

## CURRENT UPPER SECONDARY GRADUATION RATES

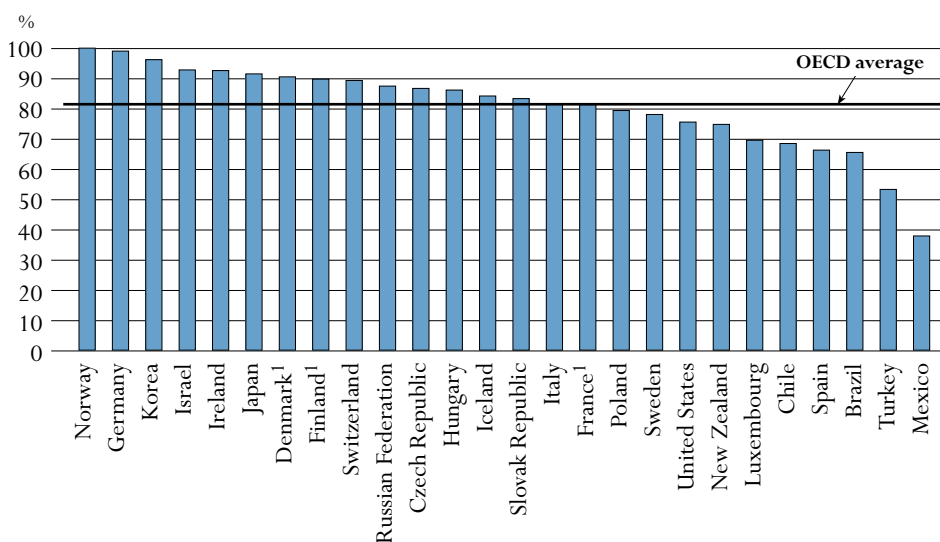
This indicator shows the current upper secondary graduate output of education systems, *i.e.* the percentage of the typical population of upper secondary school age that follows and successfully completes upper secondary programmes.

### Key results

#### Chart A2.1. Upper secondary graduation rates (2004)

The chart shows the number of students completing upper secondary education programmes for the first time, as a percentage of the age group normally completing this level. Although not all of the graduates are in this age band, this calculation gives an indication of how many of today's young people are completing upper secondary education.

In 18 of 22 OECD countries and in 2 of the 4 partner countries for which comparable data are available, the ratio of upper secondary graduates to the population at the typical age of graduation exceeds 70%. In Denmark, Finland, Germany, Ireland, Japan, Korea and Norway, and the partner country Israel, graduation rates equal or exceed 90%. The challenge is now to ensure that the remaining fraction is not left behind, with the risk of limited job prospects that this may entail.



1. Year of reference 2003.

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

Source: OECD, Table A2.1. See Annex 3 for notes ([www.oecd.org/edu/eag2006](http://www.oecd.org/edu/eag2006)).

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### Other highlights of this indicator

- Females are now more likely to complete upper secondary education than males in almost every OECD country, a reversal of the historical pattern. Today, only in Turkey are graduation rates for females below those for males.
- 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 many countries, males are more likely to be on vocational courses. Still, in nearly half of the countries represented there is either no gender difference or a higher proportion of females on such courses.
- 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, Hungary and Ireland, 20% or more of a typical age cohort complete a post-secondary non-tertiary programme.

## 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, A9 and A10).

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. In 18 of 22 OECD countries and in 2 of the 4 partner countries for which comparable data are available, upper secondary graduation rates exceed 70% (Chart A2.1). In Denmark, Finland, Germany, Ireland, Japan, Korea and Norway and the partner country Israel, graduation rates equal or exceed 90%.

The challenge is now to ensure that the remaining fraction is not left behind, with the risk of limited job prospects that this could entail.

## 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 19 of 22 OECD countries and in the 3 partner countries for which total upper secondary graduation rates can be compared between the genders. The exception is Turkey, where graduation rates are higher for males. In Korea and Switzerland, graduation rates are similar for both genders, with a less than one percentage point difference. The gender gap is greatest in Denmark, Finland, Iceland, Ireland, New Zealand, Norway, Poland and Spain, and in the partner country Brazil, where female graduation rates exceed those of males by more than 10 percentage points.

## Transitions following educational programmes

Graduation from upper secondary education is becoming the norm in most OECD and partner countries, 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 are designed primarily to prepare students for tertiary studies, and their orientation can be general, pre-vocational or vocational.

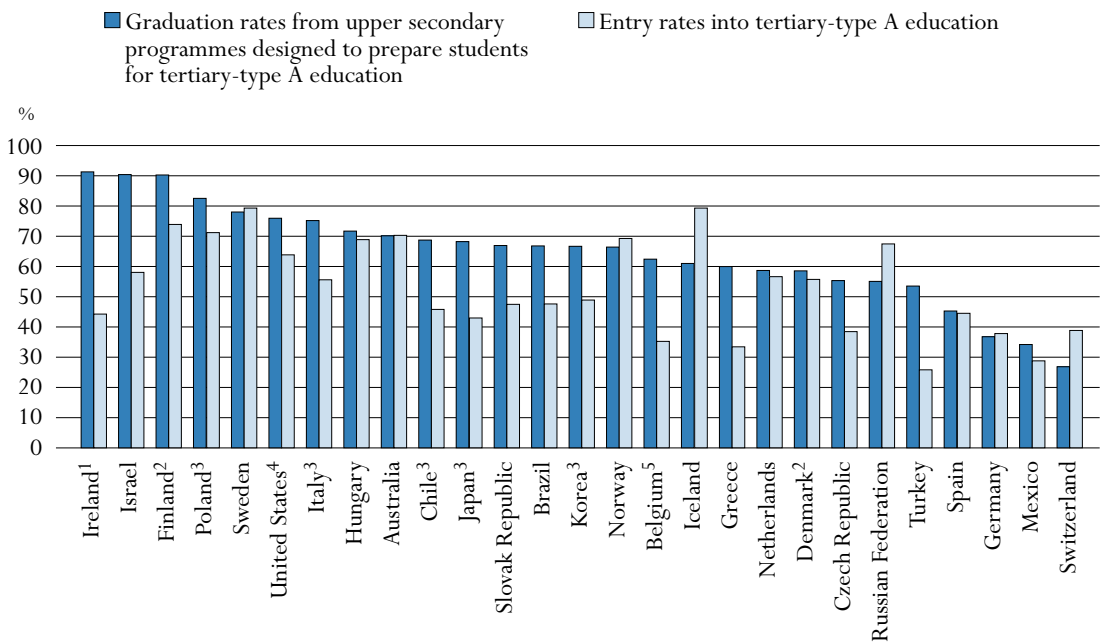
The vast majority of students who graduate from upper secondary programmes graduate from programmes that are designed to provide access to further tertiary education (ISCED 3A and 3B). Programmes to facilitate direct entry into tertiary-type A education are preferred by students in all countries, except in Germany and Switzerland 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 20% on average in the OECD countries.

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, Greece, Ireland, Japan and Turkey and the partner countries Brazil, Chile and Israel, the difference between graduation rates

### Chart A2.2. Access to tertiary-type A education for upper secondary graduates (2004)

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



1. Full-time entrants only.

2. Year of reference 2003.

3. Entry rate for tertiary-type A programmes calculated as gross entry rate.

4. Tertiary-type A education includes tertiary-type B education.

5. Excludes the German speaking community of Belgium.

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

Source: OECD. Tables A2.1. and C2.1. See Annex 3 for notes ([www.oecd.org/edu/eag2006](http://www.oecd.org/edu/eag2006)).

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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 such upper secondary programmes may also give access to tertiary-type B programmes. In contrast, in countries such as Australia, Denmark, Germany, Hungary, Netherlands, Norway, Spain and Sweden, where the comparative graduation and entry rates are similar, the reverse seems to be true.

In 14 out of 25 OECD countries for which comparable data are available, more males than females graduate from pre-vocational and vocational upper secondary programmes. Graduation rates for these programmes are higher for females in seven OECD countries – Belgium, Denmark, Finland, Ireland, the Netherlands, Norway and Spain – and are the same for males and females in the four remaining OECD countries.

### **Graduation from post-secondary non-tertiary programmes**

Post-secondary non-tertiary programmes of various kinds are offered in 26 OECD countries. 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 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 in Canada and the United States, 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 12 of the 19 OECD countries with available data, 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.

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 20 OECD countries, 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% graduate from ISCED 4B programmes.

### **Definitions and methodologies**

The data for the school year 2003-2004 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). 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 students for ISCED 3A, 3B and 3C programmes are not unduplicated, however. 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.

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, 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 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. These countries are marked with a footnote in the Table A2.2.

Counts of students 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.

Table A2.1.

## Upper secondary graduation rates (2004)

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)
<b>OECD countries</b>															
Australia	m	m	m	70	75	x(8)	x(9)	54	51	x(8)	x(9)	70	75	54	51
Austria	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Belgium <sup>1</sup>	m	m	m	62	67	a	a	20	18	17	22	37	43	62	65
Canada	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Czech Republic	87	85	88	55	64	n	n	31	23	n	n	18	23	69	65
Denmark <sup>2</sup>	90	81	100	58	70	a	a	56	63	a	a	58	70	56	63
Finland <sup>2</sup>	90	84	96	90	96	a	a	a	a	a	a	52	62	75	83
France <sup>2</sup>	81	78	84	51	60	11	10	38	33	3	2	33	40	70	65
Germany	99	97	101	37	40	61	60	a	a	1	1	36	40	62	61
Greece	m	m	m	59	68	a	a	37	36	x(8)	x(9)	59	68	39	38
Hungary	86	82	90	71	80	a	a	19	15	x(8)	x(9)	71	80	21	15
Iceland	84	72	96	61	75	1	2	37	30	15	17	61	75	52	48
Ireland	92	86	99	91	97	a	a	6	6	a	a	66	69	34	38
Italy	81	80	83	75	78	3	4	a	a	19	18	29	38	67	60
Japan	91	90	92	68	71	1	n	23	21	x(8)	x(9)	68	71	24	21
Korea	96	96	96	66	66	a	a	30	30	a	a	66	66	30	30
Luxembourg	69	66	73	42	49	7	7	18	15	2	1	28	31	42	42
Mexico	38	34	41	34	37	a	a	4	4	a	a	34	37	4	4
Netherlands	m	m	m	58	65	a	a	20	22	22	18	34	38	66	68
New Zealand	75	65	85	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	100	86	114	66	80	a	a	45	46	m	m	66	80	45	46
Poland	79	70	89	82	87	a	a	a	a	7	7	43	52	45	42
Portugal	m	m	m	53	62	x(4)	x(5)	x(4)	x(5)	x(4)	x(5)	40	48	14	14
Slovak Republic	83	81	85	66	74	a	a	22	15	1	2	22	26	68	62
Spain	66	58	75	45	54	a	a	18	19	7	8	45	54	25	27
Sweden	78	75	81	77	81	a	a	1	n	a	a	37	44	41	37
Switzerland	89	89	90	27	30	61	55	12	16	m	m	29	35	70	66
Turkey	53	57	49	53	49	a	a	m	m	a	a	34	33	19	15
United Kingdom	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
United States	75	72	79	75	79	a	a	a	a	a	a	75	79	a	a
<b>OECD average</b>	<b>81</b>	<b>77</b>	<b>86</b>	<b>61</b>	<b>67</b>	<b>6</b>	<b>6</b>	<b>20</b>	<b>19</b>	<b>5</b>	<b>5</b>	<b>47</b>	<b>53</b>	<b>44</b>	<b>43</b>
<b>EU19 average</b>	<b>83</b>	<b>79</b>	<b>88</b>	<b>63</b>	<b>70</b>	<b>5</b>	<b>5</b>	<b>18</b>	<b>17</b>	<b>6</b>	<b>6</b>	<b>42</b>	<b>49</b>	<b>50</b>	<b>50</b>
<b>Partner countries</b>															
Brazil	65	57	75	66	76	a	a	a	a	a	a	65	74	1	2
Chile	68	64	72	68	72	a	a	a	a	a	a	37	41	32	32
Israel	93	89	96	90	95	a	a	3	1	a	a	59	66	34	30
Russian Federation	87	x(1)	x(1)	55	x(4)	11	x(6)	18	x(8)	4	x(10)	55	x(12)	33	x(14)

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 2003.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2006](http://www.oecd.org/edu/eag2006)).

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

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Table A2.2.  
**Post-secondary non-tertiary graduation rates (2004)**

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 (designed to prepare for direct entry to the labour market)	
	M + F	Males	Females	M + F	Females	M + F	Females	M + F	Females
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>OECD countries</b>									
Australia	m	m	m	a	a	a	a	20.0	23.5
Austria	m	m	m	m	m	m	m	m	m
Belgium <sup>1,2</sup>	m	m	m	7.6	7.6	2.9	3.1	8.6	10.1
Canada	m	m	m	x(8)	x(9)	x(8)	x(9)	4.6	5.9
Czech Republic	30.4	28.8	32.2	25.2	28.2	a	a	5.2	4.0
Denmark <sup>1,3</sup>	1.0	1.4	0.6	1.0	0.6	a	a	a	a
Finland <sup>3</sup>	2.3	2.2	2.4	a	a	a	a	4.5	4.8
France <sup>3</sup>	1.2	0.8	1.6	0.6	0.8	a	a	0.6	0.8
Germany	15.4	16.5	14.2	10.3	9.7	5.1	4.5	a	a
Greece	9.9	9.1	10.7	a	a	a	a	9.9	10.7
Hungary	20.0	18.1	21.9	a	a	a	a	27.0	29.5
Iceland	6.9	7.7	6.0	a	a	a	a	6.9	6.1
Ireland	27.7	31.7	23.4	a	a	a	a	27.7	23.4
Italy	6.0	4.6	7.5	a	a	a	a	6.0	7.5
Japan	m	m	m	m	m	m	m	m	m
Korea	a	a	a	a	a	a	a	a	a
Luxembourg	3.6	4.9	2.3	a	a	a	a	3.6	2.3
Mexico	a	a	a	a	a	a	a	a	a
Netherlands <sup>1</sup>	1.2	1.9	0.5	a	a	a	a	1.2	0.5
New Zealand	12.0	7.5	16.7	x(1)	x(3)	x(1)	x(3)	x(1)	x(3)
Norway	4.3	7.2	1.3	1.1	0.3	a	a	3.9	1.2
Poland	13.1	9.6	16.8	a	a	a	a	13.1	16.8
Portugal	m	m	m	m	m	m	m	m	m
Slovak Republic	2.8	2.3	3.4	2.8	3.4	a	a	a	a
Spain	a	a	a	a	a	a	a	a	a
Sweden	0.6	0.6	0.5	m	m	a	a	0.6	0.5
Switzerland	14.7	11.4	18.0	4.5	3.7	11.2	15.6	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
<b>OECD average</b>	7.9	7.6	8.2	2.4	2.5	0.8	1.0	6.0	6.2
<b>EU19 average</b>	9.0	8.8	9.2	3.2	3.3	0.5	0.5	6.7	6.9
<b>Partner countries</b>									
Brazil	a	a	a	a	a	a	a	a	a
Chile	a	a	a	a	a	a	a	a	a
Israel	m	m	m	m	m	a	a	a	a
Russian Federation	m	m	m	a	a	a	a	7	7

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. Gross graduation rate may include some double counting.

2. Excludes the German-speaking Community of Belgium.

3. Year of reference 2003.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2006](http://www.oecd.org/edu/eag2006)).

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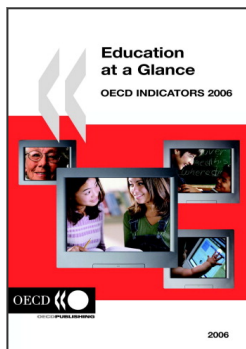
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