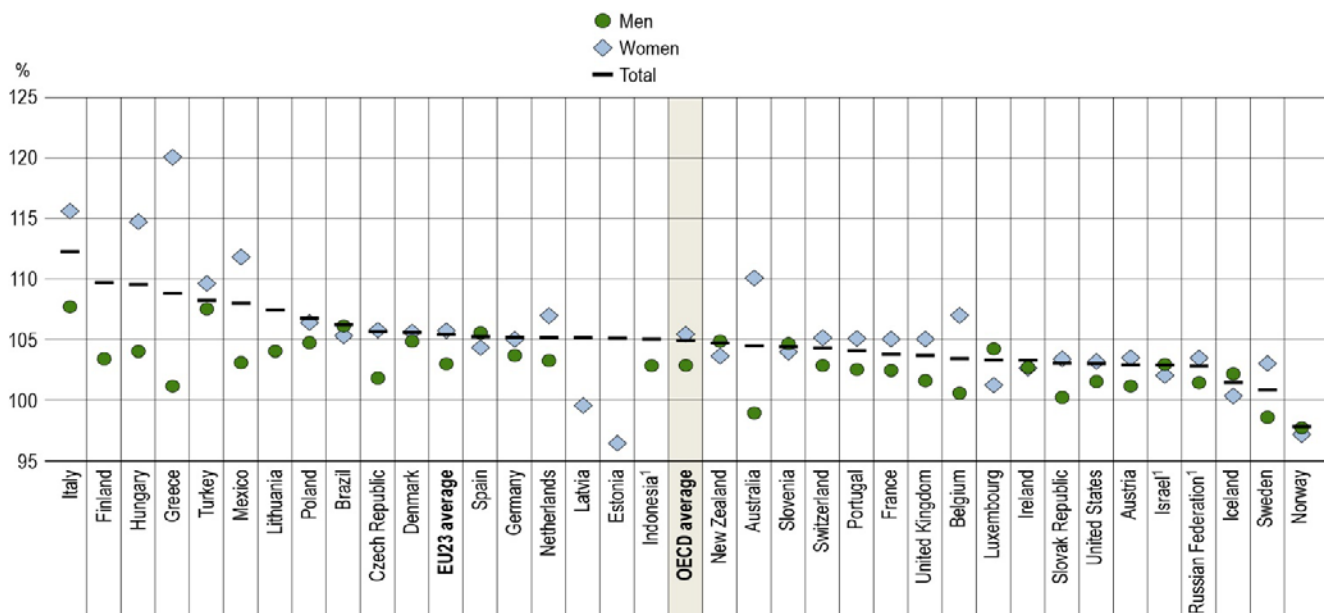


Education at a Glance: OECD Indicators (OECD, 2019^[1]) is the authoritative source for information on the state of education around the world. It provides data on the structure, finances and performance of education systems in OECD and partner countries.

Poland

- **Seven out of ten tertiary-educated adults have a master's degree in Poland** compared to three in ten on average across OECD countries. However, **their relative earnings compared to a bachelor's degree are lower than in most countries**.
- Strong provision of vocational programmes at upper secondary level contribute to the **near universal enrolment of 15-19 year-olds in education in Poland**. However spending at this level is among the lowest across OECD countries.
- **Enrolment of 3-5 year-olds in early childhood education and care** increased from less than 40% in 2005 to more than 80% in 2017. Although most teachers at this level have a master's degree, **they earn 67% as much as their similarly educated peers**, one of the lowest rates across OECD countries.
- **Just 26% of adults participated in continuing adult learning and training in Poland** in 2016 compared to 47% on average across OECD countries.

Figure 1. Relative employment rate of 25-64 year-old doctorate holders compared to master's holders (2018)



How to read the figure: A relative employment rate above 100% indicates that doctorate holders have a higher employment rate than adults with a master's degree. A relative employment rate below 100% indicates the opposite.

1. Year of reference differs from 2018.

Countries are ranked in descending order of the relative employment rate of doctorate holders compared to master's holders.

Source: OECD (2019), Table B7.3. 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 relative earnings advantage is lower than the OECD average

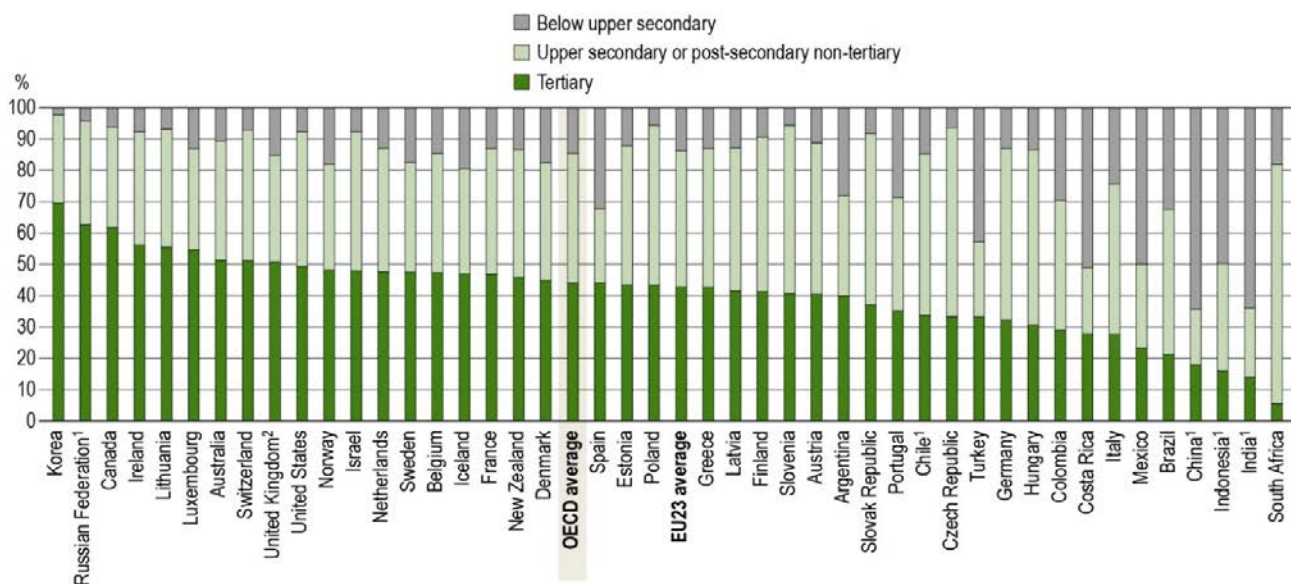
- More adults in Poland are obtaining a tertiary degree today than a decade ago. While 32% of young adults had attained a tertiary education in 2008, 44% of them had in 2018, a similar attainment rate as the OECD average (Figure 2).
- In contrast to many OECD and partner countries, where a bachelor's is the most common tertiary degree attained, most adults pursue a master's degree in Poland. Seven out of ten young tertiary-educated adults have a master's degree in Poland compared to three in ten on average across OECD countries. In 1999, Poland introduced 3- and 4-year bachelor degrees into the education system in accordance with the Bologna process. However, although participation in these programmes has been increasing, they are significantly less popular than master's degrees. The provision of short-cycle tertiary programmes, all of which are vocational in Poland, is very low. Provided solely through the Colleges of Social Work, less than 220 students currently participate in such programmes across the country.
- International students made up 4% of tertiary students in Poland in 2017, up from 1% in 2010. About half of them study social sciences, journalism and information, or business, administration and law. Eighty percent of international students studying in Poland are from Europe, and the largest share come from non-OECD countries. In contrast, only 2% of Polish students study abroad.
- The plentiful supply of master's graduates has not weakened their employment prospects. About 90% of adults with a master's degree are in employment, compared with 86% of adults with a bachelor's, a similar difference to the average across OECD countries. However, their relative earnings compared to an adult with a bachelor's degree are lower than in other countries. An adult with a master's degree earns 15% more than one with a bachelor's degree in Poland, compared to 32% more on average across OECD countries.
- In spite of high attainment at master's level, few go on to pursue a doctorate. The share of 25-64 year-olds with a doctorate in Poland is 0.6%, almost half the OECD average (1.1%). This situation is not evolving significantly: 1.9% of adults in Poland are expected to enter a doctoral programme in their lifetime if current entry patterns continue, lower than the OECD average of 2.3%. The employment advantage of adults with a doctoral degree compared to a master's is among the highest across OECD countries. Doctorate holders are 7% more likely than an adult with master's degree to find employment in Poland compared to 5% on average across OECD countries (Figure 1).
- The broad fields of engineering, manufacturing and construction; information and communication technologies; and health and welfare offer the highest employment rates in Poland (more than 90%) while employment rates are lowest for those who studied arts and humanities. These differences may have contributed to changes in the fields of study chosen by students: while the share of students who studied health and welfare is 5 percentage points higher among recent tertiary graduates than among the wider tertiary-educated adult population, the share of graduates from arts and humanities programmes is 8 percentage points lower.
- Poland spends less per student than other countries at tertiary level. In 2016, total expenditure on tertiary institutions amounted to USD 8 977,¹ almost 50% less than the OECD average and about 30% more than at primary, secondary and post-secondary non-tertiary level. In response to a decrease of 15% in the number of students enrolled since 2010 – one of the sharpest falls across OECD countries – spending has also declined, although at a slower pace (-4%). This combined effect has led to an increase in spending per student of 13% over this period. While spending per tertiary student is lower than in most countries, it is in line with Poland's national wealth and represents 1.2% of the country's gross domestic product (GDP), compared to 1.5% on average across OECD countries.
- Most of the expenditure at tertiary level is sourced through the public sector, which funds 79% of total expenditure on tertiary institutions in Poland. About three-quarters of tertiary students at bachelor's level attend public institutions in Poland, slightly higher than on average across the OECD.

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

The strong provision of vocational programmes has contributed to the near universal enrolment of 15-19 year-olds in education

- In Poland, 62% of 25-64 year-olds have upper secondary or post-secondary non-tertiary education as their highest level of attainment, the third highest share across OECD countries after the Czech Republic and the Slovak Republic. However, this share is progressively decreasing among younger adults as more pursue tertiary degrees (Figure 2).
- Almost all (93%) of 15-19 year-olds are still enrolled in education, one of the highest rates across OECD countries and an increase of 8 percentage points since 2010. Vocational programmes are an important part of the educational landscape and contribute to the high enrolment rates of youth at upper secondary level: 45% of upper secondary graduates obtained a vocational qualification in 2017 compared to 40% on average across OECD countries.

Figure 2. Educational attainment of 25-34 year-olds (2018)



1. Year of reference differs from 2018. Refer to Table A1.1 for more details. 2. Year of reference differs from 2018. Refer to Table A1.1 for more details.
 2. Data for upper secondary attainment include completion of a sufficient volume and standard of programmes that would be classified individually as completion of intermediate upper secondary programmes (13% of adults aged 25-64 are in this group).
 Countries are ranked in descending order of the percentage of tertiary-educated 25-34 year-olds.
 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>)

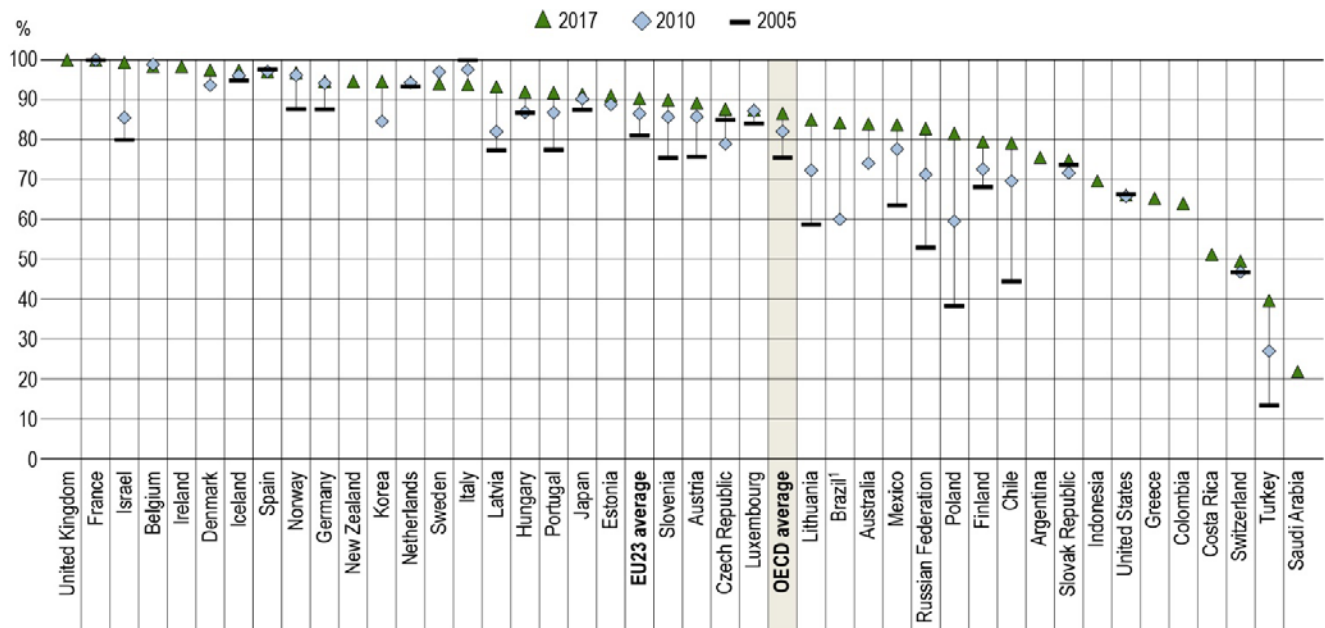
- Depending on their programme, vocational students may have access to higher educational opportunities. Technical upper secondary education provides the same exit qualifications as general upper secondary and provides access to tertiary education or to further vocational education and training (VET) programmes in post-secondary non-tertiary education (ISCED 4) while basic vocational schools do not. Enrolment in post-secondary non-tertiary education peaks among 20-year-olds, with 7% of them enrolled at this level, almost double the OECD average.
- Compared to other countries, vocational graduates in Poland tend to be younger: at upper secondary, they graduate at an average age of 20, almost the same as the average graduation age from general programmes, and compared to an average of 22 years across OECD countries. Similarly, students from post-secondary non-tertiary education graduate on average at the age of 28 in Poland compared to 31 on average across OECD countries.
- Poland spends 28% more per student on upper secondary vocational programmes than it does on general ones: a total of USD 7 863 on vocational programmes compared to USD 6 158 on general ones. However this is one of the lowest spending rates at this level across OECD countries, where spending per student averages USD 9 397 for general programmes and USD 10 922 for vocational ones.

Spending on early childhood education and care as a share of GDP is higher than the OECD average but spending per child is lower

- Between 2005 and 2017, Poland witnessed one of the fastest increases in the enrolment of young children in education across OECD countries. While less than 40% of 3-5 year-olds attended early childhood education in 2005, this had risen to over 80% in 2017, almost reaching the OECD average of 87% (Figure 3).

Figure 3. Change in enrolment rates of children aged 3 to 5 years (2005, 2010 and 2017)

Early childhood education (ISCED 0) and primary education



1. Year of reference 2012 instead of 2010

Countries are ranked in descending order of the enrolment rates of 3-5 year-olds in 2017.

Source: OECD (2019), Table B2.2. See Source section for more information and Annex 3 for notes (<https://doi.org/10.1787/f8d7880d-en>).

- Early childhood education became compulsory for 5-year-olds in 2011, although this changed to 6-year-olds in September 2016. Parliament amended the School Education Act to provide the right to participate in pre-primary education for all 4-year-olds starting in September 2015 (OECD, 2017^[2]). In 2017, 92% of 5-year-old and 85% of 4-year-old children were enrolled compared to 94% and 87% respectively on average across OECD countries.
- However, enrolment drops and the gap with the OECD average widens among younger children. Only 67% of 3-year-olds were enrolled in formal early childhood education and care in 2017, about 10 percentage points less than the OECD average. For children under 3, enrolment drops to a mere 9% compared to 36% on average across OECD countries. New policies in Poland are promoting early schooling at a young age: in September 2017, 3-year-olds became legally entitled to a place in an early childhood education institution. The Ministry of Labour and Social Policy has also developed a nationwide *Maluch* (toddler) programme to increase the number of early childhood education and care (ECEC) places for children under the age of 3 (OECD, 2017^[2]).
- Spending on pre-primary education has risen in the past years from 0.7% of GDP in 2012 to 0.8% in 2016. Although Poland spends more than the OECD average on the education of 3-5 year-olds as a share of GDP (0.7% compared to 0.6%), this amounts to USD 6 832 per child, 16% less than the OECD average.
- The lower spending per student can be partly explained by the lower salaries for teachers at this level. While the ratio of children to contact staff is similar to the OECD average, teachers' salaries are among

the lowest across OECD countries. The starting statutory salary of a pre-primary teacher in Poland is USD 16 140, about half the OECD average of USD 31 276.

- In contrast to many countries, most ECEC teachers hold a master's degree in Poland. Despite this higher qualification, their salaries relative to those of similarly educated workers are among the lowest. Pre-school teachers in Poland earn 67% as much as their similarly educated peers, one of the lowest rates across OECD countries.

The gender employment gap narrows with higher educational attainment but the pay gap widens

- Women have achieved greater educational attainment in the past decade in Poland. While the share of women with upper secondary education or below decreased by 15 percentage points between 2008 and 2018, the share with tertiary education increased by the same amount. In 2018, only 34% of men held a tertiary degree compared to 54% of women.
- Women are less likely to graduate from an upper secondary vocational programme: less than 40% of upper secondary graduates from vocational programmes are women in Poland compared to 46% on average across OECD countries. Most women at this level earn a degree in business, administration and law or services where they represent more than 60% of graduates.
- At tertiary level, women make up 74% of entrants to health and welfare programmes at bachelor's level and 64% for master's long first degrees. In contrast, they represent about one-third of entrants to science, technology, engineering, and mathematics (STEM) fields. Only the field of business, administration and law approaches gender parity among tertiary fields of study, with 57% women.
- The employment rate among women is consistently lower than among men in Poland for all levels of education. Although the employment rate of adults with an upper secondary qualification in 2018 was the same in Poland as on average across the OECD (78%), the gender gap among young adults with upper secondary education is wider: 60% of 25-34 year-old women and 90% of men were employed, compared to 68% of women and 85% of men on average across OECD countries. This gender gap has increased in Poland in the past decade: while the employment rate of men with upper secondary education increased by 3 percentage points since 2008, the rate for women fell by 4 percentage points.
- The gender difference in employment narrows as educational attainment rises. Among tertiary-educated younger adults, 84% of women and 94% of men were employed. Employment rates for those holding a doctorate are 6% higher than for those with a master's for women and 5% higher for men in Poland, a similar pattern to the OECD average (Figure 1).
- Women in Poland earn less than men and the gap widens faster with educational attainment than the average across OECD countries. While women with upper secondary education earn 80% as much as men with the same level of attainment, tertiary-educated women earn 71% as much as tertiary-educated men in Poland. In contrast, the gap in relative earnings on average across OECD countries rises less: women with upper secondary education earn 78% as much as similarly educated men, while those with tertiary education earn 75% as much.

Few adults participate in formal or non-formal education in Poland

- Social outcomes of education are also important when it comes to assessing the impact of education on our daily life. Although work-life balance tends to decrease with higher educational attainment across most countries with available data, the opposite is true in Poland. Over 70% of adults in Poland with upper secondary education reported having difficulties fulfilling their family obligations over the past 12 months because of the amount of time they spend at work, one of the largest shares among all countries with available data. In contrast, only 58% of tertiary-educated adults reported the same (compared with 51% on average). This may result from the longer work week in Poland: adults with upper secondary education work 42 hours per week on average in Poland, 3 hours more than the average across OECD countries.


- Participation in cultural or sporting activities varies more in Poland by educational attainment than in most other countries: 89% of tertiary-educated adults reported doing so in the past 12 months compared to 24% of adults without upper secondary education. This 65 percentage-point difference contrasts with the 36 percentage-point difference observed on average across countries with available data.
- According to the Adult Education Survey, just 26% of adults participated in continuing adult learning and training in Poland in 2016 compared to 47% on average across countries with available data. As in most countries, the majority of them enrol in non-formal education and training programmes and three-quarters are sponsored by their employer.
- Almost one in two tertiary-educated adults in Poland have participated in formal and/or non-formal education and training compared to less than one-fifth of adults with upper secondary education. Only 5% of those with below upper secondary education participate in such programmes. In contrast, 66% of adults with tertiary education, 44% with upper secondary and 26% with below upper secondary participated in formal and/or non-formal education and training on average across countries with available data.
- Distance learning plays an important role in the provision of non-formal training opportunities. This is particularly the case in Poland where 47% of adults participating in non-formal education and training programmes enrolled in a distance-learning course, compared to 20% on average across OECD countries.

References

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

OECD (2017), *Starting Strong 2017: Key OECD Indicators on Early Childhood Education and Care*, [2]
 Starting Strong, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264276116-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.

Updated data can be found on line at <http://dx.doi.org/10.1787/eaq-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=POL&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 Poland in Education at a Glance 2019

Source	Main topics in <i>Education at a Glance</i>	Poland		OECD average		EU23 average	
Tertiary education							
Educational attainment of 25-64 year-olds							
2018							
Table A1.1	Short-cycle tertiary	0%		7%		5%	
	Bachelor's or equivalent	7%		17%		14%	
	Master's or equivalent	23%		13%		15%	
	Doctoral or equivalent	1%		1%		1%	
Tertiary attainment of 25-34 year-olds, by gender							
2018							
Table A1.2	Men	26%	34%	31%	38%	28%	36%
	Women	39%	54%	40%	51%	38%	50%
	Total	32%	44%	35%	44%	33%	43%
Distribution of first-time tertiary entrants by education level							
2017							
Table B4.1	Short-cycle tertiary	**		17%		12%	
	Bachelor's or equivalent	**		76%		80%	
	Master's or equivalent	**		7%		8%	
Share of international or foreign students, by education level¹							
2017							
Table B6.1	Bachelor's or equivalent	4%		4%		7%	
	Master's or equivalent	5%		13%		13%	
	Doctoral or equivalent	2%		22%		22%	
	All tertiary levels of education	4%		6%		9%	
Employment rate of 25-64 year-olds, by educational attainment							
2018							
Table A3.1	Short-cycle tertiary	67%		82%		82%	
	Bachelor's or equivalent	86%		84%		84%	
	Master's or equivalent	90%		89%		89%	
	Doctoral or equivalent	96%		92%		93%	
	All tertiary levels of education	89%		85%		86%	
Employment rate of tertiary-educated 25-64 year-olds, by field of study							
2018							
Table A3.4	Education	85%		84%		85%	
	Business and administration and law	89%		86%		87%	
	Engineering, manufacturing and construction	92%		89%		89%	
	Health and welfare	92%		87%		88%	
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	**		120		121	
	Bachelor's or equivalent	139		144		138	
	Master's, doctoral or equivalent	161		191		174	
	All tertiary levels of education	156		157		152	
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	51%		41%		44%	
Percentage of first-time upper secondary graduates with a vocational qualification							
2017							
Table B3.1	Vocational programmes	45%		40%		46%	
Age at graduation from upper secondary education, by programme orientation							
2017							
Figure B3.1	General programmes	21		18		19	
	Vocational programmes	20		21		21	
Share of women among upper secondary graduates, by programme orientation							
2017							
Figure B3.2	General programmes	59%		55%		56%	
	Vocational programmes	39%		46%		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	78%		78%		79%	
	Unemployment rate	5%		7%		8%	
	Inactivity rate	18%		16%		14%	
Total expenditure on upper secondary educational institutions, in USD² per full-time equivalent student, by programme orientation							
2016							
Table C1.1	General programmes	USD 6 158		USD 9 397		USD 9 671	
	Vocational programmes	USD 7 863		USD 10 922		USD 11 320	
Early childhood education and care (ECEC)							
Enrolment rate of 3-5 year-olds in education							
2017							
Table B2.2	ECEC and primary education	82%		87%		90%	
Share of children enrolled in private institutions							
2017							
Table B2.3	Pre-primary level (ISCED 02)	24%		34%		27%	
Ratio of children to teaching staff							
2017							
Table B2.3	Pre-primary level (ISCED 02)	15		16		15	
Expenditure on children aged 3-5 enrolled in education							
2016							
Table B2.4	Annual expenditure per child, in USD ² per child	USD 6 832		USD 8 141		USD 8 926	

Source	Main topics in <i>Education at a Glance</i>	Poland		OECD average		EU23 average	
Social outcomes and adult learning							
Participation in formal and/or non-formal education, by educational attainment³		2016					
Table A7.1	Below upper secondary	5%		n.a.		26%	
	Upper secondary or post-secondary non-tertiary	17%		n.a.		44%	
	Tertiary	48%		n.a.		66%	
Participation in cultural or sporting activities in the last 12 months, by educational attainment⁴		2015					
Table A6.1	Below upper secondary	24%		n.a.		56%	
	Upper secondary or post-secondary non-tertiary	53%		n.a.		77%	
	Tertiary	89%		n.a.		92%	
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	USD/student	% GDP
	Primary	USD 6 808	1.6%	USD 8 470	1.5%	USD 8 548	1.3%
	Lower secondary	USD 7 136	0.7%	USD 9 884	0.9%	USD 10 302	0.9%
	Upper secondary	USD 7 114	0.8%	USD 10 368	1.1%	USD 10 308	1.0%
	Tertiary (including R&D)	USD 8 977	1.2%	USD 15 556	1.5%	USD 15 863	1.2%
Share of expenditure on educational institutions, by final source of funds		2016					
Table C3.1		Public	Private	Public	Private	Public	Private
	Primary, secondary and post-secondary non-tertiary	91%	8%	90%	10%	92%	8%
	Tertiary (including R&D)	79%	18%	66%	32%	73%	24%
Total public expenditure on primary to tertiary education		2016					
Table C4.1	As a percentage of total government expenditure	9.7%		10.8%		9.6%	
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	Teachers	School heads
	Pre-primary	0.68	1.02	0.78	**	0.78	1.16
	Primary	0.79	1.07	0.84	1.25	0.85	1.24
	Lower secondary (general programmes)	0.82	1.1	0.88	1.34	0.89	1.34
	Upper secondary (general programmes)	0.8	1.1	0.93	1.43	0.95	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	Starting salary	Salary after 15 years of experience
	Pre-primary	USD 16 140	USD 26 428	USD 31 276	USD 42 078	USD 30 615	USD 41 354
	Primary	USD 16 140	USD 26 428	USD 33 058	USD 45 947	USD 32 987	USD 45 748
	Lower secondary (general programmes)	USD 16 140	USD 26 428	USD 34 230	USD 47 675	USD 34 261	USD 47 772
	Upper secondary (general programmes)	USD 16 140	USD 26 428	USD 35 859	USD 49 804	USD 35 104	USD 49 875
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	Net teaching time	Total statutory working time
	Pre-primary	1 085 hours	1 808 hours	1 024 hours	1 613 hours	1 062 hours	1 550 hours
	Primary	561 hours	1 488 hours	783 hours	1 612 hours	754 hours	1 539 hours
	Lower secondary (general programmes)	481 hours	1 488 hours	709 hours	1 634 hours	673 hours	1 572 hours
	Upper secondary (general programmes)	475 hours	1 472 hours	667 hours	1 629 hours	643 hours	1 558 hours
Percentage of teachers who are 50 years old or over		2017					
Table D5.1	Primary to upper secondary	33%		36%		39%	
Share of female teachers, in public and private institutions		2017					
Table D5.2	Primary	85%		83%		87%	
	Lower secondary	73%		69%		72%	
Total number of compulsory instruction time, by level of education		2019					
Table D1.1	Primary	3 619 hours		4 568 hours		4 258 hours	
	Lower secondary	2 488 hours		3 022 hours		3 002 hours	
	Upper secondary	**		**		**	
Average class size by level of education		2017					
Table D2.1	Primary	18		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>.