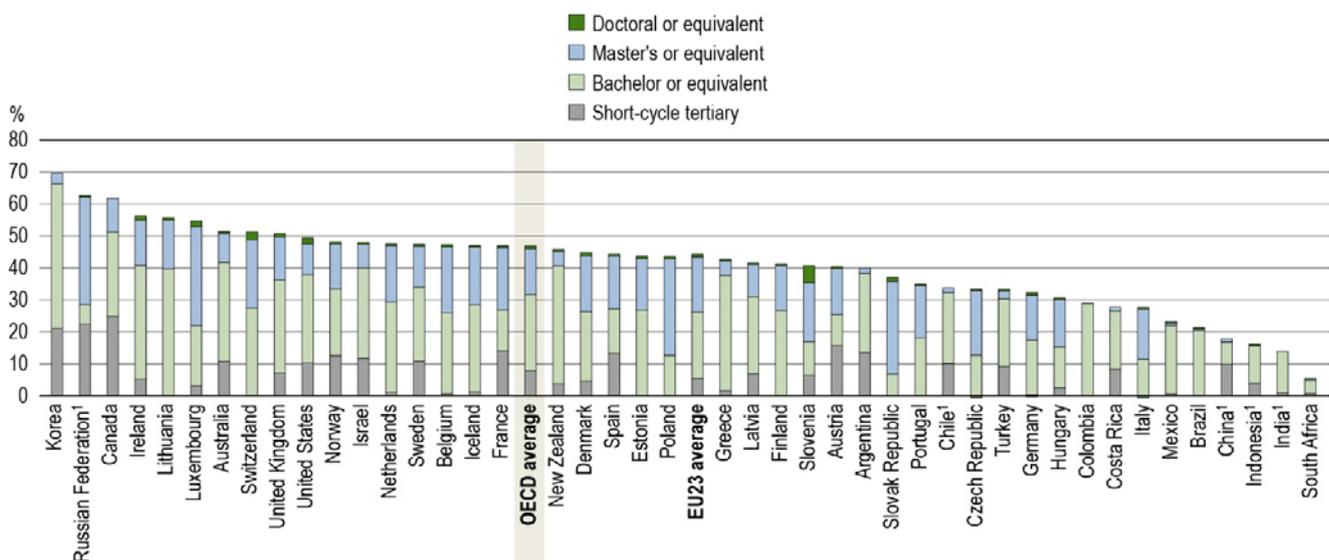


*Education at a Glance: OECD Indicators* (OECD, 2019<sup>[1]</sup>) is the authoritative source for information on the state of education around the world. It provides data on the structure, finances and performance of education systems in OECD and partner countries.

## Czech Republic

- While **most tertiary-educated adults in the Czech Republic hold a master's degree**, their employment advantage over those with upper secondary or post-secondary non-tertiary education is **among the lowest** across OECD countries.
- Total **expenditure on primary to tertiary educational institutions is relatively low** in the Czech Republic. Similarly to other OECD countries, the large majority of funding is publicly sourced.
- **Teachers' salaries in the Czech Republic are among the lowest across OECD countries** and consistently below those of tertiary-educated adults at all levels of education.
- Vocational upper secondary education is attractive in the Czech Republic: **Almost 7 out of 10 upper secondary graduates obtained a vocational qualification in 2017** compared to 4 out of 10 on average across OECD countries.

Figure 1. Distribution of 25-34 year-olds with tertiary education, by level of tertiary education (2018)



**Note:** Some categories might be included in other categories. Please refer to Education at a Glance Database, <http://stats.oecd.org> for details.

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

Countries are ranked in descending order of the percentage of tertiary-educated 25-64 year-olds who studied in the field of education.

**Source:** OECD (2019), Table A1.3. See Source section for more information and Annex 3 for notes (<https://doi.org/10.1787/f8d7880d-en>).

## Most tertiary-educated adults hold a master's degree, but their employment advantage is one of the smallest across the OECD

- Among 25-64 year-olds in the Czech Republic, the most common tertiary qualification is a master's degree, held by 17% of adults compared to 6% for a bachelor's degree. This is in contrast to most OECD countries where the majority of tertiary-educated adults hold a bachelor's degree. Overall, the share of 25-64 year-old tertiary-educated adults in the Czech Republic is 14 percentage points below the OECD average (24% compared to 39%). Although tertiary attainment is higher among 25-34 year-olds (33%), it remains below the OECD average (Figure 1).
- Young women's tertiary attainment levels have risen from 20% in 2008 to 41% in 2018 in the Czech Republic, while men's tertiary attainment increased less (from 16% to 26%). The greater tertiary attainment among women compared to men is in line with trends across OECD countries.
- Although women dominate in certain fields of study at master's level, their shares are lower at doctoral level in the Czech Republic: the share of women studying the broad field of natural science, mathematics and statistics at doctoral levels is 47%, 15 percentage points below their share at master's level. Similarly, the share of women in engineering, manufacturing and construction declines by 11 percentage points between master's and doctoral level and by 20 percentage points in business, administration and law. These are among the largest differences in the share of women between these two levels across OECD countries.
- The fields most commonly studied among 25-64 year-old tertiary-educated adults in the Czech Republic are arts and humanities, social sciences, journalism, and information (22% of tertiary-educated adults compared to 19% across OECD countries), closely followed by engineering, manufacturing and construction (20% compared to 16% across OECD countries). Across OECD countries, the most common field of study among 25-64 year-old tertiary-educated adults is business, administration and law (24% compared to 12% in the Czech Republic).
- The employment advantage for tertiary-educated adults in the Czech Republic is one of the smallest across OECD countries: their employment rate is only 4 percentage points higher than for adults with upper secondary or post-secondary non-tertiary education compared to 9 percentage points on average across OECD countries. Young adults are particularly vulnerable. The employment rates of 25-34 year-olds with tertiary education is 2 percentage points lower than for young adults with upper secondary education and 18 percentage points lower than the employment rate of tertiary-educated 45-54 year-olds. This is one of the highest differences across OECD countries, and contrasts sharply with the average difference of 5 percentage points.
- The Czech Republic has one of the highest percentages of foreign students across OECD countries – 13% compared to an average share of international and foreign tertiary students of 6% across OECD countries. However, this differs by tertiary level of education. Although the share of foreign students' is highest for doctoral or equivalent studies (17%), it is lower than the OECD average of 22%. In contrast, the share of foreign students at bachelor level, 11%, is significantly higher than the OECD average of 4%. In 2017, over half the of international and foreign students in the Czech Republic came from neighbouring countries, with the greatest share coming from the Slovak Republic (51%).

## Spending on primary to tertiary education institutions in the Czech Republic remains below the OECD average

- Public spending is the main source of funding for primary to tertiary education institutions in the Czech Republic, in line with the trends observed across the majority of OECD countries: 91% of total spending at primary, secondary and post-secondary non-tertiary level and 73% at tertiary level is publicly sourced.
- Expenditure on educational institutions in the Czech Republic is lower than on average across the OECD. Total (public and private) expenditure on primary to tertiary education as a percentage of gross domestic product (GDP) was 3.5% in 2016, well below the OECD average of 5.0%.
- Annual total expenditure per student on educational institutions in the Czech Republic was below the OECD average in 2016 for all levels of education. The largest gap was at tertiary level, where spending per student was USD 7 612<sup>1</sup> compared to USD 10 502 on average for OECD countries.
- Between 2010 and 2016, on average across OECD countries, public expenditure on educational institutions as a share of GDP fell faster at primary, secondary, and post-secondary non-tertiary levels of education than at tertiary level. However, the reverse happened in the Czech Republic: public expenditure on educational institutions as a share of GDP fell by 22.8% at tertiary level and 6.4% at primary, secondary and post-secondary non-tertiary level. The sharp drop at tertiary level is the combined effect of a 14.0% drop in public expenditure and an 11.3% increase of GDP over this period.
- Total spending across all levels of education has fluctuated significantly in the Czech Republic between 2005 and 2016. While total spending on primary, secondary and post-secondary non-tertiary educational institutions increased steadily during this period, total expenditure on tertiary institutions increased between 2005 and 2011 but then started falling. Expenditure between 2011 and 2016 decreased more quickly than student numbers resulting in a decrease in spending per student at tertiary level during this period.

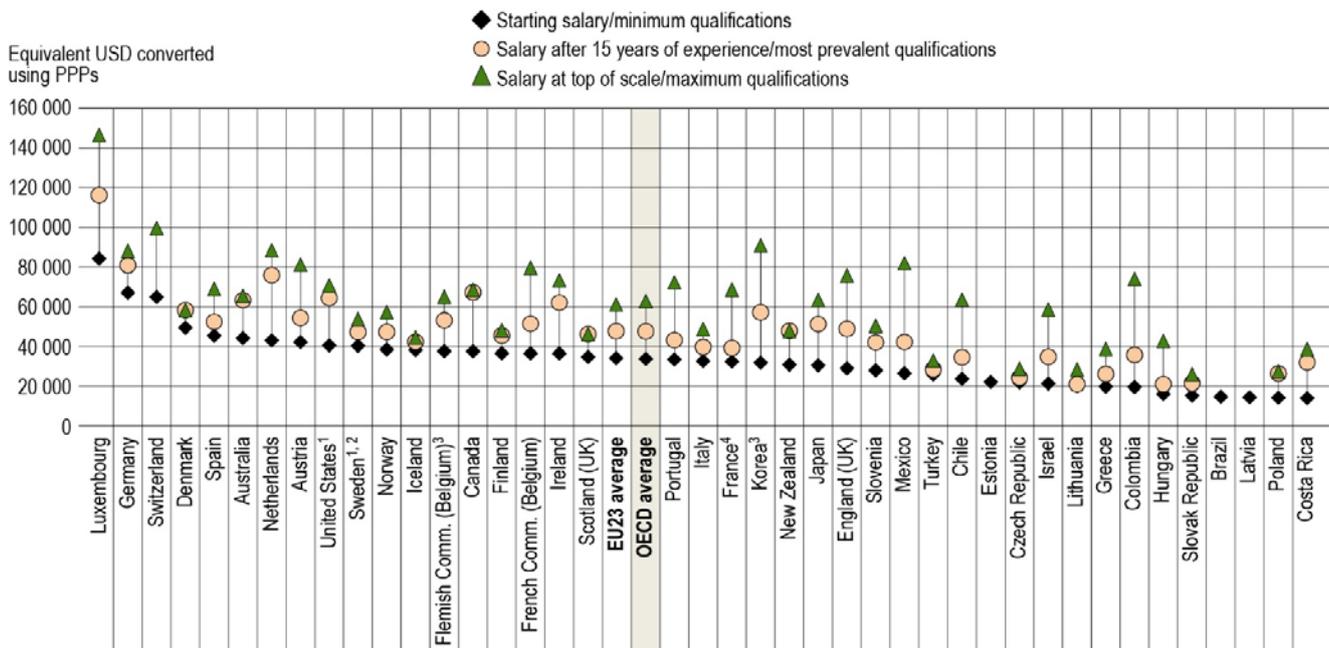
## Teachers face limited salary progression over the course of their careers

- Low levels of education expenditure are largely the result of below average salaries in the Czech Republic. The statutory annual salary for lower secondary teachers with the most prevalent qualifications and 15 years experience is USD 24 359, compared to USD 47 675 on average across OECD countries. In addition, teachers' salary progression in the Czech Republic is both limited and slow. The statutory salary for lower secondary teachers at the top of the scale is only 32% higher than starting salaries, about half the OECD average. In addition, it takes 32 years for a teacher in lower secondary education to progress from the statutory starting salary (USD 21 854) to the top of the scale (USD 28 851), compared to 25 years on average across OECD countries (Figure 2).
- Across the majority of OECD countries, the actual salaries of teachers remain below those of tertiary-educated workers. In the Czech Republic, pre-primary teachers earned 54% of the salary of tertiary-educated workers in 2017, compared to 78% on average across OECD countries. At primary to secondary levels, Czech teachers earned 64% to 66% as much as other tertiary-educated workers, well below the OECD average of 84% to 93%.
- In contrast, school heads earn similar salaries to other tertiary-educated workers at all levels of education except pre-primary, where they earn only 76% as much.

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

**Figure 2. Lower secondary teachers' statutory salaries at different points in teachers' careers (2018)**

Annual statutory salaries of teachers in public institutions, in equivalent USD converted using PPPs



1. Actual base salaries.

2. Salaries at top of scale and minimum qualifications, instead of maximum qualifications.

3. Salaries at top of scale and most prevalent qualifications, instead of maximum qualifications.

4. Includes the average of fixed bonuses for overtime hours.

Countries and economies are ranked in descending order of starting salaries for lower secondary teachers with minimum qualifications.

**Source:** OECD (2019), Table D3.1a, Tables D3.1c and D3.6, available on line. See *Source* section for more information and Annex 3 for notes (<https://doi.org/10.1787/f8d7880d-en>).

## The majority of upper secondary students follow a vocational upper secondary education

- A larger than average share of young adults have upper secondary or post-secondary non-tertiary education as their highest attainment in the Czech Republic. In 2018, 60% of 25-34 year-olds had this as their highest level of attainment, compared to only 41% on average across OECD countries.
- A well-established upper secondary vocational educational system explains the higher share of young adults attaining this level. Almost 7 out of 10 upper secondary graduates obtained a vocational qualification in the Czech Republic in 2017, compared to 4 in 10 on average across OECD countries. Women in OECD countries tend to make up at least half of upper secondary graduates from general programmes, yet are under-represented in vocational programmes in more than half of the countries with available data. The pattern is similar in the Czech Republic: 45% of first-time graduates from upper secondary vocational programmes are women, slightly below the OECD average of 46%. In contrast, 61% of first-time graduates from general upper secondary were women in the Czech Republic, one of the highest shares across OECD countries.
- Strong funding has sustained vocational education in the Czech Republic. Whereas most OECD countries spend more on general upper secondary education institutions than on vocational ones, the opposite applies in the Czech Republic: it allocates 0.7% of GDP to upper secondary vocational programmes compared to 0.2% to general ones. This difference, one of the largest across OECD

countries between the two programmes, is probably due to the larger number of students enrolling in vocational programmes. However, spending per student on upper secondary vocational programmes is also higher than for general ones in the Czech Republic (USD 8 629 compared to USD 7 236). Although this pattern is similar to other OECD countries, spending per student in the country is consistently lower for both programme orientations.

## References

OECD (2019), *Education at a Glance 2019: OECD indicators*, OECD Publishing, Paris, [1]  
<https://doi.org/10.1787/f8d7880d-en>.

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](http://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:  **Education GPS**

<http://gpseducation.oecd.org/CountryProfile?primaryCountry=CZE&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.

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### 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 the Czech Republic in Education at a Glance 2019

Source	Main topics in <i>Education at a Glance</i>	Czech Republic		OECD average		EU23 average	
<b>Tertiary education</b>							
<b>Educational attainment of 25-64 year-olds</b>							
<b>2018</b>							
Table A1.1	Short-cycle tertiary	0%		7%		5%	
	Bachelor's or equivalent	6%		17%		14%	
	Master's or equivalent	17%		13%		15%	
	Doctoral or equivalent	1%		1%		1%	
<b>Tertiary attainment of 25-34 year-olds, by gender</b>							
<b>2018</b>							
Table A1.2	Men	16%	26%	31%	38%	28%	36%
	Women	20%	41%	40%	51%	38%	50%
	Total	18%	33%	35%	44%	33%	43%
<b>Distribution of first-time tertiary entrants by education level</b>							
<b>2017</b>							
Table B4.1	Short-cycle tertiary	1%		17%		12%	
	Bachelor's or equivalent	89%		76%		80%	
	Master's or equivalent	10%		7%		8%	
<b>Share of international or foreign students, by education level<sup>1</sup></b>							
<b>2017</b>							
Table B6.1	Bachelor's or equivalent	11%		4%		7%	
	Master's or equivalent	14%		13%		14%	
	Doctoral or equivalent	17%		22%		22%	
	All tertiary levels of education	13%		6%		9%	
<b>Employment rate of 25-64 year-olds, by educational attainment</b>							
<b>2018</b>							
Table A3.1	Short-cycle tertiary	89%		82%		82%	
	Bachelor's or equivalent	83%		84%		84%	
	Master's or equivalent	88%		88%		88%	
	Doctoral or equivalent	93%		92%		93%	
	All tertiary levels of education	87%		85%		86%	
<b>Employment rate of tertiary-educated 25-64 year-olds, by field of study</b>							
<b>2018</b>							
Table A3.4	Education	83%		84%		85%	
	Business and administration and law	85%		86%		87%	
	Engineering, manufacturing and construction	91%		89%		89%	
	Health and welfare	84%		87%		88%	
<b>Relative earnings of full-time full-year 25-64 year-old workers, by educational attainment (upper secondary education = 100)</b>							
<b>2017</b>							
Table A4.1	Short-cycle tertiary	112		120		121	
	Bachelor's or equivalent	142		144		138	
	Master's, doctoral or equivalent	180		191		174	
	All tertiary levels of education	169		157		152	
<b>Upper secondary and vocational education and training (VET)</b>							
<b>Upper secondary or post-secondary non-tertiary attainment rate</b>							
<b>2018</b>							
Table A1.2	Share of 25-34 year-olds with upper secondary or post-secondary non-tertiary as their highest attainment	60%		41%		44%	
<b>Percentage of first-time upper secondary graduates with a vocational qualification</b>							
<b>2017</b>							
Table B3.1	Vocational programmes	69%		40%		46%	
<b>Age at graduation from upper secondary education, by programme orientation</b>							
<b>2017</b>							
Figure B3.1	General programmes	20		18		19	
	Vocational programmes	20		21		21	
<b>Share of women among upper secondary graduates, by programme orientation</b>							
<b>2017</b>							
Figure B3.2	General programmes	61%		55%		56%	
	Vocational programmes	45%		46%		46%	
<b>Employment, unemployment and inactivity rates of 25-34 year-olds, with upper secondary or post-secondary non-tertiary education</b>							
<b>2018</b>							
Table A3.3	Employment rate	82%		78%		79%	
	Unemployment rate	3%		7%		8%	
	Inactivity rate	16%		16%		14%	
<b>Total expenditure on upper secondary educational institutions, in USD<sup>2</sup> per full-time equivalent student, by programme orientation</b>							
<b>2016</b>							
Table C1.1	General programmes	USD 7 236		USD 9 397		USD 9 671	
	Vocational programmes	USD 8 629		USD 10 922		USD 11 320	
<b>Early childhood education and care (ECEC)</b>							
<b>Enrolment rate of 3-5 year-olds in education</b>							
<b>2017</b>							
Table B2.2	ECEC and primary education	88%		87%		90%	
<b>Share of children enrolled in private institutions</b>							
<b>2017</b>							
Table B2.3	Pre-primary level (ISCED 02)	**		34%		27%	
<b>Ratio of children to teaching staff</b>							
<b>2017</b>							
Table B2.3	Pre-primary level (ISCED 02)	13		16		15	
<b>Expenditure on children aged 3-5 enrolled in education</b>							
<b>2016</b>							
Table B2.4	Annual expenditure per child, in USD <sup>2</sup> per child	USD 5 125		USD 8 141		USD 8 926	

Source	Main topics in <i>Education at a Glance</i>	Czech Republic		OECD average		EU23 average	
<b>Social outcomes and adult learning</b>							
<b>Participation in formal and/or non-formal education, by educational attainment<sup>3</sup></b>		<b>2016</b>					
Table A7.1	Below upper secondary	16%		n.a.		26%	
	Upper secondary or post-secondary non-tertiary	43%		n.a.		44%	
	Tertiary	67%		n.a.		66%	
<b>Participation in cultural or sporting activities in the last 12 months, by educational attainment<sup>4</sup></b>		<b>2015</b>					
Table A6.1	Below upper secondary	47%		n.a.		56%	
	Upper secondary or post-secondary non-tertiary	79%		n.a.		77%	
	Tertiary	94%		n.a.		92%	
<b>Financial resources invested in education</b>							
<b>Total expenditure on educational institutions, by level of education<sup>2</sup></b>		<b>2016</b>					
Table C1.1 and C2.1		<b>USD/student</b>	<b>% GDP</b>	<b>USD/student</b>	<b>% GDP</b>	<b>USD/student</b>	<b>% GDP</b>
	Primary	USD 5 104	0.8%	USD 8 470	1.5%	USD 8 548	1.3%
	Lower secondary	USD 8 598	0.9%	USD 9 884	0.9%	USD 10 302	0.9%
	Upper secondary	USD 8 257	0.9%	USD 10 368	1.1%	USD 10 308	1.0%
	Tertiary (including R&D)	USD 10 009	0.9%	USD 15 556	1.5%	USD 15 863	1.2%
<b>Share of expenditure on educational institutions, by final source of funds</b>		<b>2016</b>					
Table C3.1		<b>Public</b>	<b>Private</b>	<b>Public</b>	<b>Private</b>	<b>Public</b>	<b>Private</b>
	Primary, secondary and post-secondary non-tertiary	91%	9%	90%	10%	92%	8%
	Tertiary (including R&D)	73%	24%	66%	32%	73%	24%
<b>Total public expenditure on primary to tertiary education</b>		<b>2016</b>					
Table C4.1	As a percentage of total government expenditure	7.8%		10.8%		9.6%	
<b>Teachers, the learning environment and the organisation of schools</b>							
<b>Actual salaries of teachers and school heads in public institutions relative to earnings of full-time, full-year workers with tertiary education</b>		<b>2017</b>					
Table D3.2a		<b>Teachers</b>	<b>School heads</b>	<b>Teachers</b>	<b>School heads</b>	<b>Teachers</b>	<b>School heads</b>
	Pre-primary	0.54	0.76	0.78	**	0.78	1.16
	Primary	0.64	1.01	0.84	1.25	0.85	1.24
	Lower secondary (general programmes)	0.64	1.01	0.88	1.34	0.89	1.34
	Upper secondary (general programmes)	0.66	1.08	0.93	1.43	0.95	1.43
<b>Annual statutory salaries of teachers in public institutions, based on most prevalent qualifications, at different points in teachers' careers<sup>2</sup></b>		<b>2018</b>					
Table D3.1a		<b>Starting salary</b>	<b>Salary after 15 years of experience</b>	<b>Starting salary</b>	<b>Salary after 15 years of experience</b>	<b>Starting salary</b>	<b>Salary after 15 years of experience</b>
	Pre-primary	USD 20 472	USD 21 768	USD 31 276	USD 42 078	USD 30 615	USD 41 354
	Primary	USD 21 854	USD 24 273	USD 33 058	USD 45 947	USD 32 987	USD 45 748
	Lower secondary (general programmes)	USD 21 854	USD 24 359	USD 34 230	USD 47 675	USD 34 261	USD 47 772
	Upper secondary (general programmes)	USD 21 854	USD 24 359	USD 35 859	USD 49 804	USD 35 104	USD 49 875
<b>Organisation of teachers' working time in public institutions over the school year</b>		<b>2018</b>					
Tables D4.1a and D4.1b		<b>Net teaching time</b>	<b>Total statutory working time</b>	<b>Net teaching time</b>	<b>Total statutory working time</b>	<b>Net teaching time</b>	<b>Total statutory working time</b>
	Pre-primary	1 333 hours	1 800 hours	1 024 hours	1 613 hours	1 062 hours	1 550 hours
	Primary	617 hours	1 560 hours	783 hours	1 612 hours	754 hours	1 539 hours
	Lower secondary (general programmes)	617 hours	1 560 hours	709 hours	1 634 hours	673 hours	1 572 hours
	Upper secondary (general programmes)	589 hours	1 560 hours	667 hours	1 629 hours	643 hours	1 558 hours
<b>Percentage of teachers who are 50 years old or over</b>		<b>2017</b>					
Table D5.1	Primary to upper secondary	44%		36%		39%	
<b>Share of female teachers, in public and private institutions</b>		<b>2017</b>					
Table D5.2	Primary	94%		83%		87%	
	Lower secondary	78%		69%		72%	
<b>Total number of compulsory instruction time, by level of education</b>		<b>2019</b>					
Table D1.1	Primary	3 434 hours		4 568 hours		4 258 hours	
	Lower secondary	3 550 hours		3 022 hours		3 002 hours	
	Upper secondary	**		**		**	
<b>Average class size by level of education</b>		<b>2017</b>					
Table D2.1	Primary	21		21		20	
	Lower secondary	22		23		21	

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

3. EU23 average refers to the average of OECD countries that participated in the Adult Education Survey (AES).

4. EU23 average refers to the average of OECD countries that participated in the European Union Statistics on Income and Living Conditions 2015.

\*\* 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>.