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**A Comparison of the Progression of International Students to First Year Undergraduate Studies by Entry Route in an Irish Higher Education Institution:
Part One – a Quantitative Study**

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Abstract

Increasing international student numbers in higher education institutions has long been an educational priority internationally due to the cultural, educational and economic benefits it brings (Ireland's International Education Strategy, 2010). Little research however has been conducted in the area of varying entry routes to higher education by international students and the potential benefits/disadvantages if any of pursuing one entry route over another (Terraschke & Wahid, 2011). This research examines the first year undergraduate progression rates of international students in the Dublin Institute of Technology (DIT) in Ireland to determine if students who complete a one year International Foundation Programme (IFP) in DIT progress differently to direct entry international students to the same institution. Results show that there is no statistically significant difference in the progression rates of international students from both entry routes however international students as a whole were found to progress at a lower rate when compared to domestic students on a national level. This research highlights the effectiveness of the DIT IFP in bringing international students up to the required standard to enter their undergraduate studies and informs practitioners and policy makers of the disparities between international and domestic students in terms of progression rates.

Keywords: International students, entry routes, International Foundation Programme, progression

Introduction

The economic benefits of increasing the international student numbers in higher education have long been documented in the literature (Qiang, 2003; Altbach & Knight, 2007; Luxon & Peelo, 2009; Hegarty, 2014; Bergerhoff et al 2013; Universities UK, 2014; Floyd, 2015). In more recent times the focus has turned to examining non-economic benefits of increasing the international student body such as an increased international awareness amongst all students and staff and an improved quality of teaching, learning and research (Kreber, 2009; Svensson & Wihlborg, 2010; Harris, 2011; Henard et al, 2012; Foster et al, 2013; Leask, 2011, 2015; HEA, 2016). Regardless of the rationale for wanting to improve and increase the uptake of international students in higher education the drive to do this is very apparent in educational policy documentation worldwide (DES, 2010, 2016; Hunt, 2011; University of Oxford, 2015).

The necessity and willingness to facilitate a variety of entry routes to higher education for international students is therefore of importance. Higher education institutions, not wanting to turn away any potential students, often demonstrate a three pronged approach when it comes to entry routes for international students:

- Direct entry for students who have met both the academic and English language requirements.
- Pathway programmes for students who require both English and academic skills, for example the IFP.
- Pathway programmes for students who have met the academic requirements and just require English language preparation, for example the International Bridging Programme.

Little research exists in the area of comparing the progression rates of direct entry international students and international students who have completed pathway programmes. One reason for this is due to the challenge that is faced trying to compare international students with varying academic backgrounds (Clarke & Gzella, 2013).

This paper seeks to address this gap in research. The next section outlines literature in the areas of incidence and benefits to universities from participation by international students across countries. We also discuss the varying entry routes to higher education for international students and the existing reported benefits and challenges of each. We then report the results of research undertaken to examine comparative progression rates based on different entry routes for international students to the DIT.

Literature Review

Incidence of International Students in Higher Education

The incidence of international students travelling abroad to partake in higher education has grown steadily over the past five decades (Hughes, 1988; Mazzarol & Soutar, 2002). Some evidence of a decline in this flow of international students was seen during the 1980s and 1990s (Kemp, 1995) however a global industry was created (Mazzarol and Soutar, 2002) and international student flow continues to increase (UNESCO, 2014).

The incidence of international students in higher education has been linked with what have become known as the ‘push and pull’ factors that encourage students to study overseas. The ‘push and pull’ factors can vary depending on the country of origin of the student and desired

study destination. The ‘push’ element refers to factors within the source country which encourage students to leave while the ‘pull’ factors refer to factors which make the host country attractive to the international student. Such factors include for example personal reasons, country/city effect, course suitability (Krampf & Heinlein, 1981), selection of courses (Qureshi, 1995), course quality (Turner, 1998), international recognition of degree (Turner, 1998), entry requirements (Bourke, 2000) and costs and availability of financial support (Qureshi, 1995). There are many reasons for the incidence of international students in higher education changing over the years some of which are discussed next when the literature surrounding the benefits for international students in higher education are discussed.

Benefits for International Students in Higher Education

The rationale for international students travelling abroad for higher education purposes has traditionally been attributed to it being a platform to raise the economic and social status of the graduate (Mazzoral & Soutar, 2002; Enders, 2004; Teichler, 2004). Ninnes et al. (2006) detailed that many international students bring with them learning experiences which could be deemed inadequate for the educational environments they are endeavouring to enter. This research highlights that the educational experiences in the international students’ country of origin have reportedly favoured rote, surface level learning which lacks any analytical and critical perspectives.

International students have also been deemed to make valuable educational and economic contributions to the higher education institutions in which they enrol (Andrade, 2006). Higher Education Institutions (HEIs) rely increasingly more on revenue generated from the international

student market due to a lack of available funding. This alternative source of revenue can be used for financing teaching, learning and research related initiatives which consequently enhances the quality of the services provided to international students (De Vita & Case, 2010, Mellors-Bourne et al. 2013).

Internationalisation encourages the incorporation of international and inter-cultural dimensions to the teaching and learning environment which contributes to an international experience for the whole student body. It results in a more meaningful and purposeful education that equips students with the skills and knowledge they require to successfully live and work in a more interconnected world (Mellors-Bourne et al. 2013; Jones, 2009).

Entry Routes to Higher Education for International Students

Preparatory Programmes as an Entry Route to Higher Education

A growing number of academic institutions around the world are offering preparatory programmes for international students. In essence these programmes - known as bridging, pathway or foundation - are aiming to improve the language skills of the students so that they are ready for the language demands of undergraduate academic studies. Research reveals the linguistic challenges faced by international students, particularly around the productive skills of writing and speaking (Evans & Green, 2007; Terraschke & Wahid, 2011) which indicates the need for these types of programmes. Additionally, international preparatory programmes are offered in an attempt to enable students to meet the minimum academic requirements of the undergraduate degree programmes to which they wish to progress (Clark & Gzella, 2013; Floyd, 2015).

Evans and Green's (2007) study which focussed on international students' challenges associated with studying in English-speaking HEIs emphasised the importance of teaching discipline-specific and common core lexis. The programmes have also been found to be beneficial in helping international students to acclimatise to the culture of learning in their host country which can often be quite different to the expectations in their source country (Ninnes, Aitchison & Kalos. 2006).

Direct Entry Routes to Higher Education

Most HEIs will offer a direct entry route for international students to their institutions however there is generally an English language stipulation. In an Irish context, applicants whose first language is not English are required to provide evidence of English language proficiency, for example, the International English Language Testing System (IELTS) qualification. The minimum level required is 6.0, some programmes may require a higher score (DIT, 2017).

Progression and Performance of International Students based on Entry Route - Existing Literature

Little research has been carried out in the area of comparing international students' progression rates or academic performance in undergraduate education by entry route. Clark and Gzella (2013) highlight that due to the large variety of types of preparatory programmes and the large variety of academic backgrounds that international students have on entry to higher education it is extremely difficult to evaluate a preparatory programme.

Most programmes of this nature are generally considered to prepare students to a level that is equivalent to competencies developed by a school leaver however there are no benchmarking standards for these programmes (Clark & Gzella, 2013). Furthermore, Floyd (2015), whose research specifically addresses concerns surrounding the English language proficiency of students who complete pre-sessional English for Academic Preparation (EAP) programmes instead of official English language tests such as the IELTS or Test of English as a Foreign Language (TOEFL), states that few studies have explored the performance or experience of students who have transitioned to higher education via these pathways. This research stipulates that while there is an assumption that these pathways are credible and pedagogically robust, there is no valid quality assurance mechanism to provide assurance that pathway students are sufficiently prepared for higher education. Floyd (2015) also acknowledges the difficulty in quantifying exactly what constitutes adequate preparation for higher education. Similarly, Dyson (2014) suggests the need for closer monitoring of onshore pathway students' performance once they progress to their destination programmes.

Dyson (2014) investigated pathway students' perceptions of their academic and language competence following completion of an EAP programme and it revealed that they tended to be more confident with their academic skills than their language skills when on their destination programmes. Adjustment problems for academic students tends to focus on language-related issues (Andrade, 2005; Evans & Green, 2007). This complements the work of Floyd (2015) which queries whether in fact it is students' prior learning in academic skills that plays a part in equalising their academic results with direct entry students. The research discussed here therefore highlights the significant challenge that exists surrounding comparisons of performance

of international students based on entry routes particularly where preparatory programmes are concerned.

Johnson (1988) examined the relationship between language proficiency and performance of undergraduate international students who enter higher education via direct entry routes. These studies however do not differentiate between international students who may have come via preparatory programmes or those who enter higher education having not previously studied in the host country. Floyd (2015) also notes that studies on the IELTS test often reveal that while IELTS scores are a significant predictor of academic success in higher education, the correlation is not that strong. Achievement of international students is affected by English language proficiency, academic skills and educational background (Andrade 2006; Floyd, 2015) so it is possible that students entering higher education, albeit with the same language proficiency as direct entry international students, could be at an advantage academically due to the additional familiarisation with the cultural teaching and learning expectations and additional exposure to academic preparation in English they engage with.

National Relevance of the International Foundation Programme

Terraschke and Wahid (2011) found that students gain an advantage over non-EAP students due to the extra tuition and EAP students are positively affected by the course, due to obtaining useful skills and techniques that the non-EAP student generally lack. An earlier study by Dooey (2010) reported that EAP pathway programmes act as a valuable preparation and a very useful starting point for tertiary studies. Students on an onshore pathway programme in Australia

confirmed that they felt better prepared in terms of skills, both general and academic than language proficiency skills (Dyson, 2014).

At a national level, the Hunt Report (2011) stipulates the need for Irish HEIs to prioritize prioritise internationalisation and emphasises the responsibility of HEIs to integrate domestic and international students and to engage with international students more creatively. One of the Higher Education Authority's (HEA) key objectives is that Ireland's higher education institutions will be globally competitive and internationally oriented and that Ireland will be a world-class centre of international education (HEA, 2014). Pre-sessional, pathway programmes such as the IFP facilitate international students' needs and create a new pipeline for international students who wouldn't otherwise be admissible. Furthermore, the Irish Government's recently released *International Education Strategy 2016-2020* (DES, 2016) emphasises the role HEIs play in driving internationalisation of higher education and how the inclusion of pathway programmes such as the IFP in the broader international education package improves the ability of agencies to promote and sell Ireland as a destination for international students.

This paper will contribute to the body of knowledge surrounding the progression rates of international students who have completed a pathway programme comprising of language, general academic and discipline specific academic skills by comparing their progression rates with direct-entry international students. The next section provides further context for the research to be presented later by outlining the entry routes taken by international students in DIT.

Context: DIT International Foundation Programme

In September 2011, the DIT International Office identified a demand from international students to undertake a foundation programme to equip them with the language and academic skills required to progress to DIT undergraduate programmes. It was agreed to offer a variant of the Mature Student Access Programme (MSAP) to international students as an International Foundation Programme with students, where possible, sharing modules and with additional English language modules to address their academic language needs. In June 2013 the MSAP and International component were re-validated as two separate programmes, namely the Access Foundation Programme (AFP) and the IFP with separate programme documentation, including programme aims, programme learning outcomes, admissions requirements and process, programme schedules, module descriptors and progression of students to the DIT.

The IFP is part of a suite of pathway programmes that DIT offers to international students who need to further develop their English and/or academic skills prior to commencing their undergraduate, postgraduate or PhD studies at DIT. Table 1 below summarises the pathway programmes DIT currently offers. The range of programmes and intakes offered ensures optimum flexibility to meet international students' needs. This is likely to result in DIT being an attractive institute for international students and in turn increasing international student numbers. Students on the IFP programme study six core modules and two electives depending on what undergraduate (UG) programme they are progressing to.

Pathway Programme	Type of programme	In-takes	IELTS requirement
International Foundation Programme (IFP)	A two semester English & Academic preparation programme for students who have not met the English or academic requirements for direct entry to UG	September & January	One band less than the direct entry requirement. Typically IELTS 5.0
Extended Foundation Year	A three semester English & Academic preparation programme for students who have not met the English or academic requirements for direct entry to UG	July & September	One and a half bands less than the direct entry requirement. Typically IELTS 4.5
Bridging for UG studies	A one semester English only programme for students who have met the academic requirements for UG but need to further develop their English	September, January and July	Half a band less than the direct entry requirement. Typically IELTS 5.5
Bridging for postgraduate (PG) studies	A one semester English only programme for students who have met the academic requirements for PG/PhD but need to further develop their English	September, January and July	Half a band less than the direct entry requirement. Typically IELTS 5.5
Pre-Masters	A two semester English & Academic preparation programme for students who have not met the English or academic requirements for direct entry to PG	September	One band less than the direct entry requirements. Typically IELTS 5.0

Table 1: DIT International Pathway Programmes.

Institutional Relevance of the International Foundation Programme

From an institutional point of view, the IFP is unique within DIT's current portfolio and is a multi-disciplinary programme. It assists the DIT in meeting its strategic objectives in internationalisation. There is a continuing expansion of these programmes both nationally and worldwide and it was in DIT's best interest to remain competitive in the international education market. The programme aims and objectives accord with the key strategic objectives of DIT. In relation to internationalisation, the programme is a central access entry route and an important means of achieving DIT's internationalisation objectives.

The institute is currently applying for technological university (TU) status. Part of this application calls for the institute to have an "expanded international orientation and a portfolio of international activity" (Marginson, 2011, p.5). It is also a requirement that 20% of all students (across levels 6 to 10) enrolled in the TU will be international. The current rate is approximately 10%.

Entry Requirements for the International Foundation Programme

The application process is coordinated by the IFP coordinator. Following submission of application, the coordinator assesses applicants for eligibility and suitability based on applicants' high school results and official English language results, namely IELTS or TOEFL. The *Institutes of Technology Central Evaluation Process Document* (Douglas & Lennon, 2011) is used as a guide to determine suitability in terms of high school results. Students are required to have an overall IELTS score which is one band less than the direct entry requirement. For the

majority of courses in DIT, this is an overall IELTS of 5.0, or equivalent. There are, however, some exceptions which require an overall score of 5.5, or equivalent. It depends on the students' desired destination programme. If international students have met the academic requirements for direct entry and are half an IELTS band below the direct entry English requirements, they would be eligible to complete a twelve week International Bridging Programme to further develop their academic English skills.

Upon successful completion of the IFP, students are guaranteed an offer of an undergraduate programme in DIT. If international students apply directly for the undergraduate programme via the Admissions Office and are rejected due to their academic or language ability, the Admissions Office directs the students to the IFP coordinator and encourages them to apply for the IFP.

Responsibility for Recruitment to the International Foundation Programme

The School of Hospitality, Management & Tourism in consultation with the International Office continues to recruit students from a range of international backgrounds to ensure diversity and avoid over-reliance on particular student cohorts e.g. Middle-Eastern scholarships schemes. Ensuring diversity also fosters an English speaking environment amongst students which leads to better language development. Furthermore, it is important to continue to explore new emerging markets and diversify recruitment strategies.

Teaching and Assessment on the International Foundation Programme

The IFP lecturers employ an active learning student-centred approach to teaching and learning and endeavour to foster life-long learning skills with an emphasis on the importance of learning

in context. Through various learning activities and group work, a communicative and interactive learning environment is created. Peer mentoring groups are often established to facilitate structured regular out-of-class study and revision led by students for students (International Foundation Programme, 2017). This is in-line with best practice for teaching and learning. The IFP is semesterised and each semester students engage in a range of assessment tasks including both formative and summative assessments. A detailed semester assessment schedule is provided to students on day one of term (Appendix). This details due dates and when feedback will be provided. Programme chairs, in consultation with the academic team, develop the assessment schedule ensuring an even spread of assessments across the semester.

Feedback is available to students for all formative and summative assessments and is delivered during scheduled lecture times or during lecturers' office hours. The class groups are generally small which facilitates the delivery of effective feedback to all students and also supports the student-centred approach to teaching and learning that is adopted.

Completion of the International Foundation Programme and Undergraduate Choice

The undergraduate programme choice is made prior to commencement on the IFP programme and is part of the IFP application process. For scholarship students this is dictated by their sponsoring body but independent fee paying students make their decision individually. Students are then streamed according to their destination programme. The IFP offers four streams, namely Business, Engineering, Science, and Humanities. As previously mentioned upon successful completion of the programme students are guaranteed a place on their undergraduate programme of choice at DIT. Some programmes, with limited spaces, also require students to attend for

interview. To successfully complete the programme students must currently pass all core and elective modules.

Decisions on the progression of students into undergraduate programmes are made by the Admissions Board based on assessment of student performance in meeting the minimum entry requirements for programmes.

Direct Entry to DIT as an International Student

International students who met the academic requirements as per the Institutes of Technology, Central Evaluation document (Douglas & Lennon, 2011) and who have met the English language direct entry requirements (Appendix) are deemed eligible for direct entry to their undergraduate studies.

Supports for International Foundation Programme Students

A high level of student support is provided to the students on the IFP from the programme coordinator, programme chair and programme committee to maximise retention and student progression to their undergraduate studies. In addition students are referred to student support services in DIT as required.

Students engage in a staggered orientation programme during the first two weeks of the IFP that includes topics such as teaching and learning in the Irish HEI environment, time management, goal setting as well as guest speakers from the various DIT support services such as the counselling and medical centre. This is under constant review to assist students in making the

transition to higher education. The coordinator of the IFP holds monthly student support meetings to address issues such as attendance and academic progress. A weekly core module, *Introduction to Higher Education* is designed to support international students, to encourage them to reflect on the experience of being in a higher education institute in a different country, and to address issues relevant to transitioning into third level education. The module uses group work methodologies to allow students to reflect and share their experiences of learning and to deepen students' understanding of peer support.

Existing supports for first year students

The DIT ethos is very supportive of all first year students. Interventions like the first year student experience, induction and orientation are amongst many initiatives offered to support and retain first year students.

Methodology and Hypothesis

Methodology

The aim of this research is to establish whether the entry route that an international student entering DIT takes has an impact on their progression to second year of their undergraduate studies. The methodology involves a mixed methods approach in which quantitative and qualitative data have been gathered from students in both the IFP and direct entry international students. The qualitative data will be reported in a second paper. The quantitative data reported in this paper addressed students' mean performance in year one of their undergraduate degree programmes, and data on whether they progressed to year two of their undergraduate programmes. The data relating to student mean performance in year 1 of their undergraduate studies and progression statistics were collated from the 'Info-view online report system' which

is the electronic system that the DIT uses to store all student grades, demographics, progression information and much more. The intention of gathering and analysing the data for the quantitative part of this research was to answer the following research question:

Do students who undertake the IFP in DIT perform to a different mean standard to direct entry international students in year one of their undergraduate programmes and do they progress at a different rate to year two of their undergraduate studies?

The research hypothesis for this question is detailed in the following section.

Hypothesis

The researchers hypothesised that the students who successfully completed the IFP in DIT would perform to a similar standard to the direct entry international students in the first year of their undergraduate studies (Note - first year undergraduate performance is based on mean performance across all modules in year one). The researchers also hypothesised that both sets of students would progress at a similar rate to the second year of their undergraduate studies. This hypothesis was based on a belief that spending a year completing the IFP would adequately prepare international students academically as well as socially for further study in the Irish context, bringing them to a similar standard as those coming straight from second level schooling in their countries of origin. This potential outcome is being hypothesised knowing that the direct entry students have higher IELTS scores than students beginning the IFP.

Data Analysis

The quantitative data was analysed using Statistical Package for Social Sciences (SPSS) (Version 22.0). Descriptive statistics such as percentages and means were used to build a profile of the international students' performances and progression within the research. Comparisons were then used to determine if any conclusions could be drawn about the two groups of students (IFP and direct entry) regarding which entry route lead to greater success in year one of their undergraduate programmes and higher rates of progression to year two.

Results

Profile of International Students

The profile of IFP students and direct entry students (numbers in each group) are outlined in Figure 1. During the academic year 2014/15, the number of IFP students was 74 and there were 30 direct entry students; and for the academic year 2015/16, the number of IFP students was 57 and there were 49 direct entry students. Only programmes in which the IFP students enrolled were examined for comparative purposes with direct entry international students who were also enrolled on those programmes that year.

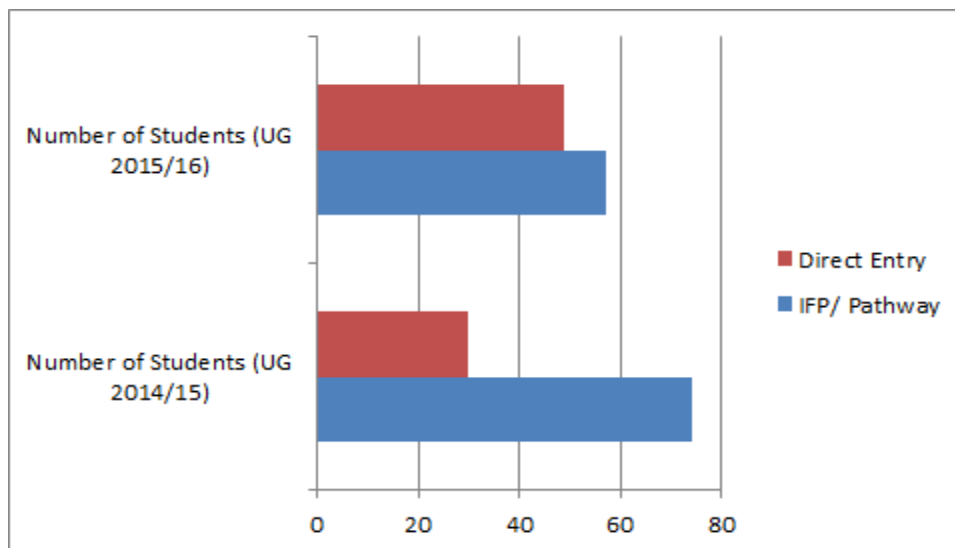


Figure 1: Number of direct entry and IFP students for two academic years.

The Higher Education Authority (HEA) publish reports on the progression of undergraduate students in Irish HEIs. The data reflects whether a student is present in their institution in March of the year following entry to undergraduate education, and the reports are concerned with the progression of students between first and second year. In an attempt to compare like with like the data gathered within this research also considered an international student (direct entry and IFP) to have successfully progressed to year two of their undergraduate studies if they were present in March of year two of their respective undergraduate programmes.

Our findings show that the progression rates of direct entry international students and IFP international students are quite similar since the introduction of the IFP programme. The 2014/15 cohort of IFP students had a slightly higher progression rate of 69 per cent (n=51) from year one to year two of their undergraduate studies compared to the direct entry counterparts who had a progression rate of 63 per cent (n=19) across the same undergraduate programmes in DIT (Figure 2). The opposite was the case when the cohort following this initial group were examined

in terms of progression rates from year one to year two, with the direct entry students having a slightly higher progression rate of 69 per cent (n=34) when compared to their IFP counterparts who had a progression rate of 65 per cent (n=37). These statistics show no definite pattern in terms of which cohort of students tend to have a higher proportion of students progressing to year two of their undergraduate studies. However, what is clear is that the progression rates for both IFP and direct entry students are quite similar with approximately 30 per cent of students not progressing to year two of their undergraduate programmes. There was no statistically significant difference found between the progression rates of the two groups. This 30 per cent of students represents a significant proportion of students who have successfully completed the IFP programme and/or successfully gained places on undergraduate programmes, who do not engage with the second year of their undergraduate studies.

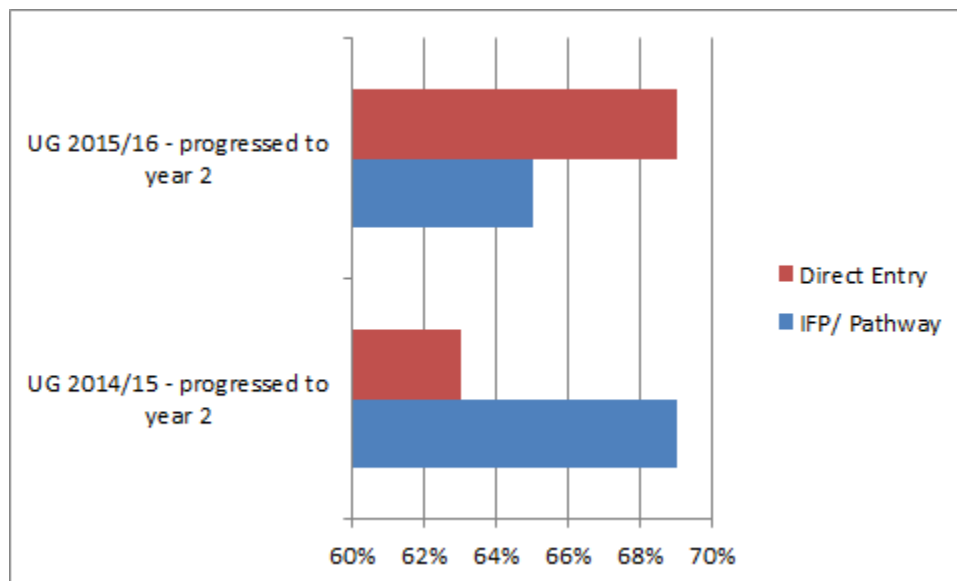


Figure 2: Progression rates of IFP students and direct entry students from two cohorts.

It should also be noted that the proportion of IFP and direct entry international students who do not progress to year two of their undergraduate studies is higher than the national average non-

progression rate for Irish students as reported by the HEA (2016). The HEA documented that in the academic year 2010/11 the non-progression rate for Irish students in Institutes of Technology (IoTs) such as DIT, was 24 per cent and in 2012/13 was 23 per cent (Figure 3). Based on our findings, there is a statistically significantly higher proportion of Irish students progressing in all Irish IoTs from the first to the second year of their undergraduate programmes when compared to international students regardless of their entry routes to undergraduate programmes. [Note: In the HEA report, nationality refers to the legal nationality as it appears on a person's passport (HEA, 2016)].

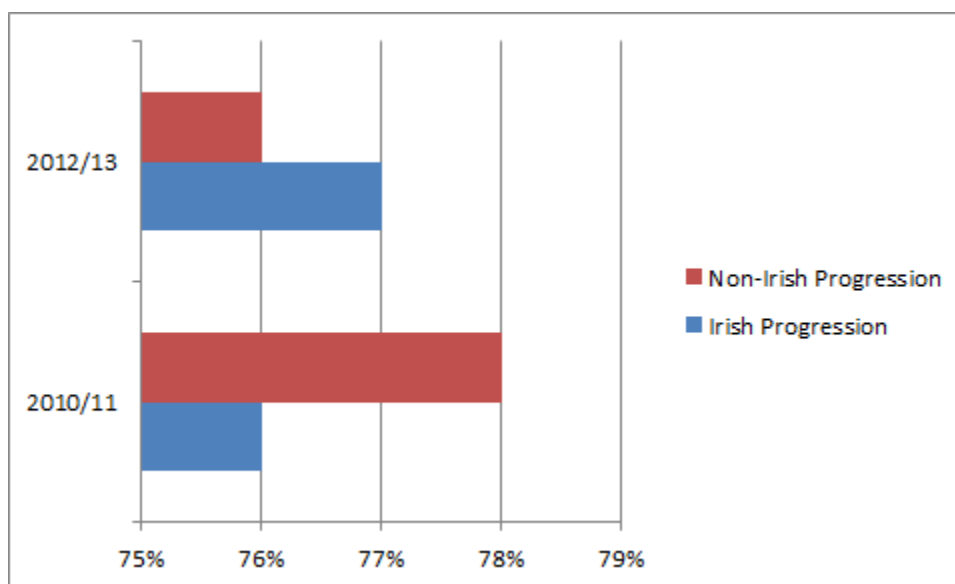


Figure 3: Progression Rates of Irish and non-Irish students for two cohorts of higher education Students.

Performance of Direct Entry and International Foundation Programme Students by College for the Direct Entry and IFP students

Although much data was gathered on direct entry and IFP students (and their average performance per programme and per college was examined) some programmes had only one

student undertaking the programme from each of the respective entry routes for international students. This resulted in it not being possible to make generalised statements about the likely performance of students on particular programmes based on their entry route. However, collective data was gathered on average performance across the DIT colleges in which the programmes being examined resided. This revealed that overall the direct entry international students performed better on average when compared to the IFP students (Table 2). However, it is noteworthy that within the DIT College of Engineering and Built Environment, in which there was the most significant number of direct entry international students (19) and IFP students (31), average scores were 49 per cent and 46 per cent respectively, showing similarities in the students' performances within the College in which most IFP students progressed. If one examines the performance per programme within this College (Table 3), it can be seen that in two out of the three programmes the direct entry students outperformed the IFP students on average, with IFP students in this particular cohort proving to be weak particularly in the Mechanical Engineering programme.

College Name	Number of Direct Entry Students	Number of IFP Students	Average Score of Direct Entry Students	Average Score of IFP Students
Arts & Tourism	1	2	48%	39%
Business	5	8	54%	46%
Sciences & Health	5	5	61%	33%
Engineering & Built Environment	19	31	49%	46%

Table 2: Average scores per college for the direct entry and IFP students.

Note: Each programme being examined within this research (Table 3) had a mean performance per programme calculated and these results were used to calculate the average score per college.

Course Code	Course Name	College Name	Number of Direct Entry Students	Number of IFP Students	Average Score of Direct Entry Students	Average Score of IFP Students
DT066A (Level 8)	Engineering (Common 1st Year)	Engineering & Built Environment	15	24	52%	49%
DT006 (Level 7)	Mechanical Engineering	Engineering & Built Environment	1	5	70%	33%
DT004 (Level 7)	Civil Engineering	Engineering & Built Environment	3	2	27%	48%

Table 3: Average scores per programme for the direct entry and IFP students.

Note: Each international student's overall performance in year one of their undergraduate programme was used to calculate average score per programme.

Discussion

The data analysed within this research demonstrates minor differences in terms of progression rates of international students according to entry route (i.e. direct entry compared with IFP). However, there is no definite pattern in terms of which entry route for international students tends to lead to higher progression rates to the second year of their undergraduate programmes. As the IFP programme is in its infancy, and no further data could be examined at this time, the main outcome that can be taken from this comparison of entry route against progression rates for international students is that within each entry route the rate of progression within the same programmes in DIT is very similar. This is a positive finding for the IFP as it demonstrates that the programme appears to enable students to progress in their undergraduate education to a similar degree upon successful completion as those who were not required to complete it.

As highlighted by Floyd (2015), it is difficult to quantify what adequate preparation for higher education is. He also notes that, in the absence of documented evidence in this area, there is an assumption that pathway programmes meet the needs of the students in preparing them appropriately for higher education. However, the findings within this research go some way to showing that students completing the IFP in DIT compared well with those international students who do not undertake the programme in terms of progression rates to second year at least. The findings suggest that IFP students are supported to resolve whatever deficiencies they may have had which required them to complete the programme (e.g. academic or language deficiencies) before commencing undergraduate studies. It is possible that the often documented increased confidence of students engaged in preparatory programmes in an academic sense (Dyson, 2014) also helps to bridge this gap between direct entry international students and those engaged in a preparatory programme.

Further longitudinal research will need to be carried out examining these comparisons to determine with any certainty whether there is a higher proportion of progression to second year from the IFP or direct entry routes. This preliminary analysis highlights that the IFP is not putting students at any notable disadvantage when it comes to progression through undergraduate education.

Despite there only being a small difference and no definite pattern in terms of the progression rates of direct entry and IFP students the data did show that there is a lower progression rate by international students (IFP and direct entry) overall when compared with domestic students. This finding is in keeping with what exists currently in the literature surrounding risk factors which

may impact upon student retention. AUSSE (2009) detailed that international students are more likely to depart from higher education prior to completion when compared to domestic students. Wilson and Lizzio (2008), when considering key factors which can predict success or failure in first year undergraduate studies, detail that students are more likely to drop out if they are a member of a minority group which included international students. The risk of not developing a social network at university could be another possible contributor to international students in DIT having significantly lower progression rates when compared to their domestic counterparts (Adams, Banks, Davis & Dickson, 2010).

There is very little documentation of progression of students from preparatory programmes in an Irish context, and minimal research on progression of international students by entry route to programme. It would be valuable to have insights from such research because of the capital and other benefits arising from keeping international students in higher education, no matter what their entry route.

In the context of Australian HEIs, Adams et al. (2010) stipulate the cost of attrition for an international student studying onshore to be \$17,000 for each year of lost tuition fees. Furthermore, there are additional costs associated with marketing and recruitment. This highlights the financial ramifications for the HEI of losing international students, and the need for HEIs to further investigate reasons associated with the attrition and progression rates of international students. The literature reports the need to provide further supports to international students during their undergraduate and postgraduate studies to ensure their on-going academic, cultural and linguistic adjustment needs are met (Andrade, 2006; Evans & Green, 2007).

In order to sustain international student numbers, reduce attrition, and increase progression and retention rates, HEIs need to move away from an economic rationalist approach to internationalisation which prioritises recruitment. Instead, HEIs should focus on the integrative and ultimately transformative approaches to internationalisation which focus on teaching and learning. Changes to the teaching and learning environment are needed to reflect more internationalised student cohorts, their associated needs, and the importance of effectively and creatively integrating international and domestic students (Clifford & Joseph, 2005).

This research goes some way to starting this work by exploring the progression rates of international students via entry route. We intend to continue, and through tracking international students' progression and raising awareness of this amongst the academic team we anticipate that more attention will be afforded to continuous improvement in this area.

Data in this research tells us we are not supporting our international students as well as we are supporting our domestic students to progress through their undergraduates studies.

It has been widely documented that international students have far greater and different adjustment challenges than domestic students (Hechanova-Alampay et al. 2002; Mullins, Quintrell, & Hancock, 1995). They include difficulties with the English language and culture; homesickness and loneliness and less social support, among others (Andrade, 2006). These factors alone demonstrate the urgent need for additional international student support.

The research conducted in this study highlights the need to examine in a qualitative manner the challenges that international students face and the possible reasons for them withdrawing from their undergraduate studies. One of the major challenges faced by international students relates to English language proficiency (Evans & Green 2007; Dooley 2010; Andrade, 2006). Such issues have been found to be related to academic writing and speaking and students vocabulary (Evans & Green, 2007; Andrade, 2006), intercultural communication (Dooley, 2010) and the processing of unfamiliar vocabulary (Evans & Green, 2007).

Conclusion

This research found that students entering their undergraduate studies in Ireland coming from an International Foundation Programme progress at a similar rate to international students who gain direct entry to the same undergraduate programmes. Due to the dataset within this research being relatively small it is difficult to make generalised statements about students' performance per programme or other issues. This must be taken into consideration when examining the findings of the research however the findings do suggest that the International Foundation Programme in DIT is bringing students up to the required standard to be as successful in terms of progression and average performance as those international students who did not have to undertake this foundation programme to gain access to undergraduate programmes. Research carried out by Andrade (2006) outlined a comparison of international and domestic students and found that international students have greater adjustment difficulties and are affected more by stress and anxiety (Andrade, 2006). Future qualitative research from international students' perspective in an Irish context is needed to explore the key influencing factors associated with international

student progression and the associated challenges. Phase two of this research study will explore such issues.

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Appendix

Qualifications	Minimum Level Required (Some programmes may require a higher score)
ETAPP	C1 (or higher)
TOEFL	Computer Based Test (DIT Code 0281) 213
TOEFL	Paper Based Test (DIT Code 0281) 550
TOEFL	Internet Based Test 92
IELTS	6.0
TOEIC (Not currently accepted for DT558)	700 (May be supplemented by interview)
TIE	(Only currently accepted for DT558) B2+ or Higher
GCE O Level English	Grade C
GCSE English	Grade C
Irish Leaving Certificate Ordinary Level	Grade D
Cambridge Certificate of Proficiency in English	Grade C
Cambridge Certificate in Advanced English	Grade A
NEAB Test in English	Pass
Norwegian Vitnemal	Grade Average 4

Table 4: English Language Direct Entry Requirements for DIT.