In doing so, policy can continue to strive towards reducing the number of students who do not progress to the following year of study, which as this report has highlighted, currently affects over 6,000 students.

Bibliography



- Astin, Alexander, Korn, William, & Kenneth Green. "Retaining and satisfying students." *Educational Record* 68 (1987): 36-42.
- Chapman, Keith. "Entry qualifications, degree results and value-added in UK universities." *Oxford Review of Education* 22 (1996): 251-264.
- Christie, Hazel, Munro, Moira and Tania Fisher, "Leaving University early: Exploring the differences between continuing and non-continuing students." *Studies in Higher Education* 29, no. 5, (2004): 617-636.
- Crosling, Glenda and Margaret Heaney. "Improving Student Retention in Higher Education: Improving Teaching and Learning." *Australian Universities Review*, 51, no. 2 (2009): 9-18.
- Department of Education and Skills. *Education at a Glance 2014: A Country Profile for Ireland*. Dublin: DES, 2014. Available at <https://www.education.ie/en/Publications/Statistics/International-Statistical-Reports/Education-at-a-Glance-OECD-Indicators-2014-Briefing-Note.pdf>.
- Department of Education and Skills. *National Strategy for Higher Education to 2030 – Report of the Strategy Group*. Dublin: DES, 2011.
- Department of Education and Skills. *Supporting a Better Transition from Second Level to Higher Education: Implementation and Next Steps*. Dublin: DES, 2005.
- Eivers, Eemer, Flanagan, Rita & Mark Morgan. *Non-completion in institutes of technology: An investigation of preparation, attitudes and behaviours among first year students*. Dublin: Education Research Centre, St. Patrick's College, Drumcondra, 2002.
- European Lifelong Learning Project 2008-10. *Access and retention: Experiences of Non-Traditional Learners in Higher Education*. Funded by the EU Commission on Lifelong Learning Programme Project, 2011. Available at http://www.dsw.edu.pl/fileadmin/www-ranlhe/files/Literature_Review_upd.pdf.
- Feldman, Kenneth A., & Newcomb, Theodore M. *The impact of college on students*. San Francisco: Jossey-Bass, 1969.
- Higher Education Authority. *A Study of Progression in Irish Higher Education*. Dublin: HEA, 2010. Available at: http://www.heai.ie/sites/default/files/study_of_progression_in_irish_higher_education_2010.pdf
- Higher Education Authority. *Achieving Equity of Access to Higher Education in Ireland: Action Plan 2005-2007*. Dublin: HEA, 2004.
- Higher Education Authority. *Consultation Paper: Towards the development of a new national plan for equality of access to higher education*. Dublin, HEA, 2014.
- Higher Education Authority. *Key Facts and Figures: Higher Education 2013/14*. Dublin: HEA, 2015.
- Higher Education Authority. *National Plan for Equity of Access to Higher Education 2008-2013*. Dublin: HEA, 2008.
- Higher Education Statistics Agency (HESA) *UKPIs: 2013/14 Summary tables and charts*. UK: HESA. Available at <https://www.hesa.ac.uk/pis/summary1314>.
- Hoskins, Sherria, Newstead, Stephen & Ian Dennis. "Degree performance as a function of age, gender, prior qualifications and discipline studied." *Assessment and Evaluation in Higher Education* 22 (1997): 317-328.
- Hussey, Trevor and Patrick Smith, "Transitions in higher education. Innovations." *Education and Teaching International*, (2010): 155-164.
- Institutes of Technology Ireland. *Transitions and allocating points regarding bands, Draft 2*. Unpublished, 2015.
- Johnes, Jill and Jim Taylor. *Performance indicators in higher education*. Buckingham: SRHE and Open University Press, 1990.
- Jones, Robert. *Student retention and success: A synthesis of research*. UK: Evidence Net, 2008. Available at https://www.heacademy.ac.uk/sites/default/files/wp_retention_synthesis_for_pdf_updated_090310_0.pdf.
- Lassibille, Gérard and Lucía Gomez. "Why do higher education students drop out? Evidence from Spain." *Education Economics* 16, no. 1 (2008): 89-105.

- McCoy, Selina and Delma Byrne. "Non Progression among Higher Education New Entrants" in *A Study of Progression in Higher Education*. Higher Education Authority: Dublin, 2010.
- McCoy, Selina and Emer Smyth. "Higher education expansion and differentiation in the Republic of Ireland", *Higher Education* 61 (2011): 243–260.
- McGuinness, Seamus, Bergin, Adele, Kelly, Eilish, McCoy, Selina, Smyth, Emer and Kevin Timoney. *A Study of Future Demand for Higher Education in Ireland. Research Series Number 30*. Dublin: ESRI, 2012.
- Morgan, Mark, Rita Flanagan, and Thomas Kellaghan. *A Study of Non-Completion in Undergraduate University Courses*. Dublin: Higher Education Authority, 2001.
- National Forum for the Enhancement of Teaching and Learning in Higher Education. *Why Students Leave: Findings from Qualitative Research into Student Non-Completion in Higher Education in Ireland*. Dublin: National Forum/UCD, 2015.
- NationalForumfortheEnhancementofTeachingandLearninginHigherEducation. *Transitionfromsecondlevelandfurther education to higher education*. Focused Research Report No. 6, 2015. Available at <http://www.teachingandlearning.ie/focused-research-report-no-6-transition-from-second-level-and-further-education-to-higher-education/>.
- O'Connell, Philip, Clancy, David and Selina McCoy. *Who Went to College in 2004? A National Survey of New Entrants to Higher Education*. Dublin: Higher Education Authority, 2006.
- Pascarella, Ernest T., & Patrick T. Terenzini. *How college affects students*. San Francisco: Jossey-Bass, 1991.
- Peers, Ian, & Margaret Johnston. "Influence of learning context on the relationship between A-level attainment and final degree performance: A meta-analytic review", *British Journal of Educational Psychology* 64 (1994), 1-18.
- Porter, Oscar. *Undergraduate completion and persistence at four-year colleges and universities: Detailed Findings*. Washington, DC: National Institute of Independent Colleges and Universities.
- Quinn, Jocey, Thomas, Liz, Slack, Kim, Casey, Lorraine, Thexton, Wayne, and John Nobel. *From life crisis to lifelong learning: rethinking working class 'drop-out' from higher education*. Staffordshire University: Joseph Roundtree Foundation, 2005.
- Smith, Jeremy & Robin Naylor. "Dropping out of university: A statistical analysis of the probability of withdrawal for UK university students." *Journal of the Royal Statistical Society: Series A (Statistics in Society)* 164, no. 2 (2010): 389–405.
- Thomas, Liz (2002) 'Student retention in higher education: the role of institutional habitus', *Journal of Education Policy* 17, no. 4 (2002): 423-442.
- Thomas, Liz. *Building student engagement and belonging in Higher Education at a time of change: final report from the What Works? Student Retention and Success Programme*, 2012. Available at https://www.heacademy.ac.uk/sites/default/files/What_works_final_report.pdf.
- Tinto, Vincent. *Leaving college: Rethinking the causes and cures of student attrition (2nd ed.)*. Chicago: University of Chicago Press, 1993.
- Tinto, Vincent. "Dropout from higher education: A theoretical synthesis of recent research." *Review of Educational Research*, 45 (1975): 89-125.
- Treacy, Páraic & Fiona Faulkner. "Trends in basic mathematical competencies of beginning undergraduates in Ireland, 2003-2013". *International Journal of Mathematical Education in Science and Technology*, 2015. DOI: 10.1080/0020739X.2015.1050707.
- Willcoxson, Lesley, Manning, Mark, Wynder, Monte, Hibbins, Ray, Joy, Sally, Thomas, Jan, Leask, Betty, Girardi, Antonia, Sidoryn, Tristana, Cotter, Julie, Kavanagh, Marie, Troedson, David & Lynch, Bernadette. *The whole of university experience: retention, attrition, learning and personal support interventions during undergraduate business studies*. Project Report. Sydney: Australian Learning and Teaching Council: Sydney, 2011.
- Yorke, Mantz and Bernard Longden. *The First Year Experience of Higher Education in the UK*. York: Higher Education Academy, 2008. Available at: <http://www.heacademy.ac.uk/ourwork/research/surveys/fye>.

Appendices



Appendix A

List of Higher Education Institutions

Table A1

Higher Education Sector and Institutions involved in the Non-Progression Study 2012/13 to 2013/14

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

Appendix B ISCED Codes

DISCIPLINE	ISCED CODES INCLUDED IN DISCIPLINE
Education	142, 143, 144, 145, 146
Healthcare	720, 721, 723, 724, 725, 726, 727, 760, 761, 762, 700
Science, Agriculture & Veterinary	400, 420, 421, 422, 440, 441, 442, 443, 460, 461, 462, 600, 620, 621, 622, 623, 624, 641
Social Science, Business, Law, Arts & Humanities	200, 210, 211, 212, 213, 214, 215, 220, 221, 222, 223, 225, 226, 300, 310, 311, 312, 313, 314, 320, 321, 322, 340, 341, 342, 343, 344, 345, 346, 347, 380
Engineering excl Civil	500, 520, 521, 522, 523, 524, 525, 540, 541, 542, 543, 544,
Construction and Related	580, 581, 582
Services	800, 810, 811, 812, 813, 814, 815, 840, 850, 851, 852, 853, 860, 861, 862, 863,
Computer Science	481, 482
Combined and Other Disciplines	900, 910

Appendix C Details of Non-Progression Rates by Field of Study, Sector and NFQ Level (2012/13 to 2013/14)

Table C1 Number 'Students who did not progress in the academic year 2013/14' and the Number of 'New Entrants' by Field of Study, Sector and NFQ Level*

SECTOR	LEVEL	EDUCATION	HEALTHCARE	SOCIAL SCIENCE BUSINESS AND LAW AND ARTS AND HUMANITIES	SCIENCE AND AGRI AND VET	ENGINEERING (EXCL CIVIL)	CONSTRUCTION AND RELATED	SERVICES	COMPUTER SCIENCE	ALL DISCIPLINES
Institutes of Technology	Level 6		35 (276)	225 (887)	58 (243)	87 (259)	28 (64)	167 (593)	69 (213)	669 (2,535)
	Level 7	1 (11)	114 (702)	499 (1,789)	186 (976)	523 (1,545)	167 (404)	368 (1,305)	301 (955)	2,159 (7,687)
	Level 8	5 (44)	188 (1,863)	608 (3,684)	116 (646)	72 (353)	75 (360)	121 (619)	230 (879)	1,415 (8,448)
All IoT		6 (55)	337 (2,841)	1,332 (6,360)	360 (1,865)	682 (2,157)	270 (828)	656 (2,517)	600 (2,047)	4,243 (18,670)
Universities	Level 8	34 (409)	151 (2,717)	1,216 (10,325)	342 (3,434)	154 (1,442)	33 (203)	3 (13)	142 (957)	2,075 (19,500)
Colleges	Level 8	33 (1,029)	12 (65)	52 (594)	0 (34)	0 (12)	n/a	n/a	n/a	97 (1,734)
All Level 8		72 (1,482)	351 (4,645)	1,876 (14,603)	458 (4,114)	226 (1,807)	108 (563)	124 (632)	372 (1,836)	3,587 (29,682)
Grand Total		73 (1,493)	500 (5,623)	2,600 (17,279)	702 (5,333)	836 (3,611)	303 (1,031)	659 (2,530)	742 (3,004)	6,415 (39,904)

* Note: The number of students who did not progress in the academic year 2013/14 is provided with the number of new entrants given in brackets.

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	% MALES IN EACH CATEGORY	% MALE NON-PROGRESSION	% FEMALE NON-PROGRESSION	% OF MALES IN EACH CATEGORY	% MALE NON-PROGRESSION	% FEMALE NON-PROGRESSION
155 to 200*	68%	48%	31%	73%	62%	49%
205 to 250	62%	43%	23%	74%	48%	41%
255 to 300	53%	35%	19%	68%	42%	29%
305 to 350	51%	25%	16%	62%	28%	20%
355 to 400	45%	23%	14%	60%	18%	13%
405 to 450	51%	12%	3%	58%	14%	12%
455 to 500	63%	8%	43%	56%	5%	3%
505 to 550	33%	0%	50%	41%	14%	20%
555 to 600	n/a	n/a	0%	38%	33%	40%
Other	57%	27%	21%	62%	23%	18%
Total	56%	32%	19%	65%	32%	22%

* In order to focus of meaningful findings, points below 155 are not reported on.

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*	45%	0%	0%	71%	57%	42%
205 to 250	66%	41%	10%	68%	46%	31%
255 to 300	55%	30%	24%	65%	39%	26%
305 to 350	47%	28%	19%	57%	27%	19%
355 to 400	43%	19%	12%	51%	19%	13%
405 to 450	48%	11%	8%	47%	12%	8%
455 to 500	42%	8%	6%	49%	7%	7%
505 to 550	n/a	15%	8%	42%	14%	10%
555 to 600	51%	10%	5%	49%	12%	9%
Other	52%	19%	14%	56%	22%	16%
Total	50%	20%	13%	57%	27%	17%

* In order to focus of meaningful findings, points below 155 are not reported on

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

SECTOR LEVEL		UNIVERSITIES LEVEL 8		SECTOR LEVEL		COLLEGES LEVEL 8	
POINTS RANGE	% OF MALES IN EACH CATEGORY	MALE % NON-PROGRESSION	FEMALE % NON-PROGRESSION	POINTS RANGE	% OF MALES IN EACH CATEGORY	% MALE NON-PROGRESSION	% FEMALE NON-PROGRESSION
155 to 200*	100%	0%	n/a	155 to 200*	50%	0%	100%
205 to 250	22%	0%	2%	205 to 250	46%	0%	14%
255 to 300	33%	29%	21%	255 to 300	40%	10%	40%
305 to 350	51%	25%	19%	305 to 350	25%	7%	12%
355 to 400	49%	18%	16%	355 to 400	25%	5%	5%
405 to 450	48%	11%	10%	405 to 450	23%	10%	10%
455 to 500	49%	8%	7%	455 to 500	26%	7%	2%
505 to 550	47%	6%	6%	505 to 550	26%	4%	2%
555 to 600	45%	5%	7%	555 to 600	10%	11%	4%
Other	48%	14%	10%	Other	29%	9%	5%
Total	48%	12%	10%	Total	25%	7%	5%

* In order to focus on meaningful findings, points below 155 are not reported on

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		SECTOR LEVEL		ALL NEW ENTRANTS	
POINTS RANGE	% OF MALES	% MALE NON PROGRESSION	% FEMALE NON PROGRESSION	POINTS RANGE	% OF MALES	% MALE NON PROGRESSION	% FEMALE NON PROGRESSION
Total	47%	14%	10%	Total	51%	20%	12%

Appendix E Details of Non-Progression Rates by Socio-Economic Group (2012/13 to 2013/14)

Table E1 Number 'Students who did not progress from the academic year 2012/13 to 2013/14' and the Number of 'New Entrants' by Socio-Economic Group

SOCIO-ECONOMIC GROUP	% NON-PROGRESSION	NUMBER OF STUDENTS WHO DID NOT PROGRESS 2012/13 TO 2013/14	NEW ENTRANTS
Farmers	10%	199	1,938
Lower Professional	12%	258	2,211
Higher Professional	10%	299	2,910
Employers and Managers	13%	604	4,579
Non-manual	14%	332	2,364
Semi-skilled	14%	187	1,382
Unskilled	14%	89	622
Own account workers	14%	282	2,035
Agricultural workers	13%	28	208
Manual skilled	15%	415	2,860
All others gainfully occupied, and unknown	17%	721	4,281
Grand Total	13%	3,414	25,390

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

Table F1 2012/13 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	22%	25%	17%	21%
IT Blanchardstown	35%	34%	22%	29%
Cork IT	32%	23%	14%	20%
IT Carlow	25%	25%	18%	21%
Dundalk IT	28%	24%	13%	21%
Dun Laoghaire Institute of Art, Design and Technology	N/A	25%	13%	15%
Dublin Institute of Technology	22%	30%	16%	20%
Galway-Mayo IT	30%	31%	18%	29%
Limerick IT	31%	33%	17%	24%
Letterkenny IT	21%	26%	17%	24%
IT Sligo	28%	31%	13%	25%
IT Tallaght	26%	27%	18%	23%
IT Tralee	36%	29%	19%	27%
Waterford IT	26%	23%	19%	21%
All Institutes of Technology	26%	28%	17%	23%
National Average	26%	28%	12%	16%

Table F2 2012/13 Full-Time Undergraduate New Entrant Non-Progression Rates by University & NFQ Level

UNIVERSITY	LEVEL 8 NON-PROGRESSION
Dublin City University	12%
University College Dublin	11%
University College Cork	10%
National University of Ireland, Galway	13%
University of Limerick	13%
Maynooth University	9%
Trinity College Dublin	7%
All Universities	11%
National Average	12%

Table F3 2012/13 Full-Time Undergraduate New Entrant Non-Progression Rates by Colleges & NFQ Level

COLLEGES	LEVEL 8 NON-PROGRESSION
St. Patrick's College Drumcondra	4%
Mary Immaculate College Limerick	5%
Mater Dei Institute of Education	12%
National College of Art and Design	6%
St. Angela's College, Sligo	10%
All Colleges	6%
National Average	12%

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

Table G1 2012/13 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	12%	n/a	n/a	17%	n/a	11%	n/a	n/a	11%	n/a	n/a	n/a	n/a	13%
Social Science, Business, Law, Arts and Humanities	22%	30%	33%	26%	n/a	19%	n/a	28%	38%	31%	23%	31%	22%	25%
Science, Agriculture and Veterinary	48%	n/a	40%	23%	3%	n/a	n/a	40%	19%	22%	21%	29%	n/a	24%
Engineering (excl Civil)	41%	56%	63%	n/a	n/a	17%	n/a	41%	n/a	n/a	40%	53%	23%	34%
Construction and Related	36%	n/a	n/a	20%	n/a	65%	n/a	43%	n/a	n/a	n/a	n/a	0%	44%
Services	28%	n/a	26%	n/a	40%	26%	24%	21%	16%	n/a	9%	45%	48%	28%
Computer Science		29%	n/a	44%	n/a	n/a	42%	33%	14%	n/a	33%	27%	n/a	32%
All Fields of Study	22%	35%	32%	25%	28%	22%	30%	31%	21%	28%	26%	36%	26%	26%

AIT	Athlone Institute of Technology
ITB	Institute of Technology Blanchardstown
CIT	Cork Institute of Technology
ITC	Institute of Technology Carlow
DKIT	Dundalk Institute of Technology
IADT	Institute of Art, Design and Technology
DIT	Dublin Institute of Technology
GMIT	Galway-Mayo Institute of Technology
LIT	Limerick Institute of Technology
LYIT	Letterkenny Institute of Technology
ITS	Institute of Technology Sligo
ITTA	Institute of Technology Tallaght
ITTR	Institute of Technology Tralee

WIT	Waterford Institute of Technology
DCU	Dublin City University
UCD	University College Dublin
UCC	University College Cork
NUIG	National University of Ireland, Galway
UL	University of Limerick
MU	Maynooth University
TCD	Trinity College Dublin
NCAD	National College of Art and Design
MDEI	Mater Dei Institute of Education
MIC	Mary Immaculate College
SPD	St. Patrick's College, Drumcondra
St. Angela's	St. Angela's College, Sligo

Table G2 2012/13 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	9%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9%
Healthcare	n/a	16%	9%	23%	3%	n/a	n/a	n/a	n/a	14%	26%	20%	27%	6%	16%
Social Science Business and Law and Arts and Humanities	7%	40%	25%	19%	23%	25%	19%	29%	26%	29%	28%	41%	22%	36%	28%
Science and Agri and Vet	20%	19%	20%	5%	21%	n/a	16%	14%	26%	24%	35%	16%	21%	14%	19%
Engineering (excl Civil)	42%	58%	26%	24%	36%	n/a	34%	35%	34%	25%	36%	19%	29%	31%	34%
Construction and Related	0%	n/a	41%	50%	46%	n/a	33%	43%	40%	24%	43%	n/a	42%	45%	41%
Services	21%	30%	26%	23%	17%	n/a	29%	39%	38%	0%	22%	22%	30%	32%	28%
Computer Science	34%	30%	23%	43%	22%	27%		27%	40%	28%	36%	23%	34%	29%	32%
All Fields of Study	25%	34%	23%	25%	24%	25%	30%	31%	33%	26%	31%	27%	29%	23%	28%

Table G3 2012/13 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	11%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	11%
Healthcare	14%	11%	11%	13%	8%		10%	10%	9%	2%	4%	20%	10%	12%	10%
Social Science, Business, Law, Arts and Humanities	21%	19%	11%	23%	16%	13%	15%	16%	15%	25%	20%	20%	19%	21%	17%
Science, Agriculture and Veterinary	19%	13%	21%	11%	n/a	n/a	14%	21%	17%	n/a	20%	7%	37%	19%	18%
Engineering (excl Civil)	n/a	59%	9%	34%	n/a	n/a	16%	13%	n/a	33%	n/a	21%	n/a	29%	20%
Construction and Related	n/a	n/a	20%	25%	8%	n/a	19%	38%	25%	n/a	42%	n/a	n/a	13%	21%
Services	14%	24%	29%	13%	n/a	n/a	21%	30%	14%	n/a	21%	13%	33%	16%	20%
Computer Science	20%	34%	20%	20%	23%	8%	20%		33%	30%		15%	17%	51%	26%
All Fields of Study	17%	22%	14%	18%	13%	13%	16%	18%	17%	17%	13%	18%	19%	20%	17%

Table G4 2012/13 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	9%	n/a	n/a	n/a	11%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	11%
Healthcare	13%	13%	10%	16%	8%		10%	10%	9%	6%	8%	20%	20%	11%	12%
Social Science, Business, Law, Arts and Humanities	20%	35%	17%	23%	20%	15%	16%	26%	19%	30%	26%	26%	23%	23%	21%
Science, Agriculture and Veterinary	23%	17%	21%	15%	17%	n/a	15%	17%	23%	23%	24%	14%	29%	18%	19%
Engineering (excl Civil)	41%	58%	22%	28%	36%	n/a	29%	34%	35%	31%	36%	28%	46%	28%	32%
Construction and Related	22%	n/a	28%	43%	37%	n/a	25%	42%	33%	29%	43%	n/a	42%	29%	33%
Services	24%	26%	26%	18%	30%	n/a	25%	34%	21%	17%	22%	15%	34%	34%	26%
Computer Science	27%	32%	22%	28%	22%	14%	20%	32%	35%	27%	36%	21%	28%	40%	29%
All Fields of Study	21%	29%	20%	21%	21%	15%	20%	29%	24%	24%	25%	23%	27%	23%	23%

Table G5 2012/13 University Level 8 Non-Progression Rates by Field of Study

FIELD OF STUDY	DCU	UCD	UCC	NUIG	UL	MU	TCD	ALL UNIVERSITIES
Education	11%	n/a	0%	18%	7%	5%	22%	8%
Healthcare	5%	8%	6%	4%	6%	4%	5%	6%
Social Science, Business, Law, Arts and Humanities	12%	13%	11%	14%	13%	9%	8%	12%
Science, Agriculture and Veterinary	14%	7%	7%	14%	14%	8%	9%	10%
Engineering (excl Civil)	13%	6%	9%	8%	15%	15%	8%	11%
Construction and Related	n/a	18%	16%	17%	8%	n/a	n/a	16%
Services	n/a	n/a	n/a	23%	n/a	n/a	n/a	23%
Computer Science	21%	10%	16%	3%	17%	9%	12%	15%
All Fields of Study	12%	11%	10%	13%	13%	9%	7%	11%

Table G6 2012/13 Colleges Level 8 Non-Progression Rates by Field of Study

FIELD OF STUDY	NCAD	MDEI	MIC	SPD	ST. ANGELA'S	ALL COLLEGES
Education	n/a	6%	3%	3%	4%	3%
Healthcare	n/a	n/a	n/a	n/a	18%	18%
Science, Agriculture and Veterinary	n/a	n/a	0%	n/a	n/a	0%
Social Science, Business, Law, Arts and Humanities	6%	33%	11%	7%	n/a	9%
Engineering (excl Civil)	n/a	n/a	n/a	n/a	0%	0%
All Fields of Study	6%	12%	5%	4%	10%	6%



Contact Us

Brooklawn House, Crampton Avenue
Shelbourne Road, Ballsbridge, Dublin 4
DO4 C2Y6, Ireland

Email: info@hea.ie

Phone: +353 1 231 7100

Lo-Call Number: 1890 200 637

Fax: +353 1 231 7172