FET Learner Outcomes

Post-Leaving Certificate (PLC)

SOLAS learning works
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Data Analytics Unit in SOLAS
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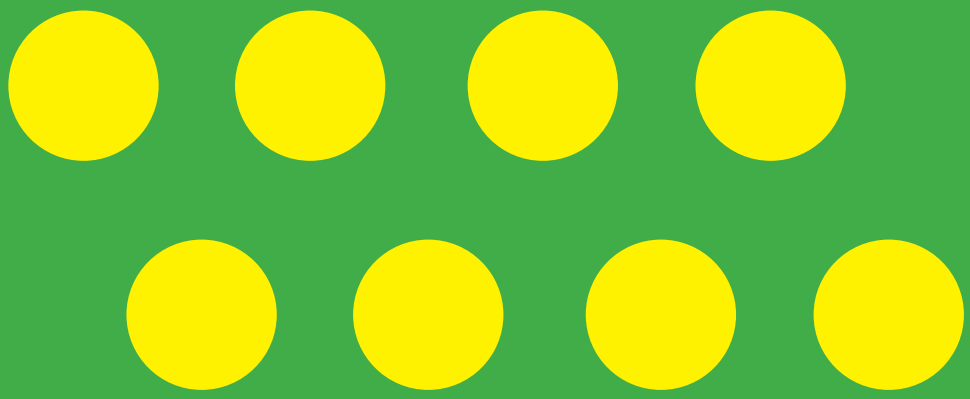


Legal Framework Underpinning This Research

The CSO provides researchers with access to relevant data holdings, subject to stringent confidentiality criteria, within the framework of the Statistics Act, 1993.

The examination of learners outcomes provided in this report was produced by SOLAS under Section 11 of the Statistics Act 1993 using the Educational Longitudinal Database (ELD) data source which was created in compliance with all relevant data protection legislation.

The ELD data source brings together data from the Department of Educa- tion and a number of state agencies, including the Higher Education Authority (HEA), Quality and Qualifications Ireland (QQI) and SOLAS, with employ- ment, benefits and earnings data from the Revenue Commissioners and the Department of Social Protection. Access to this data source is strictly limited to Officers of Statistics.

The ELD provides the basis for a series of projects that the CSO facilitates in strict compliance with the Statistics Act, which allows researchers to further analyse and examine learner outcomes.

The CSO's role is limited to the development of the ELD data source and it is important to note that any analysis, conclusions or recommendations made in this report are SOLAS's alone.

Full details relating to the framework for this research work can be accessed through the following links:

https://www.cso.ie/en/aboutus/lgdp/legislation/memorandumsofunderstanding/statisticalagreementbetweencsoandsolas/

http://www.irishstatutebook.ie/eli/1993/act/21/enacted/en/

https://www.cso.ie/en/methods/education/educationallongitudinaldatabase/

ADC	Administrative Data Centre, CSO
ATI	Accounting Technicians Ireland
BSc	Bachelor of Science Degree
CIBTAC	Confederation of International Beauty Therapy and Cosmetology
CSO	Central Statistics Office
DCU	Dublin City University
DEASP	Department of Employment and Social Protection
ELD	Educational Longitudinal Database, CSO
FET	Further Education and Training
HE	Higher Education
HEA	Higher Education Authority
ICT	Information and Communications Technology
IoT	Institute of Technology
ISCED	International Standard Classification of Education
ITEC	Provides international qualifications in a range of different fields
NACE	European Industrial Activity Classification
NFQ	National Framework of Qualifications
PLC	Post Leaving Certificate Course
PLSS	Programme Learner System Support Database, SOLAS
PPSN	Personal Public Service number
P-POD	The Post Primary Online Database
QQI	Quality and Qualifications Ireland
SOLAS	The Further Education and Training Authority

Section 1

Introduction

1. Introduction

Post-Leaving Certificate (PLC) courses form part of the provision of the further education and training (FET) system. The courses are full-time courses and in general the learner cohort consists of:

- Young people who completed their Leaving Certificate
- Adults returning to education
- Unemployed people seeking to gain new skills to transition back into the labour market

PLC courses combine general education, vocational training and work experience over a single academic year and lead to major awards at Level 5 or 6 on the National Framework of Qualifications. PLC provision consisted of 842 courses in 2018 with approximately 28,000 learners starting on programmes in a wide range of subject areas including, but not limited to, IT, Business Studies, Nursing, Science, Childcare and Fitness. PLC provision has two overarching aims, which is to provide successful participants with specific vocational skills to:

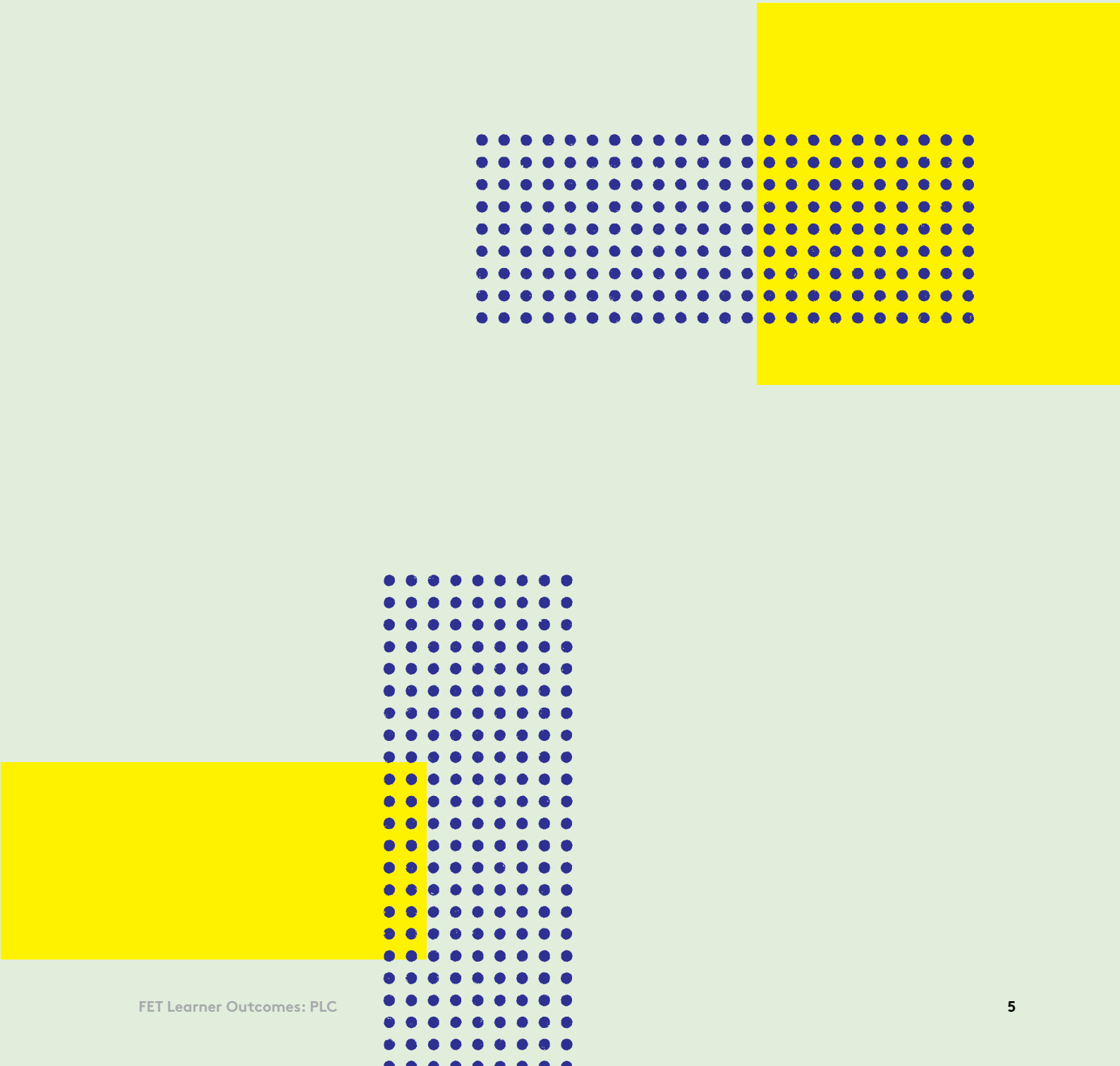
- Enhance their employment opportunities or
- Facilitate their progression to additional education and training

Therefore as an essential component of the FET system, it is important that SOLAS has insight into the impact and value of PLC courses for our learners. The development of the Programme and Learner Support System (PLSS) database in SOLAS has provided us with comprehensive real time information on actual learner profiles and trends, allowing detailed comparisons since 2017. Previously the PLC learner records were captured in Post-Primary Online Database (P-POD) by the Department of Education and Skills. Following agreement between SOLAS and the CSO we are in a position to link both P-POD and PLSS PLC records to administrative datasets that are housed in the CSO Administrative Data Center, i.e. higher education enrolments and revenue datasets to generate evidence of FET outcomes and impact. In addition, this project has benefited from a new statistical framework known as the *Educational Longitudinal Database* (ELD) developed by the CSO. This framework is produced by matching datasets from the Education sector to other public sector datasets which describe graduate outcomes in subsequent years.

In order to analyse the progress of PLC graduates, we examine data on three PLC cohorts from 2012/2013, 2013/2014 and 2014/2015 and link each learner with the Educational Longitudinal Database to determine their outcomes. Our results indicate that:

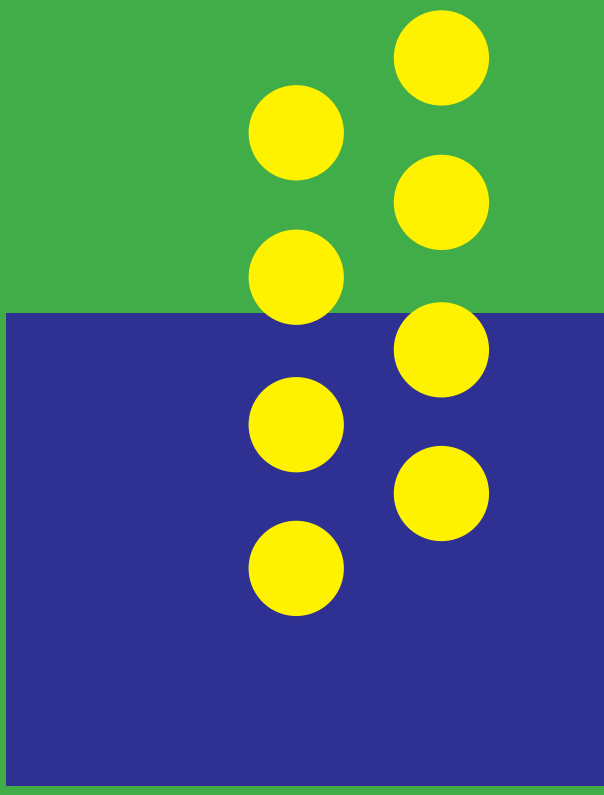
- A total of 64% of 2014/2015 PLC graduates were in substantial employment in 2016. The same figure for the 2012-2013 cohort was 54%, indicating a 10 percentage point increase over three years
- For the same cohorts, we find that 27% of PLC graduates continued their education and enrolled in higher education one year after graduation. The PLC to HE progression rate seems to have stayed stable over the years
- The most common sector for graduates (almost 30%) in substantial employment was the wholesale and retail sector, followed by accommodation and food service (19%) and human health and social work activities (13%)
- The median weekly wage of a PLC graduate in substantial employment within a year of completion was €253.6 increasing to €431.5 within six years
- In terms of progression outcomes, we find that a significant proportion of PLC graduates progress onto a HE course at a higher level within the same year of completion of their PLC course. Most progressions take place between cognate disciplines
- Another significant finding from our analysis is that those PLC graduates who enroll in a HE course have a high progression rate within the HE, therefore suggesting high completion rates in subsequent years.

Our results will have significant policy implications in various ways. For example, SOLAS is currently working on an FET-HE Transitions project which forms part of a wider Department of Education and Skills review of progression across the education system more broadly. Within the FET project, a key feature is mapping FET-HE progressions, and the vast majority of these progressions relate to PLC learners. As per the dual aims of the PLC programme it is also key that we examine the employment outcomes for those learners who transition into the labour market following their studies. Therefore in this paper we first outline the general profile of the PLC learners. Next we introduce the data used and we explain our methodology. In the results sections, we present our analysis which has been undertaken by SOLAS in collaboration with the CSO. Our results provide important and new information on both the profile and outcomes of the PLC graduates.



Section 2

PLC Learner Profiles



2. PLC Learner Profiles

In 2017, there were 27,454 unique learners who started on a PLC course. The background of the learners were very diverse: the learners came from over 119 different nationalities. The majority of the PLC students were of Irish (85%) and of UK (2.5%) origin, closely followed by Polish, Lithuanian and Nigerians. Table 1 below shows the top 10 nationalities enrolled in all PLC courses.

Nationality	Learners
Irish	14,499
British	421
Polish	400
Lithuanian	177
Nigerian	135
Latvian	103
Romanian	87
Italian	65
South African	62
Spanish	53

Table 1: Learner Nationality[1]

The majority (69%) of the 2017 starters were under the age of 25 and 60% were female. The learners were asked their principal economic status before starting the PLC course. The majority of the starters indicated that they were unemployed (55%) compared to the 26% that said they were employed, with 17% declaring that they were student or trainees prior to getting on their course.

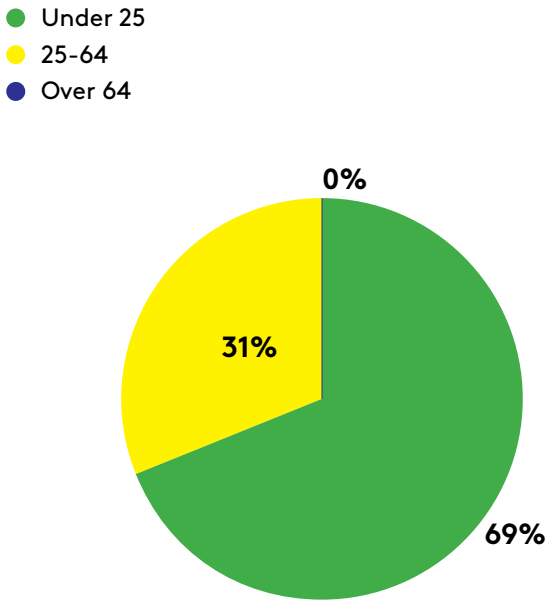


Figure 1: Starting age of 2017 PLC students

1 Of the total number of unique learners who started on a PLC course in 2017, over 10,000 did not disclose their nationality.

In terms of their educational background, almost half of the learners had a Leaving Certificate, with an additional 22% indicating that they had achieved a post-secondary non-tertiary degree.[2] In terms of the area of study, a significant proportion of starters were enrolled in courses in the following ISCED fields of learning: Health and welfare, services, arts and humanities and business and administration and law. Some of the most popular courses within these broad areas of learning include: Nursing Studies, Early Childhood Care and Education, Business Studies, and Sports, Recreation and Exercise. Almost 97% of all starters were enrolled in Level 5 and 6 courses (77 and 21% respectively), and a small number (57) enrolled in the Level 8 BA (Hons) Degree in Media Production Management by DCU.

ISCED Field	Learners	%
Health and Welfare	5,740	20.91
Services	5,429	19.77
Arts and Humanities	4,631	16.87
Business and Administration and Law	4,373	15.93
Education	2,487	9.06
Information and Communication Technologies	1,574	5.73
Engineering, Manufacturing and Construction	1,229	4.48
Agriculture, Forestry, Fisheries and Veterinary	999	3.64
Natural Sciences, Mathematics and Statistics	388	1.41
Generic Programmes and Qualifications	349	1.27
Social sciences, Journalism and Information	255	0.93

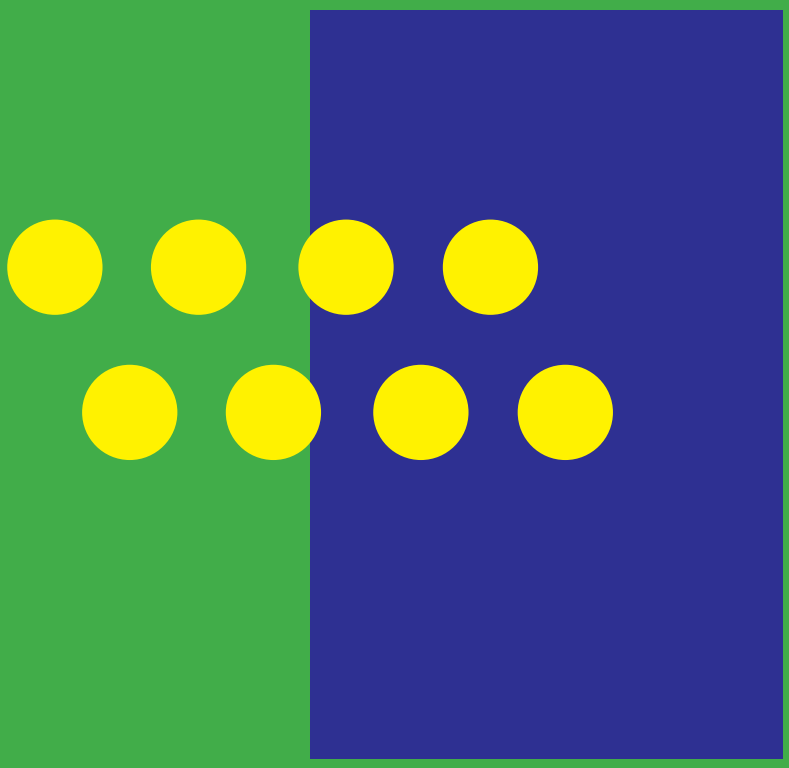
Table 2: ISCED field for 2017 PLC starters

In 2017, PLC provision was mostly QQI certified (92%), with a small number of courses offering industry awards and UK awards among others (e.g. Pearson, ITEC, ATI, City and Guilds, CIBTAC, Department of Education and Skills and DCU certified courses). Among the 2017 starters, the completion rate was 82%.

2 The response rate was 42%.

Section 3

Data and Methodology



3. Data and Methodology

The records of the PLC learners prior to 2016/2017 were originally managed by the Post-Primary Online Database (P-POD) system hosted by the Department of Education and Skills. This database collects personal data on the learners as well as a unique identifier (i.e. PPSN). Since 2016/2017, the Department advised schools who provide PLC courses to record PLC students on the Programme and Learner Support System (PLSS), the new centralised system hosted by SOLAS that collected learner data from the majority of SOLAS funded FET provision. In this report, we use records of PLC students who were enrolled on a PLC course in 2012/2013, 2013/2014 and 2014/2015 academic years to create our sample for analysis. The initial analysis is based on a sample of 4 different cohorts (including 2015/2016) of PLC students extracted from P-POD. Below is a Table(3) that shows the number of PLC enrolments for each year.

Year	PLC Enrolments	Valid PPSN	Last Instance	Completions
2012/2013	35,550	25,810	17,789	15,472
2013/2014	34,022	25,393	18,454	17,011
2014/2015	33,095	24,981	18,921	17,042
2015/2016	32,454	24,596	24,596	24,594

Table 3: Number of observations during data preparation

The first column shows the total number of students enrolled in a PLC course in each year. Datasets were matched using a protected identified key (PIK) based on PPSN. Some records (approximately one quarter of records) had missing or invalid PPSN in the original datasets, and it was therefore not possible to link such records to outcomes in the administrative datasets. Second column shows the reduced sample for each year. The next column indicates the total number of PLC enrolments by those students who are in the final year of their PLC studies. Finally the last column is the number of PLC students who have completed their course.[1] For example, out of 35,550 PLC records on P-POD only 15,472 learners among the 2012/2013 cohort had valid PPSNs and completed their course.[3]

PLC Cohort	QQI Awards	Last Instance	Completions
2012/2013	13,377	0.75	0.86
2013/2014	13,960	0.76	0.82
2014/2015	14,472	0.76	0.85
2015/2016	19,139	0.78	0.78

Table 4: QQI Robustness Check

3 The last column excludes those flagged with an early leave date in the P-POD database.

In 2015/2016, there were no records of *early leave date* in P-POD, therefore the final column includes early leavers as well as completers for this cohort. Furthermore, as this was the last PLC cohort in P-POD we may not accurately capture the final instance of the learner in 2015/2016. We examined the QQI award records for all cohorts and the results are presented above in Table 4. The number of PLC learners who achieved QQI awards up to and including three calendar years after enrolment are shown in the second column.[4] The fraction of learners who achieved QQI awards from the last instance and completion columns of Table 3 are calculated and shown in the final two columns respectively. For example, 86% of the 2012/2013 completers and 75% of the total sample (including early leavers) achieved QQI awards. The inclusion of the 2015/2016 cohort containing additional early leavers without certification could potentially bias our results. Therefore we consider only the 2012/2013, 2013/2014 and 2014/2015 cohorts for analysis.

In order to examine the outcomes of the above mentioned PLC students we used the Educational Longitudinal Database (ELD) developed by the CSO. This framework is produced by matching datasets from the Education sector to other public sector datasets (e.g. Revenue, DEASP, QQI and HEA) which describe graduate outcomes in subsequent years. Currently, this dataset covers the years 2006-2018, which can be used to produce a longitudinal record of each learner. This database allows us to produce the following outcomes for each learner:

- **Employment Only -** Worked at least 12 weeks in the year earning at least 100 Euro a week on average from their main employer or have significant self-employment (in excess of 1000 Euro). Must have no record of enrolment in HEA database in the year of question.
- **Employment and Higher Education -** Must meet above conditions of employment but also have a record of enrolment in HEA database.
- **Higher Education Only -** Must have a record of enrolment in HEA database in the year of question but not meet the definition of employment.
- **Neither Employment nor Higher Education -** Does not meet the definition of employment nor do they have an enrolment record in HEA but they do have some record of employment, benefits or education in the ELD for the year of question.[5]
- **Not Captured -** No record of either employment, benefits, or enrolment in education in the ELD for the year in question.

As can be seen above, the learner outcomes are divided into five mutually exclusive outcomes. Similar outcomes analysis was carried out in a recent CSO-HEA report on Higher Education Outcomes.[6] The ELD also includes information on the weekly wage and the sector of employment of those who are in employment. In section 4.1, we examine the destination of PLC graduates in terms of their sector of employment and evolution of their median weekly wages over a period of 5 years after completion.

In order to carry out a more in-depth analysis on progression in particular on FET-HE transitions, we linked 2012-2014 data from P-POD and 2017 data from PLSS with the HEA enrolments data. We are specifically interested in two aspects of PLC progressions into the HE. First, we want to examine to what extent the pathways from PLC to HE take place between cognate disciplines. Second, as part of the progression outcome, we are not only interested in the initial transition but also in their progression within HE.

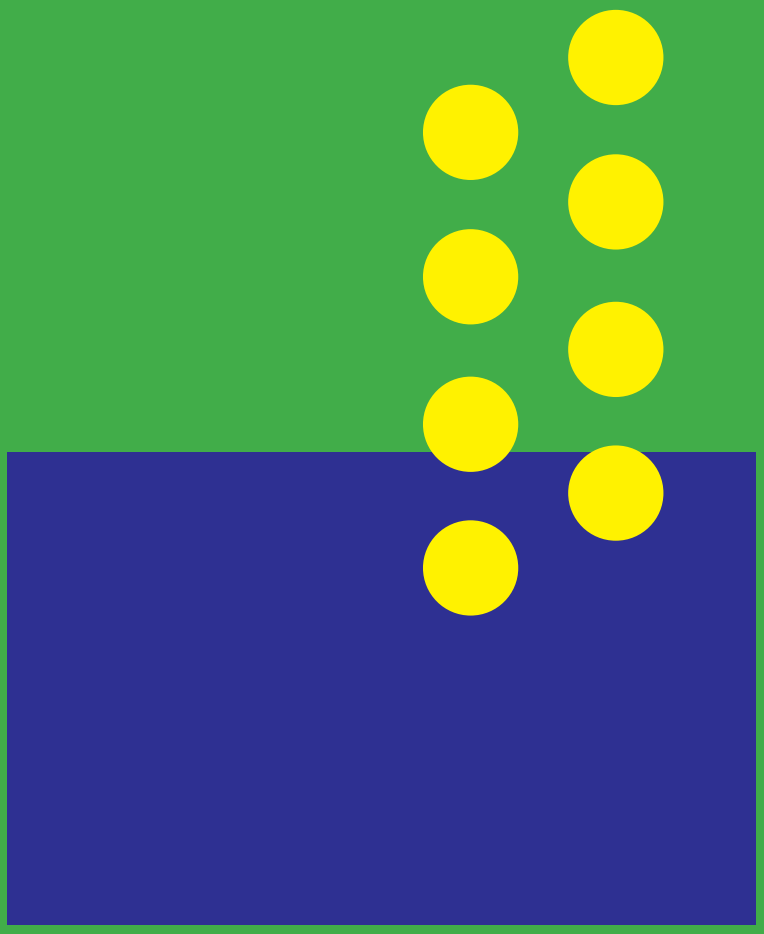
4 NFQ Level 5 and 6 further education major and minor QQI awards are considered.

5 At the time of writing the ELD contained data from Revenue (P35 and F11), DEASP, P-POD, SOLAS, QQI, Springboard and Student Universal Support Ireland.

6 https://www.cso.ie/en/csolatestnews/presspages/2018/highereducationoutcomes-graduatesof2010-2014

Section 4

PLC Outcomes



4. PLC Outcomes

In this section, we capture the learner outcomes two calendar years after enrolment in the PLC programme. As discussed above, the outcomes were evaluated by linking the 2012/2013, 2013/2014 and 2014/2015 PLC enrolments with the ELD to produce five mutually exclusive outcomes. Only those PLC students with a valid PPSN and who have completed their course are included in the sample cohort. Table 5 below show the proportion of each PLC cohort in substantial employment only, in employment and higher education, in higher education only or neither in employment nor higher education.

Graduation Year

Outcomes	2013 %	2014 %	2015 %
Employment Only	41	45	48
Employment and Higher Education	13	14	16
Higher Education Only	14	12	11
Neither Employment nor Higher Education	28	25	22
Not Captured	4	4	3
Sample Size	**15,472**	**17,011**	**17,042**

Table 5: PLC Outcomes: One year after graduation

According to our analysis, the proportion of 2013 PLC graduates in substantial employment in 2014 was 54%. The employment rate increased to 64% in 2016 among 2015 PLC graduates.[7] In contrast, the proportion of those in higher education stayed steady at 27%. There has been a relatively small number (3-4%) of PLC students whose outcome records are not captured by the ELD over the years. These may be the students who left Ireland and went abroad to work or study.

4.1 Employment

Next we examine the destination of PLC graduates who are in employment to determine the sectors they are employed in and the weekly wages they earn after graduation. Below is a Table (6) that shows the NACE sectors the PLC graduates have been employed within one year after graduation. The sample includes all 3 cohorts and includes students who were in substantial employment (Column 1).[8] According to our results, 29% of PLC graduates were employed in the wholesale and retail trade, 19% in accommodation and food service activities and 13% in human health and social work activities (Column 1). Table 6 Column 2 shows the proportion of national average employment for each NACE sector over the period 2014-2016 based on Labor Force Survey. Wholesale and retail trade sectors were the largest employers in Ireland (i.e. 14% of national employment), followed by human health and social work activities (13%).

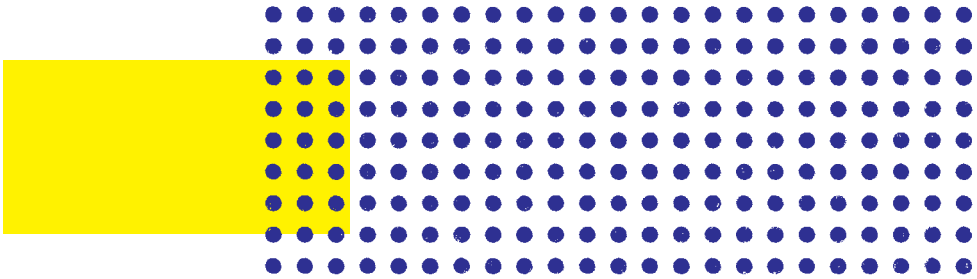
7 The employment outcome is measured by adding the proportion of those in 'employment only' and those in 'higher education and employment.'

8 The CSO data is based on the Labor Force Survey results and include all persons aged 15 years and over in employment by NACE Rev 2.

Nace Sector	(1)%	(2)%
Wholesale and Retail Trade	28.56	14.2
Accommodation and Food Service	18.9	7.3
Human Health and Social Work	13.14	13.0
Administrative and Support Services	7.92	4.0
Other	8.0	5.5
Industry	5.99	12.8
Financial and Insurance Activities	4.92	5.2
Construction	2.78	5.2
Information and Communication	2.42	5.0
Professional, Scientific and Technical Activities	2.29	6.3
Education	1.86	7.2
Transportation and Storage	1.77	4.3
Public Administration and Defence	1.37	4.5
Agriculture, Forestry and Fishing	0.84	5.3

Table 6: Destination of PLC graduates in employment
Note: Column (1) includes all PLC graduates who are in substantial employment and those who are in higher education and employment. Column (2) shows national average employment by sector.

Finally, in this section we investigate the earnings of PLC students. This analysis uses the 2012/2013 cohort of PLC graduates who are in employment only and tracks their employment and earnings from 2013 (i.e. the year of graduation) to 2018. The Table (7) below shows the number of 2012/2013 PLC cohort employed in the year of graduation and over the following five years and their corresponding median weekly earning. The median weekly earnings were calculated based on the weekly earnings from their main employer only.[9]



9 In many cases, a person is employed by more than one employer during a given year. The main employer is identified as the employer that pays the largest gross annual earnings to a given individual.

As can be seen in Table 7, the number of 2012/2013 cohort in substantial employment only in calendar year 2013 were 5,074 out of the full sample of 15,472 (i.e. 33%), increasing to 10,133 by 2018 (i.e. 65%). The initial median weekly earnings of this cohort was €253.5 in 2013 increasing to €431.5 in 2018 (i.e. an increase of 70% in five years).

Year in Employment	In Employment Only	Median Weekly Wage
2013	5,074	253.46
2014	6,343	305.38
2015	7,473	334.66
2016	81,82	367.53
2017	8,944	395.03
2018	10,133	431.50

Table 7: 2012/2013 learners in employment and weekly wage (Euro)

4.2 Progression into Higher Education

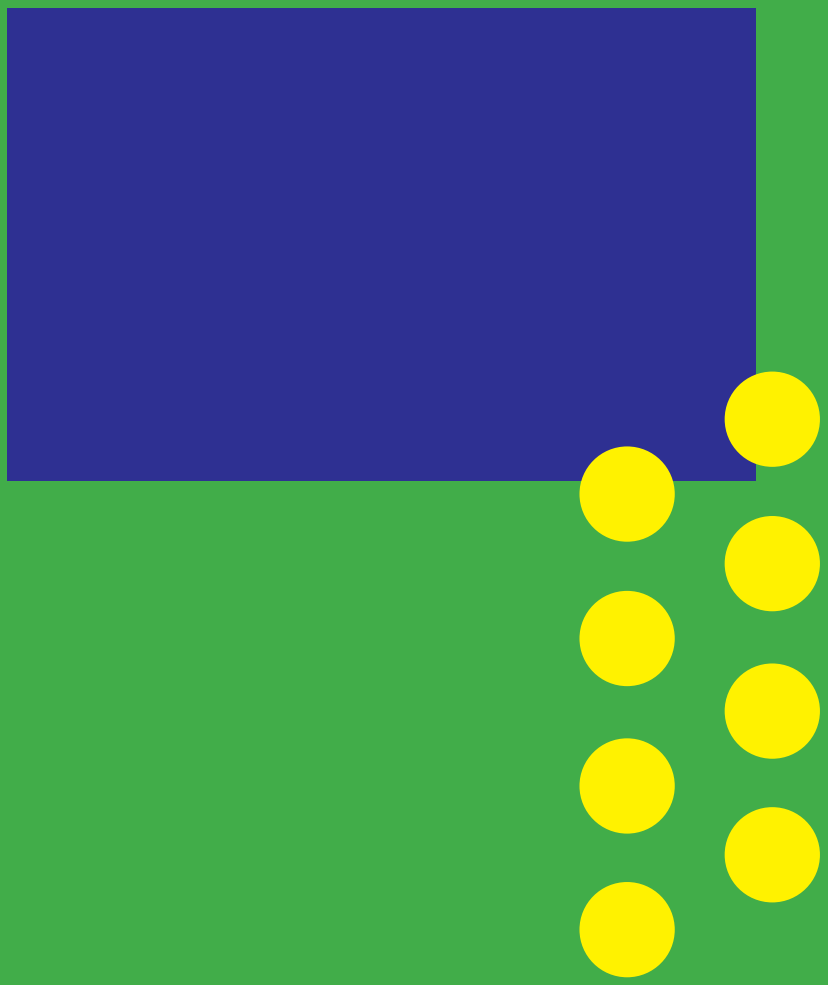
In the above section, we have focused on the employment outcomes of PLC graduates, however, a significant proportion of PLC provision is also progression focused. In this section, we examine the education outcomes of the PLC graduates for the three cohorts one year after completion. The overall results are presented in Table 5 above. The ELD dataset provides two outcome options related to progression in education: the graduates can be in 'higher education only' (i.e. no evidence of substantial employment) or they can be in 'higher education and in employment'. Our results indicate that in total 27% of 2012/2013 cohort were in higher education in 2014. The next class of PLC had 26% of its graduates in higher education in 2015, followed by 27% in the subsequent year. The breakdown of progression into two mutually exclusive categories suggest that as the Irish economy started its recovery in 2013 through 2016, the number of PLC graduates who progressed into 'higher education only' decreased by 3% age points from 14% to 11%. In contrast, a more stable proportion of graduates, on average 14%, were in 'higher education and in substantial employment' over the same period.

As mentioned above, an important policy question is how individuals progress through the education system. Until recently our understanding of the pathways from FET into HE was based on anecdotal evidence due to lack of reliable data and shortage of data linkages. In the final section we provide new evidence on FET to HE transitions using both the P-POD cohorts and a new dataset PLSS (2016/2017).[10]

10 Some analysis in section 5 could not be carried out using PLC data in P-POD because information on the ISCED field of learning was missing. However, PLSS provides us with 2-digit and 4-digit ISCED codes for the course.

Section 5

FET - HE Transitions



5. FET - HE Transitions

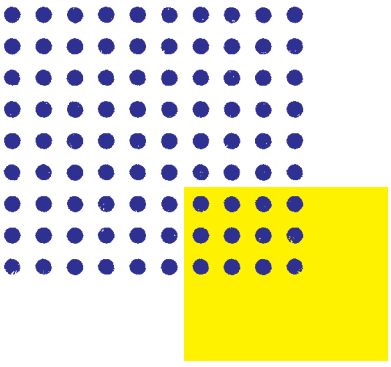
In this section, we address the question of progression from FET to HE, however, this time we are interested not only in the initial transition but also the subsequent years. In this section we will examine, how well PLC graduates do in terms of their progress within HE. Anecdotal evidence suggests that PLC graduates have a good year-on-year progression rate within the HE. Many IoTs find that they are more mature and driven and hence are more likely to complete the first two years. In order to investigate this, we link the three PLC cohorts with the HEA enrolments dataset for the years 2012-2017. The dataset is constructed so that each observation represents an individual enrolment for one academic year. There are 15,256 unique learner progressions to Higher Education from the three PLC cohorts 2012/2013, 2013/2014 and 2014/2015 in total. Table 8 below shows the patterns of FET-HE progression.

	2012/2013	2013/2014	2014/2015
Enrolled same year	3,628	3,858	4,093
Enrolled following year	550	575	568
Enrolled two years after	329	342	379
Enrolled three years after	289	375	-
Enrolled four years after	270	-	-
Total	**5,066**	**5,150**	**5,040**

Table 8: First instance of HE enrolment after PLC completion

The data shows that of those PLC students who progress into HE the majority enrol in third level education the same year as completing their PLC. For example, 3,628 PLC graduates from 2012/2013 cohort enrolled in a HE course in September 2013, another 550 enrolled in September 2014, 329 enrolled in September 2015. From the same cohort, there were still learners progressing onto HE in 2016 and 2017, up to four years after completion of their PLC course. Similar patterns can be observed for the other two cohorts.

The following Table(9) suggests that the PLC provision provides solid progression pathways for those learners who want to get a third level education. As we know, the majority of the PLC learners complete a Level 5 course. Below, we can see the level of HE course they enrol into. A significant number of PLC graduates enrol into a Level 8 course, accounting for 53% of all FET-HE transitions, followed by a further 30% enrolling into a Level 7 course.

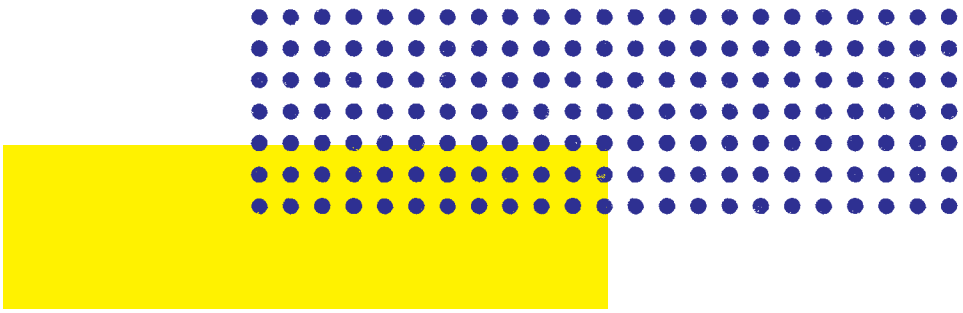


In the section below we address an important question with regards to the quality of the education provided by the PLC programme courses. It is important that the PLC graduates get accepted into a HE course, however, it is also equally or more important that they are equipped with the necessary knowledge and skills to complete their HE course. Based on studies carried out by the HEA, evidence suggests that if a student achieves satisfactory grades in the first two years and progresses onto third year, they are less likely to leave early.[11] In other words, if they are not suitable to complete a third level course, they will leave early in the first two years of their study.

HE Course by NFQ Level	Number of PLC Graduates	%
6	2,393	15.69
7	4,528	29.68
8	8,031	52.64
9	114	0.75
Other	190	1.25

Table 9: NFQ Levels of Higher Education Courses

The following analysis provides evidence on the number of PLC graduates who were able to complete the first two years of their study and progress into third year. The HE progression analysis therefore focuses on student re-enrolment (within the HE) in subsequent years of study. The analysis excludes third level programmes of short duration, e.g. most full-time Level 9 Master's courses are one year in duration. In addition, many PLC learners progress directly into the second year of Level 6 Certificate courses, these are also excluded. Therefore to study progression (or non-progression) rates of PLC graduates in higher education, we restrict our cohort to those who progressed onto Level 7 and 8 courses only. Table 10 below shows the different programme types for which the 12,599 learners enrolled at Level 7 and 8. The cohort is further restricted only to include undergraduate honours degree, general degree and diploma programmes as these courses would have a duration of at least three years. This reduces the sample size to 12,383 progressions, this cohort is used to study HE retention in the following subsection.



11 https://hea.ie/assets/uploads/2019/02/HEA-Analysis-of-Completion-in-Irish-Higher-Education-Report-Release.pdf

Programme Type	Number of Enrollments	%	Cumulative Enrollments
Undergraduate Honours Degree	7,964	63.41	7,964
Undergraduate General Degree	4,300	34.24	12,264
Undergraduate Diploma	119	0.95	12,383
Certificate	77	0.61	12,460
Undergraduate Certificate	33	0.26	12,493
Undergraduate Occasional	29	0.23	12,522
Postgraduate Diploma	14	0.11	12,536
Professional Training Qualification	14	0.11	12,550
Higher Diploma or Certificate	9	0.07	12,559

Table 10: HE programme enrolled by PLC progressions

5.1 Retention Rates of PLC Graduates in Higher Education

The progression (non-progression) rates are defined as the proportion of students enrolled in higher education that do (not) enrol the following year in the same degree programme. We consider only direct progressions (i.e. those who completed their PLC and enrolled in HE in the same calendar year) and those who entered year 1 of their degree course only. Furthermore, we ensure those who repeated years or changed degree course are only counted as progressing into the appropriate course year.[12] For example, consider a student who changed to a different degree in their second HE enrolment year and subsequently did not re-enrol in HE. For the purpose of this analysis, they are counted as not progressing into year 2. Below in Table 11, we can see that there were 4,050 PLC graduates from the 2012/2013 cohort who progressed onto third level education. Of this group, 3,178 enrolled in HE in 2013 and 2,874 were enrolled in the first year of a HE programme. In this section, we will focus our analysis on the retention rates of this reduced sample for each cohort.

12 Course year is a variable in the HEA enrollment dataset which indicates the year (1,2,3,4 etc) of the degree programme for each instance of enrolment.

	2012/2013	2013/2014	2014/2015	Total
Initial Sample	4,050	4,181	4,328	12,559
Immediately Enrolled in HE	3,178	3,367	3,628	10,173
Labelled Course Year 1 HEA	2,874	3,046	3,304	9,224

Table 11: Sample cohorts for each PLC enrolment year

Table 12 below, shows the progression outcomes of the 2012/2013 PLC sample. Our results show that 2,137 learners (who were PLC graduates) progressed into their third or fourth year, representing 74% of the PLC sample enrolled in HE in 2013. The remaining students left their study early: 16% left after the first year and another 11% left after their second year of study.

PLC 2012/2013	Numbers in HE	Non-Progression Rate %	Retention Rate %
Year 1	2,874	-	-
Year 2	2,407	16.2	83.8
Year 3	2,137	11.2	74.4

Table 12: Retention rates for PLC 2012/2013 sample in higher education

We apply the same analysis on the 2013/2014 (Table 13) and 2014/2015 (Table 14) samples. We find that the retention rates decreased to 72% and then to 61% for these PLC cohorts respectively. In other words, the non-progression rates increased from 26% to 28 and 39% over the years. Part of this increase can be explained by the economic recovery in Ireland and the strong labour market. As we showed earlier, the employment rates increased from 41% to 48% for the PLC graduates (see Table 5) over 2014-2016.

A recent HEA study found that for progression from academic year 2013/2014 into 2014/2015, 27 and 16% of all entrants into IoT degrees NFQ Level 7 and 8 respectively did not progress into year two.[13] The study shows 11% of all university entrants (NFQ Level 8) did not progress into year two 2014/2015. Furthermore, completion rates based on graduations within institute up to the class of 2016 graduations where considered and the overall HE completion rate was 76%, with rates of 83% and 74% for university and IoT entrants respectively. The completion rate was 53% for students with Leaving Certificate points from 155-200 and 43% for those with 200-250 points.

13 https://hea.ie/assets/uploads/2019/02/HEA-Analysis-of-Completion-in-Irish-Higher-Education-Report-Release.pdf

PLC 2013/2014	Numbers in HE	Non-Progression Rate %	Retention Rate %
Year 1	3,046	-	-
Year 2	2,524	17.1	82.9
Year 3	2,193	13.1	72.0

Table 13: Retention rates for PLC 2013/2014 sample in higher education

PLC 2014/2015	Numbers in HE	Non-Progression Rate %	Retention Rate %
Year 1	3,304	-	-
Year 2	2,583	21.8	78.2
Year 3	2,026	21.6	61.3

Table 14: Retention rates for PLC 2014/2015 sample in higher education

In comparison with these HEA findings our results indicate that the retention rates of PLC graduates compare favourably to those in HE from lower Leaving Certificate points brackets. The progression rates of our PLC cohorts support the anecdotal evidence from IoT instructors that learners progressing from FET into HE have a level of preparedness drawn from the former experience which helps them complete their degree successfully.

5.2 Previous Experience in Higher Education

Unfortunately, we do not have data on the educational background of the three PLC cohort in P-POD. Instead we have HEA enrolment records so we link the PLC graduate records with earlier HEA enrolment data. The results are reported in Table 15. Our findings show that around 12% of our total PLC sample were previously enrolled in a third level course.[14] In order to fully understand, the role of the PLC provision for this cohort we need further information on the level and the ISCED field of learning of the HE course they were enrolled in.

14 Our analysis suggests that these persons were enrolled in a course in HE but not necessarily that they had completed their third level education.

PLC Enrolment Year	Enrolled in HE Previously	Proportion of Sample
2012	1,989	0.13
2013	2,023	0.12
2014	1,937	0.11
Total	**5,949**	**0.12**

Table 15: Number of learners who enrolled in HE before enrolling in PLC

Figure 2 shows the percentage breakdown of the NFQ levels of higher education courses these PLC students were previously enrolled. The majority (44%) are honours degree Level 8 with 34% at Level 7. These results suggest that learners do not necessarily follow a straight path from secondary education into FET and from FET into HE.

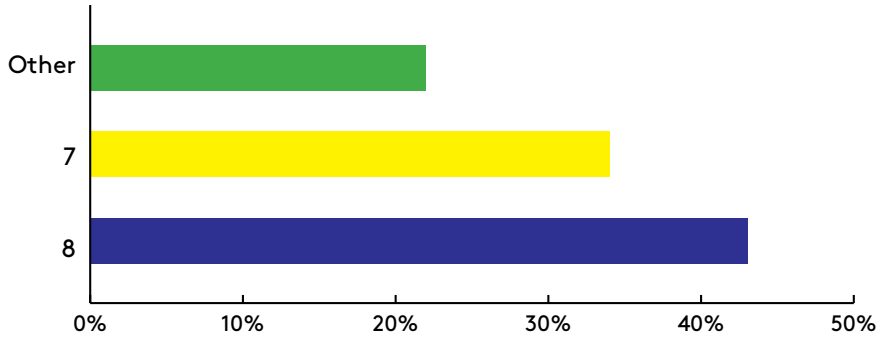


Figure 2: Distribution of the pre-PLC NFQ Levels

The ISCED fields of learning for these pre-PLC higher education enrolments are highlighted in Table 16. The majority of students were enrolled in courses in Business, Administration and Law followed closely by Arts and Humanities.

The PLC data from P-POD does not include ISCED field of learning eliminating the possibility of comparing fields between these higher education to PLC progressions. Comparing ISCED fields for those who complete their PLC course (with previous HE experience) and progress again into higher education will be possible when PLSS has gathered data for a number of PLC cohorts. This future work could help explain the role of PLC provision in these progression paths and uncover if learners change field of study via a PLC course to reskill. Work is also underway to flag if these pre-PLC higher education individuals graduated from their higher education course with an award or left early.

ISCED Field	Enrollments	%
Business, Administration & Law	1,208	20.6
Arts & Humanities	1,153	19.67
Engineering, Manufacturing & Construction	773	13.18
Services	680	11.6
Information & Communication Technolgies	650	11.09
Natural Sciences, Mathematics & Statistics	477	8.14
Health & Welfare	425	7.25
Social Sciences, Journalism & Information	263	4.49
Not Defined	72	1.23
Generic Programmes	62	1.06
Agriculture, Forestry, Fisheries & Veterinary	58	0.99
Education	42	0.72

Table 16: ISCED Field for pre-PLC Higher Education Enrolments

5.3 Details of PLC to HE Progression

In this final subsection, we focus on the detail rather than the overall progression figures. An important aspect of progression is based on the subject area of study: to the extent that students see a PLC course as a stepping stone into a course in the same broad subject area (i.e. ISCED field of learning), the more likely they will be to progress into a similar course in HE and the more likely they will be able to complete their third level education.

In order to examine progression from a PLC course to higher education by field of learning, we used the PLSS data on 2016/2017 PLC students. This sample was then directly linked with 2017 HEA enrolments data. Out of a total of 28,105 PLC learner completions, 5132 graduates were found to have progressed to third level education.[15]

The majority of progressions between PLC and higher education take place between courses of identical broad ISCED field: 63% of PLC students progressed on to HE in cognate fields. This figure is likely underestimating the actual progression between the same ISCED broad fields of learning, as upon closer inspection, we have noticed differences in ISCED coding between the HEA dataset and PLSS. For example, PLC graduates of Early Childhood Care and Education courses progress into similar courses in Higher Education (i.e. Bachelor of Arts in Early Childhood Studies) however, this is flagged as a mismatch in field of learning, as the PLC course is coded in Education and the HE course is coded in Health and Welfare broad ISCED field.

Table 17 highlights the top 10 progression routes by ISCED field by volume: Six out of top ten most common transitions between FET and HE takes place in cognate disciplines in Arts and Humanities, Health and Welfare, Business, ICT, Services and Engineering, manufacturing and construction.

15 This sample includes only those students who have completed their PLC course in May - June 2017 and subsequently enrolled in a third level course in September 2017.

	Number of Enrolments	%
Progressions Into A Different ISCED Field	1,751	37.5
Progressions Into The Same ISCED Field	2,923	62.5

Table 17: Progression based on ISCED (2-digit)

We also consider these progression movements as a proportion of the total number originating from each field of learning. For example, 115 progressions occurred between cognate Natural Science courses yielding a rank of eight in the table. However, this represents 71% of the total number progressing from natural science PLC courses. Another example is ICT with 71% progression to cognate courses in HE. Closer inspection shows most Software Development and Computer Systems/Networks graduates from PLC courses progress onto BSc courses in Computing and Software Development in HE.

On the other hand the most common progression mismatches occur between Education into Health and Welfare (Table 19), this progression route accounts for over half the total progression from Education, many of these mismatches can be explained due to differences in ISCED coding as explained above. The next highest mismatch combination by volume is that of Health and Welfare into Social Science, Journalism and Information. Closer inspection highlights many movements from practical and applied PLC courses in social care and practice to more theoretical courses of the same subject area. Progression into Bachelor of Social Science are popular and again highlight the difference in coding across the two educational institutions.

A significant number of the PLC graduates completing a course in Game Design and Development progress into a BSc in Computer Science Games Development in HE. However, this progression is marked as a transition from Arts and Humanities to an ICT course due to coding. Not all mismatches are due to differences in coding: mismatches occur, for example, when a graduate of a Photography (Level 5) course enrolls into a degree course in Software Development.

The highest number of mismatch progressions as a proportion of the original ISCED field occur between Social Sciences, Journalism and Information into Arts and Humanities. There are strong similarities between these two fields of learning with many progression routes available and the high proportion of 57% progressing into Arts and Humanities reflects this.

Another important aspect of FET-HE transitions is the level of the degree course the PLC graduates are enrolling into. In 2017, as discussed in an earlier section 77% of PLC starters were enrolled in a Level 5 course with an additional 21% enrolled in a Level 6 course. The Figure (3) below shows the percentage of the 5,132 PLC graduates who progressed on to HE by level of the course they entered. As can be seen in Figure 3, 63% (3,209) of all progressions were into Level 8 courses, followed by 27% (1,395) enrolling into a Level 7 course. Only 17 out of 5,132 progressions was at Level 5 and 441 were into Level 6. The remaining 48 were enrolled into unknown levels and 22 were enrolled into Master's or Post-Graduate Diploma course.[16]

16 Some NFQ levels are missing in HEA enrolment database.

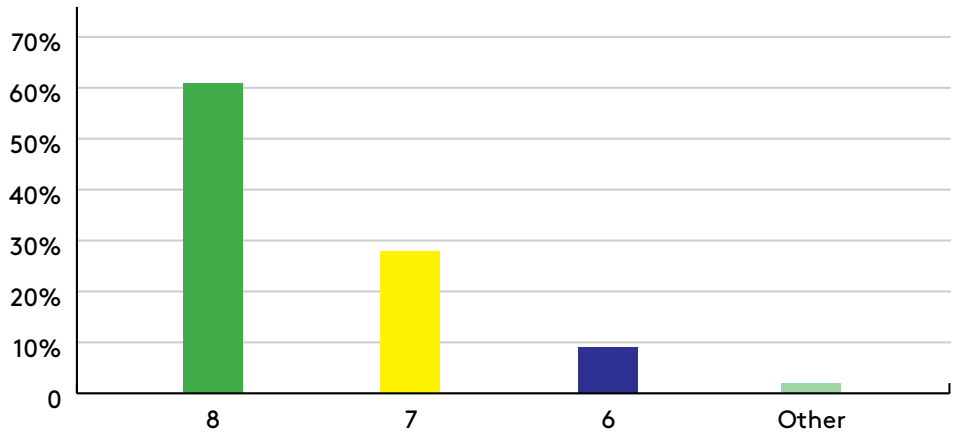


Figure 3: NFQ levels of PLC to Higher Education 2017 progressions

Enrolment into higher levels (i.e. Level 9) illustrates the non linear nature of some progression routes. Learners with Level 7 or 8 degrees may take PLC courses in preparation for enrolment in Master's or Post-Graduate Diploma courses.

	Number of progressions	Total	Proportion %
Arts & humanities	733	977	75
Health & welfare	672	1,110	61
Business & administration and law	504	885	57
Information & Communication Technologies	312	441	71
Services	253	585	43
Engineering, manufacturing & construction	187	341	55
Education / Health & welfare	154	285	54
Natural sciences, mathematics & statistics	115	162	71
Health & welfare / Social sciences, journalism & information	98	1,110	9
Arts & humanities / Information & Communication Technologies	91	977	9

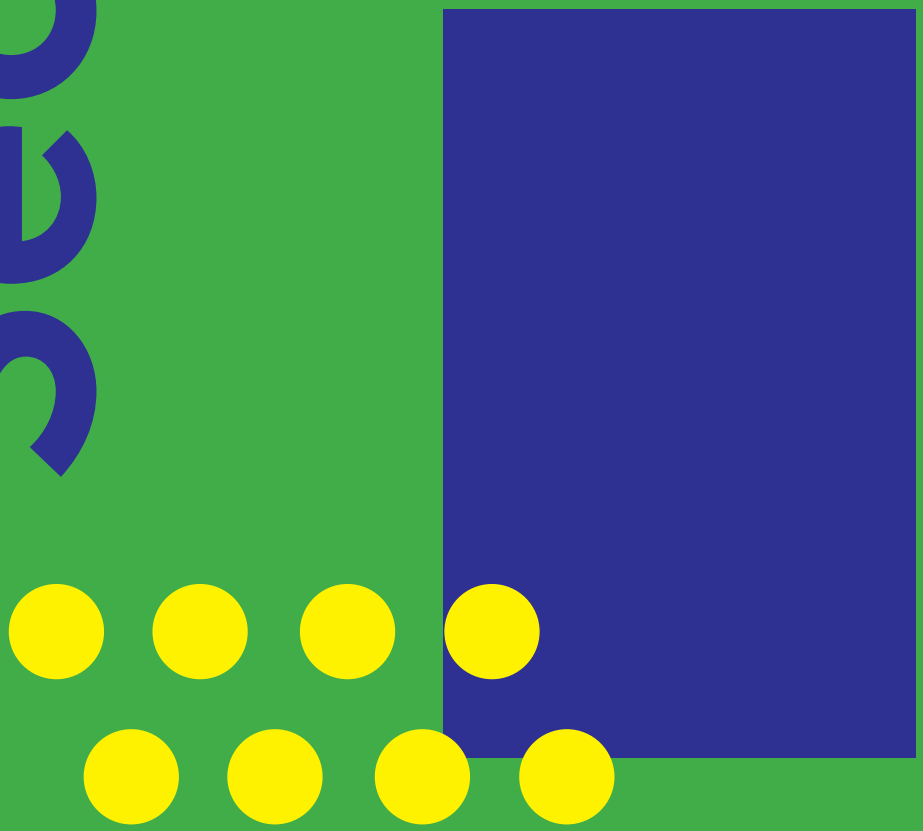
Table 18: Progression movements by ISCED

	Number of progressions	Total	Proportion %
Education/Health & welfare	154	285	54
Health & welfare/Social sciences, journalism & information	98	1,110	9
Arts & humanities/Information & Communication Technologies	91	977	9
Health & welfare/Arts & humanities	88	1,110	8
Social sciences, journalism & information/ Arts & humanities	78	138	7
Business & administration and law/Arts and humanities	77	885	9
Engineering, manufacturing & construction/ Natural sciences, mathematics & statistics	63	341	18
Business & administration/Services	53	885	6
Services/Business, administration & law	51	585	9
Health & welfare/Services	50	1,110	5

Table 19: Progression movements for mismatching ISCEDs

Section 6

Conclusions



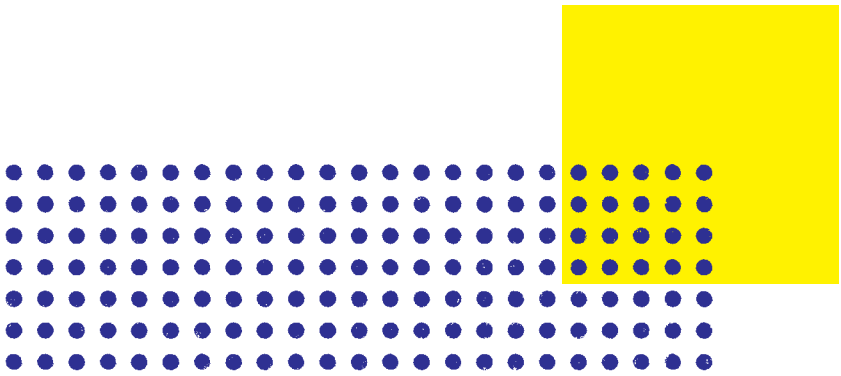
6. Conclusions

The Post Leaving Certificate (PLC) programme is a full-time programme for young people who have completed their Leaving Certificate and adults returning to education. PLC courses are generally at National Framework of Qualification (NFQ) Level 5 or Level 6 designed to equip the learner with vocational and technological skills in order to get a job or continue with their studies.

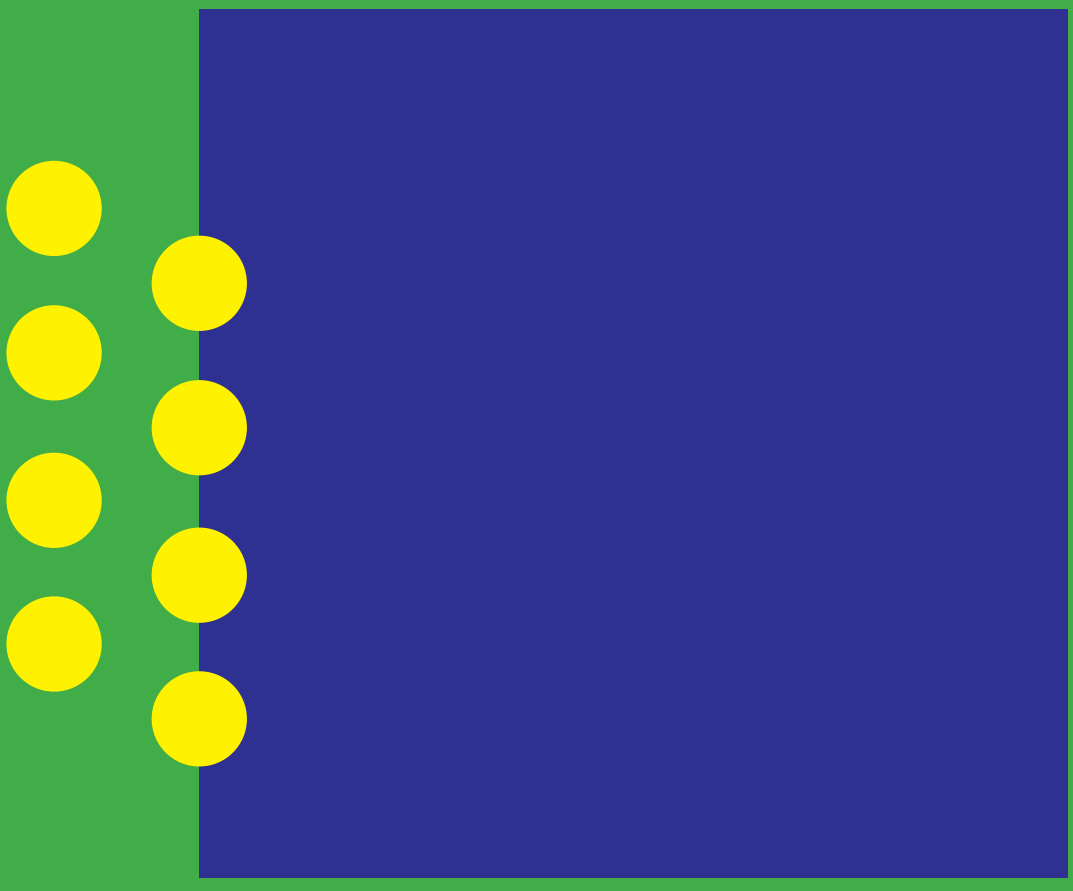
This paper presents the outcomes of those students who have completed their PLC courses. The results are based on a graduate progression analysis that involves linking the records of students from P-POD database with a new framework developed by the CSO, namely the Educational Longitudinal Database (ELD). This new framework provides evidence with regards to the progression and labour market outcomes of those in PLC education in subsequent years.

Our results indicate:

- A total of 64% of 2014-2015 PLC graduates were in substantial employment after one year following graduation. The same figure for the 2012-2013 cohort was 54%, indicating a 10 percentage point increase over three years.
- For the same cohorts, we find that 27% of PLC graduates continued their education and enrolled in higher education. The PLC to HE progression rate seems to have stayed stable over the years.
- A significantly large proportion (almost 30%) of those in substantial employment work in the wholesale and retail sector, accommodation and food service (19%) and in human health and social work activities (13%).
- The median weekly wage of a PLC graduate in substantial employment within a year of completion was €253.6 increasing to €431.5 within six years. Considering that the sample of PLC graduates in our analysis mainly include those under 25 years of age who are mainly employed in the wholesale and retail sector, this median weekly wage is comparable to the CSO figures reported at a national level.
- In terms of progression outcomes, we find that a significant proportion of PLC graduates progress onto a HE course at a higher level within the same year of completion of their PLC course. Most progressions take place between cognate disciplines.
- Another significant finding from our analysis is that those PLC graduates who enrol in a HE course have a high progression rate within the HE, therefore suggesting high completion rates in subsequent years.[17]



17 Further analysis will be carried out to find out the graduation rates for PLC students in the HE. HEA graduate data was not available at the time of writing.



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