National Plan for Equity of Access to Higher Education 2015-2019
Working Group on Student Success
Discussion Paper

The purpose of this paper is to support further discussions by a Working Group established to advise the Department of Education and Skills (DES) and Higher Education Authority (HEA) on issues contributing to student success in higher education, in particular for under-represented target groups in the National Access Plan 2015-2019. The group will also advise on the measures needed to address these issues. The paper has been informed by research done to date on the area of non completion, in Ireland and abroad.

The paper is structured in four parts as follows:

Section 1 introduction and questions for the Group
Section 2 sets out the background and context to the work of the group
Section 3 provides overview of the main themes from national and international research
Section 4 describes measures and practices developed to address non-completion

Section 1 - Introduction and Questions for the Group

The *National Plan for Equity of Access to Higher Education 2015-2019* ('National Access Plan') commits to addressing the issue of non-completion within higher education institutions. Specifically, the Plan commits to:

- Address the issue of non-completion of programmes, particularly for those in under-represented target groups (Objective 1.4)
- Develop mechanisms to track progression, retention rates and the student experience of under-represented target groups (Objective 3.3).

The target groups identified in the plan are as follows:

- Entrants from socio-economic groups that have low participation in higher education
- First time mature student entrants
- Students with disabilities
- Part-time/ flexible learners
- Further Education award holders
- Irish Travellers

In addition, the National Access Plan underlines the importance of pre-entry activity in terms of guidance for correct course choice and preparation for participation in higher education. A further objective of the Plan is to:

- Support a more coherent and systematic approach by institutions (working within their regional clusters) providing different pathways and supporting the transition to higher education (Objective 4.1)

The DES has established a Steering Committee to oversee the implementation of the National Access Plan. At the first meeting of this Steering Committee, it was agreed to establish a working group to consider the issues contributing to student non-completion and the measures required to address these. A draft terms of reference for the group is attached as a separate document.

Retention and non-completion are issues that are also central to the performance management and strategic dialogue process carried out by the HEA with HEIs. As part of the third cycle of this process, institutions have been requested by the HEA to report on the implementation of the Transitions Agenda and also on efforts to improve retention rates.

The following are draft questions for consideration by the Working Group

i. **National and international research points to different reasons why students do not complete programmes of higher education. Does this research provide sufficient evidence on the reasons that most affect target groups in the National Access Plan and the measures required to address these?**

ii. **Different disciplines may suit different approaches but what best practice can be identified? Where is the evidence of what is working?**

iii. **In terms of non completion, what is preventable and what is not?**

iv. **Are there enough supports in place to facilitate students re-entering the system following a decision to withdraw? Are there obstacles making this more difficult than it should be?**

v. **What additional research or data is required to help advise further work by the group? For example, what % of the students who withdraw switch programme? What gap will this data fill? Should it be focused on the target groups, if so which groups?**

vi. **Based on research or your experience to date, what interventions should be prioritised to address student success in higher education by students from access target groups? What interventions have proven successful?**

vii. **How and by whom should these measures be implemented and progress monitored?**

viii. **There is evidence that flexible/part-time students are more likely to withdraw than full-time students. Are additional measures needed to address the issues for this group?**

ix. **Are there other questions that need be considered by the group?**

Section 2 - Background and Context

"Dropping out is not necessarily an indication of the individual student's failure, but high drop-out rates may well indicate that the education system is not meeting the needs of students." (OECD, 2008, p. 94).

The withdrawal of a student from a college course has an impact on both the student and the institution. The most recent national data (HEA, 2015) indicates that the overall proportion of new entrants who did not progress from first to second year of their programme of study is 16% across all sectors and NFQ levels (see **Table 1** below). There are significant differences between different institutions, levels of course, discipline area and by student profile. National and international data shows how students further into their programme are less likely to withdraw so retention efforts are particularly important in first year.

From the student's perspective, the decision to withdraw can be accompanied by feelings of failure and regret and a lack of awareness about the implications that this decision can have. From the institution's point of view, the withdrawal of a student can represent a lost revenue stream and a missed opportunity for another prospective student. It can also be an indicator of a disconnect between the second level, further education and third level sectors. The current scale of non-completion at third level makes the issue an education policy matter requiring input and solutions from second to third level.

Financial Cost

Aside from the emotional cost to the student, there is also a financial cost to the student of not completing a course. DIT Campus Life estimates the annual cost of going to college as c.€11,000 per year for a student living away from home and c.€7,000 for a student living at home. These figures include the student contribution of €3,000. If a student chooses to return to college, their grant entitlement is lost for the year that they repeat. In addition, they will be also liable for some or all of the tuition fee for the year that they are repeating, depending on the timing of their withdrawal during the academic year. A student may be considered eligible for funding as a "second chance" student where they have previously attended but not completed a course, have had a 5-year break in studies since leaving that course, and are returning to attend an approved course at the same level.

There is also a cost to the Exchequer that includes tuition fees, the grant per student to the higher education institution (HEI) and an amount paid by the State for the student contribution and maintenance grant (where applicable) .There is a further stream of lost revenue to institutions for the student contribution, the fee and recurrent grant per student when the place is not taken up for the remainder of the course.

Non-completion of higher education is complex and closely linked to issues of social justice and equity in education and training. There is no one solution. However the reasons why under-represented groups are not completing their studies and withdrawing from higher education need to be addressed if higher education is to play its full part in contributing to growth and jobs and in fostering a more equal society.

National Policy Context

The Department of Education and Skills (DES), the Higher Education Authority (HEA) and the Higher Education Institutions (HEIs) have responsibility for promoting access to and participation in higher education by under-represented groups in the sector. These groups include students from socio-economically disadvantaged backgrounds, those with disabilities and first time, mature student entrants.

Section 3 – Overview of Data and Research

National

In *Irish Higher Education, A Comparative Perspective,* Pat Clancy outlines the findings from the study of retention in Irish higher education, from the late 1970s to present day. The first national study on the institutes of technology was published in 2000 and the universities was published in 2001. Institutions have also done their own research into retention and completion. The HEA's latest study on progression, published in 2016, tracks the progression patterns of a cohort of students from March 2013 to March 2014. This analysis draws on data from the HEA Student Records System (SRS) in parallel with Leaving Certificate examination attainment data provided by the CAO. The key findings of the analysis are that prior educational attainment, course discipline, institution type and socio-economic background are factors that impact on student progression rates. **Table 1** below shows variations in progression by NFQ course level and by sector.

Table 1 Non Progression by Sector and NFQ Level 2012/13 to 2013/14

	No.	%
Institutes of Technology (IOT) Level 6	669	26%
IOT Level 7	2159	28%
IOT Level 8	1415	17%
Total IOT	**4243**	**23%**
Universities Level 8	2075	11%
Colleges Level 8	97	6%
Grand Total	**6415**	**16%**

Among the key findings from the latest HEA analysis of progression are:

- Students' 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 'All Others Gainfully Occupied and Unknown' socio-economic group had the highest non-progression rate at 17%
- Students with higher **prior educational attainment** are more likely to progress to the following year than those with lower educational attainment. Levels of achievement in maths and in English have proven to be very good predictors of subsequent achievement in higher education (Clancy, 2016: 99).

- Rates of non-progression vary by **field of study and institution**. Within the Institute of Technology sector, Construction and Related disciplines and Computer Science (c. 40% and 30% respectively) have the highest non-progression rates.
- Within the university sector, 'services' show the highest non progression rate at 23%. With student numbers increasing in the Construction and Related disciplines, the low progression rate needs to be addressed. Historically, Computer Science has the highest non completion rate in university sector (Morgan 2001).

In 2007/08, the average non-progression rate in HEA institutions was 15%. While the number of new entrants increased from 2007/08 to 2013/14 by 16% (c.5000 students) the number of those who did not progress from first to second year also increased over this period. **Table 2** below shows that between 2012/13 and 2013/14 one in four students in the Institute of Technology sector dropped out from levels 6 and 7. A further one in five dropped out from level 8. Combined this is a non-progression rate of almost one in four or 23% of all entrants to the sector.

Historically, ICT courses have demonstrated the highest non-completion rates in the university sector (Morgan 2001). Prior levels of achievement in maths and in English have proven to be reliable predictors of subsequent achievement in higher education (Clancy, 2016: 99). The availability of good quality data is key to understanding retention / non completion. There is a variety in the type and amount of data that HEIs collect in relation to students that withdraw. There is no systematic data tracking what happens to students after they withdraw, for example whether or not they re-enter higher education.

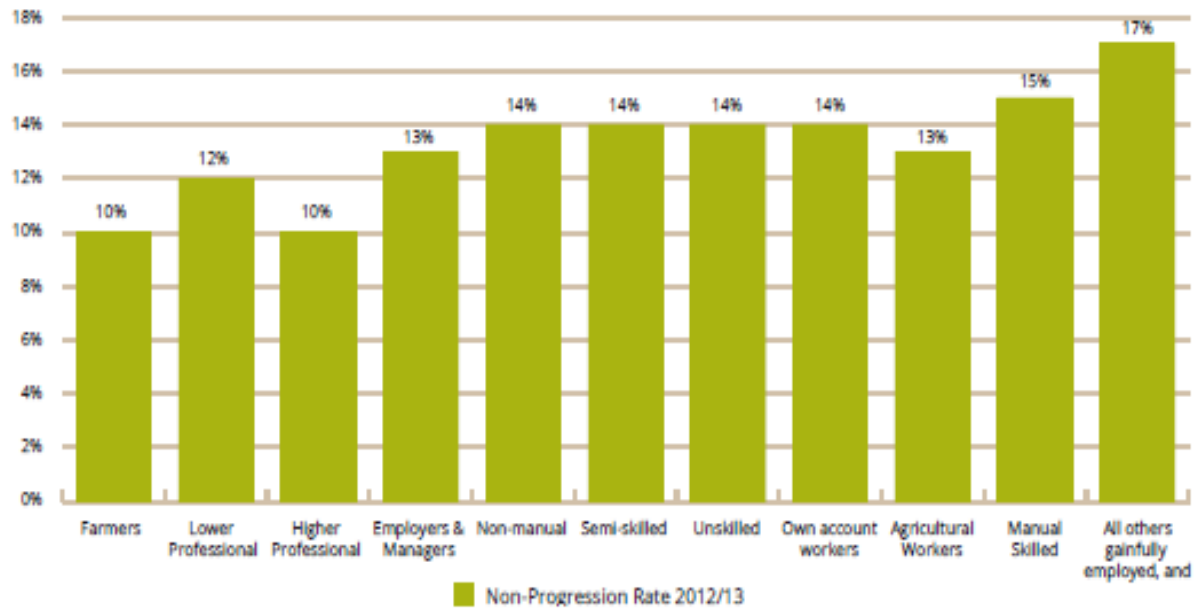
Table 2 - Trends in Non-Progression Rates by Sector and NFQ Level 2007/08 to 2012/13

Sector	Level	2007/08 - 08/09	2012/13 - 13/14
IOTs	Level 6	25%	26%
	Level 7	26%	28%
	Level 8	16%	17%
	Overall	**22%**	**23%**
Univs	Level 8	9%	11%
Colleges	Level 8	4%	6%
	Overall	**11%**	**12%**
All HEA	***Overall Rate***	***15%***	***16%***

Data on the Retention of Target Groups

In the figure below, taken from the HEA's *Study of Irish Higher Progression,* it can be seen how there is a direct relationship between student levels of non-progression and socio-economic group. The 'All Others Gainfully Occupied and Unknown' group had the highest non-progression rate at 17%. Students from the traditionally under-represented groups (those from the non-manual, semi-skilled manual and unskilled worker backgrounds, as well as mature students) are more numerous in the institutes of technology. The student body in the university sector tends to draw more entrants from the middle and higher ends of the socio-economic spectrum, as well as more of those with higher levels of prior academic attainment. For example, 18% of new entrants to the university sector colleges in 2013-14 were from the target socio-economic groups in the National Access Plan, compared to 23% of those to the IOTs. 8% of full-time new entrants to the universities were mature students, compared to 16% of those entering the Institutes of Technology (*HEA Key Facts and Figures 2014-15*).

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



Recent research highlights the importance of taking into account the student intake when assessing the effectiveness of measures to address student retention. The wide variation in rates of retention between different institutions and disciplines to a large extent reflect differences in the profile of students enrolling in different sectors. A key consideration is 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 in terms of the NFQ levels of programmes and types of disciplines which they teach.

A study published in 2013 looked at the retention of applicants who came in on the HEAR / DARE admission schemes for school-leavers with disabilities or from socio-economically disadvantaged backgrounds. The findings suggest that the admissions route does not bear an independent effect when a range of variables are considered which may influence progression to higher education. This is not a negative finding: rather the progression chances of HEAR and DARE eligible applicants, just like all other entrants to higher education, are largely determined by their previous attainment in the Leaving Certificate (Byrne et al, 2013: p.196)

International Research and Data

OECD has published comparative studies on completion. The most recent survey was completed in 2012 and published in 2013. In this report, for Type A Tertiary Education, 30% of students did not graduate (equivalent to Level 8 Honours Degree), while for Type B (level 6 and 7) there was a 61% completion rate. So the differences observed in Ireland between level 8 and levels 6 and 7 are replicated in other countries. In the OECD report, there are wide variations between countries with Australia, Denmark, Turkey and Japan showing higher completion rates in Type A courses and Germany, Japan and Slovak Republic showing higher completion rates in Type B courses. Ireland has a higher than average completion rate when using this data. However international comparisons are difficult, mainly because the data is not readily available and because different EU Member States define and measure non-completion in different ways. National differences in course duration also add to the complexity of the issue. In terms of the interface between the access agenda and retention rates, Denmark is cited as the leader. However even Denmark as the most successful only has around 80% completion and Italy's rates are as low as 46%. Therefore, non-completion is a significant issue across the European Union.

In 2013 a report was published by the European Commission on *Drop-out and Completion in Higher Education in Europe among Students from under-represented groups (Quinn, J, 2013)*. One of the main findings of this research is that coming from a poor socio-economic background is the dominant factor leading to drop-out for students from under-represented groups. In line with findings from Irish research for the RANHLE project (Fleming T., Finnegan, F. 2011), this report found that a lack of awareness of the needs of a more diverse student population and a lack of a student-centred approach in designing and delivering higher education programmes have an impact on non-completion rates. The reasons that students do not complete the courses are summarised under six interlinked headings:

Socio-cultural factors: community attitudes, self-fulfilling prophecies, normalising of drop-out for certain types of students
Structural factors: pressures caused by poverty, class, race, disability, gender
Policy factors: strategic decisions that negatively impact on ability to complete
Institutional Factors: where institutional cultures and practices do not support students to succeed. This can include poor assessment practices, unsupportive staff who do not respect student difference, curricula and pedagogies that are not student-centred or acknowledge diverse forms of knowledge; inaccessible buildings and facilities and lack of recognition of the needs of students with disabilities.
Personal factors: illness, mental health issues, traumatic experiences
Learning factors: poor approaches to learning, wrong subject choice, prior ability, poor attendance at lectures, problems with conventions of academic writing, difficulties in recognising how studies relate to career options, poor and under-stimulating teaching (Quinn, 2013: 71).

National Research

In Ireland the ESRI (2011) and the National Forum for Teaching and Learning (2015) have also conducted recent research into the reasons for non-completion. The ESRI's work had a specific focus on under-represented groups in higher education. The main hypotheses from this research can be mapped to the European research and are that:

1. Young people from lower non-manual backgrounds may not possess the cultural capital necessary to succeed within an educational system geared towards the dominant class (socio-cultural factors)
2. Occupants of the lower non-manual group may not themselves have experience of higher education and may not have the same expertise to assist their children in negotiating the higher education entry track. Children from lower non-manual backgrounds therefore may be more reliant on school guidance services (socio-cultural factors/structural factors).
3. Young people from lower non-manual backgrounds are less likely to enter higher education as a result of the higher relative costs of doing so, the greater opportunity cost and the lower likelihood of success (all factors)

The following core themes were identified in the ESRI/ NFTL research as to why students leave. Course-related reasons were a key driver for student withdrawal in HEA colleges while the main reasons for withdrawal from the private HECA colleges were financial.

- **Course-related reasons** included wrong course choice; low course preference; mistakes with CAO; course transfer; interest in/expectation of course; course difficulty; For some students, course choice was interrelated with a number of other reasons for withdrawal.

- **Personal issues** related to motivation, self-efficacy, family circumstances and student preparedness for higher education
- **Finance** in terms of living expenses, accommodation, and travel costs and fees. Financial difficulties were experienced due to unforeseen family circumstances.
- **Health and medical issues**, predominantly emotional and mental health, as a result of pre-existing conditions or arising in the course of studies
- **Family issues**. (change in circumstances, caring duties, loneliness)
- For students who withdraw for family reasons, this is can be due to a change in **family circumstances**. Mature students are more likely to be affected in this regard.
- A student's level of **prior educational achievement** in their Leaving Certificate plays a significant role in shaping later pathways.
- **Insufficient attention, information and advice**, on what course is best suited to their interests and skills
- The effects of **commuting**, often associated with difficulties in accessing affordable accommodation is an important factor.

The themes identified suggest that the solutions necessary require a whole of education approach from early years through primary and secondary school and on to further and higher education (NFTL, 2015). Solutions also need to involve partners outside of the education system, including closer co-ordination between higher education and other advisory professionals at national (policy) and local (implementation levels). These include school career guidance counsellors, Home School Community Liaison Coordinators and ETB education officers who play an important role in supporting learners in making the transition from post-primary to further education and training and also in navigating pathways to higher education.

Section 4 - Measures to Address Non-Completion

National Policy

Over the past number of years there has been much debate and analysis around the issue of how the role that the Leaving Certificate plays in acting as a selection mechanism for third level has come to dominate the exam. However, this has been at the expense of students, many of whom are unprepared for the demands of third level and are at higher risk of withdrawing. *'Students entering third level have deficiencies in analytical, problem solving and independent learning skills…greater use of continuous assessment and more varied modes of assessment over the course of the two-year programme would, it is suggested offer scope for developing higher level skills and competencies'*. (Clancy, 2015, p. 94 -5)

Representatives from second and third level are working with the Department of Education and Skills Task Group from Reform of University Selection (TGRUSE) and a number of reforms are being introduced. From 2017, the way that the Leaving Certificate examinations are graded will change as fewer broader grade bands will be used. Institutions are also introducing more generic first year programmes to support better student choice.

The Information Technology Investment Fund (ITIF) was introduced in the early 2000s as a joint initiative by the Department of Education and Skills and the Higher Education Authority, in response to Information and Communications Technology (ICT) skills needs as identified by the Expert Group on Future Skills Needs (EGFSN) and the mid-term evaluation of the European Union's Advanced Technical Skills (ATS) Programme. The aim of the ITIF is to support student access to, and participation on, courses which would provide an opportunity to acquire new or additional level 7 - 9 qualifications so as to enhance their employability in ICT areas. In addition to course funding the ITIF also provided Retention Support funding and Computing Camp funding for summer ICT taster camps on campus for second level students.

An annual block allocation is provided to all HEA funded institutions to foster retention in ICT courses. HEIs custom and tailor their funded activities to meet the specific needs of their students and course provision. Each institutions specific range of actions aim to support student's success and progression towards completion. The range of activities covers initial introductions and familiarisations for new students, drop in sessions and centres for existing students, targeted mentoring for struggling students, peer learning, maths supports and staff training. Universities receive €80,000 and IOTs receive €54,000. NCI also receives monies directly from DES.

As part of the third cycle of the strategic dialogue process, the HEA has asked higher education institutions to report on actions being implemented to support the Transitions Agenda and also to report on what measures are being implemented by institutions to address student retention. In response to the Transitions Agenda, a number of institutions reported that they are reducing the number of entry routes to courses, creating broader based first year programmes, the introduction of peer mentoring, flexibility in assessment in first year including more group projects, development of links with further education colleges and dedicated subject assistance. There is some overlap between measures to support transitions and those to address retention.

Recommendations for Practice

The National Forum for Teaching and Learning has commissioned research on non-completion. Two reports on same were published in 2015. The first entitled *'Why Students Leave: Findings From Qualitative Research Into Student Non-Completion In Higher Education In Ireland'* reports on qualitative data on student non-completion gathered by 16 Irish higher education institutions. The findings of the current qualitative study identified five core themes which are significant in terms of student non-completion: course, personal, financial, medical/health and family. The second piece looks specifically at non-completion in ICT courses and the report arising is called *'Student Non-Completion – ICT Report'.* It makes 29 recommendations to address non-completion both in ICT programmes and more generally. Examples of the measures recommended included the following:

General Policy Changes: The need for affordable student accommodation within a reasonable distance of college for first year students. The provision of high quality crèche facilities and/or a grant towards childcare for students that require it. Flexibility for SUSI scheme to assist students who become ill during their studies.

Changes for Second Level: Dedicated careers guidance for secondary school students prior to making their subject choice for Leaving Certificate. Information and advice for students and parents on navigating an intimidating system. Taster courses for 5th and 6th year students.

Changes for Higher Education: Review of entry requirements for courses to make them more specific to subjects chosen at third level. Broader entry programmes, increased transferability within and between institutions. More flexible part time provision to enable students to complete their course while dealing with competing demands. Early identification of students who are at risk of withdrawal, additional supports both subject specific and generic, greater data collection.

Overall, the National Forum reports (NFTL, 2015a and 2015b) recommend that more cohesion between the second level, further education sector and the third level sector are needed to support better transitions for students through careers guidance, parental engagement, foundation programmes, visible internal transfer mechanisms, broader-based entry to courses (students can then decide at the end of first year on a specific route to take) and improved information for second-level students.

The reports also recommend that higher education institutions could be more specific in their entry requirements thus allowing for more planning by students to take subjects in the Leaving Certificate that are related to third-level choice and offering guidance to students once they have started as to what other options are available, if and once they withdraw. Improved data collection systems on

student withdrawal is a further area that is recommended by the NFTL. A common exit form could be developed for all HEIs. Student supports could be improved, including childcare provision and quality affordable student accommodation.

Institutions are attempting to address retention through interventions such as induction and mentoring initiatives, broader-based entry programmes and additional supports in specific subjects. These are measures that benefit all of the student population. Through access programmes, many institutions have well-established links with DEIS schools, although it is less clear what the equivalent links and supports are for students from target equity groups in further education. Students need to be aware of the implications that their subject choices for the Leaving Certificate may have for course choice in higher education. Also outreach activities should commence prior to 5/6th year.

Research from Ireland for the European Commission RANLHE project has also identified the steps taken by some Irish HEIs to improve retention rates (Fleming, T., Finnegan, F. 2011). These include the introduction of mentoring for all first year students, orientation programmes for new students, supplementary modules in mathematics for those at risk, and staff development programmes. Some institutions have established a Staff Development Unit in Teaching and Learning while others have initiated training in teaching/learning methodologies to assist lecturers develop their capabilities. What emerged in the study was a view of teaching and learning that is rhetorically student-centred but measures and approaches that continue to be disconnected from student experience. Staff were found to be well intentioned but the structuring of the teaching and learning spaces, the demands of work and a lack of pedagogical awareness meant that high handed treatment of students was a regular phenomenon (Fleming & Finnegan, 2011: p. 18)

International Practice

Based on research and practice from countries across the European Union, a report for the European Commission has recommended a 14 stage typology of good practice measures to improve retention (Quinn, 2013, p.84-92). The measures that are recommended range from pre-entry guidance and information; post-entry support and monitoring including supplementary instruction in maths, science and technology; curriculum changes to make courses relevant and learning strategies to engage a diverse student population. This report also recommends targeting support at specific groups of students such as low income and first generation students, ethnic minority students and students with disabilities.

14-Point Typology of Good Practice Measures to Address Retention	
Type 1: Preparing students for higher education	Type 2: Supporting transition into higher education
Type 3: Tracking student engagement	Type 4: Creating a more relevant and supportive curriculum
Type 5: Creating more responsive pedagogies	Type 6: Fostering positive approaches to learning
Type 7: Improving formative assessment	Type 8: Improving student study skills
Type 9: Offering financial support to students	Type 10: Offering counselling and personal support
Type 11: Fostering student networks	Type 12: Targeting support for specific disciplines
Type 13: Targeting support at specific groups	Type 14: Demonstrating the future utility of higher education

Other research based on the experience of 22 higher education institutions in England and Wales (Thomas, 2012) recommends that in order to be successful in promoting completion, institutional initiatives need to be mainstreamed, relevant, publicised, collaborative and monitored. Retention needs to be part of a national equality strategy at systems level which includes outreach and pre-induction activities specifically focused on students from lower socio-economic backgrounds. It should be underpinned by quantitative and qualitative research. Under-represented students may have greater risks of drop-out but their life skills and extra university experiences should be valued and acknowledged. Recognising and accrediting prior learning and building alternative access programmes for such students can help to build confidence and resilience and have been shown to help reduce propensity to drop-out. Other broad themes from international research and practice on measures that can help address student non-completion are as follows:

Pre-Entry Interventions

Research on completion identifies the importance of the pre-entry interventions to help support pre-entry decision making, address expectations about higher education and academic preparation. The Aimhigher programme in the UK was a national collaborative programme which aimed to widen participation by raising awareness, aspirations and attainment amongst under-represented groups particularly lower socio-economic groups and the disabled. Activities included university summer schools, subject enrichment programmes, master classes and information and guidance. Although the programme was positively evaluated it has now been disbanded by the government and emphasis has shifted to institutions developing their own initiatives. Thomas (2011) found there has been limited research about the impact of such pre-entry interventions on students' retention and success in higher education. Austria has developed a similar programme, Studienchecker, to assist pre-university students in their decision making and career and degree choice. In the pre-final school year students are helped to develop a portfolio of information about future choices. They complete a questionnaire which helps them to evaluate their strengths and potentials and they also receive support from counsellors. In the final year of school this process intensifies with added input from educational institutions and professions.

Financial Supports:

Norway and Denmark's national systems involve the state supporting students financially, with social justice goals given pre-eminence. In Norway increased support has particularly increased the participation of part-time students, apprentices and mature students. Denmark has the lowest drop-out rates amongst EU countries. In Denmark the national funding system is based on ECTs with an incentive on higher education institutions to retain students. Each higher education institution has a contract with the Minister for Education with a commitment to reduce drop-out. Students receive state funding, including an extra year of funding if necessary. Student evaluations and surveys of study environments are conducted at a national level. All these factors are considered important in promoting completion. However, there is concern that 20% of students are not completing the degree they started and that faster access to the labour market is needed.

Other forms of financial support directed at particular under-represented groups have also proven useful in addressing drop-out. Research in Canada (Thompson, 2003) suggested that it is still financial barriers that most deter older learners and lead to drop-out and therefore tuition fee waivers for mature students are beneficial. However, because of poor publicity, take-up of fee waivers has been disappointing.

Low income families have been targeted for support in the USA. Matched savings accounts such as Individual Development Accounts are tools used to save and secure assets such as higher education. They are essentially a contract between a family and an organization. In a higher education context, amounts saved by families are matched by specific higher education institutions on the basis that the child will study there in the future. Once a student enters the higher education institution the jointly amassed funds are paid directly to the educational institution to cover tuition, books and computers. This is helpful in addressing potential drop-out due to problems of poverty (see BIS, 2009).

Flexible Provision

Providing alternative forms of access to higher education can also support completion. Since 2001, people in Norway who have not completed secondary school are able to enter higher education based on documented non-formal learning. Oppheim & Helland (2006) have evaluated this reform based on interviews with higher education personnel, as well as quantitative data from the applicant register. The evaluation indicates that the reform provides a second chance for learners from lower socio-economic backgrounds and a foundation for their successful completion. Nevertheless, there are considerable variations in how the universities and university colleges have adjusted to the reform with geographical location and supply of students the key factors. University colleges in rural

areas with a low number of applicants, in general, react more positively and it seems to be easier for applicants to be assessed as qualified for studies in such institutions.

Sweden also has a system for assessing real-life skills as a basis for selection and entry to higher education. Alternative selection is used by 14 higher education institutions. In the majority of cases this involves some form of quota system. Most usually a quota of places is earmarked for students who have completed a college programme. Gender quotas come second. Quotas are also based on ethnic background, vocational experience, where applicants live and the assessment of real-life skills. This system is reported to assist in the access and retention of under-represented groups to higher education, particularly in vocational areas such as nursing and teacher-training.

Flexible pathways such as allowing students to begin their degrees in community college and then transfer to university are a norm rather than an exception in the USA. However, in the US context, there has been considerable debate about whether attending a community college "diverts" students from completing a degree. Multiple entry and access points from higher education have become part of provision in South Africa. Research in the UK (Quinn, et al, 2005) indicated that the ability to make such transfers without penalty is an essential part of creating a flexible lifelong learning higher education, which accommodates the needs of the many students who need to withdraw but wish to return at a later date. These initiatives would promote integration and transfer, but also require a shift in ideas about what "normal" higher education study is. In Sweden students can leave a degree programme, enter the labour market and then return to study later. They do not lose the benefit of modules studied. Drop-out rates in Sweden are comparatively low.

Strategic Engagement with Region, Community and Employers

Regional partnerships and consortia of higher education institutions, employers and other organisations can help develop curricula which foster local employment and completion.
In Canada the state of Alberta has developed Learning Alberta which is a strong local plan to improve their advanced education system, including improving access and completion in higher education. One of the features of this approach has been to start from the in-depth study of research findings. Increasing the local applicability of HE and thus the chances of completion and entry to employment requires much better cross-sectoral and regional collaboration between higher education, further education and schools and between the education providers and the community.

The Northern Corridor Education Precinct (NCEP) in Australia brings together all education providers in this area in collaboration with the community, with a Steering Committee that is very open and representative. It organises specific initiatives bringing sectors together, such as the Cabbage Tree Creek Learning Project that focuses on enterprise education. In Europe, Dalarna

University in Sweden which is based in a remote rural area has increased access and retention by collaborating closely with local employers, for example on a number of Steering Committees which include input into the curriculum.

Expert Advice

Helping the higher education sector to respond to issues such as a multicultural environment requires expert knowledge and a high profile in relation to institutions, policy makers and employers. The National Expert Centre for Ethnic Minorities in Higher Education (ECHO) in the Netherlands has provided a successful model whose role is to enhance access, progression and transition to the labour market amongst ethnic minority students. Their research has had an impact on drop-out strategies in higher education institutions in a number of EU countries and has been widely disseminated via bodies such as the European Access Network (EAN). Recent (2016) research from the Australian National Centre for Student Equity in Higher Education found that equity students who enter university via enabling programmes generally experience better first-year retention rates than those entering via other sub-bachelor pathways.

Appendix 1
Publications Consulted

1. A Study of Progression in Irish Education 2012-2013 and 2013-2014 (HEA, 2016) (http://www.hea.ie/sites/default/files/hea-progression-irish-higher-education_final.pdf)

2. Why Students Leave (National Forum for Teaching and Learning, 2015) (http://www.teachingandlearning.ie/wp-content/uploads/2015/07/Project-4.pdf)

3. Student Non-Completion - ICT Report (National Forum for Teaching and Learning,2015) http://www.teachingandlearning.ie/wp-content/uploads/2015/11/Student-Non-Completion-on-ICT-Programmes6NovDK.pdf

4. 'The Sooner the Better I Could Get Out of There' Barriers to higher education access in Ireland (ESRI,2011) (https://www.esri.ie/publications/the-sooner-the-better-i-could-get-out-of-there-barriers-to-higher-education-access-in-ireland/)

5. Irish Higher Education – A Comparative Perspective P Clancy (IPA, 2015)

6. Cultural and Institutional Perspectives on Access and Retention in three Irish Higher Education Institutes, Ted Fleming & Fergal Finnegan (2011) http://www.dsw.edu.pl/fileadmin/www-ranlhe/files/Final_Irish_WP8_report_for_Web.pdf

7. Drop-out and Completion in Higher Education in Europe among students from under-represented groups, Professor Jocey Quinn (2013) http://nesetweb.eu/wp-content/uploads/2015/09/2013-Drop-out-and-Completion-in-Higher-Education-in-Europe-among-students-from-under-represented-groups.pdf

8. An Evaluation of the HEAR and DARE Supplementary Admission Routes to Higher Education, D Byrne et al (2011) http://www.iua.ie/wp-content/uploads/2014/02/HEAR-DARE-Evaluation-Report.pdf