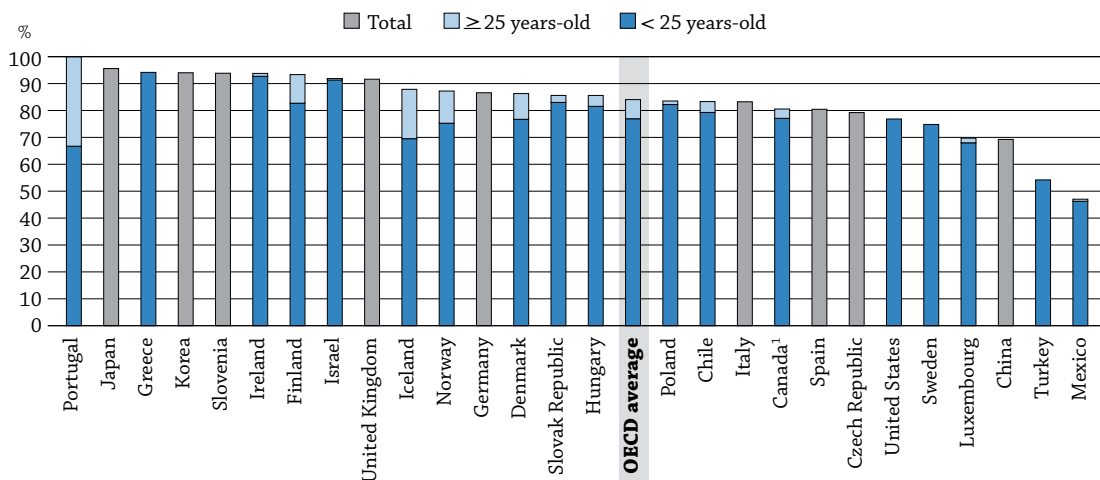


## HOW MANY STUDENTS ARE EXPECTED TO FINISH SECONDARY EDUCATION?

- Based on current patterns of graduation, it is estimated that an average of 84% of today's young people in OECD countries will complete upper secondary education over their lifetimes; in G20 countries, some 78% of young people will.
- In some countries, it is common for students to graduate from upper secondary programmes after the age of 25. Around 10% of upper secondary graduates in Denmark, Finland and Norway are 25 or older, while 20% in Iceland and more than 40% in Portugal are.

Chart A2.1. Upper secondary graduation rates (2010)



Note: Only first-time graduates in upper secondary programmes are reported in this chart.

1. Year of reference 2009.

Countries are ranked in descending order of the upper secondary graduation rates in 2010.

Source: OECD. China: UNESCO Institute for Statistics (World Education Indicators programme). Table A2.1. See Annex 3 for notes ([www.oecd.org/edu/eag2012](http://www.oecd.org/edu/eag2012)).

StatLink <http://dx.doi.org/10.1787/888932661573>

### Context

Upper secondary education provides the basis for advanced learning and training opportunities and prepares some students for direct entry into the labour market. Graduation rates discussed here do not assume 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. However, these rates do give an indication of the extent to which education systems are succeeding in preparing students to meet the labour market's minimum requirements.

Although many countries allow students to leave the education system after completing lower secondary education, students in OECD countries who leave school without an upper secondary qualification tend to face severe difficulties entering – and remaining in – the labour market. Leaving school early is a problem, both for individuals and society. Policy makers are examining ways to reduce the number of early school-leavers, defined as those students who do not complete their upper secondary education. Internationally comparable measures of how many students successfully complete upper secondary programmes – which also imply how many students do not complete those programmes – can assist efforts to that end.

### ■ Other findings

- In 23 of 27 countries with available data, **first-time upper secondary graduation rates exceed 75%**. In Finland, Greece, Ireland, Israel, Japan, Korea, Portugal, Slovenia and the United Kingdom, graduation rates equal or exceed 90%.
- **Young women are now more likely than young men to graduate from upper secondary programmes** in almost all OECD countries, a reversal of the historical pattern. Only in Germany are graduation rates for young women slightly lower than those for young men. Young women are also graduating from vocational programmes more often than in the past; consequently, their graduation rates from these programmes are catching up with those of young men.
- In most countries, **upper secondary education is designed to prepare students to enter tertiary-type A (largely theory-based) education**. In Germany, Slovenia, and Switzerland, however, students are more likely to enrol in and graduate from upper secondary programmes that lead to tertiary-type B education, where courses are typically shorter and focus on developing practical, technical or occupational skills.
- **Most boys in vocational programmes at the upper secondary level choose to study engineering, manufacturing and construction**, while girls in such programmes opt for several different fields of study, notably business, law, social sciences, health and welfare, and services.
- This edition marks the second time that comparable data have been published from 25 countries that participated in a special survey on the successful completion of upper secondary programmes. The data show that **70% of students who begin upper secondary education complete the programmes they entered within the theoretical duration of the programme**. However, there are large differences in completion rates, depending on gender and type of programme.

### ■ Trends

Since 1995, the upper secondary graduation rate has increased by an average of 8 percentage points among OECD countries with comparable data, which represents an annual growth rate of 0.6%. The greatest increase occurred in Portugal, which showed an annual growth rate of 4.7% between 1995 and 2010.

### ■ Note

Graduation rates represent the estimated percentage of people from a certain age cohort that is expected to graduate at some point during their lifetime. This estimate is based on the number of graduates in 2010 and the age distribution of this group. The graduation rates are based on the current pattern of graduation and are thus sensitive to any changes in the education system, such as the introduction of new programmes, and the lengthening or shortening of programme duration. Graduation rates can be very high – even above 100% – during a period when an unexpected category of people goes back to school. For example, this happened in Portugal, when the “New Opportunities” programme was launched to provide a second chance for those individuals who left school early without a secondary diploma.

In this indicator, 25 is regarded as the upper age limit for completing initial education. Among OECD countries, 93% of first-time graduates from upper secondary programmes in 2010 were younger than 25. People who graduate from this level when they are older than 25 are usually enrolled in special programmes.

## Analysis

### Graduation from upper secondary programmes

Even if completing upper secondary education is considered the norm in most OECD and other G20 countries and economies, the proportion of graduates outside the typical age of graduation varies. First-time graduates are generally between 17 and 20 years old (see Table X1.1a in Annex 1), but some countries also offer second-chance/adult-education programmes. In the Nordic countries, for example, students can leave the education system relatively easily and re-enter it later on. That is why graduation rates for students 25 years or older are relatively high in Denmark, Finland, Iceland and Norway (at least 10% of graduates). Indeed, graduation rates do not imply that all young people have graduated from secondary school by the time they enter the labour market; some students graduate after a period of time spent in work. Policy makers could thus encourage students to complete their upper secondary education before they look for a job, as this is often considered to be the minimum credential for successful entry into the labour market (Chart A2.1). In Portugal, the “New Opportunities” programme, launched in 2005, was introduced to provide a second chance to individuals who left school early or are at risk of doing so, and to assist those in the labour force who want to acquire further qualifications. As a result of the programme, graduation rates in 2010 exceeded 100% and were 41 percentage points higher than in 2008. More than 40% of the students concerned were older than 25.

In most countries, men and women do not have the same level of educational attainment. Women, who often had fewer opportunities and/or incentives to attend higher levels of education, have generally been over-represented among those who had not attained an upper secondary education and were thus under-represented at higher levels of education. But this has changed over the years, and the education gap between men and women has narrowed significantly, and has even been reversed in some cases, among young people (see Indicator A1).

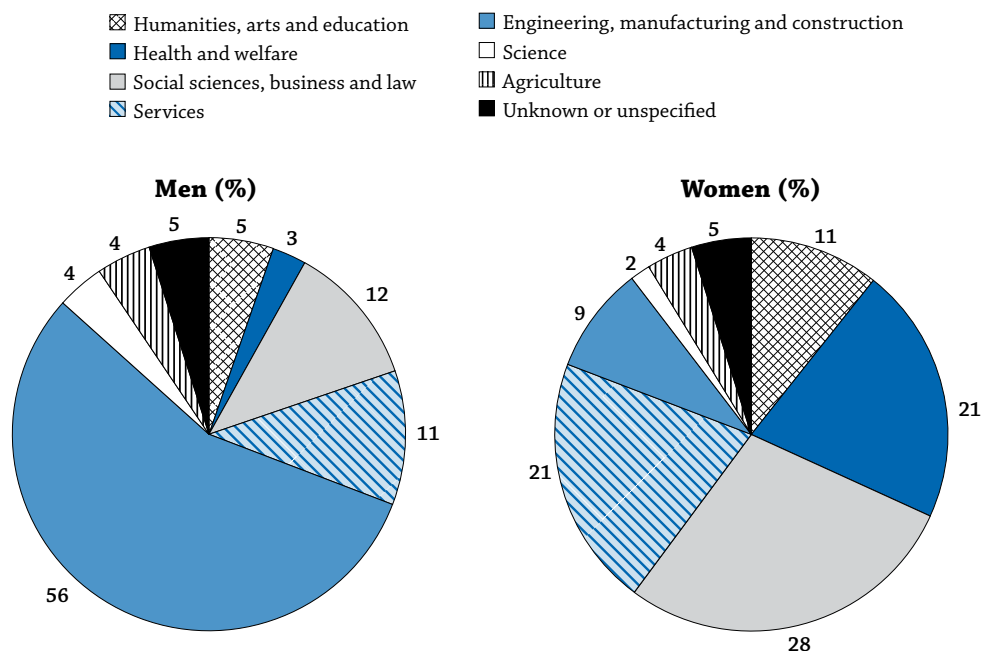
Upper secondary graduation rates for young women exceed those for young men in nearly all countries for which total upper secondary graduation rates can be compared by gender. The gap is greatest in Iceland and Portugal, where graduation rates among young women exceed those of young men by 20 percentage points or more. The exception is Germany, where the graduation rate is slightly higher for young men (Table A2.1).


Most upper secondary programmes are designed primarily to prepare students for tertiary studies, and their orientation may be general, pre-vocational or vocational (see Indicator C1). In 2010, it is estimated that 50% of young people will graduate from general programmes, compared to 46% from pre-vocational or vocational programmes. The rates were 47% and 44%, respectively, in 2005.

For many years now, young women have been more likely to graduate from general programmes than young men. In 2010, the average OECD graduation rate from general programmes was 56% for young women and 44% for young men. In Argentina, Austria, the Czech Republic, Estonia, Italy, Poland, Slovenia and Switzerland, young women outnumber young men as graduates by at least three to two. Only in China, Ireland and Korea is there no, or an extremely narrow, gender gap in graduates from general upper secondary programmes.

On average among countries with available data, there is no clear trend for pre-vocational and vocational upper secondary graduation rates according to gender. Although 47% of boys and 44% of girls in OECD countries graduated from vocational programmes in 2010, graduates who are girls outnumbered graduates who are boys by 10 or more percentage points in Belgium, Finland, Ireland and the Netherlands (Table A2.1).

At this level of education, girls and boys graduate from different fields of education. Differences in young people’s choice of field of study can be attributed to traditional perceptions of gender roles and identities as well as the cultural values sometimes associated with particular fields of education. For example, while some fields, especially science, engineering, manufacturing and construction, are often regarded as “masculine” and preferred by men, other (often care-related) fields of study, such as education and health, are sometimes perceived as “feminine” and preferred by women (Eurydice, 2010; see also Indicator A4).

**Chart A2.2. Distribution of graduates in upper secondary vocational programmes in OECD countries, by field of education and gender (2010)**

Source: OECD, Table A2.4. See Annex 3 for notes ([www.oecd.org/edu/eag2012](http://www.oecd.org/edu/eag2012)).  
 StatLink  <http://dx.doi.org/10.1787/888932661592>

More than one out of two male graduates from upper secondary vocational education programmes studied engineering, manufacturing or construction (Chart A2.2). Furthermore, boys predominated over girls in these fields in almost all countries with available data; in Estonia and Norway, three-quarters of all graduates in these fields were boys (Table A2.4).

For girls, the main field of education varied. In Austria, the Czech Republic, France, Germany, Indonesia, Japan, the Slovak Republic, Slovenia, Spain and Switzerland, girls tended to prefer social sciences, business and law. In Australia, Denmark, Finland, the Netherlands, Norway and Turkey, health and welfare programmes were more popular among girls. Girls in Estonia, Hungary and Poland were more attracted to the service professions, while girls in Iceland, Korea and Sweden tended to pursue studies in education, humanities and the arts. Argentina is the only country where girls preferred engineering, manufacturing and construction (Table A2.4).

Girls and boys might choose different fields of education because of differences in their personal preferences, performance differences in subjects such as reading, mathematics and science, different expectations about labour-market outcomes, or because education policies may lead to gender sorting early in their education. Regardless of social, cultural, or personal differences, girls and boys are equally capable of succeeding in all fields, as indicated by PISA results which show that girls outperform boys in reading in every OECD country, with the average gender gap in reading proficiency equivalent to about a year's worth of schooling. While boys score higher in mathematics, there is no gender gap in science performance (OECD, 2010).

The priority for many countries is to provide young people with the right skills to find a suitable job and to provide adults with an opportunity to update their skills throughout their working lives. As such, governments would be well-advised to link the fields of study at the upper secondary level of education with current or predicted labour-market needs.

The distribution of upper secondary vocational graduates across fields of education sheds light on the prevalence of different fields from country to country. Awareness of this distribution helps policy makers ensure that the demand for qualified vocational trainers who are adequately prepared to teach is met. Policies should also ensure that vocational teachers, trainers and training institutions continue to develop and update their skills and equipment to meet current and future labour-market needs. Efficient and effective delivery of vocational education and training is helpful to raise the status of these programmes, and can also help reduce the proportion of students who drop out from these types of programmes, which is higher than the proportion of general programme dropouts (see section below on successful completion of upper secondary programmes by programme orientation).

Not all countries offer vocational programmes at this level, and thus the level of graduation rates differs quite substantially among countries. Pre-vocational and vocational graduation rates are over 70% in Austria, Finland, the Netherlands, Slovenia and Switzerland; but in Argentina, Brazil, Canada, Estonia, Greece, Hungary, Indonesia, Japan, Korea, Mexico and Turkey, the rates are below 30% (Table A2.1).

Pre-vocational and vocational graduation rates are affected by the proportion of students outside the typical age of graduation, which differs markedly across countries. In Australia, Canada, Denmark, Finland and Iceland, some 40% or more of all graduates are older than 25. In these countries, part-time or evening programmes at this level may be designed especially for older students, i.e. people who drop out during their initial education and who decide to acquire new skills through these types of programmes (Table A2.2).

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

Various kinds of post-secondary non-tertiary programmes are offered in OECD countries. These programmes straddle upper secondary and post-secondary education and may be considered either as upper secondary or post-secondary programmes, depending on the country concerned. Although the content of these programmes may not be significantly more advanced than upper secondary programmes, they broaden the knowledge of individuals who have already attained an upper secondary qualification. Students in these programmes tend to be older than those enrolled in upper secondary schools. These programmes usually offer trade and vocational certificates, and include nursery-teacher training in Austria and vocational training for those who have attained general upper secondary qualifications in the dual system in Germany. Apprenticeships designed for students who have already graduated from an upper secondary programme are also included among these programmes (Table A2.1a available on line).

### **Transitions following upper secondary education or post-secondary non-tertiary programmes**

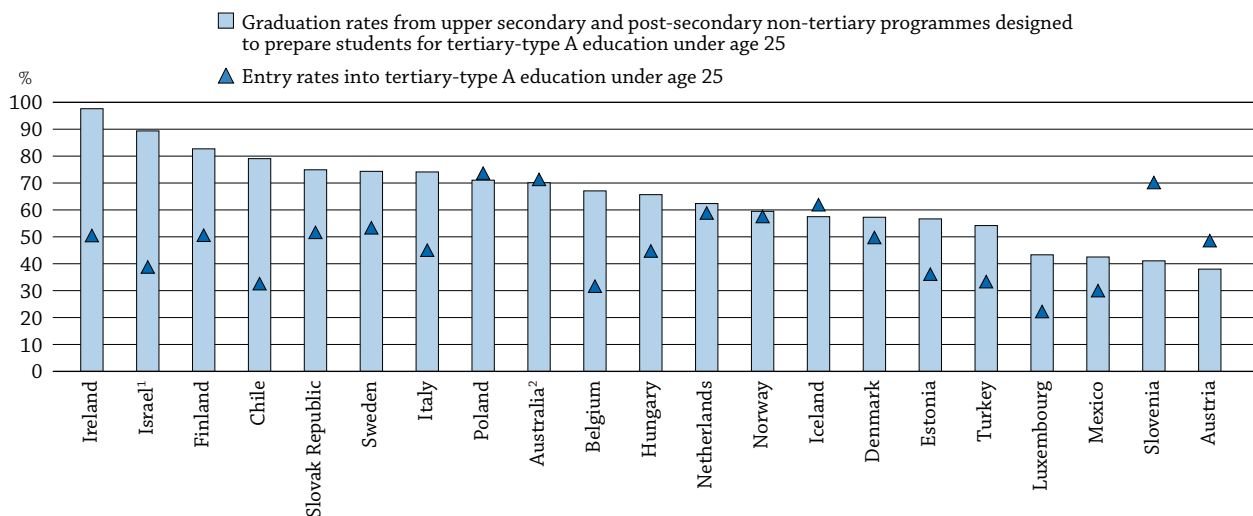
The vast majority of students who graduate from upper secondary education graduate from programmes designed to provide access to tertiary education (ISCED 3A and 3B). Programmes that facilitate direct entry into tertiary-type A education (ISCED 3A) are preferred by students in all countries except Germany, Slovenia and Switzerland, where the education systems are more strongly oriented towards vocational education and thus, more young people graduate from upper secondary programmes that lead to tertiary-type B programmes. In 2010, graduation rates from long upper secondary programmes (ISCED 3C long) averaged 17% in OECD countries (Table A2.1).

It is interesting to compare the proportion of students who graduate from programmes designed as preparation for entry into tertiary-type A programmes (ISCED 3A and 4A) with the proportion of students who actually enter these programmes under the age of 25. Chart A2.3 shows significant variation in patterns among countries. For instance, in Belgium, Chile, Finland, Ireland and Israel, the difference between these two groups is relatively large, at more than 30 percentage points. This suggests that many students who attain qualifications that would allow them to enter tertiary-type A programmes do not do so, though it should be noted that upper secondary programmes in Belgium and Israel also prepare students for tertiary-type B programmes.

In Israel, the difference may be explained by the wide variation in the age of entry to university, which is partly due to the two to three years of mandatory military service students undertake before entering higher education. In Finland, upper secondary education includes vocational training, and many graduates

enter the labour market immediately after completing this level, without any studies at the tertiary level. There is also a *numerus clausus* system in Finnish higher education, which means that the number of entry places is restricted. Therefore, graduates from upper secondary general education may have to take a break of two to three years before obtaining a place in a university or polytechnic institution. In Ireland, the majority of secondary students take the “Leaving Certificate Examination” (ISCED 3A). Although this is designed to allow students to enter tertiary education, not all of the students who take this examination intend to do so. Until the onset of the global economic crisis, school-leavers in Ireland also had strong labour market opportunities, and this also may have had an impact on the difference.

**Chart A2.3. Access to tertiary-type A education for upper secondary and post-secondary non-tertiary graduates under age 25 (2010)**




1. Data for post-secondary non-tertiary graduates are missing.

2. Year of reference for graduation rates 2009.

Countries are ranked in descending order of graduation rates from upper secondary programmes designed to prepare students under age 25 for tertiary-type A education in 2010.

Source: OECD. Tables A2.1, A2.1a (available on line) and C3.2. See Annex 3 for notes ([www.oecd.org/edu/eag2012](http://www.oecd.org/edu/eag2012)).

StatLink  <http://dx.doi.org/10.1787/888932661611>

In contrast, in Austria and Slovenia, the upper secondary and post-secondary non-tertiary graduation rate is markedly lower – by more than 10 percentage points – than entry rates into tertiary-type A programmes. The large gap for Austria is linked to the high proportion of adults entering tertiary-type A programmes and also to the high proportions of international/foreign students in these programmes (see Indicator C3). Although many students in Slovenia are more likely to graduate from upper secondary programmes leading to tertiary-type B programmes, some may choose to pursue university studies later, and can do so because of the strong pathways between the two types of tertiary programmes in this country.

The availability of pathways between upper secondary/post-secondary non-tertiary and tertiary programmes varies, depending on the country and the relative flexibility of the education system. Switching from vocational to academic programmes, or vice versa, can also occur at the upper secondary level.

### Successful completion of upper secondary programmes

This edition of *Education at a Glance* presents, for the second time, an indicator to measure the successful completion of upper secondary programmes and, thus, the pathways between programmes. The indicator sheds light on the time needed to complete these programmes and the proportion of students still in education after the theoretical duration of programmes. It allows for an estimation of the number of students who drop out and a comparison of completion rates by gender and programme orientation.

**Box A2.1. Completion and graduation: Two different measures**

How is completion measured in *Education at a Glance*? "Successful completion" describes the percentage of students who enter an upper secondary programme for the first time and who graduate from it a given number of years after they entered. It is a measure of how efficiently students flow through upper secondary education. It represents the relationship between the graduates of and the new entrants into the same level of education. The calculation is made using the amount of time normally allocated for completing the programme and also after an additional two years (for students who had to repeat a grade or individual courses, who studied part-time, etc.). This indicator also includes the percentage of students who do not graduate from an upper secondary programme but are still in education. These might include part-time students who need more time to complete their studies and adults who decide to return to school, perhaps while they are working. Only initial education programmes are covered by this indicator.

This measure should not be confused with upper secondary graduation rates. Graduation rates represent the estimated percentage of people from a certain age cohort that is expected to graduate at some point during their lifetime. It measures the production of graduates from upper secondary education, relative to the country's population, and represents the relationship between all the graduates in a given year and a particular population. For each country, for a given year, the number of students who graduate is broken down into age groups. For example, the number of 15-year-old graduates is divided by the total number of 15-year-olds in the country; the number of 16-year-old graduates is divided by the total number of 16-year-olds in the country, etc. The graduation rate is the sum of these age-specific graduation rates.

A third indicator in *Education at a Glance* uses the notion of educational attainment (see Indicator A1). Attainment measures the percentage of a population that has reached a certain level of education, in this case, those who graduated from upper secondary education. It represents the relationship between all graduates (of the given year and previous years) and the total population.

The majority of students who start upper secondary education complete the programmes they entered. It is estimated that 70% of boys and girls who begin an upper secondary programme graduate within the theoretical duration of the programme. However, in some countries, it is relatively common for students and apprentices to take a break from their studies and leave the education system temporarily. Some return quickly to their studies, while others stay away for longer periods of time. In other countries, it is also common for students to repeat a grade or to change programmes; by doing so, their graduation is delayed. Around 85% of students have successfully completed their upper secondary programmes two years after the stipulated time of graduation – 15 percentage points more than the proportion of students who complete their programme within its theoretical duration (Table A2.5).

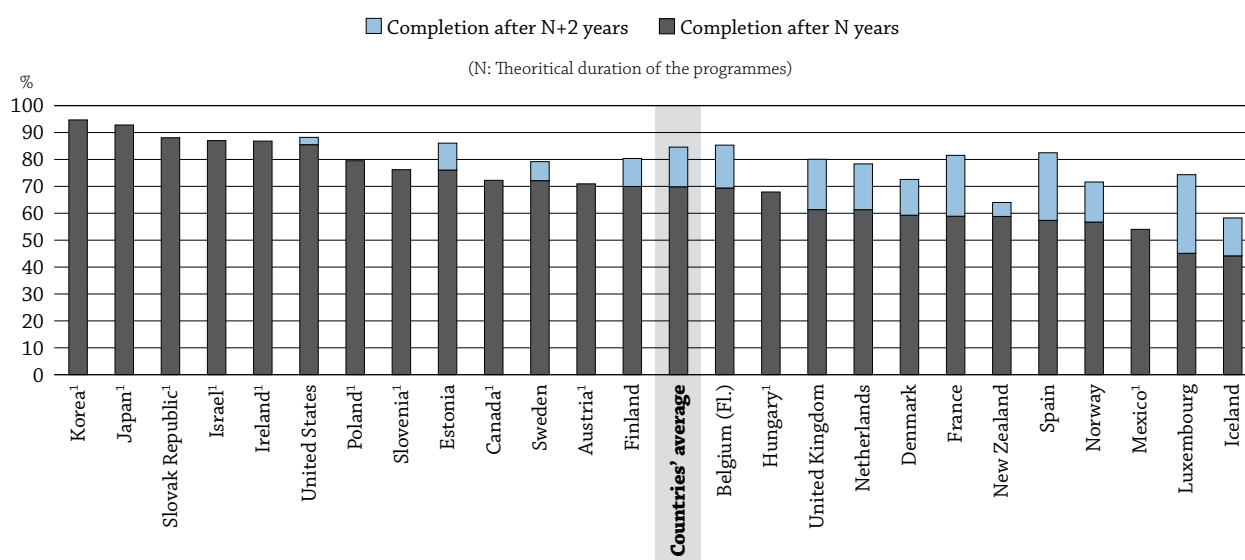
The proportion of students who complete their education in the stipulated time varies considerably among countries, with Korea having the highest share, at 95%, and Iceland the lowest share, at 44%. Giving two extra years to students to complete the programmes slightly changes the ranking of the countries, with six more countries passing the bar of 80% (Flemish Community of Belgium, Estonia, Finland, France, Spain and the United Kingdom). Iceland remains in last place, at 58%.

In most OECD countries, students may attend regular educational institutions for additional years to complete their upper secondary education whereas in some other countries, older students must attend special programmes designed specifically for them. The difference in the proportion of students who completed their programmes

within the stipulated time and that of students who completed after two additional years is 29 percentage points in Luxembourg, where it is common for students to repeat one or more years of school. In contrast, among countries with available data, the difference in New Zealand and in the United States is as low as five and three percentage points, respectively (Chart A2.4). In the United States, it is highly unusual for students over the age of 20 to be enrolled in a regular high school programme.

The large differences in upper secondary completion rates are also linked to the duration of programmes (see section *Successful completion by programme orientation*).

**Chart A2.4. Successful completion of upper secondary programmes**



**Note:** Please refer to Annex 3 for details concerning this indicator, including methods used, programmes included/excluded, year of entry, etc.

1. N+2 information missing.

Countries are ranked in descending order of the successful completion of upper secondary programmes (after N years).

**Source:** OECD. Table A2.5. See Annex 3 for notes ([www.oecd.org/edu/eag2012](http://www.oecd.org/edu/eag2012)).

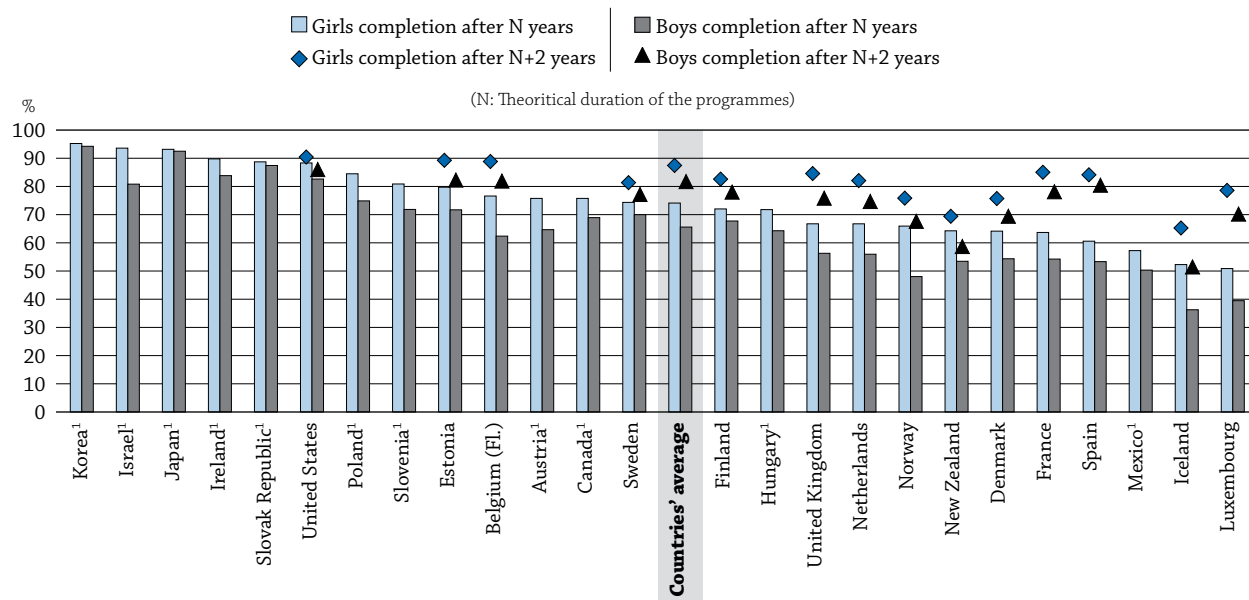
**StatLink** <http://dx.doi.org/10.1787/888932661630>

Successful completion of upper secondary education also depends on how accessible these programmes are. In all of the countries with available data (except Mexico), upper secondary entry rates for students under age 20 are around or over 90%. It is reasonable to expect that a higher percentage of students will graduate from upper secondary education in countries with limited access to this level than in countries that have nearly universal access. In other words, countries where students have to pass an examination to enter upper secondary programmes may have a larger share of higher-achieving students moving on to these programmes, which could produce a higher completion rate (Table A2.4).

### Successful completion by gender

In all countries with available data, boys are more likely than girls to drop out of upper secondary school without a diploma. On average, 74% of girls complete their upper secondary education within the stipulated time, compared to 66% of boys. Only in Finland, Japan, Korea, the Slovak Republic and Sweden is the difference in the proportions of boys and girls who leave school early less than five percentage points. In Iceland and Norway, girls outnumbered boys who successfully completed upper secondary education by more than 15 percentage points (Chart A2.5). The gender differences seen in Norway are likely due to the fact that girls tend to have better academic performance than boys in lower secondary school. Controlling for performance in lower secondary school, there is no gender difference, or just a small advantage, for boys (Falch, T., et al., 2010).



**Chart A2.5. Successful completion of upper secondary programmes, by gender**


1. N+2 information missing.

Countries are ranked in descending order of the successful completion of girls in upper secondary programmes (after N years).

Source: OECD. Table A2.5. See Annex 3 for notes ([www.oecd.org/edu/eag2012](http://www.oecd.org/edu/eag2012)).

StatLink  <http://dx.doi.org/10.1787/888932661649>

The gender gap narrowed slightly, to an average of six percentage points, when completion was delayed by two years because of grade repetition or transfer to a different programme.

The gender gap also varies depending on the programme: 80% of girls complete general programmes, compared to 73% of boys; 64% of girls complete vocational programmes, compared to 59% of boys. In Norway, this gender gap widens to more than 20 percentage points, in favour of girls, in vocational programmes. In Estonia, girls in vocational programmes are not as successful as boys in completing their upper secondary education within the normal duration of the programmes (Table A2.5).

Many studies, including the OECD's PISA analyses, confirm that girls are less likely than boys to leave school early. That said, young women who do leave school early tend to have poorer outcomes than their male counterparts, despite their higher average attainment (see Indicators A1 and C5). The completion rate for upper secondary programmes is also linked to many other issues, such as parental education and immigrant background (Box A2.2).

### Successful completion by programme orientation

In several countries, general and vocational programmes are organised separately and students have to opt for one or the other. In other countries, general and vocational programmes are offered in the same programme structure and sometimes in the same school building.

The choice between general and vocational studies is made at different stages in a student's career, depending on the country. In countries with a highly comprehensive system, students follow a common core curriculum until the start of upper secondary education at the age of 16 (e.g. the Nordic countries), while in countries with a highly differentiated system, the choice of a particular programme or type of school can be made during lower secondary education from the age of 10-13 onwards (e.g. Luxembourg).

Students who enter general programmes are more likely to graduate than those who are enrolled in vocational programmes. Among the 20 countries with available data, 77% of students completed their general programme within the theoretical duration of the programme, and that proportion increased by 15 percentage points

among students who completed their programme two years after its stipulated duration. In contrast, 61% of students completed their vocational programme within the theoretical duration, and that proportion increased by 16 percentage points two years after the stipulated time. This average difference of 16 percentage points between completion rates for upper secondary general and vocational programmes ranges from around 40 percentage points in Denmark and Estonia, to less than 10 percentage points in France, Japan, Korea and Sweden (Table A2.5).

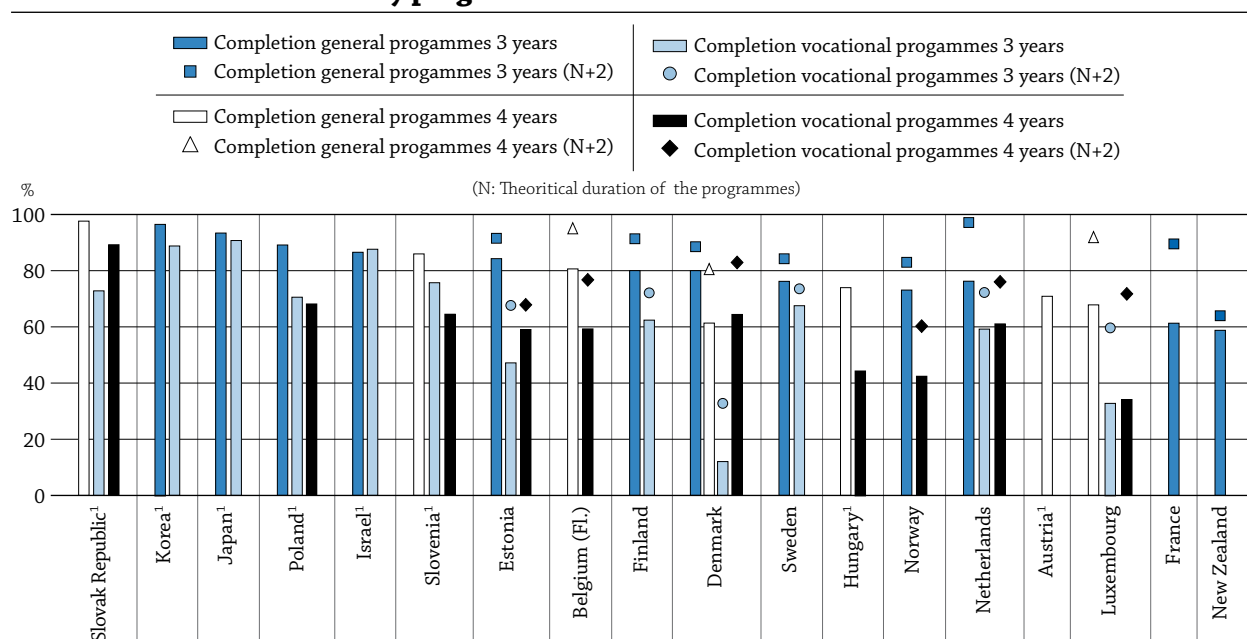
The large difference in completion rates between upper secondary general and vocational programmes among countries can be explained by the fact that in some countries, low-achieving students may be oriented (or re-oriented) into vocational programmes, while higher-achieving students go into general programmes. Some students may also have difficulty determining which vocational programme is best for them and thus may have to repeat one or more grades at this level of education.

Pathways between these two types of education are well developed in some countries. In Norway, for example, among the 42% of students who entered a vocational programme and graduated within the stipulated time, 47% graduated with a vocational degree, and 53% changed programmes and graduated with a general diploma (Table A2.5).

Some students who begin a vocational programme may leave the education system to enter the labour market directly. Access to employment for people with low educational attainment could also affect successful completion rates and the incidence of dropping out.

Among students who do not complete their programmes within the stipulated time, 59% of those who follow a general programme are still in education, compared to only 45% of those who follow a vocational programme. There is large variation among countries: in Belgium (Flemish Community) and France, 90% or more of students who had not graduated after the theoretical duration of general programmes are still in education, compared to 26% in Israel and only 2% in Korea (Table A2.5).

**Chart A2.6. Successful completion of upper secondary programmes, by programme orientation and duration**



**Note:** Please refer to Annex 3 for details concerning this indicator, including methods used, programmes included/excluded, year of entry, etc.

1. N+2 information missing.

Countries are ranked in descending order of the successful completion of upper secondary general programmes (after N years).

**Source:** OECD, Table A2.6. See Annex 3 for notes ([www.oecd.org/edu/eag2012](http://www.oecd.org/edu/eag2012)).

**StatLink** <http://dx.doi.org/10.1787/888932661668>

A2

The picture is slightly different when it comes to completion of upper secondary programmes (general and vocational) by programme duration. One would assume that completion rates for programmes of longer duration will be lower than those for programmes of shorter duration. Indeed, the completion rate for 4-year general programmes is, on average among countries with available data, 3 percentage points lower than that for 3-year programmes (within the normal duration of the programme, or after 2 more years). But this assumption does not hold for vocational programmes, largely because of differences between the apprenticeship or vocational systems in some countries. For example, in Denmark, completion rates for 3-year vocational programmes are very low (12%), compared to the completion rates for programmes of shorter duration. In some instances, students start the programme, often complete the first school-based part, and then have difficulties finding an employer who will agree to an apprenticeship programme. These students must then wait for an apprenticeship opportunity to arise or give up.


### Box A2.2. Completion by parents' education and immigrant background

Among the 25 countries that participated in the survey, nine reported completion rates for separate social groups. These rates cannot be directly compared to the overall rates presented above as the cohorts used to calculate them are not the same. A detailed description of the cohort used for each country is presented in Annex 3. The analysis below focuses only on comparing the successful completion of upper secondary programmes as associated with parents' education or an immigrant background.

#### Successful completion of upper secondary programmes, by parents' education or immigrant background

*Ratio of graduates to new entrants based on cohorts*

	N = theoretical duration	Successful completion of upper secondary programmes by parental education			Successful completion of upper secondary programmes for immigrant students	
		Below upper secondary education	At upper secondary education	At tertiary education	First generation	Second generation
Denmark	within N	45	56	72	45	47
	2 years after N	56	72	83	55	63
Finland	within N	58	67	75	50	69
	2 years after N	67	77	86	65	74
France	within N	50	59	68	46	49
	2 years after N	70	83	92	68	71
Iceland	within N	m	m	m	26	25
	2 years after N	m	m	m	31	75
Israel	within N	84	91	93	83	m
	2 years after N	m	m	m	m	m
Netherlands	within N	m	m	m	51	53
	2 years after N	m	m	m	65	71
Norway	within N	34	52	70	40	57
	2 years after N	48	68	83	54	70
Sweden	within N	54	70	78	62	65
	2 years after N	61	76	86	70	73
United States	within N	68	83	91	80	84
	2 years after N	74	86	92	85	89

Note: Please refer to Annex 3 for details concerning this Indicator, including methods used, programmes included/excluded, year of entry, etc. StatLink  <http://dx.doi.org/10.1787/888932664518>

Nine countries reported completion rates for immigrant students. Differences in the completion rates of first- and second-generation immigrant students are less than five percentage points in Denmark, France, Iceland, the Netherlands, Sweden and the United States. The exceptions are Finland and Norway, where the completion rates of second-generation immigrant students is more than 17 percentage points higher than the completion rates of first-generation students. Further data will be needed to determine if immigrant students in these two countries are better integrated compared to those in other countries where completion rates are similar between first- and second-generation immigrant students.

...

Seven countries reported completion rates by parents' education level. The difference in upper secondary completion rates between students from families where parents have a tertiary education and those from families where parents have no more than a lower secondary education ranges from 18 percentage points in Finland and France to 36 percentage points in Norway. In Norway, only 34% of students from families with low levels of education complete upper secondary in the stipulated time, compared to 70% of those from highly educated families.

Learning outcomes among students with an immigrant background or from families with low level of education should be an area of focus among education policy makers, particularly in countries where these students show significantly lower completion rates than their peers who do not come from these social groups.

## Definitions

**First-generation students:** both students and parents were born outside the country. **Second-generation students:** students were born in the country, but parents were born outside. More details on the definitions used by countries in Box A2.2 is available in Annex 3.

**Graduates** in the reference period can be either first-time graduates or repeat graduates. A **first-time graduate** is a student who has graduated for the first time at a given level of education in the reference period. Thus, if a student has graduated multiple times over the years, he or she is counted as a graduate each year, but as a first-time graduate only once.

**Net graduation rates** represent the estimated percentage of an age group that will complete upper secondary education, based on current patterns of graduation.

**Successful completion of upper secondary programmes** represents the proportion of new entrants to upper secondary programmes who graduated at the upper secondary level a specific number of years later based on cohorts.

**Successful completion of upper secondary general programmes** represents the proportion of new entrants to upper secondary general programmes who graduated at the upper secondary level a specific number of years later (based on cohorts).

**Successful completion of upper secondary vocational programmes** represents the proportion of new entrants to upper secondary general programmes who graduated at the upper secondary level a specific number of years later (based on cohorts).

## Methodology

Data refer to the academic year 2009-10 and are based on the UOE data collection on education statistics administered by the OECD in 2011 (for details, see Annex 3 at [www.oecd.org/edu/eag2012](http://www.oecd.org/edu/eag2012)). The fields of education used in the UOE data collection instruments follow the revised ISCED classification by field of education. The same classification is used for all levels of education.

Upper secondary graduation rates (Tables A2.1 to A2.3) are calculated as net graduation rates (i.e. as the sum of age-specific graduation rates) for the years 2005-10. Gross graduation rates are presented for the years 1995 and 2000-04. Gross graduation rates are presented for 2005-10 for countries that are unable to provide such detailed data. In order to calculate gross graduation rates, countries identify the age at which graduation typically occurs. The number of graduates, regardless of their age, is divided by the population at the typical graduation age. The graduation rates take into account students graduating from upper secondary education at the typical graduation ages, as well as older students (e.g. those in "second-chance" programmes) or younger students. Information on the methods used to calculate graduation rates – gross versus net rates – are presented for each level of education in Annex 1.

The count of first-time graduates (Columns 1-3 in Tables A2.1 and Table A2.2) is calculated by netting out students who graduated from another upper secondary programme in a previous year (or another post-secondary non-tertiary programme). As for the others columns of the tables, the net rate is calculated when data are available.

Graduates of ISCED 3A, 3B and 3C (or 4A, 4B, 4C) programmes are not considered as first-time counts. Therefore, gross graduation rates cannot be added, as some individuals graduate from more than one upper secondary programme and would be counted twice. The same applies for graduation rates according to programme orientation, i.e. general or vocational. In addition, the typical graduation ages are not necessarily the same for the different types of programmes (see Annex 1). 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 programmes that are not overseen by a formal education authority are not included.

In Table A2.3 (trends in graduation rates at upper secondary level), data for the years 1995, 2000, 2001, 2002, 2003 and 2004 are based on a special survey carried out in January 2007.

In Tables A2.5, A2.6 and Box A2.2, data are based on a special survey carried out in December 2011. Successful completion of upper secondary programmes is calculated as the ratio of the number of students who graduate from an upper secondary programme during the reference year to the number of new entrants in this programme N years before (or N+2), with N being the duration of the programme. The calculation of successful completion is defined from a cohort analysis in three quarters of the countries listed in Table A2.5 (true cohort and longitudinal survey). The estimation for the other countries without a real cohort tracking system assumes constant student flows at the upper secondary level, owing to the need for consistency between the graduate cohort in the reference year and the entrant cohort N years before (Proxy cohort data). This assumption may be an oversimplification. A detailed description of the method used for each country is included in Annex 3 (years of new entrants, years of graduates, programmes taken into account, etc.).

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

## References

Education, Audiovisual and Culture Executive Agency (Eurydice) (2010), *Gender Differences in Educational Outcomes: Study on the Measures Taken and the Current Situation in Europe*, Eurydice, Brussels.

Falch, T., et al. (2010), *Completion and Dropout in Upper Secondary Education in Norway: Causes and Consequences*, Centre for Economic Research at Norges Teknisk-Naturvitenskapelige Universitet, Trondheim.

OECD (2010), *PISA 2009 Results: What Students Know and Can Do: Student Performance in Reading, Mathematics and Science* (Volume I), OECD Publishing.

The following additional material relevant to this indicator is available on line:




- **Table A2.1a Post-secondary non-tertiary graduation rates (2010)**  
StatLink  <http://dx.doi.org/10.1787/888932664366>
- **Table A2.3a Trends in graduation rates (general and pre-vocational/vocational programmes) at upper secondary level (2005-2010)**  
StatLink  <http://dx.doi.org/10.1787/888932664423>
- **Table A2.4a Distribution of upper secondary vocational graduates, by field of education (2010)**  
StatLink  <http://dx.doi.org/10.1787/888932664461>

Table A2.1. Upper secondary graduation rates (2010)

Sum of age-specific graduation rates, by programme destination, programme orientation and gender

	Total (first-time graduates)			General programmes			Pre-vocational/vocational programmes			ISCED 3A <sup>1</sup>	ISCED 3B <sup>1</sup>	ISCED 3C (long) <sup>1</sup>	ISCED 3C (short) <sup>1</sup>
	M + W	Men	Women	M + W	Men	Women	M + W	Men	Women	M + W	M + W	M + W	M + W
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(13)	(16)	(19)
<b>OECD</b>													
Australia <sup>2</sup>	m	m	m	70	66	75	49	47	50	70	a	49	a
Austria	m	m	m	18	15	22	76	86	66	18	55	1	21
Belgium	m	m	m	36	31	41	69	63	75	60	a	20	25
Canada <sup>2</sup>	81	77	84	78	74	82	3	4	2	78	a	3	a
Chile	83	80	86	53	50	56	30	30	31	83	a	a	a
Czech Republic	79	76	82	22	17	28	57	59	55	57	n	21	a
Denmark	86	84	89	57	48	66	47	49	44	57	a	46	n
Estonia	m	m	m	58	46	70	20	25	15	58	18	a	2
Finland	93	90	97	46	38	55	94	89	99	93	a	a	a
France	m	m	m	51	45	58	65	65	65	51	14	4	47
Germany	87	87	86	40	35	45	47	52	42	40	46	a	1
Greece	94	92	96	66	59	75	28	34	22	66	a	28	x(16)
Hungary	86	82	89	69	62	77	17	21	13	69	a	17	x(16)
Iceland	88	76	101	69	58	81	54	53	55	65	2	37	18
Ireland	94	93	95	72	73	71	68	53	83	99	a	6	35
Israel	92	88	96	58	52	65	34	35	32	89	a	2	a
Italy	83	81	86	36	25	46	60	67	53	74	1	a	20
Japan	96	95	96	73	70	76	23	25	20	73	1	22	x(16)
Korea	94	93	95	71	70	72	23	23	23	71	a	23	a
Luxembourg	70	67	73	30	27	34	41	42	41	44	7	20	2
Mexico	47	43	51	43	39	47	4	4	4	43	a	4	a
Netherlands	m	m	m	39	36	42	85	76	94	67	a	57	a
New Zealand	m	m	m	m	m	m	m	m	m	m	m	m	m
Norway	87	84	91	60	49	71	36	44	27	60	a	36	m
Poland	84	80	88	52	40	65	38	46	29	75	a	14	a
Portugal <sup>3</sup>	104	92	116	68	60	76	36	32	39	x(1)	x(1)	x(1)	x(1)
Slovak Republic	86	83	88	26	21	31	67	69	64	76	a	15	1
Slovenia	94	92	96	37	29	46	73	80	65	40	44	22	2
Spain	80	76	85	48	41	56	43	43	43	48	19	8	15
Sweden	75	73	77	31	26	36	44	46	41	74	n	n	n
Switzerland	m	m	m	32	25	39	74	78	69	28	71	7	x(16)
Turkey	54	54	54	33	31	35	22	24	19	54	a	a	m
United Kingdom	92	90	94	m	m	m	m	m	m	m	m	74	18
United States	77	73	81	x(1)	x(2)	x(3)	x(1)	x(2)	x(3)	x(1)	x(1)	x(1)	x(1)
OECD average	84	81	87	50	44	56	46	47	44	63	9	17	8
EU21 average	87	84	90	45	39	52	54	55	52	62	11	18	10
<b>Other G20</b>													
Argentina <sup>2</sup>	m	m	m	36	29	44	6	8	5	43	a	a	a
Brazil	m	m	m	63	52	74	10	8	12	63	10	a	a
China	69	69	70	40	39	41	48	47	49	41	x(10)	28	18
India	m	m	m	m	m	m	m	m	m	m	m	m	m
Indonesia	m	m	m	31	29	33	19	22	15	31	19	a	a
Russian Federation	m	m	m	49	x(4)	x(4)	40	x(7)	x(7)	49	18	19	3
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m
South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m
G20 average	78	76	80	51	47	56	30	30	28	56	8	13	8

Notes: Columns showing graduation rates for men and women at upper secondary level by programme orientation (i.e. Columns 11-12, 14-15, 17-18, 20-21) are available for consultation on line (see *StatLink* below).

Refer to Annex 1 for information on the method used to calculate graduation rates (gross rates versus net rates) and the corresponding typical ages.

Mismatches between the coverage of the population data and the graduate data mean that the 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. 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.

2. Year of reference 2009.

3. The above 100% first-time graduation rate is an exceptional and temporary situation following the implementation of the “New Opportunities” programme in Portugal. Many individuals went back to school and are now graduated from this programme.

Source: OECD, Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators programme). See Annex 3 for notes ([www.oecd.org/edu/eag2012](http://www.oecd.org/edu/eag2012)).

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

StatLink  <http://dx.doi.org/10.1787/888932664347>

**Table A2.2. Upper secondary graduation rates: below 25 years old (2010)**  
 Sum of age-specific graduation rates below age 25, by programme destination, programme orientation and gender

	Total (first-time graduates)				General programmes				Pre-vocational/vocational programmes				ISCED 3A <sup>1</sup>	ISCED 3B <sup>1</sup>	ISCED 3C (long) <sup>1</sup>	ISCED 3C (short) <sup>1</sup>
	M + W	Men	Women	Share of graduates below 25 <sup>2</sup>	M + W	Men	Women	Share of graduates below 25 <sup>2</sup>	M + W	Men	Women	Share of graduates below 25 <sup>2</sup>	M + W	M + W	M + W	M + W
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(16)	(19)	(22)
<b>OECD</b>																
Australia <sup>3</sup>	m	m	m	m	70	66	75	100	23	25	21	47	70	a	23	a
Austria	m	m	m	m	18	15	22	99	70	79	60	90	18	50	1	20
Belgium	m	m	m	m	36	31	41	100	51	51	52	71	60	a	20	4
Canada <sup>3</sup>	77	74	80	96	76	73	80	98	1	1	1	37	76	a	1	a
Chile	79	77	82	96	49	48	51	94	30	30	30	99	79	a	a	a
Czech Republic	m	m	m	m	m	m	m	m	m	m	m	m	m	n	m	a
Denmark	77	75	78	89	56	47	65	98	28	33	22	58	56	a	28	n
Estonia	m	m	m	m	57	45	69	98	19	24	14	96	57	m	a	1
Finland	83	80	85	89	45	37	54	99	50	53	47	54	83	a	a	a
France	m	m	m	m	51	45	58	100	58	61	55	89	51	14	3	40
Germany	m	m	m	m	m	m	m	m	m	m	m	m	m	m	a	m
Greece	94	92	96	100	66	59	75	100	28	34	22	100	66	a	28	x(16)
Hungary	82	79	84	94	66	59	72	94	17	21	12	96	66	a	17	x(16)
Iceland	70	61	78	80	61	51	71	89	32	32	32	60	57	2	21	13
Ireland	93	92	94	98	70	72	69	97	52	45	60	71	98	a	6	19
Israel	92	88	96	100	58	52	65	100	34	35	32	100	89	a	2	a
Italy	m	m	m	m	36	25	46	100	m	m	m	m	74	m	a	m
Japan	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	x(16)
Korea	m	m	m	m	m	m	m	m	m	m	m	m	m	a	m	a
Luxembourg	68	65	71	97	30	27	34	100	40	40	39	95	43	7	18	2
Mexico	46	43	50	99	43	39	46	99	4	4	4	94	43	a	4	a
Netherlands	m	m	m	m	39	36	42	100	59	60	58	67	62	a	36	a
New Zealand	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Norway	75	72	79	86	58	48	69	98	22	30	14	61	58	a	22	m
Poland	82	78	86	98	48	37	60	92	37	46	28	99	71	a	14	a
Portugal	67	59	74	56	40	32	47	50	27	27	27	69	x(1)	x(1)	x(1)	x(1)
Slovak Republic	83	81	85	97	26	21	31	98	63	67	59	94	74	a	15	n
Slovenia	m	m	m	m	37	29	46	100	m	m	m	m	40	m	m	2
Spain	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Sweden	75	73	77	100	31	26	36	100	44	46	41	100	74	n	n	n
Switzerland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Turkey	54	54	54	100	33	31	35	100	22	24	19	100	54	a	a	m
United Kingdom	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
United States	77	73	81	100	x(1)	x(2)	x(3)	m	x(1)	x(2)	x(3)	m	x(1)	x(1)	x(1)	x(1)
OECD average	77	74	80	93	49	44	56	96	35	37	32	79	64	3	11	5
EU21 average	80	78	83	92	44	38	51	96	43	46	40	83	62	5	12	6
<b>Other G20</b>																
Argentina <sup>3</sup>	m	m	m	m	34	27	42	95	6	8	5	100	41	a	a	a
Brazil	m	m	m	m	54	46	61	86	6	5	7	62	54	6	a	a
China	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
India	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Indonesia	m	m	m	m	31	29	33	100	19	22	15	100	31	19	a	a
Russian Federation	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
G20 average	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

Notes: Columns showing graduation rates for men and women at upper secondary level by programme orientation (i.e. Columns 14-15, 17-18, 20-21, 23-24) are available for consultation on line (see StatLink below).

Refer to Annex 1 for information on the method used to calculate graduation rates (gross rates versus net rates) and the corresponding typical ages.

Mismatches between the coverage of the population data and the graduate data mean that the 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. 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.

2. Share of 25-year-old graduates among the total population of graduates.

3. Year of reference 2009.

Source: OECD. Argentina, Indonesia: UNESCO Institute for Statistics (World Education Indicators programme). See Annex 3 for notes ([www.oecd.org/edu/eag2012](http://www.oecd.org/edu/eag2012)).

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


StatLink  <http://dx.doi.org/10.1787/888932664385>

Table A2.3. Trends in graduation rates (first-time) at upper secondary level (1995-2010)

	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average annual growth rate 1995-2010 <sup>1</sup>
<b>OECD</b>													
Australia	m	m	m	m	m	m	m	m	m	m	m	<b>m</b>	m
Austria	m	m	m	m	m	m	m	m	m	m	m	<b>m</b>	m
Belgium	m	m	m	m	m	m	m	m	m	m	m	<b>m</b>	m
Canada	m	m	77	79	83	79	80	79	76	79	81	<b>m</b>	m
Chile	m	m	m	m	m	79	85	82	82	83	85	<b>83</b>	m
Czech Republic	78	m	84	83	88	87	89	90	88	87	84	<b>79</b>	0.1%
Denmark	83	95	95	94	88	88	82	84	85	83	85	<b>86</b>	0.3%
Estonia	m	m	m	m	m	m	m	m	m	m	m	<b>m</b>	m
Finland	91	91	85	84	90	95	94	94	97	93	95	<b>93</b>	0.2%
France	m	m	m	m	m	m	m	m	m	m	m	<b>m</b>	m
Germany <sup>2</sup>	100	92	92	94	97	99	99	100	100	97	84	<b>87</b>	-1.0%
Greece	80	54	76	85	96	93	100	98	96	91	m	<b>m</b>	m
Hungary	m	m	83	82	87	86	84	87	84	78	86	<b>86</b>	m
Iceland	80	67	70	79	81	87	79	87	86	89	89	<b>88</b>	0.7%
Ireland	m	74	77	78	91	92	91	87	90	88	91	<b>94</b>	2.3%
Israel	m	m	m	90	89	93	90	90	92	90	89	<b>92</b>	m
Italy	m	78	81	78	m	82	85	86	84	86	81	<b>83</b>	0.7%
Japan	96	95	93	94	95	96	95	96	96	95	95	<b>96</b>	0.0%
Korea	88	96	100	99	92	94	94	93	91	93	89	<b>94</b>	0.5%
Luxembourg	m	m	m	69	71	69	75	71	75	73	69	<b>70</b>	m
Mexico	m	33	34	35	37	39	40	42	43	44	45	<b>47</b>	3.6%
Netherlands	m	m	m	m	m	m	m	m	m	m	m	<b>m</b>	m
New Zealand	m	m	m	m	m	m	m	m	m	m	m	<b>m</b>	m
Norway	77	99	105	97	92	100	89	88	92	91	91	<b>87</b>	0.8%
Poland	m	90	93	91	86	79	85	81	84	83	85	<b>84</b>	-0.8%
Portugal <sup>3</sup>	52	52	48	50	60	53	51	54	65	63	96	<b>104</b>	4.7%
Slovak Republic	85	87	72	60	56	83	85	86	86	82	82	<b>86</b>	0.0%
Slovenia	m	m	m	m	m	m	85	97	91	85	96	<b>94</b>	m
Spain	62	60	66	66	67	66	72	72	74	73	74	<b>80</b>	1.8%
Sweden	m	75	71	72	76	78	76	75	74	74	74	<b>75</b>	0.0%
Switzerland	86	88	91	92	89	87	89	89	89	90	90	<b>m</b>	m
Turkey	37	37	37	37	41	55	48	52	58	26	45	<b>54</b>	2.6%
United Kingdom	m	m	m	m	m	m	86	88	89	91	92	<b>92</b>	m
United States	69	70	71	73	74	75	76	75	75	76	76	<b>77</b>	0.7%
OECD average	78	76	77	78	79	81	82	82	83	81	83	<b>84</b>	m
OECD average for countries with 1995 and 2010 data	78	77										85	0.6%
EU21 average	79	77	79	77	79	78	81	82	84	84	85	<b>86</b>	m
<b>Other G20</b>													
Argentina	m	m	m	m	m	m	m	m	m	m	m	<b>m</b>	m
Brazil	m	m	m	m	m	m	m	m	m	m	m	<b>m</b>	m
China	m	m	m	m	m	m	m	m	m	m	m	<b>69</b>	m
India	m	m	m	m	m	m	m	m	m	m	m	<b>m</b>	m
Indonesia	m	m	m	m	m	m	m	m	m	m	m	<b>m</b>	m
Russian Federation	m	m	m	m	m	m	m	m	m	m	m	<b>m</b>	m
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	<b>m</b>	m
South Africa	m	m	m	m	m	m	m	m	m	m	m	<b>m</b>	m
G20 average	m	m	m	m	m	m	m	m	m	m	m	<b>m</b>	m

Notes: Up to 2004, graduation rates at upper secondary level were calculated on a gross basis. From 2005 and for countries with available data, graduation rates are calculated as net graduation rates (i.e. as the sum of age-specific graduation rates).

Refer to Annex 1 for information on the method used to calculate graduation rates (gross rates versus net rates) and the corresponding typical ages.

1. For countries that do not have data for the year 1995, the 2000-10 average annual growth rate is indicated in italics.

2. Break in the series between 2008 and 2009 due to a partial reallocation of vocational programmes into ISCED 2 and ISCED 5B.

3. Year of reference 1997 instead of 1995.

Source: OECD. China: UNESCO Institute for Statistics (World Education Indicators programme). See Annex 3 for notes ([www.oecd.org/edu/eag2012](http://www.oecd.org/edu/eag2012)).

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


StatLink  <http://dx.doi.org/10.1787/888932664404>



Table A2.4. Distribution of upper secondary vocational graduates, by field of education and gender (2010)

	Boys									Girls								
	Pre-vocational/ vocational programmes graduation rates	Humanities, arts and education	Health and welfare	Social sciences, business and law	Services	Engineering, manufacturing and construction	Sciences	Agriculture	Unknown or unspecified	Pre-vocational/ vocational programmes graduation rates	Humanities, arts and education	Health and welfare	Social sciences, business and law	Services	Engineering, manufacturing and construction	Sciences	Agriculture	Unknown or unspecified
	(1)	(2)	(5)	(6)	(7)	(8)	(9)	(14)	(15)	(16)	(17)	(20)	(21)	(22)	(23)	(24)	(29)	(30)
<b>OECD</b>																		
Australia <sup>1</sup>	46	2	5	12	12	59	3	4	2	49	6	35	30	17	4	1	2	5
Austria	86	1	2	14	11	59	2	11	n	66	3	10	42	27	7	n	11	n
Belgium	63	17	5	11	8	30	3	2	24	75	22	18	12	19	2	n	1	26
Canada <sup>1</sup>	4	m	m	m	m	m	m	m	m	2	m	m	m	m	m	m	m	m
Chile	30	m	m	m	m	m	m	m	m	31	m	m	m	m	m	m	m	m
Czech Republic	59	3	1	11	13	69	n	3	n	55	6	13	36	29	10	n	5	n
Denmark	49	3	3	15	12	61	n	7	n	44	1	43	36	9	6	n	4	n
Estonia	25	2	n	1	10	76	5	7	n	15	6	n	20	43	22	3	5	n
Finland	89	4	3	9	18	56	4	5	n	99	7	29	21	27	10	1	5	n
France	65	2	3	14	12	63	n	6	n	65	2	30	32	27	6	n	3	n
Germany	52	2	2	27	9	52	3	3	n	42	3	16	53	19	7	1	1	n
Greece	35	m	m	m	m	m	m	m	m	22	m	m	m	m	m	m	m	m
Hungary	21	1	1	6	17	72	n	5	n	13	4	10	30	37	14	n	4	n
Iceland	53	11	1	12	13	59	1	2	n	55	26	19	20	24	6	n	4	n
Ireland	53	7	7	10	7	3	3	5	57	83	6	31	16	5	n	1	2	40
Israel	35	m	m	m	m	m	m	m	m	32	m	m	m	m	m	m	m	m
Italy	67	m	m	m	m	m	m	m	m	53	m	m	m	m	m	m	m	m
Japan	25	n	1	17	2	56	n	11	11	20	n	10	40	13	8	n	11	17
Korea	23	16	n	6	3	62	10	2	n	23	32	1	22	5	26	13	2	n
Luxembourg	42	m	m	m	m	m	m	m	m	41	m	m	m	m	m	m	m	m
Mexico	4	m	m	m	m	m	m	m	m	4	m	m	m	m	m	m	m	m
Netherlands	76	4	8	18	22	37	7	4	n	94	5	58	19	14	2	n	2	n
New Zealand	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Norway	44	1	4	2	13	75	3	3	n	27	4	47	11	25	10	n	3	n
Poland	46	1	n	7	14	63	10	5	n	29	3	n	35	46	11	2	4	n
Portugal	32	m	m	m	m	m	m	m	m	39	m	m	m	m	m	m	m	m
Slovak Republic	69	3	2	11	19	61	n	3	n	64	7	11	38	31	9	n	4	n
Slovenia	80	3	4	15	10	57	7	4	n	65	12	21	39	15	7	n	6	n
Spain	43	15	2	10	12	48	8	4	n	43	27	20	30	16	3	2	1	n
Sweden	46	12	5	4	8	64	n	3	4	41	33	21	11	14	10	n	7	4
Switzerland	78	2	2	23	6	57	3	6	n	69	4	24	47	13	9	n	3	n
Turkey	24	1	2	13	4	52	17	n	13	19	5	23	19	8	13	13	n	19
United Kingdom	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
United States	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD average	47	5	3	12	11	56	4	4	5	44	11	21	28	21	9	2	4	5
EU21 average	55	4	3	12	13	55	3	5	5	52	8	21	30	24	8	1	4	5
<b>Other G20</b>																		
Argentina <sup>1</sup>	8	2	1	9	1	63	6	14	4	5	5	2	27	1	32	13	17	2
Brazil	8	m	m	m	m	m	m	m	m	12	m	m	m	m	m	m	m	m
China	47	m	m	m	m	m	m	m	m	49	m	m	m	m	m	m	m	m
India	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Indonesia	22	2	2	49	n	39	n	n	8	15	2	6	49	n	29	n	4	10
Russian Federation	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
G20 average	31	m	m	m	m	m	m	m	m	28	m	m	m	m	m	m	m	m

Note: Columns showing the breakdown of humanities, arts and education (3, 4, 18 and 19) and science (10-13, 25-28) are available for consultation on line (see StatLink below).

1. Year of reference 2009.

Source: OECD. Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators programme). See Annex 3 for notes ([www.oecd.org/edu/eag2012](http://www.oecd.org/edu/eag2012)).

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


StatLink  <http://dx.doi.org/10.1787/888932664442>

Table A2.5. [1/2] **Successful completion of upper secondary programmes, by gender and programme orientation**

Ratio of graduates to new entrants based on cohorts

OECD	Method	Year used for new entrants Duration of programme (G: general, V: vocational)	N: theoretical duration	Completion of upper secondary programmes			Completion of general programmes <sup>1</sup>				Completion of vocational programmes <sup>2</sup>			
				Total	Men	Women	Total	Men	Women	Proportion of vocational programme graduates <sup>3</sup>	Total	Men	Women	Proportion of general programmes graduates <sup>4</sup>
Austria	True cohort	2006-07	within N	71	65	76	71	65	76	3	m	m	m	n
		4 years G & V	2 years after N	m	m	m	m	m	m	m	m	m	m	m
Belgium (Fl.)	True cohort	2004-05	within N	69	62	77	81	74	86	13	59	54	66	n
		4 years G & V	2 years after N	85	82	89	95	93	97	18	77	74	80	n
Canada	Proxy cohort data	2006-07	within N	72	69	76	m	m	m	m	m	m	m	m
		3 years	2 years after N	m	m	m	m	m	m	m	m	m	m	m
Denmark	True cohort	2002-03	within N	59	54	64	80	76	82	n	35	35	35	3
		3-4 years G & 2-5 years V	2 years after N	73	69	76	88	87	90	3	54	54	54	9
Estonia	True cohort	2004	within N	76	72	80	84	82	86	n	48	52	40	1
		3 years G & 3-4 years V	2 years after N	86	82	89	92	90	93	3	68	67	69	3
Finland	True cohort	2004	within N	70	68	72	80	78	81	1	62	61	64	1
		3 years G & V	2 years after N	80	78	83	91	90	93	4	72	71	74	1
France	Longitudinal sample survey	1999-2005	within N	59	54	64	61	56	66	5	55	52	60	n
		3 years G & 2 years V	2 years after N	82	78	85	90	88	91	6	69	67	73	1
Hungary	Proxy cohort data	2006-07	within N	68	64	72	74	70	77	m	44	45	43	m
		4 years G & V	2 years after N	m	m	m	m	m	m	m	m	m	m	m
Iceland	True cohort	2003	within N	44	36	52	44	35	51	6	45	38	55	39
		4 years G & V	2 years after N	58	51	65	59	52	65	15	57	50	67	46
Ireland	True cohort	2004	within N	87	84	90	m	m	m	m	m	m	m	m
		2-3 years G & V	2 years after N	m	m	m	m	m	m	m	m	m	m	m
Israel	True cohort	2007	within N	87	81	94	87	78	94	9	88	84	92	13
		3 years G & V	2 years after N	m	m	m	m	m	m	m	m	m	m	m
Japan	True cohort	2007	within N	93	92	93	93	93	94	m	91	91	91	m
		3 years G & V	2 years after N	m	m	m	m	m	m	m	m	m	m	m
Korea	True cohort	2007	within N	95	94	95	97	96	97	m	89	88	89	m
		3 years G & V	2 years after N	m	m	m	m	m	m	m	m	m	m	m
Luxembourg	True cohort	2004-05	within N	45	39	51	68	61	73	1	35	31	39	n
		4 years G & 2-5 years V	2 years after N	74	70	79	92	90	93	5	66	63	71	n
Mexico	Proxy cohort data	2008	within N	54	50	57	m	m	m	m	m	m	m	n
		3 years G & V	2 years after N	m	m	m	m	m	m	m	m	m	m	n
Netherlands	True cohort	2007	within N	61	56	67	72	69	75	2	55	50	62	n
		2-3 years G & 2-4 years V	2 years after N	78	75	82	94	93	95	3	70	66	75	1
New Zealand	True cohort	2004	within N	59	53	64	59	53	64	m	m	m	m	m
		3 years G	2 years after N	64	59	69	64	59	69	m	m	m	m	m
Norway	True cohort	2004	within N	57	48	66	73	68	77	n	42	33	54	53
		3 years G & 4 years V	2 years after N	72	68	76	83	79	87	1	62	59	65	39
Poland	True cohort	2006-07	within N	80	75	84	89	87	91	m	69	67	73	m
		3 years G & 3-4 years V	2 years after N	m	m	m	m	m	m	m	m	m	m	m
Slovak Republic	Proxy cohort data	2006	within N	88	87	89	98	98	97	m	84	84	85	m
		4 years G & 2-4 years V	2 years after N	m	m	m	m	m	m	m	m	m	m	m
Slovenia	Proxy cohort data	2007	within N	76	72	81	86	86	86	m	68	63	75	m
		4 years G & 3-4 years V	2 years after N	m	m	m	m	m	m	m	m	m	m	m
Spain	Proxy cohort data	2006-07	within N	57	53	61	57	53	61	m	m	m	m	m
		2 years G & V	2 years after N	82	80	84	82	80	84	m	m	m	m	m
Sweden <sup>6</sup>	True cohort	2006	within N	72	70	74	76	74	78	1	68	66	69	1
		3 years G & V	2 years after N	79	77	81	84	82	86	4	74	72	75	3
United Kingdom	True cohort	2006	within N	61	56	67	m	m	m	m	m	m	m	m
		2 years	2 years after N	80	76	85	m	m	m	m	m	m	m	m
United States	Longitudinal sample survey	2002	within N	85	83	88	m	m	m	m	m	m	m	m
		3 years G & V	2 years after N	88	86	90	m	m	m	m	m	m	m	m
Countries' average <sup>7</sup>			within N	70	66	74	77	73	80	m	61	59	64	m
			2 years after N	85	82	87	92	90	93	m	77	76	80	m

Note: Data presented in this table come from a special survey in which 25 countries participated. Refer to Annex 3 for details concerning this indicator, including methods used, programmes included/excluded, year of entry, etc.

1. ISCED 3 general programme entrants who graduated from either a general or vocational programme.

2. ISCED 3 vocational programme entrants who graduated from either a general or vocational programme.

3. ISCED 3 general programme entrants who graduated from a vocational programme.

4. ISCED 3 vocational programme entrants who graduated from a general programme.

5. Net entry rates at upper secondary level are based on the UOE data collection.

6. Excluding students having continued their studies in the adult education system.

7. Countries' average for N + 2 corresponds to the countries' average for N + the difference (in percentage points) of the average for countries with N and N + 2 data.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2012](http://www.oecd.org/edu/eag2012)).

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


StatLink  <http://dx.doi.org/10.1787/888932664480>

Table A2.5. [2/2] **Successful completion of upper secondary programmes, by gender and programme orientation**
*Ratio of graduates to new entrants based on cohorts*

	Method	Year used for new entrants Duration of programme (G: general, V: vocational)	N: theoretical duration	Proportion of students who did not graduate and who are still in education (general programmes)			Proportion of students who did not graduate and who are still in education (vocational programmes)			Net entry rates at upper secondary level for students below 20 years old (2010) <sup>5</sup>
				Total	Men	Women	Total	Men	Women	
OECD	Austria	2006-07 4 years G & V	within N 2 years after N	76 m	76 m	76 m	m m	m m	m m	m
	Belgium (Fl.)	2004-05 4 years G & V	within N 2 years after N	90 11	90 13	89 8	70 6	71 7	69 5	89
	Canada	2006-07 3 years	within N 2 years after N	m m	m m	m m	m m	m m	m m	m
	Denmark	2002-03 3-4 years G & 2-5 years V	within N 2 years after N	69 34	71 35	67 33	62 34	61 33	62 36	95
	Estonia	2004 3 years G & 3-4 years V	within N 2 years after N	54 23	51 20	57 26	51 15	44 12	63 21	100
	Finland	2004 3 years G & V	within N 2 years after N	81 45	78 42	83 48	46 25	44 23	48 27	m
	France	1999-2005 3 years G & 2 years V	within N 2 years after N	93 m	93 m	94 m	80 m	81 m	79 m	m
	Hungary	2006-07 4 years G & V	within N 2 years after N	m m	m m	m m	m m	m m	m m	98
	Iceland	2003 4 years G & V	within N 2 years after N	50 35	49 35	50 37	40 25	38 24	44 28	100
	Ireland	2004 2-3 years G & V	within N 2 years after N	m m	m m	m m	m m	m m	m m	100
	Israel	2007 3 years G & V	within N 2 years after N	26 m	25 m	28 m	14 m	12 m	18 m	95
	Japan	2007 3 years G & V	within N 2 years after N	m m	m m	m m	m m	m m	m m	100
	Korea	2007 3 years G & V	within N 2 years after N	2 m	1 m	4 m	13 m	8 m	21 m	m
	Luxembourg	2004-05 4 years G & 2-5 years V	within N 2 years after N	90 37	91 37	89 38	73 28	72 29	74 28	91
	Mexico	2008 3 years G & V	within N 2 years after N	m m	m m	m m	m m	m m	m m	77
	Netherlands	2007 2-3 years G & 2-4 years V	within N 2 years after N	73 43	71 42	75 44	25 20	26 20	25 20	m
	New Zealand	2004 3 years G	within N 2 years after N	34 24	34 25	35 24	m m	m m	m m	99
	Norway	2004 3 years G & 4 years V	within N 2 years after N	40 14	39 15	40 13	35 11	39 10	28 11	98
	Poland	2006-07 3 years G & 3-4 years V	within N 2 years after N	m m	m m	m m	m m	m m	m m	89
	Slovak Republic	2006 4 years G & 2-4 years V	within N 2 years after N	m m	m m	m m	m m	m m	m m	95
	Slovenia	2007 4 years G & 3-4 years V	within N 2 years after N	m m	m m	m m	m m	m m	m m	100
	Spain	2006-07 2 years G & V	within N 2 years after N	m m	m m	m m	m m	m m	m m	m
	Sweden <sup>6</sup>	2006 3 years G & V	within N 2 years after N	50 1	49 1	51 2	35 1	35 1	35 1	98
	United Kingdom	2006 2 years	within N 2 years after N	m m	m m	m m	m m	m m	m m	m
	United States	2002 3 years G & V	within N 2 years after N	m m	m m	m m	m m	m m	m m	99
	Countries' average <sup>7</sup>		within N 2 years after N	59 m	59 m	60 m	45 m	44 m	47 m	m

Note: Data presented in this table come from a special survey in which 20 countries participated. Refer to Annex 3 for details concerning this indicator, including methods used, programmes included/excluded, year of entry, etc.

1. ISCED 3 general programme entrants who graduated from either a general or vocational programme.
2. ISCED 3 vocational programme entrants who graduated from either a general or vocational programme.
3. ISCED 3 general programme entrants who graduated from a vocational programme.
4. ISCED 3 vocational programme entrants who graduated from a general programme.
5. Net entry rates at upper secondary level are based on the UOE data collection.
6. Excluding students having continued their studies in the adult education system.
7. Countries' average for N + 2 corresponds to the countries' average for N + the difference (in percentage points) of the average for countries with N and N + 2 data.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2012](http://www.oecd.org/edu/eag2012)).

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


StatLink  <http://dx.doi.org/10.1787/888932664480>

Table A2.6. **Successful completion of upper secondary programmes, by programme orientation and duration**

Ratio of graduates to new entrants based on cohorts

OECD	N: theoretical duration	Completion of general programmes <sup>1</sup>				Completion of vocational programmes <sup>2</sup>				
		Total	2 years	3 years	4 years	Total	2 years	3 years	4 years	5 years
Austria	within N	<b>71</b>	a	a	71	<b>m</b>	n	m	m	a
	2 years after N	<b>m</b>	a	a	m	<b>m</b>	n	m	m	a
Belgium (Fl.)	within N	<b>81</b>	a	a	81	<b>59</b>	a	a	59	a
	2 years after N	<b>95</b>	a	a	95	<b>77</b>	a	a	77	a
Canada	within N	<b>m</b>	m	m	m	<b>m</b>	m	m	m	m
	2 years after N	<b>m</b>	m	m	m	<b>m</b>	m	m	m	m
Denmark	within N	<b>80</b>	m	80	61	<b>35</b>	57	12	64	41
	2 years after N	<b>88</b>	m	89	80	<b>54</b>	72	33	83	59
Estonia	within N	<b>84</b>	a	84	a	<b>48</b>	a	47	59	a
	2 years after N	<b>92</b>	a	92	a	<b>68</b>	a	68	68	a
Finland	within N	<b>80</b>	a	80	n	<b>62</b>	n	62	n	n
	2 years after N	<b>91</b>	a	91	n	<b>72</b>	n	72	n	n
France	within N	<b>61</b>	a	61	a	<b>55</b>	55	m	a	a
	2 years after N	<b>90</b>	a	90	a	<b>69</b>	69	m	a	a
Hungary	within N	<b>74</b>	m	a	74	<b>44</b>	m	a	44	n
	2 years after N	<b>m</b>	m	a	m	<b>m</b>	m	a	m	m
Iceland	within N	<b>44</b>	m	m	m	<b>45</b>	m	m	m	m
	2 years after N	<b>59</b>	m	m	m	<b>57</b>	m	m	m	m
Ireland	within N	<b>m</b>	m	m	m	<b>m</b>	m	m	m	m
	2 years after N	<b>m</b>	m	m	m	<b>m</b>	m	m	m	m
Israel	within N	<b>87</b>	a	87	a	<b>88</b>	a	88	m	a
	2 years after N	<b>m</b>	a	m	m	<b>m</b>	a	m	m	a
Japan	within N	<b>93</b>	a	93	m	<b>91</b>	a	91	m	a
	2 years after N	<b>m</b>	a	m	m	<b>m</b>	a	m	m	a
Korea	within N	<b>97</b>	a	97	a	<b>89</b>	a	89	a	a
	2 years after N	<b>m</b>	a	m	a	<b>m</b>	a	m	a	a
Luxembourg	within N	<b>68</b>	a	a	68	<b>35</b>	52	33	34	36
	2 years after N	<b>92</b>	a	a	92	<b>66</b>	61	60	72	74
Mexico	within N	<b>m</b>	m	m	m	<b>m</b>	m	m	m	m
	2 years after N	<b>m</b>	m	m	m	<b>m</b>	m	m	m	m
Netherlands	within N	<b>72</b>	69	76	m	<b>55</b>	48	59	61	m
	2 years after N	<b>94</b>	91	97	m	<b>70</b>	64	72	76	m
New Zealand	within N	<b>59</b>	m	59	m	<b>m</b>	m	m	m	m
	2 years after N	<b>64</b>	m	64	m	<b>m</b>	m	m	m	m
Norway	within N	<b>73</b>	n	73	n	<b>42</b>	a	m	42	m
	2 years after N	<b>83</b>	n	83	n	<b>62</b>	a	m	62	m
Poland	within N	<b>89</b>	a	89	a	<b>69</b>	a	71	68	a
	2 years after N	<b>m</b>	a	m	a	<b>m</b>	a	m	m	a
Slovak Republic	within N	<b>98</b>	a	a	98	<b>84</b>	73	73	89	a
	2 years after N	<b>m</b>	a	a	m	<b>m</b>	m	m	m	a
Slovenia	within N	<b>86</b>	n	a	86	<b>68</b>	n	76	65	a
	2 years after N	<b>m</b>	n	a	m	<b>m</b>	n	m	m	a
Spain	within N	<b>57</b>	57	a	a	<b>m</b>	m	m	m	m
	2 years after N	<b>82</b>	82	a	a	<b>m</b>	m	m	m	m
Sweden <sup>3</sup>	within N	<b>76</b>	m	76	a	<b>68</b>	m	68	a	a
	2 years after N	<b>84</b>	m	84	a	<b>74</b>	m	74	a	a
United Kingdom	within N	<b>m</b>	m	m	m	<b>m</b>	m	m	m	m
	2 years after N	<b>m</b>	m	m	m	<b>m</b>	m	m	m	m
United States	within N	<b>m</b>	m	m	m	<b>m</b>	m	m	m	m
	2 years after N	<b>m</b>	m	m	m	<b>m</b>	m	m	m	m
Countries' average <sup>4</sup>	within N	<b>77</b>	m	80	77	<b>61</b>	m	64	59	m
	2 years after N	<b>92</b>	m	93	90	<b>77</b>	m	80	78	m

Note: Please refer to Annex 3 for details concerning this indicator, including methods used, programmes included/excluded, year of entry, etc.

1. ISCED 3 general programme entrants who graduated from either a general or vocational programme.


2. ISCED 3 vocational programme entrants who graduated from either a general or vocational programme.

3. Excluding students having continued their studies in the adult education system.

4. Countries' average for N+2 corresponds to the countries' average for N + the difference (in percentage points) of the average for countries with N and N+2 data.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2012](http://www.oecd.org/edu/eag2012)).

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

StatLink  <http://dx.doi.org/10.1787/888932664499>



**From:**  
**Education at a Glance 2012**  
OECD Indicators

**Access the complete publication at:**  
<https://doi.org/10.1787/eag-2012-en>

**Please cite this chapter as:**

OECD (2012), "Indicator A2 How many students are expected to finish secondary education?", in *Education at a Glance 2012: OECD Indicators*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/eag-2012-6-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to [rights@oecd.org](mailto:rights@oecd.org). Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at [info@copyright.com](mailto:info@copyright.com) or the Centre français d'exploitation du droit de copie (CFC) at [contact@cfcopies.com](mailto:contact@cfcopies.com).