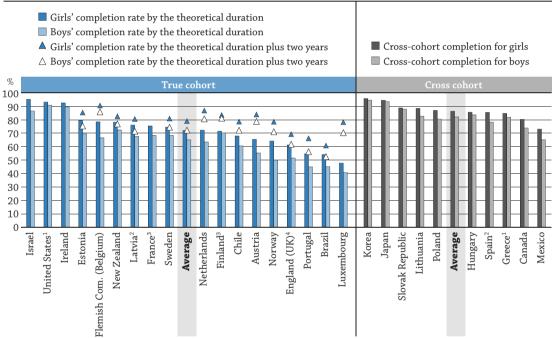
INDICATOR A9

HOW MANY STUDENTS COMPLETE UPPER SECONDARY **EDUCATION?**

- On average across countries that submitted true-cohort data (data on individual students), 68% of students who enter upper secondary education graduate within the theoretical duration of the programme in which they began. Two years after the end of the theoretical duration, average completion increases to 75%. For countries with cross-cohort data (aggregate data on student cohorts; see Analysis section), the average completion rate is 84%.
- In all countries, girls have higher completion rates than boys in total upper secondary education, though the gender gap tends to decrease when looking at completion rates two years beyond the theoretical end of the programme. This means more boys graduate late than girls.
- On average, 4% of students are still in education two years after the theoretical end of the programme in which they enrolled, while 21% have not graduated and are no longer enrolled.

Figure A9.1. Completion rate of upper secondary education by gender (2015)

Completion rate of full-time students in initial education programmes of at least two years of duration



- 1. Year of reference 2013.
- 2. Upper secondary general programmes only.
- 3. Year of reference 2014.
- 4. Year of reference is 2016 and data cover successful completion and achievement of two-year GCSE programmes. Countries are ranked in descending order of girls' completion rate (for true cohort, by the theoretical duration).

Source: OECD (2017), Table A9.1. See Source section for more information and Annex 3 for notes (www.oecd.org/education/educationat-a-glance-19991487.htm).

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Context

Upper secondary completion rates measure how many of the students who enter an upper secondary programme graduate from it within a given time frame. One of the challenges facing education systems in many countries is students' disengagement and consequent dropout from the education system, meaning that they leave school without an upper secondary qualification. These young people tend to face severe difficulties entering – and remaining in – the labour market. Leaving school early is a problem therefore for individuals and society alike.

INDICATOR A9

Evidence shows that the risk of not completing upper secondary programmes can be linked to students' socio-economic, demographic and educational backgrounds. As policy makers examine ways to reduce the number of early school-leavers, it is important to identify and address these potential at-risk groups (Box A9.1).

This indicator is restricted to initial education only, meaning it only captures students who are entering upper secondary education for the first time. For these students, it measures the successful completion of upper secondary programmes and the proportion of students still in education after two specific time frames: 1) the theoretical duration of the programme in which students enrolled; and 2) two years after the end of the theoretical duration. The difference between these two time frames sheds light on the extent to which students tend to graduate "on time" (or within the amount of time expected given the theoretical duration of the programme). This indicator also allows for a comparison of completion rates by gender and programme orientation.

Like the graduation rate (see Indicator A2), the completion rate does not indicate the quality of upper secondary education; it does however indicate to a certain extent the capacity of this education level to engage students to the end of the programme.

Other findings

- For nearly all countries, completion rates are higher for general programmes than for vocational programmes. In Estonia, Luxembourg and Norway, the completion rate for general programmes is over 20 percentage points higher than for vocational programmes.
- In some countries, it is common for students to transfer between programme orientations before graduating from upper secondary education. In Chile, the Flemish Community of Belgium, Israel and Norway, 10% or more of students graduate from a different programme orientation to the one in which they originally enrolled.
- Completion rates within the theoretical duration for vocational programmes vary widely across countries, from 33% in Luxembourg to 92% in Israel. For countries with cross-cohort data, the figures range from 58% in Greece to 92% in Japan and Korea.

Note

The completion rate in this indicator describes the percentage of students who enter an upper secondary programme for the first time and graduate from it a given number of years after they entered. The restriction to first-time entrants into upper secondary education means that adulteducation programmes and students entering upper secondary education again after their initial schooling are excluded. For example, students who enter a vocational upper secondary programme after having completed a general upper secondary programme are not captured by this indicator. In addition, this indicator is restricted to programmes of at least two years' duration, even though some countries have one-year programmes offering an upper secondary qualification and the credentials required to obtain a job.

Completion and graduation rates are two different measures; this measure of upper secondary completion should not be confused with the indicator on upper secondary graduation rates (see Indicator A2). Graduation rates represent the estimated percentage of people from a certain age cohort that are expected to graduate at some point during their lifetime. It measures the number of graduates from upper secondary education relative to the country's 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 16-year-old graduates divided by the total number of 16-year-olds in the country). The overall 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.

Analysis

Completion rates for true-cohort and cross-cohort data

Completion rates in this indicator are calculated using two different methods, depending on data availability. The first method, true-cohort, follows individual students from entry into an upper secondary programme until a specified number of years later. Completion is then calculated as the share of entrants who have graduated in that time frame. The second method, cross-cohort, is used when individual data are not available. It calculates completion by dividing the number of graduates in a year by the number of new entrants to that programme a certain number of years previously, where the number of years corresponds to the theoretical duration of the programme.

Because of the difference in methodologies, caution must be exercised when comparing true-cohort and cross-cohort completion rates. On the one hand, countries with true-cohort data are able to report exactly how many students from a given entry cohort have graduated within a specific time frame. This means that the true-cohort completion rate includes students who graduated before or exactly at the end of the time frame (even if they graduated from a different upper secondary programme than the one in which they began) and excludes students who graduated after the expected time frame.

On the other hand, the number of graduates used in the cross-cohort calculation corresponds to the total number of graduates of an upper secondary programme in a given calendar year. Thus, it includes every student who graduated that year, regardless of the time they took to successfully complete the programme. As an example, consider a programme with a theoretical duration of three years. Completion rates will then be calculated using the graduation cohort in 2015 and an entry cohort three academic years earlier, in 2012/2013. For countries with cross-cohort data, the graduation cohort in 2015 will include students who entered in 2012/2013 and graduated on time (within three years), as well as all others who entered before 2012/2013 and graduated in 2015. As a result, in countries where a significant share of students takes longer to graduate, cross-cohort completion will be overestimated when compared to true-cohort completion, for which the time frame is limited. The cross-cohort method may also be more vulnerable to changes in the student population due to immigration.

The theoretical duration of upper secondary programmes may vary across countries. Therefore, despite having the same reference year for graduates (2015 unless specified otherwise), the year used for entry cohorts differs across countries. Please see Annex 3 (www.oecd.org/education/education-at-a-glance-19991487.htm) for more information on each country's theoretical duration of upper secondary programmes.

True-cohort completion rates

On average across the countries that submitted true-cohort data, 68% of students who enter upper secondary education graduate within the theoretical duration of the programme in which they enrolled, 20% are still in education and 12% have not graduated and are not enrolled. Two years after the end of the theoretical duration, average completion increases to 75%. While the completion rate for all countries increases between the end of the theoretical duration and two years afterwards, for some countries the increase is substantial: by over 15 percentage points in Austria, the Flemish Community of Belgium, the Netherlands and Norway; and by 30 percentage points in Luxembourg.

A large difference in completion rates between the shorter and longer time frames is not necessarily a negative outcome. It could reflect a more flexible upper secondary system in which it is common for students to transfer between different programmes or programme orientations, thus delaying their graduation. In the Flemish Community of Belgium, for example, 19% of students who enter a general upper secondary programme graduate instead from a vocational programme within the two years following the end of the theoretical duration of their original programme. In Norway, many students take the opposite pathway: 21% of students who enter a vocational programme transfer and graduate instead from a general programme. In Chile and Israel also, 10% or more of students graduate from a different programme orientation to the one in which they first enrolled (Table A9.2).

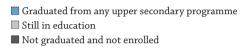
More generally, in countries that provide broad access to upper secondary education, flexibility may be important to give students more time to meet the standards set by their educational institution. In countries where upper secondary education is restricted, either by admissions criteria or because students from disadvantaged backgrounds have less access to this level, completion rates may be higher because of the selection bias (see Indicator C1 for more information on age-specific enrolment rates in secondary education).

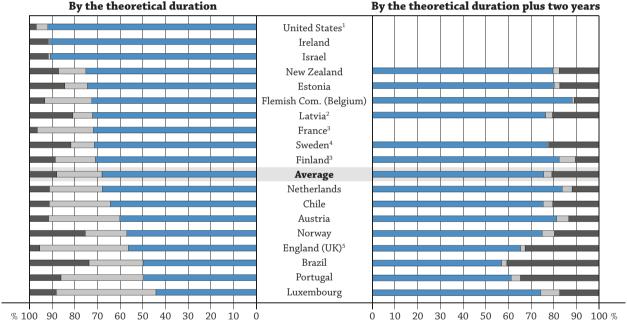
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Nevertheless, students with excessive delays in graduating or who are leaving the system without graduating are a source of concern. In most countries, the majority of students who are still in education at the end of the theoretical duration of the programme will graduate within the following two years. However, this is not the case in every country. In Chile and Portugal, for example, over one quarter of the students who enter an upper secondary programme are still in education after the theoretical duration of the programme; out of those, more than half will no longer be enrolled two years later. In these countries, the delay in graduating could signal students who are falling behind and at risk of dropping out. On average across countries with available data, 4% of students are still in education two years after the end of the theoretical duration of the programme in which they enrolled, while 21% have not graduated and are no longer enrolled (Figure A9.2).

Figure A9.2. Outcomes for students who entered upper secondary education, by duration (2015)

Completion rate of full-time students in initial education programmes of at least two years of duration. True cohort only





- 1. Year of reference is 2013.
- 2. Upper secondary general programmes only.
- 3. Year of reference is 2014.
- 4. Students who continued their studies in the adult education system are included in the share of "not graduated and not enrolled".
- 5. Year of reference is 2016 and data cover succesful completion and achievement of two-year GCSE programmes.

Countries are ranked in descending order of the percentage of students who graduated from any upper secondary programme by the theoretical duration.

Source: OECD (2017), Table A9.2. See Source section for more information and Annex 3 for notes (www.oecd.org/education/education-at-aglance-19991487.htm).

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Cross-cohort completion rates

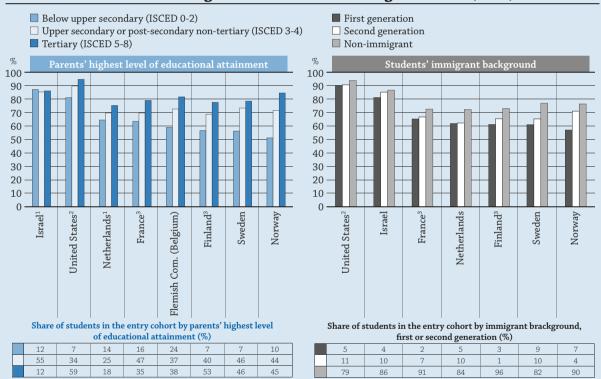
Completion rates for countries that submitted cross-cohort data tend to be higher than for countries with true-cohort data because they include all graduates, with no limitation on the time it took them to complete the programme. So although it is not possible to assess whether students are graduating with excessive delays, cross-cohort completion provides valuable information on the share of students who are graduating in the long run. On average across the ten countries that submitted cross-cohort data, 84% of students complete upper secondary education. There is, however, wide variation among countries, ranging from 69% in Mexico, to 94% in Japan and 95% in Korea.

Box A9.1. How immigrant status and parents' educational attainment affect completion rates

Recent results from the OECD Programme for International Student Assessment (PISA) show that a variety of demographic, social, economic and educational factors can significantly affect a student's performance and well-being in school (OECD, 2016b). Similarly, non-completion of upper secondary education is not the result of any single risk factor, but rather a combination and accumulation of various barriers and disadvantages that affect students throughout their lives. Figure A9.a shows the completion rate of upper secondary education disaggregated by two measures of socio-economic background: parents' educational attainment and students' immigrant status.

In all countries except Israel, students' completion rate increases as their parents' educational attainment increases. Having at least one parent who completed upper secondary education increases students' likelihood of completing upper secondary education considerably. In Finland, the Flemish Community of Belgium, Norway and Sweden, the completion rate of students whose parents (at least one) has upper secondary or post-secondary non-tertiary as their highest level of attainment is over 10 percentage points higher than their peers whose parents did not attain this level.

Figure A9.a. Completion rate of upper secondary education by parents' educational background and students' immigrant status (2015)



Note: Some students in the entry cohort may have been reported as having unknown parents' educational attainment or unknown immigrant background. That explains why the shares of students reported below each figure does not always add up to 100%.

France and the United States provided data based on longitudinal studies whereas the other countries provided data based on registries. The results for students' immigrant background may not be comparable across these methods, as longitudinal studies would not account for the most recent waves of immigration.

- 1. The number of new entrants in Israel and the Netherlands whose parents' educational background is unknown is considerable: 22% and 43%, respectively
- 2. Year of reference is 2013. In the international classification, upper secondary education refers only to grades 10-12 in the United States.
- 3. Year of reference is 2014.

Countries are ranked in descending order of completion rate in upper secondary education of students whose parents have below upper secondary education

Source: OECD, 2016 ad hoc survey on completion rates. See Source section for more information and Annex 3 for notes (www.oecd.org/ education/education-at-a-glance-19991487.htm).

The likelihood of completing upper secondary education further increases if at least one parent is tertiaryeducated. In Norway, the completion rate of students whose mother or father attained tertiary education is 33 percentage points higher than the completion rate of students whose parents did not attain upper secondary education. These results are consistent with the findings from the OECD Programme for International Assessment of Adult Competencies (Survey of Adult Skills [PIAAC]), which highlight the challenge of intergenerational mobility in education (Indicator A4 in Education at a Glance 2015 [OECD, 2015]).

Being a first or second-generation immigrant also seems to affect students' likelihood of completing upper secondary education. In all countries with available data, the completion rate for non-immigrant students is higher than for first-generation immigrants (those born outside the country and whose both parents were born in another country, excluding international students) and for second-generation immigrants (those born in the country and whose both parents were born in another country). These lower completion rates among students with an immigrant background add to existing concerns about their educational outcomes, such as the fact that immigrant students are more than twice as likely to underperform in PISA, even after adjusting for socio-economic differences (OECD, 2016b).

The difference in completion rates between non-immigrant students and first-generation immigrants is greater than 10 percentage points in Finland, the Netherlands, Norway and Sweden – although first-generation immigrants make up less than 5% of Finland's entry cohort. Second-generation immigrants have higher completion rates than first-generation immigrants, though this difference tends to be smaller in magnitude than the difference between non-immigrant students and either immigrant group.

Children from disadvantaged social groups not only face more barriers to accessing education, but their performance and outcomes once in education are also lower than those of their counterparts. Education outcomes among students with an immigrant background or from families with low levels of educational attainment should be an area of focus among education policy makers, particularly in countries where these students show significantly lower completion rates than their peers from more advantaged social groups.

Gender differences in completion rate

In all countries with available data, girls have higher completion rates than boys in total upper secondary education. This is true for both time frames in countries with true-cohort data, as well as in countries with cross-cohort data (Figure A9.1). These results are consistent with those of other education indicators, namely the higher share of girls who are expected to graduate from upper secondary education (see Indicator A2), the higher likelihood that women will study at the tertiary level when their parents did not reach this level (see Indicator A4), as well as women's higher completion rate at tertiary level (see Indicator A9 of Education at a Glance 2016 [OECD, 2016a]).

On average across countries with true-cohort data, 72% of girls graduate from upper secondary education within the theoretical duration of the programme in which they enrolled compared to only 64% of boys. The gender difference in completion within this time frame is highest in the Flemish Community of Belgium and in Norway - both over 11 percentage points.

In most countries, the gender gap in completion rates decreases within the two years after the end of the theoretical duration of programmes, meaning more boys tend to delay graduation than girls. Many factors may contribute to this delay, including the higher incidence of grade repetition among boys, who are more likely than girls to repeat a grade even after accounting for students' academic performance and self-reported behaviour and attitudes (OECD, 2016b). On average across countries with available data, 79% of girls and 72% of boys graduate within the two years following the end of the theoretical duration. Indeed, the two countries/economies with the highest gender gap within the theoretical duration (the Flemish Community of Belgium and Norway) also see the largest closing of the gender gap during the two additional years, of about 7 percentage points each.

Following the same pattern of decreasing gender gaps over longer time frames, the difference between upper secondary completion for girls and boys tends to be smaller among countries with cross-cohort data. On average, the completion rate for girls is 4 percentage points higher than for boys, with the biggest gap being in Mexico, at 8 percentage points.

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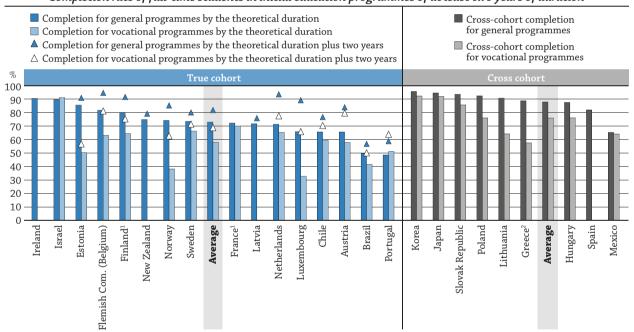
The gender gap also varies considerably depending on the programme orientation. While the gender gap in favour of girls tends to be even higher for general programmes, boys' completion rates in vocational programmes are higher than girls' in several countries: Finland (true cohort within the theoretical duration), Greece, Hungary, Lithuania and the Slovak Republic (the four of which have cross-cohort data).

Completion rate by programme orientation

In all countries except Israel and Portugal, the completion rate for students who enter upper secondary education in a general programme is higher than for students who enter a vocational programme (Figure A9.3). On average across countries with true-cohort data, the completion rate for general programmes within the theoretical duration is 73%, compared to 58% for vocational programmes. In Estonia, Luxembourg and Norway, the completion rate for general programmes is over 30 percentage points higher than for vocational programmes. There is, however, broad variation in size, duration and even completion of vocational programmes across countries. Within the theoretical duration, for example, completion of vocational programmes ranges from 33% in Luxembourg to 92% in Israel.

In most countries, the difference in completion between the two orientations does not change significantly within the two years following the theoretical duration. Two notable exceptions are Luxembourg and Norway, where this gap reduces by 10 and 13 percentage points, respectively, between the shorter and longer time frames. The other exception is the Netherlands, where the gap actually increases by 10 percentage points, as the completion of general programmes is considerably higher than for vocational programmes within the two years after the end of the theoretical duration.

Figure A9.3. Completion rate of upper secondary education, by programme orientation (2015) Completion rate of full-time students in initial education programmes of at least two years of duration



- 1. Year of reference 2014
- 2. Year of reference 2013.

Countries are ranked in descending order of completion rate in general programmes (for true cohort, by the theoretical duration).

Source: OECD (2017), Table A9.1. See Source section for more information and Annex 3 for notes (www.oecd.org/education/education-at-aglance-19991487.htm)

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Across countries with cross-cohort data, the average completion rate for general programmes is 88%, compared to 76% for vocational programmes. The largest differences are found in Greece and Lithuania, where the completion rates for general programmes are, respectively, 31 and 26 percentage points higher than for vocational programmes. However, there is broad variation in completion of vocational programmes across countries, with rates that range from 58% in Greece to 92% in Japan and Korea.

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As many countries aim to develop their upper secondary vocational programmes to better prepare students for the labour market, the lower completion rates for these programmes are of concern. Some countries have been successful in considerably increasing completion rates in vocational programmes and diminishing the gap between vocational and general programmes, however (Box A9.2).

Box A9.2. Trends in completion rates

Increasing the number of students who complete upper secondary education is a priority for many education policy makers. However, this is a challenging goal, which may require changes at the system, school and classroom levels. Figure A9.b shows trends in completion rates broken down by programme orientation. Due to lack of data availability, the time frame for comparison is different for each country (as indicated below the country's name on the horizontal axis), and therefore cross-country comparisons cannot be drawn from these data.

It is, however, possible to observe that countries such as Israel, Finland and France have been able to increase completion rates over recent years for both general and vocational programmes in upper secondary education. In all three countries, the completion rate for vocational programmes has increased by more than for general programmes. In France, the total upper secondary completion rate increased by 13 percentage points between 2005 and 2014, led mostly by an increase of 15 percentage points in the completion rate for vocational programmes. This sharp increase in completion rates for vocational programmes can also be observed in Israel from 2009 to 2015 and in the Netherlands between 2010 and 2015, though the completion rate for general programmes actually slightly decreased in the same period.

In Sweden, an upper secondary school reform in 2011 may help explain the negative trend between 2007 and 2015. This has meant, among other things, that higher demands have been introduced for completion/ graduation and that vocational programmes no longer automatically give access to university admission.



Figure A9.b. Trends in completion rates of upper secondary education, by programme orientation

How to read this figure

In France, the completion rate for total upper secondary education increased by 13 percentage points from 2005 to 2014. In Sweden, it decreased by 5 percentage points from 2007 to 2015.

Note: Completion rate by the theoretical duration of the programme.

Countries are ranked in descending order of the percentage-point change in completion rates of upper secondary programmes.

Source: OECD, 2016 ad hoc survey on completion rates. See Source section for more information and Annex 3 for notes (www.oecd.org/ education/education-at-a-glance-19991487.htm).

Definitions

The theoretical duration of studies is the regulatory or common-practice time it takes a full-time student to complete a level of education. Please see Annex 3 (www.oecd.org/education/education-at-a-glance-19991487.htm) for information on each country's theoretical duration for general and vocational upper secondary programmes.

Parents' educational attainment:

- Below upper secondary means that both parents have attained ISCED 2011 levels 0, 1 and 2, and includes recognised qualifications from ISCED 2011 level 3 programmes (see Reader's Guide), which are not considered as sufficient for ISCED 2011 level 3 completion, and without direct access to post-secondary non-tertiary education or tertiary education.
- Upper secondary or post-secondary non-tertiary means that at least one parent has attained ISCED 2011 levels 3 and 4.
- Tertiary means that at least one parent has attained ISCED 2011 levels 5, 6, 7 and 8.

First-generation immigrants are people born outside the country and whose parents were both also born in another country. In this indicator it excludes international students.

Second-generation immigrants are people born in the country but whose parents were both born in another country.

Methodology

The true-cohort method requires following an entry cohort through a specific time frame. In this survey it corresponds to the theoretical duration N and the theoretical duration plus two years (N+2). Only countries with longitudinal surveys or registers are able to provide such information. Panel data may be available in the form of an individual student registry (a system including unique personal ID numbers for students) or a cohort of students used for conducting a longitudinal survey.

The cross-cohort method only requires data on the number of new entrants to a given ISCED level and the number of graduates N years later, where N corresponds to the theoretical duration of the programme. Under the assumption of constant student flows (constant increase or decrease in the number of students entering a given ISCED level throughout the years), the cross-cohort completion rate is closer to a total completion rate (i.e. the completion rate of all students, regardless of the time it took them to graduate). Thus, in countries where a large share of students do not graduate "on time" (within the theoretical duration of the programme), the cross-cohort completion rate may be more comparable to longer time frames in the true-cohort completion.

Completion rates for both methods are calculated as the number of graduates divided by the number of entrants N or N+2 years previously (where N is the theoretical duration of the programme).

For countries that submit true-cohort data it is also possible to calculate the share of students still in education and the share of students who have neither graduated nor are still enrolled - all of which is calculated within the timeframes of N and N+2. Both shares are calculated by dividing the number of students in the given situation by the number of new entrants N or N+2 years before.

For more information please see the OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications (OECD, 2017) and Annex 3 for country-specific notes (www.oecd.org/ education/education-at-a-glance-19991487.htm).

Source

Data on completion rates refer to the academic year 2014/2015 and were collected through a special survey undertaken in 2016. Countries could submit data either using either true-cohort or cross-cohort methodology.

Note regarding data from Israel

The statistical data for Israel are supplied by and are 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.

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Indicator A9 Tables

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Completion rate of upper secondary education, by programme orientation and gender (2015)

Table A9.2 Distribution of entrants to upper secondary education, by programme orientation and outcomes after theoretical duration and after the theoretical duration plus two years (2015)

Cut-off date for the data: 19 July 2017. Any updates on data can be found on line at http://dx.doi.org/10.1787/eag-data-en.

Table A9.1. Completion rate of upper secondary education, by programme orientation and gender (2015)

			•	î			İ		
	General programmes		Vocational programmes			Total upper secondary			
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			True cohort	– Completed 1	ipper seconda	ry by theoret	ical duration		
Austria	59	71	66	54	63	58	55	65	60
Flemish Com. (Belgium)	76	87	82	59	69	63	67	78	73
Brazil	45	54	50	40	44	42	45	54	50
Chile	62	70	66	57	63	60	61	68	64
Estonia	84	88	86	50	51	51	70	80	74
Finland ¹	79	81	80	65	64	65	70	71	71
France ¹	69	76	73	68	74	70	68	75	72
Ireland	90	92	91	a	a	a	90	92	91
Israel	85	95	90	89	95	92	86	95	91
Latvia	68	76	72	m	m	m	m	m	m
Luxembourg	62	70	66	32	34	33	41	48	44
Netherlands	69	74	72	61	71	66	63	72	68
New Zealand	72	78	75	a	a	a	72	78	75
Norway	70	78	75	33	45	38	50	64	57
Portugal	45	52	49	46	59	51	45	55	50
Sweden	70	77	74	66	67	67	68	75	71
England (UK) ²	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	52	61	56
United States ³	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	91	93	92
A	69	76	73	55	62	58	64	72	68
Average	09	76	75	33	62	36	04	12	00
	True cohort – Completed upper secondary education by theoretical duration plus two years								
Austria	82	87	84	78	83	80	79	84	81
Flemish Com. (Belgium)	94	97	95	80	84	82	86	91	88
Brazil	53	61	57	48	53	50	53	61	57
Chile	74	80	77	68	74	71	72	79	75
Estonia	90	93	91	57	58	57	75	85	80
Finland ¹	91	93	92	76	76	76	81	84	82
France	m	m	m	m	m	m	m	m	m
Ireland	m	m	m	a	a	a	m	m	m
Israel	m	m	m	m	m	m	m	m	m
Latvia	72	81	76	m	m	m	m	m	m
Luxembourg	88	92	90	63	70	66	70	78	74
Netherlands	93	95	94	74	82	78	81	87	84
New Zealand	77	83	80	a	a	a	77	83	80
Norway	82	89	86	62	65	63	71	79	75
Portugal	55	62	59	57	74	64	56	66	61
Sweden	77	84	81	71	73	72	74	81	78
England (UK) ²	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	62	69	65
United States	m	m	m	m	m	m	m	m	m
Average	79	84	82	67	72	69	72	79	75
				Cr	oss cohort				
Canada	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	74	80	77
Greece ³	86	91	89	60	56	58	82	85	83
Hungary	86	89	88	78	74	76	84	86	85
Japan	94	95	95	91	93	92	93	94	94
Korea	95	96	96	92	93	92	95	96	95
Lithuania	89	93	91	65	63	64	83	88	85
Mexico	62	69	65	60	69	64	65	73	69
Poland	91	93	93	75	78	76	80	87	84
Slovak Republic	92	95	94	86	85	86	88	89	88
Spain	78	85	82	m	m	m	m	m	m
Average	86	90	88	76	76	76	83	86	84
Tiverage	- 00	50		7.0	, 0	, 0			UT

Note: Data presented in this table come from an ad hoc survey and only concern initial education programmes. For true cohorts, the reference year (2015, unless noted otherwise) refers to the year of graduation by the theoretical duration plus two years. See *Definitions* and *Methodology* sections for more information.

Source: OECD (2017). See Source section for more information and Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

 $Please\ refer\ to\ the\ Reader's\ Guide\ for\ information\ concerning\ symbols\ for\ missing\ data\ and\ abbreviations.$

^{1.} Year of reference is 2014.

^{2.} Year of reference is 2016 and data cover successful full completion and achievement of two-year GCSE programmes.

^{3.} Year of reference is 2013.

Table A9.2. Distribution of entrants to upper secondary education, by programme orientation and outcomes after theoretical duration and after the theoretical duration plus two years (2015)

True cohort only

	Students' status by theoretical duration					Students' status by theoretical duration plus two years						
	Graduated			nc od 1		Graduated			ų.	r _p		
	From general programmes	From vocational programmes	Total	Still in education	Not graduated and not enrolled $^{\mathrm{1}}$	Total (3)+(4)+(5)	From general programmes	From vocational programmes	Total	Still in education	Not graduated and not enrolled ¹	Total (3)+(4)+(5)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
		E	Distributio	n of stude	nts who e	ntered an 1	upper seco	ndary gene	eral progra	amme		
Austria	63	3	66	25	9	100	76	9	84	4	11	100
Flemish Com. (Belgium)	70	12	82	15	2	100	77	19	95	0	4	100
Brazil	50	0	50	23	26	100	57	0	57	2	40	100
Chile	51	15	66	26	8	100	59	18	77	4	19	100
Estonia	86	0	86	9	5	100	89	3	91	3	6	100
Finland ²	79	1	80	16	4	100	89	3	92	4	4	100
France ²	72	1	73	26	1	100	m	m	m	m	m	m
Ireland	91	a	91	1	8	100	m	m	m	m	m	m
Israel	80	10	90	1	9	100	m	m	m	m	m	m
Latvia	72	0	72	9	19	100	75	2	76	3	21	100
Luxembourg	65	1	66	30	4	100	84	6	90	3	7	100
Netherlands	72	0	72	28	0	100	92	2	94	5	1	100
New Zealand	71	4	75	12	13	100	73	7	80	3	18	100
Norway	75	0	75	9	17	100	85	1	86	2	12	100
Portugal	49	0	49	34	17	100	59	0	59	4	37	100
Sweden ³	73	1	74	10	16	100	78	2	81	0	19	100
England (UK) ⁴	x(3)	x(3)	56 ^d	39 ^d	5 ^d	100	x(9)	x(9)	65 ^d	2 ^d	33 ^d	100
United States ⁵	x(3)	x(3)	92 ^d	5 ^d	3 ^d	100	m	m	m	m	m	m
Average	70	3	73	18	9	100	76	6	81	3	17	100
		Di	stribution	of studen	ts who ent	ered an up	per secon	dary vocat	ional prog	ramme		
Austria	0	58	58	33	8	100	0	80	80	6	14	100
Flemish Com. (Belgium)	0	63	63	26	11	100	0	81	82	1	17	100
Brazil	9	33	42	35	23	100	15	36	50	3	46	100
Chile	4	55	60	30	11	100	6	65	71	5	24	100
Estonia	1	50	51	12	38	100	1	56	57	2	41	100
Finland ²	1	64	65	19	17	100	1	75	76	9	15	100
France ²	0	70	70	22	8	100	m	m	m	m	m	m
Ireland	a	a	a	a	a	a	a	a	a	a	a	a
Israel	10	81	92	0	8	100	m	m	m	m	m	m
Latvia	m	m	m	m	m	m	m	m	m	m	m	m
Luxembourg	0	33	33	51	16	100	0	66	66	11	23	100
Netherlands	0	65	66	21	13	100	0	78	78	4	18	100
New Zealand	a	a	a	a	a	a	a	a	a	a	a	a
Norway	15	24	38	28	33	100	21	42	63	9	28	100
Portugal	0	51	51	40	9	100	0	64	64	5	31	100
Sweden ³	1	66	67	10	23	100	2	70	72	0	28	100
England (UK) ⁴	х	х	х	m	х	x	х	х	х	х	х	x
United States ⁵	x	х	x	x	х	x	m	m	m	m	m	m
Average	3	55	58	25	17	100	4	65	69	5	26	100

Note: Data presented in this table come from an ad hoc survey and only concern initial education programmes. See Definitions and Methodology sections for more information.

- $1. \ The \ columns for "not graduated and not enrolled" may include students who left the country before graduation.$
- 2. Year of reference is 2014.
- 3. Students who continued their studies in the adult education system are included in the columns "not graduated and not enrolled".
- 4. Year of reference is 2016 and data cover successful full completion and achievement of two-year GCSE programmes. Vocational programmes are included with general programmes.
- 5. Year of reference is 2013 and vocational programmes are included with general programmes. In the international classification, upper secondary education refers only to grades 10-12 in the United States.

Source: OECD (2017). See Source section for more information and Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

 ${\it Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.}$



FINANCIAL AND HUMAN RESOURCES Invested In Education



Indicator B1 How much is spent per student? StatLink http://dx.doi.org/10.1787/888933560130

Indicator B2 What proportion of national wealth is spent on educational institutions? StatLink http://dx.doi.org/10.1787/888933560225

Indicator B3 How much public and private investment on educational institutions is there? StatLink http://dx.doi.org/10.1787/888933560339

Indicator B4 What is the total public spending on education? StatLink http://dx.doi.org/10.1787/888933560415

Indicator B5 How much do tertiary students pay and what public support do they receive? StatLink http://dx.doi.org/10.1787/888933560529

Indicator B6 On what resources and services is education funding spent? StatLink http://dx.doi.org/10.1787/888933560605

Indicator B7 Which factors influence the level of expenditure on education? StatLink http://dx.doi.org/10.1787/888933560795

Classification of educational expenditure

Educational expenditure in this chapter is classified through three dimensions:

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- The first dimension represented by the horizontal axis in the diagram below relates to the location where spending occurs. Spending on schools and universities, education ministries and other agencies directly involved in providing and supporting education is one component of this dimension. Spending on education outside these institutions is another.
- The second dimension represented by the vertical axis in the diagram below classifies the goods and services that are purchased. Not all expenditure on educational institutions can be classified as direct educational or instructional expenditure. Educational institutions in many OECD countries offer various ancillary services - such as meals, transport, housing, etc. - in addition to teaching services to support students and their families. At the tertiary level, spending on research and development can be significant. Not all spending on educational goods and services occurs within educational institutions. For example, families may purchase textbooks and materials themselves or seek private tutoring for their children.
- The third dimension represented by the colours in the diagram below distinguishes among the sources from which funding originates. These include the public sector and international agencies (indicated by light blue), and households and other private entities (indicated by medium-blue). Where private expenditure on education is subsidised by public funds, this is indicated by cells in the grev colour.

	Public sources of funds Private sources	of funds Private funds publicly subsidised		
	Spending on educational institutions (e.g. schools, universities, educational administration and student welfare services)	Spending on education outside educational institutions (e.g. private purchases of educational goods and services, including private tutoring)		
Spending on core educational	e.g. public spending on instructional services in educational institutions	e.g. subsidised private spending on books		
services	e.g. subsidised private spending on instructional services in educational institutions	e.g. private spending on books and other school materials or private tutoring		
	e.g. private spending on tuition fees			
Spending on research and	e.g. public spending on university research			
development	e.g. funds from private industry for research and development in educational institutions			
Spending on educational services other than instruction	e.g. public spending on ancillary services such as meals, transport to schools, or housing on the campus	e.g. subsidised private spending on student living costs or reduced prices for transport		
	e.g. private spending on fees for ancillary services	e.g. private spending on student living costs or transport		

Coverage diagrams

For Indicators B1, B2, B3 and B6

For Indicator B4

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