Chapter 3: UNDERSTANDING AND MONITORING EARLY LEAVING

Leaving education early: putting vocational education and training centre stage
Volume I: investigating causes and extent

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CHAPTER 3.
Understanding and monitoring early leaving

European terminology defines early leaving from education and training (ELET) as ‘share of the population aged 18 to 24 with only lower secondary education or less and not in education or training’ (Eurostat, 2014).

This is the basis for the European indicator on early leaving, regularly monitored by Eurostat via the LFS. This indicator was previously named early school leaving (ESL), suggesting leaving from ‘school’ as the main aspect. However young people can drop out from other forms of education and training. Eurostat provides data by region (nomenclature of territorial units for statistics (NUTS) 2) and other variables such as labour status and country of birth.

Though broadly used nationally and internationally to compare rates of early leaving across countries, this definition has a number of limitations which explain why some countries use alternative definitions and measurement approaches.

This chapter discusses the use of the EU definition and its limitations, in order to get a more refined indicator on early leaving. It also discusses the use of alternative definitions in selected countries.

The following points are discussed:
(a) how can the concepts of early leaving and dropping out from VET be defined;
(b) what data are being collected on early leavers from VET and how are they being used? What are the limitations;
(c) what are the data needs and limitations at national, regional and local level and how can the data collection mechanisms be improved.

3.1. EU definition and its limitations

For statistical purposes, early leavers from education and training are defined as persons aged 18 to 24 fulfilling the following two conditions:
(a) the highest level of education or training attained is ISCED 0, 1, 2 or 3c short (\(^{14}\));

\(^{14}\) ISCED stands for international standard classification of education. This classification has been developed by UNESCO to aid comparisons of education statistics and indicators across countries. The different levels correspond to different education levels: level 0 – early childhood education; level 1 – primary education;
(b) no education or training has been received in the four weeks preceding the survey. The reference group to calculate the early leaving rate is the total population of the same age group (18 to 24). All measurements come from the EU LFS (Eurostat, 2014).

This EU indicator is built on data from the LFS which is a large scale household survey in EU-28, three EFTA countries and two candidate countries. The survey involves around 1.8 million interviews each quarter across the participating countries, with sampling rates in the various countries varying between 0.2% and 3.3%. However, only a subsample of the data set is used to develop the ELET indicator (age group 18 to 24). National statistics institutes are responsible for sample selection. They also prepare questionnaires, based on a standardised manual which sets the topics for questions, conduct interviews and code the data. LFS anonymised microdata are available for scientific purposes.

The indicator on ELET is based on annual averages of quarterly data and is updated annually. This provides a reliable data set at European level, and allows analysis of the phenomenon over time in a cross-national perspective. It also has the advantage of being based on a status definition (not qualified at the desired level and outside education) so it is not dependent on differences in education and training systems across countries.

This indicator has been constructed to provide a comparable measurement of early leaving, based on non-attainment, across the EU. It is developed for statistical purposes and while it shows progress or deterioration over time, it offers limited opportunities to understand who is most at risk, what are the programmes and situations that result in dropping out, or to monitor early leavers to offer support.

It also has the limitations inherent to the fact that it is a sample-based survey. For instance, data at subnational level (NUTS 2) sometimes have low reliability due to issues of sample size. This can be problematic in countries where education systems are regionalised and where there are important regional disparities in education attainment among the population.

The text below discusses in greater depth the different uses and limitations of this EU definition.

level 2 – lower secondary education; level 3 – upper secondary education. Level 3c includes short programmes at upper secondary which are not designed to lead directly to higher education (ISCED 5).

(15) This is indicated in Eurostat data on ‘Early leavers from education and training by sex and NUTS 2 regions’ (edat_lfse_16).
3.1.1. **Single definition, different phenomena**

The EU indicator of ELET places young people in a variety of situations within the same broad category of ‘early leavers’. Notably, it does not distinguish between:

(a) dropouts of an ISCED 3 programme or persons who never started such a programme. For example, in countries where compulsory education lasts until the age of 15 or 16, a young person who has repeated classes could leave education without ever starting an ISCED 3 programme;

(b) those who drop out of education and training during the course of a programme and those who fail final examinations/assessment after having completed the full programme;

(c) the type of education and training that the person surveyed did not complete, particularly whether it was a VET or general education programme;

(d) the nature of the programme undertaken in the last four weeks preceding the survey. Those enrolled in any kind of training, even if it is a short course that will not result in a qualification (such as a short labour market training or adult education course), are not counted among early leavers.

Currently, the LFS survey does not include variables that could be used to develop more precise indication on any of the above issues. It records the highest level of education attained by ISCED level but does not have a question on whether the person started education at a higher level. The LFS includes information on the level of education or training of programmes attended in the last four weeks, distinguishing between ‘training that is not allocated to the ISCED classification (e.g. language courses, computer courses, seminars, etc.)’ and that which is allocated to ISCED levels (indicating that it is a formal training that results in a qualification). This information is currently not used in designing the LFS indicator on ELET. However, further analysis of the microdata could be undertaken to understand the share of those who are in training at the moment of the survey, preparing for a formal qualification, compared to those enrolled in training that does not lead to a qualification.

The previous distinctions in the timing and nature of early leaving – be it an issue of non-starters, dropouts or those failing the final exam – can provide valuable insights to inform policy-maker responses. In providing a snapshot at any given point in time, the indicator does not explicitly take account of the possibilities for early leavers to switch programmes, retake failed examinations or otherwise reengage with education and training. An inability to make more refined distinctions about the situation of young people considered as early leavers based on this indicator limits potential choice of policy response needed.

Understanding where the young person last studied before leaving education and training is an important issue for design of policy measures.
Solutions are likely to be radically different depending on whether the person leaves during primary or lower secondary education or if they drop out later on. A European Commission staff working document on European objectives for education and training observed that, in 2009, 17.4% of early leavers in the EU had completed at most primary education, and that this figure showed high variation across countries. While this category did not exist in several countries, it was alarmingly high in others, reaching a maximum of 38.1% in Portugal. At the other extreme, in Luxembourg and the UK a high proportion of early leavers had completed a short upper secondary education course (ISCED 3c), including vocational or prevocational training, at 41.2% and 61.1%, respectively (European Commission, 2011b). These two categories (those with at most primary education and those with short upper secondary education) face very different challenges and need targeted solutions.

There is also an issue of institutional responsibility. Not knowing where young people leave from makes it difficult to decide which institutions should be in charge of tackling this problem; this is particularly so in systems where institutional responsibilities over different levels and types of education are fragmented. Araujo et al. (2013) note that in Poland, the fact that Eurostat definition of ELET does not identify the moment of leaving education and training has been considered a limitation, since different entities are responsible for tackling the phenomenon depending on education level.

The available EU indicator on ELET can thus be seen as one broad measure that brings together a range of different situations to provide a snapshot of what it is a multi-faceted and complex phenomenon. This is why countries tend to develop additional measurements that are more adapted to analysing the characteristics of early leaving in their territories, as discussed later.

3.1.2. Differentiating early leaving and dropping out

The term dropout is often used to refer to interrupting an ongoing course. This can be experienced by different age groups and does not necessarily lead to early leaving. It can reflect a change of course or school and also happens at higher levels of education, once people have already achieved the threshold ISCED 3 qualifications.

Not all early leavers are necessarily dropouts. There are those who completed a lower secondary programme or a short ISCED 3c programme and never started higher level studies; these are non-starters rather than dropouts. It can be assumed that dropouts are a subgroup of early leavers (Figure 2).
Many countries use measurements of dropouts (including Belgium-fr, Denmark, Croatia, Italy and Portugal). VET schools and training centres usually monitor dropout rates in the different programmes and levels. In one way, dropout rates are easier to monitor than early leaving as they are typically based on administrative data. However, the common limitation of these measurements is that they do not distinguish between ‘real’ dropouts and student mobility. Often, students who change programme, school, or system of education or training, are counted as dropouts when they are not really dropping out but changing pathway; they are mobile.

Combining data on dropouts with data on early leavers is a key challenge for monitoring systems. In Denmark, for example, two dropout measurements are based on longitudinal data: one refers to VET students who drop out of a programme but enrol in another programme (called dropout with reselection); and the other, to VET students who drop out of a programme but do not re-enter another programme (dropout without reselection). The data used for these indicators comes from a database which tracks the status of VET students every monthly.

The EU indicator tries to address this issue by measuring non-attainment of young people older than the theoretical age of end of secondary education. By focusing on the age group of 18 to 24 years old, it should not be affected by instances of student mobility because, by the age of 18, young people who follow a ‘standard’ pathway are expected to be qualified at ISCED 3 (a, b, c-long) or to be still enrolled in formal training (even if they change tracks during their studies); according to the EU definition, they would not be counted as ELET. Consequently, the EU indicator is not affected by student mobility, since it is not based on a dropout rate but on qualification attainment combined with participation in education and training. The use of these age brackets, though,
has other limitations for informing prompt measures. Many young people leave education and training much before the age of 18 and policy measures need to aim at early intervention after these people disengaged; the EU indicator cannot inform national policy-making at the appropriate time. This is why countries frequently use measurements that also capture younger age groups.

3.1.3. Capturing where young people drop out from
The Eurostat definition focuses on the highest qualification level achieved, not allowing for analysis of the type of programme from which young people drop out. Although national LFS questionnaires collect information on the type of certificate attained, they do not cover information on unfinished studies (Eurostat, 2014). The survey does not ask a question on whether the respondent started a programme that s/he did not finish. There is no information on whether, beyond the highest education level attained, the respondent pursued other studies and, if so, what was the nature of the programme attended (in particular, whether it was general education or VET).

Several countries have information on early leaving or on dropout rates disaggregated by type of programme. Knowing which types of programmes ‘generate’ most early leavers enables targeting of policies at those programmes where the problem is most acute. However, these national measurements do not necessarily cover all the types of courses, and they are by no means comparable. Often, information on apprenticeships or courses provided by entities other than those under ministries of education is collected separately and the definitions used are different. This is so in Germany where, for apprenticeships, the measurement focuses on ‘contract dissolution rate’ rather than on real early leaving.

3.1.4. Refining the EU indicator
The LFS indicator on early leaving relies purely on education attainment as captured through ISCED levels. However, ISCED levels as currently defined are based on the hierarchy of formal education pathways; alternative pathways to qualifications recognised on the labour market are not always well aligned with ISCED levels. This means that some people who have relevant certificates or qualifications, that are in practice sufficient for entry into the labour market, are counted as early leavers in the EU definition.

In many countries, qualifying adult learning courses or second chance education are not captured by the ISCED levels. For example, in the Flemish Community of Belgium (Belgium-fl) the decision has been made to exclude certain forms of special education (targeting people with handicap) from the national definition of early leavers because some of these courses provide
sufficient qualification level (Araujo et al., 2013). In Malta, certain courses delivered by upper secondary education institutions as revision (catch-up courses), open to young people as well as adults, used to be considered equivalent to ISCED 2. A recent review of alignment between the national education system and qualifications structure and ISCED led to review of early leaving rates based on LFS in Malta. As shown in National Statistics Office of Malta (2013), after these courses were aligned to ISCED 3, the rate of early leaving appears 10 percentage points lower than before realignment of ISCED levels (23.6% in 2011 instead of 33.4%).

Use of the revised ISCED 2011 classification, to which countries are currently mapping their education systems, could partly solve this issue. According to the new classification, second chance courses and reintegration courses should be mapped as ISCED 3.

3.1.5. LFS data set limitations
Stakeholder interviews and the literature review carried out for this analysis have highlighted three potential limitations in the EU measurement of ELET. These are likely to be particularly pronounced in the case of vocational pathways:

(a) the EU LFS is considered likely to under-represent hard-to-reach groups in the overall survey sample (such as Roma) (16). However, these groups have a high prevalence of early leaving. Therefore, the overall result may be an underestimate of the true share of early leavers;

(b) individuals who took part in any short training courses – possibly not leading to a formal qualification – at the time of the survey are not counted as early leavers. This can also introduce a bias that underestimates the real share of early leavers (Kaye et al., 2014);

(c) the definition used refers to achievement of upper secondary education programme of duration of at least two years. This means that those who complete shorter courses are considered as early leavers. Given that many second chance programmes and vocational courses for adults are shorter, the indicator may not accurate reflect the issue (17).

(16) See, for example, the discussion on sampling frames in Eurostat (2009). Also, an ethnic gap in ELET is the focus of research in Spain, where a high percentage of the Roma minority have been shown to drop out before the completion of upper secondary education e.g. Fundación Secretariado Gitano et al., 2006.

(17) Individuals completing an upper secondary programme of short duration not granting direct access to tertiary education (ISCED 1997 3c, short) are not considered to have achieved sufficient educational attainment.
In some countries, the total sample size of the LFS is considered to be too small to provide meaningful disaggregated data at regional level. This was noted in Belgium, where the Brussels region has specific characteristics and education governance. The LFS does not cover sufficiently large population per region to enable trustworthy comparisons between subsamples, such as different regions.

3.2. National definitions and monitoring systems

3.2.1. EU versus national definitions

While all EU countries use the EU definition to report data at European level and for comparison with other countries or regions, several countries also use alternative national definitions. These are typically more specific than the EU definition and suited to the characteristics of the national education system. The most common differences between the national indicators and the EU definition and related indicator are:

(a) focus of the definition: qualification attainment versus participation in education and training. The EU definition mainly focuses on qualification attainment, with participation as a secondary aspect that helps to measure the number of those who did not achieve the minimum qualification. Measurements incorporating similar variables are also in place, for instance, in Belgium-fl, Denmark, Germany, France, the Netherlands and Austria. In other countries (such as Belgium-fr, Croatia, Italy), however, the emphasis is on measuring participation in education and training and dropout rates from education programmes, so definitions are not necessarily clearly associated with qualification attainment;

(b) minimum level of qualification considered: while the EU definition focuses on upper secondary qualification attainment (also the case in Denmark and the Netherlands), some national definitions (Germany, France) include lower secondary education attainment. Further, unlike in the EU definition, the qualification attainment is measured via reference to specific qualifications and not to ISCED levels;

(c) participation in education and training: unlike the EU definition, the national definitions specify that to be considered as still in education (hence not an early leaver), the unqualified young person should be enrolled in formal education. The EU definition covers any form of training;

\[^{18}\) Examples of national measurements of early leaving or of closely related indicators are available on request.

DOI: 10.2801/12699
(d) the age groups considered also differ: In several countries, the numbers of dropouts are compared with the age cohort of those in typical age brackets associated with a given level of education (in Belgium-fr, all students in the last year of compulsory education; in Croatia, all students enrolled in a given grade; in France, all students who, in a given year, left the education system). In these countries, the indicator does not give a transversal picture of the full age cohort of young people, omitting those young people who have been out of the education system longer;

(e) data collection method: most countries reviewed use administrative data sets to develop indicators on early leaving or dropouts. These data sets are either school reported cohort data or student registers. School reported cohort data typically give information on number of students initially enrolled in a given grade compared with numbers of students who successfully completed the grade. Data based on student registers are more accurate as they are based on individuals’ personal identification (using a unique student number) and enable following a pathway across education and training institutions. These data are also reported by education institutions but per individual rather than per cohort. They allow differentiation between those students who changed education institution or programme and those who left the education and training altogether. A few countries (France, UK) collect these data through surveys other than the LFS. The Netherlands has a specific annual survey on pathways of early leavers.

In several countries (including Belgium, Germany and Austria) data on apprenticeships are collected through different modes than school-based education and training data. They also do not capture early leaving but contract dissolution, which is quite different. This difference in measurement is typically due to the difficulty of comparing school-level data and data from the apprenticeship system. Countries where apprenticeship completion is measured in the same way as completion of other education programmes often use information from student registers (Denmark and the Netherlands).

Some countries fine-tune their measurements to pick out aspects that might otherwise be hidden under the category of ‘early leavers’:
(a) in Austria, dropping out during the programme is differentiated from failure at final examination;
(b) in Denmark, dropping out and then entering another programme is reported separately from those dropouts who do not rejoin any other education or training.

In addition to measuring of ELET, several countries introduced measures to identify students at risk of early leaving:
(a) Belgium monitors students below 18 who have at least 20 half days (lower secondary education) or 30 half days (upper secondary education) of unjustified absences during the academic year;
(b) in Denmark, the youth database collects information on the current education situation of young people aged 15 to 17, allowing for identification of young people who no longer attend an education programme in which they were enrolled or who are considered as at risk by the school;
(c) Italian data measure students who attend education and training irregularly (repeating grades, interrupting studies).

3.2.2. Country-specific ELVET data

Most of the data collected at national level and directly measuring early leaving or related to it permit differentiation per type of education and training. It is possible to disaggregate the data and differentiate only VET programmes. However, the detailed information available varies. For example, the extent to which the data can be disaggregated by economic sectors varies. Further, where available, the grouping of programmes into sectors follows a national approach and is varied.

The extent to which apprenticeship data are covered by the same indicators as other forms of education and training also varies.

Table 1 gives an overview of VET-related data available in countries analysed in greater depth.

Table 1. Country-specific ELVET data

<table>
<thead>
<tr>
<th>Country</th>
<th>ELVET data</th>
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| Austria | Information about those who leave without a certification at upper secondary is given for:
  - general education schools;
  - VET schools;
  - VET colleges.
  Data are provided by gender, mother tongue and regions.
  Data are also available per broad grouping of sectors.
  Data on apprenticeships are also available per groupings of sectors. |
| Belgium-fr | The indicators ‘exit rates’ and ‘certification rates’ can be differentiated by type of education:
  - general education;
  - technical education (enseignement technique de qualification);
  - VET (enseignement professionnel);
  - apprenticeships organised by the French Community (Alternate Training and Education Centre (Centre d’Education et de Formation en Alternance) (CEFA)).
  Information on sectoral orientation of programmes is also available. |
### Country | ELVET data
--- | ---
Belgium-fl | The data can be disaggregated by type of education:
- general secondary education;
- vocational secondary education;
- special needs secondary education;
- part-time vocational education;
- technical secondary education;
- apprenticeship;
- arts secondary education.
They can also be disaggregated by field of study or by economic sector.

Croatia | Indicators on attendance and graduation are disaggregated by type of school (differentiating VET schools from general education). VET data are also disaggregated by field of study/sector.
In the e-Matica system, with information on ‘students enrolled each school year’ and ‘students who leave the school during the school year’, information can be traced for VET. However, it is not currently done.

Denmark | The data can be disaggregated by type of education differentiating between general education and VET. VET data can be further disregarded by type of VET: foundation courses, main courses, other VET programmes.
The data can also be desegregated by fields of study/economic sectors.

France | The indicator of the statistical department of the Ministry of Education is broken down by type of qualification and level of education. The type of qualification enables differentiation between those who completed a VET programme, those who completed technical upper secondary education, and those who completed general education.
The data set from the SIEI collects administrative data, disaggregated by:
- type of qualification;
- level of education;
- type or orientation.

Germany | There are no VET specific data on early leaving for full-time vocational schools.
The only VET specific data available concern dual VET.

Italy | There is information on students at risk of early leaving attending VET institutions which are part of the State school system (technical institutes and professional institutes). VET institutions which are not part of the State school system, have their own statistics; these are not public.

Portugal | The Ministry of Education indicator on dropout and retention is broken down by type of courses (general and VET). For VET, it includes professional courses and technological courses (the latter were officially discontinued from 2013/14). This indicator does not include data on VET courses in private schools or VET provided by employment authorities.

Source: Cedefop.

### 3.2.3. Data use to inform policy-making

Data collected by countries are used in monitoring systems that aim at informing policy-making. More specifically, monitoring systems can be used to:

(a) identify persons who dropped out or are at risk of doing so, to offer them support;
(b) improve school performance;
(c) monitor the performance of the education system to inform VET policies. It can involve the analysis of student trajectories.
Table 2 provides an overview of the main monitoring systems integrated in policy responses to address early leaving in the countries reviewed, according to their main purpose. Data from a monitoring system can be used with different purposes: school attendance officers in the Netherlands follow up data on the digital absence portal to engage with absentees and their parents; data in that portal are used by the Ministry of Education, Culture and Science to develop monthly reports and establish benchmarks for regions.

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Country</th>
<th>Monitoring system</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td><strong>Identifying early leavers and students at risk to offer them support (information that can identify the individual: name, phone number, address, etc.)</strong></td>
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<tr>
<td></td>
<td>Belgium-fr</td>
<td>Data on absenteeism used by the Directorate-General for Compulsory Education (Direction générale de l’enseignement obligatoire, 2011).</td>
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<tr>
<td></td>
<td>Denmark</td>
<td>Youth database.</td>
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<td></td>
<td>France</td>
<td>SIEI (Ministère de l’Education, 2011)</td>
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<tr>
<td></td>
<td>Ireland</td>
<td>Data on non-attendance in primary and post-primary schools collected by the Child and Family Agency (Tusla) through the annual attendance report requirement on schools.</td>
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<tr>
<td></td>
<td>The Netherlands</td>
<td>Digital absence portal</td>
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<tr>
<td></td>
<td>Luxembourg</td>
<td>Digital register of pupils in secondary education (fichier élèves).</td>
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<tr>
<td></td>
<td>Portugal</td>
<td>• monitoring system of the Commission for the Protection of Children and Youth at risk; • system for the management of training of the Institute for Employment and Professional Education (*).</td>
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<tr>
<td></td>
<td>Belgium-fr</td>
<td>Tabor (school-level dashboards on entry and exit rates) (see description in Mathy, 2013).</td>
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<tr>
<td></td>
<td>Belgium-fl</td>
<td>Data on early leaving as well as on absenteeism (see description in Flemish Ministry of Education and Training, 2013).</td>
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<tr>
<td></td>
<td>Croatia</td>
<td>E-matica (enables schools to have good overview of the state of play of their student participation but it is not used specifically to monitor early leaving).</td>
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<tr>
<td></td>
<td>France</td>
<td>(Only in some regions is the SIEI data sent back to schools to require schools to take actions).</td>
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<tr>
<td></td>
<td>UK-Northern Ireland</td>
<td>‘Further education activity’ system.</td>
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<tr>
<td></td>
<td>Norway</td>
<td>Skoleporten portal.</td>
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<tr>
<td></td>
<td>Austria</td>
<td>• school statistics that allow tracking individuals’ educational pathways; • apprenticeship statistics (Austrian Economic Chambers (Wirtschaftskammer Österreich, WKO) – apprenticeship statistics); • career monitoring (monitor of individuals after leaving education).</td>
</tr>
<tr>
<td></td>
<td>Denmark</td>
<td>• pupil register (based on personal identification number); • EASY.</td>
</tr>
<tr>
<td></td>
<td>Estonia</td>
<td>Estonian education information system.</td>
</tr>
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Purpose
Country
Monitoring system

Germany
- statistics on general and school-based VET which are integrated in the annual Berufsbildungsbericht (national report on VET) (BMBF, 2015);
- monitoring data on education in Germany, published in the annual Nationaler Bildungsbericht (national report on education) (Bildungsberichterstattung, 2014);
- education monitor by the initiative for social market economy, supported by chambers of commerce.

Ireland
- Department of Education and Skills (2013) first annual report tracking school leavers. Pupils in the post-primary pupils database are traced to other data sources, based on a unique personal identifier;
- survey on the impact of training and employment programmes on trainees’ subsequent labour market situation commissioned by the Further Education and Training Authority (SOLAS).

The Netherlands
- Basic records database of education (based on a unique number allocated to each student).

Portugal
- Information system of the Ministry of Education.

England
- National client caseload information system.

Wales
- Annual survey on pupil destinations from schools in Wales, undertaken by Careers Wales

(*) The information on the system for managing training is based on interviews with professionals from a training centre under the PES.

Source: Cedefop.

Several countries have put in place centralised mechanisms allowing for individual follow-up of students. Different institutions are in charge of contacting young people identified as being early leavers to offer them possible solutions: these institutions include education authorities at national level, regional youth services, or designated professionals within schools.

Box 1. National digital register of pupils in secondary education: Luxembourgish example

The Luxembourgish Ministry of National Education, Children and Youth maintains a national digital register of pupils in secondary education (fichier élèves), which is updated on monthly. These data are communicated to the regional offices of local action for youth (Action locale pour les jeunes). The local action for youth makes direct contact with early leavers on the national register, to establish their current activity/status (in terms of employment, education or training) and survey them on their reasons for dropping out. It provides them with guidance services to support their reintegration into schooling or the labour market.

Source: Cedefop.

DOI: 10.2801/12699
The identification of young people who drop out from an education and training programme can also be followed by the suppression of public subsidies. In Portugal, PESs collect data on absenteeism from training centres providing apprenticeship-type courses via the system for management of training; if absences surpass a certain level, the system automatically cancels social benefits the students might be receiving.

In some countries, monitoring data are used by central services as an incentive for improving school performance in monitoring and preventing early leaving. Ministries of education or local authorities transmit the information to schools for them to reflect on and improve their performance. School-level information on performance can also be taken into account by public authorities when deciding on funding for each institution (outcomes-based funding), and it can trigger closer monitoring and support for those schools performing poorly.

Box 2. Monitoring data used for improving school performance: examples from Belgium-fr, the UK (Northern Ireland) and the Netherlands

The TABOR (19) dashboards are compiled centrally by the statistical office of the Ministry of Education of Belgium-fr, and provided to each head of school and the authorities governing the school. They are meant to support quality improvement and decision-making at school level but not as a control tool (not linked to any sanctions or funding measures). The dashboard contains various indicators at school level, including: proportion of students who repeat a grade; proportion of those who are delayed in their education progression; and proportion of those who exit the school, differentiating between those who are no longer enrolled in the education system of the French Community, those who changed type of programme or those who changed school.

The Department for Employment and Learning in Northern Ireland sets enrolment, achievement and success targets for further education colleges at the beginning of each year. These are directly linked to funding of the further education college provision. Attainment of these targets is monitored through the ‘further education activity’ system.

In the Netherlands, the ‘top-6 approach’ involves periodic meetings between the Ministry of Education, Culture and Science and the boards of the six VET schools with the highest rates of ELVET. They discuss the latest ELVET developments at institutional and regional level and the measures the school is taking to reduce ELVET.

Source: Cedefop.

(19) TABOR stands for tableau de bord meaning dashboard.
National policy-makers monitor data to assess the state of play of their education system and inform VET policies. Some existing systems allow analysis of student trajectories (e.g. the Danish EASY-S database). Countries including Belgium-fr, Poland and Portugal are aiming at developing similar systems.

Box 3. Monitoring the education system: examples from Denmark and Poland

The Danish EASY-S database has longitudinal data based on material from a decentralised database which functions as an administration tool at VET institutions (EASY-A) and a centralised system to administer apprenticeships (EASY-P). Monthly and annual reports are based on the longitudinal data. These reports are mostly used by people working in the VET sector (such as the Ministry of Education, the Confederation of Employers, the Confederation of Trade Unions, professional committees and journalists), and feed into debate and policy-making on VET.

In Poland, a new project of monitoring VET student trajectories (Badanie losów absolwentów szkół zawodowych) is being developed in the framework of the new 2014-20 Knowledge, education and growth operational programme. The objectives include drafting of recommendations for the development of the education system, based on the results from research and pilot projects, and development of a teaching offer adequate to the needs of the labour market, students and graduates.

Source: Cedefop.

Careers Wales undertakes an annual survey of school leavers on behalf of the Welsh Government to report on the destinations of pupils from secondary schools across Wales. The results inform Careers Wales’ staff in their work with clients, parents, teachers and employers, as well as partners involved in planning learning, training and employment opportunities. Local authorities use these data as part of their internal planning systems which are increasingly based on more robust monitoring. Although arrangements vary across local authorities, it is best practice that this information is shared with schools and colleges who can use it to influence their internal policies.

Although VET providers are the main source of data in centralised monitoring systems (inputting data on their students), often they do not use them themselves to inform decision-making at school level. A non-negligible share of interviewees from VET institutions regretted that no resourceful feedback is provided to them after they sent information on their students to the ministry or statistical office (stated in Belgium-fr, Denmark, Italy, Portugal). They were lacking feedback about where those who dropped out went and whether they just changed programme or left education and training altogether. They also complained about lacking information on whether the authorities undertook actions to contact potential early leavers. It is common, therefore, for education providers to have their own monitoring systems, tailored to their daily needs.
3.2.4. **User perspectives**

National stakeholders were asked about their views on the existing data and their use. The feedback received varied across countries and across institutions, though they all recognise the usefulness of having quantitative data on early leaving. In countries where there are indicators on early leaving, stakeholders often mentioned the need for more detailed information; in Croatia stakeholders agreed on the need to collect more national data – in addition to the data for the LFS – to contribute to understanding the phenomenon.

Different stakeholders reflected on the need to have more detailed data on geographic scope (such as commune/province level in Italy or county level in Croatia); socioeconomic background ('citizenship' is considered a poor proxy for migration background in Germany and Austria); sector or type of programme (Germany, Austria); and training company characteristics (Germany). They also look for more information on the reasons for dropout and individual factors that lead to early leaving (Denmark, Germany, Croatia, Austria) and mention the need to have more updated data to increase relevance in decision-making (Croatia, Portugal).

Another concern for interviewees in some countries is lack of information on young people's academic trajectories. A national registry based on the fiscal code aims at filling this gap in Italy but it is still not fully functional; Portugal is currently developing a similar system. Several stakeholders mentioned that such registers are difficult to implement and use in research and policy-making due to data protection regulations.

**Box 4. Trajectories of those who drop out: Danish example**

Stakeholders from Denmark stated the need to know more about life trajectories beyond purely academic ones. The educational status of Danish students who start in VET is currently monitored after one, two, three, six, nine, 12, 18, 24, 30, 36 and 42 months. A policy-maker observed that tracking dropouts after five to 10 years would be beneficial to assess what could be done to support those who cannot be engaged through teaching methods at VET institutions.

*Source: Cedefop.*

Difficulties in following up students are also linked to the existence of different data sets for different subsystems, not connected to each other. In Austria, it is now possible to know if a student leaving a programme finally dropped out from dual VET or changed training company but a change to school-based VET will not appear in the data.
Some stakeholders voiced concerns about data quality; these are collected in many cases, directly by VET providers. Some interviewees believe that there is a lack of mechanisms to ensure that this is done systematically and in the same way by all institutions (Denmark, Germany, Italy, Austria, and Portugal).

Interviewees reported that data are mostly used by public authorities for monitoring, and by universities and other institutions for research. However, data provided by public authorities are less used in developing and monitoring specific initiatives. It should be considered that nowadays more data are available than are or can be used in policy-making. Most people, including within ministries, are not familiar with statistical details and methodologies and so need well-prepared indicators which are simple to understand and to interpret. This would contribute to informing decision-making on programmes and measure design. Stakeholders also agreed on the need to complement data with information other than learner status: reasons for dropping out and the characteristics of early leavers and their pathways are examples.

On-site stakeholders were asked about their experience using the available monitoring systems. The feedback received varied across countries and also across users. However, in countries where data collection systems exist at school level, interviewees tend to have a good overview of the situation of their institution. This was particularly the case in those countries and organisations where the interviewees did not just provide the data to the central level but also used them for their own activities. This was seen in France where VET schools and other local actors use data from the SIEI to identify ELET and those at risk. Similarly, interviewees in Denmark referred to data collection systems and used the information to clarify matters such as which programmes had higher rates of dropping out than others.

At the same time, non-negligible share of interviewees from VET institutions regretted lack of feedback to them after they sent information on their students to the ministry or statistical office (as in Belgium-fr Denmark, Italy, Portugal). They were lacking feedback about where those who dropped out went and whether they just changed programme or left education and training altogether. They complained about lacking information on whether the authorities undertook actions to contact potential early leavers. They also regretted that the reasons for truancy or dropping out were not reported in national data systems. To improve relevant knowledge, VET institutions would find it useful to have detailed national analysis on the reasons for dropping out.

Where schools receive feedback on their performance from central authorities, this allows VET institutions to compare themselves to similar organisations and to monitor their progress in relation to early leaving. However,
the information often arrives after some time and local action is often needed before data are received. This is particularly so in countries where monitoring is not continuous, using a student register.

Several VET providers interviewed have developed their own data collection and identification system. These enable them to identify quickly students at-risk of dropping out and take immediate action. Developing an internal data collection system enables VET institutions accurately to monitor student pathways, their absences, and all the factors usually associated with early leaving (social and economic characteristics, academic achievement, health issues, consumption of illicit products). On detecting risk of dropping out they can take action such as contacting the family, providing remedial classes, and providing psychological support.

Box 5. VET provider data collection system: Portuguese example

A VET school in the central region of Portugal created an internal system in 2011 with the objective of being more efficient in monitoring truancy, in transmitting the information between the pedagogical and psychological staff, and in school management.

The system includes detailed information on each student: classroom and reference teacher, contact details, age, psychological and health profile, any legal concerns, previous truancy and dropout issues, academic achievement – especially in basic skills in Portuguese and mathematics – hobbies, results in psychometric tests done at the moment of the application, and comments by teachers. Some of the information (such as psychological and health profile, legal situation) is only accessible to psychologists following the student and to the director.

When a student is absent, the teacher clicks on the student name on the truancy monitoring software. After clicking, a note is registered in the student profile and an SMS is sent to his parents/guardian to notify the students’ absence.

Source: Cedefop.

In several cases, VET institutions reported difficulties using their national information technology (IT) software to report on their students. IT tools are not always user-friendly. VET institutions also often report lack of human resources for monitoring school data (the case in Belgium-fr, Belgium-fl, France and Austria).

3.2.5. Challenges in ELVET data collection

Users’ perspectives on the challenges for collecting data on ELVET can be summarised as following:

(a) coexistence of different data collection mechanisms in education subsystems. This is particularly true for apprenticeships but also other areas
of VET governed by ministries other than the main one in charge of education;

(b) lack of student registers to enable tracking students across education institutions. In some countries, the issue of personal data protection was put forward as a main argument against such data sets;

(c) many VET providers work with data on dropouts rather than on actual early leavers as they do not have the capacity to verify if the student who left enrolled elsewhere. This gives only a partial picture of the problem as many dropouts continue education and training elsewhere (20);

(d) difficulty in collecting data from private education and training providers who receive no State funding and have no obligation to report data to the State;

(e) difficulties linked to the user’s experience of the IT systems. Several interviewees from schools complained about the fact that some of the systems required quite a lot of time to administer on their side;

(f) questions about the age group that should be monitored. Belgian data collection systems on absenteeism focus on underage students who are still required to attend education. There is no monitoring of those after the age of 18. In France, the SIEI only focuses on young people one year after they left education and training. Afterwards, they are no longer reflected in the system;

(g) local organisations interviewed in some countries (VET providers or others) noted that often the data they received were outdated. This was noted in those countries where the data are collected and returned to VET providers once or twice per year (as in Belgium-fr or France). These delays mean that it is sometimes late to reach out to the young person as the linkages between him/her and the education institution have been broken. The young person has moved on in his personal life, often becoming more disengaged from education, making return difficult. Contact data such as phone number

(20) In Portugal, the National Association of VET schools – representing a network of 143 grant-aided private schools – has carried out two surveys focusing on the students who start a school year but drop out during that year, and giving information on the reasons for dropout. The surveys identified situations that do not fall strictly under ‘dropout’, such as emigration, change of VET programme (ANESPO, 2011). In Germany, the Chamber of Crafts of Cologne estimates that around 70% of contract dissolutions are linked to a change of company and/or occupation, but not permanent dropout from education or VET. In Italy, the Institute for the Development of Vocational Training of Workers (Istituto per lo Sviluppo della Formazione Professionale dei Lavoratori, ISFOL) has carried out a survey to obtain more reliable data on ELVET (ISFOL, 2012).
and email address are often no longer valid if the data are several months old;

(h) database quality assurance is a concern. Data entered by VET (and other) institutions are often not quality assured, resulting in errors that translate to loss of time for those who work with the data. The Netherlands, for example, has developed a protocol whereby data submitted by schools undergo external audit before validation; this requires additional resources.

3.2.6. **Suggestions for improvements**

Users’ perspectives on the factors contributing to improved use of data on early leaving to inform policy and practice can be summarised as follows:

(a) the coherence and compatibility of data collection mechanisms in education and training subsystems within countries, allowing for the follow-up of students through the system, regardless of the public authority in charge or the education and training provider (e.g. apprenticeships and school-based VET; public and private institutions);

(b) the availability of student registers, to allow follow-up of student trajectories;

(c) anonymised student register data, to allow extended use while respecting data protection regulations;

(d) revising the type of data breakdown which could be useful for monitoring and research (geographic, socioeconomic background, type of programme);

(e) information on the reasons for dropout and individual factors that lead to early leaving;

(f) data for different age groups (as in after the end age of compulsory schooling);

(g) mechanisms to support data collection by education and training providers (to address difficulties in the use of IT systems for data collection);

(h) mechanisms to quality assure data collection by education and training providers, to ensure that data collection is done systematically and so improve the quality of available data;

(i) more data analyses to provide decision-makers with indicators which are simple to understand, to interpret and to use;

(j) feedback on data collected by national and regional authorities to local authorities and VET providers, to contribute to its use in decision-making also at these levels;

(k) the possibility of having more up-to-date information and of sharing it with stakeholders at decision-making different levels (central, regional and local authorities, as well as VET providers).