

EDUCATION AT A GLANCE 2016

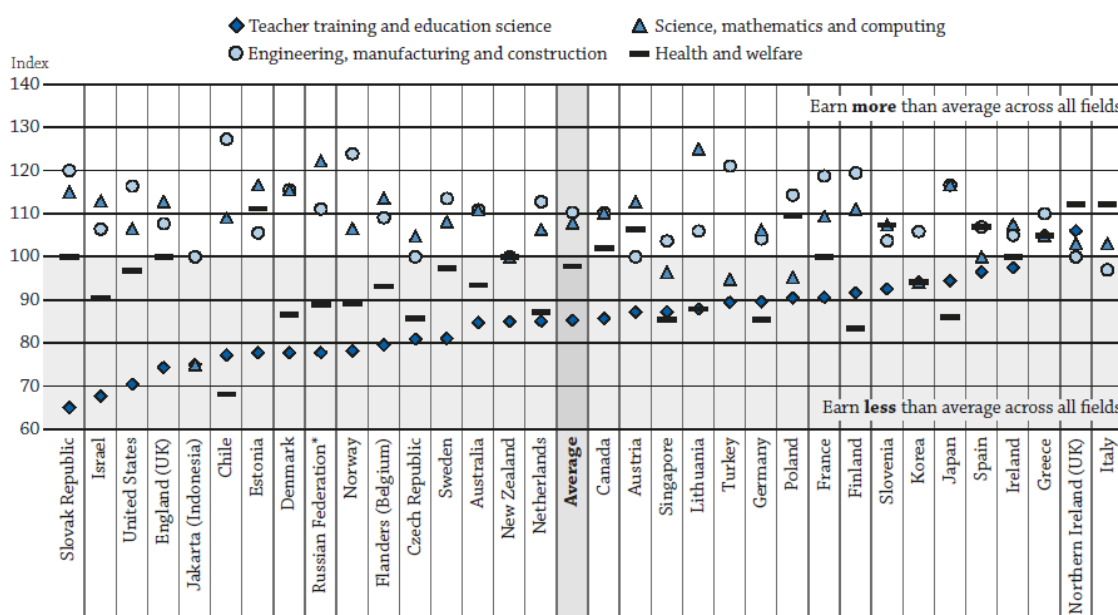
Education at a Glance: OECD Indicators is the authoritative source for information on the state of education around the world. It provides data on the structure, finances and performance of education systems in the 35 OECD countries and a number of partner countries.

Estonia

- **With half of Estonia's teachers over the age of 50**, the country needs to attract new talent to the profession. Average earnings of tertiary graduates from teacher training programmes are among the lowest of all tertiary graduates.
- Estonia has historically had a highly educated population, as shown by the **high level of tertiary attainment of 55-64 year-olds (35%) compared to the OECD average (26%)**. However, if current patterns of completion persist, the attainment rate of future generations will likely decrease. In 2014, the completion rate for bachelor's degrees in Estonia (51%) was the lowest among all countries with similar data available.
- **Vocational upper secondary education remains unpopular among upper secondary students**. Only about a third of upper secondary students are enrolled in such programmes, compared to almost half of students on average across EU22* countries.
- In 2013, **capital expenditure accounted for 15% of total expenditure on educational institutions, the highest rate among OECD countries**. The relatively high level of capital expenditure may be linked to ongoing heavy investment in school infrastructure as part of the current reform of the school network.
- **Women represent a higher share of tertiary graduates than men, but they earn only 70% as much as their male counterparts** (slightly below the OECD average of 73%).

Figure 1. Relative earnings of adults with tertiary education by field of education studied (2012 or 2015)

Survey of Adult Skills, 25-64 year-old non-students full-time workers; all fields of education = 100



Note: Chile, Greece, Israel, Jakarta (Indonesia), Lithuania, New Zealand, Singapore, Slovenia, Turkey: Year of reference 2015. All other countries: Year of reference 2012.

* See note on data for the Russian Federation in the *Methodology* section.

Countries and subnational entities are ranked in ascending order of the ratio of the mean monthly earnings of adults who studied teacher training and education science over that of all fields of education.

Source: OECD, Table A6.4. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

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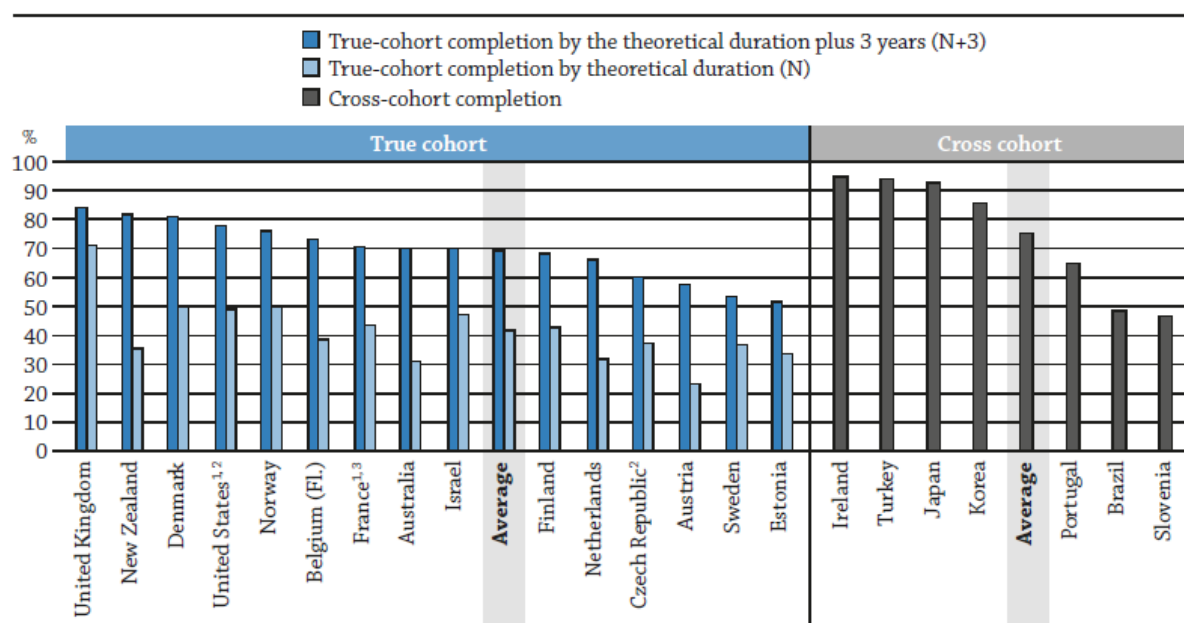
Salary can influence teachers' decisions to enter – and remain in – the profession

- With half its teaching profession at secondary level aged 50 or more, Estonia faces a generational turnover in the coming years. In only one country, Italy, are teachers ageing more than in Estonia. This turnover may represent an opportunity for Estonia to attract new talent to the teaching profession and to promote new teaching practices.
- To make teaching an attractive profession, Estonia must offer competitive salaries and good earning progression. Teachers' salaries in Estonia underwent one of the highest increases in the OECD, with lower and upper secondary teachers' salaries increasing by 31%. However, teachers' salaries remain low compared to other professions. Tertiary-educated adults who studied in teacher training and education science have among the lowest average monthly earnings compared to their peers who studied in other fields of education in Estonia.
- More competitive salaries could also help improve the gender balance by attracting more men to the teaching profession. The overwhelming majority of teachers in Estonia are women: 92% in primary education, compared to the OECD average of 82%; 82% in lower secondary, compared to the OECD average of 68%; and 78% in upper secondary general, compared to the OECD average of 62%.

Labour market outcomes can impact students' decision to pursue a tertiary degree

- Estonia has had historically high tertiary attainment levels. Tertiary attainment of adults in Estonia (38%) is above the OECD average (36%). This high attainment level is true not only for young adults (25-34 year-olds), with 41% attaining tertiary education (almost at par with the OECD average of 42%), but also for the older generation (55-64 year-olds), where 35% have tertiary attainment, higher than the OECD average of 26%.

Figure 2. Completion rate of full-time students who entered bachelor's or equivalent level, by method and duration (2014)



Note: Please refer to the *Methodology* section for an explanation on the true-cohort and cross-cohort methodologies. For countries that submitted true-cohort data, the data presented in this figure correspond to students who entered at bachelor's or equivalent level and graduated from any educational level within the specified time frame.


1. Data provided using a longitudinal survey. For the United States, year of graduation is 2009 instead of 2014.

2. N+3 refers to N+2.

3. Excludes international students.

Countries are ranked in descending order of completion rate for cross-cohort and completion by N+3 for true cohort.

Source: OECD, Table A9.1. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

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- In line with these attainment levels, the entry rate to bachelor's or equivalent programmes remains high, as shown by the fact that 65% of Estonian students are expected to enter a bachelor's programme over their lifetime, compared to 59% across OECD countries and 57% across EU22 countries. However, a significant share (49%) of students who enrol in a bachelor's programme do not complete their studies, even three years after the theoretical end of the programme (Figure 2). Even more concerning is the fact that 43% had not graduated and were not in education – by far the highest such share among countries with similar data available.
- The low level of financial returns and earning premiums in Estonia might deter students from investing in tertiary education. The earning premium of tertiary graduates compared to upper secondary graduates reached only 28% in 2014, below both the OECD average of 55% and the EU22 average of 52%. The low earning premium also decreases the overall expected financial returns from tertiary education for individuals. Net private returns in Estonia for individuals attaining tertiary education are among the lowest in OECD countries.

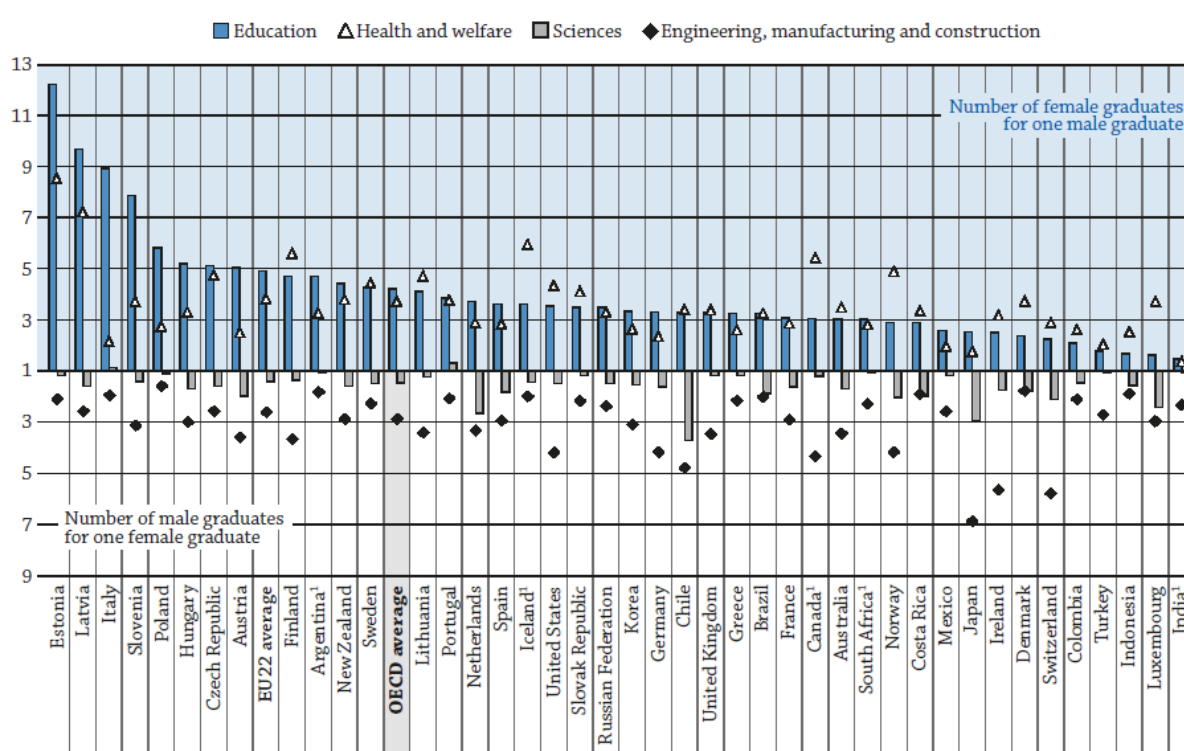
Vocational education and training can provide more direct pathways into the labour market

- Vocational education and training (VET) can equip young people with the experience and skills needed in the labour market, but VET in Estonia remains unpopular among students, compared to the OECD and EU22 averages. While 44% of students on average across OECD countries and 48% on average across EU22 countries were enrolled in vocational upper secondary programmes in 2014, only 35% of upper secondary students in Estonia were enrolled in vocational programmes.
- Moreover, less than 1% of students in vocational upper-secondary programmes are enrolled in work-study programmes in Estonia, compared to the OECD average of 13% and the EU22 average of 14%. Upper secondary vocational education in Estonia, as in the majority of OECD countries, caters more to an older age group than general upper secondary programmes. In 2014, 59% of students in vocational programmes in upper secondary education were between 20 and 24, while 15-19 year-olds only represented about a third of the student population in these programmes.
- As is the case for general upper secondary education, individuals who have attained vocational upper secondary education have a low unemployment rate (6.2%), compared to the OECD average (9.2%) and the EU22 average (10.8%).

Gender gaps in education and employment persist

- As in the majority of OECD countries, women in Estonia tend to reach higher levels of attainment than men. Women represented 69% of students who graduated from a master's programme following a
- bachelor's degree in 2014, the highest such share among OECD countries. At the lower end of the attainment spectrum, the share of individuals with below upper secondary education is higher among men (12%) than among women (9%).
- However, women continue to earn less than men with similar levels of attainment, although the gap decreases with higher levels of attainment. At tertiary level, women earn on average 70% as much as their male counterparts, slightly below the OECD average of 73%, and lower than in the neighbouring countries, Finland and Latvia, which are both at 76%. As previously highlighted, the earning imbalance seems to be correlated to the choice of field of study, where highly female-dominated professions, such as teaching, typically offer lower salaries than other professions.


Figure 3. Gender ratio for all tertiary graduates, by field of education (2014)



1. Year of reference 2013.

Countries are ranked in descending order of the number of female graduates for one male graduate in the field of "Education".

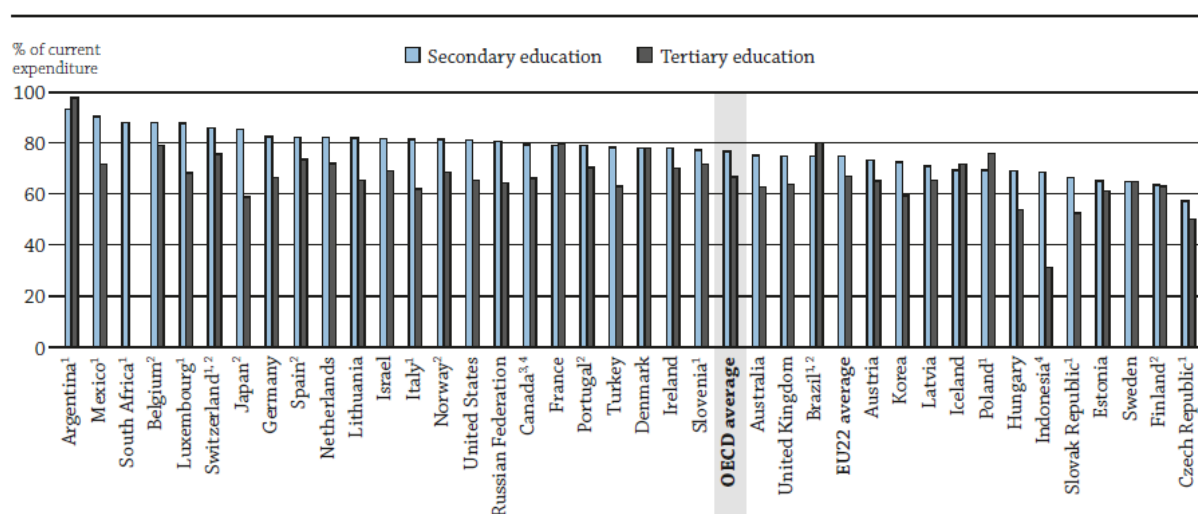
Source: OECD, Table A3.3. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

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High-quality education needs sustainable funding

- In the past decade, the decrease in the student population at primary, secondary and post-secondary non-tertiary levels of education enabled Estonia to increase its level of expenditure per student in a context of shrinking total expenditure on education. Estonia has experienced a decrease of 12% in its student population since 2008, the fourth-highest decrease among OECD countries after Korea, Poland and the Slovak Republic. But the decrease in expenditure was even larger, resulting in a decrease in expenditure per student.
- While Estonia experienced one of the highest increases in GDP among OECD countries between 2010 and 2013, public expenditure on education as a share of GDP decreased by 10% over the same period. In 2013, public expenditure in education as a share of GDP was 5.0%, slightly above the OECD average (4.5%), but much lower than Estonia's more populated neighbours, Finland (5.6%) and Norway (6.2%). This downward trend may be explained by the large decrease in the student population in Estonia.
- Primary, secondary and post-secondary non-tertiary education in Estonia is mainly publicly funded. In 2013, public expenditure represented 98% of total expenditure, compared to the EU22 average of 93% and the OECD average of 91%. This share is similar to what can be observed across the Baltic and Nordic countries, where the state is the primary investor in non-tertiary education.
- The relatively high share of capital expenditure is a striking feature of the Estonian education system. In 2013, capital expenditure amounted for 15% of total expenditure on educational institutions, the highest rate among OECD countries. One potential explanation for this high share, is the ongoing heavy investment in school infrastructure as part of the current reform of the school network.
- The share of teachers' compensation in total current expenditure is relatively low. Teachers' compensation amounted to only 42% of current expenditure in primary education in 2013, the lowest share among OECD countries – which spent on average 61% of current expenditure on teachers' compensation at primary level. At secondary level in Estonia, only 38% of current expenditure is spent on teachers' compensation, compared to the OECD average of 61%.

Figure 4. Compensation of staff as a share of current expenditure on educational institutions, by level of education (2013)



1. Public institutions only. For the Czech Republic, Italy, Luxembourg and the Slovak Republic in tertiary education only.


2. Secondary includes some or all post-secondary non-tertiary programmes.

3. Secondary includes only upper secondary.

4. Year of reference 2012.

Countries are ranked in descending order of share of current expenditure devoted to compensation of all staff in secondary education.

Source: OECD, Table B6.2. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

StatLink  <http://dx.doi.org/10.1787/888933398065>

Access to high-quality early childhood education makes a difference later on

- Early childhood education is extremely important, because it can improve the future performance of students and develop their social and emotional skills. Children in Estonia have early access to education compared to other countries. In 2014, more than half (58%) of 2-year-olds were enrolled in early childhood education, compared to the OECD average of 36% and the EU22 average of 35%. Enrolment rises to 86% for 3-year-olds, compared to the OECD average of 71% and the EU22 average of 77%.
- However, Estonia has one of the lowest levels of expenditure on early childhood education as a share of GDP (0.4%), far below the EU22 average (0.8%), the OECD average (0.8%) and that of neighbouring countries, such as Latvia (0.8%), Lithuania (0.7%) and Finland (1.2%). Moreover, pre-primary teachers have a very low actual salary (including bonuses and allowances), which amounts to only 65% of the average actual salary of full-time full-year similarly educated adults.

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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.

Note regarding data from the Russian Federation in the Survey of Adult Skills (PIAAC)

Readers should note that the sample for the Russian Federation does not include the population of the Moscow municipal area. The data published, therefore, do not represent the entire resident population aged 16-65 in Russia, but rather the population of Russia *excluding* the population residing in the Moscow municipal area. More detailed information regarding the data from the Russian Federation as well as that of other countries can be found in the *Technical Report of the Survey of Adult Skills*.


* EU22 countries are those that are members of both the European Union and the OECD. These 22 countries are Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Luxembourg, the Netherlands, Poland, Portugal, Slovenia, the Slovak Republic, Spain, Sweden and the United Kingdom.

The Survey of Adult Skills is a product of the OECD Programme for the International Assessment of Adult Competencies (PIAAC).

References

OECD (2016), *Education at a Glance 2016: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2015-en>.

For more information on *Education at a Glance 2016* 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=AUS&treshold=10&topic=EQ>.

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Key Facts for Estonia in Education at a Glance 2016

Source	Main topics in <i>Education at a Glance</i>	Estonia		OECD average		EU22 average	
	Gender						
	Employment rate of 25-64 year-olds, by educational attainment	2015					
Chart A5.2.		Men	Women	Men	Women	Men	Women
	Below upper secondary	62%	51%	66%	46%	62%	44%
	Upper secondary or post-secondary non-tertiary	82%	70%	81%	67%	79%	68%
	Tertiary	91%	83%	88%	80%	88%	80%
	Full-year earnings of women as a percentage of men's earnings, by educational attainment (25-64 year-olds)	2014					
Table A6.2		Ratio (women/men)		Ratio (women/men)		Ratio (women/men)	
	Below upper secondary	63%		76%		77%	
	Upper secondary or post-secondary non-tertiary	62%		77%		79%	
	Tertiary	70%		73%		74%	
	Percentage of people not in employment, nor in education or training (NEET)	2015					
Table C5.2		Men	Women	Men	Women	Men	Women
	15-29 year-olds	8%	18%	12%	17%	13%	16%
	Percentage of female graduates, by tertiary levels of education	2014					
Table A3.4		% Women		% Women		% Women	
	Short-cycle tertiary	**		56%		59%	
	Bachelor's or equivalent	**		58%		60%	
	Master's or equivalent	**		57%		58%	
	Doctoral or equivalent	**		47%		49%	
	Field of education studied among tertiary-educated adults (25-64 year-old non-students)	2012		2012 ¹		2012	
Table A1.5.		Men	Women	Men	Women	Men	Women
	Teacher training and education science	2%	14%	7%	18%	n.a.	n.a.
	Engineering, manufacturing and construction	46%	16%	31%	7%	n.a.	n.a.
Vocational Education and Training (VET)							
	Distribution of enrolment, by programme orientation	2014					
Table C1.3a		General	Vocational	General	Vocational	General	Vocational
	Upper secondary education	65%	35%	56%	44%	52%	48%
	Educational attainment, by programme orientation	2015					
Table A1.4.		General	Vocational	General	Vocational	General	Vocational
	25-34 year-olds with upper secondary or post-secondary non-tertiary education	20%	28%	17%	26%	13%	30%
	Unemployment rate, by programme orientation	2015					
Table A5.5		General	Vocational	General	Vocational	General	Vocational
	25-34 year-olds with upper secondary or post-secondary non-tertiary education as their highest educational attainment level	5.2%	6.2%	10%	9.2%	11.7%	10.8%
Financial Investment in Education							
	Annual expenditure per student, by level of education (in equivalent USD, using PPPs)	2013					
Table B1.1		USD 7 138		USD 8 477		USD 8 545	
	Primary education						
	Secondary education	USD 6 417		USD 9 811		USD 10 053	
	Tertiary (including R&D activities)	USD 11 607		USD 15 772		USD 15 664	
	Total expenditure on primary to tertiary educational institutions	2013					
Table B2.2	As a percentage of GDP	5.2%		5.2%		5%	
	Total public expenditure on primary to tertiary education	2013					
Table B4.2	As a percentage of total public expenditure	11.7%		11.2%		9.9%	
Early Childhood Education and Care (ECEC)							
	Enrolment rates in early childhood education at age 3	2014					
Table C2.1		ISCED 01 and 02		71%		77%	
	86%						
	Expenditure on all early childhood educational institutions	2013					
Table C2.3		0.4%		0.8%		0.8%	
	As a percentage of GDP						
	Proportions of total expenditure from public sources	94%		81%		86%	
Teachers							
	Actual salaries of teachers in public institutions relative to wages of full-time, full-year workers with tertiary education	2014					
Table D3.2a		0.59		0.74		0.74	
	Pre-primary school teachers						
	Primary school teachers	0.88		0.81		0.81	
	Lower secondary school teachers (general programmes)	0.88		0.85		0.86	
	Upper secondary school teachers (general programmes)	0.88		0.89		0.92	
	Annual statutory salaries of teachers in public institutions, based on typical qualifications, at different points in teachers' careers (in equivalent USD, using PPPs)	2014					
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 school teachers	**	**	USD 29 494	USD 39 245	USD 28 934	USD 38 992
	Primary school teachers	**	**	USD 31 028	USD 42 675	USD 30 745	USD 42 285
	Lower secondary school teachers (general programmes)	**	**	USD 32 485	USD 44 407	USD 32 274	USD 44 204
	Upper secondary school teachers (general programmes)	**	**	USD 34 186	USD 46 379	USD 33 420	USD 46 420

Estonia - Country Note - Education at a Glance 2016: OECD Indicators

Source	Main topics in <i>Education at a Glance</i>	Estonia		OECD average		EU22 average	
	Mean monthly earnings of tertiary-educated 25-64 year-old, by selected field of education studied	2012		2012¹		2012	
Table A6.4	Teacher training and education science	USD 1 400		USD 3 004		n.a.	
	Engineering, manufacturing and construction	USD 1 900		USD 3 883		n.a.	
	Ratio of students to teaching staff	2014					
Table D2.2	Primary education	13 students per teacher		15 students per teacher		14 students per teacher	
	Secondary education	12 students per teacher		13 students per teacher		12 students per teacher	
	Tertiary education	15 students per teacher		17 students per teacher		17 students per teacher	
Tertiary Education							
	Percentage of adults who have attained tertiary education, by tertiary level of educational attainment and age group	2015					
		25-34 year-olds	25-64 year-olds	25-34 year-olds	25-64 year-olds	25-34 year-olds	25-64 year-olds
Table A1.2	Short-cycle tertiary	1%	7%	8%	8%	5%	6%
	Bachelor's or equivalent	23%	10%	21%	16%	18%	13%
	Master's or equivalent	15%	20%	14%	11%	16%	13%
	Doctoral or equivalent	1%	1%	1%	1%	1%	1%
	All tertiary levels of education	41%	38%	42%	35%	40%	32%
	Employment rate of 25-64 year-olds, by tertiary educational attainment	2015					
Tables A5.1 & A5.3	Short-cycle tertiary	82%		80%		80%	
	Bachelor's or equivalent	87%		82%		81%	
	Master's or equivalent	86%		87%		86%	
	Doctoral or equivalent	89%		91%		91%	
	All tertiary levels of education	86%		84%		84%	
	Relative earnings of full-time full-year 25-64 year-old workers, by tertiary educational attainment (upper secondary education = 100)	2014					
Table A6.1	Short-cycle tertiary	99		120		120	
	Bachelor's or equivalent	123		148		139	
	Master's, doctoral or equivalent	139		191		175	
	All tertiary levels of education	128		155		152	
	Share of international or foreign students, by level of tertiary education	2014					
Table C4.1.	Bachelor's or equivalent	3%		5%		6%	
	Master's or equivalent	5%		12%		13%	
	Doctoral or equivalent	8%		27%		22%	
	All tertiary levels of education	4%		6%		8%	
	First-time entry rates into tertiary education	2014					
Table C3.1.	All tertiary levels (including international students)	**		68%		63%	
	All tertiary levels (excluding international students)	**		61%		57%	
	All tertiary levels (students younger than 25 years old and excluding international students)	**		51%		50%	
Other: Immigration and intergenerational mobility in education							
	Proportion of adults with same educational attainment levels as their parents, by parents' immigrant status²	2012		2012¹		2012	
		Native-born parents	Foreign-born parents	Native-born parents	Foreign-born parents	Native-born parents	Foreign-born parents
Table A4.3	25-44 year-old adults with below upper secondary education as their highest educational attainment level	29%	22%	27%	37%	n.a.	n.a.
Other: Adult education and learning							
	Participation of 25-64 year-olds in formal and/or non-formal education, by level of education²	2012		2012¹		2012	
Table C6.3	Below upper secondary	28%		26%		n.a.	
	Upper secondary or post-secondary non-tertiary	43%		46%		n.a.	
	Tertiary	70%		70%		n.a.	
Other: Education and social outcomes							
	Percentage of 25-64 year-old adults reporting that they are in good health, by selected literacy proficiency level	2012		2012¹		2012	
Table A8.1 (L)	Low literacy proficiency (Level 1 or below)	43%		67%		n.a.	
	High literacy proficiency (Level 4 or 5)	78%		90%		n.a.	
	Life satisfaction today and life satisfaction expected in five years for 25-64 year-olds, by educational attainment³	2015					
		Life satisfaction today	Life satisfaction in 5 years	Life satisfaction today	Life satisfaction in 5 years	Life satisfaction today	Life satisfaction in 5 years
Table A8.3a	Upper secondary or post-secondary non-tertiary	**	**	83%	87%	83%	86%
	Tertiary	**	**	92%	94%	92%	93%

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

Refer to Annex 3 for notes and for more information on data presented in this key facts table (www.oecd.org/education/education-at-a-glance-19991487.htm).

1. OECD average includes some countries with 2015 data.

2. Data refer to ISCED-97 instead of ISCED-A 2011.

3. Educational attainment categories collected by Gallup World Poll may differ from ISCED-A 2011.

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



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