

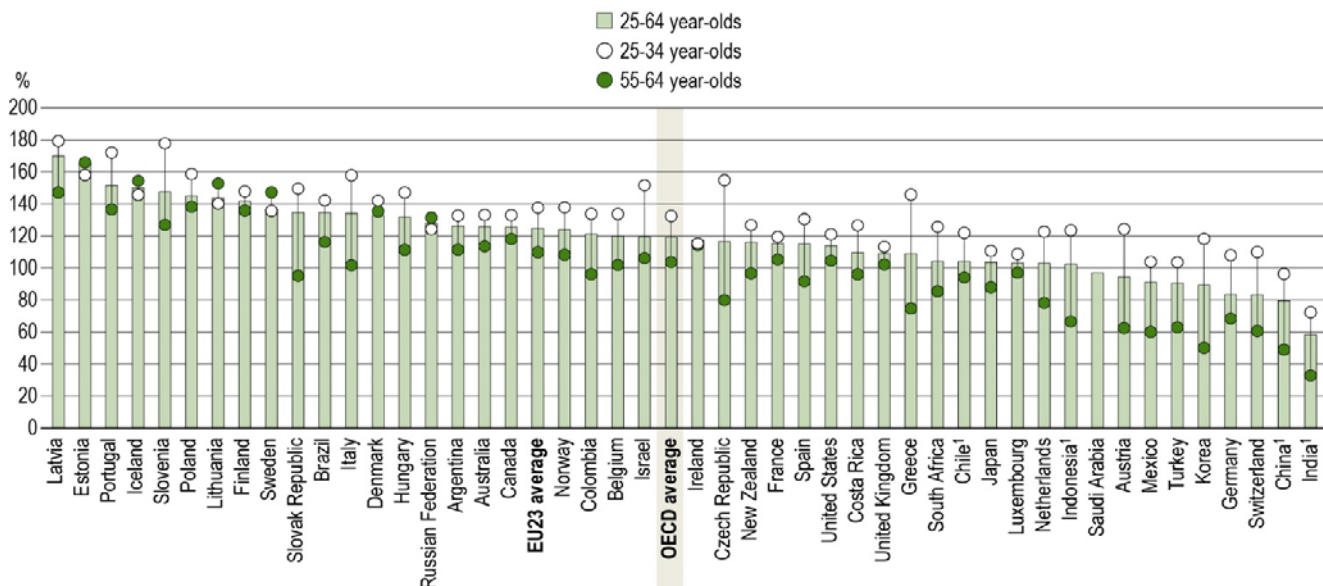
EDUCATION
AT A GLANCE 2019

Education at a Glance: OECD Indicators (OECD, 2019^[1]) is the authoritative source for information on the state of education around the world. It provides data on the structure, finances and performance of education systems in OECD and partner countries.

Mexico

- **Mexico has made great progress in increasing tertiary educational attainment** from 16% in 2008 to 23% in 2018.
- On average, a tertiary qualification results in better labour-market outcomes. **Tertiary-educated workers in Mexico enjoy the second highest earnings premium over those with upper secondary education among OECD countries.**
- **The share of young adults without upper secondary education has fallen**, but pathways from secondary to tertiary education remain limited.
- **Mexico's public expenditure on all levels of education as a share of total government expenditure is the second-highest among OECD countries**, but expenditure per student remains the lowest.
- **The gap between teachers' and school heads' salaries in lower secondary education in Mexico is among the widest across OECD countries.**

Figure 1. Share of tertiary-educated women as a percentage of the share of tertiary-educated men, by age group (2018)



Note 1. Year of reference differs from 2018. Refer to Table A1.1 for more details.

Countries are ranked in descending order of the percentage-point difference for the age group 25-64.

Source: OECD (2019), Education at a Glance Database, <http://stats.oecd.org>. See Source section for more information and Annex 3 for notes (<https://doi.org/10.1787/f8d7880d-en>).

Tertiary attainment has increased over the last decade, but still lags behind other OECD countries

- Mexico has made major progress in increasing tertiary educational attainment. The share of young adults (25-34 year-olds), who have completed tertiary education increased from 16% in 2008 to 23% in 2018, although it is still well below the OECD average of 44%. The substantial expansion of tertiary education has been accompanied by a diversification of institutions' missions, profiles and geographical coverage, and an expansion of distant learning. This has helped to reduce socio-economic inequalities in participation (OECD, 2019^[2]).
- Most first-time entrants into tertiary education (92%) choose a bachelor's programme, with only 9% enrolling in short-cycle tertiary programmes. In contrast, OECD countries on average have a more even distribution of entrants, with 17% entering short-cycle tertiary programmes, 7% master's long first degrees, and 76% bachelor's programmes.
- First-time entrants to tertiary education are younger than on average across OECD countries. The average age of first-time entrants is 20 years for short-cycle tertiary programmes and 21 years for bachelor's programmes, well below the OECD average of 25 years for short-cycle tertiary and 22 years for bachelor's. However, the median age of new entrants to doctoral programmes in Mexico is 34 years old, well above the OECD average of 29 years.
- Doctoral education in Mexico is limited in scale and focused on a few fields of study. Only 0.1% of 25-64 year-olds in Mexico hold a doctorate, the lowest share among OECD countries. In 2017, about 9 300 people graduated with a doctoral degree, of whom 51% were women and 38% had obtained a degree in the field of education. This is by far the highest share across OECD countries (OECD average: 5%). The second most popular field was business, administration and law, which accounted for 25% of all doctoral graduates, well above the OECD average of 9%. On average across OECD countries, the most common broad field of study at the doctoral level is natural sciences, mathematics and statistics (23%), whereas only 10% of doctoral graduates in Mexico studied this field.
- Unlike in most OECD countries, 25-64 year-old men are more likely to have attained tertiary education in Mexico than women of the same age group. However, this pattern has been reversed among the younger generation. The attainment rate of 25-34-year-old women is 4% higher than that of their male counterparts (Figure 1). On average across OECD countries, the attainment rate for women in this age group is 32% higher than that of men.
- The Mexican tertiary education system is weakly internationalised. About 1% of Mexican national tertiary students are enrolled in programmes abroad, lower than in most OECD countries, and below the OECD total (2%). Mexico has less than one international student for every hundred national students studying at home and abroad, a ratio well below the OECD total of 6 students, and 44% of them come from neighbouring countries.

Tertiary education results in better labour-market outcomes, but women and recent graduates benefit less

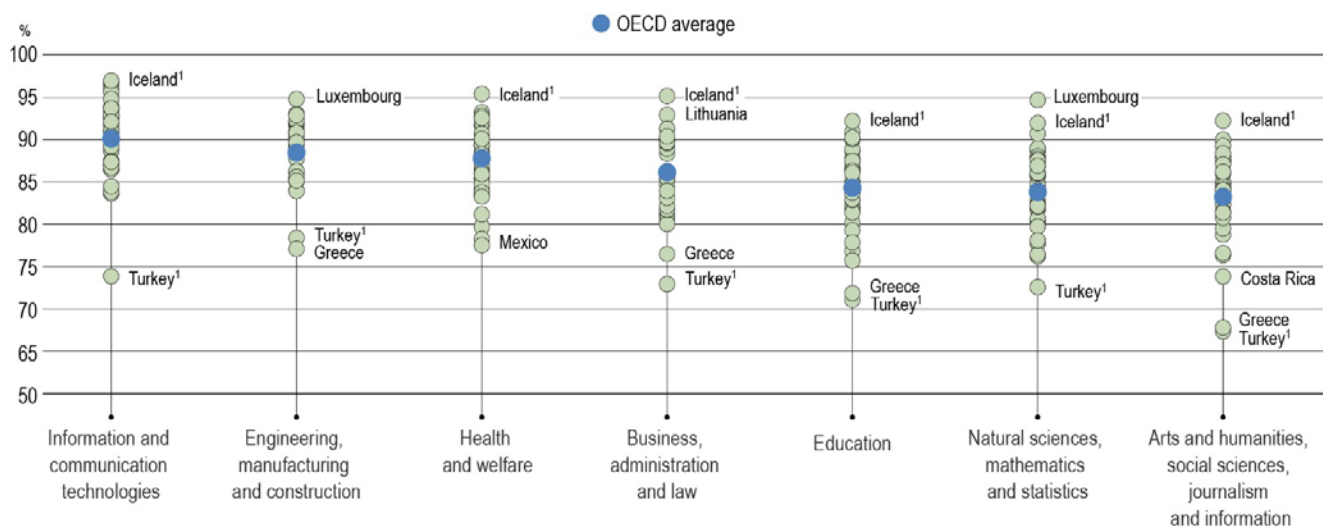
- As in most OECD countries, tertiary-educated young adults (25-34 year-olds) have a higher employment rate (81%) than those with upper secondary education (71%) and below upper secondary education (66%). Moreover, employment rates increase with higher levels of tertiary attainment. Graduates from short-cycle tertiary programmes have an employment rate of 79%, well below the OECD average of 84%. The employment rate for bachelor's graduates is 81%, slightly below the OECD average of 83%, and for master's graduates it is 85% (OECD average: 87%).
- In Mexico, doctorate holders have a relatively large employment advantage over those with a master's degree. Among 25-64 year-olds, the employment rate for doctorate holders is 8% higher than for master's graduates, above the OECD average advantage of 5%. The advantage for women with a doctorate is

12%, compared with 3% for men, although the employment rate for female doctorate holders, at 87%, is lower than for their male peers (94%).

- Employment rates vary by fields of study (Figure 2). Employment rates are highest for tertiary graduates in information and communication technologies (ICT), at 84% (OECD average: 90%); engineering, manufacturing and construction, at 84% (OECD average: 88%); and business, administration and law, at 80% (OECD average: 86%). Graduates from programmes in arts and humanities, social sciences, journalism, and information have lower employment rates, at 76% on average, compared to 83% across OECD countries.
- The distribution of graduates by fields of study has been stable, and is weakly aligned to employment outcomes. The largest share of tertiary graduates in 2017 studied business, administration and law, at 33% (OECD average: 24%), followed by engineering, manufacturing and construction (17%; OECD average: 14%). In comparison, 5% of graduates in 2017 had studied ICT (OECD average: 4%).

Figure 2. Employment rates of tertiary-educated adults, by field of study (2018)

Percentage of employed 25-64 year-olds among all 25-64 year-olds



1. Year of reference differs from 2018. Refer to the source table for more details.

Fields of study are ranked in descending order of the employment rates for the OECD average.

Source: Source: OECD (2019), Table A3.4. See Source section for more information and Annex 3 for notes (<https://doi.org/10.1787/f8d7880d-en>).

- Mexico's earnings premium for tertiary-educated workers is one of the highest among OECD countries. Young tertiary-educated workers can expect to earn 78% more than their peers with only upper secondary education. Tertiary-educated women benefit much less: on average they earn 66%, net of income tax, of their male counterparts, the widest gender gap across OECD countries and well below the OECD average of 75%. In contrast, the gap in the best performing countries for which data are available is 86% in Belgium and 97% in Costa Rica.
- Data on labour-market outcomes in Mexico must be understood within the context of the country's high levels of informal employment (OECD, 2019^[3]). This may help explain, for example, the high share of 18-24 year-olds who were neither employed nor in education or training (NEET) in Mexico: 22%, compared to the OECD average of 14%. Although tertiary-educated workers enjoy better access to formal jobs, a tertiary degree does not immediately guarantee access to fully formalised employment. At the start of their professional careers, young tertiary-educated adults (25-34 year-olds) are more likely to lack social security and pension coverage than 35-44 year-olds. For example, during the period 2013-17, 32% of young graduates from health and welfare programmes were working informally, 15 percentage points more than for the older cohort (17%). A similar pattern holds across all fields of study (OECD, 2019^[4]).

Efforts to expand early childhood and lower secondary education have been successful, although pathways to tertiary education remain restricted

- Government efforts to improve the quality and coverage of early childhood education, and the introduction of compulsory upper secondary education in 2013 (OECD, 2017^[5]), seem to have been effective in raising educational attainment. Enrolment rates among 3-5 year-olds increased from 64% in 2005 to 84% in 2017, close to the OECD average of 87%. In 2017, about 47% of 3-year-olds (OECD average: 77%) and 92% of 4-year-olds (OECD average: 87%) were enrolled in early childhood education programmes, and enrolment is universal among 5-6 year-olds.
- Moreover, between 2008 and 2018 the share of 25-34 year-olds without upper secondary education fell by 15 percentage points although, at 50%, Mexico still has the highest share among OECD countries. This is more than three times the OECD average of 15%.
- Lower and upper secondary education are organised into three strands: general, combined and vocational. Students from the vocational track in upper secondary education cannot access tertiary education and there is no post-secondary non-tertiary education. In 2017, 33% of first-time graduates from upper secondary education obtained a vocational qualification, below the OECD average of 40%.

Education is a public spending priority in Mexico but expenditure per student remains the lowest among OECD countries

- In 2016, total public expenditure on primary to tertiary education in Mexico accounted for 16.4% of total government expenditure, well above the OECD average of 10.8%. However, total public expenditure on all services was just 25.9% of gross domestic product (GDP), the second-lowest among OECD countries, meaning public expenditure on education accounted for 4.2% of GDP, below the OECD average 4.4%.
- Total public expenditure on education has been increasing over the past few years. Between 2010 and 2016, public expenditure on primary and secondary education increased by 12%, and expenditure on tertiary education increased by 21%. However, given that total government expenditure increased by 21% over the same period, the share of the government's budget devoted to primary to tertiary education fell by about 6%.
- In 2016, expenditure per student from primary to tertiary level was USD 3 600¹ per year, the lowest across OECD countries. Spending ranged from USD 2 600 per student at lower secondary level (OECD average: USD 9 900) to USD 5 900 at tertiary level excluding research and development expenditure (OECD average: USD 11 100).
- A 5% increase in the number of primary and secondary students between 2010 and 2016 was met by an 8% increase in expenditure per student. At tertiary level, a 49% increase in the number of students was accompanied by a 19% reduction in expenditure per student, despite increased spending.
- Public funding makes up 78% of Mexico's primary to tertiary education funding, below the OECD average of 83%. Households cover 31% of the expenditure at the tertiary level (OECD average: 23%), and 19% of expenditure at primary and secondary levels (OECD average: 8%). Between 2010 and 2016 households' expenditure on educational institutions increased by 2 percentage points in primary to tertiary education.
- In Mexico, most private funding comes from households in the form of tuition fees. These fees are set by the institutions and vary widely (OECD, 2019^[4]). Most students in short-cycle tertiary programmes are enrolled in public institutions (97%), but this falls to 67% for bachelor's programmes, 39% for master's programmes and 61% for doctoral programmes. There is a system of public grants for students, albeit with limited coverage (OECD, 2019^[2]).

¹ Values reported in equivalent US dollars (USD) have been converted using purchasing power parities (PPPs) for GDP.

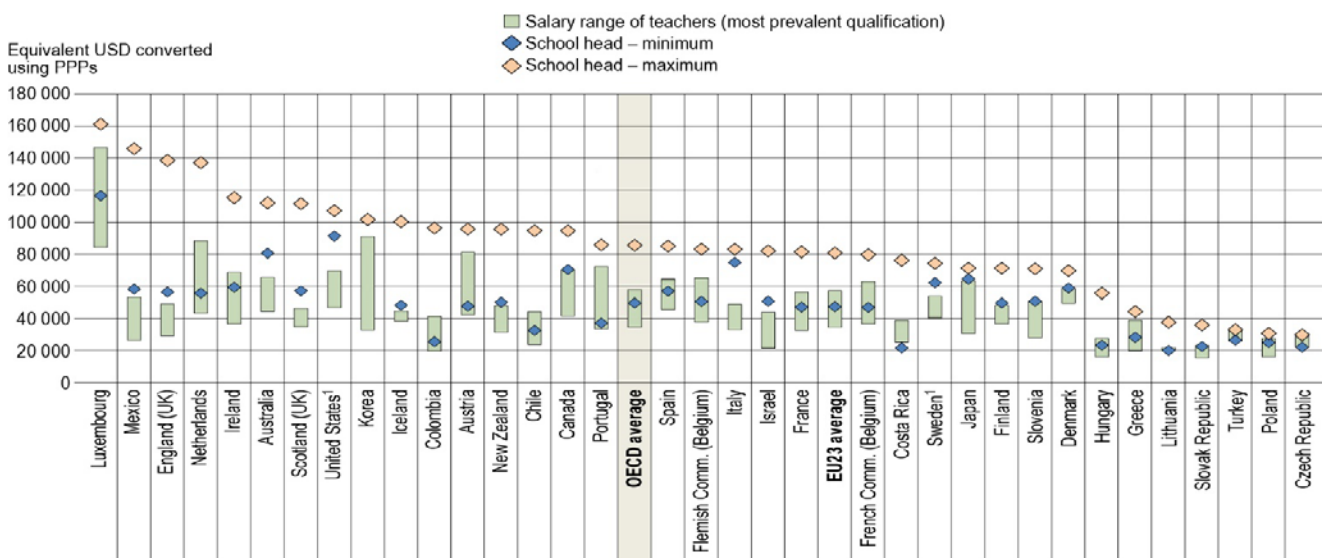
- About 79% of public expenditure on primary and secondary education comes from central government and the remainder from state budgets. Central government funds are typically transferred to states, and earmarked for existing fixed costs (staff salaries and running costs, for example), or tied to agreements with specific institutions.
- The main source of public funding at tertiary level is the central government and transfers between different levels of government only marginally increase the state governments' share, from 19% to 21%. There is no common funding formula covering all public universities meaning public expenditure per student varies widely across states, regions and institutions (OECD, 2019^[2]).

Mexico's teaching profession is more gender balanced than average, with relatively high salaries for school heads and upper secondary teachers

- In pre-primary education, 96% of teachers are women in Mexico (OECD average: 97%). This falls to 68% at primary level (OECD average: 83%), 53% at lower secondary level (OECD average: 69%) and 48% for upper secondary programmes (OECD average: 60%).

Figure 3. Minimum and maximum statutory salaries for lower secondary teachers and school heads (2018)

Based on teachers with most prevalent qualifications at a given level of education and school heads with minimum qualifications



1. Actual base salaries.

Countries are ranked in descending order of maximum salaries of school heads.

Source: OECD (2019), Education at a Glance Database, <http://stats.oecd.org>. Table D3.1b. available online and Table D3.10. See Source section for more information and Annex 3 for notes (<https://doi.org/10.1787/f8d7880d-en>).

- Teachers' statutory salaries are below the OECD average for pre-primary, primary and general lower secondary education, but above the OECD average for upper secondary general education. Starting salaries are USD 50 800 at this level, about 42% higher than the OECD average of USD 35 900, while salaries at the top of the scale are USD 62 700, just slightly above the OECD average of USD 60 700.
- School heads' statutory salaries are highest in lower secondary schools, where the maximum salary is USD 145 900 per year. This is about 70% more than the OECD average of USD 85 700. Mexico has one of the largest differences in the OECD between teachers' and school heads' minimum statutory salaries (Figure 3).

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For more information on **Education at a Glance 2019** and to access the full set of Indicators, visit www.oecd.org/education/education-at-a-glance-19991487.htm.

Updated data can be found on line at <http://dx.doi.org/10.1787/eag-data-en> and by following the **StatLinks**  under the tables and charts in the publication.

Explore, compare and visualise more data and analysis using:



<http://gpseducation.oecd.org/CountryProfile?primaryCountry=MEX&treshold=10&topic=EO>.

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On 25 May 2018, the OECD Council invited Colombia to become a Member. While Colombia is included in the OECD averages reported in this note, at the time of its preparation, Colombia was in the process of completing its domestic procedures for ratification and the deposit of Colombia's instrument of accession to the OECD Convention was pending.

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.

Key Facts for Mexico in Education at a Glance 2019

Source	Main topics in <i>Education at a Glance</i>	Mexico		OECD average	
Tertiary education					
Educational attainment of 25-64 year-olds					
2018					
Table A1.1	Short-cycle tertiary	0%		7%	
	Bachelor's or equivalent	16%		17%	
	Master's or equivalent	2%		13%	
	Doctoral or equivalent	0%		1%	
Tertiary attainment of 25-34 year-olds, by gender					
2018					
Table A1.2	Men	17%	23%	31%	38%
	Women	16%	24%	40%	51%
	Total	16%	23%	35%	44%
Distribution of first-time tertiary entrants by education level					
2017					
Table B4.1	Short-cycle tertiary	9%		17%	
	Bachelor's or equivalent	92%		76%	
	Master's or equivalent	**		7%	
Share of international or foreign students, by education level¹					
2017					
Table B6.1	Bachelor's or equivalent	0%		4%	
	Master's or equivalent	1%		13%	
	Doctoral or equivalent	7%		22%	
	All tertiary levels of education	1%		6%	
Employment rate of 25-64 year-olds, by educational attainment					
2018					
Table A3.1	Short-cycle tertiary	72%		82%	
	Bachelor's or equivalent	79%		84%	
	Master's or equivalent	84%		88%	
	Doctoral or equivalent	91%		92%	
	All tertiary levels of education	80%		85%	
Employment rate of tertiary-educated 25-64 year-olds, by field of study					
2018					
Table A3.4	Education	78%		84%	
	Business and administration and law	80%		86%	
	Engineering, manufacturing and construction	84%		89%	
	Health and welfare	78%		87%	
Relative earnings of full-time full-year 25-64 year-old workers, by educational attainment (upper secondary education = 100)					
2017					
Table A4.1	Short-cycle tertiary	133		120	
	Bachelor's or equivalent	192		144	
	Master's, doctoral or equivalent	303		191	
	All tertiary levels of education	195		157	
Upper secondary and vocational education and training (VET)					
Upper secondary or post-secondary non-tertiary attainment rate					
2018					
Table A1.2	Share of 25-34 year-olds with upper secondary or post-secondary non-tertiary as their highest attainment	27%		41%	
Percentage of first-time upper secondary graduates with a vocational qualification					
2017					
Table B3.1	Vocational programmes	33%		40%	
Age at graduation from upper secondary education, by programme orientation					
2017					
Figure B3.1	General programmes	18		18	
	Vocational programmes	18		21	
Share of women among upper secondary graduates, by programme orientation					
2017					
Figure B3.2	General programmes	53%		55%	
	Vocational programmes	50%		46%	
Employment, unemployment and inactivity rates of 25-34 year-olds, with upper secondary or post-secondary non-tertiary education					
2018					
Table A3.3	Employment rate	71%		78%	
	Unemployment rate	4%		7%	
	Inactivity rate	26%		16%	
Total expenditure on upper secondary educational institutions, in USD² per full-time equivalent student, by programme orientation					
2016					
Table C1.1	General programmes	USD 3 935		USD 9 397	
	Vocational programmes	USD 4 617		USD 10 922	
Early childhood education and care (ECEC)					
Enrolment rate of 3-5 year-olds in education					
2017					
Table B2.2	ECEC and primary education	84%		87%	
Share of children enrolled in private institutions					
2017					
Table B2.3	Pre-primary level (ISCED 02)	14%		34%	
Ratio of children to teaching staff					
2017					
Table B2.3	Pre-primary level (ISCED 02)	25		16	
Expenditure on children aged 3-5 enrolled in education					
2016					
Table B2.4	Annual expenditure per child, in USD ² per child	USD 2 317		USD 8 141	

Source	Main topics in <i>Education at a Glance</i>	Mexico		OECD average	
Social outcomes and adult learning					
Participation in formal and/or non-formal education, by educational attainment		2016			
Table A7.1	Below upper secondary	**		n.a.	
	Upper secondary or post-secondary non-tertiary	**		n.a.	
	Tertiary	**		n.a.	
Participation in cultural or sporting activities in the last 12 months, by educational attainment		2015			
Table A6.1	Below upper secondary	**		n.a.	
	Upper secondary or post-secondary non-tertiary	**		n.a.	
	Tertiary	**		n.a.	
Financial resources invested in education					
Total expenditure on educational institutions, by level of education²		2016			
Table C1.1 and C2.1		USD/student	% GDP	USD/student	% GDP
	Primary	USD 2 961	1.8%	USD 8 470	1.5%
	Lower secondary	USD 2 561	1%	USD 9 884	0.9%
	Upper secondary	USD 4 187	0.9%	USD 10 368	1.1%
	Tertiary (including R&D)	USD 7 347	1.4%	USD 15 556	1.5%
Share of expenditure on educational institutions, by final source of funds		2016			
Table C3.1		Public	Private	Public	Private
	Primary, secondary and post-secondary non-tertiary	81%	19%	90%	10%
	Tertiary (including R&D)	69%	31%	66%	32%
Total public expenditure on primary to tertiary education		2016			
Table C4.1	As a percentage of total government expenditure	16.4%		10.8%	
Teachers, the learning environment and the organisation of schools					
Actual salaries of teachers and school heads in public institutions relative to earnings of full-time, full-year workers with tertiary education		2017			
Table D3.2a		Teachers	School heads	Teachers	School heads
	Pre-primary	**	**	0.78	**
	Primary	**	**	0.84	1.25
	Lower secondary (general programmes)	**	**	0.88	1.34
	Upper secondary (general programmes)	**	**	0.93	1.43
Annual statutory salaries of teachers in public institutions, based on most prevalent qualifications, at different points in teachers' careers²		2018			
Table D3.1a		Starting salary	Salary after 15 years of experience	Starting salary	Salary after 15 years of experience
	Pre-primary	USD 20 851	USD 33 076	USD 31 276	USD 42 078
	Primary	USD 20 851	USD 33 076	USD 33 058	USD 45 947
	Lower secondary (general programmes)	USD 26 560	USD 42 316	USD 34 230	USD 47 675
	Upper secondary (general programmes)	USD 50 776	USD 62 678	USD 35 859	USD 49 804
Organisation of teachers' working time in public institutions over the school year		2018			
Tables D4.1a and D4.1b		Net teaching time	Total statutory working time	Net teaching time	Total statutory working time
	Pre-primary	519 hours	**	1 024 hours	1 613 hours
	Primary	780 hours	**	783 hours	1 612 hours
	Lower secondary (general programmes)	1 021 hours	**	709 hours	1 634 hours
	Upper secondary (general programmes)	853 hours	**	667 hours	1 629 hours
Percentage of teachers who are 50 years old or over		2017			
Table D5.1	Primary to upper secondary	**		36%	
Share of female teachers, in public and private institutions		2017			
Table D5.2	Primary	68%		83%	
	Lower secondary	53%		69%	
Total number of compulsory instruction time, by level of education		2019			
Table D1.1	Primary	4 800 hours		4 568 hours	
	Lower secondary	3 500 hours		3 022 hours	
	Upper secondary	3 069 hours		**	
Average class size by level of education		2017			
Table D2.1	Primary	24		21	
	Lower secondary	28		23	

The reference year is the year cited or the latest year for which data are available.

1. For some countries, data on foreign students are provided instead of international students.

2. Values reported in equivalent US dollars (USD) have been converted using purchasing power parities (PPPs) for GDP

** Please refer to the source table for details on these data.

Cut-off date for the data: 19 July 2019. Any updates on data can be found on line at <http://dx.doi.org/10.1787/eag-data-en>.

