



Education

Education, vocational training and more generally lifelong learning play a vital role in both an economic and social context. The opportunities which the EU offers its citizens for living, studying and working in other countries make a major contribution to cross-cultural understanding, personal development and the realisation of the EU's full economic potential. Each year, well over a million EU citizens of all ages benefit from EU-funded educational, vocational and citizenship-building programmes.

The Treaty establishing the European Community⁽¹⁾ acknowledged the importance of these areas by stating that 'the Community shall contribute to the development of quality education by encouraging cooperation between Member States and, if necessary, by supporting and supplementing their action ... The Community shall implement a vocational training policy which shall support and supplement the action of the Member States'. As such, the European Commission follows up on policy cooperation and work with the Member States, while funding programmes, such as the Lifelong Learning Programme (LLP).

The European Council adopted in 2001 a set of goals and objectives for education and training systems that are to be attained by 2010⁽²⁾, with education ministers agreeing on three goals:

- to improve the quality and effectiveness of education and training systems;
- to ensure that they are accessible to all;
- to open up education and training to the wider world.

These ambitious goals were subsequently subdivided into specific objectives covering the various types and levels of education and training, including areas such as: teacher training; basic skills; the integration of information and communication technologies (ICTs); efficiency of investments; language learning; lifelong guidance; flexibility to make learning accessible to all; mobility; and citizenship education.

(1) Consolidated version of the Treaty establishing the European Community, Chapter 3, Articles 149(1) and 150(1) (OJ C 352, 24.12.2002, p. 33); http://eur-lex.europa.eu/en/treaties/dat/12002E/pdf/12002E_EN.pdf.

(2) <http://ec.europa.eu/education/policies/2010/doc/repfutobjen.pdf>.



Under the principle of subsidiarity every Member State retains responsibility for organising their education system and deciding its content. The EU does however promote cooperation in this field through a variety of funding and action programmes. Indeed, political cooperation has been strengthened through the Education and Training 2010 work programme which integrates previous actions in the fields of education and training at a European level. Five EU benchmarks were set for 2010:

- to limit the rate of early school leavers to no more than 10 %;
- to increase to at least 15 % the total number of graduates in maths, science and technology, while at the same time, reducing the gender imbalance in these subjects;
- to aim for 85 % of 22 year olds to have completed an upper secondary education;
- to halve the number of low-achieving 15 year olds in reading, maths and science, and;
- to increase the EU average level of participation in lifelong learning to at least 12.5 % of the adult working-age population (25 to 64 years old).

As of 2007, the Lifelong Learning Programme became the flagship programme in the field of education and training, covering all learning opportunities from childhood to old age. Over the period 2007 to 2013, this programme has a budget of EUR 7 000 million in order to

support projects that foster interchange, cooperation and mobility between education and training systems within the EU. It is made-up of four sub-programmes that focus on the different stages of education and training:

- Comenius for schools;
- Erasmus for higher education;
- Leonardo da Vinci for vocational education and training, and;
- Grundtvig for adult education.

Quantified targets have been set for each of the sub-programmes:

- Comenius should involve at least three million pupils in joint educational activities, over the period of the programme;
- Erasmus should reach a total of three million individual participants in student mobility actions;
- Leonardo da Vinci should increase placements in enterprises to 80 000 persons per year by the end of the programme, and;
- Grundtvig should support the mobility of 7 000 individuals involved in adult education each year by 2013

The measurement of progress towards these objectives within the field of education policy requires a range of comparable statistics on enrolment in education and training, numbers of graduates and teachers, language learning, student and researcher mobility, educational expenditure, as well as data on educational attainment and adult learning.

4.1 School enrolment and levels of education

The standards on international statistics on education coming from administrative sources are set by three international organisations, jointly managing data collection:

- the United Nations Educational, scientific, and Cultural Organisation institute for statistics (UNESCO-UIS);
- the Organisation for Economic Co-operation and Development (OECD), and;
- the Statistical Office of the European Union (Eurostat).

The UNESCO / OECD / Eurostat (UOE) questionnaire on education statistics constitutes the main source of information and is the basis for the core components of the Eurostat database on education statistics; Eurostat also collects data on regional enrolments and foreign language learning. The definitions and methodological requirements for the joint UOE data collection and for the Eurostat data collection are available on the Eurostat website⁽³⁾. Data on educational attainment and adult learning are mainly provided by household surveys, i.e. the EU Labour Force Survey, which will soon be complemented by an adult education survey⁽⁴⁾, while the continuous vocational training survey (CVTS) provides information on training participation, volume and costs for enterprises.

Introduction

School helps young people acquire basic life skills and competences necessary for their personal development. Besides their own personal development, the quality of a pupil's school experience affects their place in society, educational attainment, and employment opportunities too. The quality of the education experienced by pupils is linked directly to the quality of teaching, which in turn is linked to the demands placed upon teachers, the training they receive and the roles they are asked to fill. With this in mind, several Member States are in the process of revising their school curricula in line with the changing needs of society and the economy, as well as reflecting on how to improve teacher training and evaluation.

Demographic trends in the last three decades reflect reductions in birth rates, that have resulted in the structure of the EU's population ageing and the proportion of those aged under 30 decreasing in the majority of Member States. These changes can have a significant impact on human and material resources required for the sound functioning of education systems – such as average class sizes or teacher recruitment strategies.

Most Europeans spend significantly longer in education than the legal minimum requirement. This reflects the choice to enrol in higher education, as well as increased enrolment in pre-primary education and wider participation in life-long learning initiatives, such as mature (adult) students returning to education – often in order to retrain or equip themselves for a career change.

(3) http://circa.europa.eu/Public/irc/dsis/edtcsl/library?l=/public/unesco_collection.

(4) http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CC-05-005/EN/KS-CC-05-005-EN.PDF.



At the age of 4, a high proportion of children in the EU are already enrolled in pre-primary educational institutions. The general objectives for pre-primary education are fairly similar across countries, focusing on the development of children's independence, well-being, self-confidence, citizenship, and preparation for life and learning at school.

On average, compulsory education lasts 9 or 10 years in most of the EU: lasting longest in Hungary, the Netherlands and the United Kingdom. Age is the sole criterion for admission to compulsory primary education, which starts at the age of 5 or 6 in most countries, although the Nordic countries, as well as Bulgaria and Estonia have a compulsory starting age of 7.

While national curricula include broadly the same subjects across the Member States, the amount of time allocated to each subject varies considerably. In addition, there are wide-ranging differences in the freedoms that teachers have to shape the content of their classes or follow a strict curriculum. The most significant differences between countries tend to relate to the degree of instruction given in foreign languages, information and communication technology, or religion. In contrast, all countries allocate a considerable amount of time to teach their mother tongue and mathematics.

Teaching time tends to be more evenly spread across subjects in compulsory secondary education, with more emphasis given to natural and social sciences, as well as foreign languages. Pupils from

a particular country follow the same common curriculum throughout their full-time compulsory education in most Member States, although in Germany, Luxembourg, the Netherlands and Austria parents have to choose a particular type of education for their child at the end of primary school.

The Comenius programme addresses developments in education and school policy and has the following goals:

- to improve and increase the mobility of pupils and educational staff;
- to enhance and increase partnerships between schools in different Member States, with at least three million pupils taking part in joint educational activities by 2010;
- to encourage language learning, innovative ICT-based content, services and better teaching techniques and practices;
- to enhance the quality and European dimension of teacher training, and;
- to improve pedagogical approaches and school management.

Member States have themselves set a number of other benchmarks for improving education. These include benchmarks for, among others, reading proficiency, attainment in mathematics, science and technology, early school leaving, and the completion of secondary school.

Definitions and data availability

The **International Standard Classification of Education (ISCED)** is the basis for international education statistics, describing different levels of education, as well as fields of education and training⁽⁵⁾. The current version, ISCED 97 distinguishes seven levels of education:

- ISCED level 0: **pre-primary education** – defined as the initial stage of organised instruction; it is school- or centre-based and is designed for children aged at least 3 years;
- ISCED level 1: **primary education** – begins between 5 and 7 years of age, is compulsory in all countries and generally lasts from four to six years;
- ISCED level 2: **lower secondary education** – continues the basic programmes of the primary level, although teaching is typically more subject-focused; usually, the end of this level coincides with the end of compulsory education;
- ISCED level 3: **upper secondary education** – generally begins at the end of compulsory education; the entrance age is typically 15 or 16 years and entrance qualifications and other minimum entry requirements are usually needed; instruction is often more subject-oriented and typical duration varies from two to five years;
- ISCED level 4: **post-secondary non-tertiary education** – straddles the boundary between upper secondary and tertiary education; typical examples are programmes designed to prepare pupils for studies at level 5 or programmes designed to prepare pupils for direct labour market entry;

- ISCED level 5: **tertiary education (first stage)** – entry normally requires the successful completion of level 3 or 4; includes tertiary programmes with academic orientation which are largely theoretically based and occupation orientation which are typically shorter and geared for entry into the labour market;
- ISCED level 6: **tertiary education (second stage)** – leads to an advanced research qualification (Ph.D. or doctorate).

The indicator for **four-year-olds in education** presents the percentage of four-year-olds who are enrolled in education-oriented pre-primary institutions. These institutions provide education-oriented care for young children. They must recruit staff with specialised qualifications in education. Day nurseries, playgroups and day care centres, where the staff are not required to hold a qualification in education, are not included. The indicator for **18-year-olds** who are still in any kind of school (all ISCED levels) provides an indication of the number of young people who have not abandoned their efforts to improve their skills through initial education and it includes both those who had a regular education career without any delays as well as those who are continuing even if they had to repeat some steps in the past.

(5) http://www.unesco.org/education/information/nfsunesco/doc/isced_1997.htm.



Pupil-teacher ratios are calculated by dividing the number of full-time-equivalent pupils and students in each level of education by the number of full-time-equivalent teachers at the same level; all institutions, both public and private, are included. This ratio should not be confused with average class-size, as: there can be a difference between the number of hours of teaching provided by individual teachers and the number of hours of instruction prescribed for pupils; more than one teacher can be teaching in a class at the same time; or teachers for special education needs can work with small groups or on a one-to-one basis.

The indicator **youth education attainment level** is defined as the proportion of the population aged 20 to 24 having completed at least an upper secondary education, i.e. with an education level ISCED 3a, 3b or 3c long minimum (numerator). The denominator consists of the total population of the same age group, excluding non-response.

The indicator for **early school leavers** is defined as the proportion of the population aged 18 to 24 with at most a lower secondary level of education, who are no longer in further education or training (respondents declared not having received any education or training in the four weeks preceding the survey). The denominator consists of the total population of the same age group, excluding non-response.

Main findings

There were about 93.9 million pupils and students enrolled in educational establishments in the EU-27 in 2006. The highest share of pupils and students in the EU-27 total was accounted for by Germany, where 14.4 million pupils and students attended education establishments in 2006; this figure was 1.7 million higher than the next largest student population that was registered in the United Kingdom, and 2.1 million higher than in France.

The proportion of students found in each level of education varied considerably between the Member States and reflects, to some degree, the demographic structure of each population. The high proportion of pupils in primary education in Luxembourg (46.0 % in 2006) reflects the lack of a developed tertiary education sector in this country, whereas Ireland, Cyprus and Portugal also reported a relatively high proportion of students within primary education (upwards of 40 %) – reflecting relatively high birth rates. At the other end of the spectrum, Greece, Slovenia, the Baltic Member States, Poland and Finland all had relatively high proportions (around one quarter or more) of their student populations within the tertiary education sector.

The figures above exclude pre-primary education – where 86.8 % of all four-year olds attended establishments in the EU-27 in 2006. Enrolment rates in pre-primary education ranged from 100 % in Belgium, France and Italy, to less than one child in two across Finland, Ireland and Poland.



More than three quarters (77.4 %) of all 18-year olds within the EU-27 remained within the education system in 2006. There was a considerable variation in this proportion between the Member States: as six countries reported more than nine out of ten people of this age remaining in education, while less than half of all 18-year-olds were still attending an educational establishment in three of the Member States (Cyprus, Malta and the United Kingdom); note these figures may reflect a number of factors, in particular, the need for students to go abroad to continue their (tertiary) education, or the practise of making students re-take a whole year if their performance at the end of each academic year is not deemed to be satisfactory.

Pupil/teacher ratios within primary education ranged from an average of less than 11 pupils per teacher in Greece, Italy, Lithuania, Luxembourg (2004), Hungary and Portugal in 2006, to almost double that rate in the Ireland, France (2005) and the United Kingdom (all above 19 pupils per teacher). Between 2001 and 2006 there was a general reduction in the average number of pupils per teacher in most of the Member States.

The average number of pupils per teacher was generally lower for secondary education than for primary education, with an average of less than ten pupils for every teacher in Greece, Spain, Luxembourg (2004) and Portugal within upper secondary education. Germany had by far the highest average number of pupils per teacher within the upper secondary education sector (19.5) in 2006, rising from 13.7 pupils per teacher in 2001.

Data on educational attainment show that, in 2007, just over three quarters (78.1 %) of the EU-27's population aged 20 to 24 had completed at least an upper secondary level of education. However, 14.8 % of those aged 18 to 24 (16.9 % of men and 12.7 % of women) were early school leavers, with at most a lower secondary education.

**Table 4.1:** Pupils and students (excluding pre-primary education) (1)

	Breakdown of total number of pupils and students (% of total)									
	Total (ISCED 1-6) (1 000)		Primary level of education (ISCED 1)		Lower secondary level of education (ISCED 2)		Upper and post-secondary non-tertiary education (ISCED 3-4)		Tertiary education (ISCED 5-6)	
	2001	2006	2001	2006	2001	2006	2001	2006	2001	2006
EU-27	96 001	93 901	31.2	30.4	24.4	24.4	25.7	25.1	17.2	20.0
Euro area (2)	56 630	57 796	31.0	30.4	27.5	26.3	21.7	23.5	18.2	19.3
Belgium	2 304	2 410	33.5	30.4	17.1	18.0	33.8	35.2	15.6	16.4
Bulgaria	1 322	1 193	28.3	22.9	27.7	25.2	25.3	31.5	18.7	20.4
Czech Republic	1 932	1 869	32.6	25.3	26.8	26.1	27.1	30.5	13.5	18.0
Denmark	1 029	1 142	38.5	36.4	20.0	20.6	23.0	22.9	18.5	20.0
Germany	14 515	14 394	24.2	23.1	38.9	36.7	22.1	23.7	14.4	15.9
Estonia	306	278	38.3	28.6	20.7	21.3	22.1	25.6	18.9	24.5
Ireland	987	1 036	45.0	44.6	18.6	17.1	19.6	20.4	16.9	18.0
Greece	1 906	2 042	33.4	31.6	18.9	16.6	22.6	19.8	25.1	32.0
Spain	7 597	7 529	33.0	35.2	26.2	26.3	16.6	14.8	24.1	23.8
France	11 849	12 321	32.4	32.9	27.9	26.7	21.9	22.4	17.1	17.9
Italy	9 144	9 464	30.9	29.7	19.9	19.1	29.4	29.8	19.8	21.4
Cyprus	140	146	45.6	40.9	23.4	22.3	22.5	22.7	8.5	14.1
Latvia	510	472	24.6	16.7	33.7	31.8	21.5	23.8	20.2	27.8
Lithuania	787	784	26.9	19.2	42.2	39.2	13.7	16.2	17.3	25.4
Luxembourg	70	77	47.3	46.0	22.9	23.7	26.1	26.8	3.6	3.5
Hungary	1 924	1 952	25.5	21.3	26.3	24.5	31.1	31.8	17.2	22.5
Malta	78	78	43.0	37.9	37.2	35.6	10.3	15.0	9.5	11.4
Netherlands	3 217	3 318	39.8	38.5	24.1	23.7	20.3	20.3	15.7	17.5
Austria	1 464	1 471	26.8	24.2	26.1	26.8	29.0	31.8	18.1	17.2
Poland	9 153	8 663	35.2	30.0	13.1	18.6	32.4	26.6	19.4	24.8
Portugal	2 002	1 862	40.0	40.4	20.6	21.1	20.0	18.8	19.4	19.7
Romania	3 954	3 831	27.6	24.5	33.4	25.1	25.5	28.6	13.5	21.8
Slovenia	403	403	21.4	23.2	24.7	19.3	31.2	29.1	22.7	28.5
Slovakia	1 114	1 089	26.9	21.6	35.8	31.7	24.3	28.5	12.9	18.2
Finland	1 172	1 246	33.5	29.9	16.4	16.4	26.2	29.0	23.9	24.8
Sweden	2 085	2 096	37.3	33.0	17.1	20.1	27.5	26.7	17.0	20.2
United Kingdom	15 038	12 736	30.6	35.5	15.4	17.9	40.3	28.2	13.7	18.3
Croatia	:	733	:	26.6	:	28.2	:	26.6	:	18.7
FYR of Macedonia	387	366	32.0	28.7	33.2	31.6	24.4	26.4	10.4	13.2
Turkey	14 893	16 275	70.2	65.6	:	:	:	:	10.8	14.4
Iceland	74	84	42.7	36.1	15.9	16.5	27.7	28.7	13.7	18.6
Liechtenstein	:	6	:	36.2	:	26.1	:	27.5	:	10.3
Norway	993	1 068	42.9	40.2	16.3	17.9	21.6	21.8	19.1	20.1
Switzerland	:	1 340	:	38.6	:	22.4	:	23.0	:	15.3
Japan	20 254	19 095	36.5	37.9	20.4	19.1	22.2	20.5	19.6	21.4
United States	63 653	66 793	39.7	36.4	19.7	19.5	19.2	17.9	21.4	26.2

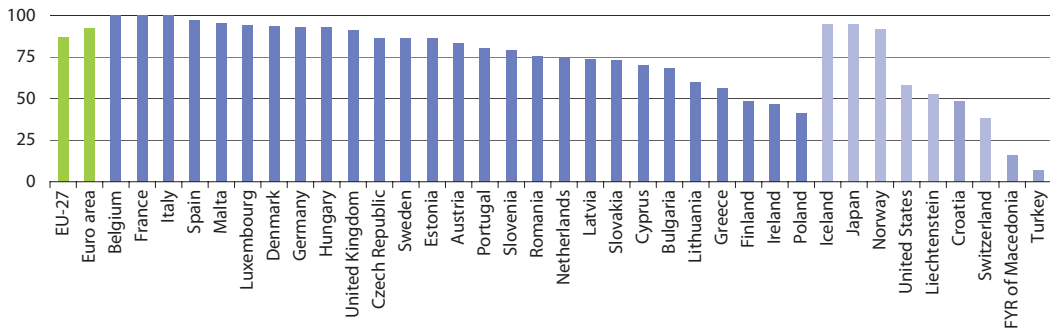
(1) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm).

(2) EA-13 instead of EA-15 for 2001.

Source: Eurostat (tps00051 and educ_enr1t1)

Figure 4.1: Four-year-olds in education, 2006 (1)

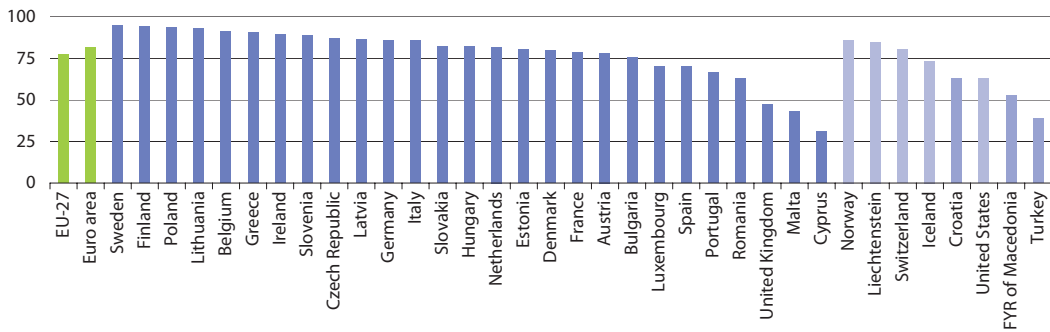
(1) (% of all four-year-olds)

(1) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm).

Source: Eurostat (tps00053)

Figure 4.2: 18-year-olds in education, 2006 (1)

(1) (% of all 18-year-olds)

(1) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm).

Source: Eurostat (tps00060)



Table 4.2: Pupil/teacher ratio in primary, lower and upper secondary education (1)
(average number of pupils per teacher)

	Primary education (ISCED 1)		Lower secondary/second stage of basic education (ISCED 2)		Upper secondary education (ISCED 3)	
	2001	2006	2001	2006	2001	2006
Belgium	13.4	12.6	:	9.4	9.8	10.2
Bulgaria	17.7	15.8	13.0	12.3	11.3	11.7
Czech Republic	19.4	17.3	14.5	12.3	13.1	11.9
Denmark	10.2	:	10.3	11.4	13.3	:
Germany	19.4	18.7	15.7	15.5	13.7	19.5
Estonia	14.7	14.1	11.2	12.3	10.3	13.3
Ireland	20.3	19.4	15.1	:	15.1	14.6
Greece	12.7	10.6	9.8	8.0	11.3	8.3
Spain	14.7	14.2	:	12.5	11.0	7.8
France (2)	19.5	19.4	13.9	14.2	10.9	10.3
Italy	10.8	10.7	9.9	10.3	10.4	11.0
Cyprus	21.1	16.8	15.1	11.6	13.6	12.7
Latvia	17.6	11.8	13.2	10.5	13.2	11.7
Lithuania	16.9	10.7	12.0	8.5	:	:
Luxembourg (3)	11.0	10.7	9.1	:	9.1	9.0
Hungary	11.3	10.4	11.2	10.2	12.5	12.3
Malta	19.0	13.7	9.9	9.3	18.1	14.3
Netherlands	17.2	15.3	:	:	17.1	15.8
Austria	14.3	13.9	9.8	10.4	9.9	11.3
Poland	12.5	11.4	13.1	12.6	16.8	12.7
Portugal	11.6	10.6	9.9	8.3	8.0	7.5
Romania	:	17.1	14.8	12.2	13.3	15.7
Slovenia	13.1	14.9	13.3	10.2	13.8	14.0
Slovakia	20.7	18.6	14.5	13.7	12.9	14.2
Finland	16.1	15.0	10.9	9.7	17.0	15.8
Sweden	12.4	12.1	12.4	11.4	16.6	13.8
United Kingdom	20.8	19.8	17.5	16.7	18.9	11.4
Croatia	:	17.7	:	12.8	:	11.8
FYR of Macedonia	21.2	:	11.4	:	18.9	17.3
Turkey	29.8	26.7	:	:	17.2	15.8
Iceland	12.6	:	:	10.6	10.9	10.8
Liechtenstein	:	10.5	:	7.3	:	11.4
Norway	:	10.9	10.9	10.2	9.2	9.7
Japan	20.6	19.2	16.6	14.9	14.0	12.7
United States	:	14.6	:	14.7	:	15.7

(1) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm).

(2) 2005 instead of 2006.

(3) 2004 instead of 2006.

Source: Eurostat (tps00054 and educ_iste)

**Table 4.3:** Youth education attainment level and early school leavers (1)

	Youth education attainment level (%)		Early school leavers (%)					
			Total		Male		Female	
	2002	2007	2002	2007	2002	2007	2002	2007
EU-27	76.7	78.1	17.1	14.8	19.3	16.9	14.9	12.7
Euro area	72.7	74.5	19.3	17.1	22.0	19.6	16.6	14.5
Belgium	81.6	82.6	12.4	12.3	14.9	13.9	9.9	10.7
Bulgaria	77.4	83.3	21.0	16.6	22.5	16.3	19.6	16.9
Czech Republic (2)	92.2	91.8	5.5	5.5	5.3	5.7	5.7	5.4
Denmark	78.6	70.8	8.6	12.4	10.3	15.7	6.9	8.9
Germany	73.3	72.5	12.6	12.7	12.6	13.4	12.6	11.9
Estonia	81.4	80.9	12.6	14.3	15.6	21.0	9.6	:
Ireland	84.0	86.7	14.7	11.5	18.4	14.2	10.9	8.7
Greece	81.1	82.1	16.7	14.7	20.7	18.6	12.6	10.7
Spain	63.7	61.1	29.9	31.0	36.4	36.1	23.1	25.6
France	81.7	82.4	13.4	12.7	14.9	14.6	11.9	10.9
Italy	69.6	76.3	24.3	19.3	27.9	22.6	20.7	15.9
Cyprus	83.5	85.8	15.9	12.6	22.3	19.5	11.0	6.8
Latvia	77.1	80.2	19.5	16.0	26.7	19.7	12.2	12.3
Lithuania	81.3	89.0	14.3	8.7	15.1	11.4	13.4	5.9
Luxembourg	69.8	70.9	17.0	15.1	14.4	19.2	19.6	11.1
Hungary	85.9	84.0	12.2	10.9	12.5	12.5	11.8	9.3
Malta	39.0	54.7	53.2	37.6	56.5	41.5	49.7	33.3
Netherlands	73.1	76.2	15.0	12.0	15.7	14.4	14.3	9.6
Austria	85.3	84.1	9.5	10.9	8.7	11.6	10.2	10.2
Poland	89.2	91.6	7.6	5.0	9.5	6.4	5.6	3.6
Portugal	44.4	53.4	45.1	36.3	52.6	42.0	37.5	30.4
Romania	76.3	77.4	23.2	19.2	24.3	19.2	22.1	19.1
Slovenia	90.7	91.5	4.8	4.3	6.2	5.7	3.3	2.7
Slovakia	94.5	91.3	5.6	7.2	6.7	8.1	4.6	6.3
Finland	85.8	86.5	9.9	7.9	12.6	9.7	7.3	6.3
Sweden (2)	86.7	87.2	10.4	12.0	11.4	13.3	9.3	10.7
United Kingdom (2)	77.1	78.1	17.8	13.0	18.8	14.6	16.7	11.4
Croatia (3)	90.6	94.6	8.3	3.9	9.1	5.2	7.4	5.3
Turkey	42.8	46.4	54.8	47.6	45.4	39.4	63.5	55.0
Iceland (2, 3)	48.5	49.3	28.8	28.1	32.7	31.5	24.8	24.6
Norway (2, 3)	94.8	93.3	14.0	5.9	14.9	7.4	13.1	4.3
Switzerland (3)	79.4	78.1	6.7	7.6	6.3	8.5	7.1	6.7

(1) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm).

(2) 2006 instead of 2007 for early school leavers.

(3) 2006 instead of 2007 for youth education attainment level.

Source: Eurostat (tsiir110 and tsisc060)



4.2 Foreign language learning

Introduction

The EU recognises 23 official languages, in addition to which there are regional, minority languages, and languages spoken by migrant populations. School is the main opportunity for the vast majority of people to learn these languages – as linguistic diversity is actively encouraged within schools, universities, adult education centres and the workplace.

For several decades it has been mandatory for most European children to learn at least one foreign language during their compulsory education, with the time devoted to foreign language instruction generally increasing in recent years. In 2002, the Barcelona European Council recommended that at least two foreign languages should be learnt from a very early age by each pupil. This recommendation has been implemented to varying degrees, usually for compulsory secondary education, either by making it mandatory to learn a second language, or ensuring that pupils have the possibility to study a second foreign language as part of their curriculum. In November 2005, the European Commission published a Communication (COM(2005) 596) titled 'A New Framework Strategy for Multilingualism'⁽⁶⁾. The EU promotes multilingualism and aims for a situation in which every EU citizen can speak at least two foreign languages in addition to their own mother tongue, based on the premise that multilingual citizens are better equipped to take advantage of educational opportunities and employment opportunities.

This Communication complements an action plan for 2004-2006 for the promotion of language learning and linguistic diversity⁽⁷⁾, which focused on: extending the benefits of language learning to all citizens as a lifelong activity; improving the quality of language teaching, and; building an environment favourable to languages.

Definitions and data availability

Data on the number of pupils studying foreign languages are related to the corresponding numbers of students enrolled; mentally handicapped students enrolled in special schools are excluded.

The **average number of foreign languages learned per pupil** is collected for different ISCED levels. The data refer to all pupils, even if teaching languages does not start in the first years of instruction for the particular ISCED level considered. This indicator is defined as the sum of language students divided by the total number of students enrolled in the educational level considered. Each student studying a foreign language is counted once for each language he or she is studying, i.e. students studying more than one language are counted as many times as the number of languages studied. Irish, Luxembourgish and regional languages are excluded, although provision may be made for them in certain Member States. Allowing for exceptions, when one of the national languages is taught in schools where it is not the teaching language, it is not considered as a foreign language.

(6) <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2005:0596:FIN:EN:PDF>.

(7) http://ec.europa.eu/education/doc/official/keydoc/actlang/act_lang_en.pdf.

Main findings

Within primary education establishments, there is a clear pre-eminence in terms of the proportion of pupils that (choose to) study English. Learning English is mandatory in a number of countries within secondary education establishments, and a number of Member States witnessed (near) 100 % shares of pupils learning this language in primary education. The highest shares of primary education pupils studying English were recorded in Greece, Spain, Italy, Malta and Austria, where upwards of nine out of every ten children was studying English. The relative importance of English as a foreign language may be further magnified because pupils tend to receive more tuition in their first foreign language than they do for any subsequent languages they may choose to study.

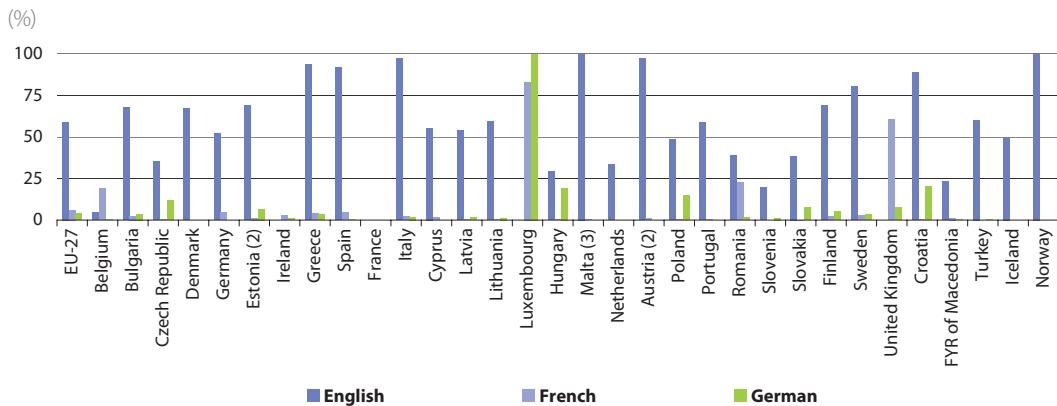
The 12 Member States that joined the EU since 2004 are in a particular position with respect to language teaching, as many of them used to make it compulsory

to study Russian. This situation has since changed and now most pupils have a free choice as to the language(s) they (wish to) study. In these countries too there has been a marked increase in the proportion of pupils learning English (often above 50 % of all students). Luxembourg is also of particular interest, insofar as this country has three official languages, with most pupils receiving tuition in Luxembourgish, German and French at a primary level, while English is introduced as a foreign language at secondary school.

Turning to language learning within upper secondary education, some 84.1 % of all EU-27 students at ISCED level 3 were studying English in 2006, compared with less than a quarter studying French (24.3 %) or German (22.2 %).

Luxembourg and Estonia stood out as the two countries with the highest average number of foreign languages learnt per pupil; note this indicator includes other languages (such as Russian), besides English, French and German.

Figure 4.3: Proportion of pupils learning foreign languages in primary education, by language, 2006 (1)



(1) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm); France, not available; Luxembourg, not available for English; the Netherlands and Norway, not available for French and German; Slovenia and Iceland, not available for French.

(2) Estimates.

(3) 2005 for French and German.

Source: Eurostat (educ_ilang), Unesco, OECD

**Table 4.4:** Foreign languages learnt per pupil in upper secondary education (ISCED level 3) (1)

	Average number of foreign languages learnt per pupil (number)		Pupils learning English in general programmes (%)		Pupils learning French in general programmes (%)		Pupils learning German in general programmes (%)	
	2001	2006	2001	2006	2001	2006	2001	2006
EU-27	1.3	1.3	71.0	84.1	18.1	22.2	19.4	24.3
Belgium	1.8	1.7	94.1	94.4	48.3	48.1	30.3	28.4
Bulgaria	1.4	1.5	79.0	86.1	20.8	15.3	38.6	40.3
Czech Republic	1.3	1.4	96.6	100.0	14.7	25.0	75.7	72.2
Denmark	1.5	1.5	91.0	99.9	22.9	22.6	69.6	71.9
Germany	0.7	0.9	92.0	94.3	29.4	28.7	-	-
Estonia	2.2	2.2	90.9	92.6	4.3	6.1	46.3	44.1
Ireland	0.9	0.9	-	-	66.2	60.5	19.1	18.2
Greece	1.0	1.0	94.3	94.0	14.0	8.6	3.1	2.9
Spain	1.2	1.2	95.5	94.6	23.9	27.1	0.9	1.1
France	1.7	1.7	99.3	99.4	-	-	31.2	22.8
Italy	1.2	1.4	81.0	96.9	27.0	21.4	7.8	7.7
Cyprus	1.6	1.6	89.8	88.1	68.7	38.3	1.3	2.4
Latvia	:	1.2	89.2	94.9	4.0	4.1	51.8	35.1
Lithuania	1.6	1.4	73.7	82.3	7.8	5.4	37.0	27.2
Luxembourg	2.3	2.3	93.1	97.0	89.4	97.0	87.6	97.0
Hungary	1.2	1.2	60.6	73.3	6.1	6.2	47.8	49.9
Malta (2)	0.7	0.6	80.7	63.5	8.1	7.9	0.8	1.7
Netherlands	1.6	:	98.2	100.0	26.7	70.1	32.0	86.2
Austria	:	1.4	:	96.9	:	54.1	-	-
Poland	1.4	1.7	90.1	90.0	15.2	10.0	62.4	64.0
Portugal	:	0.8	:	50.7	:	15.1	:	1.6
Romania	1.4	1.6	86.1	94.8	84.8	83.6	10.8	11.6
Slovenia	1.4	1.6	95.6	98.9	7.8	10.2	83.3	77.0
Slovakia	1.4	1.5	95.9	97.7	13.1	16.0	78.8	72.6
Finland	:	:	99.5	99.5	22.2	19.7	43.3	35.4
Sweden	1.7	1.6	99.8	99.9	25.6	22.4	53.5	32.4
United Kingdom	:	0.6	-	-	:	34.8	:	13.1
Croatia	:	1.4	:	98.3	:	3.4	:	65.6
FYR of Macedonia	1.3	1.5	:	:	:	:	:	:
Turkey	:	0.8	:	67.3	:	0.7	:	6.5
Iceland	1.3	1.5	65.9	76.1	16.4	17.1	32.8	30.7
Norway	:	0.8	:	:	:	:	:	:

(1) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm).

(2) 2005 instead of 2006 for average number of foreign languages learnt per pupil.

Source: Eurostat (tps00056, tps00057, tps00058 and tps00059), Unesco, OECD

4.3 Tertiary education

Introduction

Europe has around 4 000 higher education institutions, with over 17 million students and 1.5 million staff; some European universities are among the most well-respected in the world. Higher education plays a central role in the development of human beings and modern societies, enhancing social, cultural and economic development, as well as active citizenship and ethical values.

The European Commission has published a modernisation agenda for universities as part of the Lisbon strategy for growth and jobs. The main fields for reform were identified as:

- Curricular reform: a three cycle system (bachelor-master-doctorate), competence based learning, flexible learning paths, recognition, mobility;
- Governance reform: university autonomy, strategic partnerships, including with enterprises, quality assurance;
- Funding reform: diversified sources of university income better linked to performance, promoting equity, access and efficiency, including the possible role of tuition fees, grants and loans.

Curricular reforms are also promoted through the Bologna Process⁽⁸⁾, which sets out plans to create a European area for higher education by 2010, facilitating

student mobility, the transparency and recognition of qualifications, while promoting a European dimension within higher education and the attractiveness of European institutions to non-Community students. This initiative has been extended to cover 46 countries within the wider Europe.

The Erasmus programme is one of the most well-known European initiatives. Around 90 % of European universities take part in it and some 1.9 million students have already participated in exchanges since it started in 1987. Erasmus became part of the EU's lifelong learning programme in 2007 and was expanded to cover student placements in enterprises, university staff training and teaching for enterprise staff. The programme seeks to expand its mobility actions in the coming years, with a target of 3 million Erasmus students by 2012.

Some of the most recent policy initiatives in this area include efforts to instigate a dialogue between universities and business to develop links between universities and businesses in areas such as, curriculum development, governance, entrepreneurship, continuing education and knowledge transfer. Otherwise, a Council Resolution on modernising universities for Europe's competitiveness in a global knowledge economy was adopted on 23 November 2007⁽⁹⁾.

(8) http://ec.europa.eu/education/policies/educ/bologna/bologna_en.html.

(9) <http://register.consilium.europa.eu/pdf/en/07/st16/st16096-re01.en07.pdf>.



Definitions and data availability

ISCED is used to define the levels of education: **tertiary education** includes both programmes which are largely theoretically-based and designed to provide qualifications for entry to advanced research programmes and professions with high skill requirements, as well as programmes which are classified at the same level of competencies but are more occupationally-oriented and lead to direct labour market access. Persons who are enrolled in tertiary education (including university and non-university studies) in the regular education system in each country correspond to the target population for policy in higher education. It provides an indication of the number of persons who had access to tertiary education and are expected to complete their studies, contributing to an increase of the educational attainment level of the population in the country in case they continue to live and work in the country at the end of their studies.

Student and teacher mobility are both seen as important tools for increasing innovation, productivity and competitiveness. Historically, it has been rare for countries to have precise details concerning the number of students that study abroad in third countries. Instead, these statistics have usually been collected by summing the numbers of students studying in receiving countries. This method has a downside; as a lack of information on the distribution of students according to their nationality is likely to lead to underestimation (for example, the number of students studying abroad may be a count of students enrolled on a certain day, whereas the actual number of foreign students could be higher as many students stay abroad for just a few months).

The number of foreign students may be defined as all students with a foreign nationality – however, this means that permanent residents with a foreign nationality are included in the numerator, even though they have not changed country for their studies. The statistics in this edition of the Yearbook present, for the first time, information on student mobility that is based on the **actual number of foreign students studying in the host country** and excludes foreigners who are resident.

Main findings

There were almost 19 million students active within tertiary education in the EU-27 in 2006. Proportionally more young men than women opt for a vocational education, while women outnumber men within tertiary education. This may reflect the desire of some young men to enter a vocational profession as rapidly as possible, as well as changing social attitudes and professional activity concerning the position of women. As the emphasis placed on qualifications grows in relation to entering further education or obtaining a job, it is important to note that the participation rate of young women in education after the completion of compulsory education is higher than that for young men in most Member States, and that young women obtain more upper secondary education qualifications than young men.

The highest number of students in tertiary education was recorded in Germany and the United Kingdom – around 2.3 million in each country, equivalent to more than 12 % of the EU-27 total, while there were 2.2 million in France, 2.1 million in Poland and 2 million in Italy.



Gender disparities in educational enrolment and attainment at a tertiary level have been reversed in many Member States during the last couple of decades, with women accounting for 55.1 % of the total number of tertiary students in 2006 in the EU-27; Germany was the only country where the proportion of male tertiary students (50.3 % of the total) was higher than the share accounted for by women.

Educational policies have increasingly shifted to promote particular subject areas, where take-up among female students remains relatively low (for example, science, mathematics and computing, or engineering, manufacturing and construction-related studies). Instead, women appear to have a higher propensity to study health and welfare, humanities and arts, social sciences, business

and law, while a higher proportion of men chose to study science and technology related subjects, as well as agriculture and veterinary related subjects. Some 39.7 % of tertiary students in science, mathematics and computing disciplines in the EU-27 were female in 2006, while the proportion of female students among those studying engineering, manufacturing and construction-related studies was 25.1 %, both these values marked an increase compared with the year before.

Some 9.0 % of the tertiary education student population in the EU-27 in 2006 was found to be studying in another country. Some of the most popular destinations for foreign students include countries where English, French or German are spoken, such as the United Kingdom, Austria, Belgium, Germany or France.

**Table 4.5:** Students in tertiary education, 2006 (1)

	Total number of students in tertiary education (1 000)	of which, studying (%)						
		Humanities & arts	Social sciences, business & law	Science, math. & computing	Engin., manif. & construction	Agricul. & veterinary	Health & welfare	Services
EU-27	18 783	12.6	32.6	10.1	13.9	1.8	12.3	3.5
Euro area	11 199	13.1	30.4	10.5	14.8	1.8	12.7	3.5
Belgium	394	10.5	27.5	6.9	10.6	2.5	22.1	1.5
Bulgaria	244	7.9	42.5	5.0	21.0	2.5	6.4	7.6
Czech Republic	337	8.5	27.6	8.5	14.4	3.7	12.1	5.3
Denmark	229	15.0	29.5	8.0	10.1	1.5	22.2	2.3
Germany	2 290	15.6	27.4	15.2	15.7	1.4	14.7	2.5
Estonia	68	11.6	39.0	10.0	12.3	2.5	8.5	8.5
Ireland	186	15.7	23.1	11.6	10.4	1.2	12.8	4.5
Greece (2)	653	11.6	31.9	15.7	16.5	5.9	6.9	5.0
Spain	1 789	10.4	31.9	11.4	17.8	3.4	9.9	5.6
France	2 201	16.5	34.5	12.3	11.5	1.0	14.2	3.5
Italy	2 029	15.5	36.5	7.9	15.6	2.3	12.5	2.6
Cyprus	21	8.5	47.4	12.7	6.1	0.1	6.6	9.2
Latvia	131	7.0	54.2	5.2	10.0	1.2	5.2	4.9
Lithuania	199	7.0	41.8	6.1	18.0	2.3	9.2	3.4
Luxembourg	3	8.2	45.2	8.4	15.0	0.0	0.4	0.0
Hungary	439	8.0	41.6	5.2	12.4	2.9	8.2	8.3
Malta	9	14.0	37.4	8.4	7.6	0.2	20.3	2.2
Netherlands	580	8.4	38.0	6.7	8.3	1.2	16.4	5.9
Austria	253	14.9	35.0	12.4	11.8	1.6	9.4	2.1
Poland	2 146	9.2	40.9	9.7	12.6	2.2	5.7	5.4
Portugal	367	8.6	31.5	7.3	21.9	1.9	16.0	5.6
Romania	835	10.5	50.0	4.7	18.2	2.9	5.7	3.0
Slovenia	115	7.5	43.5	5.4	15.6	3.1	7.4	8.7
Slovakia	198	6.0	28.3	9.0	16.4	2.8	15.2	5.8
Finland	309	14.5	22.5	11.4	25.9	2.2	13.3	4.8
Sweden	423	12.6	26.2	9.7	16.3	0.9	17.2	1.8
United Kingdom	2 336	17.0	27.0	13.7	8.2	0.9	18.8	0.7
Croatia	137	9.9	40.5	7.4	16.3	3.8	7.5	10.2
FYR of Macedonia	48	10.7	32.6	7.2	18.3	3.6	10.2	4.5
Turkey	2 343	6.9	47.4	7.5	13.3	3.5	5.6	3.5
Iceland	16	14.8	38.0	8.0	7.3	0.5	12.4	1.5
Liechtenstein	1	1.4	71.4	0.0	25.0	0.0	2.2	0.0
Norway	215	12.1	32.2	8.9	6.7	0.8	19.3	4.3
Switzerland	205	13.0	37.1	10.7	13.4	1.2	10.2	3.8
Japan	4 085	15.8	29.3	2.9	16.1	2.1	12.2	5.7
United States	17 488	10.6	27.3	8.9	6.7	0.6	13.9	5.1

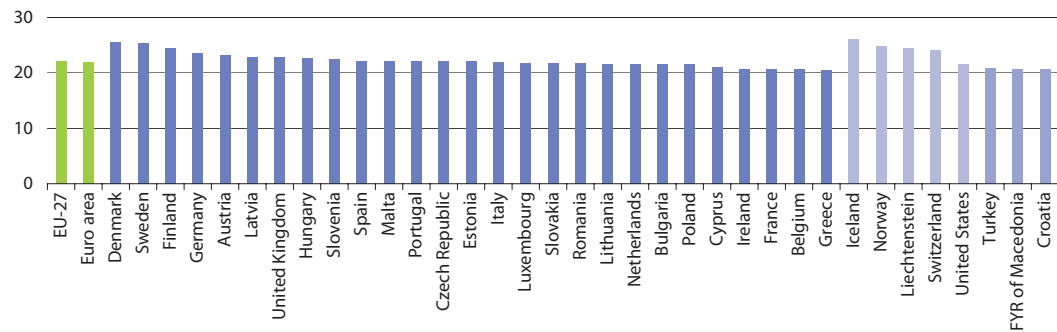
(1) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm).

(2) Breakdown by subject is for 2005.

Source: Eurostat (tps00062 and educ_enr15)

Figure 4.4: Median age in tertiary education, 2006 (1)

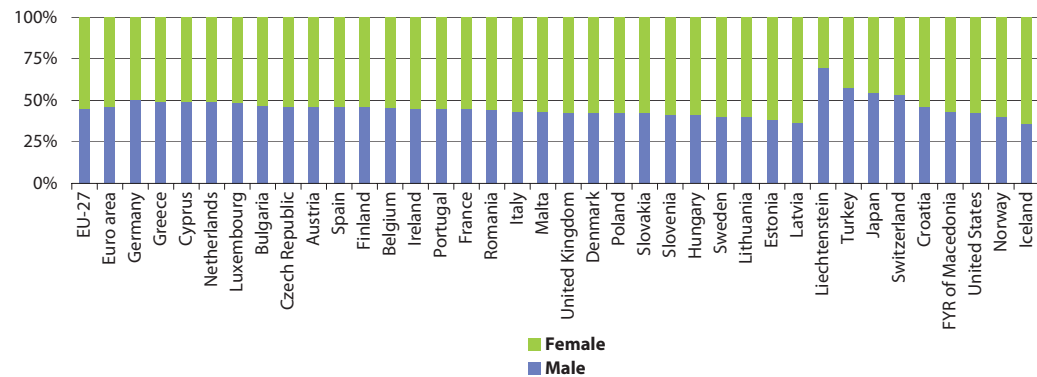
(years)

(1) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm).

Source: Eurostat (tps00061)

Figure 4.5: Gender breakdown of tertiary students, 2006 (1)

(% of total number of tertiary students)

(1) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm).

Source: Eurostat (tps00063)

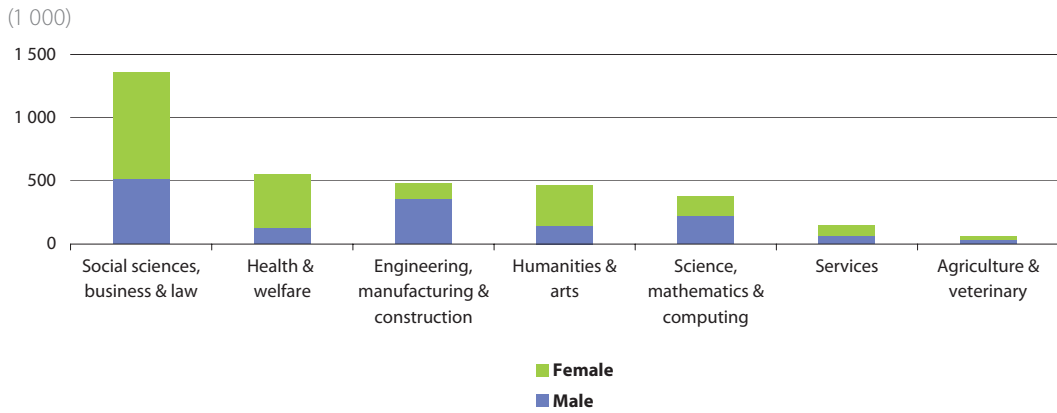
**Table 4.6:** Graduates from tertiary education, by field of education, 2006 (1)

	Total number of graduates from tertiary education (1 000)	of which, studying (%)						
		Humanities & arts	Social sciences, business & law	Science, math. & computing	Engin., manif. & construction	Agricul. & veterinary	Health & welfare	Services
EU-27	3 846	12.2	35.3	9.9	12.5	1.7	14.4	3.8
Euro area	2 113	12.9	33.8	10.2	14.3	1.8	15.2	4.3
Belgium	82	9.8	28.3	7.7	9.3	2.3	18.9	2.1
Bulgaria	45	8.4	47.8	5.3	15.6	2.0	6.2	7.7
Czech Republic	69	7.5	28.7	7.6	15.0	3.6	12.4	5.6
Denmark	48	13.8	30.4	7.2	10.9	2.1	23.8	3.3
Germany	415	15.9	23.7	11.4	13.5	1.8	20.4	3.1
Estonia	12	11.4	36.6	9.4	9.9	2.2	11.6	8.6
Ireland	59	19.1	34.7	13.8	12.1	0.6	11.0	2.4
Greece (2)	60	13.1	28.0	15.0	12.3	3.6	9.7	8.5
Spain	286	9.2	28.3	10.0	16.5	1.8	14.2	7.6
France	644	12.1	41.6	11.1	14.7	1.5	13.0	3.9
Italy	279	17.0	38.7	6.8	15.9	1.7	12.4	2.6
Cyprus	4	10.0	43.7	9.7	4.2	0.2	6.7	14.3
Latvia	26	6.2	56.0	4.6	6.8	1.0	5.2	4.9
Lithuania	43	6.7	40.9	5.9	15.9	1.8	9.0	3.5
Luxembourg	:	:	:	:	:	:	:	:
Hungary	70	7.6	43.8	5.8	6.7	2.6	8.8	8.8
Malta	3	15.5	44.2	6.3	4.8	1.0	13.0	3.1
Netherlands	117	8.2	38.2	6.8	8.3	1.5	16.5	4.5
Austria	35	8.7	29.7	12.6	19.8	2.1	9.9	3.7
Poland	504	8.7	42.6	8.5	8.4	1.6	7.8	5.0
Portugal	72	10.3	32.2	11.3	15.1	1.8	24.2	7.2
Romania	175	11.9	48.2	4.5	15.8	2.7	9.6	2.1
Slovenia	17	5.1	49.6	3.5	12.6	2.4	9.9	7.7
Slovakia	40	6.3	27.4	8.6	15.0	2.9	17.1	6.7
Finland	40	13.5	23.4	8.7	20.7	2.3	19.1	6.0
Sweden	61	6.1	24.8	8.1	18.4	1.0	25.3	2.2
United Kingdom	640	15.4	30.5	13.4	8.2	0.9	18.3	0.8
Croatia	21	9.4	39.4	6.3	11.5	3.6	8.9	13.5
FYR of Macedonia	7	13.4	26.9	7.4	13.8	4.0	12.3	5.4
Turkey	373	6.4	37.7	7.8	14.3	4.0	5.7	6.2
Iceland	3	11.2	34.1	8.0	6.4	0.7	11.7	1.4
Liechtenstein	0	3.0	54.5	0.0	34.8	0.0	7.6	0.0
Norway	34	8.8	27.0	8.2	7.5	1.1	24.5	4.8
Switzerland	69	6.5	39.4	10.3	12.1	1.6	11.0	6.7
Japan	1 068	15.2	27.0	3.0	18.2	2.2	12.8	9.7
United States	2 639	13.2	38.1	8.9	7.2	1.1	13.5	6.5

(1) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm).

(2) 2005.

Source: Eurostat (educ_grad5)

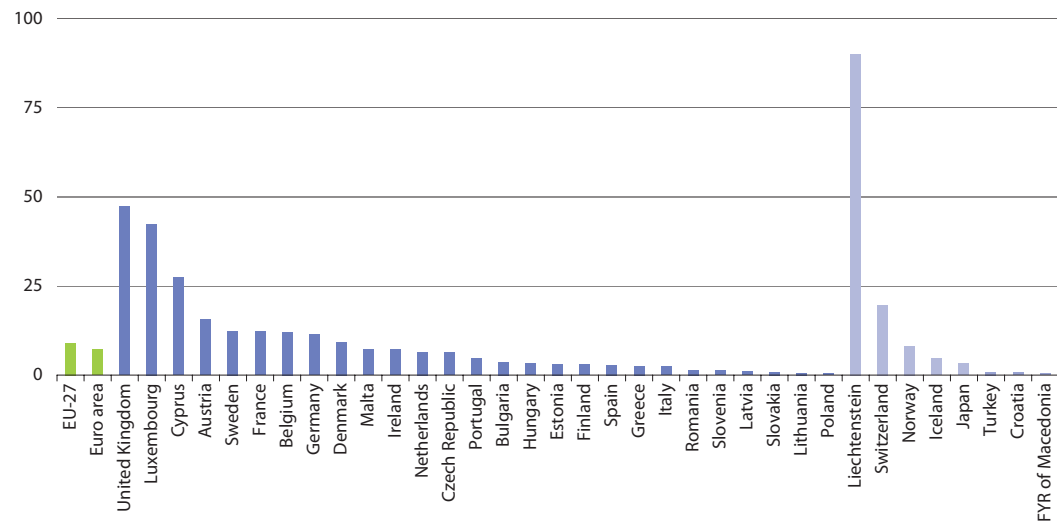
Figure 4.6: Graduates from tertiary education, by field of education and gender, EU-27, 2006 (1)

(1) Estimates.

Source: Eurostat (educ_grad5)

Figure 4.7: Student mobility in tertiary education (ISCED 5-6), 2006 (1)

(foreign students as a % of all students in tertiary education)



(1) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm).

Source: Eurostat (educ_enr18 and educ_enr11t)



4.4 Lifelong learning and vocational training

Introduction

The European Commission has integrated its various educational and training initiatives under a single umbrella, the Lifelong Learning Programme (LLP). This new programme replaces previous education, vocational training and e-Learning programmes, which ended in 2006.

Lifelong learning is defined as encompassing learning for personal, civic and social purposes, as well as for employment-related purposes. It can take place in a variety of environments, both inside and outside formal education and training systems. Lifelong learning implies raising investment in people and knowledge; promoting the acquisition of basic skills, including digital literacy and broadening opportunities for innovative, more flexible forms of learning. The aim is to provide people of all ages with equal and open access to high-quality learning opportunities, and to a variety of learning experiences throughout Europe.

The EC Treaty recognised the importance of vocational training in Article 150 by stating that 'Community action shall aim to ... facilitate access to vocational training ...; stimulate cooperation on training between educational or training establishments and firms'⁽¹⁰⁾.

A European Commission communication of November 2001 entitled 'Making a European area of lifelong learning a reality'⁽¹¹⁾ underlines in paragraph 1.1 that

the 'Lisbon European Council confirmed lifelong learning as a basic component of the European social model'. As such, learning is no longer given weight only in the area of education; it is also seen as a critical factor in the areas of employment and social security, economic performance and competitiveness.

The European employment strategy (EES)⁽¹²⁾, agreed on 22 July 2003, introduced two guidelines to tackle the need for improved skills levels through lifelong learning. These guidelines called upon the Member States to address labour shortages and skills bottlenecks and also encourage them to implement comprehensive lifelong learning strategies in order to equip all individuals with the skills required of a modern workforce. The guidelines stated that policies should aim to increase investment in human resources, in particular through the training of adults by enterprises. At the beginning of 2005, the European Commission made a proposal for a revision of the Lisbon strategy, revising the EES by publishing employment guidelines in conjunction with macro-economic and micro-economic guidelines.

The Leonardo da Vinci programme in the field of vocational education and training (VET) is designed to encourage projects which give individuals the chance to improve their competences, knowledge and skills through a period spent abroad, as well as to encourage Europe-wide cooperation between training organisations.

(10) Consolidated version of the Treaty establishing the European Community, Chapter 3, Article 150(2) (OJ C 352, 24.12.2002, p. 33); http://eur-lex.europa.eu/en/treaties/dat/12002E/pdf/12002E_EN.pdf.

(11) 'Making a European area of lifelong learning a reality', COM(2001) 678 final of 21 November 2001; http://ec.europa.eu/education/policies/lll/life/communication/com_en.pdf.

(12) <http://ec.europa.eu/social/main.jsp?catId=101&langId=en>.

The Gruntvig programme was launched in 2000 and now forms part of the Lifelong Learning Programme. It aims to provide adults with ways of improving their knowledge and skills. It not only covers learners in adult education, but also the teachers, trainers, education staff and facilities that provide these services.

Definitions and data availability

Lifelong learning encompasses all purposeful learning activity, whether formal, non-formal or informal, undertaken on an ongoing basis with the aim of improving knowledge, skills and competence. The intention or aim to learn is the critical point that distinguishes these learning activities from non-learning activities such as cultural activities or sports activities.

Within the domain of lifelong learning statistics, formal education corresponds to education and training in the regular system of schools, universities and colleges. Non-formal education and training includes all types of taught learning activities which are not part of a formal education programme. Note that the statistics presented do not, therefore, cover informal learning, which corresponds to self-learning (through the use of printed material, computer-based learning/training, online Internet-based web education, visiting libraries, etc).

The target population for lifelong learning statistics refers to all persons in private households aged between 25 and 64 years old. Data are collected through the EU Labour Force Survey (LFS). The denominator used in this subchapter consists of the total population of the same age group, excluding those who did not answer to the question participation to education and training. From 27 October 2006, this indicator is based on annual averages of quarterly data instead of one unique reference quarter in spring.

Additional information is available from two other surveys:

- the third European survey of continuing vocational training in enterprises (CVTS3) which was implemented with 2005 as reference year in the EU-27 Member States and Norway, and;
- an adult education survey which was carried out by EU, EFTA and candidate countries between 2005 and 2008; at the time of writing, the results of this survey are not yet available.

Continuing Vocational Training (CVT) concerns persons employed by enterprises; the qualifying criteria are: the training must be planned in advance; the training must be organised or supported with the specific goal of learning; the training must be financed at least partly by the enterprise.



Main findings

In 2007, the proportion of persons aged 25 to 64 receiving some form of lifelong learning in the four weeks preceding the survey was 9.7 % within the EU-27. This figure was 1.2 points higher than the corresponding share for 2003. The proportion of the population who had participated in lifelong learning activities was higher among women (10.6 % in 2007) than among men (8.8 %). Sweden, Denmark, the United Kingdom and Finland stood out as they reported considerably higher proportions of their respective populations participating in lifelong learning (between 32 % and 23 %); in contrast, Bulgaria and Romania reported lifelong learning participation rates of less than 2 %.

As regards vocational training, the proportion of all enterprises that provided training to their employees in 2005 ranged from 21 %, in Greece, to 90 % in the United Kingdom, and averaged 60 % across the EU.

The preliminary EU results of the survey reflect, on average, a slight decrease in the proportion of enterprises offering training to their employees in comparison with the results of the previous survey (conducted in 1999). The northern countries and especially the Scandinavian countries, where considerable efforts were made in previous years, experienced a decrease in participation rates for vocational training, while the proportion rose considerably in most of the Member States that joined the EU since 2004.

The rate of participation of employees in continuous vocational training (CVT) activities was generally highest in the EU-15 Member States. On average, one in three employees (33 %) participated in CVT courses, with this proportion ranging from 11 %, in Latvia, to nearly 60 % in the Czech Republic.

The intensity of continual vocational training, as measured by the average hours of training per employee was similar between the EU-15 Member States and those that joined the EU since 2004. However, three groups of countries could be clearly distinguished: those with high proportions of training enterprises and high intensity in CVT courses, those with high rates of training enterprises and relatively low intensity in CVT courses, and those with low rates of training enterprises and relatively high intensity in CVT courses.

The third vocational training survey included, for the first time, information regarding initial vocational training within enterprises (for example, apprentices). Germany, the United Kingdom, Austria, Denmark, the Netherlands, Italy and France had the highest proportion of enterprises providing initial vocational training in 2005. In these countries the shares were often close to 50 %, while in the majority of the other Member States it did not exceed 10 %.

Table 4.7: Lifelong learning (1)

(% of the population aged 25 to 64 participating in education and training)

	Total		Male		Female	
	2003	2007	2003	2007	2003	2007
EU-27 (2)	8.5	9.7	7.9	8.8	9.1	10.6
Euro area (2)	6.5	8.4	6.4	8.0	6.6	8.8
Belgium	7.0	7.2	7.0	7.0	6.9	7.4
Bulgaria	1.3	1.3	1.1	1.4	1.4	1.3
Czech Republic	5.1	5.7	4.8	5.5	5.4	5.9
Denmark (2)	24.2	29.2	21.0	24.2	27.4	34.2
Germany	6.0	7.8	6.4	8.0	5.6	7.6
Estonia	6.7	7.0	5.0	4.6	8.2	9.3
Ireland (2)	5.9	7.6	5.1	6.2	6.8	9.0
Greece (2)	2.6	2.1	2.6	2.2	2.7	2.1
Spain	4.7	10.4	4.3	9.3	5.1	11.5
France (2)	7.1	7.4	7.0	7.0	7.2	7.9
Italy	4.5	6.2	4.2	5.9	4.8	6.6
Cyprus (2)	7.9	8.4	7.1	8.1	8.5	8.6
Latvia	7.8	7.1	5.4	4.6	10.0	9.3
Lithuania	3.8	5.3	2.8	3.6	4.7	6.8
Luxembourg (2)	6.5	7.0	6.8	6.5	6.1	7.4
Hungary (2)	4.5	3.6	4.0	3.0	4.9	4.1
Malta	4.2	6.0	4.7	6.4	3.6	5.7
Netherlands (2)	16.4	16.6	16.1	16.1	16.8	17.0
Austria (2)	8.6	12.8	8.6	11.6	8.6	14.0
Poland	4.4	5.1	3.9	4.7	4.9	5.5
Portugal	3.2	4.4	3.0	4.4	3.4	4.5
Romania	1.1	1.3	1.1	1.2	1.2	1.4
Slovenia (2)	13.3	14.8	12.0	13.5	14.7	16.1
Slovakia (2)	3.7	3.9	3.5	3.4	3.9	4.3
Finland (2)	22.4	23.4	18.6	19.4	26.2	27.5
Sweden (2)	31.8	32.0	28.4	26.0	35.4	38.3
United Kingdom (3)	27.2	26.6	22.7	22.0	30.9	31.2
Croatia	1.8	2.9	1.8	3.1	1.9	2.8
Turkey	1.2	1.5	1.7	1.8	0.7	1.2
Iceland (2)	29.5	27.9	25.0	22.4	34.1	33.7
Norway (2)	17.1	18.0	16.2	17.1	18.0	18.9
Switzerland (2)	24.7	22.5	25.3	21.7	24.0	23.4

(1) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm).

(2) Break in series, 2003.

(3) Break in series, 2003 and 2007.

Source: Eurostat (tsiem080)

**Table 4.8:** Continuous vocational training, 2005

	Training enterprises (% of all enterprises)	Employees participating in CVT courses (%)	Cost of CVT courses (% of total labour cost)	Average time spent in CVT courses per employee (hours)	Share of enterprises providing IVT (% of all enterprises)
EU (1)	60	33	1.6	9	30
Belgium	63	40	1.6	12	9
Bulgaria	29	15	1.1	4	4
Czech Republic	72	59	1.9	14	3
Denmark	85	35	2.7	10	45
Germany	69	30	1.3	9	55
Estonia	67	24	1.6	7	1
Ireland	:	:	:	:	:
Greece	21	14	0.6	3	3
Spain	47	33	1.2	9	14
France	74	46	2.3	13	37
Italy	32	29	1.3	7	40
Cyprus	51	30	1.3	7	2
Latvia	36	11	0.8	3	5
Lithuania	46	15	1.2	5	17
Luxembourg	72	49	2.0	16	28
Hungary	49	16	2.6	6	6
Malta	46	32	1.8	11	12
Netherlands	75	34	2.0	12	41
Austria	81	33	1.4	9	49
Poland	35	21	1.3	6	9
Portugal	44	28	1.1	7	5
Romania	40	17	1.1	5	2
Slovenia	72	50	2.0	14	9
Slovakia	60	38	1.8	12	1
Finland	77	39	1.5	10	17
Sweden	78	46	2.1	15	7
United Kingdom	90	33	1.3	7	51
Norway	86	29	1.3	9	23

(1) EU averages calculated on the basis of the available country data (i.e. excluding Ireland).

Source: Eurostat (trng_cvts3_01, trng_cvts3_41, trng_cvts3_53, trng_cvts3_71 and trng_cvts3_85)

4.5 Educational expenditure

Introduction

Expenditure on education is an investment that may help foster economic growth, enhance productivity, contribute to personal and social development, and reduce social inequalities. The proportion of total financial resources devoted to education is one of the key choices made in each country by governments, enterprises and individual students and their families.

There is an ongoing debate in many Member States as to how to increase education funding, improve efficiency and promote equity. Possible approaches include charging tuition fees, administrative or examination charges, the introduction of grants, or income-contingent loans to try to stimulate enrolment rates in higher education, in particular among the less well-off members of society. Another possible area for raising funds is through promoting partnerships between business and higher educational establishments.

Education accounts for a significant proportion of public expenditure in all of the Member States – the most important budget item being expenditure on staff. The cost of teaching increases significantly as a child moves through the education system, with expenditure per pupil/student considerably higher in universities than primary schools. Although tertiary education costs more per head, the highest proportion of total education spending is devoted to secondary education systems, as these teach a larger share of the total number of pupils/students.

Definitions and data availability

Indicators on education expenditure cover schools, universities and other public and private institutions involved in delivering or supporting educational services. Expenditure on institutions is not limited to expenditure on instructional services but also includes public and private expenditure on ancillary services for students and families, where these services are provided through educational institutions. At the tertiary level, spending on research and development can also be significant and is included, to the extent that the research is performed by educational institutions.

Total public expenditure on education includes direct public funding for educational institutions and transfers to households and enterprises. In general, the public sector finances educational expenditure by assuming direct responsibility for the current and capital expenditure of schools (direct public financing of schools), or by offering financial support to pupils/students and their families (public-sector grants and loans) and by subsidising the education or training activities of the private business sector or non-profit organisations (transfers to households and enterprises). **Expenditure on educational institutions from private sources** comprises school fees; materials (such as textbooks and teaching equipment); transport to school (if organised by the school); meals (if provided by the school); boarding fees; and expenditure by employers on initial vocational training. **Expenditure per pupil/student in public and private institutions** measures



how much central, regional and local government, private households, religious institutions and enterprises spend per pupil/student. It includes expenditure for personnel, as well as other current and capital expenditure. **Public schools/institutions** are defined as those which are directly or indirectly administered by a public education authority. **Private schools/institutions** are directly or indirectly administered by a non-governmental organisation (such as a church, trade union, a private business concern or another body) and are considered to be independent if they get less than 50 % of their funding from any level of government (local, regional or national).

Main findings

Public expenditure on education in the EU-27 in 2005 was equivalent to 5.0 % of GDP, while the expenditure of both public and private sources of funds on educational institutions amounted to 5.4 % of GDP.

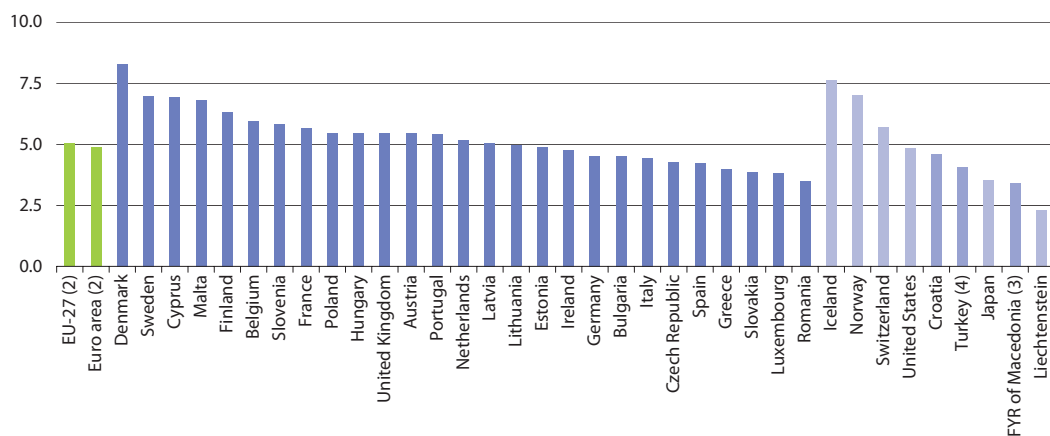
The highest public spending on education was observed in Denmark (8.3 %

of GDP), while Sweden (7.0 %), Cyprus (6.9 %), Malta (6.8 %) and Finland (6.3 %) also recorded relatively high rates. Most Member States reported that public expenditure on education accounted for between 4 and 6 % of their GDP, although the proportion of public expenditure on education fell to below 4 % of GDP in Greece, Slovakia, Luxembourg and Romania; note that the tertiary education system in Luxembourg is underdeveloped and that the majority of tertiary students attend courses in another Member State.

It should be noted that GDP growth can mask significant increases that have been made in terms of education spending over the last decade within the majority of Member States. Note also that declining birth rates will result in reduced school age populations, which will have an effect on ratios such as the average expenditure per pupil (given that expenditure is held constant). Annual expenditure on public and private educational institutions per pupil/student shows that an average of PPS 5 650 was spent per pupil/student in 2005 in the EU-27.

Figure 4.8: Total public expenditure on education, 2005 (1)

(% of GDP)



(1) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm).

(2) Estimate. (3) 2003. (4) 2004.

Source: Eurostat (tsiir010)

Table 4.9: Expenditure on educational institutions (1)

	Public expenditure (% of GDP) (2)	Private expenditure (% of GDP) (3)	Annual expenditure on public and private educational institutions per pupil/student (PPS for full-time equivalents)	
	2005	2005	2000	2005
EU-27	4.7	0.7	:	5 650
Euro area	4.6	0.6	:	6 190
Belgium	5.7	0.4	5 314	6 501
Bulgaria	3.8	0.6	1 277	1 993
Czech Republic	4.1	0.6	2 574	3 809
Denmark	6.8	0.6	7 108	8 244
Germany	4.2	0.9	5 677	6 503
Estonia	4.6	0.4	:	2 868
Ireland	4.3	0.3	4 481	6 012
Greece	4.0	0.3	:	4 606
Spain	4.1	0.5	4 304	5 718
France	5.4	0.6	5 712	6 364
Italy	4.2	0.4	:	5 908
Cyprus	6.0	1.2	4 879	6 684
Latvia	4.7	0.8	1 818	2 746
Lithuania	4.5	0.5	1 716	2 475
Luxembourg	3.7	:	:	:
Hungary	5.1	0.5	:	3 842
Malta	6.8	0.4	3 189	5 882
Netherlands	4.6	0.4	5 211	6 703
Austria	5.0	0.5	7 144	8 293
Poland	5.4	0.6	1 971	3 051
Portugal	5.3	0.4	3 943	4 704
Romania	3.3	0.4	:	1 454
Slovenia	5.3	0.8	:	6 056
Slovakia	3.7	0.7	1 681	2 699
Finland	5.8	0.1	5 455	6 225
Sweden	6.2	0.2	6 185	7 204
United Kingdom	5.0	1.3	4 799	7 084
Croatia	4.6	:	:	:
FYR of Macedonia	3.3	:	:	:
Turkey	3.8	0.1	:	:
Iceland	7.2	0.7	6 501	7 897
Liechtenstein	2.1	:	:	7 389
Norway	5.7	0.1	7 812	9 133
Switzerland	5.5	0.6	:	:
Japan	3.4	1.5	6 091	7 148
United States	4.9	2.4	9 200	10 661

(1) Refer to the Internet metadata file (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm).

(2) Turkey, 2004; the former Yugoslav Republic of Macedonia, 2003.

(3) Turkey and Norway, 2004.

Source: Eurostat (educ_figdp, tps00068 and tps00067), Unesco, OECD