



Structural Indicators for Monitoring Education and Training Systems in Europe 2019

Overview of
major reforms since 2015

Authors EACEA:

Teodora Parveva (Coordinator),
Akvile Motiejunaite, Sogol Noorani,
Jari Riiheläinen, and Anna Horvath

Cover: Virginia Giovannelli

This document is published by the Education, Audiovisual and Culture Executive Agency (EACEA, Education and Youth Policy Analysis).

Please cite this publication as:

European Commission/EACEA/Eurydice, 2019. *Structural Indicators for Monitoring Education and Training Systems in Europe – 2019: Overview of major reforms since 2015*. Eurydice Report. Luxembourg: Publications Office of the European Union.

EC-AR-19-001-EN-N ISBN 978-92-9484-116-2 ISSN 2599-8846 doi:10.2797/256641

Text completed in October 2019.

Luxembourg: Publications Office of the European Union, 2019

© Education, Audiovisual and Culture Executive Agency, 2019

Reproduction is authorized provided the source is acknowledged.

Education, Audiovisual and Culture Executive Agency
Education and Youth Policy Analysis
Avenue du Bourget 1 (J-70 – Unit A7)
BE-1049 Brussels
Tel. +32 2 295 72 66
E-mail: eacea-eurydice@ec.europa.eu
Website: <http://ec.europa.eu/eurydice>

CONTENTS

Contents	5
Introduction	7
1. Early childhood education and care (ECEC)	9
2. Achievement in basic skills	14
3. Early leaving from education and training (ELET)	18
4. Higher education	22
5. Graduate employability	24
6. Learning mobility	26
Scope of indicators/Key definitions	30

INTRODUCTION

This report contains more than 35 key structural indicators on education policies in six areas: early childhood education and care (ECEC), achievement in basic skills, early leaving from education and training (ELET), higher education, graduate employability and learning mobility.

Policy context

The indicators provide information on the national policies and structures that contribute to achieving the benchmarks set in the strategic framework for European cooperation in education and training ('[ET 2020](#)').

EU and Member States' performance on the ET 2020 benchmarks are analysed in detail in the European Commission's Education and Training Monitor. The Eurydice project on Structural Indicators for Monitoring Education and Training Systems in Europe contributes to the contextual information for this analysis. It provides yearly data since 2015, which illustrate the main policy developments in education and training systems across Europe.

Selection of indicators

The structural indicators were selected by the European Commission's Directorate General for Education and Culture (DG EAC) using information from several recent Eurydice reports that provide extensive focus on specific policy areas.

The selection of the structural indicators was discussed with the Eurydice National Units and country representatives of the Standing Group on Indicators and Benchmarks (SGIB).

Earlier updates

In 2015 and 2016, the structural indicators were published in detailed Eurydice reports presenting methodology, definitions, country examples and visual representation for each indicator. In 2017 and 2018, they were published as short reports containing only the summary tables of data.

In addition, the summary tables for the EU Member States were included in the European Commission's Education and Training Monitor 2017 (only selected topics) and Education and Training Monitor 2018 (see Volume 1, Annex).

2019 update

This report contains the updated indicators for the 2018/19 school/academic year together with a short overview of the major reforms since the start of the 2014/15 school/academic year in six policy areas:

1. Early childhood education and care (ECEC)
2. Achievement in basic skills
3. Early leaving from education and training (ELET)
4. Higher education
5. Graduate employability
6. Learning mobility (reference year 2017/18) ⁽¹⁾

⁽¹⁾ This report contains the indicators on learning mobility for the academic year 2017/18. The updated information for the academic year 2018/19 will be included in the 2019 Mobility Scoreboard, which will be published in December 2019.

Information on the scope of each indicator, as well as detailed definitions of the terms used can be found at the end of the report.

Part of the information in this report that concerns the EU Member States was published in the [Education and Training Monitor 2019](#).

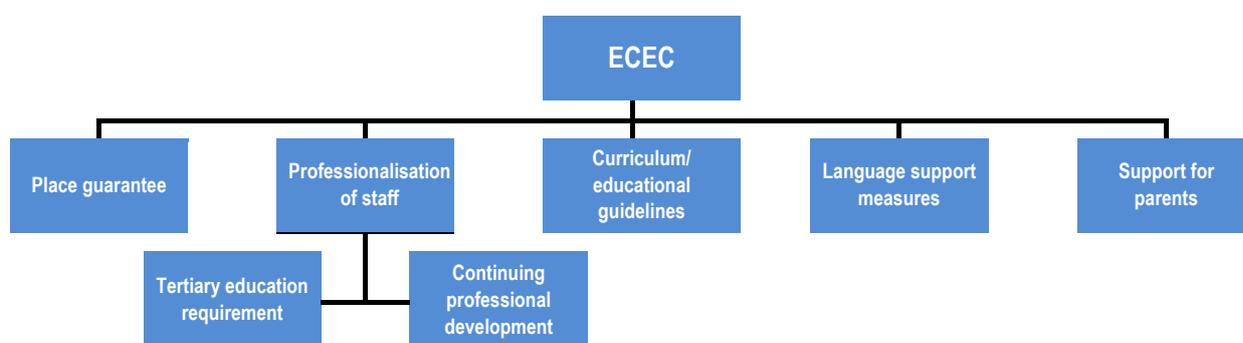
Country coverage

The 2019 update of the structural indicators covers all EU Member States, as well as Bosnia and Herzegovina, Iceland, Liechtenstein, Montenegro, North Macedonia, Norway, Serbia and Turkey. The information has been collected through a questionnaire completed by the national representatives of the Eurydice Network.

1. EARLY CHILDHOOD EDUCATION AND CARE (ECEC)

The structural indicators in this chapter provide an overview of the key features of early childhood education and care (ECEC) systems. The choice of indicators is based on an analysis of the research literature and takes account of the factors deemed important in the Council Recommendation on High-Quality Early Childhood Education and Care Systems ⁽²⁾. The Recommendation identified five main aspects of quality in early childhood education and care: access, staff, curriculum, evaluation/monitoring and governance/funding. Seeing children as active participants in their own learning, the Recommendation highlights that parents' participation as partners of such services is essential if high-quality ECEC is to be delivered.

However, considering the vast range of possible system-level information, and having in mind the limitations of scope and time, only a few robust structural ECEC indicators have been chosen for yearly monitoring, as shown in the diagram below.



In this analysis, '**early childhood education and care (ECEC)**' refers to provision for children from birth through to compulsory primary education that falls within a national regulatory framework, i.e. it must comply with a set of rules, minimum standards and/or undergo accreditation procedures. Only centre-based provision is considered. The definition goes beyond the education programmes classified as ISCED level 0 (early childhood education), as it includes all registered ECEC services, not only those with a defined educational component. In many European countries, ECEC provision for children under age 3 does not qualify as 'early childhood educational development' (ISCED level 010), but it still offers an important service for children and their families.

Many European countries structure ECEC services according to the age of the children. Usually, the transition from the first phase to the second takes place when children are around 3 years old. In order to reflect the different regulations, a distinction between provision for 'children under 3 years old' and provision for 'children of 3 years and over' is often made. However, it is important to keep in mind that in some countries the transition can be as early as 2-and-a-half years or as late as 4 years of age.

Some European countries have several types of ECEC provision. The indicators show if a certain measure is available in the main type of ECEC provision for each age group.

⁽²⁾ OJ C 189, 5.6.2019, p. 4-14. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C_.2019.189.01.0004.01.ENG&toc=OJ:C:2019:189:TOC

Overview of reforms and policy developments since 2015

Access to ECEC and the legal framework surrounding the provision of a **place guarantee** in ECEC has been changed substantially in several European Union countries since 2014/15 when the information for the structural indicators on ECEC was first gathered. Five countries have introduced compulsory ECEC for one year prior to starting primary education, and two education systems have prolonged the period of mandatory attendance to 2-3 years. Moreover, three countries are extending the ages of the legal right to ECEC for every child.

Attending the last year of ECEC has been made compulsory in Czechia (2017), Croatia (2014), Lithuania (2016), Finland (2015) and Sweden (2018). Two countries have made compulsory attendance longer than one year. In Hungary, ECEC has been compulsory for children from the age of 3 since September 2015. Greece is gradually lowering the starting age of compulsory pre-primary school attendance from age 5 to age 4 (between 2018-2021). Three countries are planning to introduce compulsory ECEC: from September 2019, it is compulsory from age 3 in France; in Belgium and Slovakia, legislation is in preparation to make the last year of ECEC before primary education compulsory from September 2020.

A legal entitlement to ECEC has been introduced or extended in Czechia, Poland and Portugal. These countries have imposed a statutory duty on ECEC providers in a catchment area to secure publicly subsidised ECEC provision for all children of a certain age whose parents require a place. Czechia and Poland have been gradually extending the entitlement to age 3 (fully implemented in Poland from 2017 and in Czechia from 2018). Portugal is still implementing the reform started in 2015 to establish universal pre-school education. The legal entitlement to ECEC currently starts at age 4 and is planned to be lowered to age 3 by 2020.

There have been substantial reforms aiming to improve the quality and governance of ECEC in some countries. It is important to mention Italy, which is going through a major restructuring of its ECEC system. An integrated ECEC system providing for children from birth up to age 6 is being introduced: the two existing ECEC services (nurseries and pre-schools) have been integrated within a single framework with the aim of improving quality, effectiveness and the number of providers across the country.

The **professionalisation of staff** has continued in several countries with reforms to initial qualifications or to continuing professional development (CPD). Ireland, Italy, Malta and Finland have raised the minimum qualification requirement for all or for a large proportion of staff. They have also introduced CPD to support staff in attaining the necessary degrees. Other countries have introduced reforms to provide a coherent system of CPD (Belgium – Flemish Community, Bulgaria and Estonia). In addition, in September 2018, Austria introduced a new type of training institution, the *Fachschule für pädagogische Assistenzberufe* (school for pedagogical assistants) (ISCED 3).

A curriculum or educational guidelines have been established for younger children for the first time in Belgium (Flemish Community) and France. In Belgium (Flemish Community), a non-binding [pedagogical framework for childcare settings for babies and toddlers](#) (under 2-and-a-half years) was introduced in 2015/16. In 2017, France adopted [the National Framework for Early Childhood Care](#) for services outside the ISCED classification scheme (mainly ECEC provision for children under age 3). This non-binding document sets the main principles and values for safe child development and provides some educational guidance. In addition, Italy and Portugal plan to draw up educational guidelines for ECEC provision for children under age 3 in the near future.

New ECEC educational guidelines have been introduced in several countries. In 2016, a [new curriculum for pre-school education](#) (children aged 3 and over) was introduced in Bulgaria. Croatia adopted a new National Curriculum for Early and Pre-primary Education in 2014, followed by amendments to the preschool programme in 2018. In Slovakia, a new State Educational Programme for Pre-primary Education has been applied in all ECEC settings for 3- to 5-year-olds since 2016. In Finland, a new national core curriculum, including ECEC, has been in place since 2017. Norway introduced a new [Framework Plan for Kindergartens](#) in 2017. In Latvia, a new curriculum is in preparation for children from 18 months to high school and will be introduced in 2019/20.

A few countries have changed their ECEC educational guidelines or introduced new areas of learning. Lithuania updated its pre-primary curriculum for the last year of ECEC (in 2015) and established a detailed list of attainment targets for children in ECEC. Poland has introduced two new areas of learning into the pre-school core curriculum for children aged 3 and over: 'preparation to use a modern foreign language' (in 2014) and the 'development of reading, writing and mathematical skills' (in 2017). In Portugal, the educational guidelines for children aged 3 and over have been reviewed and updated (2016).

Specific language support has been introduced in several countries. In Denmark, the obligatory language assessment which used to be carried out when children were age 3 has been brought forward and there is now some flexibility in that it can be administered between 22 and 30 months. In 2017/18, Luxembourg introduced a programme for multilingualism (focusing on Luxembourgish and French) which targets children aged between 1 and 4. Malta launched a ['Language Policy for the Early Years in Malta and Gozo'](#) in 2016 to promote bilingual development in both English and Maltese for children (0 to 7 years). Poland established mother tongue instruction in regional or ethnic languages for children aged 3 and over (2014). Lastly, Austria is strengthening early language support by introducing a uniform language test for all *Länder* (2018-2022).

Support for parents of children in ECEC either as guidance for home-learning or for parenting in general has been expanded in Bulgaria, France, Estonia, Lithuania, Croatia, Finland and the United Kingdom (Wales). Bulgaria has enshrined certain rights for parents in law. Since 2016, parents have had a right to receive information, support and counselling regarding their children's education or personal development from the kindergarten or school. France has introduced a national strategy of support for parenthood for the period 2018-2022. In 2014, the United Kingdom (Wales) published comprehensive non-statutory [guidance](#) (updated in 2017) for those providing parenting support.

The role of parents has been explicitly addressed in the ECEC curriculum in Croatia (since 2014) and Finland (since 2015). Bulgaria and Estonia have expanded their parenting programmes and Lithuania has issued new editions of guidance materials for parents.

ECEC summary table 1: Place guarantee: legal framework and starting ages, 2018/19

	1. Place guarantee starting age		
	Universal legal entitlement to ECEC	Compulsory ECEC	Compulsory primary education
Belgium fr	2y 6m		6
Belgium de	3		6
Belgium nl	2y 6m		6
Bulgaria		5	7
Czechia	3	5	6
Denmark	6m		6
Germany	1		6
Estonia	1y 6m		7
Ireland			6
Greece		4	6
Spain	3		6
France	3		6
Croatia		6	7
Italy			6
Cyprus		4y 8m	5y 8m
Latvia	1y 6m	5	7
Lithuania		6	7
Luxembourg	3	4	6
Hungary		3	6
Malta			5
Netherlands		5	6
Austria		5	6
Poland	3	6	7
Portugal	4		6
Romania			6
Slovenia	11 m		6
Slovakia			6
Finland	9 m	6	7
Sweden	1	6	7
United Kingdom-ENG	3		5
United Kingdom-WLS	3		5
United Kingdom-NIR			4
United Kingdom-SCT	3		5
Bosnia and Herzegovina		5	6
Iceland			6
Liechtenstein	4		6
Montenegro			6
North Macedonia			6
Norway	1		6
Serbia		5y 6m	6y 6m
Turkey			5y 6m

Notes: abbreviation y means years, m means months.

A universal legal entitlement to ECEC exists when every child of a certain age has an enforceable right to benefit from ECEC provision.

ECEC summary table 2: Features of high quality ECEC, 2018/19

	2. Staff professionalisation		3. Curriculum or educational guidelines	4. Language programmes offered as targeted support	5. Parent support	
	At least one staff member has a tertiary qualification in education	CPD mandatory or professional duty			Home-learning guidance	Parenting programmes
Belgium fr	■	●	●	■		■
Belgium de	■	■	■	■		●
Belgium nl	■	●	●	■		
Bulgaria	●	■	■	■		■
Czechia		■	■	■		
Denmark			●	●		
Germany	●		●	●	●	●
Estonia	●	●	●	●		●
Ireland			●		●	
Greece	●	■	■	■		
Spain	■	■	●	●		●
France	●	●	●	■	●	●
Croatia	●	●	●	●		●
Italy	■	■	■	■		
Cyprus	●	■	■			■
Latvia		●	●	●		
Lithuania	●	●	●	●	●	●
Luxembourg	■	●	●	●		
Hungary	■	●	●	■		For under 3s
Malta		■	●	■	●	●
Netherlands	■		■	●		
Austria		●	●	●	■	●
Poland	■	■	■	■	●	
Portugal	●	■	■	●		
Romania		●	●	■		●
Slovenia	●	●	●	●	●	●
Slovakia		■	■	■		
Finland	●	●	●	●		
Sweden			●	●		
United Kingdom-ENG	■	●	●	●	●	●
United Kingdom-WLS	■	●	■	●	●	●
United Kingdom-NIR	■	●	■	●	●	●
United Kingdom-SCT		●	●	●	●	●
Bosnia and Herzegovina	●	●	●	●		
Iceland	●	●	●	●		
Liechtenstein	■	●	●	●		●
Montenegro	●	●	●	●		
North Macedonia	■	●	●	●		
Norway	●		●	●		
Serbia	■	●	●	●		
Turkey	■	●	●			●

Notes: ■ = children aged 3 years or more ⁽³⁾; ● = the entire ECEC phase (from birth to the start of compulsory education).

1. Tertiary qualification in education = minimum 3 years ISCED 6.

2. CPD refers to continuing professional development.

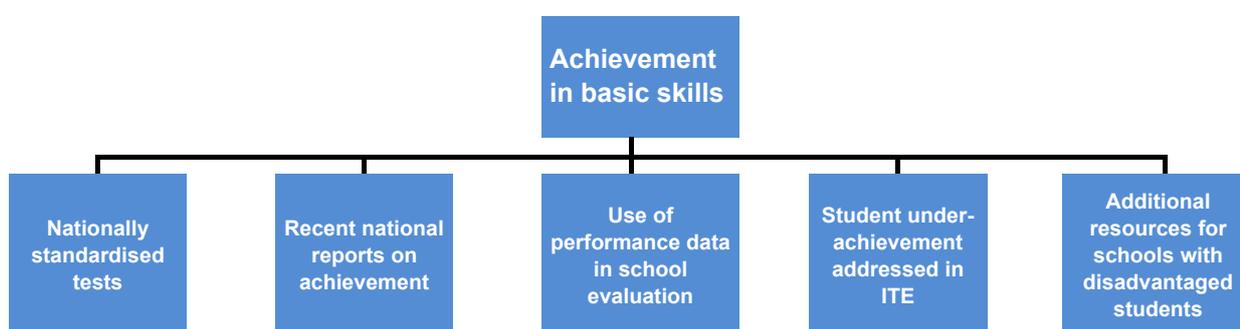
⁽³⁾ ■ Refers to children aged 2 years or more in France, 2.5 years or more in Belgium (French and Flemish Communities) and to children aged 4 years or more in Greece, the Netherlands and Liechtenstein.

2. ACHIEVEMENT IN BASIC SKILLS

Overview of reforms and policy developments since 2015

Low student achievement in the basic skills of literacy/language of instruction, mathematics and science is a concern for many European countries. It is an issue associated not only with the effectiveness of teaching and learning, but also with providing an equitable system of education. Recognising the need for targeted action, the Council of the European Union adopted an EU-wide benchmark related to basic skills which aims to reduce the proportion of 15-year-olds underachieving in reading, mathematics and science to less than 15 % by 2020 ⁽⁴⁾. However, underachievement, defined as performing below level 2 in the PISA test, continues to be a serious challenge across Europe. The latest PISA results from 2015 show that 22.2 % of European students had low achievement in mathematics, 19.7 % in reading, and 20.6 % in science ([Education and Training Monitor 2017](#)).

The structural indicators below concentrate on a selection of policies and measures that are associated with improving student achievement. All indicators refer to the period of compulsory education, which in the majority of countries corresponds to ISCED levels 1 and 2. They relate to competences in three distinct areas, i.e. literacy, mathematics and science, but these are often treated separately and given different emphasis in national policies.



Overall, there have been very few policy changes or reforms relating to the indicators on achievement in basic skills in the past five years, and these areas (with the exception of national standardised tests) do not seem to be a priority for policy action.

While most countries organise national standardised tests and publish national reports on achievement, not all three basic skills are treated equally – science is given less attention. Moreover, many countries use student performance data in external school evaluation but only around half have issued national guidelines to include tackling student underachievement in initial teacher education. Finally, while the majority of countries provide some form of top-level support to schools with large numbers of disadvantaged students, how these resources are allocated, what the target groups are, and the type of actions funded vary greatly.

The national testing of students has emerged as an important instrument of education policy, not only because it allows for individual student performance to be assessed but also because it is a

⁽⁴⁾ Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training ('ET 2020'), OJ C 119, 28.5.2009.

means by which the education system as a whole can be monitored. It is a widespread practice in Europe but often takes different forms. One of the main differences being that where it is used primarily to evaluate the performance of the education system, samples of students are tested rather than a complete cohort. In the 2018/19 school year, all European education systems except Belgium (German-speaking Community), Greece, Croatia⁽⁵⁾, Bosnia and Herzegovina⁽⁶⁾ and North Macedonia are holding nationally standardised tests for students during the period of compulsory education.

In some education systems such as Belgium (Flemish Community) and Czechia, the subjects in which national tests are held are rotated, changing from year to year. In the majority of European countries, standardised national assessment during compulsory education focuses largely on the language of instruction and mathematics, and to a much lesser extent on science.

In the past five years, the national authorities in some European countries have moved from piloting national tests to the establishment of regular testing systems (Czechia and Spain⁽⁷⁾), while others have changed the approach of some national tests from being summative to formative (Portugal). Some countries have added new tests in specific years (Lithuania and Portugal), while others have discontinued certain tests (Latvia), or all national testing for the time being (North Macedonia).

The majority of European countries publish **national reports on achievement** in each of the basic skills drawing on national performance data. In many cases, these reports are complemented by reports based on the country results from international surveys such as PISA, TIMSS and PIRLS. Only in Bosnia and Herzegovina are there no recent national reports on achievement in the basic skills. Moreover, in around a third of countries, national reports are based solely on the results of international surveys. In terms of the subject areas covered by these reports, as with the previous indicator on national testing, it appears that performance in the language of instruction and mathematics is still analysed much more often than performance in science.

Across Europe, **school evaluation** that takes account of **student performance data** has become increasingly important for monitoring the overall quality of education. However, in some countries (Greece, Cyprus, Slovenia, Slovakia and Norway), external school evaluation is concerned only with school processes and compliance with regulations. Moreover, several countries do not carry out any external school evaluation (Croatia⁽⁸⁾, Finland and Bosnia and Herzegovina). In terms of major reforms in the past five years, Bulgaria has recently introduced external school evaluation which does take account of student performance.

Student underachievement is a problem in many countries and teachers' ability to deal with students in difficulty and to manage groups of students with different needs and abilities is crucial. Consequently, a number of countries stipulate that the competences needed to address this issue should be acquired during **initial teacher education (ITE)**.

In all, 23 European systems have top-level regulations, recommendations and/or guidelines on addressing student underachievement in ITE. However, the approaches used vary between countries

⁽⁵⁾ A pilot project is under way in Croatia: Development of National Examination System (*Razvoj nacionalnog sustava ispitivanja*). See <https://www.ncvvo.hr/vanjsko-vrednovanje-odgojno-obrazovnih-ishoda-srednje-skole/razvoj-nacionalnoga-sustava-ispitivanja/>

⁽⁶⁾ Nationally standardised tests in compulsory education are held in only two cantons, Sarajevo Canton and Tuzla Canton.

⁽⁷⁾ The tests in Spain are sample-based and have no academic consequences.

⁽⁸⁾ The pilot project 'External Evaluation of Primary and General Upper Secondary Schools' (*Vanjsko vrednovanje osnovnih škola i gimnazija*) started at the end of 2017 and represents the first phase in the preparation for the introduction of a comprehensive system of external evaluation of educational institutions. See <https://www.ncvvo.hr/vanjsko-vrednovanje/vanjsko-vrednovanje-odgojno-obrazovnih-ustanova/pilot-projekt-vanjskoga-vrednovanja-osnovnih-skola-gimnazija/>

both in the level of detail provided in guidance documents and in the variety of practices used at national level and at the level of individual higher education institutions. In some cases, only general guidelines are provided without specifying particular subjects. Again, science is the area that is least likely to be mentioned explicitly. It is also significant that in 18 education systems there are no such guidelines, which is often due to the fact that, in these systems, higher education institutions have complete autonomy in determining the content of their teacher education programmes.

Additional resources are allocated to schools with large numbers of disadvantaged students by top-level education authorities in around two thirds of education systems. There are a variety of approaches in terms of how these resources are allocated, what the target groups are, and the type of actions funded.

In most countries, schools receive additional funding directly from top-level authorities, although in many cases local authorities are also involved. In some countries, the financial flows are rather complex because several levels of authority (top, regional, and local) are involved in the allocation of funding. Moreover, in some cases, in addition to the funding automatically allocated by top-level authorities, education providers/schools can apply for extra funds for specific purposes.

Top-level authorities **do not** allocate any additional resources in Denmark, Croatia, Hungary, Romania, North Macedonia and Norway. In Denmark and Norway, this is done at municipality level. In other countries, additional resources for this purpose are provided mainly through social programmes (Romania), the EU or other international organisations (North Macedonia). In certain cases (Denmark and Hungary), the additional resources are not financial, but are given in the form of support for continuing professional development (CPD), remedial classes or other educational support services.

Across Europe, additional support is most often linked to factors relating to socio-economic background, migrant status and disability. Factors such as geographical location and ethnic origin are used less often. Targeted funds are most often used to improve staff numbers or skills. This may mean additional teaching staff or other professionals, CPD opportunities for staff in relation to creating more inclusive education, or the provision of career advice services. In the past five years, reforms in this area have led to the establishment of a scheme for providing additional support to disadvantaged students (in Malta) and the reinforcement of existing support (in Germany and Spain).

Summary table on achievement in basic skills, 2018/19

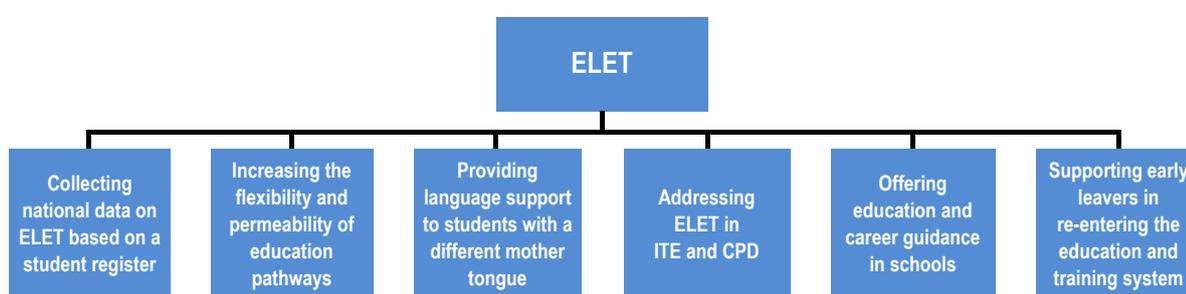
	1. National tests during compulsory education			2. Recent national reports on student achievement			3. Use of student performance data in school evaluation	4. Guidelines on addressing student underachievement during ITE	5. Additional resources from top-level authorities for schools with disadvantaged students		
	R	M	S	R	M	S	●	R	M	S	●
Belgium fr	R	M	S	R	M	S	●	R	M	S	●
Belgium de				R	M	S	●	R	M	S	●
Belgium nl		M		R	M	S	●	R	M	S	●
Bulgaria	R	M	S	R	M	S	●				●
Czechia			S	R	M		●				●
Denmark	R	M	S	R	M	S	●	R	M	S	
Germany	R	M	S	R	M	S	●	R			●
Estonia	R	M	S	R	M	S	●	R	M	S	●
Ireland	R	M	S	R	M	S	●	R	M		●
Greece				R	M	S					●
Spain	R	M	S	R	M	S	●	R	M	S	●
France	R	M	S	R	M	S	●	R	M	S	●
Croatia				R	M	S					
Italy	R	M		R	M		●				●
Cyprus	R	M		R	M	S		R	M	S	●
Latvia	R	M	S	R	M		●				●
Lithuania	R	M	S	R	M	S	●	R	M	S	●
Luxembourg	R	M		R	M		●	R	M	S	●
Hungary	R	M		R	M		●	R	M	S	
Malta	R	M	S	R	M	S	●	R	M		●
Netherlands	R	M	S	R	M	S	●				●
Austria	R	M		R	M		●	R	M	S	●
Poland	R	M	S	R	M	S	●	R	M	S	●
Portugal	R	M	S	R	M	S	●				●
Romania	R	M	S	R	M	S	●				
Slovenia	R	M	S	R	M	S					●
Slovakia	R	M		R	M			R	M	S	●
Finland	R	M	S	R	M						●
Sweden	R	M	S	R	M	S	●	R	M	S	●
United Kingdom-ENG	R	M		R	M	S	●	R	M	S	●
United Kingdom-WLS	R	M		R	M	S	●	R	M	S	●
United Kingdom-NIR	R	M		R	M	S	●	R	M	S	●
United Kingdom-SCT	R	M		R	M	S	●	R	M		●
Bosnia and Herzegovina											●
Iceland	R	M		R	M		●				●
Liechtenstein	R	M		R	M		●				●
Montenegro	R	M	S	R	M	S	●				●
North Macedonia				R	M	S	●				
Norway	R	M		R	M	S		R	M	S	
Serbia	R	M	S		M	S	●				●
Turkey	R	M	S	R	M	S	●				●

Note: 'R' = reading; 'M' = mathematics; 'S' = science.

3. EARLY LEAVING FROM EDUCATION AND TRAINING (ELET)

Overview of reforms and policy developments since 2015

The structural indicators on early leaving from education and training (ELET) ⁽⁹⁾ focus on certain key policies and measures that together cover the three main areas of action – prevention, intervention and compensation – as highlighted in the EU Council Recommendation of 28 June 2011 ⁽¹⁰⁾. This set of structural indicators therefore provides an overview of some of the main activities taking place in European countries to achieve the ET 2020 benchmark on ELET. The indicators focus on school education: primary and general secondary as well as school-based initial vocational education (ISCED 1, 2 and 3). Since 2015, when the structural indicators on ELET were first gathered, there have been reforms in all of the above-mentioned six areas.



A **national data collection system based on a student register** can be used to understand the scale of the problem and to develop and implement appropriate policies to address ELET. Such a system can also be employed to both monitor absenteeism and evaluate the effectiveness of policies to reduce early leaving. Hungary is one of the countries that has introduced an early warning system for primary and secondary schools in the last few years (November 2016). Its data collection makes it possible to monitor absenteeism as well as to analyse early school leaving patterns at several levels – school, local, regional and national. In some other EU countries, the national data collection has been modified or expanded. In the current reference year, a majority of European countries are collecting national data on ELET through a student register.

Policies for **increasing the flexibility and permeability of education pathways** can help prevent ELET by removing potential obstacles to the completion of education and training programmes. These might include initiatives to promote alternative education and training pathways (e.g. vocational or technical rather than general), to facilitate the transition between pathways, and to improve systems for the recognition of students' skills and qualifications. For example in Greece, new legislation introduced in 2016 has reformed the vocational lyceum (upper secondary vocational cycle). This allows for greater permeability between programmes within a more flexible framework so as to attract a greater number of students. It also promotes a smoother transition from one education pathway to another. The 2018/19 update of these structural indicators shows that almost all European countries now have policies to promote alternative education and training pathways; and many countries also aim to facilitate transitions between the different pathways. However, only around half of the countries have policies promoting the recognition of skills and/or qualifications.

⁽⁹⁾ In this analysis, 'early leaving from education and training' refers to students leaving education or training before completing the upper secondary level and thus not obtaining the corresponding school leaving certificate. However, these structural indicators focus on the whole period of school education: primary education and general secondary as well as school-based initial vocational education (IVET) (ISCED levels 1, 2 and 3).

⁽¹⁰⁾ Council Recommendation of 28 June 2011 on policies to reduce early school leaving, OJ C 191, 1.7.2011. (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2011:191:0001:0006:en:PDF>)

Language support for students with a mother tongue other than the language of instruction can be crucial as these students are often at increased risk of early leaving. The great majority of European countries already had such policies in place in 2015. Recent developments in this area have mainly been focused on intensifying this support. For example, in Austria, as part of the legislative package of July 2016, language support courses were extended to part-time vocational schools and VET colleges; and the most recent reforms, implemented in both Austria and Slovenia in 2018/19, address language provision and support for students with no or very limited knowledge of the language of instruction. Similarly, in Italy and Cyprus, reforms in 2015/16 were intended to ensure that language support was available to unaccompanied foreign minors as well as to children of asylum seekers. This latest structural indicators update shows that almost all European countries have policies for language support for students with a different mother tongue.

Addressing ELET in ITE and/or in CPD is essential if teachers are to learn how to support students who are showing signs of disengagement at school, and who are therefore at risk of leaving school early. This was an area addressed by the least number of countries in 2015. It therefore does not come as a surprise that it has recently been the focus of top-level regulations/recommendations and/or practical support in many countries. For example, since the implementation of the 'Teacher and school leadership education programme 2017-2020' in Estonia, inclusive education has been the priority in all CPD courses. Teachers and school heads are for instance being trained on how to adapt their teaching and assessment methods to the needs of disadvantaged students who are at most risk of leaving school early. The training has also covered the ways in which teachers can work together and with parents to support these students. Despite the positive developments over the last few years across Europe, the latest update of the structural indicators (in the current reference year of 2018/19) shows that educating and training teachers on issues relating to ELET is still the area where the least number of policies can be found.

The role of **education and career guidance services** in preventing students from leaving education and training is widely acknowledged. In order to strengthen this area in schools, several countries have recently introduced reforms to ensure that education and career guidance is not only delivered through school-based guidance or counselling services, but also through the national curriculum, thus systematically reaching all students. In Poland, for example, education and career guidance became part of the ISCED 2 and 3 national curricula in 2017/18, and more recently in Malta at ISCED 1-3 in 2018/19. These developments are in addition to the existing support provided by the school guidance services in all these countries. This two-way approach to promoting education and career guidance in schools is now (in 2018/19) promoted through top-level policies in about two-thirds of European countries.

Support for early leavers to re-enter the education and training system has been provided through a number of new policy developments since 2015. These have involved the provision of second chance education, education and career guidance and/or youth guarantee commitments ⁽¹⁾. For example, in the Flemish Community of Belgium, young people labelled as 'hidden NEET' (not in education, employment or training) are systematically contacted by the Flemish Employment Services and Vocational Training Agency (VDAB) and asked to register as job seekers so that the VDAB has a mandate to carry out their obligations under the Youth Guarantee Plan. Currently, almost all European countries have policies promoting second chance education for early leavers, and most of them support early leavers through targeted education and career guidance; however, fewer European countries advocate Youth Guarantee related initiatives as a way of supporting early leavers to re-enter the education and training system.

⁽¹⁾ The Youth Guarantee is a commitment by all Member States to ensure that all young people under the age of 25 receive a good quality offer of employment, further education, apprenticeship, or traineeship within a period of four months of becoming unemployed or leaving formal education. See: <https://ec.europa.eu/social/main.jsp?catId=1079>

In the current reference year, therefore, while there is a good range of policies in place to reduce ELET in most countries, these tend to be focused on areas such as language support, alternative education and training pathways and second chance education. In contrast, policies on teacher education and training on ELET or the recognition of skills and/or qualifications to enable students to re-enter education at the appropriate level are less common.

ELET Summary table 1, 2018/19

	1. National data collection on ELET based on a student register	2. Increasing the flexibility and permeability of education pathways:			3. Language support for students with a different mother tongue
		2.1. Providing alternative education & training pathways	2.2. Facilitating transitions within education & training systems	2.3. Recognising skills and/or qualifications	
Belgium fr	●	●	●	●	●
Belgium de			●	●	●
Belgium nl	●	●	●	●	●
Bulgaria	●	●			●
Czechia	●	●	●	●	●
Denmark	●	●			●
Germany		●	●		●
Estonia	●	●			●
Ireland	●	●			●
Greece	●	●	●		●
Spain		●	●	●	●
France	●	●	●	●	●
Croatia	●		●	●	●
Italy	●	●	●	●	●
Cyprus	●	●	●		●
Latvia	●	●	●	●	●
Lithuania	●	●	●	●	●
Luxembourg	●	●	●	●	●
Hungary	●	●			
Malta	●	●	●	●	●
Netherlands	●	●	●		●
Austria	●	●	●		●
Poland	●	●		●	●
Portugal	●	●	●	●	●
Romania		●	●	●	●
Slovenia		●	●	●	●
Slovakia		●	●		●
Finland	●	●	●	●	●
Sweden	●	●	●	●	●
United Kingdom-ENG	●	●	●		●
United Kingdom-WLS	●	●	●		●
United Kingdom-NIR		●	●		●
United Kingdom-SCT	●	●	●	●	●
Bosnia and Herzegovina					
Iceland	●	●			
Liechtenstein	●	●	●	●	●
Montenegro	●	●	●	●	●
North Macedonia			●		
Norway	●	●	●		●
Serbia		●			●
Turkey	●				

ELET Summary table 2, 2018/19

	4. Encouraging the inclusion of ELET in ITE and/or CPD	5. Education and career guidance in schools ISCED 2 and 3*	6. Supporting early leavers re-enter the education & training system:		
			6.1. Second chance education	6.2. Education and career guidance	6.3. Youth guarantee
Belgium fr	•	•	•	•	•
Belgium de	•	•	•		
Belgium nl	•	•	•	•	•
Bulgaria		•	•	•	•
Czechia		•	•	•	•
Denmark				•	
Germany	•	•	•	•	•
Estonia	•	•	•	•	•
Ireland	•	•	•		
Greece		•	•	•	•
Spain	•	•	•	•	•
France	•	•	•	•	•
Croatia			•	•	•
Italy	•	•	•		•
Cyprus		•	•	•	•
Latvia	•	•	•	•	•
Lithuania		•	•	•	•
Luxembourg	•		•	•	•
Hungary	•	•	•		•
Malta	•	•	•	•	•
Netherlands	•		•	•	•
Austria	•	•	•	•	•
Poland		•	•	•	•
Portugal	•	•	•	•	•
Romania		•	•	•	•
Slovenia	•	•	•	•	•
Slovakia		•	•		
Finland		•	•	•	•
Sweden	•	•	•	•	•
United Kingdom-ENG			•	•	
United Kingdom-WLS			•	•	
United Kingdom-NIR			•	•	
United Kingdom-SCT		•	•	•	•
Bosnia and Herzegovina			•		
Iceland					
Liechtenstein		•	•	•	
Montenegro			•		
North Macedonia					
Norway		•	•	•	
Serbia			•		
Turkey		•	•		

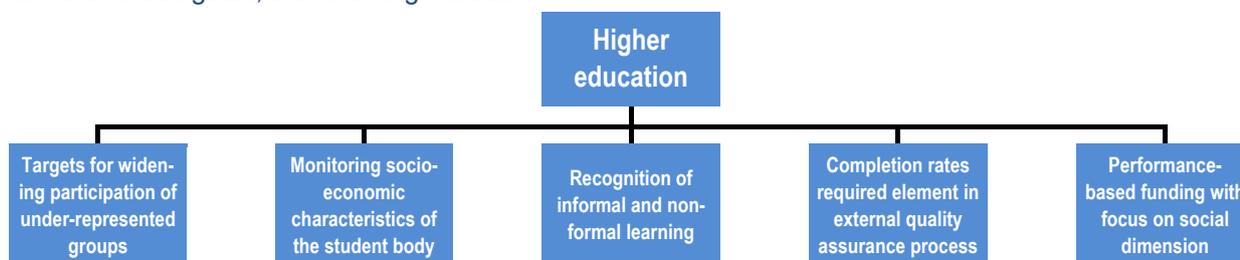
Note: * Education and career guidance provided both as a compulsory part of the curriculum **and** by school guidance services in lower and upper secondary education.

4. HIGHER EDUCATION

Overview of reforms and policy developments since 2015

In 2008, the Council adopted an EU-wide benchmark on tertiary education, stating that by 2020 at least 40 % of 30-34 year-olds should have a tertiary or equivalent level qualification⁽¹²⁾. This benchmark has since become part of the double headline target on education within the Europe 2020 growth strategy.

The following five structural indicators have been developed in relation to this headline target (see summary table below), and guided by the Commission's communication, 'Supporting growth and jobs: An agenda for the modernisation of Europe's higher education systems'⁽¹³⁾. Among the Communication's main objectives are two key inter-linked policy goals: increasing and widening participation, and improving the quality and relevance of higher education. To monitor progress towards these goals, the following indicators were chosen:



In the area of higher education, very few reforms have taken place in this area since 2015. However, progress has been made in that more countries are introducing quantitative targets for widening participation and improving the attainment of under-represented groups. In addition, completion rates have become a required element of external quality assurance processes in more countries. In 2017 in Austria, quantitative targets were introduced through the outcome objectives for the Federal Ministry of Science, Research and Economy (BMWFW), in relation to increasing the proportion of higher education students coming from families where the parents had not successfully completed the upper secondary school leaving examination or any other higher education entrance qualification. In Croatia, completion rates have been incorporated into the quality assurance process as part of the new re-accreditation cycle which started in 2017. The Agency for Science and Higher Education has specified the following requirement: 'Higher education institutions (HEIs) collect and analyse data on student progression and use it to secure student completion'. The accreditation process has now been completed for 30 HEIs. However, two countries (Finland and the United Kingdom – Northern Ireland) ceased to have quantitative targets for widening participation or for the attainment of under-represented groups during the period 2015 to 2019.

When looking at the five indicators for the reference year 2018/19, the monitoring of the socio-economic characteristics of the student body was the most widely implemented policy (23 education systems). Similarly, the recognition of prior informal or non-formal learning was a practice carried out in more than half of the education systems, while the requirement to include completion rates in external quality assurance processes was implemented in almost half of the education systems.

⁽¹²⁾ Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training ('ET 2020'), OJ C 119, 28.5.2009.

⁽¹³⁾ Communication from the European Commission, 2011. 'Supporting Growth and Jobs: an Agenda for the Modernisation of Europe's Higher Education Systems'. Luxembourg: Office for Official Publications of the European Communities [COM (2011) 567 final].

The two areas of policy which could, arguably, have the most positive and direct effect in terms of access to higher education for disadvantaged students were apparent in less than half of the education systems. Only 13 education systems had quantitative targets for widening participation among under-represented groups, while only 13 countries had performance-based funding focusing on the social dimension. This suggests that while good progress is being made in many education systems in relation to the benchmark on tertiary education, there is more work to be done in relation to the two key social dimension indicators – widening participation and performance-based funding.

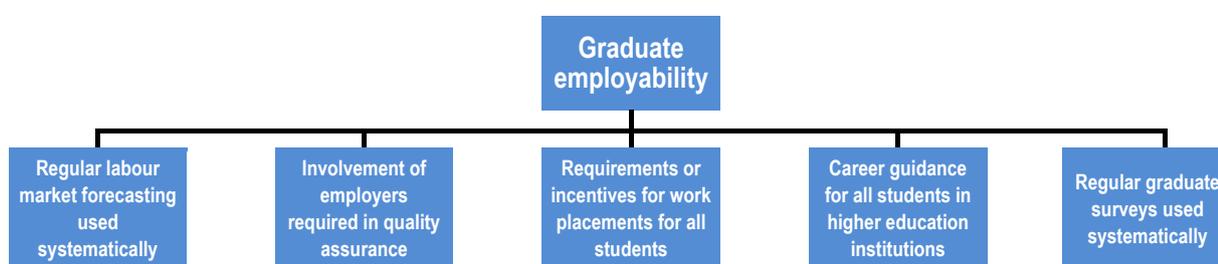
Summary table on higher education, 2018/19

	1. Quantitative targets for widening participation and/or attainment of under-represented groups	2. Monitoring of socio-economic background of students	3. Recognition of informal or non-formal learning on entry to higher education	4. Completion rates as a required criterion in external QA	5. Performance-based funding mechanisms with a social dimension focus
Belgium fr		●	●	●	
Belgium de				●	
Belgium nl	●	●	●		●
Bulgaria		●		●	
Czechia					
Denmark		●	●		
Germany		●	●	●	
Estonia				●	
Ireland	●	●	●	●	●
Greece	●				
Spain		●	●	●	●
France	●	●	●	●	●
Croatia		●		●	●
Italy		●	●	●	●
Cyprus	●				
Latvia					
Lithuania		●	●	●	
Luxembourg			●		
Hungary		●	●		
Malta	●	●	●		
Netherlands	●	●			
Austria	●	●			●
Poland		●	●	●	●
Portugal			●	●	●
Romania	●	●		●	●
Slovenia				●	
Slovakia					
Finland		●	●		
Sweden		●	●		
United Kingdom- ENG	●	●	●	●	●
United Kingdom- WLS	●	●	●	●	●
United Kingdom- NIR		●	●	●	●
United Kingdom-SCT	●	●	●		
Bosnia and Herzegovina					
Iceland			●	●	
Liechtenstein		●	●		
Montenegro			●	●	
North Macedonia		●	●	●	
Norway		●	●		
Serbia	●	●		●	
Turkey		●	●		

5. GRADUATE EMPLOYABILITY

Overview of reforms and policy developments since 2015

Employability has played a central role in the Europe 2020 strategy as well as in the Education and Training 2020 ('ET 2020')⁽¹⁴⁾ and higher education modernisation strategies (European Commission, 2011). Within the ET 2020 strategy, the Council of the European Union adopted a benchmark on graduate employability in 2012⁽¹⁵⁾. According to this benchmark, 'by 2020, the share of employed graduates (20-34 year-olds) having left education and training no more than three years before the reference year should be at least 82 %'⁽¹⁶⁾. The monitoring of graduates' career development by higher education institutions (HEIs) has also been identified as crucial in increasing the relevance of programmes (European Commission, 2011). Drawing on these strategies and benchmarks, five structural indicators have been identified (see the diagram below).



Between 2015 and 2019, there were reforms in all policy areas, except in career guidance (Indicator 4). Greece and Estonia started using labour market forecasting systematically in 2015 and 2017 respectively. For example, in Greece an action plan for labour market forecasting was drafted by the Ministry of Labour and the National Institute of Labour and Human Resources in May 2015. It was approved by the European Commission on 15 May 2015 and implementation started immediately.

In Czechia, an amendment to the Higher Education Act introducing a new system of quality evaluation for higher education institutions was approved in 2016. A new accreditation agency – the Accreditation Bureau – was established. The members of this Bureau are appointed in such a way that nine members of the Board, including the Chairman and one Vice-Chairman, are long-serving academics and five members, including one Vice-Chairman, are professionals, including representatives from the 'professional chambers' established by law. There is no requirement for these five to be employers, but they are from potential graduate workplaces. Croatia introduced requirements for work placements (Indicator 3 below) in the 2016/17 academic year.

When looking at the situation in 2019, the most widely implemented policy is clearly the provision of career guidance for all students in higher education institutions. This service is available in almost all countries, as was the case in 2015. The area where most work is needed is in relation to incentives or requirements for all students to undertake work placements during their course of study. Only 11 education systems have policies covering all students, suggesting that many students in Europe

⁽¹⁴⁾ Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training ('ET 2020'), OJ 2009/C 119/02, 28.5.2009.

⁽¹⁵⁾ Council conclusions of 11 May 2012 on the employability of graduates from education and training, OJ 2012/C 169/04, 15.6.2012.

⁽¹⁶⁾ Ibid., p. 10.

are not necessarily given this opportunity. However, many more countries do offer incentives or require work placements for some students, but these very often only apply to those studying in professional higher education. The other three policy areas (labour market forecasting, required involvement of employers in quality assurance, and graduate tracking surveys) are relatively widespread, covering at least half of the education systems. However, clearly, more needs to be done in the remaining countries in these policy areas.

Summary table on graduate employability, 2018/19

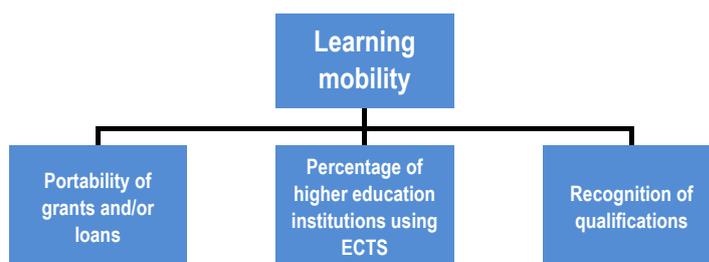
	1. Regular labour market forecasting used systematically	2. Involvement of employers in required in external QA	3. Requirements OR incentives for work placements for ALL students	4. Career guidance for ALL students in HEIs	5. Regular graduate surveys used systematically
Belgium fr	●	●		●	●
Belgium de		●	●		
Belgium nl		●		●	●
Bulgaria	●	●	●	●	●
Czechia		●		●	
Denmark		●		●	●
Germany		●		●	●
Estonia	●	●	●	●	●
Ireland	●			●	●
Greece	●	●		●	
Spain		●	●	●	
France	●	●	●	●	●
Croatia		●			●
Italy	●	●	●	●	●
Cyprus				●	
Latvia	●	●			
Lithuania	●	●	●	●	
Luxembourg				●	
Hungary		●		●	●
Malta		●	●	●	
Netherlands	●	●		●	●
Austria		●		●	●
Poland	●	●		●	●
Portugal		●		●	
Romania		●	●	●	●
Slovenia		●		●	
Slovakia				●	●
Finland	●			●	
Sweden	●	●		●	●
United Kingdom- ENG	●			●	●
United Kingdom- WLS	●			●	●
United Kingdom- NIR	●			●	●
United Kingdom-SCT	●			●	●
Bosnia and Herzegovina	●	●			
Iceland				●	
Liechtenstein		●		●	●
Montenegro	●	●	●	●	●
North Macedonia	●	●	●	●	●
Norway	●			●	●
Serbia					
Turkey				●	

6. LEARNING MOBILITY

Overview of reforms and policy developments since 2015

Despite the fact that the value of learning mobility in higher education is being increasingly acknowledged, the path towards the free movement of students is still not smooth. The obstacles to learning abroad include language skills, the lack of portability of grants and loans, difficulties in having qualifications and credits recognised, as well as problems in obtaining relevant information and guidance. For this reason, a Council Recommendation encourages ⁽¹⁷⁾ Member States to implement structural reforms to create a positive environment to support learning mobility. This Recommendation also provides the framework for the [Mobility Scoreboard](#), a tool for monitoring the progress made by European countries in this area.

Three of the indicators from the Mobility Scoreboard were selected to be part of the structural indicators: 1) the portability of grants and/or loans; 2) the percentage of higher education institutions using the European Credit Transfer and Accumulation System (ECTS); and 3) the recognition of qualifications.



This section examines the learning mobility indicators up to the 2017/18 academic year. The updated information for the 2018/19 academic year will be included in the 2019 Mobility Scoreboard, to be published in December 2019.

Portability means that students can use their domestic funding (grants and/or loans) in another European Higher Education Area (EHEA) system, thereby facilitating the funding of studies abroad. Portability should ideally apply to both credit mobility (short-term study periods abroad to obtain credits within the framework of a home-country programme) and degree mobility (long-term stays to undertake a full degree course). However, less than half of European education systems allow students to use all types of domestic funding (grants and/or loans, depending on their availability) to obtain both credits and full degrees in another country. In addition, even when they do so, most apply at least some restrictions related to geography (country limitations), the type of programme, the field of study, or the time period. Nevertheless, a large majority of education systems allow some funding portability at least in relation to short term stays to obtain credits.

The **European Credit Transfer and Accumulation System (ECTS)** is a student-centred credit system based on the student workload required to achieve specified learning outcomes. As such, it is an essential tool for comparing and recognising student learning achievements in home-country programmes as well as during learning periods abroad. ECTS is widely used in European countries. As the table shows, in a majority of higher education systems all institutions use ECTS. In five

⁽¹⁷⁾ Council Recommendation of 28 June 2011 on 'Youth on the move' – promoting the learning mobility of young people, OJ C199, 7.7.2011.

systems the vast majority of institutions use it. However, there are ten systems where a national credit system operates in conjunction with ECTS. Although these national and European systems may be sufficiently similar for credits to be converted easily, there may be some differences in how national credits and ECTS operate, and so each of these systems will have differing degrees of ECTS compatibility.

These two indicators show a remarkable level of stability during the period analysed. No reforms have taken place in these areas between 2015/16 and 2017/18. While grants ceased to exist in the United Kingdom (England), there has been no change regarding the portability of loans and therefore no impact on this country's position with respect to this indicator.

In contrast, the **automatic recognition of qualifications** has seen more changes taking place. At the same time, this indicator still reveals the greatest need for progress in comparison with the other policy areas.

The automatic recognition of degrees and qualifications refers to the automatic right of applicants holding a qualification of a certain level to be considered for entry to a programme of further study at the next level in any other EHEA-country – a key condition for facilitating learning mobility. One of the expectations of the Bologna Process when it was launched in 1999 was that, through establishing convergent degree structures across Europe, it would become much easier for students to become mobile and undertake higher education programmes in other systems. However, as yet, there is neither an automatic or straightforward process for the recognition of qualifications in most European education systems.

Given the autonomy of higher education institutions and the blurring of boundaries between qualification recognition and admissions systems, the situation in many countries is not clear-cut. Only a handful of education systems report that they operate an automatic recognition system by taking the qualifications issued in other EHEA countries at face value. In the large majority of education systems, there is no automatic recognition of qualifications at system level, which means that recognition procedures are required for holders of qualifications from all EHEA countries. However, some education systems have started to take significant steps forward by signing regional multilateral agreements on the mutual automatic recognition of qualifications.

These new bilateral and multilateral agreements on the mutual automatic recognition of qualifications represent the main direction of policy development during the period analysed. The Benelux agreement – between the three Communities of Belgium, Luxembourg and the Netherlands – was signed in 2015. Shortly after, in 2016, Denmark, Finland, Sweden, Iceland and Norway signed the Nordic Declaration on the Recognition of Qualifications Concerning Higher Education. Most recently, in 2018, Estonia, Latvia and Lithuania also signed an intergovernmental agreement on the automatic recognition of higher education qualifications, which entered into force in the 2018/19 academic year.

Summary table on learning mobility, 2017/18

	Portability of grants and/or loans			Percentage of higher education institutions using ECTS	Automatic recognition of qualifications		
	Full	Partial	No		Full	Partial	No
Belgium fr			●	100%		●	
Belgium de	● ^b			100%		●	
Belgium nl	● ^a			100%	●		
Bulgaria			●	National system, ECTS compatible			●
Czechia		● ^c		75%-99%		●	
Denmark	● ^b			100%	●		
Germany	● ^b			75%-99%			●
Estonia		● ^c		100%			●
Ireland	● ^b			75%-99%			●
Greece			●	100%			●
Spain		● ^d		100%			●
France	● ^b			75%-99%			●
Croatia		● ^c		100%			●
Italy		● ^c		100%			●
Cyprus	● ^a			75%-99%			●
Latvia		● ^d		National system, ECTS compatible			●
Lithuania		● ^d		100%			●
Luxembourg	● ^a			100%		●	
Hungary		● ^c		National system, ECTS compatible			●
Malta		● ^d		100%	●		
Netherlands	● ^b			100%		●	
Austria	● ^b			100%			●
Poland		● ^c		100%	●		
Portugal		● ^d		100%			●
Romania			●	100%			●
Slovenia	● ^a			100%			●
Slovakia		● ^c		100%		●	
Finland	● ^a			National system, ECTS compatible	●		
Sweden	● ^a			National system, ECTS compatible	●		
United Kingdom- ENG		● ^d		National system, ECTS compatible			●
United Kingdom- WLS		● ^d		National system, ECTS compatible			●
United Kingdom- NIR		● ^d		National system, ECTS compatible			●
United Kingdom-SCT	● ^b			National system, ECTS compatible			●
Bosnia and Herzegovina			●	100%			●
Iceland	● ^a			100%	●		
Liechtenstein	● ^a			100%			●
Montenegro	● ^a			100%			●
North Macedonia			●	100%			●
Norway	● ^b			100%	●		
Serbia			●	100%			●
Turkey			●	National system, ECTS compatible			●

PORTABILITY OF STUDENT GRANTS AND/OR LOANS	
Full	<p>Portability of all available domestic student support measures (grants and/or loans) for both credit and degree mobility,</p> <ul style="list-style-type: none"> a) without restrictions b) with some restrictions related to geography (country limitations), and/or types of programme, and/or field of study or time period.
Partial	<p>Portability for credit mobility,</p> <ul style="list-style-type: none"> c) without restrictions d) with some restrictions related to geography (country limitations), and/or types of programme, and/or field of study or time period. <p>No portability for degree mobility or not all major support measures with portability for degree mobility.</p>
No	No portability: public grants and/or loans are only provided if students study in the home country or are portable only in exceptional cases (no equivalent programme is available in the home country).
Automatic recognition of qualifications	
Full	All higher education qualifications issued in other EHEA countries are recognised on an equal basis to qualifications in the home country.
Partial	Automatic recognition takes place within a region or subset of European countries; for other countries specific procedures are in place for recognition.
No	There is no automatic recognition at system level.

SCOPE OF INDICATORS/KEY DEFINITIONS

Top-level authority: the highest level of authority with responsibility for education in a given country, usually located at national (state) level. However, for Belgium, Germany, Spain and the United Kingdom, the *Communautés*, *Länder*, *Comunidades Autónomas* and devolved administrations respectively are responsible for all or most areas relating to education. Therefore, these administrations are considered as the top-level authority for the areas where they hold the responsibility, and for the areas of responsibility shared with the national (state) level both are considered to be top-level authorities.

1. Early Childhood Education and Care

1.1. Guarantee of a place

This table shows the starting age of the universal legal entitlement to an ECEC place, compulsory ECEC and compulsory primary education.

Compulsory ECEC refers to the obligation for children to attend ECEC.

Legal entitlement to ECEC refers to a statutory duty on ECEC providers to secure publicly subsidised ECEC provision for children living in a catchment area whose parents want it. The legal entitlement means that a child has an enforceable right to benefit from ECEC provision.

It is important to note that a 'right to ECEC for every child' expressed in legislation in general terms, but without adequate funding and the necessary policies to ensure the delivery of sufficient places is not considered a legal entitlement. Similarly, the existence of some publicly subsidised ECEC settings providing places for limited numbers of children is not considered a legal entitlement if public authorities are not obliged to provide a place. A legal entitlement to ECEC exists when every child has an enforceable right to benefit from ECEC provision. An enforceable right means that public authorities guarantee a place for each child whose parents request it (in the age-range covered by the legal entitlement), regardless of their employment, socio-economic or family status. It does not necessarily imply that provision is free, only that it is publicly subsidised and affordable. Moreover, the legal entitlement does not necessarily entail a duty to provide a first choice of setting, but the needs of families usually must be taken into account.

A targeted legal entitlement or targeted compulsory ECEC that applies only to certain groups of children (e.g. disadvantaged learners, children of parents who are in employment, certain minorities, etc.) are not considered in this publication.

1.2. Professionalisation of ECEC staff

ECEC staff refers here only to those professionals who have regular, daily, direct contact with children and whose duties involve education and care. These staff have the main responsibility for groups of children in an ECEC setting. Their duties usually include designing and delivering safe and developmentally appropriate activities in accordance with all relevant programmes/curricula.

The term ECEC staff does not include heads of ECEC settings, medical/healthcare staff (such as paediatricians, physiotherapists, psychomotor therapists, nutritionists, etc. providing support for children's

physical development), professional specialists (such as psychologists), assistants/auxiliary staff who perform only domestic or maintenance roles (such as preparing food and cleaning premises).

The indicator 1.2.1 on the requirement for at least one staff member per group of children in ECEC to be qualified to a minimum of Bachelor level in the field of education (i.e. a minimum of three years at ISCED 6 according to the ISCED 2011 classification) aims to show whether education staff in the sector are highly qualified. This is important as staff who are highly qualified in education can provide leadership to other team members when designing and delivering developmentally appropriate activities for children and thus raise the quality of provision.

Programmes at **ISCED level 6, at Bachelor's or equivalent level**, are often designed to provide participants with academic and/or professional knowledge, skills and competencies, leading to a first degree or equivalent qualification. Programmes at this level are typically theoretically-based but may include practical components and are informed by state of the art research and/or best professional practice. They are traditionally offered by universities and equivalent tertiary educational institutions, but do not necessarily involve the completion of a research project or thesis ⁽¹⁸⁾.

The indicator 1.2.2 presents the basic requirements regarding the **continuing professional development** (CPD). CPD consists of the formal in-service training undertaken that allows ECEC staff members to broaden, develop and update their knowledge, skills and attitudes throughout their career. It includes both subject-based and pedagogical training. Different formats are offered such as courses, seminars, peer observation and support from practitioner networks. In certain cases, continuing professional development activities may lead to supplementary qualifications.

Mandatory: CPD is compulsory and the minimum amount of time to be spent on it is specified.

Professional duty: CPD is described as such in the regulations, or it is deemed compulsory but the amount of time to be spent on it is not specified.

1.3. Curriculum or educational guidelines

This indicator shows whether countries have ECEC curriculum or educational guidelines for the entire ECEC phase or only for the children aged 3 and over.

The **ECEC curriculum**, according to the Council Recommendation ⁽¹⁹⁾, is a powerful tool to improve well-being, development and learning of children. A broad pedagogical framework sets out the principles for sustaining children's development and learning through educational and care practices that meet children's interests, needs and potentialities.

Educational guidelines: official documents issued to steer or guide ECEC providers in the content of and approach to children's care and learning. They may include main principles, values, guidelines, developmental and learning goals or learning areas, educational/pedagogical approaches, learning materials and assessment methods. Such documents may be national curriculum frameworks or criteria for developing local curricula; they might be expressed as practical guidelines for ECEC practitioners, be incorporated into legislation as part of an ECEC programme, published as a reference framework of educational/care standards, care and education plans, etc. Depending on how formal or binding they are, educational guidelines allow varying degrees of flexibility in the way they are applied in ECEC settings. There may be more than one document applicable to ECEC within a

⁽¹⁸⁾ <http://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-isced-2011-en.pdf>

⁽¹⁹⁾ OJ C 189, 5.6.2019, p. 4-14.

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C_2019.189.01.0004.01.ENG&toc=OJ:C:2019:189:TOC

country, but they all contribute to establishing the fundamental framework in which ECEC staff are required (or advised, where mandatory requirements do not exist) to develop their own practice to meet children's learning and developmental needs.

1.4. Language programmes as a targeted support measure

This indicator shows if any of the three types of language support measures are available in ECEC:

- a) speech therapy or other language or communication support for all;
- b) language of instruction as a second language;
- c) home language teaching: measures to improve children's skills in the language they speak at home where it is not the language of instruction.

Language of instruction refers to the main language that is officially used in education at ECEC and school level. It may not be the first or home language for all pupils.

The limitation of this indicator relates to the fact that only top-level recommendations are reported, therefore regional and local practices are not reflected even when they are widespread. Languages spoken in a country often vary in different regions and localities, therefore many measures are taken at these levels.

1.5. Parent support

These two indicators concern measures issued by top-level authorities regarding parent support. Bottom up, NGO and pro-profit educational activities that are not initiated/supported from top-level are not considered.

Home learning guidance refers to fostering a child's learning at home by providing information and ideas to families about how to help their children with curriculum-related activities. ECEC services can inspire parents to offer their children all kinds of learning experiences at home, both implicit and explicit, e.g. by involving children in daily routines (meals, phone calls, making grocery lists, getting dressed, etc.) and enriching these routines by getting children to engage in activity-related discussions.

Parenting programmes refer to formal parenting classes to help families establish home environments that support children as learners. Parents attend formal courses covering a variety of topics related to children's education and development (for example, speech/language development, effective discipline, building self-esteem, understanding challenging behaviour).

2. Achievement in basic skills

2.1. Nationally standardised tests in literacy, mathematics and science

This indicator examines the extent to which the three basic skills are assessed in national tests during compulsory education.

National testing is defined as 'the national administration of standardised tests and centrally set examinations'. These tests are standardised by the national education authorities or, in the case of Belgium, Germany, Spain and the United Kingdom, by the top-level authorities for education. The procedures for the administration and marking of tests, as well as the setting of content and the

interpretation and use of results are decided at the top level. National testing is carried out under the authority of a national or centralised body and all examinees take the tests under similar conditions.

This indicator includes national testing for both summative and formative purposes. Both compulsory and optional tests are considered, as are sample-based national tests.

2.2. Recent national reports on achievement in basic skills

This indicator relates to national reports on performance trends, factors contributing to underachievement, and effective approaches for raising attainment in the basic skills. These reports are based on national data and/or results of international surveys such as PISA, TIMSS and PIRLS and have been published since 2012.

2.3. Use of student performance data in external school evaluation

This indicator looks at whether student performance data is used as an information source in external school evaluation.

The **external evaluation of schools** is conducted by evaluators who report to a local, regional or central/top level education authority; they are not directly involved in the activities of the school under evaluation. This type of evaluation covers a broad range of school activities, including teaching and learning and/or all aspects of school management.

The **student performance data** used in external school evaluation may include students' results in centrally set examinations and nationally standardised assessments. Also used are student results in teacher assessment; data on student progression through school; student results in international surveys; as well as, although less frequently, outcomes in the job market and student or parent satisfaction.

2.4. Top-level guidelines on addressing student underachievement in initial teacher education (ITE)

This indicator shows whether top-level regulations, recommendations or guidelines for ITE programmes identify any final competences related to the knowledge and skills needed for addressing underachievement in basic skills or whether higher education institutions have full autonomy with regard to the content of ITE programmes.

2.5. Additional support for schools enrolling large numbers of disadvantaged students

This indicator examines whether top-level education authorities allocate additional resources to schools that enrol large numbers of disadvantaged students. **Additional support to schools** refers to nationally allocated financial and/or other resources that require additional funding (extra educational staff, special allowances, professional development opportunities, reduced teaching time, scholarships, career advice services, etc.). The top-level education authorities can allocate these resources to the regional, local or school level directly.

Disadvantaged students (groups at risk or vulnerable groups) are defined at national level. Possible criteria are socio-economic status, ethnic origin, coming from a migrant background or others depending on the national context.

Socio-economic status refers to a combined economic and sociological measure of an individual's or his/her family's economic and social position relative to others, based on income, education, and occupation. Parents' educational attainment is often taken as a proxy measure for socio-economic status.

3. Early leaving from education and training (ELET)

In this analysis, '**early leaving from education and training**' refers to students leaving education and training before completing the upper secondary level or obtaining the corresponding school leaving certificate. This broad definition encompasses the young people who, according to their own country's definition, are considered to be early leavers. It includes, for example, young people who leave (or drop out of) school without completing what is considered in the national context as basic education (usually primary and lower secondary education).

3.1. Collecting national data on ELET based on a student register

This indicator examines the existence of a national data collection system on ELET to assess the scale of the problem. ELET data from student registers is collected automatically from school administration systems based on students' personal data. This can be used to determine the number of early leavers by comparing records from one school year to the next. It can also be useful when evaluating the effectiveness of policies to reduce early leaving. Student register based data can also be employed to monitor absenteeism, thereby acting as a warning system to alert schools and authorities that they may need to intervene to help students at risk of leaving early.

3.2. Increasing the flexibility and permeability of education pathways

This indicator focuses on policy initiatives aimed at minimising the risk of early leaving by offering students a wider choice of programmes or alternative pathways (academic, technical or vocational), as well as providing opportunities for students to change tracks or programmes which do not meet their needs. The indicator also covers policies that are designed to ensure a smooth transition between education levels and programmes (especially from general education to VET programmes). It also includes policies that aim to improve the recognition of skills and qualifications, thereby helping students to progress to the next level or to re-engage in education or training if they have left the system prematurely.

3.3. Providing language support for students with a different mother tongue

This indicator covers policies for language support for students with a mother tongue that is different from the language of instruction. Empirically, young people from migrant backgrounds tend to be over-represented among those leaving education and training early in many European countries⁽²⁰⁾. Policies on language support for these students can help ensure the provision of measures for strengthening the students' competences in the language of instruction, which are crucial in order to benefit from all the learning opportunities and to avoid falling behind.

⁽²⁰⁾ Eurostat (EU-LFS) [edat_ifse_02]

3.4. Addressing ELET in initial teacher education and continuing professional development

This indicator examines policies and measures for improving teachers' understanding of the challenge of early leaving through initial teacher education (ITE) and continuing professional development (CPD). This implies increasing teachers' awareness of the underlying causes, the main triggers and early warning signs, as well as strengthening teachers' capacity to take action in both preventing early leaving and supporting students who are at risk. Training on ELET may also provide teachers with an opportunity to engage in peer learning and collaborate with other teachers and schools with experience in this area.

3.5. Offering education and career guidance in schools

This indicator analyses policies on education and career guidance, which is provided both as a compulsory part of the curriculum and by school guidance services in lower and upper secondary education. Education and career guidance provides students with information as well as support for developing their decision-making and other skills important for managing their educational and/or career choices. Guidance may also include psycho-social work or counselling to help students, in particular those at risk of leaving early, as they progress through education and training.

3.6. Providing support for early leavers to re-enter the education and training system

This indicator presents policies and measures that help young people who have left education and training early to re-enter the system. This may entail: policies promoting the provision of second chance education, i.e. alternative education and training pathways leading to a formal qualification; education and career guidance, which may be combined with practical skills training, one-to-one or group counselling, or similar support offered to help young people develop a vision for their careers and lives; and initiatives taking place within the context of the 'Youth Guarantee' ⁽²¹⁾, which seeks to ensure that all young people under 25 get a good quality, definite offer within four months of leaving formal education or becoming unemployed, for a job, apprenticeship, traineeship or continuing education that is adapted to each individual's need and situation.

4. Higher Education

4.1. Quantitative targets relating to the social dimension of higher education

This indicator examines countries' attempts to widen participation in higher education through quantitative targets for under-represented groups of students. It encompasses quantitative targets which focus on widening or increasing participation among the groups currently under-represented in higher education. However, equity in treatment is also important, so targets related to improving completion rates (attainment) for these groups are also considered here. Examples of under-represented groups might include people with disabilities, migrants, ethnic groups, lower socio-economic status groups, women/men, etc.

⁽²¹⁾ Council Recommendation of 22 April 2013 on establishing a Youth Guarantee. OJ C 120, 26.4.2013. ([http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32013H0426\(01\)](http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32013H0426(01)))

4.2. Monitoring of the socio-economic characteristics of the student body

For this indicator, **systematic monitoring** refers to the process of systematic data gathering, analysis and use of data to inform policy. It aims to capture how the higher education system operates and whether it is reaching its objectives and targets. It can take place at various stages: on entry to higher education, during studies (refers to student retention), at graduation (refers to completion rates) and after graduation (refers to graduate destinations – employment or further study). Systematic monitoring must include mechanisms for cross-institutional data gathering and allow cross-institutional data comparability.

This indicator focuses on the systematic monitoring of the **socio-economic status of students**, defined as a combined measure of students' or their families' economic and social position relative to others, based on income, education, and occupation. When analysing a family's socio-economic status, the household income (combined and individual) is examined as well as the education and occupation of earners. Parents' educational attainment is often taken as a proxy measure for socio-economic status.

4.3. Recognition of informal and non-formal learning on entry to higher education

This indicator focuses on prior informal and non-formal learning.

Informal learning means learning resulting from daily activities related to work, family or leisure and is not organised or structured in terms of objectives, time or learning support; it may be unintentional from the learner's perspective. Examples of informal learning outcomes are skills acquired through life and work experiences such as project management or ICT skills acquired at work; languages learned and intercultural skills acquired during a stay in another country; ICT skills acquired outside work; skills acquired through volunteering, cultural activities, sports and youth work; and through home-based activities (e.g. taking care of a child).

Non-formal learning means learning which takes place through planned activities (in terms of learning objectives and learning time), where some form of learning support is present (e.g. from a tutor); it may cover programmes to deliver work skills, adult literacy, and basic education for early school leavers. Very common examples of non-formal learning include in-company training, through which companies update and improve the skills of their workers such as ICT skills, structured on-line learning (e.g. by making use of open educational resources), and courses organised by civil society organisations for their members, their target groups or the general public.

4.4. Completion rates as a requirement in external quality assurance

This indicator focuses on the use of completion rates as one of the criteria included in external quality assurance procedures for higher education institutions/programmes. Where the monitoring of completion rates is a requirement, it gives a good indication that they are measured in practice and that the information is likely to be used in policy making. The completion rate indicates the percentage of students who complete the higher education programme they have started.

4.5. Performance-based funding mechanisms with a social dimension focus

Performance-based funding mechanisms with a **social dimension focus** enable funding to be provided to higher education institutions if they meet a defined level of performance in relation to social objectives. The performance may refer to people – staff or students – with defined characteristics in terms of socio-economic status, ethnicity, disability, age, gender, migrant status, etc.

5. Graduate employability

5.1. Labour market forecasting

Labour market forecasting means 'estimating the expected future number of jobs available in an economy [in the medium or long term] and their particular skill or qualification requirements'. Skills needs forecasts are complemented by forecasts of the number of people (supply) with particular skills. The comparison of demand and supply can indicate potential imbalances or skill mismatches in future labour markets ⁽²²⁾.

This indicator looks specifically at whether educational authorities and recognised stakeholders make systematic use of information from labour market forecasts through established mechanisms.

5.2. Required involvement of employers in external quality assurance (QA) procedures

Quality assurance is the most common mechanism used to evaluate and monitor the employability performance of higher education institutions in the EHEA. Through quality assurance, education authorities can encourage HEIs to be responsive to the needs of the labour market. Employer involvement in quality assurance procedures is a relatively common way of ensuring that study programmes provide graduates with the skills they need in the workplace.

This indicator shows whether employers are required to be involved in quality assurance in higher education.

5.3. Requirements or incentives to include work placements in higher education programmes

Practical training is regarded as a key element in enhancing employability as it helps graduates acquire the work-related skills demanded by employers. The term 'work placement' has referred to two types of experience in a working environment in the research literature. Firstly, it is the placement of students in supervised work settings (e.g. through internships) so they can apply the knowledge and skills learned during their studies. Secondly, it refers to a period of voluntary work (also referred to as 'student-community engagement') that is intended to allow students to become familiar with the working environment in general, whilst also conveying some benefit to the community. Nevertheless, this latter type of placement should also be integrated into tertiary programmes in order to have a positive impact on graduate employability.

This indicator looks at whether public authorities in European countries have requirements or give incentives to ensure that higher education institutions include work placements/practical experience as part of their education programmes.

5.4. Career guidance for higher education students

In the context of employability, an important role of higher education institutions is to provide graduates with the work skills that will enable them to find jobs after graduation. Career guidance

⁽²²⁾ Cedefop (European Centre for the Development of Vocational Training), 2012. *Building on skills forecasts – Comparing methods and applications. Conference proceedings*. Luxembourg: Office for Official Publications of the European Communities.

services can help students acquire the job-hunting skills they need to find work. Career guidance is regarded as particularly important for non-traditional learners, especially if it is provided throughout their course of study, not only in their last year(s).

This indicator looks at whether career guidance is available to all home students⁽²³⁾ in higher education institutions throughout their course of study.

5.5. Systematic use of graduate tracking surveys

Graduate tracking surveys seek to track the employment destinations and early careers of higher education graduates. According to research, these self-assessment surveys are valuable tools for evaluating graduate employability. They not only provide the means to measure the percentage of graduates finding employment after graduation, but they are also able to describe the quality of jobs, the time it took to find a job, graduates' job satisfaction, and the match between graduates' skills and job requirements. Furthermore, based on graduate surveys, it is possible to conduct analyses on the relative impact of graduates' individual characteristics and the higher education programme they attended. In this way, these surveys are useful tools for a multi-dimensional evaluation of employability in higher education, particularly when there are established mechanisms by which both education authorities and HEIs can make use of the information gathered.

This indicator examines whether graduate tracking surveys are used systematically by education authorities. Systematic use of graduate tracking surveys means that education authorities have established mechanisms with well-defined actors to make use of the information gained from graduate tracking surveys. Examples of systematic use: quality assurance procedures, mechanisms to determine the number of publicly funded study places, etc.

6. Learning mobility

6.1. Portability of domestic grants and/or loans

Portability refers to the possibility of students to take domestic grants and/or loans to another EHEA system, easing the funding of mobility periods. Portability can apply to either short-term study visits in the framework of a home-country programme (credit mobility) or entire-degree courses (degree mobility), or both.

This indicator examines the extent to which education systems allow for the portability of available domestic support measures, with or without additional restrictions related to geography (country limitations), the types of programme, the field of study, or time. Full portability refers to the possibility of students to take domestic grants and/or loans to another EHEA system for both credit and degree mobility; partial portability limits this possibility to credit mobility periods; while in case of no portability, public grants and/or loans are only provided if students study in the home country or are portable only in exceptional cases (no equivalent programme is available in the home country).

⁽²³⁾ Home students are students that are either nationals of a country or are treated in the same manner from a legal perspective (e.g. EU citizens studying in another EU Member State).

6.2. Percentage of higher education institutions using ECTS

The European Credit Transfer and Accumulation System (ECTS) is a student-centred credit system based on the student workload required to achieve specified learning outcomes.

This indicator looks at the percentage of higher education institutions using ECTS in each education system. The assumption behind the indicator is that reliance on ECTS, without the need for conversion between national credit systems, facilitates the recognition of students' learning achievements during mobility periods in their home countries/institutions. Where a national credit system operates in conjunction with ECTS, there may be aspects of the use of national credits which differ from the agreements on how ECTS should operate, and therefore there is a risk of differing degrees of ECTS compatibility.

6.3. Recognition of qualifications

The automatic mutual recognition of a qualification is the right for holders of a qualification of a certain level that has been issued by one country to be considered for entry to a higher education programme in the next level in another country, without having to go through any separate recognition procedure. This shall not prejudice the right of a higher education institution or the competent authorities to set specific evaluation and admission criteria for a specific programme ⁽²⁴⁾. Such automatic recognition is an important facilitator of degree mobility.

This indicator examines to what extent there is automatic recognition of qualifications within the European Higher Education Area, or whether there are additional procedures in place for the recognition of qualifications. In education systems with a system of full and automatic recognition, all higher education qualifications issued in other EHEA countries are recognised on an equal level with qualifications in the home country. A partial application of this system exists where automatic recognition takes place with a subset of European countries only, and specific procedures are in place for recognition for the other countries. Finally, there is no automatic recognition at system level where additional recognition procedures are in place for all higher education qualifications issued in any other country.

⁽²⁴⁾ See the Council Recommendation of 26 November 2018 on promoting automatic mutual recognition of higher education and upper secondary education and training qualifications and the outcomes of learning periods abroad, OJ C444/01 10.12.2018.

Structural Indicators for Monitoring Education and Training Systems in Europe 2019: Overview of major reforms since 2015

This report contains more than 35 structural indicators on education policies in six areas: early childhood education and care (ECEC), achievement in basic skills, early leaving from education and training (ELET), higher education, graduate employability and learning mobility.

It is an update of the report *Structural indicators for Monitoring Education and Training Systems in Europe 2018*. This year, the report additionally provides an overview of major reforms since 2015 in the said policy areas.

The Eurydice project on *Structural Indicators for Monitoring Education and Training Systems in Europe* provides yearly data since 2015 to illustrate the main policy developments in education and training systems across Europe.

The Eurydice network's task is to understand and explain how Europe's different education systems are organised and how they work. The network provides descriptions of national education systems, comparative studies devoted to specific topics, indicators and statistics. All Eurydice publications are available free of charge on the Eurydice website or in print upon request. Through its work, Eurydice aims to promote understanding, cooperation, trust and mobility at European and international levels. The network consists of national units located in European countries and is coordinated by the EU Education, Audiovisual and Culture Executive Agency. For more information about Eurydice, see <http://ec.europa.eu/eurydice>.

