INDICATOR A2

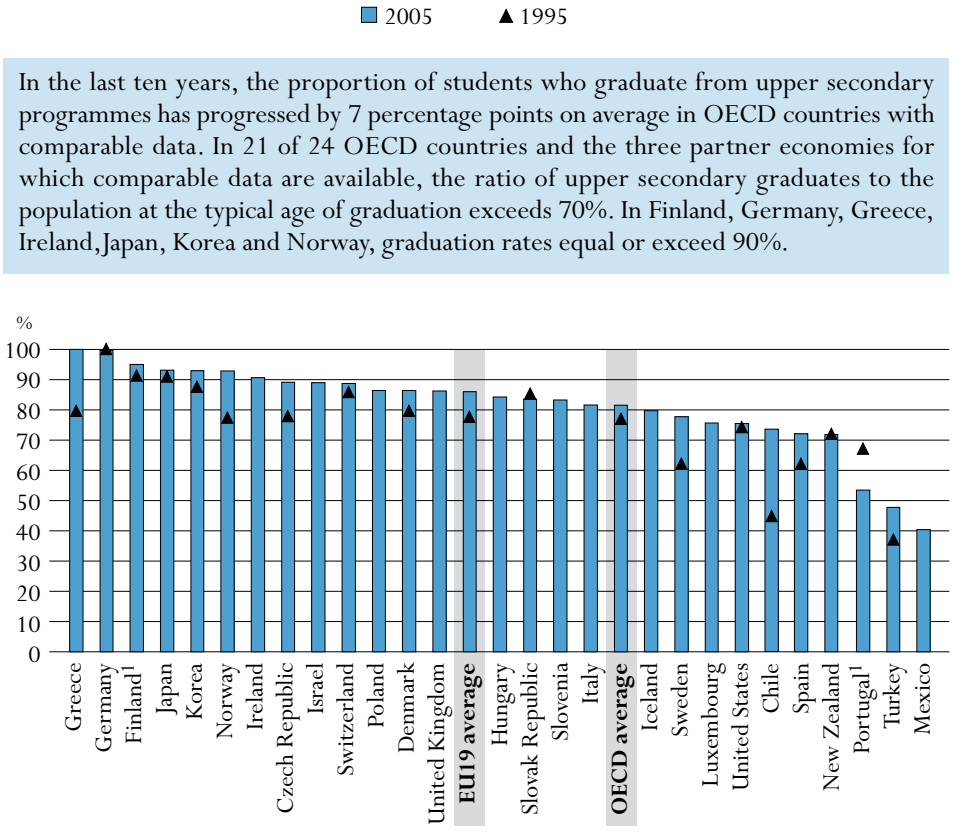
HOW MANY STUDENTS FINISH SECONDARY EDUCATION?

This indicator shows the current upper secondary graduate output of education systems, *i.e.* the percentage of the typical population of upper secondary school age that follows and successfully completes upper secondary programmes.

Key results

Chart A2.1. Upper secondary graduation rates (1995, 2005)

The chart shows the number of students completing upper secondary education programmes for the first time in 1995 and 2005, as a percentage of the age group normally completing this level; it gives an indication of how many young people complete upper secondary education compared to ten years before.



In the last ten years, the proportion of students who graduate from upper secondary programmes has progressed by 7 percentage points on average in OECD countries with comparable data. In 21 of 24 OECD countries and the three partner economies for which comparable data are available, the ratio of upper secondary graduates to the population at the typical age of graduation exceeds 70%. In Finland, Germany, Greece, Ireland, Japan, Korea and Norway, graduation rates equal or exceed 90%.

1. Year of reference 2004.

Countries are ranked in descending order of upper secondary graduation rates in 2005.

Source: OECD. Table A2.1. See Annex 3 for notes (*www.oecd.org/edu/eag2007*).

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Other highlights of this indicator

- Females are now more likely to complete upper secondary education than males in almost all OECD countries and partner economies, a reversal of the historical pattern. Today, graduation rates for females are below those for males only in Korea, Switzerland and Turkey and are equal only in the partner economy Slovenia.
- In many countries, males are more likely to be on vocational courses. Still, in nearly one-half of the countries represented there is either no gender difference or a higher proportion of females on such courses.
- The vast majority of students who graduate from upper secondary programmes graduate from programmes that are designed to provide access to further tertiary education.
- Most students obtain upper secondary qualifications giving them access to university-level study (ISCED 5A), although the extent to which students go on to take up such study varies significantly between countries.
- In some countries, a significant proportion of students broaden their knowledge at the post-secondary non-tertiary level after completing a first upper secondary programme. In the Czech Republic and Hungary, 20% or more of a typical age cohort complete a post-secondary non-tertiary programme.

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Policy context

Rising skill demands in OECD countries have made qualifications at the upper secondary level the minimum credential for successful labour market entry. Upper secondary education serves as the foundation for advanced learning and training opportunities, as well as preparation for direct entry into the labour market. Although many countries do allow students to leave the education system at the end of the lower secondary level, young people in OECD countries who leave without an upper secondary qualification tend to face severe difficulties in entering the labour market (see Indicators A8 and A9).

High upper secondary graduation rates do not guarantee that an education system has adequately equipped its graduates with the basic skills and knowledge necessary to enter the labour market because this indicator does not capture the quality of educational outcomes. But these graduation rates do give an indication of the extent to which educational systems succeed in preparing students to meet the minimum requirements of the labour market.

Evidence and explanations

Graduation from upper secondary education is becoming the norm in most OECD countries. Since 1995, the upper secondary graduation rate has increased by 7 percentage points on average across the OECD countries with comparable data. The highest growth occurred in Greece, Norway and Sweden and in the partner economy Chile, whereas the level of Germany, Japan, New Zealand, the Slovak Republic, Switzerland and the United States has been stable over the last ten years. In Mexico and Turkey, the proportion of students graduating at upper secondary level has strongly progressed since 2000 and thus has reduced the gap between these and other OECD countries.

In 21 of 24 OECD countries and the three partner economies for which comparable data are available, upper secondary graduation rates exceed 70% (Chart A2.1). In Finland, Germany, Greece, Ireland, Japan, Korea and Norway graduation rates equal or exceed 90%.

Gender differences

The balance of educational attainment between males and females in the adult population is unequal in most countries. In the past, females did not have sufficient opportunities and/or incentives to reach the same level of education as males. Females have generally been overrepresented among those who did not proceed to upper secondary education and underrepresented at the higher levels of education. However, these gender differences are most evident in older age groups and have been significantly reduced or reversed among younger age groups (see Indicator A1).

Today, it is males who trail behind females in upper secondary graduation in almost every OECD country (Table A2.1). Graduation rates for females exceed those for males in 20 of 23 OECD countries and in 2 of the 3 partner economies for which total upper secondary graduation rates can be compared between the genders. The exceptions are Korea, Switzerland and Turkey, where graduation rates are higher for males. In the partner economy Slovenia, graduation rates are similar for both genders. The gender gap is greatest in Denmark, Finland, Iceland, Ireland, Luxembourg, New Zealand, Norway, Poland, Spain and the United States, where female graduation rates exceed those of males by more than 10 percentage points.

Transitions following upper secondary educational programmes

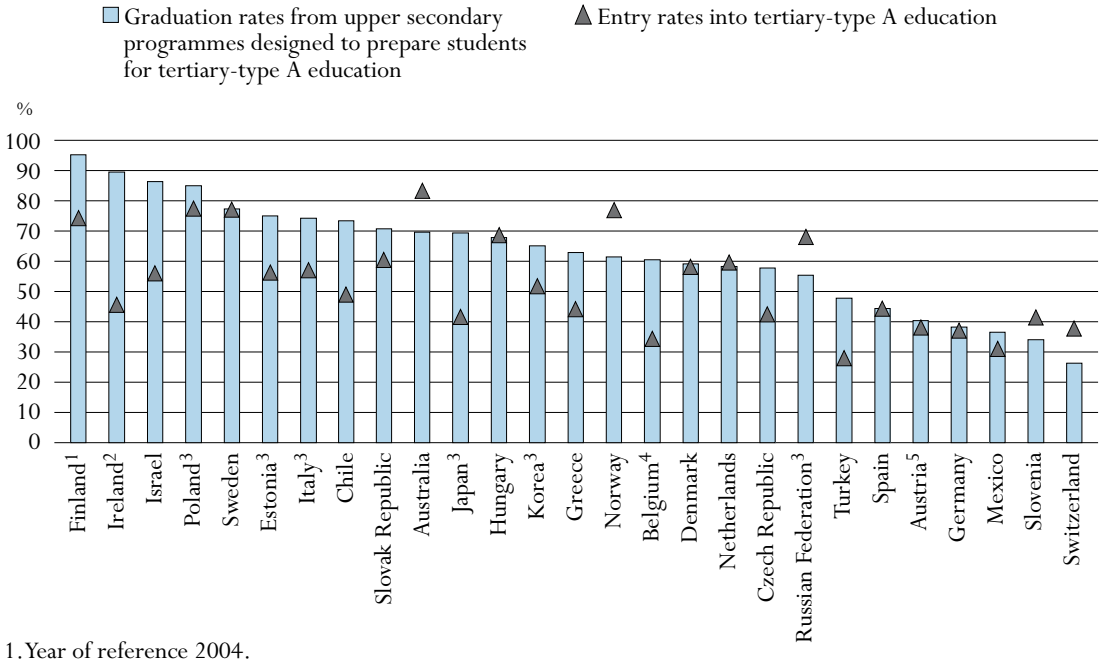
Graduation from upper secondary education is becoming the norm in most OECD and partner economies, but curriculum content in upper secondary programmes can vary depending on the type of education or occupation for which the programmes are designed. Most upper secondary programmes in OECD countries and partner economies are designed primarily to prepare students for tertiary studies, and their orientation can be general, pre-vocational or vocational.

The vast majority of students who graduate from upper secondary programmes graduate from programmes that are designed to provide access to further tertiary education (ISCED 3A and 3B). Programmes to facilitate direct entry into tertiary-type A education are preferred by students in all countries, except in Austria, Germany and Switzerland and the partner economy Slovenia where both female and male students are more likely to graduate from upper secondary programmes leading to tertiary-type B programmes (Table A2.1).

The graduation rate for ISCED 3C (long) programmes is less than 20% on average in the OECD countries.

Chart A2.2. Access to tertiary-type A education for upper secondary graduates (2005)

Comparison of graduation rates from upper secondary programmes designed for tertiary-type A entry with actual entry rates to tertiary-type A education



1. Year of reference 2004.
2. Full-time entrants only.
3. Entry rate for tertiary-type A programmes calculated as gross entry rate.
4. Excludes the German-speaking Community of Belgium.
5. Includes ISCED 4A programmes ("Berufsbildende Höhere Schulen").

Countries are ranked in descending order of graduation rates from upper secondary programmes designed to prepare students for tertiary-type A education in 2005.

Source: OECD. Tables A2.1. and C2.1. See Annex 3 for notes (*www.oecd.org/edu/eag2007*).

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It is interesting, however, to contrast the proportion of students who graduate from programmes designed for entry into tertiary-type A programmes with the proportion who actually do enter these programmes. Chart A2.2 shows this comparison and demonstrates significant variation among countries. For instance, in the OECD countries Belgium, Finland, Ireland, Japan and Turkey, and the partner economies Chile and Israel, the difference between graduation rates from upper secondary programmes designed for tertiary-type A programmes and the eventual entry rate to these tertiary-type A programmes is relatively large (more than 20 percentage points). This suggests that many students who achieve qualifications designed for university level entrance do not in fact go on to take up university studies, although at least in Belgium and Israel such upper secondary programmes also give access to tertiary-type B programmes. In the case of Israel, the difference may be explained by the very varied ages of entry to university, which is partially due to the two to three years of military service students undertake before entering higher education.

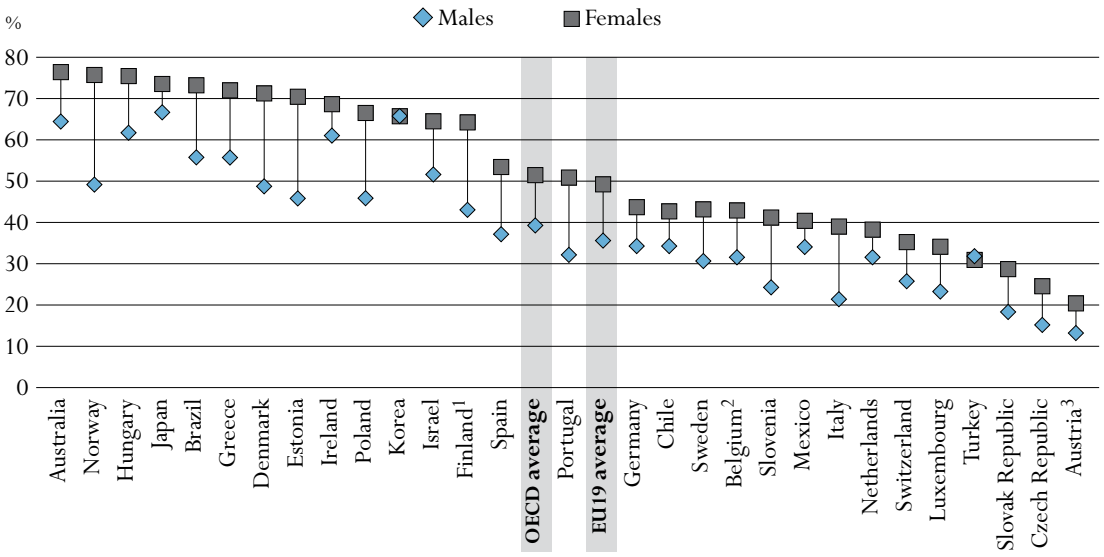
In contrast, in countries such as Australia, Norway and Switzerland and in the partner economies the Russian Federation and Slovenia, the upper secondary graduation rate is lower than entry rates. For some countries such as Australia or Norway, this could be explained by a high proportion of international/foreign students (see Indicator C3).

Gender differences by type of programmes

In most OECD countries and partner economies, students do not follow a uniform curriculum at the upper secondary level. Programmes at the upper secondary level can be subdivided into general, pre-vocational and vocational programmes (see Indicator C1).

Chart A2.3. Upper secondary graduation rates for general programmes, by gender (2005)

Percentage of graduates to the population at the typical age of graduation



1. Year of reference 2004.
2. Excludes the German-speaking Community of Belgium.
3. Excludes ISCED 4A programmes ("Berufsbildende Höhere Schulen").

Countries are ranked in descending order of upper secondary graduation rates for general programmes for females.

Source: OECD. Table A2.1. See Annex 3 for notes (*www.oecd.org/edu/eag2007*).

StatLink http://dx.doi.org/10.1787/068023602135

For all OECD countries and partner economies for which comparable data are available, graduation rates in general programmes for females exceed those for males, with the exception of Korea and Turkey. The OECD average graduation rate from general programmes is 51% for women and 39% for men. The difference is 25 percentage points higher in Norway and in the partner economy Estonia.

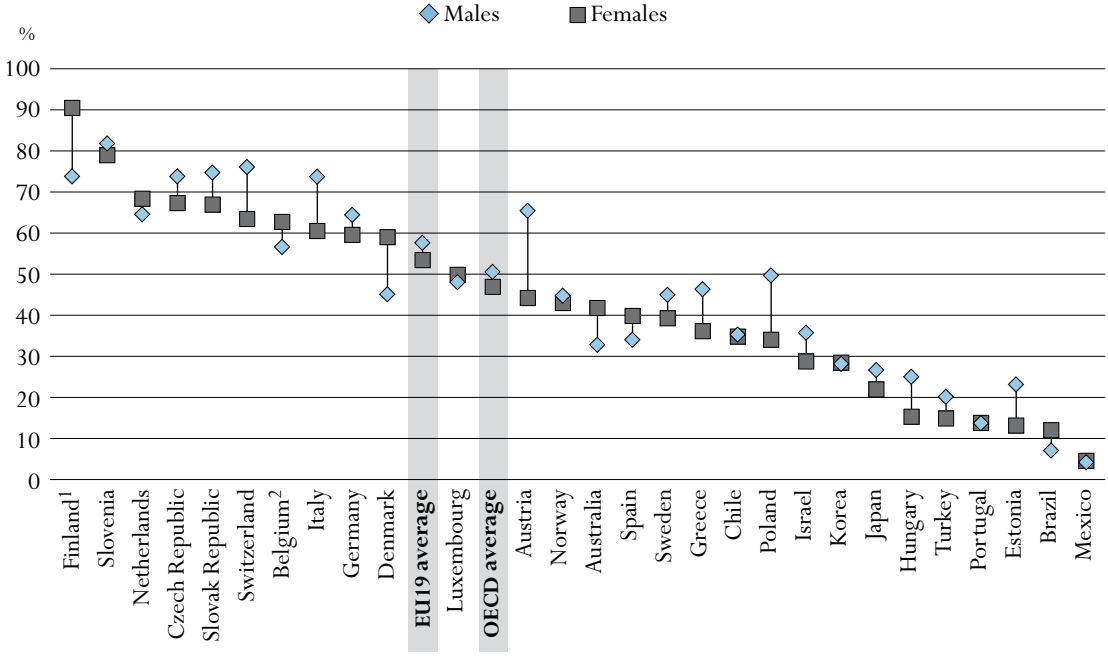
There is no clear gender trend for pre-vocational and vocational upper secondary graduation rates. Although vocational programmes are most common for males – 50% of males in OECD countries graduate compared to 47% for females – females students in such programmes outnumber males in Australia, Belgium, Denmark, Finland, Luxembourg, the Netherlands and Spain and the partner economy Brazil (Chart A2.4).

Graduation from post-secondary non-tertiary programmes

Post-secondary non-tertiary programmes of various kinds are offered in 26 OECD countries and 4 partner economies. From an international comparative point of view such programmes straddle the boundary between upper secondary and post-secondary education, even though they might clearly be considered either upper secondary or post-secondary programmes in a national context. Although the content of these programmes may not be significantly more advanced

Chart A2.4. Upper secondary graduation rates for pre-vocational/vocational programmes, by gender (2005)

Percentage of graduates to the population at the typical age of graduation



1. Year of reference 2004.
2. Excludes the German-speaking Community of Belgium.

Countries are ranked in descending order of upper secondary graduation rates for pre-vocational/vocational programmes for females.

Source: OECD. Table A2.1. See Annex 3 for notes (*www.oecd.org/edu/eag2007*).

StatLink http://dx.doi.org/10.1787/068023602135

than upper secondary programmes, post-secondary non-tertiary programmes serve to broaden the knowledge of participants who have already gained an upper secondary qualification. The students tend to be older than those enrolled at the upper secondary level.

Typical examples of such programmes are trade and vocational certificates, nursery teacher training in Austria and Switzerland, or vocational training in the dual system for holders of general upper secondary qualifications in Germany. In most countries, post-secondary non-tertiary programmes are vocationally oriented.

In the Czech Republic and Hungary, 20% or more of a typical age cohort complete a post-secondary non-tertiary programme.

In 13 of the 24 OECD countries with available data and two partner economies, the majority of, if not all, post-secondary non-tertiary students graduate from ISCED 4C programmes, which are designed primarily to prepare graduates for direct entry into the labour market. Although the gender difference is not apparent at the level of the OECD average, the proportion of males and females participating in such programmes in each country is very different. Poland and the partner economy Estonia count 50% more females who have completed an ISCED 4C programme than males, while the opposite trend exists in Ireland, where women represent four times less graduates than men (Table A2.3).

Apprenticeships that are designed for students who have already graduated from an upper secondary programme are also included in the post-secondary non-tertiary programmes. However, in 7 out of 24 OECD countries and one partner economy, 50% or more of post-secondary non-tertiary graduates have completed programmes designed to provide direct access to either tertiary-type A or B education. In Switzerland, 72% of graduates complete ISCED 4B programmes (Table A2.3).

Definitions and methodologies

The data for the school year 2004-2005 are based on the UOE data collection on education statistics administered annually by the OECD.

In Table A2.1, upper secondary graduates are those who successfully complete the final year of upper secondary education, regardless of age. In some countries, successful completion requires a final examination, and in others it does not (see Annex 1).

Upper secondary graduation rates are estimated as the number of students, regardless of age, who graduate for the first time from upper secondary programmes, divided by the population at the age at which students typically graduate from upper secondary education (see Annex 1). The graduation rates take into account students graduating from upper secondary education at the typical (modal) graduation ages, as well as older students (*e.g.* those in "second chance" programmes) or younger students. The unduplicated total count of graduates is calculated by netting out those students who have graduated from another upper secondary programme in a previous year.

Counts of graduates for ISCED 3A, 3B and 3C programmes are not unduplicated. Therefore, gross graduation rates cannot be added, as some individuals graduate from more than one upper secondary programme and would thus be counted twice. The same applies for graduation rates by programme orientation, *i.e.* general or vocational. Moreover, the typical graduation ages are not necessarily the same for the different programme types.

Pre-vocational and vocational programmes include both school-based programmes and combined school- and work-based programmes that are recognised as part of the education system. Entirely work-based education and training that is not overseen by a formal education authority is not taken into account.

In Table A2.2, data on trends in graduation rates at upper secondary level for the years 1995, 2000, 2001, 2002, 2003 and 2004 are based on a special survey carried out in the OECD countries and four of the six partner economies in January 2007.

In Table A2.3, post-secondary non-tertiary graduates are those who successfully complete the final year of post-secondary non-tertiary education, regardless of age. In some countries, successful completion requires a final examination, and in others it does not.

Post-secondary non-tertiary graduation rates are estimated as the number of students, regardless of age, who graduate for the first time from post-secondary non-tertiary programmes, divided by the population at the age at which students typically graduate from these programmes (see Annex 1). The graduation rates take into account students graduating at the typical (modal) graduation ages, as well as older or younger students. The unduplicated total count of graduates is calculated by netting out those students who have graduated from another post-secondary non-tertiary programme in a previous year.

For some countries, an unduplicated count of post-secondary non-tertiary graduates is unavailable and graduation rates may be overestimated because of graduates who have completed multiple programmes at the same level. Counts of graduates for ISCED 4A, 4B and 4C programmes are not unduplicated. Gross graduation rates cannot be added, as some individuals graduate from more than one post-secondary non-tertiary programme and would thus be counted twice. Moreover, the typical graduation ages are not necessarily the same for the different programme types.

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Table A2.1.

Upper secondary graduation rates (2005)

Percentage of upper secondary graduates to the population at the typical age of graduation, by programme destination, programme orientation and gender

		Total (unduplicated)			ISCED 3A (designed to prepare for direct entry to tertiary-type A education)		ISCED 3B (designed to prepare for direct entry to tertiary-type B education)		ISCED 3C (long) similar to duration of typical 3A or 3B programmes		ISCED 3C (short) shorter than duration of typical 3A or 3B programmes		General programmes		Pre-vocational/ vocational programmes	
		M + F	Males	Females	M + F	Females	M + F	Females	M + F	Females	M + F	Females	M + F	Females	M + F	Females
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD countries	Australia	m	m	m	70	76	x(8)	x(9)	37	41	x(8)	x(9)	70	76	37	41
	Austria	m	m	m	16	20	52	40	n	n	2	4	16	20	55	44
	Belgium[1]	m	m	m	60	66	a	a	19	18	16	20	36	42	59	62
	Canada	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Czech Republic	89	88	91	58	68	n	1	31	22	a	a	19	24	70	67
	Denmark	86	77	96	59	70	a	a	51	58	n	n	59	70	51	58
	Finland[2]	95	89	101	95	101	a	a	a	a	a	a	53	63	81	90
	France	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Germany	100	98	102	38	43	61	58	a	a	1	1	38	43	62	59
	Greece	102	99	106	63	71	a	a	40	35	x(8)	x(9)	63	71	41	36
	Hungary	84	81	87	68	75	a	a	19	14	x(8)	x(9)	68	75	20	15
	Iceland	80	68	92	55	68	1	2	37	29	17	21	56	68	54	50
	Ireland	91	84	98	89	97	a	a	5	6	81	65	64	68	100	100
	Italy	82	80	83	74	77	2	3	a	a	21	19	29	38	67	60
	Japan	93	92	94	69	73	1	n	23	21	x(8)	x(9)	69	73	24	21
	Korea	93	94	92	65	65	a	a	28	28	a	a	65	65	28	28
	Luxembourg	76	70	82	43	52	9	8	21	20	3	2	28	33	48	49
	Mexico	40	37	44	36	40	a	a	4	4	a	a	36	40	4	4
	Netherlands	m	m	m	58	65	a	a	20	22	22	18	34	37	66	68
	New Zealand	72	61	83	x(1)	x(3)	x(1)	x(3)	x(1)	x(3)	x(1)	x(3)	x(1)	x(3)	x(1)	x(3)
	Norway	93	82	104	61	75	a	a	43	42	m	m	61	75	43	42
	Poland	86	81	92	85	91	a	a	13	9	a	a	55	66	41	33
	Portugal	m	m	m	54	63	x(4)	x(5)	x(4)	x(5)	x(4)	x(5)	41	50	13	13
	Slovak Republic	84	81	86	71	77	a	a	21	15	1	1	23	28	70	66
	Spain	72	65	80	44	53	a	a	18	19	19	20	44	53	36	39
	Sweden	78	74	81	77	81	a	a	1	n.	n	n	36	42	42	39
	Switzerland	89	90	88	26	29	62	55	10	14	m	m	30	34	69	63
	Turkey	48	51	44	48	44	a	a	a	a	m	m	31	30	17	14
	United Kingdom	86	83	90	m	m	m	m	m	m	m	m	m	m	m	m
	United States	76	70	82	m	m	m	m	m	m	m	m	m	m	m	m
	OECD average	*82*	*78*	*87*	*59*	*66*	*8*	*7*	*18*	*17*	*11*	*10*	*45*	*51*	*48*	*47*
	EU19 average	*87*	*82*	*91*	*62*	*69*	*8*	*7*	*16*	*15*	*12*	*11*	*42*	*48*	*54*	*53*
Partner economies	Brazil	m	m	m	64	72	9	11	a	a	a	a	64	72	9	11
	Chile	73	69	77	73	77	a	a	a	a	a	a	38	43	35	34
	Estonia	m	m	m	75	82	a	a	a	a	a	a	57	70	18	13
	Israel	89	86	92	86	91	a	a	3	1	a	a	57	64	32	28
	Russian Federation	m	m	m	55	x(4)	12	x(6)	18	10	3	2	55	x(12)	33	x(14)
	Slovenia	83	83	83	34	42	46	50	n	n	32	28	32	40	80	78

Note: Mismatches between the coverage of the population data and the student/graduate data mean that the participation/graduation rates for those countries that are net exporters of students may be underestimated (for instance, Luxembourg) and those that are net importers may be overestimated.

1. Excludes the German-speaking Community of Belgium.

2. Year of reference 2004.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2007*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table A2.2.

Trends in graduation rates at upper secondary level (1995-2005)

Percentage of upper secondary graduates to the population at the typical age of graduation (1995, 2000, 2001, 2002, 2003, 2004, 2005)

		Typical Age	1995	2000	2001	2002	2003	2004	2005
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OECD countries	Australia	18-20	m	m	m	m	m	m	m
	Austria	18	m	m	m	m	m	m	m
	Belgium	18	m	m	m	m	m	m	m
	Canada	m	m	m	m	m	m	m	m
	Czech Republic	18-19	78	m	84	83	88	87	89
	Denmark	19-20	80	90	91	93	87	90	86
	Finland	19	91	91	85	84	90	95	m
	France	17-20	m	m	m	m	m	m	m
	Germany	19	101	92	92	94	97	99	100
	Greece	17-18	80	54	76	85	96	93	102
	Hungary	18	m	m	m	m	m	m	84
	Iceland	20	m	67	67	79	79	84	80
	Ireland	17-18	m	74	77	78	91	92	91
	Italy	19	m	78	81	78	m	82	82
	Japan	18	91	94	93	92	91	91	93
	Korea	17-18	88	96	100	99	92	94	93
	Luxembourg	17-19	m	m	m	69	71	69	76
	Mexico	18	m	33	34	35	37	39	40
	Netherlands	18-20	m	m	m	m	m	m	m
	New Zealand	17-18	72	80	79	77	78	75	72
	Norway	18-19	77	99	105	97	92	100	93
	Poland	18-20	m	90	93	91	86	79	86
	Portugal	17	67	52	48	50	59	53	m
	Slovak Republic	18-20	85	87	72	60	56	83	84
	Spain	17	62	60	66	66	67	66	72
	Sweden	19	62	75	71	72	76	78	78
	Switzerland	18-20	86	88	91	92	89	87	89
	Turkey	16-17	37	37	37	37	41	55	48
	United Kingdom	18	m	m	m	m	m	m	86
	United States	18	74	74	70	72	75	74	76
	OECD average		*77*	*76*	*77*	*77*	*78*	*80*	*82*
	OECD average for countries with 1995 and 2005 data		*77*						*84*
	EU19 average		*78*	*76*	*79*	*79*	*82*	*82*	*86*
Partner economies	Brazil	17-18	m	m	m	m	m	m	m
	Chile	18	46	63	m	61	64	66	73
	Estonia	m	m	m	m	m	m	m	m
	Israel	18	m	m	m	90	89	93	89
	Russian Federation	17	m	m	m	m	m	m	m
	Slovenia	m	m	m	m	m	m	m	83

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2007*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/068023602135

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Table A2.3.

Post-secondary non-tertiary graduation rates (2005)

Percentage of post-secondary non-tertiary graduates to the population at the typical age of graduation, by programme destination and gender

		Total (unduplicated)			ISCED 4A (designed to prepare for direct entry to tertiary-type A education)		ISCED 4B (designed to prepare for direct entry to tertiary-type B education)		ISCED 4C	
		M + F	Males	Females	M + F	Females	M + F	Females	M + F	Females
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD countries	**Australia**	m	m	m	a	a	a	a	19.0	22.6
	Austria	m	m	m	24.3	28.5	3.2	5.5	1.7	2.9
	Belgium[1]	m	m	m	7.7	7.5	3.1	3.3	9.1	10.7
	Canada	m	m	m	m	m	m	m	m	m
	Czech Republic	26.2	24.2	28.4	23.3	25.9	a	a	2.9	2.5
	Denmark	1.2	1.6	0.8	1.2	0.8	a	a	a	a
	Finland[2]	2.6	2.5	2.8	a	a	a	a	5.4	5.9
	France	m	m	m	m	m	m	m	m	m
	Germany	16.4	17.7	15.1	11.2	10.6	5.2	4.6	a	a
	Greece	10.7	10.0	11.4	a	a	a	a	10.8	11.6
	Hungary	20.4	19.2	21.6	a	a	a	a	26.3	28.2
	Iceland	7.4	7.5	7.3	n	n	n	n	7.7	7.4
	Ireland	14.3	23.0	5.2	a	a	a	a	14.3	5.2
	Italy	6.9	5.2	8.6	a	a	a	a	6.9	8.6
	Japan	m	m	m	m	m	m	m	m	m
	Korea	a	a	a	a	a	a	a	a	a
	Luxembourg	2.6	4.2	0.9	a	a	a	a	2.6	0.9
	Mexico	a	a	a	a	a	a	a	a	a
	Netherlands	m	m	m	a	a	a	a	1.3	0.7
	New Zealand	18.2	11.5	25.3	x(1)	x(3)	x(1)	x(3)	x(1)	x(3)
	Norway	5.1	7.1	3.0	1.0	0.3	a	a	4.6	2.9
	Poland	13.3	10.2	16.6	a	a	a	a	13.3	16.6
	Portugal	m	m	m	m	m	m	m	m	m
	Slovak Republic	2.8	3.1	2.5	2.8	2.5	a	a	a	a
	Spain	a	a	a	a	a	a	a	a	a
	Sweden	0.8	0.7	0.9	a	a	a	a	0.8	0.9
	Switzerland	15.3	11.5	19.0	5.3	4.7	11.0	15.7	a	a
	Turkey	a	a	a	a	a	a	a	a	a
	United Kingdom	m	m	m	m	m	m	m	m	m
	United States	m	m	m	m	m	m	m	m	m
	OECD average	***8.2***	***8.0***	***8.5***	***3.3***	***3.5***	***1.0***	***1.3***	***5.5***	***5.5***
	EU19 average	***9.1***	***9.4***	***8.8***	***4.4***	***4.7***	***0.7***	***0.8***	***6.0***	***5.9***
Partner economies	**Brazil**	a	a	a	a	a	a	a	a	a
	Chile	a	a	a	a	a	a	a	a	a
	Estonia	m	m	m	a	a	a	a	18.0	22.3
	Israel	m	m	m	m	m	m	m	a	a
	Russian Federation	m	m	m	a	a	a	a	6.2	6.3
	Slovenia	2.6	1.4	3.9	2.0	2.8	0.7	1.1	n	n

Note: Mismatches between the coverage of the population data and the student/graduate data mean that the participation/graduation rates for those countries that are net exporters of students may be underestimated (for instance, Luxembourg) and those that are net importers may be overestimated.

1. Excludes the German-speaking Community of Belgium.
2. Year of reference 2004.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2007*).

StatLink http://dx.doi.org/10.1787/068023602135

Reader's Guide

Coverage of the statistics

Although a lack of data still limits the scope of the indicators in many countries, the coverage extends, in principle, to the entire national education system (within the national territory) regardless of the ownership or sponsorship of the institutions concerned and regardless of education delivery mechanisms. With one exception described below, all types of students and all age groups are meant to be included: children (including students with special needs), adults, nationals, foreigners, as well as students in open distance learning, in special education programmes or in educational programmes organised by ministries other than the Ministry of Education, provided the main aim of the programme is the educational development of the individual. However, vocational and technical training in the workplace, with the exception of combined school and work-based programmes that are explicitly deemed to be parts of the education system, is not included in the basic education expenditure and enrolment data.

Educational activities classified as "adult" or "non-regular" are covered, provided that the activities involve studies or have a subject matter content similar to "regular" education studies or that the underlying programmes lead to potential qualifications similar to corresponding regular educational programmes. Courses for adults that are primarily for general interest, personal enrichment, leisure or recreation are excluded.

Calculation of international means

For many indicators an OECD average is presented and for some an OECD total.

The OECD average is calculated as the unweighted mean of the data values of all OECD countries for which data are available or can be estimated. The OECD average therefore refers to an average of data values at the level of the national systems and can be used to answer the question of how an indicator value for a given country compares with the value for a typical or average country. It does not take into account the absolute size of the education system in each country.

The OECD total is calculated as a weighted mean of the data values of all OECD countries for which data are available or can be estimated. It reflects the value for a given indicator when the OECD area is considered as a whole. This approach is taken for the purpose of comparing, for example, expenditure charts for individual countries with those of the entire OECD area for which valid data are available, with this area considered as a single entity.

Note that both the OECD average and the OECD total can be significantly affected by missing data. Given the relatively small number of countries, no statistical methods are used to compensate for this. In cases where a category is not applicable (code "a") in a country or where the data value is negligible (code "n") for the corresponding calculation, the value zero is imputed for the purpose of calculating OECD averages. In cases where both the numerator and the denominator of a ratio are not applicable (code "a") for a certain country, this country is not included in the OECD average.

For financial tables using 1995 data, both the OECD average and OECD total are calculated for countries providing both 1995 and 2004 data. This allows comparison of the OECD average and OECD total over time with no distortion due to the exclusion of certain countries in the different years.

For many indicators an EU19 average is also presented. It is calculated as the unweighted mean of the data values of the 19 OECD countries that are members of the European Union for which data are available or can be estimated. These 19 countries are Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Ireland, Luxembourg, the Netherlands, Poland, Portugal, the Slovak Republic, Spain, Sweden and the United Kingdom.

Classification of levels of education

The classification of the levels of education is based on the revised International Standard Classification of Education (ISCED-97). The biggest change between the revised ISCED and the former ISCED (ISCED-76) is the introduction of a multi-dimensional classification framework, allowing for the alignment of the educational content of programmes using multiple classification criteria. ISCED is an instrument for compiling statistics on education internationally and distinguishes among six levels of education. The glossary available at *www.oecd.org/edu/eag2007* describes in detail the ISCED levels of education, and Annex 1 shows corresponding typical graduation ages of the main educational programmes by ISCED level.

Symbols for missing data

Six symbols are employed in the tables and charts to denote missing data:

a Data is not applicable because the category does not apply.

c There are too few observations to provide reliable estimates (*i.e.* there are fewer than 3% of students for this cell or too few schools for valid inferences). However, these statistics were included in the calculation of cross-country averages.

m Data is not available.

n Magnitude is either negligible or zero.

w Data has been withdrawn at the request of the country concerned.

x Data included in another category or column of the table (*e.g.* *x*(2) means that data are included in column 2 of the table).

~ Average is not comparable with other levels of education.

Further resources

The website *www.oecd.org/edu/eag2007* provides a rich source of information on the methods employed for the calculation of the indicators, the interpretation of the indicators in the respective national contexts and the data sources involved. The website also provides access to the data underlying the indicators as well as to a comprehensive glossary for technical terms used in this publication.

Any post-production changes to this publication are listed at *www.oecd.org/edu/eag2007*.

The website *www.pisa.oecd.org* provides information on the OECD Programme for International Student Assessment (PISA), on which many of the indicators in this publication draw.

Education at a Glance uses the OECD's StatLinks service. Below each table and chart in *Education at a Glance 2007* is a url which leads to a corresponding Excel workbook containing the underlying data for the indicator. These urls are stable and will remain unchanged over time. In addition, readers of the *Education at a Glance* e-book will be able to click directly on these links and the workbook will open in a separate window.

Codes used for territorial entities

These codes are used in certain charts. Country or territorial entity names are used in the text. Note that in the text the Flemish Community of Belgium is referred to as "Belgium (Fl.)" and the French Community of Belgium as "Belgium (Fr.)".

AUS	Australia	ITA	Italy
AUT	Austria	JPN	Japan
BEL	Belgium	KOR	Korea
BFL	Belgium (Flemish Community)	LUX	Luxembourg
BFR	Belgium (French Community)	MEX	Mexico
BRA	Brazil	NLD	Netherlands
CAN	Canada	NZL	New Zealand
CHL	Chile	NOR	Norway
CZE	Czech Republic	POL	Poland
DNK	Denmark	PRT	Portugal
ENG	England	RUS	Russian Federation
EST	Estonia	SCO	Scotland
FIN	Finland	SVK	Slovak Republic
FRA	France	SVN	Slovenia
DEU	Germany	ESP	Spain
GRC	Greece	SWE	Sweden
HUN	Hungary	CHE	Switzerland
ISL	Iceland	TUR	Turkey
IRL	Ireland	UKM	United Kingdom
ISR	Israel	USA	United States

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