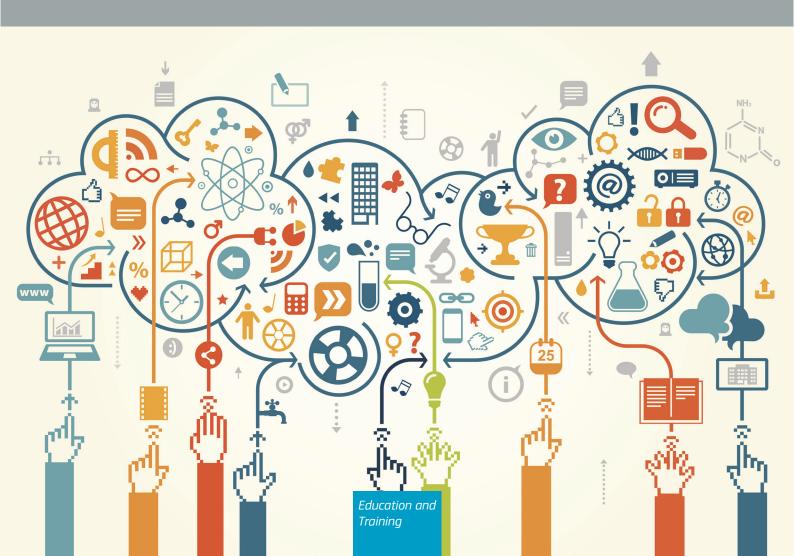


# Structural Indicators for Monitoring Education and Training Systems in Europe 2017

Eurydice Background Report





# Structural Indicators for Monitoring Education and Training Systems in Europe

2017

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### INTRODUCTION

This document contains more than 30 structural indicators on education policies in five areas: early childhood education and care (ECEC), achievement in basic skills, early leaving from education and training (ELET), higher education and graduate employability.

### **Policy context**

The indicators provide information on national policies and structures that contribute to achieving the benchmarks set in the strategic framework for European cooperation in education and training ('ET 2020'). The framework defines several targets to be achieved at European level by 2020:

- At least 95 % of children should participate in early childhood education;
- fewer than 15 % of 15-year-olds should be under-skilled in reading, mathematics and science;
- the rate of early leavers from education and training aged 18-24 should be below 10 %;
- at least 40 % of people aged 30-34 should have completed some form of higher education;
- at least 15 % of adults should participate in lifelong learning;
- at least 20 % of higher education graduates and 6 % of 18-34 year-olds with an initial vocational qualification should have spent some time studying or training abroad;
- the share of employed graduates (aged 20-34 with at least upper secondary education attainment and having left education 1-3 years ago) should be at least 82 %.

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 the contextual information to 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 focus on a specific policy area. Within these reports, each indicator has been developed within a larger framework in order to allow readers to better understand a particular topic.

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

### Earlier updates

The Structural indicators were published in 2015 and 2016 in detailed Eurydice reports presenting methodology, definitions, country examples and visual representation. In 2017, most of the indicators for the EU Member States were discussed and published in a concise form in the European Commission's Education and Training Monitor 2017 (see volume 1, Annex).

This short document presents the complete set of data on the Structural indicators for the 2016/17 school and academic year. It needs to be read as an update of the 2016 report. Additional information can be found in the latest full report <u>Structural indicators for Monitoring Education and Training Systems in Europe 2016</u>.

### **Country coverage**

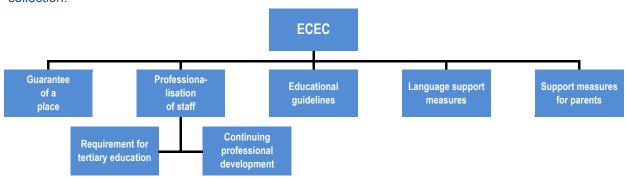
This annual update of the Structural indicators covers all EU Member States, as well as Bosnia and Herzegovina, Iceland, Liechtenstein, Montenegro, the former Yugoslav Republic of Macedonia, Norway, Serbia and Turkey. The information has been collected through a questionnaire completed by the national representative of the Eurydice Network.

### 1. EARLY CHILDHOOD EDUCATION AND CARE (ECEC)

The structural indicators in this chapter provide an overview of key features of early childhood education and care (ECEC) systems. The choice of indicators was based on the research literature analysis as well as a <u>'Proposal for key principles of a quality framework for early childhood education and care'</u> (1), which is currently a foundation of the <u>Proposal for a Council Recommendation on High Quality Early Childhood Education and Care Systems</u> (2).

The proposal for ECEC Quality Framework identified five main aspects of quality in early childhood education and care: access, workforce, curriculum, evaluation/monitoring and governance/funding. Seeing children as active participants in their own learning, the proposal highlights that parents (<sup>3</sup>) are the most important partners and their participation is essential if high-quality ECEC is to be delivered. It also stresses that determining what constitutes high-quality ECEC should be a dynamic, continuous and democratic process.

However, considering the vast range of possible system-level information and having in mind the limitations of scope and time, only several essential and robust indicators have been chosen for yearly monitoring. The diagram below indicates the ECEC structural indicators covered in the Eurydice data collection:



In this analysis, 'early childhood education and care (ECEC)' refers to provision for children from birth through to primary education that is subject to a national regulatory framework, i.e., it must comply with a set of rules, minimum standards and/or undergo accreditation procedures. It includes public, private and voluntary sectors. Only centre-based provision is considered.

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 2½ 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.

<sup>(</sup>¹) European Commission, 2014. Proposal for key principles of a Quality Framework for Early Childhood Education and Care. Report of the Working Group on Early Childhood Education and Care under the auspices of the European Commission. [pdf] Available at: <a href="http://ec.europa.eu/assets/eac/education/policy/strategic-framework/archive/documents/ecec-quality-framework en.pdf">http://ec.europa.eu/assets/eac/education/policy/strategic-framework/archive/documents/ecec-quality-framework en.pdf</a> [Accessed 13 December 2018].

<sup>(</sup>²) https://ec.europa.eu/education/education-in-the-eu/proposal-for-council-recommendation-on-early-childhood-education-and-care\_en

<sup>(3)</sup> The term 'parent' includes mothers, fathers, foster carers, adoptive parents, step-parents and grandparents.

### 1.1. Guarantee of a place

See ECEC summary table 1: Legal framework below.

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 settings when they reach a certain age.

**Legal entitlement to ECEC** refers to a statutory duty on ECEC providers to secure publicly subsidised ECEC provision for all children living in a catchment area whose parents, regardless of their employment, socio-economic or family status, require a place for their child.

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.

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

See ECEC summary table 2: Selected quality aspects below.

**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 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 (4).

The indicator 2.2 presents the basic requirements regarding the **continuing professional development** (CPD). CPD consists of the formal in-service training undertaken throughout a career that allows ECEC staff members to broaden, develop and update their knowledge, skills and attitudes. It includes both subject-based and pedagogical training. Different formats are offered such as courses, seminars, peer observation and support from practitioners' networks. In certain cases, continuing professional development activities may lead to supplementary qualifications.

**Professional duty**: CPD is considered to be one of ECEC staff's professional duties according to regulations or other relevant policy documents.

### 1.3. Curriculum or educational guidelines

See ECEC summary table 2: Selected quality aspects below.

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** as defined in the ECEC quality framework covers developmental care, formative interactions, learning experiences and supportive assessment. It promotes young children's personal and social development and their learning as well as laying the foundations for their future life and citizenship. The ECEC curriculum is set out in formal documentation issued by the responsible authorities.

The learning opportunities to be provided to young children can also be communicated through official **educational guidelines** which explain the content and teaching approaches incorporated into legislation as part of, for example, an ECEC education programme or reference framework. The guidelines often refer to skills, educational standards, curriculum criteria or care/education plans; they may also offer practical advice for ECEC practitioners.

### 1.4. Language programmes as targeted support measure

See ECEC summary table 2: Selected quality aspects below

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

- a) measures for children who have speech, language and communication needs in the language of instruction;
- b) measures to improve the language of instruction for children who speak other language(s) at home:
- c) mother tongue 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 central 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.

 $<sup>\</sup>begin{tabular}{ll} (4) & \underline{\mbox{http://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-isced-2011-en.pdf} \end{tabular}$ 

### 1.5. Parent support

See ECEC summary table 2: Selected quality aspects below

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

**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, the United Kingdom and Switzerland, the Communautés, *Länder*, *Comunidades Autónomas*, devolved administrations and cantons 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.

Home learning guidance refers to fostering the child's learning at home, by providing information and ideas to families about how to help their children with curriculum-related activities, decisions and planning. Home learning guidance aims to inspire parents to offer their children all kinds of learning experiences at home, both implicit and explicit, e.g. by involving children in routine activities (making grocery lists, shopping, preparing meals, getting dressed, making phone call, etc.) and by enriching these activities with stimulating discussions.

Parenting programmes have similar objectives to those set for guidance on home learning. The main distinction between these two types of support lies in their organisation: in the case of parenting programmes, parents attend formal courses covering a variety of topics related to children's education and development. 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).

ECEC summary table 1: Legal framework, 2016/17

	Starting age (in years) of						
	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				
Czech Republic	5		6				
Denmark	6m		6				
Germany	1		6				
Estonia	1y 6m		7				
Ireland	,		6				
Greece		5	6				
Spain	3		6				
France	3		6				
Croatia		6	7				
Italy			6				
Cyprus		4y 8m	5y 8m				
Latvia	1y 6m	5	7				
_ithuania	.,	6	7				
Luxembourg	3	4	6				
Hungary	Ŭ	3	6				
Malta	2y 9m		5				
Netherlands	*	5	6				
Austria		5	6				
Poland	4	6	7				
	4	0					
Portugal	4		6				
Romania	44.0		6				
Slovenia	11m		6				
Slovakia			6				
Finland	9m	6	7				
Sweden	1		7				
United Kingdom-ENG	3		5				
United Kingdom-WLS	3		5				
United Kingdom-NIR			4				
United Kingdom-SCT	3		5				
Bosnia and Herzegovina			6				
Iceland			6				
Liechtenstein	4		6				
Montenegro			6				
Former Yugoslav Republic of Macedonia			5y 8m				
Norway	1		6				
Serbia		5y 6m	6y 6m				
Turkey			5y 6m				

Notes: abbreviation y means years, m means months.

<sup>\*</sup> In the Netherlands, the ECEC system combines a demand-driven structure for children aged 0-4 and supply-side arrangements for all children aged 4 and upwards and for children aged 2.5-4 from disadvantaged backgrounds.

ECEC summary table 2: Selected quality aspects, 2016/17

	2. Staff				5. Parent support	
	2.1. At least one staff member with a tertiary qualification in education sciences	2.2. CPD professional duty or necessary for promotion	Curriculum or educational guidelines      guidelines  4. Language programmes as targeted support measure		5.1. Home- learning guidance	5.2. Parenting programmes
Belgium fr		•	•			
Belgium de	•	•	-	<u> </u>		
Belgium nl		•	•	•		
Bulgaria	<u>=</u>		-	<u> </u>		
Czech Republic		•				
Denmark			•	<u> </u>		
Germany	•	•	•	•	•	
Estonia	•	•	•	•	•	
Ireland			•		•	
Greece	•		•			Only for under 3s
Spain	<b>=</b>	•	•	•		_
France	=		_	<u>=</u>	•	•
Croatia	•	•	•	•	•	
Italy	=		-	<b>=</b>		
Cyprus	-	-	•		-	
Latvia		•	•	•		
Lithuania	•	•	•	•	•	
Luxembourg	•	•	•	<u> </u>	•	
Hungary	<u> </u>	•	•	<u> </u>		
Malta	<u>=</u>		•	•		_
Netherlands	<u></u>		•	•		
Austria		•	•	•	•	<u> </u>
Poland	<u></u>	_	_	<u> </u>	-	•
Portugal	•		_	•	_	•
Romania	<u> </u>	•	•	•	•	•
Slovenia	•	•	•	•	•	•
Slovakia			_	_		
Finland	•	•	•	•		
Sweden	•		•	•		
United Kingdom-ENG	_		•	•	•	•
United Kingdom-WLS		_	_	•	•	•
United Kingdom-NIR	_	_	_	•	•	•
United Kingdom-SCT	<del>-</del>	•	•		•	
Bosnia and Herzegovina	•	•	•		•	•
Iceland	•	•	•	•		
Liechtenstein	<u> </u>	•	_	<u> </u>		
Montenegro	•	•	•	•	•	
Former Yugoslav Republic of Macedonia	<b>=</b>	•	•			
Norway	•		•	•		
Serbia	<u> </u>	•	•			
Turkey	•					

- = children aged 3 years or more (<sup>5</sup>); = 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.

refers to children aged 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

In 2009 the Council 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 (<sup>6</sup>). 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 could contribute to improving student achievement. The indicators relate to compulsory education, which in the majority of countries corresponds to ISCED 1 and 2.



### 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 central 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.

<sup>(6)</sup> 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.

### 2.3. Use of student performance data in external school evaluation

This indicators 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. Central guidelines on addressing student underachievement in initial teacher education (ITE)

This indicator shows whether central 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 central 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 central 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, having 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.

### Summary table on Achievement in basic skills, 2016/17

		n com	nal tests pulsory cation		cent nation reports chievemo		Use of performance data in school evaluation	und	erachi	lines on evement c in ITE	Additional resources provided by top-level authorities to schools with disadvantaged students
Belgium fr	R	M	S	R	М	S	•	R	M	S	•
Belgium de				R	М	S	•	R	M	S	•
Belgium nl			S	R	М	S	•	R	M	S	•
Bulgaria	R	M	S	R	М	S	•	R			•
Czech Republic	R	M	S	R	M	S	•				•
Denmark	R	M	S	R	М	S	•	R	M	S	
Germany	R	M	S	R	М	S	•	R			
Estonia	R	M	S	R	М	S		R	M	S	•
Ireland	R	M	S	R	М	S	•	R	M		•
Greece				R		S					•
Spain	R	M	S	R	М	S	•				•
France	R	M	S	R	М	S	•	R	M	S	•
Croatia				R	М	S					
Italy	R	M		R	М	S	•				•
Cyprus	R	M		R	М	S		R	M	S	•
Latvia	R	M	S	R	М	S	•				•
Lithuania	R	M	S	R	М	S	•	R	M	S	•
Luxembourg	R	M	S	R	М		•				•
Hungary	R	M		R	М		•	R	M	S	
Malta	R	M	S	R	М	S	•	R	M		
Netherlands	R	M	S	R	М	S	•				•
Austria	R	M		R	М		•	R	M	S	•
Poland	R	M	S	R	М	S	•	R	M	S	•
Portugal	R	M	S	R	М	S	•				•
Romania	R	M	S	R	М	S	•				
Slovenia	R	M	S	R	М	S		R	M	S	•
Slovakia	R	M		R	М	S		R	M	S	•
Finland	R	M	S	R	М						•
Sweden	R	M	S	R	М	S	•	R	M	S	•
United Kingdom- ENG	R	M		R	М	S	•	R	М	S	•
United Kingdom- WLS	R	M		R	М		•	R	M	S	•
United Kingdom- NIR	R	M		R	М	S	•	R	M	S	•
United Kingdom- SCT	R	M		R	М	S	•	R	M		•
Bosnia and Herzegovina											•
Switzerland											
Iceland	R	M		R	М		•				•
Liechtenstein	R	M		R	М		•				•
Montenegro	R	М	S	R	М	S	•				•
Former Yugoslav Republic of Macedonia	R	M	S	R	М	S	•				
Norway	R	M		R	М	S		R	M	S	
Serbia	R	М	S		М	S	•				•
Turkey	R	М	S	R	М	S	•				•

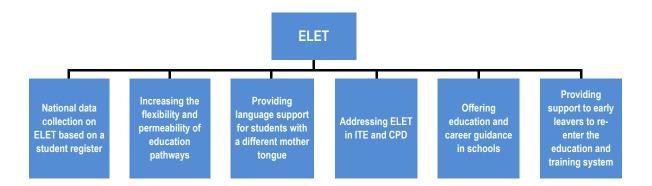
Note: 'R' = reading; 'M' = mathematics; 'S' = science.

### 3. EARLY LEAVING FROM EDUCATION AND TRAINING (ELET)

The structural indicators on early leaving from education and training (ELET) focus on some key policies and measures that together cover the three important areas of action – prevention, intervention and compensation – as highlighted in the EU Council Recommendation of 28 June 2011 (<sup>7</sup>).

In this context, 'early leaving from education and training' refers to students leaving education and training before completing the upper secondary level and obtaining a 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).

The indicators focus on school education: primary education and general secondary as well as school-based initial vocational education (IVET) (ISCED levels 1, 2 and 3). Adult education may be covered too in the context of compensation policies (see indicator 3.6).



### 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 finally 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.

<sup>(7)</sup> 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)

### 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 (8). 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.

# 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' (9), 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.

<sup>(8)</sup> Eurostat (EU-LFS) [edat\_lfse\_02]

<sup>(9)</sup> 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))

### ELET Summary table 1, 2016/17

	National data     collection on	2. Policies for incr	2. Policies for increasing the flexibility and permeability of education pathways:			
	ELET based on a student register	2.1.Providing alternative education & training pathways	2.2. Facilitating transitions within education & training systems	2.3.Recognising skills and/or qualifications	Policies for language support for students with a different mother tongue	
Belgium fr	•	•	•	•	•	
Belgium de			•	•	•	
Belgium nl	•	•	•	•	•	
Bulgaria	•	•			•	
Czech Republic	•	•	•	•	•	
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						
Switzerland						
Iceland	•	•				
Liechtenstein	•	•	•	•	•	
Montenegro	•	•		•	•	
Former Yugoslav Republic of Macedonia			•			
Norway	•	•	•		•	
Serbia		•			•	
Turkey	•					

### ELET Summary table 2, 2016/17

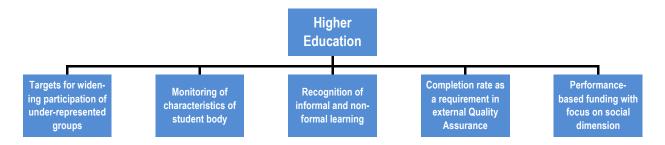
•	4. Policies encouraging the inclusion of career guidance in		Policies to support early leavers re-enter the education & training system:			
	inclusion of ELET in ITE and/or CPD	schools, ISCED 2 and 3	6.1.Second chance education	6.2. Education and career guidance	6.3. Youth guarantee	
Belgium fr	•	•	•		•	
Belgium de	•		•			
Belgium nl	•	•	•	•		
Bulgaria			•	•		
Czech Republic		•	•	•	•	
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						
Switzerland						
Iceland						
Liechtenstein		•	•	•		
Montenegro			•			
Former Yugoslav Republic of 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

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 (<sup>10</sup>). This benchmark has since become part of the double headline target on education within the Europe 2020 growth strategy.

The following structural indicators have been developed in relation to this headline target, and guided by the Commission's communication, 'Supporting growth and jobs: An agenda for the modernisation of Europe's higher education systems' (<sup>11</sup>). 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.



### 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.

### 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.

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<sup>(10)</sup> 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.

<sup>(11)</sup> 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].

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

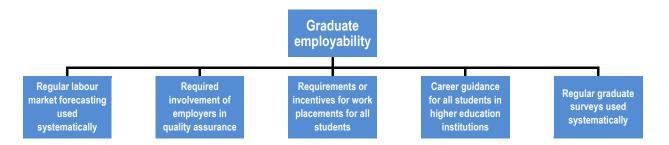
Performance-based funding mechanisms with a **social dimension focus** enable funding to be provided to higher education institutions if they meet a defined level of performance in relation to social objectives. The performance may refer to people – staff or students – with defined characteristics in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

### Summary table on higher education, 2016/17

·	Quantitative targets     for widening     participation and/or     attainment of under-     represented groups	Monitoring of socioeconomic background of students	Recognition of informal or nonformal learning in entry to higher education	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		•		•	
Czech Republic					
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					
Switzerland					
Iceland			•	•	
Liechtenstein		•	•		
Montenegro			•	•	
Former Yugoslav Republic of Macedonia		•	•	•	
Norway		•	•	•	
Serbia	•	•		•	
Turkey		•	•		

### 5. GRADUATE EMPLOYABILITY

Employability plays a central role in the Europe 2020 strategy as well as in the Education and Training 2020 ('ET 2020') (<sup>12</sup>) and higher education modernisation strategies. Within the ET 2020 strategy, the Council of the European Union adopted a benchmark on graduate employability in 2012 (<sup>13</sup>). 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 %' (<sup>14</sup>). In this context, the term 'graduates' refers not only to those finishing higher education (HE) but also to those graduating with upper secondary or post-secondary, non-tertiary qualifications. Public authorities and higher education institutions have a major role to play in achieving this goal.



### 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 (<sup>15</sup>).

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 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.

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<sup>(12)</sup> 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.

<sup>(13)</sup> Council conclusions of 11 May 2012 on the employability of graduates from education and training, OJ 2012/C 169/04, 15.6.2012.

<sup>(14)</sup> Ibid., p. 10.

<sup>15)</sup> 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.

# 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 pubic 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 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 (<sup>16</sup>) 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.

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<sup>(16)</sup> 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).

### Summary table on graduate employability, 2016/17

	Regular labour market forecasting used systematically	Required involvement of employers in external QA	Requirements     OR incentives for work placements for all students	Career guidance for all students in HEIs	5. Regular graduate surveys used systematically
Belgium fr	•	•		•	•
Belgium de		•	•		
Belgium nl		•		•	•
Bulgaria	•	•	•	•	•
Czech Republic		•		•	
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	•	•			
Switzerland					
Iceland				•	
Liechtenstein		•		•	•
Montenegro	•	•		•	•
Former Yugoslav Republic of Macedonia	•	•	•	•	
Norway	•	•	•	•	
Serbia					
Turkey				•	

# Structural Indicators for Monitoring Education and Training Systems in Europe — 2017

This document contains data tables with 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 2016.

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 co-ordinated by the EU Education, Audiovisual and Culture Executive Agency. For more information about Eurydice, see <a href="http://ec.europa.eu/eurydice">http://ec.europa.eu/eurydice</a>.

