

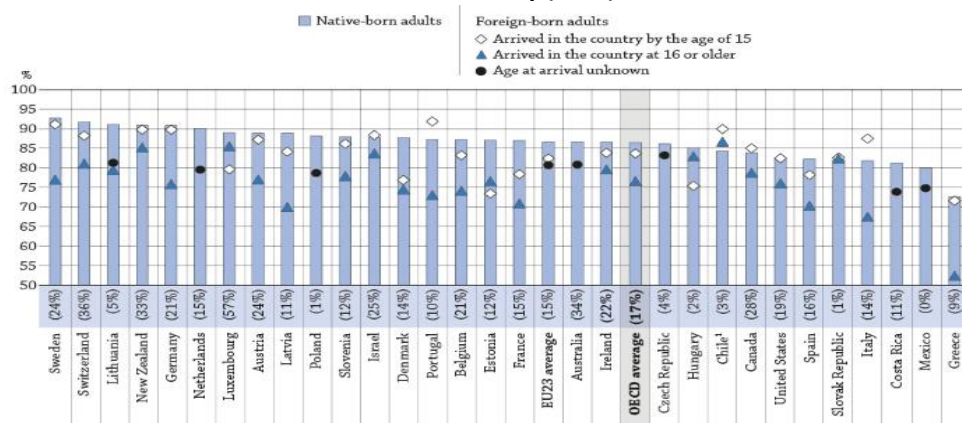
EDUCATION AT A GLANCE 2018

Education at a Glance: OECD Indicators 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.

Sweden

- **Enrolment in early childhood and care (ECEC) is nearly universal in Sweden for children between the ages of 2 and 5**, with enrolment rates of 90% or more for each age.
- **Vocational education and training** (e.g. upper secondary school and adult education) **receive substantial investment of USD 16 873 per student in Sweden**. Students whose parents did not attain tertiary education are more likely to enter vocational education and training than general education. In upper secondary school, **a small proportion of the students at vocational programmes are enrolled in apprenticeship education** (e.g. in combined school- and work-based programmes).
- Tertiary-educated adults in Sweden enjoy higher employment rates than their OECD peers: 89% of 25-64 year-olds with a tertiary degree were employed in 2016, compared to 85% in the OECD on average.
- **Tertiary-educated adults enjoy high levels of employment in Sweden**. Even though a 35-44 year-old tertiary-educated woman still earns less than a man, Sweden is one of the best performers among OECD countries in reducing the gender pay gap.
- **Immigrants have more difficulty integrating into the labour market, due for example to lack of recognition of credentials and linguistic barriers**. Their employment rates and earnings are therefore much lower than native-born adults with the same qualifications.
- **Teachers have longer statutory hours** and are required to stay longer at school than their OECD peers. **They also have little salary progression in primary and secondary education**. While starting salaries in Sweden are relatively high, they fall behind their similarly educated peers over time.

Figure 1. Employment rates of native- and foreign-born 25-64 year-olds with tertiary education, by age at arrival in the country (2017)




Note: The percentage in parentheses represents the share of foreign-born adults among 25-64 year-olds.

1. Year of reference differs from 2017. Refer to the source table for details.

Countries are ranked in descending order of the employment rate of tertiary-educated native-born adults.

Source: OECD/ILO (2018), Table A3.4. See Source section for more information and Annex 3 for notes (<http://dx.doi.org/10.1787/eag-2018-36-en>).

StatLink  <https://doi.org/10.1787/888933802114>

Access to early childhood education and care among young children is more equitable in Sweden than most OECD countries

- In Sweden, enrolment of 3-5 year-olds in early childhood education and care (ECEC) is nearly universal. Enrolment rates in ECEC (ISCED 0) are 95% for 3-year-olds, 94% for 4-year-olds and 95% for 5-year-olds, all above or the same as the corresponding OECD averages of 76%, 88% and 95%.
- Among OECD countries, the average enrolment rate of children under 3 is 34%, much lower than the rates for 3-5 year-olds. The same pattern applies in Sweden, where 46% of all children under 3 (e.g. 0-to-2-year-olds) are enrolled in ECEC. However, while only 25% of children under 2 are enrolled in ECEC, by the age of 2 the rate has reached 90%, one of the highest proportions in the OECD after Denmark (90%), Iceland (95%) and Norway (92%).
- Across the OECD countries, children under 3 are more likely to participate in ECEC when they come from relatively advantaged socio-economic backgrounds. However, a child's background makes less of a difference in Sweden where 52% of children from households in the lowest income tertile are enrolled in ECEC, compared with 59% of those from the wealthiest tertile (OECD averages: 28% and 44% respectively).
- ECEC has been the focus of policy attention in Sweden over recent decades. Expenditure on ECEC services amounts to 1.9% of Sweden's gross domestic product (GDP), the highest share among OECD countries. Annual expenditure per child is around USD 15 000,¹ about USD 6 000 more than the OECD average and the third highest amount in the OECD, below only Norway and Luxembourg.
- ECEC is mainly publicly funded in Sweden: around 95% of expenditure on ECEC comes from public sources, among the highest shares across OECD countries with available data.
- In Sweden, there are 13 children per teaching staff member in ECEC services (ISCED 0), the same as the OECD average. However, when teachers' aides are taken into account, the ratio of children to contact staff falls to 5, one of the lowest ratios across OECD countries (OECD average: 10).

Upper secondary vocational education and training attract a low share of students, except among those without tertiary-educated parents

- In 2016, only 37% of all students in upper secondary education (e.g. upper secondary school and adult education) were enrolled in vocational education and training in Sweden, one of the lowest shares among OECD countries. In upper secondary school, a small proportion of the students at vocational programmes are enrolled in apprenticeship education (e.g. in combined school- and work-based programmes).
- Despite the low share of students enrolled in vocational education and training, expenditure per student on upper secondary vocational education and training amounts to around USD 16 873, the second highest amount after Luxembourg.
- When the graduates from general education are taken into account, the graduation rate for upper secondary education is 77% in Sweden, below the OECD average of 81%.
- Students whose parents did not complete tertiary education are more likely to enter vocational programmes than general ones. In Sweden, 64% of students 2016 whose parents obtained upper secondary or post-secondary non-tertiary education as their highest educational attainment were enrolled in vocational programmes, the highest proportion among the eight OECD countries with available data.
- In the eight OECD countries with available data, the completion rate of any upper secondary programme is lower for students with an immigrant background, either foreign-born students of two parents who are also foreign-born or native-born students of two foreign-born parents. In Sweden, this pattern is particularly strong: in 2016 only 56% of foreign-born students had completed upper secondary education and the proportion increased by only 6 percentage points for native-born students with foreign born parents, compared to 73% for non-immigrant students.
- In Sweden, the employment rate 2017 among adults with upper secondary or post-secondary non-tertiary education is 86%, the highest rate among OECD countries. However, gender gaps in earnings remain an issue. Thus, 25-64 year-old women who attained upper secondary or post-secondary non-tertiary education as their

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

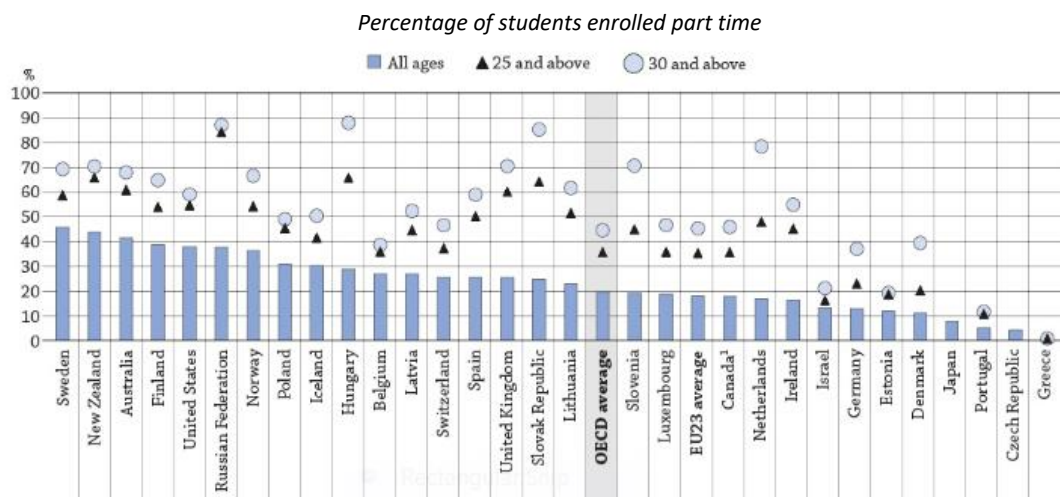
highest qualification earn about 15% less than their male peers in Sweden, compared with the OECD average of 22% less.

- Foreign-born adults with upper secondary or post-secondary non-tertiary qualifications are less likely to be employed than their native-born counterparts. Whereas 88% of native-born adults with upper secondary or post-secondary non-tertiary education 2017 were employed in Sweden, the proportion falls to 75% for similarly qualified foreign-born adults. There is also an earnings disadvantage: foreign-born adults with upper-secondary or post-secondary non-tertiary education earned about 19% less than their native-born counterparts (the OECD average is 17% less).

Sweden's tertiary graduation rate is low due to later entry rates

- Sweden has a highly educated population, with 42% of 25-64 year-olds having attained tertiary education, against the OECD average of 38%. Among the youngest generation (25-34 year-olds), nearly half (47%) have attained tertiary education, slightly above the OECD average of 44%.
- Students in Sweden both enter into and graduate from tertiary education later than their peers in other OECD countries. On average, they begin their tertiary studies at 24 years old and graduate at the age of 28.
- In Sweden, a large proportion of students are enrolled part time. Nearly half (46%) of all tertiary students study part time, the highest rate among OECD countries (Figure 2).
- First degree tertiary programmes are selective in Sweden: about 60% of applicants are rejected, the highest proportion across OECD countries with available data.
- Tertiary graduation rate in Sweden is below the OECD average. If current patterns continue, only 39% of adults are expected to graduate from tertiary education, whereas nearly half (49%) of adults on average across OECD countries will obtain a tertiary qualification.
- Spending on tertiary education amounts to about 1.6% of GDP in Sweden, just above the OECD average of 1.5%. Expenditure on tertiary education totals around USD 24 000 per student, the fourth highest amount in the OECD, below only Luxembourg, the United States and the United Kingdom. However, more than half of the total is dedicated to research and development (R&D); if R&D is excluded, total expenditure per student in tertiary education falls to around USD 11 000, about USD 1 000 more than the OECD average.

Figure 2. Part-time enrolment in tertiary education, by age group (2016)



1. Excludes enrolment in short-cycle tertiary programmes in private institutions.

Countries are ranked in descending order of their share of part-time enrolment in tertiary education for all ages.

Source: OECD (2018), Education at a Glance Database, <http://stats.oecd.org/>. See Source section at the end of this indicator for more information and Annex 3 for notes (<http://dx.doi.org/10.1787/eag-2018-36-en>).

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Sweden has one of the smallest gender pay gaps in the OECD, but women and foreign-born adults are still at a disadvantage in the labour market

- Tertiary-educated adults in Sweden enjoy higher employment rates than their OECD peers: 89% of 25-64 year-olds with a tertiary degree were employed in 2016, compared to 85% in the OECD on average.
- Foreign-born adults with tertiary education have worse employment prospects than their native-born peers in most countries with data. In Sweden, as in most countries, the employment rates for foreign-born tertiary-educated adults are higher for those who arrived by the age of 15 (91%) than for those who arrived in the country at an older age (77%) (Figure 1). Tertiary-educated foreign-born adults in Sweden also earn 9% less than similarly qualified native-born adults.
- These worse employment prospects and lower earnings can be partly explained by qualification mismatches in the labour market. Barriers such as credential recognition or language mean in many countries that foreign-born adults tend to accept jobs requiring lower qualifications (OECD Survey of Adult Skills). In Sweden, 25% of foreign-born adults in Sweden with a university level qualification² work in a job requiring only an upper secondary degree or lower compared to 7% among native-born adults.
- Although tertiary-educated adults enjoy good labour market outcomes in Sweden, their earnings advantage is the smallest among OECD countries. Those who have completed tertiary education earn only 15% more than someone who attained upper secondary education, compared to 55% on average across OECD countries. As tertiary education is free of tuition in Sweden, the lower premium offered to graduates provides Swedish employers with highly qualified staff at a competitive cost.
- Although women still earn less than men, Sweden has one of the smallest gender gaps in earnings in among OECD countries. A 35-44 year-old tertiary-educated woman earns on average 82% of what her male peers earn, compared with an OECD average of 77%.

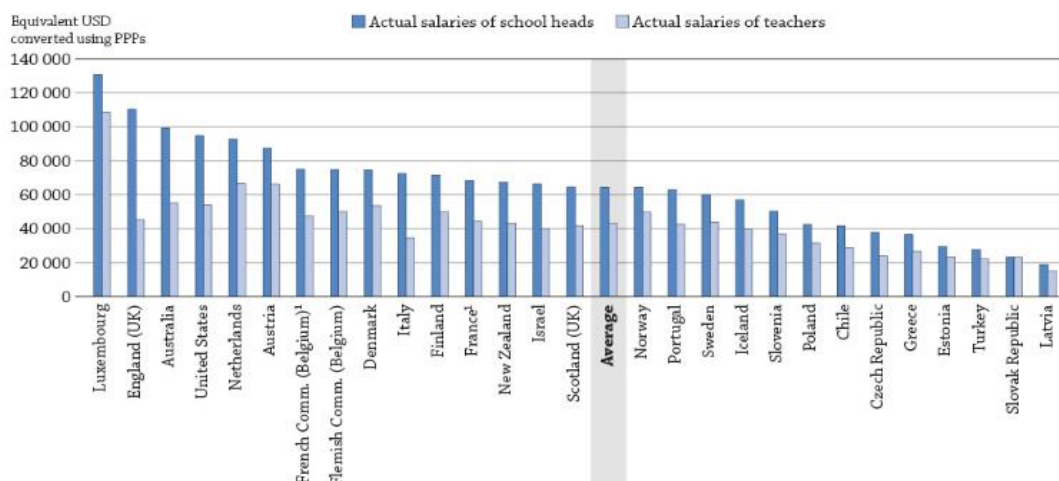
Teachers' salaries start high but become less competitive as their careers progress

- Sweden has a decentralised education system giving schools a high level of autonomy over teachers' working conditions. Teachers' total hours per year are decided through collective agreements. In addition, the number of working hours per week and the use of teachers' time (teaching or non-teaching activities) is regulated by the collective agreement and individual agreement between the school organiser (the employer) and the employee.
- In Sweden, teachers' total working time is high, 1 767 hours per year in primary to upper secondary education, nearly 100 hours more than the OECD average for all education levels. Teachers are also required to stay longer at school. For example, a teacher in secondary education is required to spend 1 360 hours at school, nearly 200 hours more than the OECD average.
- School heads at lower secondary level play an active role in decision making and leadership activities in Sweden. Sweden is one of a small group of countries where school heads' minimum salaries are higher than the maximum salaries of teachers in lower secondary education (Figure 3).
- Swedish teachers have a flat salary structure in primary and secondary education. While starting salaries are relatively high, they fall behind their similarly qualified counterparts in other OECD countries over time. For example, at lower secondary level, starting salaries for teachers with most prevalent qualifications are 17% higher than the OECD average of USD 33 126), while maximum salaries are 11% lower than the OECD average of USD 55 846.
- Teachers' actual salaries are low relative to the earnings of other tertiary-educated workers. In pre-primary, primary and secondary education, teachers in Sweden earn 24%, 14% and 10% less respectively than tertiary-educated adults working in other fields. However, among younger adults (25-34 year-olds) teachers in lower secondary and upper secondary education earn 3% and 5% more respectively than their tertiary-educated peers.

² ISCED 5A or 6 in ISCED 97

Figure 3. Minimum and maximum salaries for lower secondary teachers and school heads (2017)

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



1. Year of reference differs from 2016. See Table D3.4 for more information.

Countries and economies are ranked in descending order of actual salaries of school heads.

Source: OECD (2018), Table D3.4. See Source section for more information and Annex 3 for notes (<http://dx.doi.org/10.1787/eag-2018-36-en>).

StatLink <https://doi.org/10.1787/888933805534>

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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.

Lithuania was not an OECD member at the time of preparation of Education at a Glance and is therefore not included in the zone aggregates mentioned in the publication. However this country note, produced at a later stage, includes updated figures for the OECD and EU averages including Lithuania and therefore may differ from the figures mentioned in Education at a Glance.

References

OECD (2018), *Education at a Glance 2018: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2018-en>.

OECD (2016), *Working Together: Skills and Labour Market Integration of Immigrants and their Children in Sweden*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264257382-en>

For more information on Education at a Glance 2018 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=SWE&treshold=10&topic=EO>.

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Key Facts for Sweden in Education at a Glance 2018

Source	Main topics in <i>Education at a Glance</i>	Sweden		OECD average		EU23 average	
	Equity						
	Educational attainment of 25-34 year-olds by gender	2017					
Table A1.2		% Men	% Women	% Men	% Women	% Men	% Women
	Below upper secondary	19%	15%	17%	14%	16%	12%
	Upper secondary or post-secondary non-tertiary	41%	30%	46%	37%	48%	39%
	Tertiary	40%	55%	38%	50%	36%	49%
	Percentage of 15-29 year-olds NEETs by country of birth	2017					
Table A2.3	Native-born	7%		13%		12%	
	Foreign-born	13%		18%		19%	
	Employment rates of native- and foreign-born 25-64 year-olds, by educational attainment	2017					
Table A3.4		Native-born	Foreign-born	Native-born	Foreign-born	Native-born	Foreign-born
	Below upper secondary	74%	57%	56%	60%	55%	57%
	Upper secondary or post-secondary non-tertiary	88%	75%	76%	72%	76%	71%
	Tertiary	93%	80%	87%	79%	87%	78%
	Earnings of 25-64 women relative to men, by educational attainment	2016					
Table A4.3	Below upper secondary	90%		78%		79%	
	Upper secondary or post-secondary non-tertiary	85%		78%		79%	
	Tertiary	82%		74%		75%	
	Share of girls among repeaters in secondary general programmes	2016					
Table B1.3	Lower secondary	**		39%		38%	
	Upper secondary	**		42%		42%	
	Percentage of women and men entering doctoral programmes by field of study	2016					
Table B4.1		% Men	% Women	% Men	% Women	% Men	% Women
	Natural sciences, mathematics and statistics	21%	14%	22%	20%	20%	19%
	Engineering, manufacturing and construction	29%	14%	22%	10%	23%	11%
	Health and welfare	25%	45%	12%	19%	11%	18%
	First-time tertiary graduates	2016					
Table B5.1	Share of female first-time tertiary graduates	63%		57%		58%	
	Participation of 25-64 year-olds in formal and/or non-formal education	2012 ¹					
Table A7.1	Participation of native-born adults and foreign-born adults who arrived in the country by the age of 25	67%		49%		n.a.	
	Participation of foreign-born adults who arrived in the country at 26 or older	55%		48%		n.a.	
	Early childhood education and care (ECEC)						
	Enrolment rates in ECEC at age 3	2016					
Table B2.1a	ECEC services (ISCED 0) and other registered ECEC services	95%		76%		82%	
	Share of children enrolled in pre-primary education (ISCED 02), by type of institution	2016					
Table B2.2	Public institutions	83%		68%		75%	
	Private institutions	17%		32%		25%	
	Expenditure on pre-primary level (ISCED 02)	2015					
Table B2.3a	Annual expenditure per child in USD (converted to PPPs)	USD 14 212		USD 8 426		USD 8 163	
	Vocational education and training (VET)						
	Percentage of upper secondary students enrolled in vocational education, by programme orientation	2016					
Table B1.3	All vocational programmes	37%		44%		47%	
	Combined school- and work-based programmes	2%		11%		11%	
	Share of women among upper secondary graduates, by programme orientation	2016					
Figure B3.1	General programmes	54%		54%		55%	
	Vocational programmes	41%		46%		45%	
	Total expenditure on upper secondary educational institutions per full-time equivalent student, by programme orientation	2015					
Table C1.1	General programmes	USD 7 749		USD 8 981		USD 9 235	
	Vocational programmes	USD 16 873		USD 10 831		USD 11 115	
	Tertiary education						
	Share of international or foreign students, by education level ²	2016					
Table B6.1	Bachelor's or equivalent	2%		4%		6%	
	Master's or equivalent	11%		12%		13%	
	Doctoral or equivalent	35%		26%		23%	
	All tertiary levels of education	7%		6%		9%	
	Share of first-time tertiary graduates by education level	2016					
Table B5.1	Short-cycle tertiary	2%		14%		10%	
	Bachelor's or equivalent	64%		75%		76%	
	Master's or equivalent	34%		10%		14%	
	Employment rate of 25-64 year-olds, by educational attainment	2017					
Table A3.1	Short-cycle tertiary	85%		81%		82%	
	Bachelor's or equivalent	90%		84%		83%	
	Master's or equivalent	92%		88%		88%	
	Doctoral or equivalent	93%		92%		92%	
	All tertiary levels of education	89%		85%		85%	
	Relative earnings of full-time full-year 25-64 year-old workers, by educational attainment (upper secondary education = 100)	2016					
Table A4.1	Short-cycle tertiary	98		123		125	
	Bachelor's or equivalent	105		145		137	
	Master's, doctoral or equivalent	135		191		175	
	All tertiary levels of education	115		155		152	

Sweden - Country Note - Education at a Glance 2018: OECD Indicators

Source	Main topics in <i>Education at a Glance</i>	Sweden		OECD average		EU23 average	
	Financial resources invested in education						
Table C1.1	Total expenditure on educational institutions per full-time equivalent student, by level of education (in equivalent USD, using PPPs)	2015					
	Primary	USD 10 853		USD 8 539		USD 8 512	
	Secondary	USD 11 402		USD 9 868		USD 9 882	
	Tertiary (excluding R&D activities)	USD 11 297		USD 11 049		USD 10 919	
Table C2.1	Total expenditure on primary to tertiary educational institutions	2015					
	As a percentage of GDP	5.3%		5.0%		4.6%	
Figure C3.1	Share of expenditure on tertiary educational institutions by source of funds ^a	2015					
	Public expenditure	89%		73%		76%	
	Private expenditure	11%		21%		19%	
	Public to private transfers	0%		6%		4%	
Table C4.1	Total public expenditure on primary to tertiary education	2015					
	As a percentage of total government expenditure	11.6%		11.1%		9.6%	
	Teachers, the learning environment and the organisation of schools						
Table D3.2a	Actual salaries of teachers and school heads in public institutions relative to earnings of full-time, full-year workers with tertiary education	2016					
		Teachers	School heads	Teachers	School heads	Teachers	School heads
	Pre-primary	0.76	1.11	0.82	**	0.83	1.1
	Primary	0.86	1.21	0.86	1.21	0.88	1.21
	Lower secondary (general programmes)	0.89	1.21	0.91	1.34	0.93	1.37
Table D3.1a	Upper secondary (general programmes)	0.91	1.25	0.96	1.42	1	1.45
	Annual statutory salaries of teachers in public institutions, based on most prevalent qualifications, at different points in teachers' careers (in equivalent USD, using PPPs)	2017					
		Starting salary	Salary after 15 years of experience	Starting salary	Salary after 15 years of experience	Starting salary	Salary after 15 years of experience
	Pre-primary	USD 36 192	USD 39 444	USD 30 229	USD 40 436	USD 29 096	USD 39 371
	Primary	USD 36 689	USD 43 201	USD 31 919	USD 44 281	USD 31 206	USD 43 486
Table D3.1a	Lower secondary (general programmes)	USD 37 566	USD 43 827	USD 33 126	USD 46 007	USD 32 495	USD 45 472
	Upper secondary (general programmes)	USD 37 566	USD 44 891	USD 34 534	USD 47 869	USD 33 205	USD 47 615
	Organisation of teachers' working time in public institutions over the school year	2017					
Table D4.1		Net teaching time	Total statutory working time	Net teaching time	Total statutory working time	Net teaching time	Total statutory working time
	Pre-primary	**	**	1 029 hours	1 628 hours	1 068 hours	1 569 hours
	Primary	**	1 767 hours	778 hours	1 620 hours	754 hours	1 553 hours
	Lower secondary (general programmes)	**	1 767 hours	701 hours	1 642 hours	665 hours	1 585 hours
	Upper secondary (general programmes)	**	1 767 hours	655 hours	1 638 hours	633 hours	1 572 hours
Table D5.1	Percentage of teachers who are 50 years old or over	2016					
	Primary to upper secondary	39%		35%		38%	
Table D5.2	Share of female teachers, in public and private institutions	2016					
	Primary	77%		83%		86%	
	Lower secondary	77%		69%		71%	
	Upper secondary	53%		60%		63%	
	Tertiary	45%		43%		44%	
Table D2.1	Average class size by level of education	2016					
	Primary	19		21		21	
	Lower secondary	21		23		23	

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

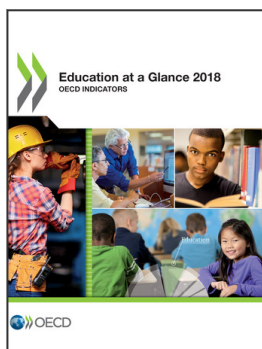
1. OECD average includes some countries with 2015 data.

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

3. International expenditure is aggregated with public expenditure

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

Cut-off date for the data: 18 July 2018. Any updates on data can be found on line at <http://dx.doi.org/10.1787/eag-data-en>.



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