Session 8

# Graduate Outcomes Analysis in the FET Sector in Ireland: Challenges and Benefits

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Data Analytics Unit

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SOLAS has responsibility for providing strategic leadership to the further education and training sector

- Supporting the development and implementation of the further education and training strategy
- Funding of the further education and training (FET) system to maximise the impact of state investment
- Overseeing the development and implementation of the Strategic Performance Agreements between SOLAS and each Education and Training Board (ETB) which set out 3 year plans to further embed a strategic and integrated FET system
- Statutory responsibility for the apprenticeship system
- Analysing the labour market and identifying and anticipating key skills needs, and
- Promoting the standing of Further Education and Training
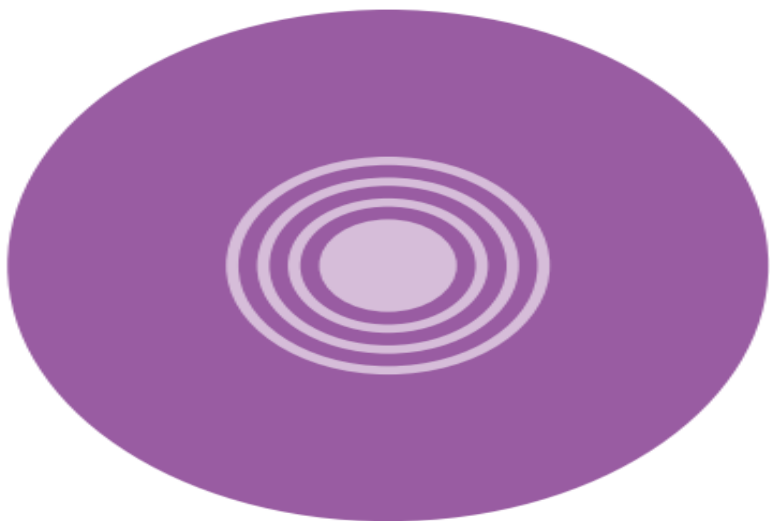
MISSION

To be ambitious for Further Education and Training; and through that ambition to lead, support and influence an ever-improving FET sector that delivers excellent outcomes for learners, enterprise and communities.
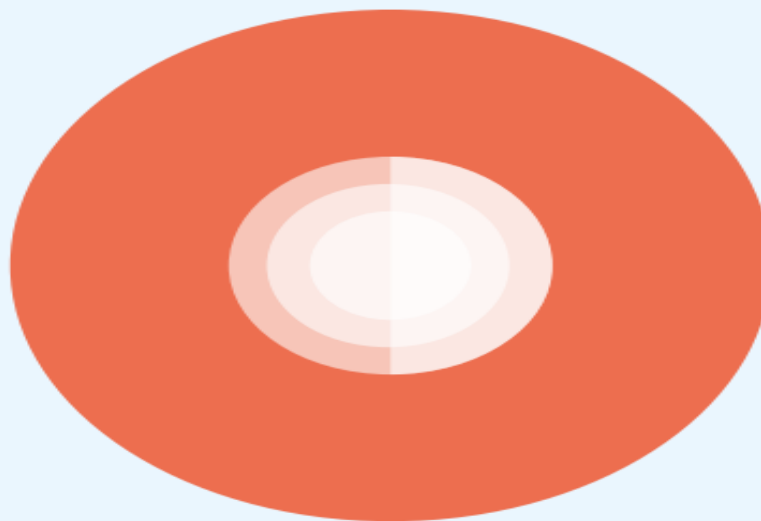
CORE PRINCIPLES

The SOLAS approach is:

— Evidence-based
— Responsive and flexible
— Outward-looking and learner-centred
— Collaborative
— Focused on excellence

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SOLAS
An tSeirbhís Oideachais Leanúnaigh agus Scileanna
Further Education and Training Authority

SOLAS GOAL 1

Align skills provided through FET courses with those required by the labour market to improve individuals' employment prospects and lifelong learning needs.

THREE-YEAR TARGETS

New strategic-performance agreements with all 16 ETBs, integrated with the FET planning process.

ACTIONS

1.1 Carry out skills and labour-market research to inform decisions on FET provision by SOLAS.

1.2 Develop agreed skills targets using outputs from improved FET data, the strategic pilots' projects, programme evaluation, research and improved planning processes. These would be developed with the National Skills Council, regional forums and employers as a key component of the FET strategic agreements and service planning with ETBs.

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Further Education and Training Authority

Setting the Baseline:

- **ETB Strategic Performance Agreements and Planning Framework**
  - It is statutory responsibility of SOLAS
    - fulfil its obligations under the Education and Training Act 2013:
    - *'to assess whether or not training bodies, and other bodies engaged in the provision of further education and training programmes, to whom moneys have been advanced under section 21, perform their functions in an economic, efficient and **effective** manner'*.

Setting the Baseline: SOLAS/CSO Input

SOLAS corporate plan 2017-2019:

Targeted and <u>measured goals</u>

- <u>Provide accurate and reliable statistics on Learners:</u>
  - <u>Employment</u>
  - <u>Higher Education</u>
  - <u>Other FET</u>
  - <u>Back on welfare</u>

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A key objective of the current Further Education and Training Strategy is to ensure that planning for and provision of FET is supported by a strong data infrastructure.
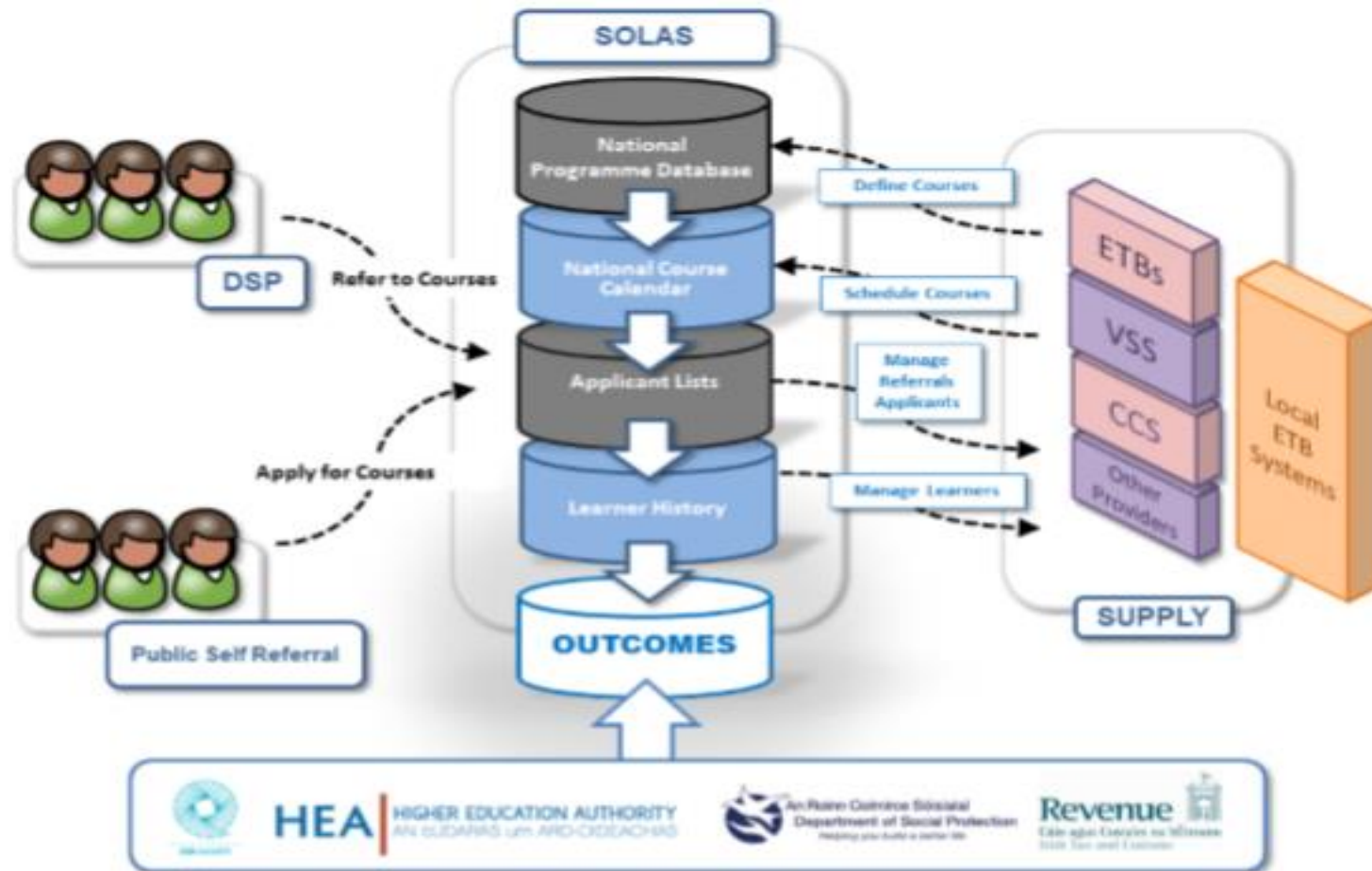
The data deficit:

Some ETBs have sophisticated computer systems. Others relied on manual and paper based systems
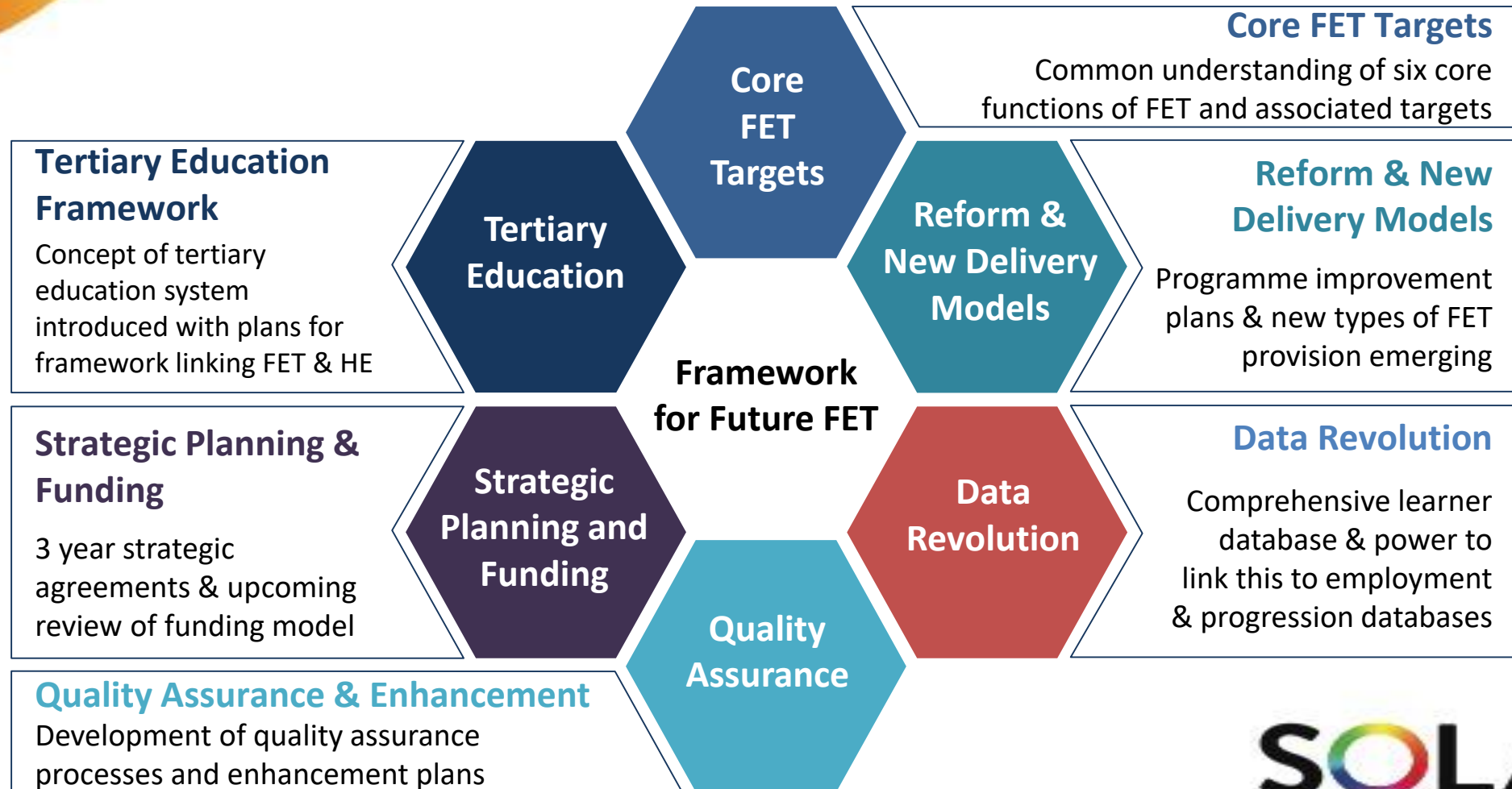
In response SOLAS created

PLSS: an IT infrastructure and centralised repository of FET information

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High Level Flow Chart of PLSS

We now have a framework in place for a strategic and integrated further education and training system…

Core FET Targets
Common understanding of six core functions of FET and associated targets

Reform & New Delivery Models
Programme improvement plans & new types of FET provision emerging

Data Revolution
Comprehensive learner database & power to link this to employment & progression databases

Tertiary Education Framework
Concept of tertiary education system introduced with plans for framework linking FET & HE

Strategic Planning & Funding
3 year strategic agreements & upcoming review of funding model

Quality Assurance & Enhancement
Development of quality assurance processes and enhancement plans

Core FET Targets

Tertiary Education

Reform & New Delivery Models

Framework for Future FET

Strategic Planning and Funding

Data Revolution

Quality Assurance
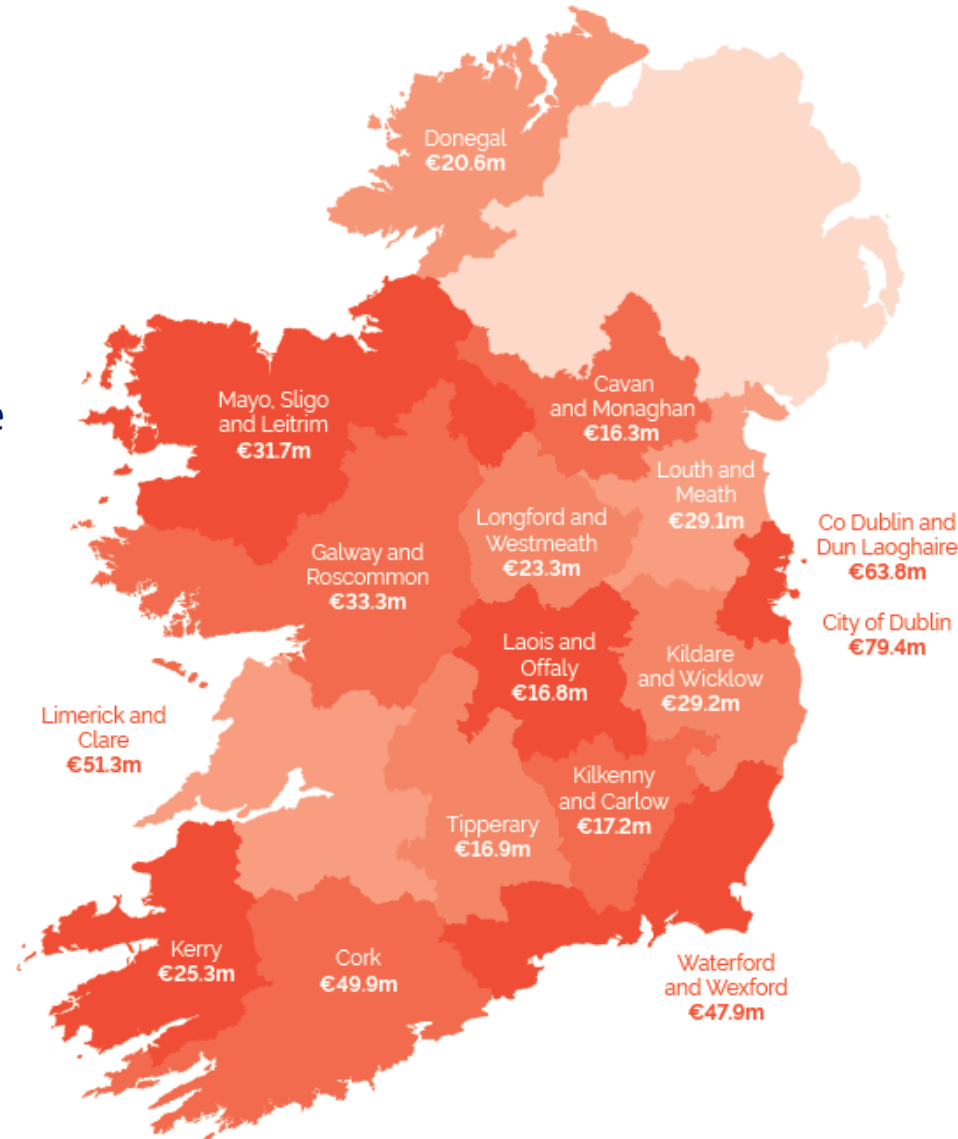
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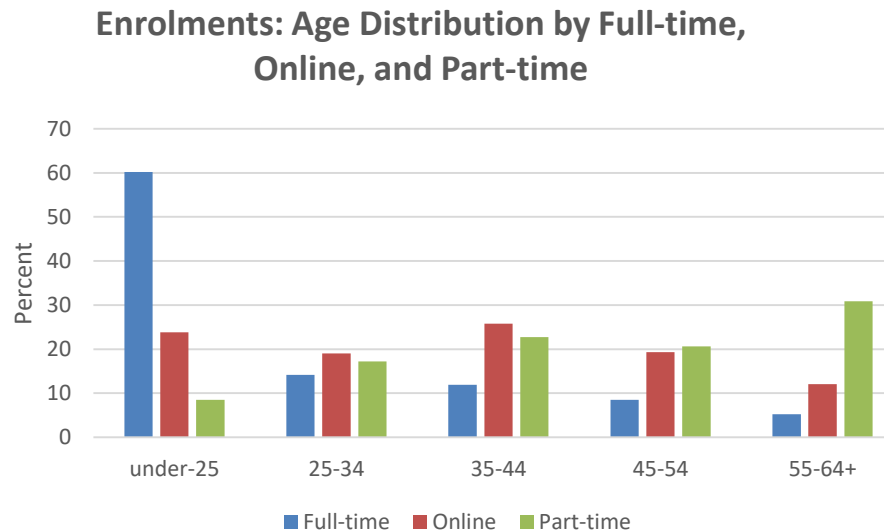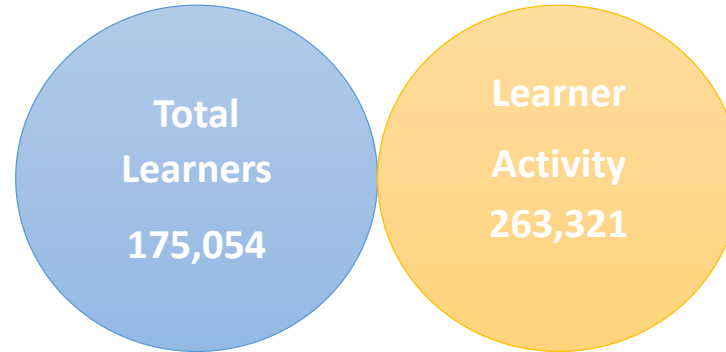learning works

Our Role: Data Analytics Unit

- to oversee this work and to support evidenced-based planning across the organisation.

    - A key aspect of the work of the Data Analytics unit includes tracking outcomes of FET learners to measure the impact of FET in relation to the future learning progression or employment of graduates.

- Reporting on FET statistics to the DES, DEASP, ESF, Eurostat, OECD, etc.

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The further education and training system is very diverse and geographically spread but complex and multi-faceted…

➢ Student cohort roughly equivalent to that of higher education (circa 200k)

➢ However 340k beneficiaries, meaning many accessing more than one course

➢ €640m SOLAS investment (+€140m)

➢ Community based model characterised by small scale provision

➢ Work-based components of much provision

➢ Large proportion of adult learners with competing demands

➢ Level 5 and Level 6 principally delivered via PLC, traineeships & apprenticeships

Donegal
€20.6m

Mayo, Sligo and Leitrim
€31.7m

Cavan and Monaghan
€16.3m

Louth and Meath
€29.1m

Co Dublin and Dun Laoghaire
€63.8m

Galway and Roscommon
€33.3m

Longford and Westmeath
€23.3m

City of Dublin
€79.4m

Laois and Offaly
€16.8m

Kildare and Wicklow
€29.2m

Limerick and Clare
€51.3m

Kilkenny and Carlow
€17.2m

Tipperary
€16.9m

Kerry
€25.3m

Cork
€49.9m

Waterford and Wexford
€47.9m

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PLSS-FET Statistics, 2018

Total Learners

175,054

Learner Activity

263,321

39.7%   **60.2%**

Enrolments: Age Distribution by Full-time, Online, and Part-time

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PLSS-FET Statistics, 2018

Completions: ISCED Broad Field of Study (Learner Activity)

ISCED broad
- Generic programmes and qualifications
- Business and administration and law
- Health and welfare
- Services
- Education
- ICT
- Eng., manuf. and construction
- Arts and humanities
- Agriculture, forestry, fisheries and veterinary
- Natural sciences, mathematics and statistics
- Social sciences, journalism and information

2,291

418

348

Generic programmes and qualifications
105,660

Services
12,660

Education
7,716

Business and administration and law
13,389

ICT
7,427

Eng., manuf. and construction
6,262

Health and welfare
13,239

Arts and humanities
5,940

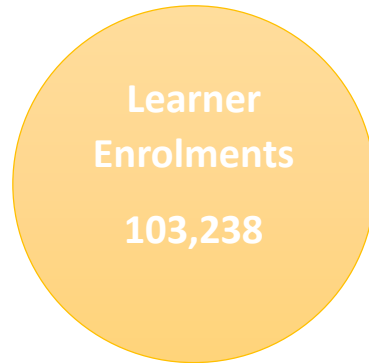SOLAS learning works

Linking PLSS with Administrative Datasets
Profile of FET Learners

Total of 173 different nationalities
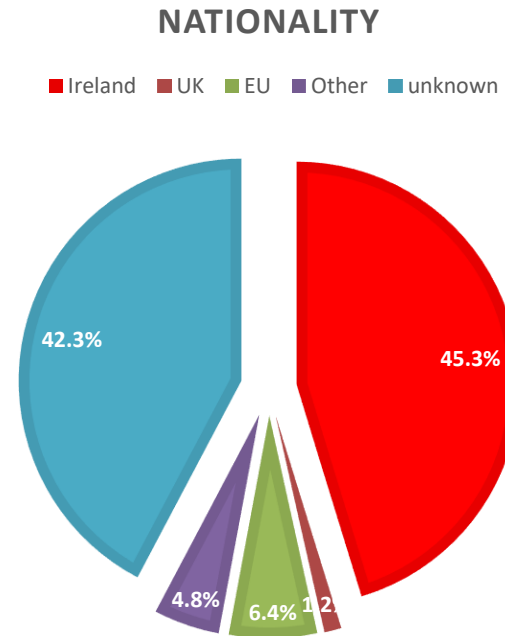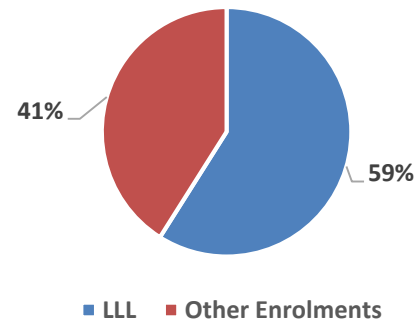
NATIONALITY

■ Ireland ■ UK ■ EU ■ Other ■ unknown

45.3%

42.3%

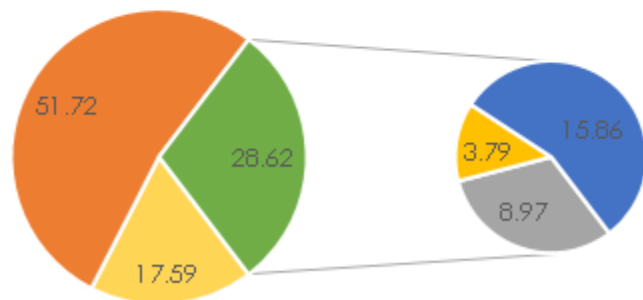4.8% 6.4% 1.2%

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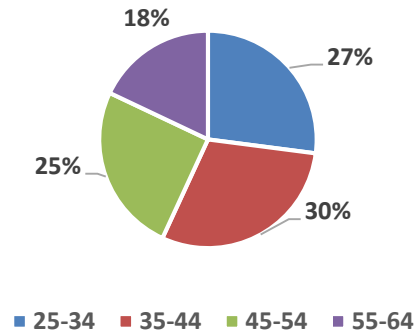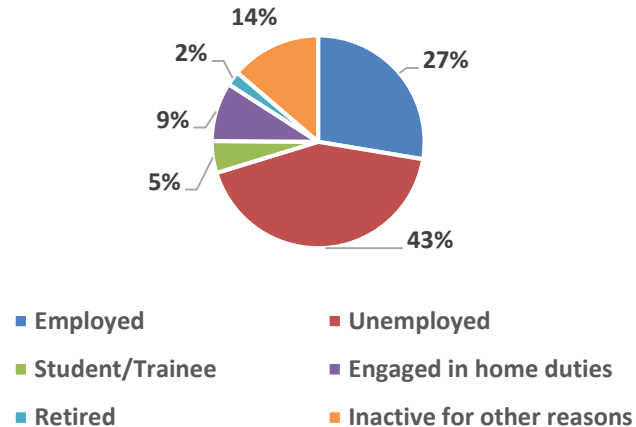
Participation by Learners of Roma Ethnic Origin

ENROLMENTS

In 2018, there were 302 Roma enrolled in the further education and training sector; engaged in 600 learning activities. Of the total number of learning activities, 71 percent (427) were finished in 2018, while the rest were still on course.

PROFILE

54 percent female
68 percent were older than 25 years of age.

Duration of Unemployment

40%
60%

- LTU   - Less than 12 months

ECONOMIC STATUS

51.72
28.62
17.59
3.79
8.97
15.86

- Employed - Unemployed - Student - Home duties - Other

Full and partial completions
87%

Certification rate
57%
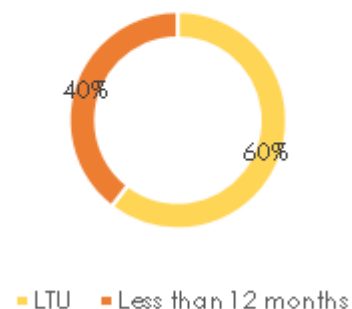
HOUSEHOLD JOBLESSNESS

Among this cohort 12 learners stated that they were part of a jobless household, whereas 58 stated that they were dependents in a jobless household.

DISABILITY

24

Learners stated that they had a long-lasting condition

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Participation by Learners with a Disability

ENROLMENTS

In 2018, there were 8644 learners with at least one disability enrolled in the further education and training programmes; this figure constitutes 5 percent of all learners enrolled in the same year.

ECONOMIC STATUS
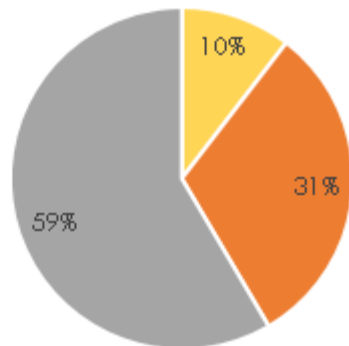
- Employed
- Unemployed
- Inactive

PROFILE

54 percent female

69 percent were older than 25 years of age.

Full and partial completions	Certification rate
90%	30%

Total number of learners with a disability

Psychological...	1,689
Hearing disability	545
Vision disability	408
Learning or...	2,803
Intellectual...	2,136
Mobility...	1,220
Other Illness or...	2,529

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The Aim

- Method: Graduate/Learner tracking
- Suitable performance indicators
- Informed decision making regarding FET provision
- Connecting supply and demand in areas where there are skills shortages
- An integrated approach to FET provision

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Benefits of Linking PLSS with Administrative Datasets
Evidence based Evaluation of FET outcomes

Construction of the new database

Source Tier
Personal Data

| PLSS | P35 | JLD | Form 11 | HEA |

Personal Identifiers Removed

Analysis Tier
Pseudonymised Data

Matching using
Protected Identifier Key
based on PPSN

PLSS
HEA
P35
Form 11
JLD

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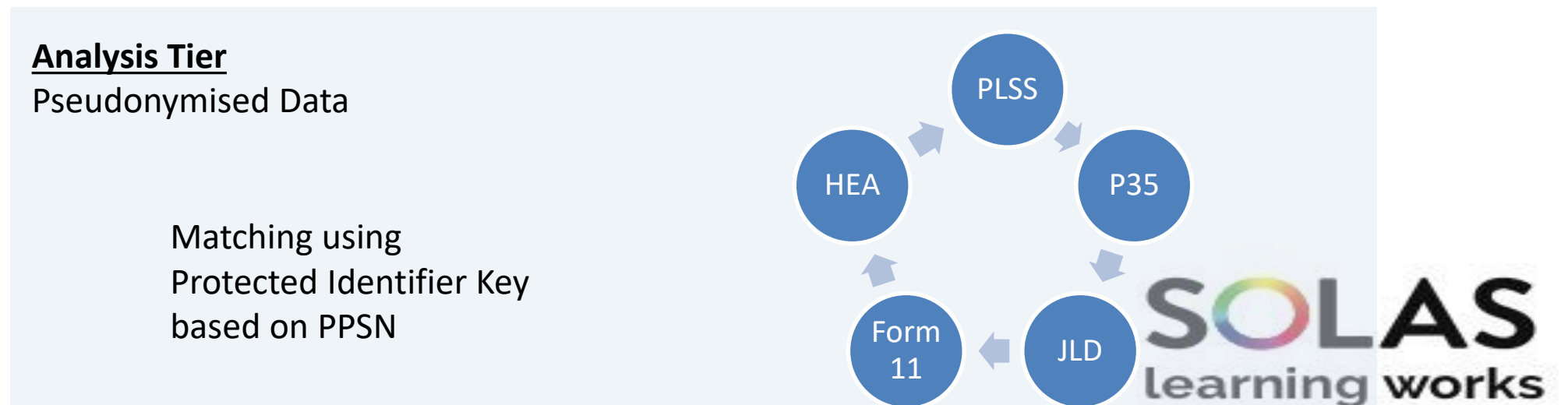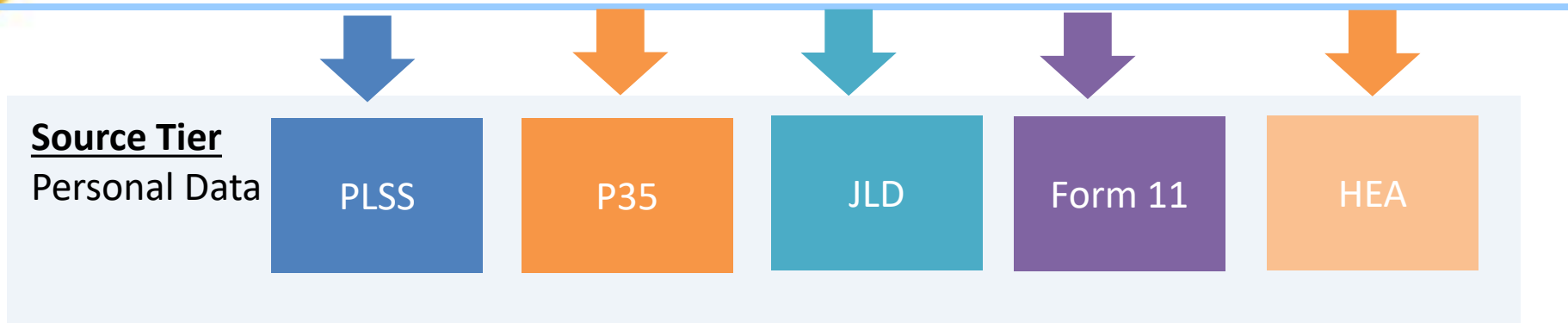
Graduate Tracking and Skills Shortages in the Labour Market

Benefits of Linking PLSS with Administrative Datasets

- Why?

➢ Better than surveys
  ➢ (Follow up Survey)

➢ Better than self-declaration
➢ Best practice
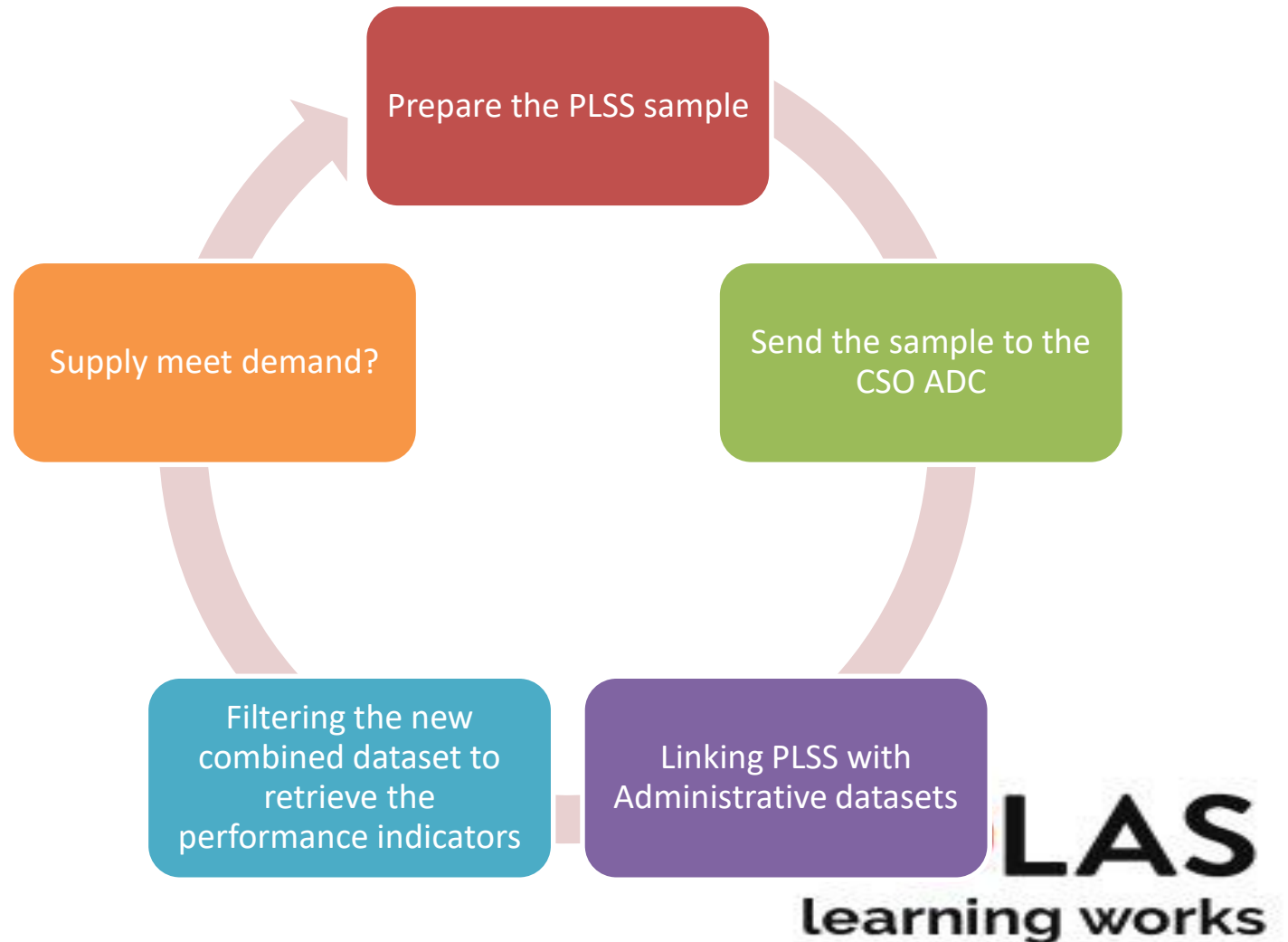
Strategic performance agreements mark a major milestone in the continued development of a strategic and integrated FET system…

Building systems & capability

Multi-annual strategic planning
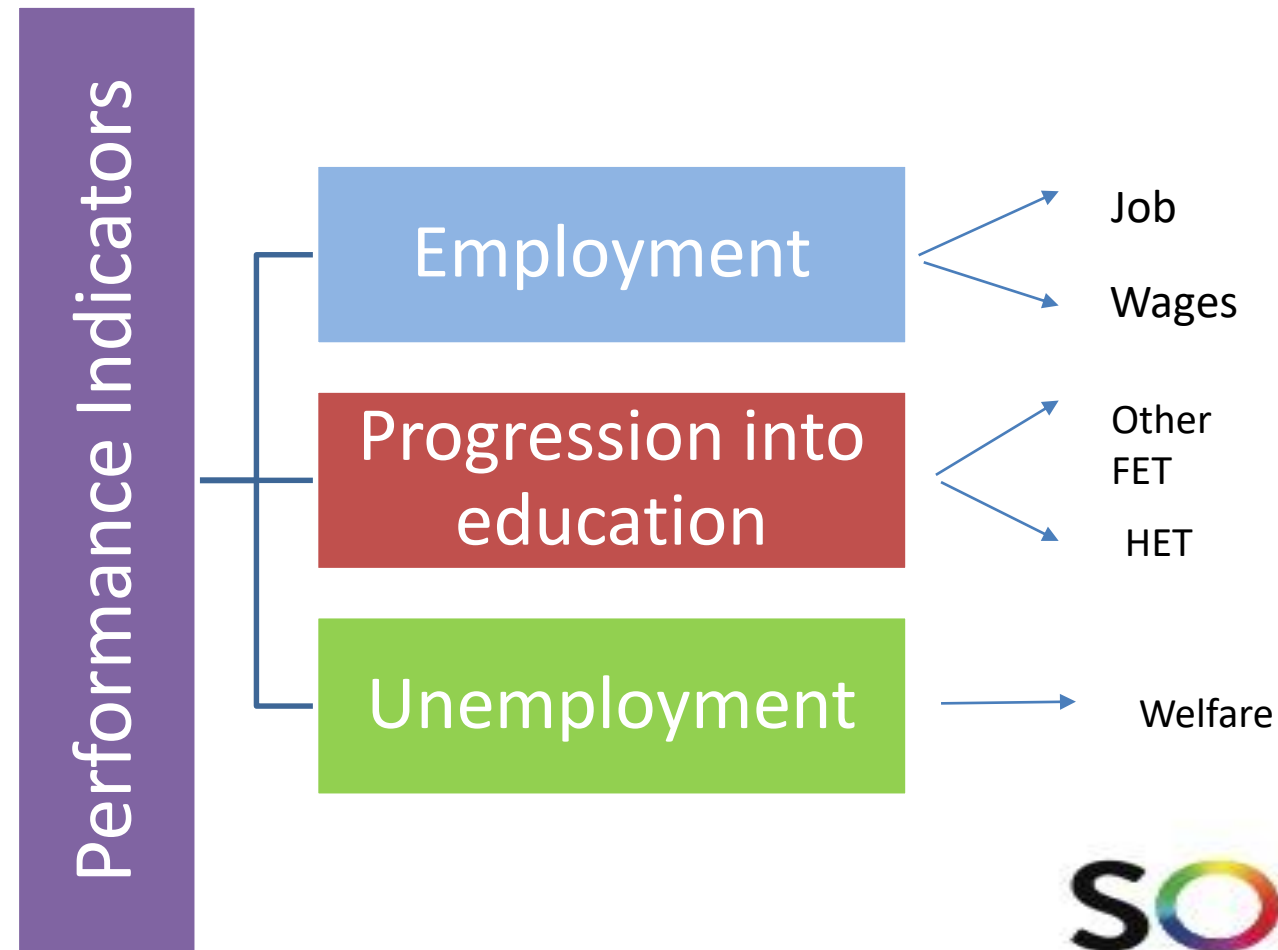
Planning
Build on the foundation and continual improvement of FARR annual planning framework

Data
Supported by the development or robust learner data tracking system

Agreements
Agreements developed with each ETB to establish 3 year FET strategic plans

Consult
Event with CEs & FET Directors, internal & external consultation, pilots to test process

Establishment phase

Strategic Pilots
Initiative tested and developed a process with 3 ETBs.

Outcomes Focus
FET Strategy 2014-19 commits to a system of outcomes-based planning and funding

New Ecosystem
SOLAS and ETBs becoming established as part of new skills development ecosystem (National Skills Council, Regional Skills Fora)

Targets
3 year national targets for FET set down in SOLAS Corporate Plan

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Graduate Tracking and Funding in FET in Ireland

Target 1 — 10 % more learners will secure employment

Target 2 — 10% more learners will progress to other FET or HE

Target 3 — 10% increase in certification on transversal skills focused courses

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Graduate Tracking and Funding in FET in Ireland

Target 4 10 % more learners will engage in lifelong learning

Target 5 10,000 learners per annum securing relevant qualifications in sectors where employment growth/skills needs have been identified

Target 6 13,900 (2018-2020) Starters on Traineeship

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Contribution to National FET Sector Targets by Skills Cluster

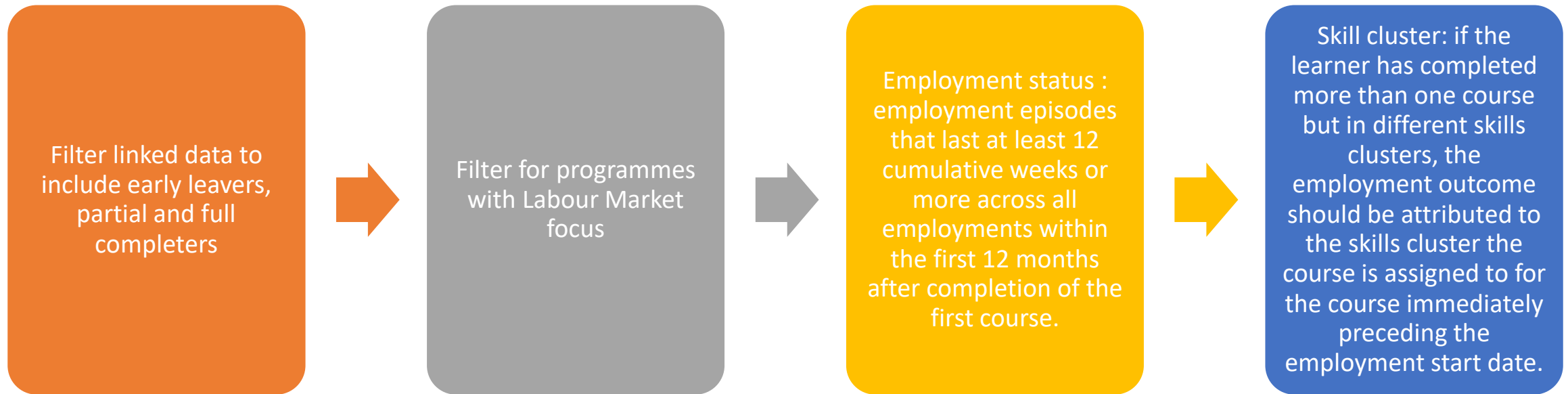| Further Education & Training Provision	Target 1		Target 2		Target 3	
	2018-2020		2018-2020		2018-2020	
	Sector Provision 10% More Learners will secure employment from provision which primarily serves the labour market.		Sector Provision 10% more learners will progress to other further or higher education courses from provision which is primarily focused on this purpose.		Sector Provision 10% increase in the rate of certification on courses primarily focused on transversal (social mobility) skills Development.	
	Expected overall Increase in Completers Securing Employment		Expected overall increase in Completers Progressing to FET or HET		Expected overall increase in Completers certified	
Skill Clusters	Number	%	Number	%	Number	%
Agriculture, Horticulture and Mariculture	1	10%	4	13%		
Animal Science	4	13%	0	0%		
Arts and Crafts	17	10%	1	25%		
Built Environment	4	11%	0	0%		
Business Administration	20	10%	7	10%		
Engineering	0	0%	0	0%		
Engineering (Electrical)	0	0%	0	0%		
Engineering (IT)	0	0%	1	50%		
Engineering (Mechanical)	0	0%	0	0%		
Engineering (Transport)	4	13%	0	0%		
Entrepreneurship	0	0%	0	0%		
Financial Services	2	10%	0	0%		
Food and Beverage	6	11%	1	25%		
Hairdressing, Beauty and Complementary Therapies	11	10%	1	17%		
Health, Family other Social Services	86	10%	30	10%		
Information Technology	8	10%	1	17%		
Management	0	0%	0	0%		
Manufacturing	0	0%	0	0%		
Media, Graphics Communications	25	10%	1	14%		
Natural Resources	0	0%	0	0%		
Research and Education-Training	0	0%	0	0%		
Sales & Marketing	0	0%	2	18%		
Science and Technology	2	11%	1	50%		
Security, Guarding & Emergency Services	0	0%	0	0%		
Sport and Leisure	12	10%	3	10%		
Tourism	14	10%	0	0%		

Target 4		Target 5		Target 6	
2018-2020		2018-2020		2018-2020	
Sector Provision 10% increase of adults, who are seeking FET level provision, engaging in Lifelong learning interventions[1]		Sector Provision: Increase in Relevant Qualifications across FET programmes. Increase of 10,000 learners per annum securing relevant qualifications in sectors where employment growth/skills needs have been identified		Traineeship Programmes. Traineeship National Target of 18,000 (2018-2020) – 13,900 – (2018-2020) Commencements on Traineeship (Skill Clusters By Starters) Labour Market Skills	
Expected overall contribution to the National Target for Increase in Starters and ETB capacity %		Expected overall annual average contribution to National Target for Completers Certified & ETB Capacity %		Expected overall contribution to National Target and ETB capacity %	
Number	%	Number	%	Number	%
25	10%			0	0%
0	0%			0	0%
10	10%			0	0%
40	10%	107	60%	382	1710%
107	11%			235	-40%
0	0%	11	67%	0	0%
2	5%	11	67%	19	600%
2	5%	0	0%	0	0%
25	11%	93	75%	0	0%
10	10%	27	72%	150	-25%
25	10%	24	65%	0	0%
2	10%			0	-100%
15	10%	52	75%	0	0%
14	10%			45	0%
175	11%	345	65%	299	85%
33	10%	192	63%	144	-45%
15	10%			0	0%
0	0%	0	0%	45	0%
0	0%	252	65%	195	0%
0	0%			0	0%
4	10%			0	0%
22	10%	62	75%	150	175%
0	0%	62	90%	0	0%
24	10%			0	0%
19	10%	151	60%	185	55%
5	5%	155	60%	0	0%
0	0%			0	0%
0	0%	12	67%	42	0%
22	11%				
277	11%				
772	11%				
0	0%				
0	0%				
0	0%				

Target 1
10 percent more learners will secure employment from provision which primarily serves the labour market.

Filter linked data to include early leavers, partial and full completers

→

Filter for programmes with Labour Market focus

→

Employment status : employment episodes that last at least 12 cumulative weeks or more across all employments within the first 12 months after completion of the first course.

→

Skill cluster: if the learner has completed more than one course but in different skills clusters, the employment outcome should be attributed to the skills cluster the course is assigned to for the course immediately preceding the employment start date.

Target 1

Programme Type	Full-time/part-time	NFQ level
Blended Training	Full-time	3-6
Local Training Initiatives	Full-time	3-5
PLC	Full-time	5-6
Specific Skills Training	Full-time	4-6
Traineeship Training	Full-time	4-6
VTOS	Full-time	4-6
VSCCs PLC	Full-time	5-6
Momentum	Full-time	4-6
Cork Institute of Technology	Full-time	6
Evening Training	Part-time	3-6
eCollege	Part-time	3-6

Target 2

10 percent more learners will progress to other further or higher education courses from provision which is progression focused.

| Sample includes early leavers as well as partial and full completers | → | Filter for progression focused provision | → | Search for the Learner in the HEA enrolment dataset or in PLSS |

Target 2

Programme Type	Full-time/part-time	NFQ level
Justice Workshops	Full-time	3-4
Youthreach	Full-time	2-5
Bridging & Foundation Training	Full-time	3-4
Community Training Centres	Full-time	3-5
Specialist Training Programmes	Full-time	2-5
BTEI	Part-time	3-5
Skills for work	Part-time	2-3
VSCCS BTEI	Part-time	3-5
Other	Part-time	1-6

FET progression

- 43, 995 progression movements
- 29,410 unique learners

Table 3

Change

Move to Higer NFQ	3,789
Move to lower NFQ	2,326
No change in NFQ	10,597
Undefined	27,283

Table 4

Change

Move to Higer NFQ	2,866
Move to lower NFQ	1,257
No change in NFQ	7,118
Undefined	5,810

Table 5

Change in NFQ Level

0	-1	-2	-3	+1	+2	+3	+4	NA
7,118	1,046	199	12	2,260	498	94	14	5,810

FET progression

- The majority of progression movements occur within the same skills cluster accounting for 69 percent of total progression movements. The other 39 percent (13,457) are cross skills cluster movements.

Table 8

Cluster Change

Yes	13,457
No	30,538

Previous Cluster

New Cluster	Business, Administration	Core ICT	Core Personal	General Learning	Health, Family other Social Services
Health, Family other Social Services	126	56	464	353	
Core Personal	125	142		588	126
Business, Administration		180	331	239	102
General Learning	57	76	423		129
Core ICT	137		264	159	
Hairdressing, Beauty and Complementary Therapies			58	51	
Agriculture, Horticulture and Mariculture			63		
Food and Beverage				58	
Sales & Marketing			53		

Target 1-Results

ETB	ETB Reported	Total number of unique learners who finished a Target1 course	Employment1		Employment2		Employment3	
National Total	11762	<u>60926</u>	28338	47%	23860	<u>39%</u>	16092	26%
Note:								
Employment1:		This column shows the number of unique learners who were employed for more tha 12 cumulative weeks during 2017 (the drawback of this method is that we do not know when the employment started and finished)						
Employment2:		This column shows the number of unique learners who were employed for more than 12 weeks during 2017 and whose gross annual salary was greater than 4,400€ (same drawback as employment1)						
Employment3:		This column shows the number of unique learners who were employed after the course start date and at least 12 cumulative weeks during 2017. This data links 2015 and 2016 employments with PLSS as well as 2017 as there are some learners with 2015 and 2016 start dates. Finally, the eligible cohort is filtered for gross annual salary threshold of 8 hrs multiplied by the minimum wage (9.80) for 12 weeks (i.e. 940 euro).						

Target 2-Results

ETB	Learners Target 2	Progression in FET	Progression HEA	Total	Percent
National Total	24436	7194	298	7492	31

Challenges and Questions

- Data Coverage: Highly improved since the launch in 2017
- Data Gap: missing observations, sensitive personal data

- Collection of sensitive personal data: what might help? When best to collect sensitive data? ESF requirements should be mandatory?
- Reporting definitions: who is a 'graduate'? What is a 'completion'? Who to track?