

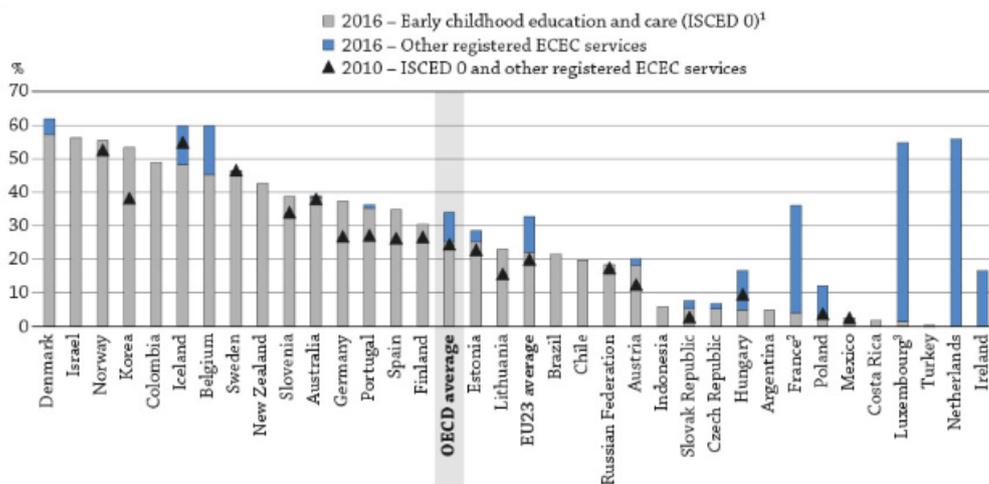
EDUCATION AT A GLANCE 2018

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.

Korea

- Early childhood and care (ECEC) is particularly well developed in Korea. **Korea's catching-up in terms of enrolment and funding has been remarkable.**
- **Repeating years in upper secondary education are rare** in Korea, and a large majority of students go on to enrol in tertiary education.
- General programmes are more conventional option for upper secondary students in Korea than vocational programmes
- **Korea has the highest share of tertiary-educated adults of all OECD countries, mostly at bachelor's level.** In addition, Korea exhibits a high intergenerational mobility in tertiary education.
- Despite increasing levels of public spending in education, **annual average tuition fees are still above the OECD average in Korea**, both in public and private institutions.
- **The gender gap in the labour market** in terms of wages and employment perspectives persists in Korea and remains a challenge, as in most OECD countries.

Figure 1. Enrolment rates of children under the age of 3 in early childhood education and care, by type of service (2010 and 2016)



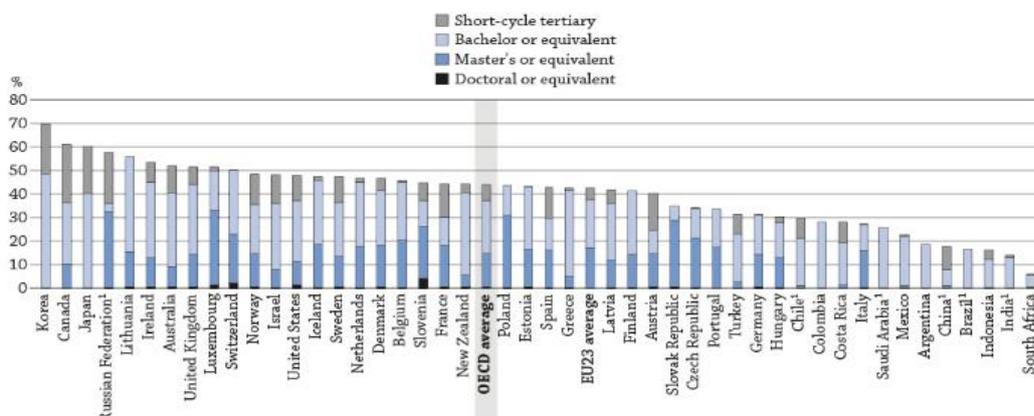
Early childhood education and care has received high levels of investment over the last decade, resulting in practically universal enrolment at the age of 3

- The enrolment rates of 3-5 year-old children in early childhood education and care (ECEC) have increased in many countries between 2010 and 2016. In Korea, the enrolment rate increased by 9 percentage points, from 85% to 93% (the OECD average is of 86% in 2016).
- Broken down by age, the enrolment rate in ECEC is 53% for children under the age of 3, 97% for 3-year-olds and 93% for 4-year-olds, all above the corresponding OECD averages of 34%, 76% and 88%. However, among 5-year-olds, the enrolment rate in Korea (90%) is slightly below the OECD average of 95%.
- Whereas about 90% of children aged 4 and 5 are enrolled, regional differences remain in access to pre-primary education, particularly when comparing the capital, Seoul, to other regions in the country. For instance, respectively around 80% and 85% of children aged 4 and 5 are enrolled in pre-primary education in Seoul whereas more than 90% of them are in other regions.
- In Korea, 91% of children in early childhood educational development programmes (ISCED 01) and 79% of children in pre-primary education (ISCED 02) are enrolled in private institutions, well above the corresponding OECD averages of 54% and 32%. However, all private institutions¹ in Korea at this level are government-dependent, meaning that they are mostly publicly funded.
- Public spending in pre-primary education increased by 28 percentage points over the period 2010-2015 (from 56% to 84%), the largest increase across OECD countries (the OECD average is 83% in 2015).
- In pre-primary education, the annual expenditure per child is USD 7 814, around USD 700 less than the OECD average of USD 8 426.² In total, in 2015, expenditure on pre-primary education amounts to 0.56% of gross domestic product (GDP), slightly below the OECD average (0.62%), but more than double in comparison to 2010, when it amounted to 0.27% of GDP.

Students follow a direct path to tertiary education, which has a strong impact on the labour market

- Only 2% of 25-34 year-old men and women have not completed upper secondary education, the lowest share across OECD and partner countries for both genders.
- Following upper secondary education, a large majority of students go on to enrol in tertiary education and leave education with a tertiary qualification. Korea has the highest percentage of 25-34 year-olds with tertiary education (70%), above Canada, Japan and the Russian Federation (Figure 2).

Figure 2. Percentage of 25-34 year-olds with tertiary education, by level of tertiary education (2017)



¹ Financial data of ECEC level is limited in certain private institutions.

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

- Intergenerational mobility is strong in Korea. Among adults whose both parents have below upper secondary education, 27% have attained tertiary education, a proportion below Canada, Denmark and New Zealand. Among adults whose at least one parent attained upper secondary or post-secondary non-tertiary education, the proportion of tertiary-educated reaches 53%, only below Italy.
- Individuals who attained a tertiary qualification can expect to earn 45% more than those with only upper secondary education, slightly below the OECD average of 55%. By contrast, bachelor's and master's degrees result in earning premiums of 49% and 98% respectively, above the OECD averages (45% and 91%). The premium for short-cycle tertiary is at 16%, below the OECD average of 23%.
- The employment rate of tertiary-educated 25-64 year-olds is high at 77%, but below the OECD average of 85%. The employment rate is 75% for tertiary-educated 25-34 year-olds and 71% for 55-64 year-olds, both below the corresponding OECD averages of 85% and 73%.

Government expenditure on educational institutions increased over the last decade and is now at the level of the OECD average. However, household expenditure still accounts for 45% of tertiary institutions funding

- In 2015, total expenditure on primary to tertiary education is 5.8% in Korea, 0.8 percentage points above the OECD average. Across all levels of education, 4.0% of this investment is dedicated to primary, secondary and post-secondary non-tertiary education, and 1.8% to tertiary education (Table 1).
- Of this total investment, government expenditure on primary to tertiary education amount 4.4% of GDP, similar to the OECD average of 4.2%. Primary, secondary and post-secondary non-tertiary education receive 3.5% of government expenditure as percentage of GDP, higher than the OECD average of 3.2%, whereas 0.9% is dedicated to tertiary level, lower than the OECD average of 1.0%.

Table 1 Total expenditure on educational institutions as a percentage of GDP, by source of funds (2015)

	Primary, secondary and post-secondary non-tertiary			Tertiary			Primary to tertiary		
	Initial funds excluding student loans and international sources of fund		Total	Initial funds excluding student loans and international sources of fund		Total	Initial funds excluding student loans and international sources of fund		Total
	Government	Private		Government	Private		Government	Private	
Korea ¹	3.5	0.5	4.0	0.9	0.9	1.8	4.4	1.4	5.8
OECD average ²	3.2	0.3	3.5	1.0	0.5	1.5	4.2	0.8	5.0

1. Educational levels below tertiary education (ISCED 0-4) include about 4.7 trillion KRW of carryovers from previous years.

2. OECD averages of primary, secondary and post-secondary non-tertiary are values from the Table C2.2 that include student loans and funds from international sources.

- Private expenditure on tertiary education in percentage of GDP declined in Korea by 1.0 percentage point between 2010 and 2015 (from 1.9% in 2010 to 0.9% of GDP in 2015) partly led by the 2012 reform of National Scholarships³. However, household expenditure in Korea still accounts for a large proportion of the funding of tertiary educational institutions. In tertiary education, nearly half (45%) of total tertiary education expenditure is funded by households, compared with 22% on average among OECD countries.
- In public institutions, annual average tuition fees in 2016 at bachelor's or equivalent level amounts to an average of USD 4 712 in Korea, below Australia, Canada, Chile, England, Japan and the United States. At master's or

³ National scholarships have been offered since 2012 by combining and expanding the existing scholarships for low-income students. The annual budget for government-funded scholarships such as the national scholarships has increased every year and reached almost eight times the 2011 value in 2016.

equivalent level, fees average USD 6 215 (only less than in Australia, Chile and the United States), and at doctoral or equivalent level they average USD 6 970 (only less than in Chile and the United States).

- Private institutions charge higher tuition fees than public institutions, in Korea as well as in most other countries with available data. Thus, fees at bachelor's or equivalent level average USD 8 419 per year in 2016 in Korea (only less than in Australia and the United States). At master's or equivalent level, they average USD 11 426 (only less than in the United States) and at doctoral or equivalent level, they average USD 12 175 (only less than in the United States).

General programmes are more conventional option than vocational programmes for upper secondary students in Korea

- In Korea, the share of graduates in vocational programmes is 18%, the second lowest proportion among the OECD countries. If current pattern continues, only 17% of young adults will graduate from vocational programmes, the lowest rate among the OECD countries.
- Among the OECD, on average, the unemployment of the tertiary educated (5.7%) is lower than the unemployment rate of the upper secondary or post-secondary non-tertiary educated (7.8%). The same pattern applies to Korea, but the gap between the unemployment rate of the tertiary educated (6.6%) and the upper secondary or post-secondary non-tertiary educated (7.0%) is 0.4%, one of the lowest differences among the OECD countries.

Gender gaps in education and employment persist in Korea, as in many other OECD countries

- As in many other OECD countries, the distribution of students across fields of education shows significant gender disparity in Korea. For example, 1% of female graduates study information and communication technologies (ICT), and 5% natural sciences, mathematics and statistics, close to the corresponding OECD averages. However, 9% of women study engineering, manufacturing and construction, one of the largest shares among OECD countries, below Greece, Poland, Portugal, Mexico and Sweden.
- Between 2005 and 2016, the share of female new entrants in tertiary education increased by 6 percentage points, one of the largest increases among OECD countries. At this level, women are more likely to enter the fields of health and welfare (22%) whereas men tend to enter the fields of engineering, manufacturing and construction (34%).
- Employment rate of male with tertiary education (81%) is 13 percentage points higher than that of female (69%) with the same educational attainment in 2017. Among OECD countries, on average, employment rates of male and female with tertiary education were 89% and 80% respectively with a difference of 9 percentage points. These differences could be explained by the fact that women are more likely to be inactive than men, even with tertiary education. In Korea, the difference in inactivity rates between tertiary-educated men and women is 26 percentage points, significantly above the OECD average of 8%.
- As in most other OECD countries, women earn less than men with the same educational attainment in Korea. On average, across OECD countries, women with upper secondary or post-secondary non-tertiary education or below earn 22% less than men with the same educational attainment. Tertiary-educated women earn 26% less on average across OECD than men with similar educational attainment. In Korea, differences in earnings between women and men are particularly wide among those without upper secondary and those with secondary or post-secondary non-tertiary education as they earn respectively 30% and 35% less than men with equivalent educational attainment. Tertiary educated women earn 28% less than men with similar educational attainment, a proportion slightly higher than the OECD average.

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This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

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>.

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=KOR&treshold=10&topic=EO>.

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Key Facts for Korea in Education at a Glance 2018

Source	Main topics in <i>Education at a Glance</i>	Korea		OECD average	
	Equity				
	Educational attainment of 25-34 year-olds by gender	2017			
		% Men	% Women	% Men	% Women
Table A1.2	Below upper secondary	2%	2%	17%	14%
	Upper secondary or post-secondary non-tertiary	33%	23%	46%	37%
	Tertiary	65%	75%	38%	50%
	Percentage of 15-29 year-olds NEETs by country of birth	2017			
Table A2.3	Native-born	**		13%	
	Foreign-born	**		18%	
	Employment rates of native- and foreign-born 25-64 year-olds, by educational attainment	2017			
		Native-born	Foreign-born	Native-born	Foreign-born
Table A3.4	Below upper secondary	**	**	56%	60%
	Upper secondary or post-secondary non-tertiary	**	**	76%	72%
	Tertiary	**	**	87%	79%
	Earnings of 25-64 women relative to men, by educational attainment	2016			
Table A4.3	Below upper secondary	70%		78%	
	Upper secondary or post-secondary non-tertiary	65%		78%	
	Tertiary	72%		74%	
	Share of girls among repeaters in secondary general programmes	2016			
Table B1.3	Lower secondary	46%		39%	
	Upper secondary	37%		42%	
	Percentage of women and men entering doctoral programmes by field of study	2016			
		% Men	% Women	% Men	% Women
Table B4.1	Natural sciences, mathematics and statistics	14%	10%	22%	20%
	Engineering, manufacturing and construction	34%	10%	22%	10%
	Health and welfare	12%	22%	12%	19%
	First-time tertiary graduates	2016			
Table B5.1	Share of female first-time tertiary graduates	**		57%	
	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	50%		49%	
	Participation of foreign-born adults who arrived in the country at 26 or older	**		48%	
	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	97%		76%	
	Share of children enrolled in pre-primary education (ISCED 02), by type of institution	2016			
Table B2.2	Public institutions	21%		68%	
	Private institutions	79%		32%	
	Expenditure on pre-primary level (ISCED 02)	2015			
Table B2.3a	Annual expenditure per child in USD (converted to PPPs)	USD 7 814		USD 8 426	
	Vocational education and training (VET)				
	Percentage of upper secondary students enrolled in vocational education, by programme orientation	2016			
Table B1.3	All vocational programmes	18%		44%	
	Combined school- and work-based programmes	**		11%	
	Share of women among upper secondary graduates, by programme orientation	2016			
Figure B3.1	General programmes	49%		54%	
	Vocational programmes	44%		46%	
	Total expenditure on upper secondary educational institutions per full-time equivalent student, by programme orientation	2015			
Table C1.1	General programmes	**		USD 8 981	
	Vocational programmes	**		USD 10 831	
	Tertiary education				
	Share of international or foreign students, by education level²	2016			
Table B6.1	Bachelor's or equivalent	2%		4%	
	Master's or equivalent	7%		12%	
	Doctoral or equivalent	9%		26%	
	All tertiary levels of education	2%		6%	
	Share of first-time tertiary graduates by education level	2016			
Table B5.1	Short-cycle tertiary	**		14%	
	Bachelor's or equivalent	**		75%	
	Master's or equivalent	**		10%	
	Employment rate of 25-64 year-olds, by educational attainment	2017			
Table A3.1	Short-cycle tertiary	77%		81%	
	Bachelor's or equivalent	78%		84%	
	Master's or equivalent	**		88%	
	Doctoral or equivalent	**		92%	
	All tertiary levels of education	77%		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	116		123	
	Bachelor's or equivalent	149		145	
	Master's, doctoral or equivalent	198		191	
	All tertiary levels of education	145		155	

Source	Main topics in <i>Education at a Glance</i>	Korea		OECD average	
Financial resources invested in education					
Total expenditure on educational institutions per full-time equivalent student, by level of education (in equivalent USD, using PPPs)					
2015					
Table C1.1	Primary	USD 11 047		USD 8 539	
	Secondary	USD 12 202		USD 9 868	
	Tertiary (excluding R&D activities)	USD 8 141		USD 11 049	
Total expenditure on primary to tertiary educational institutions					
2015					
Table C2.1	As a percentage of GDP	5.8%		5.0%	
Share of expenditure on tertiary educational institutions by source of funds³					
2015					
Figure C3.1	Public expenditure	**		73%	
	Private expenditure	**		21%	
	Public to private transfers	**		6%	
Total public expenditure on primary to tertiary education					
2015					
Table C4.1	As a percentage of total government expenditure	14%		11.1%	
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					
2016					
		Teachers	School heads	Teachers	School heads
Table D3.2a	Pre-primary	**	**	0.82	**
	Primary	**	**	0.86	1.21
	Lower secondary (general programmes)	**	**	0.91	1.34
	Upper secondary (general programmes)	**	**	0.96	1.42
2017					
Annual statutory salaries of teachers in public institutions, based on most prevalent qualifications, at different points in teachers' careers (in equivalent USD, using PPPs)					
		Starting salary	Salary after 15 years of experience	Starting salary	Salary after 15 years of experience
Table D3.1a	Pre-primary	USD 30 395	USD 53 405	USD 30 229	USD 40 436
	Primary	USD 30 395	USD 53 405	USD 31 919	USD 44 281
	Lower secondary (general programmes)	USD 30 455	USD 53 465	USD 33 126	USD 46 007
	Upper secondary (general programmes)	USD 29 738	USD 52 747	USD 34 534	USD 47 869
2017					
Organisation of teachers' working time in public institutions over the school year					
		Net teaching time	Total statutory working time	Net teaching time	Total statutory working time
Table D4.1	Pre-primary	543 hours	1 520 hours	1 029 hours	1 628 hours
	Primary	671 hours	1 520 hours	778 hours	1 620 hours
	Lower secondary (general programmes)	533 hours	1 520 hours	701 hours	1 642 hours
	Upper secondary (general programmes)	551 hours	1 520 hours	655 hours	1 638 hours
Percentage of teachers who are 50 years old or over					
2016					
Table D5.1	Primary to upper secondary	23%		35%	
Share of female teachers, in public and private institutions					
2016					
Table D5.2	Primary	78%		83%	
	Lower secondary	70%		69%	
	Upper secondary	51%		60%	
	Tertiary	35%		43%	
Average class size by level of education					
2016					
Table D2.1	Primary	23		21	
	Lower secondary	28		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>.