

2.

EDUCATION



- School enrolment and levels of education
- Foreign language learning
- Tertiary education
- Lifelong learning
- Educational expenditure



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2. EDUCATION

Education, vocational training and 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 (14) 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'*.

(14) 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).

Eurostat has a wide range of data within this area, including:

- educational attainment;
- entrants, enrolments, and graduates by age and gender;
- levels of education;
- fields of study;
- numbers of non-national students;
- education staff;
- pupil/teacher ratios;
- numbers of students studying foreign languages;
- expenditure on education in current and constant prices;
- expenditure on public educational institutions;
- expenditure on private educational institutions;
- financial aid to students;
- training policy and management of training;
- participation in training courses;
- working time spent on training courses;
- cost and funding of training courses.

More recently the European Council adopted in 2001 a set of goals and objectives for education and training systems that are to be attained by 2010⁽¹⁵⁾. These objectives set as part of the Lisbon strategy, are likely to be attained only through the efficient use of resources, quality improvements in the education and training systems, and the implementation of a coherent lifelong learning strategy within the Member States. The ministers of education agreed on three major goals:

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

The European Commission adopted on 11 November 2003 a communication presenting an interim evaluation of the progress being made towards the Lisbon objectives, entitled, *'Education and training 2010'*⁽¹⁶⁾. This communication called for accelerated reforms in the years to come and a stronger political commitment to achieve the Lisbon goals.

Another key priority for the European Commission is the European qualifications framework (EQF), which was formally published as a staff working document on 8 July 2005⁽¹⁷⁾. The objective of the planned EQF is to facilitate the transfer and recognition of qualifications held by individual citizens, by linking qualifications systems at the national and sectoral levels and enabling them to relate to each other. The EQF will act as a translation device and should aid citizen mobility for work and study.

(15) See http://ec.europa.eu/education/policies/2010/doc/rep_fut_obj_en.pdf.

(16) *"Education and training 2010"* — The success of the Lisbon strategy hinges on urgent reforms', COM(2003) 685 final of 11 November 2003 (http://ec.europa.eu/education/policies/2010/doc/com_2003_685-a1_23013_en.pdf).

(17) *'Towards a European qualifications framework for lifelong learning'*, SEC(2005) 957 of 8 July 2005 (http://ec.europa.eu/education/policies/2010/doc/consultation_eqf_en.pdf).

SCHOOL ENROLMENT AND LEVELS OF EDUCATION

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

The European statistical system provides data on education and training which are the basis for indicators that are used to measure the performance of the education and training systems in the EU and for monitoring progress towards the knowledge-based economy and society that is part of the broader policy context of the Lisbon objectives.

There were about 93 million pupils and students enrolled in educational establishments (excluding pre-primary education) in the EU-25 in 2004, some 4 million more than in 1998. The increase in student numbers results from an expansion of educational opportunities, as the number of persons of school age was relatively unchanged during the period considered. Increasing numbers of students and pupils may be largely attributed to two trends:

- more students remaining in education and taking up places within higher education;
- mature (adult) students returning to education in order to retrain or equip themselves for a career change.

One of the main deterrents for having children is a lack of pre-school childcare and education. This may result in either parent having to give up their job in order to take care of their children before they reach obligatory school age. In many of the Member States the possibility of placing a child in a crèche remains limited.

The proportion of four-year old children in pre-primary education varied considerably across the Member States, with an average of about 86 % for the EU-25 in 2004. A number of countries reported participation rates close to or equal to 100 %, while at the other end of the range, less than one in two children aged four were in education in Ireland, Finland and Poland.

Low pupil/teacher ratios are thought to be an important factor for successful primary education. Ratios in 2004 ranged from less than 11 pupils per teacher in Denmark, Italy, Luxembourg and Hungary, to almost double that rate in the United Kingdom (more than 21).

Data on educational attainment show that, in 2005, just over three quarters (77 %) of the EU-25's population aged 20 to 24 had completed at least an upper secondary level of education. However, 16 % of those aged 18 to 24 (17 % of men and 13 % of women) were early school leavers, with at most a lower secondary education. In general, higher education qualifications reduce, albeit to differing degrees, the risk of unemployment (see Chapter 4 for more details).



Table 2.1: Pupils and students (excluding pre-primary education)

(1 000)

TPS00051

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
EU-25	:	:	:	:	88 862	90 391	90 521	90 747	92 053	91 838	92 742
EU-15	73 001	73 360	73 380	73 296	73 027	74 388	74 340	74 400	75 674	75 518	76 463
Euro area	57 105	57 019	56 883	56 758	56 861	56 490	56 293	56 226	56 107	56 286	56 664
Belgium (1)	2 113	2 153	2 160	2 168	:	2 207	2 235	2 304	2 333	2 373	2 333
Czech Republic	:	:	:	:	1 914	1 875	1 906	1 932	1 935	1 928	1 934
Denmark (2)	942	943	942	955	973	988	1 003	1 029	1 046	1 069	1 127
Germany (3)	13 842	14 035	14 210	14 441	14 568	14 581	14 549	14 515	14 511	14 525	14 583
Estonia	:	:	:	:	290	296	303	306	304	298	293
Greece	1 889	1 850	1 840	1 833	1 904	1 859	1 884	1 906	1 975	1 961	1 983
Spain	8 778	8 637	8 509	8 239	8 087	7 898	7 769	7 597	7 461	7 382	7 509
France	12 145	12 148	12 137	12 131	12 092	12 022	11 934	11 849	11 791	11 884	11 903
Ireland (4)	898	893	885	887	1 000	994	990	987	992	1 001	1 033
Italy	9 572	9 433	9 300	9 306	9 202	9 151	9 049	9 144	9 199	9 266	9 380
Cyprus (5)	:	:	:	136	:	138	138	140	142	146	148
Latvia	:	:	:	:	471	485	499	510	510	506	502
Lithuania	:	:	:	:	713	739	767	787	797	807	811
Luxembourg (6)	52	54	57	60	62	68	69	70	72	73	71
Hungary	:	:	:	:	1 855	1 879	1 906	1 924	1 946	1 968	1 988
Malta	:	:	:	:	:	78	78	78	77	79	81
Netherlands	3 241	3 201	3 179	3 116	3 136	3 123	3 171	3 217	3 208	3 239	3 264
Austria	1 387	1 402	1 412	1 416	1 426	1 443	1 459	1 464	1 422	1 429	1 452
Poland	:	:	:	:	8 867	9 003	9 074	9 153	9 153	9 077	9 004
Portugal	2 145	2 166	2 134	2 085	2 076	2 020	2 032	2 002	1 964	1 962	1 945
Slovenia (3)	:	:	:	:	386	392	389	403	407	408	411
Slovakia	:	:	:	:	1 123	1 119	1 123	1 114	1 109	1 104	1 108
Finland	1 044	1 047	1 059	1 077	1 101	1 126	1 152	1 172	1 179	1 193	1 206
Sweden	1 656	1 698	1 753	1 814	1 962	2 075	2 090	2 107	2 115	2 119	2 123
United Kingdom	13 298	13 700	13 802	13 769	13 232	14 835	14 955	15 038	16 407	16 043	16 550
Bulgaria	:	:	:	:	1 404	1 390	1 357	1 322	1 275	1 274	1 250
Croatia	:	:	:	:	:	:	:	:	:	725	730
Romania (7)	:	:	:	:	4 020	4 006	3 962	3 954	3 939	3 915	3 901
Turkey	:	:	:	:	:	13 571	13 169	14 893	15 389	15 565	16 379
Iceland	:	67	67	68	71	72	74	74	77	80	82
Liechtenstein (8)	:	:	5	5	:	:	5	:	:	6	6
Norway	895	858	865	884	958	981	989	993	1 005	1 036	1 052
Switzerland	:	:	:	:	:	:	:	:	1 294	1 315	1 330
Japan	22 842	22 409	22 346	:	21 368	20 908	20 583	20 254	19 956	19 646	19 435
United States	58 573	59 225	59 781	60 622	61 816	62 795	62 323	63 653	64 440	65 738	66 075

(1) Excluding independent private institutions; excluding the German speaking community for 2004; according to new definitions for 2004, students in programmes of a duration of one semester or shorter (which were included in previous years) are excluded.

(2) Improved coverage — adult education programmes (ISCED levels 3 and 5) are included for the first time for 2004.

(3) Excluding ISCED level 6 for 1998-2004.

(4) Improved coverage of ISCED levels 2, 3 and 4 part-time programmes for 2004.

(5) Most tertiary students study abroad and are not included.

(6) Most tertiary students study abroad and are not included; many students at ISCED levels 1, 2 and 3 study abroad and are not included.

(7) Excluding ISCED level 6 for 1998-2002.

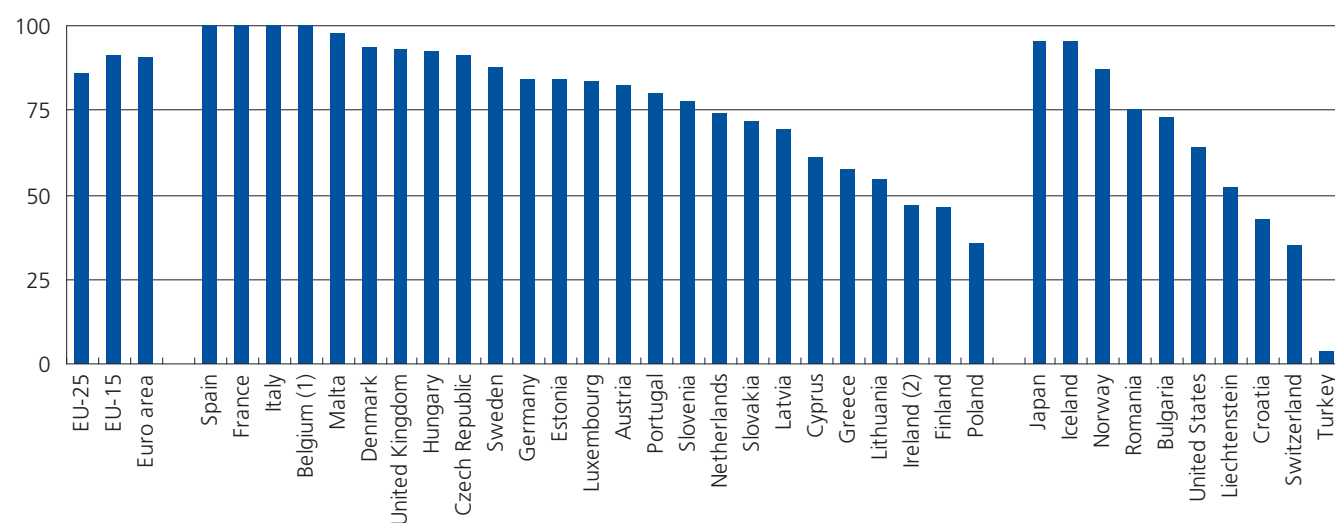
(8) Most students at ISCED levels 3 to 6 study abroad and are not included, while many students at ISCED level 3 and ISCED level 5 come from abroad.

This table includes the total number of persons who are enrolled in the regular education system in each country; it covers all levels of education from primary education to postgraduate studies; it corresponds to the target population for education policy.

Figure 2.1: Four-year-olds in education, 2004

(% of all four-year olds)

TPS00053



(1) Excluding independent private institutions; excluding enrolments in the German speaking community.

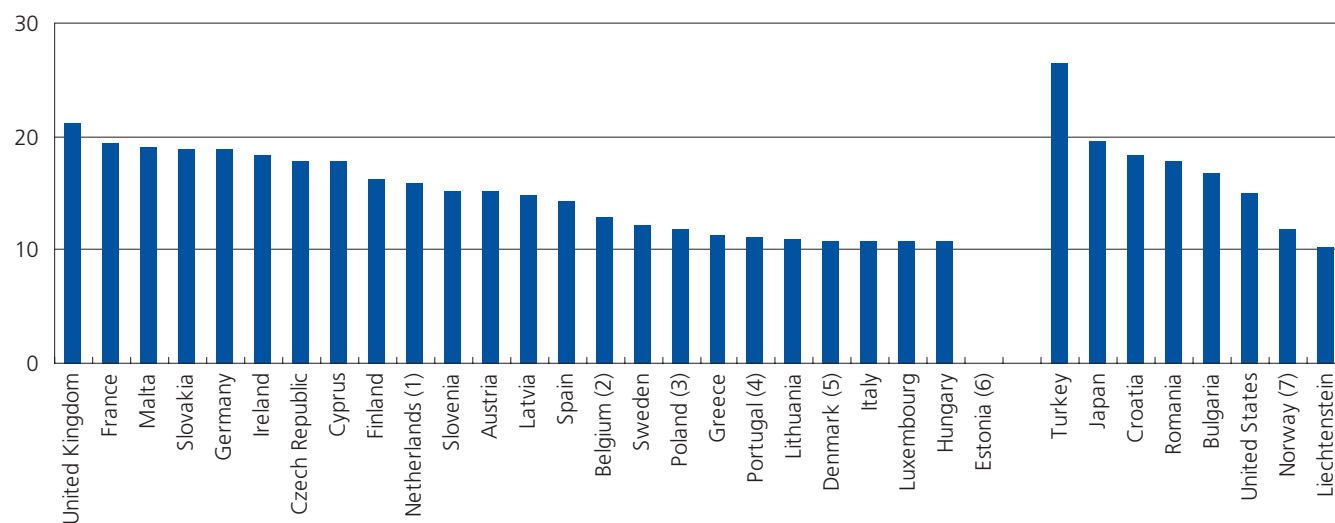
(2) There is no official provision of ISCED level 0 education; many children attend some form of ISCED level 0 education but data are for the most part missing.

This indicator presents the percentage of the four-year-olds who are enrolled in education-oriented pre-primary institutions; these institutions provide education-oriented care for young children; they can either be schools or non-school settings, which generally come under authorities or ministries other than those responsible for education; 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.

Figure 2.2: Pupil/teacher ratio in primary education, 2004

(average number of pupils per teacher)

TPS00054



(1) ISCED level 0 included in ISCED level 1.

(2) Excluding independent private institutions; excluding the German speaking community.

(3) 2003.

(4) Data on full-time equivalents not available; all teachers (head-count) are included in the denominator.

(5) ISCED level 2 included in ISCED level 1; 2003.

(6) Not available.

(7) Public sector only.

The pupil-teacher ratio is calculated by dividing the number of full-time equivalent pupils by the number of full-time equivalent teachers teaching at ISCED level 1; only teachers in service (including special education teachers) are taken into account; the pupil-teacher ratio should not be confused with average class size as it does not take into account special cases, like the small size of groups of special needs pupils or specialised/minority subject areas, or the difference between the number of hours of teaching provided by teachers and the number of hours of instruction prescribed for pupils for example in the case where a teacher is working in a shift system.



Table 2.2: Youth education and early school leavers



TPS00061

	Median age in tertiary education (years old)		Youth education attainment level (%)		Early school leavers (%)					
	1999	2004	2000	2005	Total		Male		Female	
					2000	2005	2000	2005	2000	2005
EU-25	21.9	22.1	76.3	76.9	17.7	15.2	19.9	17.3	15.5	13.1
EU-15	22.0	22.2	73.5	74.1	19.5	17.2	21.8	19.5	17.2	14.9
Euro area	21.8	22.0	72.5	73.1	20.1	18.1	22.8	20.7	17.5	15.5
Belgium (1)	20.3	20.7	80.9	80.3	12.5	13.0	14.8	15.3	10.2	10.6
Czech Republic	21.0	21.9	91.1	90.3	:	6.4	:	6.2	:	6.6
Denmark	24.8	25.3	69.8	76.0	11.6	8.5	13.4	9.4	9.9	7.5
Germany (2)	24.7	23.8	74.7	71.0	14.9	13.8	14.6	13.5	15.2	14.1
Estonia (3)	20.6	22.0	83.6	80.9	14.2	14.0	16.3	17.4	12.1	10.7
Greece	19.2	20.7	79.3	84.0	18.2	13.3	22.9	17.5	13.6	9.2
Spain (4)	21.5	22.0	65.9	61.3	29.1	30.8	34.7	36.4	23.4	25.0
France	20.6	20.7	81.6	82.8	13.3	12.6	14.8	14.6	11.9	10.7
Ireland	19.8	20.3	82.4	86.1	:	12.3	:	14.9	:	9.6
Italy	22.3	22.2	68.8	72.9	25.3	21.9	28.8	25.9	21.9	17.8
Cyprus (5)	19.6	20.8	79.0	80.7	18.5	18.1	25.0	26.6	13.9	10.6
Latvia	21.4	22.7	76.8	81.8	:	11.9	:	15.5	:	8.2
Lithuania (6)	20.3	21.5	77.9	85.2	16.7	9.2	18.5	12.2	14.9	6.2
Luxembourg	:	:	77.5	71.1	16.8	13.3	15.9	17	17.6	9.6
Hungary	21.4	22.5	83.6	83.3	13.8	12.3	14.3	13.5	13.2	11.1
Malta	20.3	21.3	40.9	48.1	54.2	41.2	52.5	43	56.1	39.3
Netherlands	21.5	21.7	71.7	74.6	15.5	13.6	16.2	15.8	14.8	11.2
Austria	24.3	23.2	84.7	85.9	10.2	9.0	9.6	9.4	10.7	8.5
Poland	21.5	21.6	87.8	90.0	:	5.5	:	6.9	:	4.0
Portugal	21.6	22.2	42.8	48.4	42.6	38.6	50.1	46.7	35.1	30.1
Slovenia (2) (3)	21.4	22.1	87.0	90.6	:	4.3	:	5.7	:	2.8
Slovakia	:	21.6	94.5	91.5	:	5.8	:	6	:	5.7
Finland	24.0	24.2	87.8	84.8	8.9	9.3	11.3	11.3	6.5	7.3
Sweden	24.8	25.5	85.2	87.8	7.7	8.6	9.2	9.3	6.2	7.9
United Kingdom	22.9	22.9	76.4	77.1	18.4	14.0	19.0	14.7	17.9	13.2
Bulgaria	21.3	21.6	74.9	76.8	:	20.0	:	19.5	:	20.6
Croatia (3)	:	20.5	:	93.9	:	4.8	:	5.6	:	3.8
Romania (7)	20.7	21.4	75.8	75.2	22.3	20.8	23.3	21.4	21.3	20.1
Turkey	21.0	20.9	38.9	43.9	58.8	51.3	65.8	58.2	51.2	43.8
Iceland	24.2	25.6	46.1	53.0	29.8	26.3	29.9	30.5	29.6	22.0
Liechtenstein	:	24.9	:	:	:	:	:	:	:	:
Norway	23.9	25.0	95.1	96.3	13.3	4.6	13.2	5.3	13.5	3.9
Switzerland	:	24.2	77.7	82.5	7.3	7.8	7.4	8.7	7.1	6.9
Japan	38.7	:	:	:	:	:	:	:	:	:
United States	23.0	22.0	:	:	:	:	:	:	:	:

(1) All data in relation to median age excluding independent private institutions for 1999 and 2004; excluding the German speaking community for 2004.

(2) All data in relation to median age excluding ISCED level 6.

(3) All data in relation to early school leavers, unreliable.

(4) All data in relation to early school leavers, break in series in 2005.

(5) Most tertiary students study abroad and are not included.

(6) All data in relation to early school leavers, unreliable in 2005.

(7) Data for 1999 in relation to median age excluding ISCED level 6.

The median age of a given population is the age separating the group into two halves of equal size; in the case of this indicator it means that half of the student population, i.e. persons enrolled in tertiary education (ISCED levels 5 and 6), is younger than the median age and the other half is older.

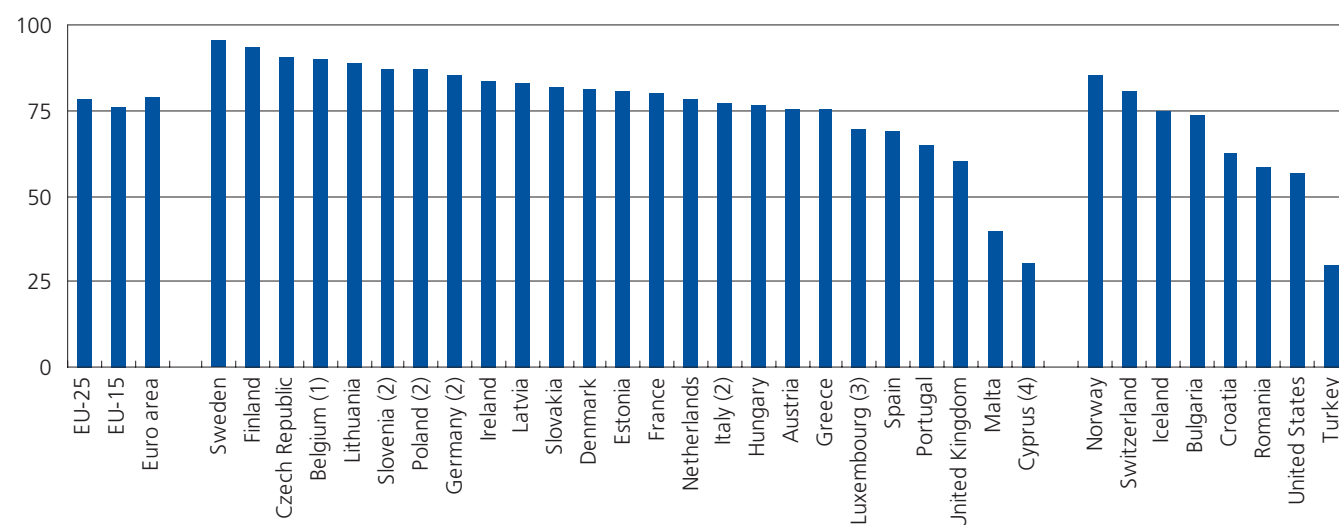
The indicator youth education attainment level is defined as the percentage of young people aged 20 to 24 years having attained at least upper secondary education attainment level, i.e. with an education level ISCED 3a, 3b or 3c long; the denominator consists of the total population of the same age group.

Early school leavers refers to persons aged 18 to 24 in the following two conditions: the highest level of education or training attained is ISCED 0, 1, 2 or 3c short and 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.

Figure 2.3: 18-year-olds in education, 2004

(% of all 18-year-olds)

TPS00060



(1) Excluding independent private institutions; excluding the German speaking community.

(2) Excluding ISCED level 6.

(3) Most tertiary students study abroad and are not included; many students at ISCED levels 1, 2 and 3 study abroad and are not included in the enrolment data but are included in population data; therefore, all participation rates by age are underestimated; excluding ISCED level 5.

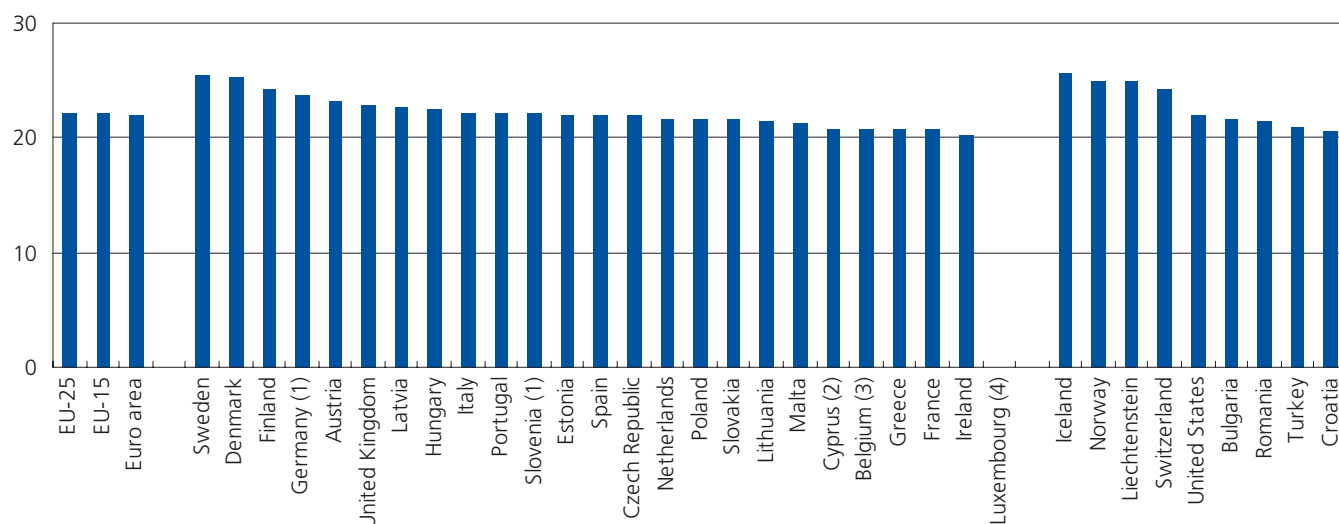
(4) Most tertiary students study abroad and are not included.

This indicator gives the percentage of all 18-year-olds who are still in any kind of school (all ISCED levels); it gives 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.

Figure 2.4: Median age in tertiary education, 2004

(years old)

TPS00061



(1) Excluding ISCED level 6.

(2) Most tertiary students study abroad and are not included.

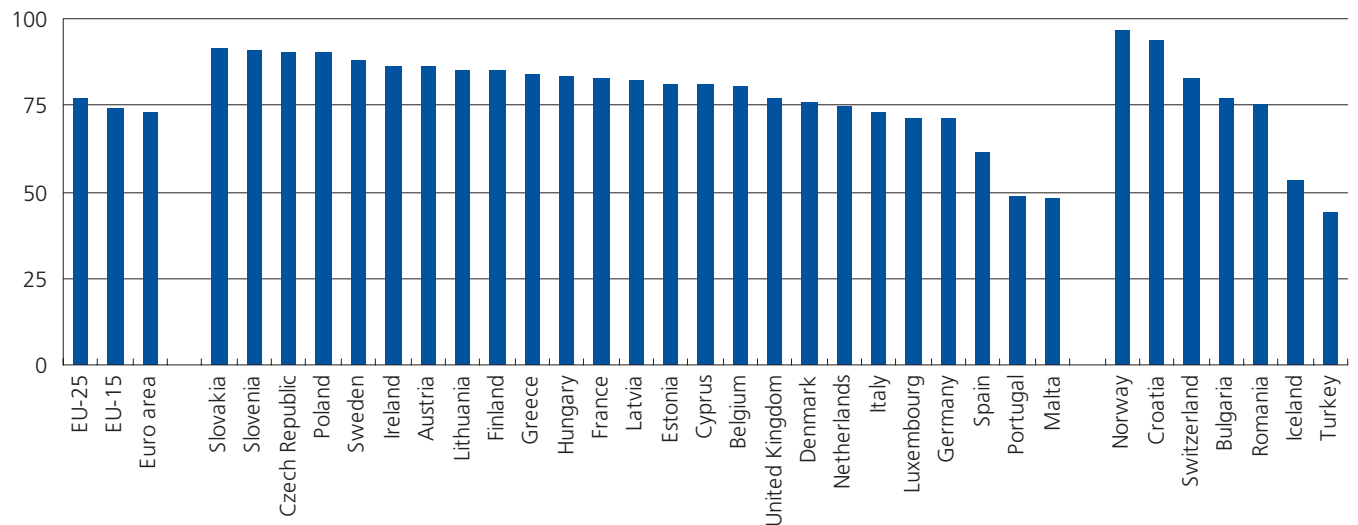
(3) Excluding independent private institutions; excluding the German speaking community.

(4) Not available.

The median age of a given population is the age separating the group into two halves of equal size; in the case of this indicator it means that half of the student population, i.e. persons enrolled in tertiary education (ISCED levels 5 and 6), is younger than the median age and the other half is older.


Figure 2.5: Youth education attainment level, 2005

(% of the population aged 20 to 24 having completed at least upper secondary education)

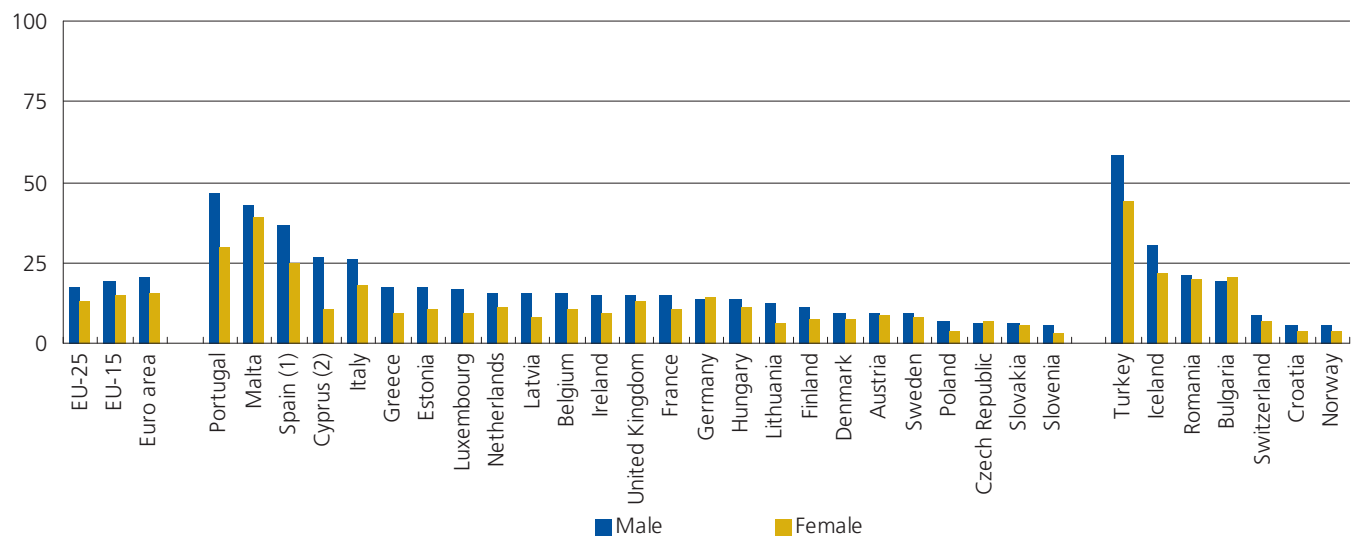


The indicator youth education attainment level is defined as the percentage of young people aged 20 to 24 years having attained at least upper secondary education attainment level, i.e. with an education level ISCED 3a, 3b or 3c long; the denominator consists of the total population of the same age group.

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Figure 2.6: Early school leavers, 2005

(% of the population aged 18 to 24 with at most lower secondary education and not in further education or training)



(1) Break in series.

(2) Most tertiary students study abroad and are not included.

Early school leavers refers to persons aged 18 to 24 in the following two conditions: the highest level of education or training attained is ISCED 0, 1, 2 or 3c short and 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.

FOREIGN LANGUAGE LEARNING

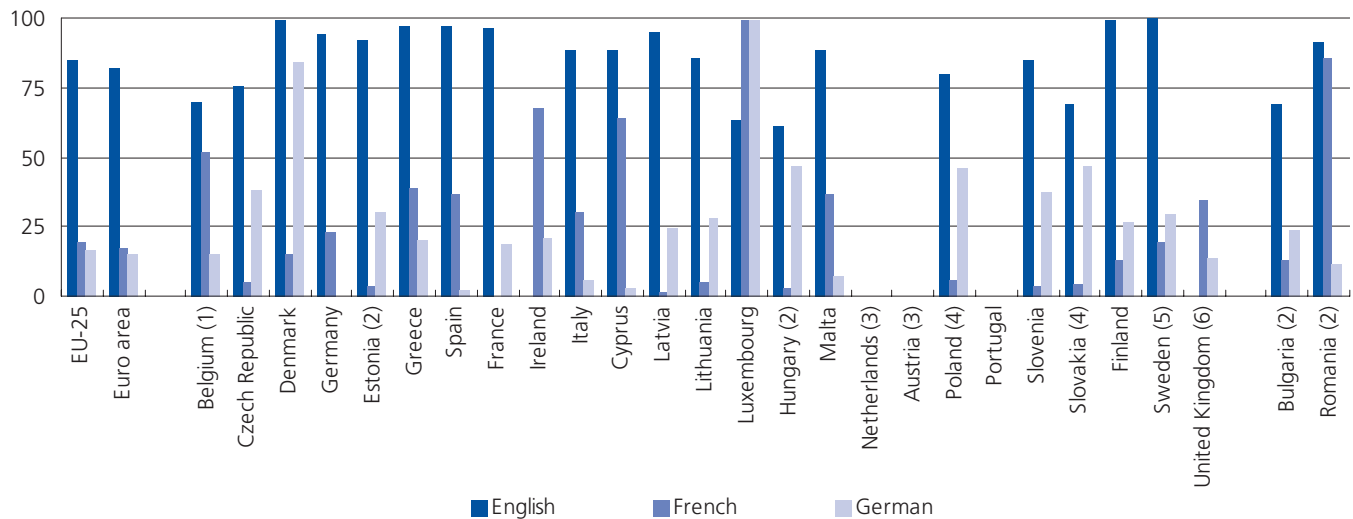
The promotion of linguistic diversity is a policy actively encouraged within the EU in schools, universities, adult education centres and enterprises; this includes the smaller European languages as well as the larger ones, regional, minority and migrant languages, as well as the languages of major trading partners throughout the world.

The European Commission's contribution in this field combines the regular funding of projects and activities with strategic developments and innovation in areas which it considers to be of particular importance. It has been able to finance practical projects, notably through the Socrates and Leonardo da Vinci programmes, while the EU's programmes for cooperation in the field of education and vocational training include specific measures to promote language teaching and learning. For example, the Lingua action of the Socrates programme enables institutions from different countries to work together to develop language-learning materials which fill gaps in the existing market, while the Comenius action of the same programme provides funding each year for language exchange visits, teacher-training courses, and language assistants for schools and adult education centres.

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Figure 2.7: Proportion of pupils learning foreign languages in secondary education by language, 2004

(%) TPS00057 TPS00058 TPS00059



- (1) Excluding the German speaking community; excluding pupils in special education.
- (2) Pupils with a disability in cognitive development are included in the total number of pupils.
- (3) Not available.
- (4) Full-time pupils only.
- (5) Excluding adult education; includes only pupils graduating.
- (6) England only, data are underestimated as they are based on the number of pupils taking exams and hence exclude pupils who are taking a language course but do not sit final examinations.

The percentage of all pupils in secondary education (ISCED levels 2 and 3) who are learning English/French/German as a foreign language; it only covers general and not vocational education in countries where English/French/German is described as a foreign language in the curriculum or other official document relating to education in the country.



Table 2.3: Foreign languages learnt per pupil in secondary education (1)

TPS00056 TPS00057 TPS00058 TPS00059

	Average number of foreign languages learnt per pupil: secondary education (number)		Pupils learning English in general programmes (%)		Pupils learning French in general programmes (%)		Pupils learning German in general programmes (%)	
	2000	2004	2000	2004	2000	2004	2000	2004
EU-25	1.2	1.3	73.4	84.9	17.0	19.2	14.2	16.8
Euro area	:	1.3	:	82.1	:	17.5	:	14.9
Belgium (2)	1.7	1.7	66.3	69.5	50.5	52.0	15.1	14.8
Czech Republic (3)	1.2	1.2	63.7	75.8	3.7	4.8	49.0	38.2
Denmark	1.9	2.1	100.0	99.1	13.5	14.9	66.6	84.5
Germany	1.2	1.2	93.6	94.2	23.5	23.3	-	-
Estonia (4)	2.1	2.1	86.4	92.3	2.7	3.7	35.6	30.2
Greece	:	1.6	:	96.9	:	39.1	:	20.2
Spain	1.4	1.4	97.7	97.3	36.9	36.6	1.6	2.0
France	1.6	1.2	96.1	96.5	-	-	22.4	18.4
Ireland (5)	1.0	1.0	-	-	69.9	67.6	23.3	21.0
Italy	1.2	1.3	78.5	88.4	33.5	30.5	5.4	5.4
Cyprus	2.0	1.7	100.0	88.4	100.0	63.7	0.0	2.6
Latvia	1.6	1.7	87.7	95.2	1.8	1.5	32.8	24.6
Lithuania	1.7	1.7	73.1	85.3	7.1	5.0	34.1	27.8
Luxembourg (6)	2.6	2.6	63.9	63.2	94.3	99.1	93.5	99.1
Hungary (7)	0.9	1.1	41.5	60.8	2.4	3.2	39.0	47.0
Malta	2.0	1.9	94.2	88.8	41.1	36.9	7.3	7.0
Netherlands	:	2.6	:	:	:	:	:	:
Austria	1.2	:	98.3	:	13.1	:	-	-
Poland (8)	1.6	1.4	80.4	79.6	10.9	5.8	52.9	46.0
Portugal	:	:	:	:	:	:	:	:
Slovenia	1.3	1.3	87.5	84.7	2.8	3.6	36.9	37.6
Slovakia (9)	1.2	1.3	56.0	68.9	3.5	4.2	51.2	46.7
Finland	2.5	2.4	98.8	99.1	13.8	12.8	31.2	26.3
Sweden (10)	1.8	1.8	100.0	100.0	22.7	19.1	41.5	29.7
United Kingdom (11)	:	0.6	-	-	:	34.4	:	13.9
Bulgaria (12)	1.3	1.4	60.9	69.3	16.8	13.0	21.0	23.4
Romania (12)	1.9	1.9	80.4	91.7	88.5	86.0	11.4	11.3

(1) For the proportion of pupils learning English, French and German: coverage has changed from general and pre-vocational programmes up to and including 2003, to general programmes from 2004.

(2) Excluding the German speaking community; excluding pupils in special education.

(3) Full-time pupils only for 2000.

(4) The national language taught in schools where it is not the teaching language is counted as a foreign language.

(5) Irish is not considered as a foreign language; all pupils in primary and secondary education in Ireland learn Irish; full-time pupils only.

(6) Luxembourgish is excluded; all pupils in primary and secondary education in Luxembourg learn Luxembourgish.

(7) Pupils with a disability in cognitive development are included in the total number of pupils; full-time pupils only for 2000.

(8) Full-time pupils only; special schools are excluded for 2000.

(9) Full-time pupils only.

(10) Excluding adult education; includes only pupils graduating.

(11) England only, data are underestimated as they are based on the number of pupils taking exams and hence exclude pupils who are taking a language course but do not sit final examinations.

(12) Pupils with a disability in cognitive development are included in the total number of pupils.

The average number of foreign languages learned per pupil in secondary education (ISCED levels 2 and 3) is obtained by dividing the total number of pupils learning foreign languages by the number of pupils at that level; a foreign language is recognised as such in the curriculum or other official document relating to education in the country; 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.

TERTIARY EDUCATION

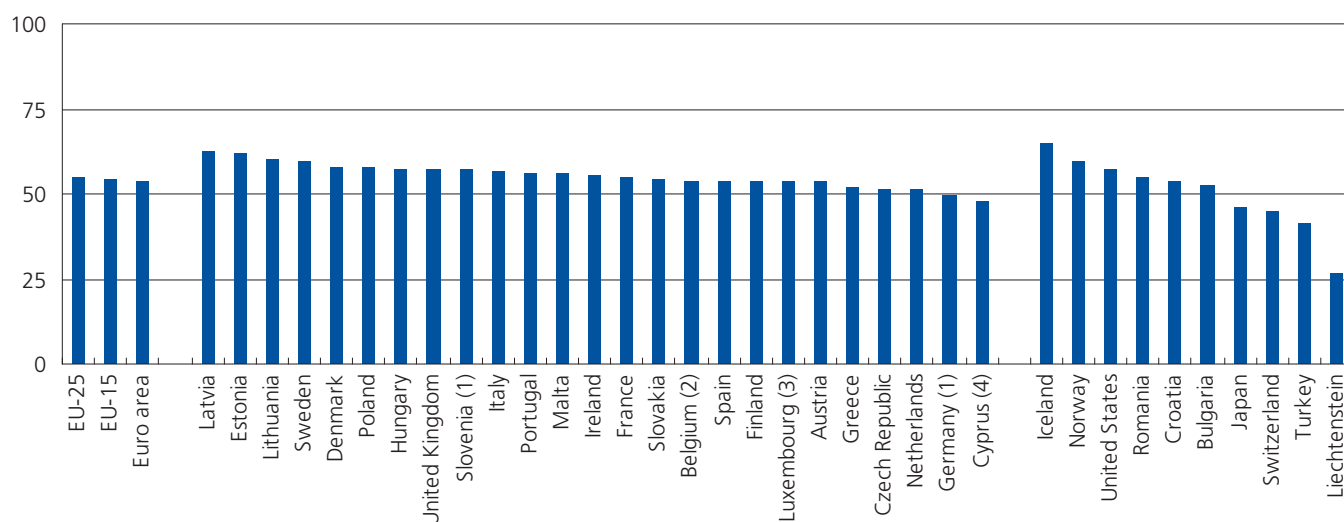
The number of students in tertiary education within the EU-25 stood at over 17 million in 2004, some 3 million higher than in 1998. The highest number of students in tertiary education was recorded in Germany (2.3 million, equivalent to 13.5 % of the EU-25 total), while double-digit shares were also recorded in the United Kingdom, France, Poland, Italy and Spain.

Disparities in educational attainment levels between the sexes have been reduced and even reversed throughout the EU over the last 30 years, such that women have generally overtaken men in terms of the average qualifications they obtain. As a result, EU educational policies have increasingly shifted to promote particular subject areas, where take-up among female students remains relatively low (for example, science,

Figure 2.8: Proportion of women among tertiary students, 2004

(% of total number of tertiary students)

TPS00063



(1) Excluding ISCED level 6.

(2) Excluding independent private institutions; excluding the German speaking community.

(3) Most tertiary students study abroad and are not included; 2003.

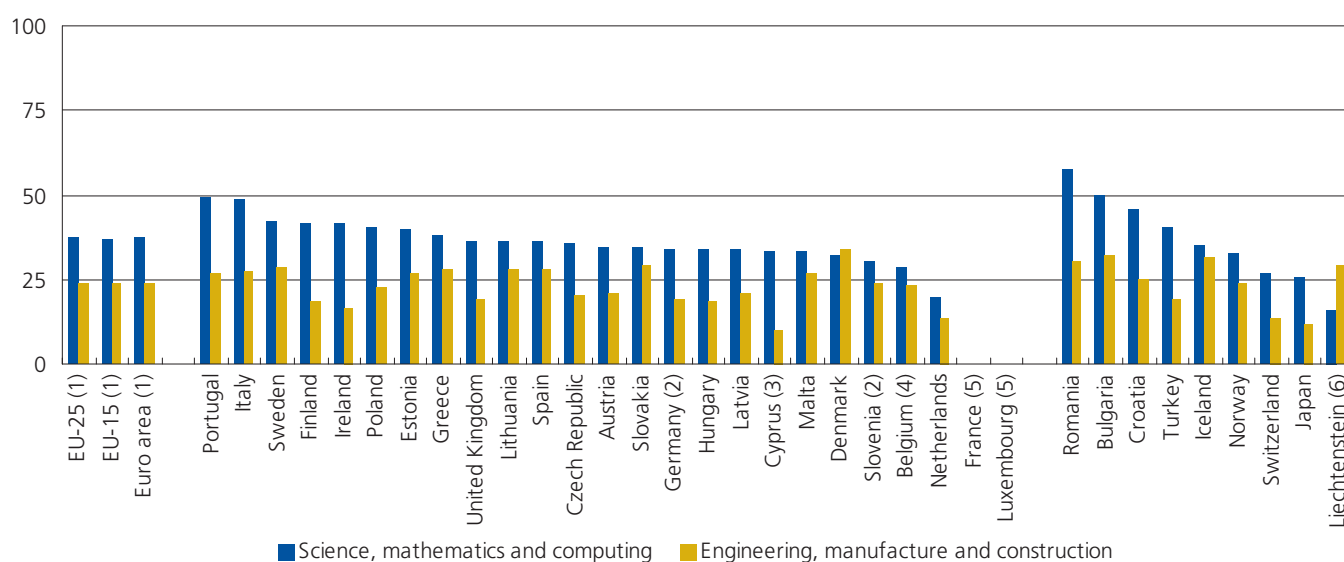
(4) Most tertiary students study abroad and are not included.

This indicator presents the percentage of women among all students in tertiary education irrespective of field of education.

Figure 2.9: Proportion of women among tertiary students, 2004

(% of total number of tertiary students in each field)

TPS00063



(1) Excluding France and Luxembourg.

(2) Excluding ISCED level 6.

(3) Most tertiary students study abroad and are not included.

(4) Excluding independent private institutions; excluding the German speaking community.

(5) Not available.

(6) Science, mathematics and computing, 2003.

This indicator presents the percentage of women among all students in tertiary education irrespective of field of education and among all students in the fields of mathematics, science and computing and in the fields of engineering, manufacturing and construction; the levels and fields of education and training used follow the 1997 version of the International Standard Classification of Education (ISCED-97) and the Eurostat manual of fields of education and training (1999).



mathematics and computing, or engineering, manufacturing and construction-related studies). Overall, throughout almost the entire EU, there were slightly more women than men in tertiary education. However, some 37.0 % of tertiary students in science, mathematics and computing disciplines in the EU-25 were female in 2004. The proportion of female students among those studying engineering, manufacturing and construction-related studies in the EU-25 in 2004 was 23.4 %.

The median age of tertiary students was 22.1 years in the EU-25 in 2004, with the oldest average age being recorded in the Nordic countries; these figures are influenced by the degree to which educational opportunities have been opened-up to older, mature students.

Table 2.4: Students in tertiary education

(1 000)

TPS00062

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
EU-25	:	:	:	:	14 392	14 892	15 207	15 737	16 329	16 887	17 319
EU-15	11 513	11 810	11 933	12 266	12 324	12 525	12 563	12 820	13 191	13 590	13 860
Euro area	9 445	9 581	9 685	9 919	9 922	9 919	10 003	10 204	10 372	10 685	10 966
Belgium (1)	322	353	358	361	:	352	356	359	367	375	386
Czech Republic	:	:	:	196	215	231	254	260	285	287	319
Denmark	170	170	167	180	183	190	189	191	195	202	217
Germany (2)	2 132	2 156	2 144	2 132	2 098	2 087	2 055	2 084	2 160	2 242	2 331
Estonia	:	:	:	39	43	49	54	58	61	64	66
Greece	314	:	329	363	374	388	422	478	529	562	597
Spain	1 470	1 527	1 592	1 684	1 746	1 787	1 829	1 834	1 833	1 841	1 840
France	2 083	2 073	2 092	2 063	2 027	2 012	2 015	2 032	2 029	2 119	2 160
Ireland	118	122	128	135	143	151	161	167	176	182	188
Italy	1 770	1 792	1 775	1 893	1 869	1 797	1 770	1 812	1 854	1 913	1 987
Cyprus (3)	:	:	:	10	:	11	10	12	14	18	21
Latvia	:	:	:	62	70	82	91	103	111	119	128
Lithuania	:	:	:	84	96	107	122	136	149	168	183
Luxembourg (3)	2	:	2	2	2	3	2	3	3	3	:
Hungary	:	:	:	203	255	279	307	331	354	391	422
Malta	:	:	:	:	:	6	6	7	7	9	8
Netherlands	532	503	492	469	461	470	488	504	517	527	543
Austria	227	234	239	241	248	253	261	265	224	230	239
Poland	:	:	:	:	1 191	1 399	1 580	1 775	1 906	1 983	2 044
Portugal	276	301	320	351	352	357	374	388	397	401	395
Slovenia (2)	:	:	:	53	68	79	84	92	99	102	104
Slovakia	:	:	:	102	113	123	136	144	152	158	165
Finland	197	205	214	227	250	263	270	280	284	292	300
Sweden	235	246	261	275	281	335	347	358	383	415	430
United Kingdom	1 664	1 813	1 821	1 892	1 938	2 081	2 024	2 067	2 241	2 288	2 247
Bulgaria	:	:	:	263	261	270	261	247	228	231	229
Croatia	:	:	:	:	:	:	:	:	:	122	126
Romania (4)	:	:	:	354	361	408	453	533	582	644	686
Turkey	:	:	:	:	:	1 465	1 015	1 607	1 678	1 919	1 973
Iceland	:	7	8	8	8	9	10	10	12	13	15
Liechtenstein	:	:	0	0	:	:	1	:	:	0	1
Norway	177	173	180	185	183	188	191	190	197	212	214
Switzerland	149	148	148	:	:	:	:	:	170	186	196
Japan	3 841	3 918	3 945	:	3 964	3 941	3 982	3 973	3 967	3 984	4 032
United States	14 305	14 279	14 262	14 300	13 284	13 769	13 203	13 596	15 928	16 612	16 901

(1) Excluding independent private institutions; excluding the German speaking community for 2004.

(2) Excluding ISCED level 6 for 1998-2004.

(3) Most tertiary students study abroad and are not included.

(4) Excluding ISCED level 6 for 1998-2002.

This table includes the total number of persons who are enrolled in tertiary education (including university and non-university studies) in the regular education system in each country; it corresponds 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.

LIFELONG LEARNING

Lifelong learning and continuing vocational training at work is essential for keeping the qualifications of the workforce up-to-date, whereby age is no longer seen as an impediment to access education or training.

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' (18).

A European Commission communication of November 2001 entitled 'Making a European area of lifelong learning a reality' (19) 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. This perception reflects the long-term Lisbon strategy to strengthen employment and social cohesion in a knowledge-based society and economy.

(18) 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).

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

Council Resolution (2003/C 175/02) (20) of 15 July 2003 on social and human capital underlines the importance of learning and training at work in building social and human capital in the knowledge-based society. Special reference is made to '... the importance of ensuring that all workers within their specific enterprises and organisations are fully involved and properly trained... which can help facilitate change, and are thus aware of the benefits in terms of improved competitiveness and quality of working life'.

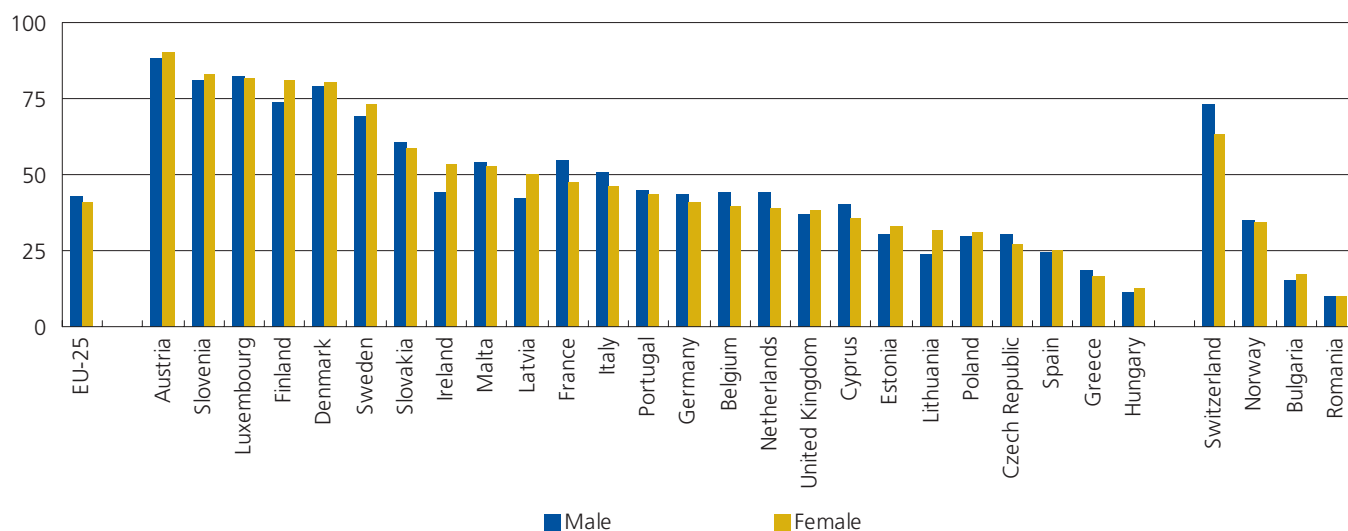
The European employment strategy (EES) (21), agreed on 22 July 2003, was revised to better account for the needs of an enlarged EU, to react more rapidly to the challenges facing a modern labour market, and to contribute better to the Lisbon strategy. Two key guidelines were introduced to tackle the 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 revamp of the Lisbon strategy, completely revising the EES, by publishing employment guidelines in conjunction with macroeconomic and micro-economic guidelines.

(20) Council resolution on social and human capital — building social and human capital in the knowledge society: learning, work, social cohesion and gender (http://eur-lex.europa.eu/LexUriServ/site/en/oj/2003/c_175/c_17520030724en00030006.pdf).

(21) See http://ec.europa.eu/employment_social/employment_strategy/index_en.htm.

Figure 2.10: Participation in any learning activities (formal, non-formal, informal), 2003

(% of male/female population aged 25 to 64)



Formal education and training 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; informal learning corresponds to self-learning which is not part of either formal nor non-formal education and training, by using one of the following ways: making use of printed material (e.g. professional books, magazines and the like); computer-based learning/training; online Internet-based web education; making use of educational broadcasting or offline computer-based (audio or videotapes); visiting facilities aimed at transmitting educational content (library, learning centres, etc.).



As a result, lifelong learning and continuing vocational training statistics are becoming increasingly important. 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. Informal learning corresponds to self-learning (which is not part of either formal or non-formal education and training), through the use of printed material, computer-based learning/training, online Internet-based web education, making use of educational broadcasting or offline computer-based tapes or disks, or visiting facilities aimed at transmitting educational content (library, learning centres, etc.).

The labour force survey ad hoc module conducted in 2003 permitted a deeper analysis of the participation in lifelong learning activities. Participation (during the year preceding the survey) in any learning activities (formal, non-formal or informal) of persons aged 25 to 64 averaged 42 %. The proportion of the population who had participated in lifelong learning activities varied between age groups (from a high of 50 % for those aged 25 to 34 to 30 % for those aged 55 to 64) and also reflected the impact of educational attainment (23 % of those with a low level of educational attainment had participated in any learning activities compared with 69 % of those who were highly-educated). On the other hand, gender differences in lifelong learning activities were rather small, as for the EU-25 these stood at 41 % for women and 43 % for men.

Table 2.5: Participation in any learning activities (formal, non-formal, informal), by educational attainment, 2003

(% of population aged 25 to 64)

	Low educational attainment (1)	Medium educational attainment (2)	High educational attainment (3)
EU-25	23.1	44.2	68.7
Belgium	23.3	42.4	66.9
Czech Republic	10.3	26.2	62.7
Denmark	61.5	77.4	93.4
Germany	19.0	41.1	65.8
Estonia	10.1	25.0	51.8
Greece	5.6	18.9	42.6
Spain	12.6	30.3	47.7
France	29.2	52.4	83.1
Ireland	34.5	51.4	66.4
Italy	34.4	60.7	78.0
Cyprus	8.5	34.2	76.1
Latvia	30.0	43.6	70.9
Lithuania	5.8	20.9	59.6
Luxembourg	67.4	86.4	94.7
Hungary	3.7	11.3	27.0
Malta	49.8	65.3	68.4
Netherlands	20.1	42.6	66.2
Austria	86.8	88.6	95.3
Poland	9.2	26.5	73.9
Portugal	35.3	70.6	79.7
Slovenia	66.8	83.2	96.7
Slovakia	40.4	59.4	82.6
Finland	60.9	76.8	90.1
Sweden	48.8	69.1	87.6
United Kingdom (4)	12.2	36.9	60.8
Bulgaria	1.8	12.2	45.2
Romania	3.3	9.5	33.2
Norway	15.1	30.3	50.5
Switzerland	28.3	66.9	90.5

(1) At most lower secondary education (ISCED 0 to 2).

(2) Upper secondary and post-secondary non-tertiary education (ISCED 3 and 4).

(3) Tertiary education (ISCED 5 and 6).

(4) Informal learning is excluded.

EDUCATIONAL EXPENDITURE

The increasing demands on education systems to meet the challenges set by the Lisbon strategy are likely to require additional sources of funding. As a result, there is an ongoing debate in many Member States as to how to increase 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.

EU-25 public expenditure on education was about PPS 516 000 million in 2003 ⁽²²⁾, which was equivalent to 4.9 % of GDP (compared with 7.2 % for healthcare).

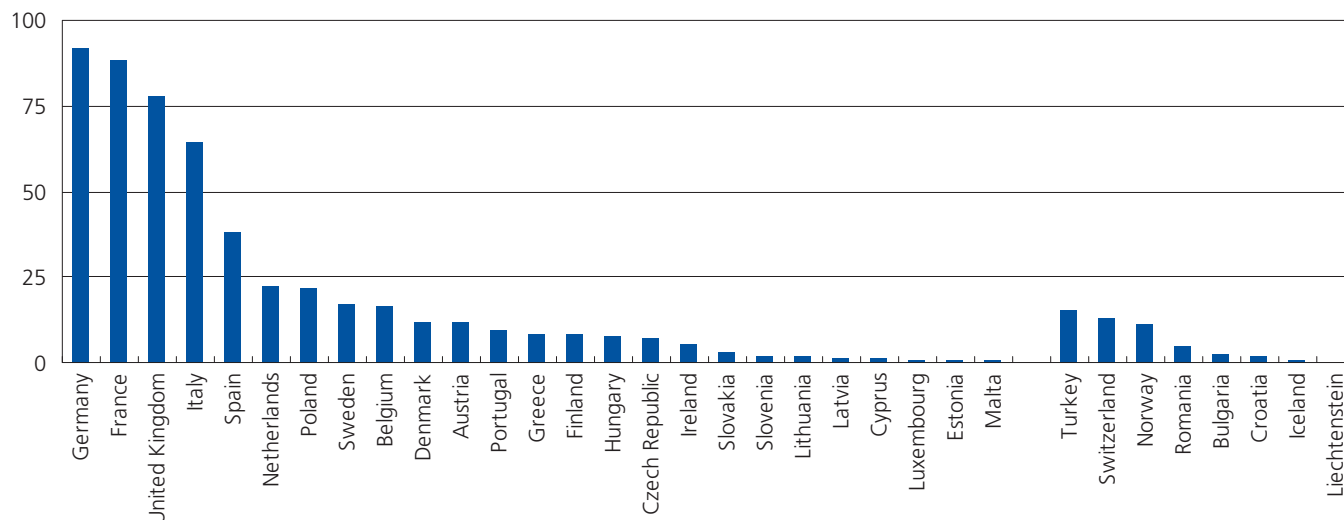
⁽²²⁾ Purchasing power standard; see the glossary for explanation.

Annual expenditure on public and private educational institutions per pupil/student shows that an average of PPS 5 518 was spent per pupil/student in 2003 in the EU-25. Average expenditure per pupil/student generally rose with the level of education (except in Lithuania), with the PPS 8 060 spent on each tertiary student in the EU-25 in 2003 some 1.9 times as high as spending on each primary school pupil (PPS 4 331). The ratio of tertiary to primary expenditure was lower in the EU-25 than it was in either Japan (2.2 times as high) or the United States (2.9 times as high).

The ratio of public to private expenditure varied considerably across the Member States in 2003, with private expenditure relatively important in Germany, Cyprus, Malta, the United Kingdom and Latvia (where it accounted for at least one sixth of public expenditure).

Figure 2.11: Total public expenditure on education, 2003 (1)

(PPS 1 000 million)



(1) EU 25, EUR/PPS 515 647 million total public expenditure on education; EU 15, EUR/PPS 470 525 million total public expenditure on education; euro area, EUR/PPS 364 090 million total public expenditure on education; refer to the Internet metadata file http://europa.eu/estatref/info/sdds/en/educ/educ_list_of_indic.htm.

Generally, the public sector funds education either by bearing directly the current and capital expenses of educational institutions (direct expenditure for educational institutions) or by supporting students and their families with scholarships and public loans as well as by transferring public subsidies for educational activities to private firms or non-profit organisations (transfers to private households and firms); both types of transactions together are reported as total public expenditure on education.



Table 2.6: Expenditure on education (1)

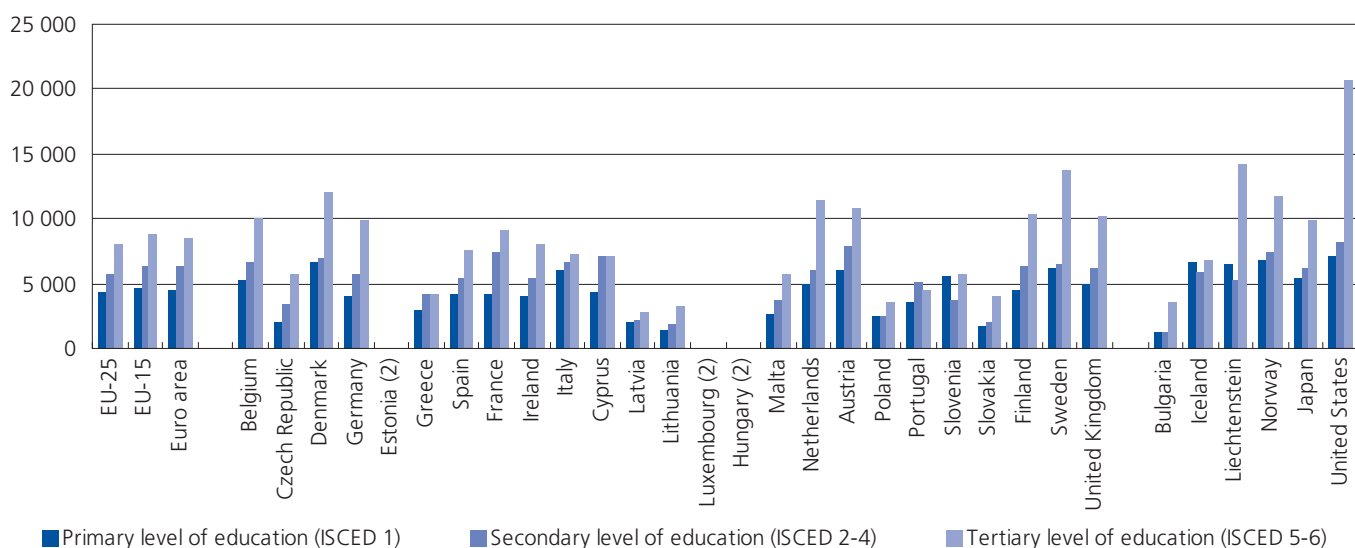
	Expenditure on educational institutions					
	Public expenditure on education (PPS 1 000 million)		Public expenditure (% of GDP)	Private expenditure (% of GDP)	Annual expenditure on public and private educational institutions per pupil/student (PPS for full-time equivalents)	
	1995	2003	2003	2003	1995	2003
EU-25	:	515.6	4.9	0.6	:	5 518
EU-15	:	470.5	4.9	0.6	:	6 002
Euro area	:	364.1	4.8	0.6	:	5 883
Belgium	:	16.1	5.8	0.4	:	6 396
Czech Republic	5.1	6.8	4.3	0.4	:	3 279
Denmark	7.6	11.7	6.7	0.3	:	7 251
Germany	68.6	91.5	4.4	0.9	4 972	5 861
Estonia	0.5	0.8	5.3	:	:	:
Greece	3.3	8.2	3.9	0.2	:	3 848
Spain	24.4	38.2	4.2	0.5	3 025	5 117
France	62.2	88.5	5.7	0.6	4 444	6 248
Ireland	2.8	5.1	4.1	0.3	:	5 299
Italy	48.9	64.1	4.5	0.4	:	6 251
Cyprus	0.4	0.9	6.5	1.4	3 322	5 690
Latvia	0.7	1.1	4.9	0.8	:	2 234
Lithuania	1.0	1.8	4.8	0.5	1 285	2 129
Luxembourg	0.5	0.9	4.0	:	:	:
Hungary	4.2	7.8	5.5	0.6	:	:
Malta	0.2	0.3	4.4	1.4	:	4 280
Netherlands	14.3	22.3	4.5	0.5	4 066	6 234
Austria	9.5	11.7	5.2	0.3	6 261	7 481
Poland	12.3	21.9	5.6	0.7	:	2 657
Portugal	6.0	9.3	5.5	0.1	:	4 307
Slovenia	:	2.0	5.4	0.9	:	4 968
Slovakia	1.8	2.6	4.3	0.5	1 351	2 305
Finland	5.6	8.2	6.0	0.1	4 677	6 139
Sweden	11.5	16.8	6.6	0.2	:	6 916
United Kingdom	49.1	77.8	5.1	1.0	:	6 281
Bulgaria	1.3	2.1	3.9	0.7	:	1 634
Croatia	:	2.0	4.6	:	:	:
FYR of Macedonia	:	:	3.3	:	:	:
Romania	:	4.9	3.4	:	:	:
Turkey	6.7	15.3	3.6	0.1	:	:
Iceland	0.2	0.6	7.4	0.7	:	6 900
Liechtenstein	:	0.0	:	:	:	5 938
Norway	6.5	11.1	6.5	0.1	:	8 207
Switzerland	:	12.7	5.9	0.6	:	:
Japan	83.3	111.7	3.6	1.3	:	6 779
United States	306.6	521.4	5.4	2.1	:	10 005

(1) Refer to the Internet metadata file (http://europa.eu/estatref/info/sdds/en/educ/educ_list_of_indic.htm).

Figure 2.12: Public and private expenditure on educational institutions per pupil/student, 2003 (1)

(PPS for full-time equivalents)

TPS00067



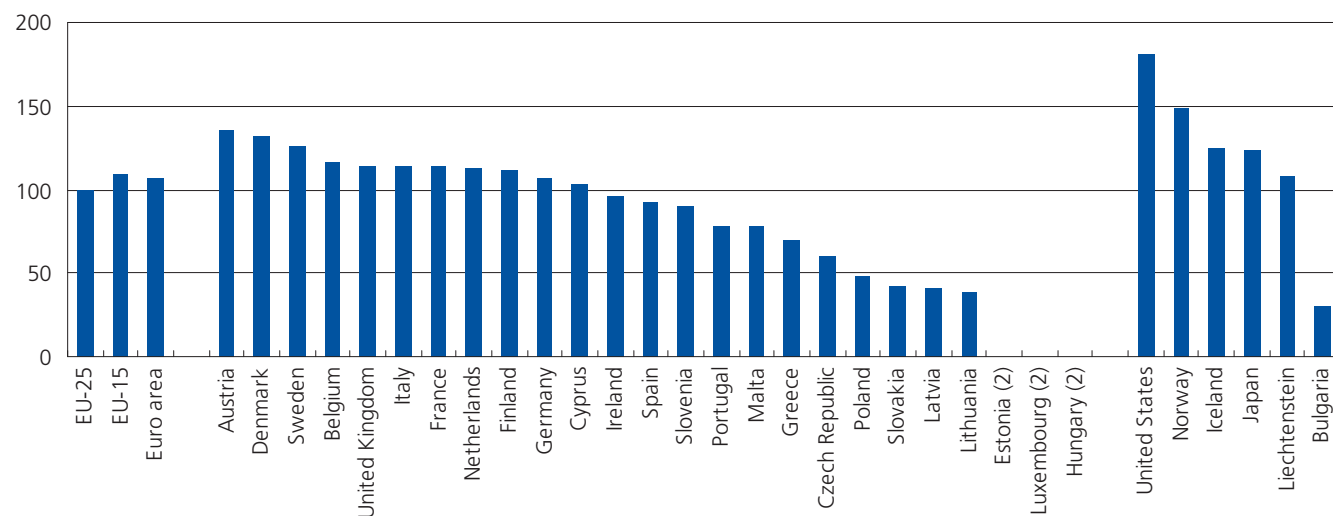
(1) Refer to the Internet metadata file (http://europa.eu/estatref/info/sdds/en/educ/educ_list_of_indic.htm).

(2) Not available.

The annual expenditure on public and private educational institutions per pupil/student compared to GDP per capita relates the resources (e.g. expenditure for personnel, other current and capital expenditure) being devoted to education in public and private educational institutions to the overall economic welfare of a country; it is based on full-time equivalent enrolment; the use of GDP per capita allows the comparison of levels of economic activity of different sized economies (per capita) irrespective of their price levels (in PPS).

Figure 2.13: Annual expenditure on public and private educational institutions compared with EU-25 average, 2003 (1)

(EU-25 = 100, based on PPS for full-time equivalents)



(1) Refer to the Internet metadata file (http://europa.eu/estatref/info/sdds/en/educ/educ_list_of_indic.htm).

(2) Not available.