COUNTRY NOTE

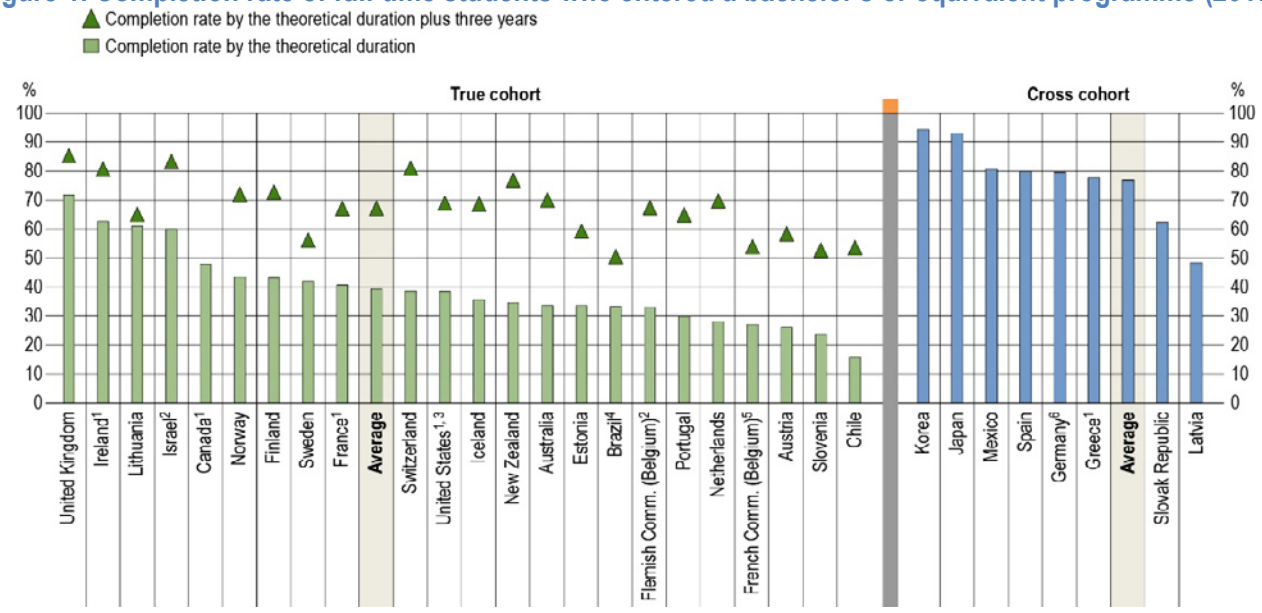
EDUCATION AT A GLANCE 2019

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.

Israel

- **A large share of Israeli students who enter a bachelor's programme graduate by the end of the theoretical duration of the programme they entered.** However, Israel's historically above-average share of tertiary-educated adults is losing ground among younger adults, where the gap with the OECD average is only 4 percentage points.
- Compulsory education starts at just 3 years old in Israel. The country **also emphasises the early stages of early childhood education and care (ECEC), with 47% of children under 2 enrolled in an ECEC services in 2017**, compared to 24% on average across OECD countries.
- Military service in Israel affects international comparisons of the enrolment rate of young adults. **In Israel, 70% of young people leave education between the ages of 18 and 24**, the highest rate across OECD countries.
- Among OECD countries, **Israel spends one of the highest share of its gross domestic product (GDP) on primary, secondary and post-secondary non-tertiary education**
- **About three-quarter of Israeli teachers are under 50 years old compared 64% on average across OECD countries.** This may be associated with the reforms in Israel to increase teachers' salaries in order to attract top talent.

Figure 1. Completion rate of full-time students who entered a bachelor's or equivalent programme (2017)



Note: For countries with true cohort data, the completion includes students who transferred and graduated from another tertiary level.

1. Year of reference differs from 2017. Refer to the source table for details.
2. Completion rate of students who entered a bachelor's programme does not include students who transferred and graduated from short-cycle programmes.
3. The theoretical duration plus 3 years refers to the theoretical duration plus 2 years.
4. Data do not include entrants to 6-year bachelor's programmes, which correspond to about 2% of total entrants at this level.
5. Data refer only to the hautes écoles (HE) and the écoles des arts (ESA), representing about 60% of entrants to bachelor's or equivalent programmes

Countries and economies are ranked in descending order of completion rate by theoretical duration (true cohort) or cross cohort.

Source: OECD (2019), Table B5.1. See Source section for more information and Annex 3 for notes (https://doi.org/10.1787/f8d7880d-en).

Tertiary completion rates are high, but tertiary attainment rates for younger adults are not as far above average as for the older generation

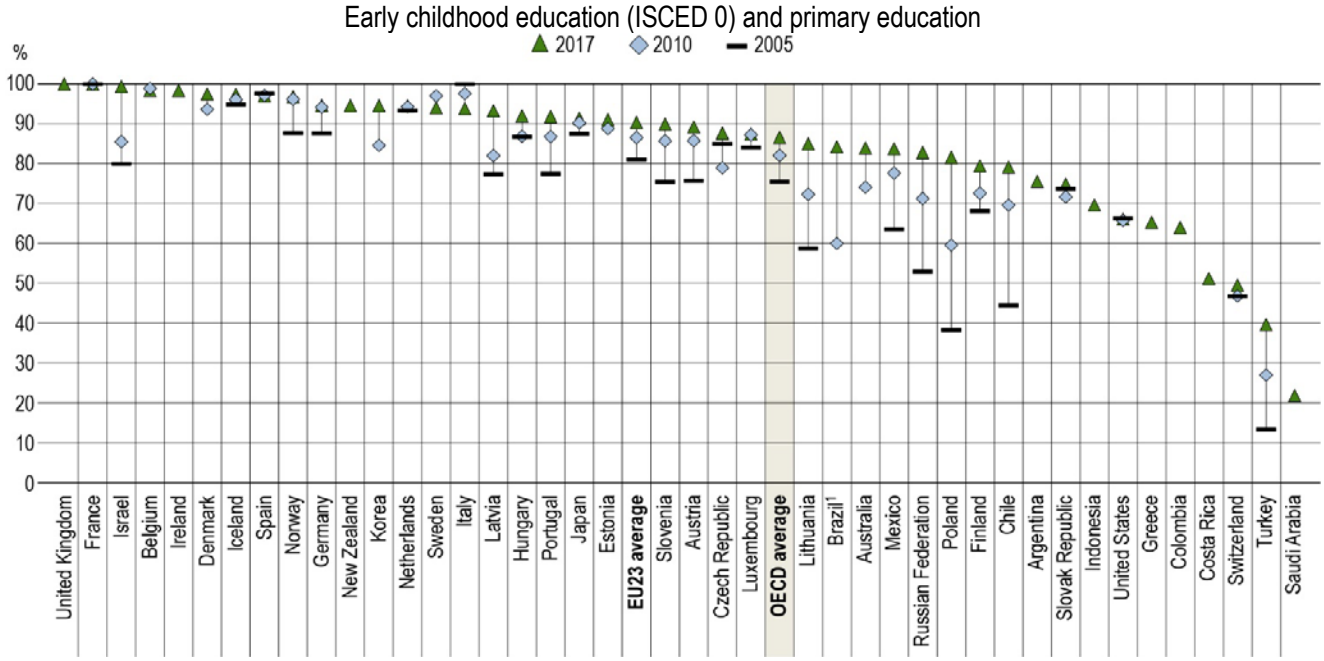
- As Figure 1 shows, a large proportion of Israeli students who enter a bachelor's programme graduate by the end of the theoretical duration of the programme they entered. In Israel, the share is 60% compared with 39% on average across countries and economies with true cohort data available (longitudinal data following individual students through time). In Israel, an additional 23% of students will graduate three years after the end of the theoretical duration of the programme they entered, reaching a graduation rate of 83%. In comparison, on average across OECD countries and economies with data, the graduation rate increases from 39% by the end of the duration of the programme to 67% three years later.
- In Israel, the completion rate of full-time students with a general upper secondary education who entered a bachelor's programme is slightly higher than for students with a vocational upper secondary education (62% compared with 57%). This difference narrows when considering the completion rate after three additional years, to 84% and 82%.
- As for most other countries with true cohort data, the percentage of women who enter a bachelor's programme and complete any tertiary programme is higher than the percentage of men (64% compared to 55%). After three additional years, the completion rate raises to 87% for women and 79% for men, with the gender gap remaining significant.
- In 2018, 48% of 55-64 year-olds in Israel had completed a tertiary degree compared to only 27% on average across OECD countries. The difference among 25-34 year-olds is much smaller: 48% in Israel against 44% on average across OECD countries. Tertiary attainment rates among 25-34 year-olds are increasing rapidly in many OECD countries. Between 2008 and 2018, the share of tertiary-educated 25-34 year-olds increased by 6 percentage points in Israel, from 42% in 2008 to 48% in 2018. In comparison, the average increase across OECD countries was 9 percentage points over the same period, from 35% in 2008 to 44% in 2018.
- While tertiary attainment among younger adults has risen in Israel for both men and women between 2008 and 2018, the gender gap in favour of women has widened from 13 percentage points in 2008, to 20 percentage points in 2018. Across the OECD, the gender gap in tertiary attainment among young adults has increased from 9 percentage points in 2008 to 13 percentage points in 2018.
- Students' choice of field of study is guided by career opportunities and aspirations. While business, administration and law is the most popular broad field of study at bachelor's or equivalent level across OECD countries, a larger share of Israeli students enrol in social sciences, journalism and information. In Israel, 24% of new entrants at bachelor's level enrolled in this field of study compared to 11% on average across OECD countries. Education has the second highest share of students in Israel, attracting 16% of bachelor's students, compared to 8% on average across OECD countries. This larger share could be related to the "New Horizon" reform that has helped to enhance the attractiveness of the teaching profession.
- Business, administration and law attracted 15% of new entrants in Israel compared to 22% on average across OECD countries. Health and welfare was also less popular in Israel than other OECD countries, accounting for 7% of bachelor's students in Israel, much lower than the OECD average of 13%.
- Despite their prevalence, tertiary-educated adults enjoy good labour-market prospects in Israel. Unemployment has declined to levels close to full employment, and labour shortages are spreading to all sectors in the economy and are not limited to the high-tech sectors and high-skilled workers as was the case in previous years (OECD, 2018[2]). In 2018, the unemployment rate for tertiary-educated adults was 4% in Israel compared to 6% on average across OECD countries. The advantage of completing tertiary education is most evident in the area of earnings. In Israel, tertiary-educated adults earn 56% more than upper secondary graduates, a figure that is almost on a par with the OECD average. Those with a doctoral degree or equivalent have higher earning premiums than across OECD countries: 102% more than upper secondary graduates, compared to 91% on average across OECD countries.

- In 2017, Israel attracted 11 000 foreign students, representing 3% of all tertiary students in the country. However, Israel attracts fewer students from abroad than it sends. There is less than 1 foreign student in Israel (0.74) for each national student abroad, much lower than on average across OECD countries (4:1). Most foreign students in Israel come from the United States (20%), the Russian Federation (14%) and France (10%) and.

Participation in early childhood education and care is high and keeps increasing

- Economic prosperity depends on maintaining a high employment-to-population ratio, and the increasing number of women entering the labour market has contributed to greater government interest in expanding early childhood education and care (ECEC) services. ECEC is considered fundamental to building the foundations of cognitive development and helps mitigate the effect of inequalities later on in life. Israel has a long history of early childhood education. Kindergartens played an important role in helping to develop a unified identity amongst children who emigrated from different countries. Since 1984, compulsory education has started at the age of 3 in Israel.

Figure 2. Change in enrolment rates of children aged 3 to 5 years (2005, 2010 and 2017)



Countries are ranked in descending order of the enrolment rates of 3-5 year-olds in 2017.
1. Year of reference 2012 instead of 2010
Source: OECD (2019), Table B2.2. See Source section for more information and Annex 3 for notes (https://doi.org/10.1787/f8d7880d-en).

- The importance placed on ECEC in Israel is reflected in the data as the country has one of the highest enrolment rates of 3-5 year-olds across OECD countries (Figure 2). It is also one of the OECD countries with the strongest increase between 2005 and 2017, going from an enrolment rate of 80% in 2005 to almost 100% in 2017. This change can be explained by the implementation of the recommendation of the Trachtenberg Committee which was appointed on August 2011 in order to examine and propose solutions to Israel's socio-economic problems. One of its recommendations referred to expanding free education to start as early as the age of 3.
- Participation in high-quality ECEC can have a positive effect on children's well-being, learning and development in the first years of their lives. The data show Israel emphasises the early stages of ECEC as 47% of children under 2 were enrolled in an ECEC services in Israel in 2017, compared to 24% on average across OECD countries, and 31% of children under 1, more than 3 times the OECD average of

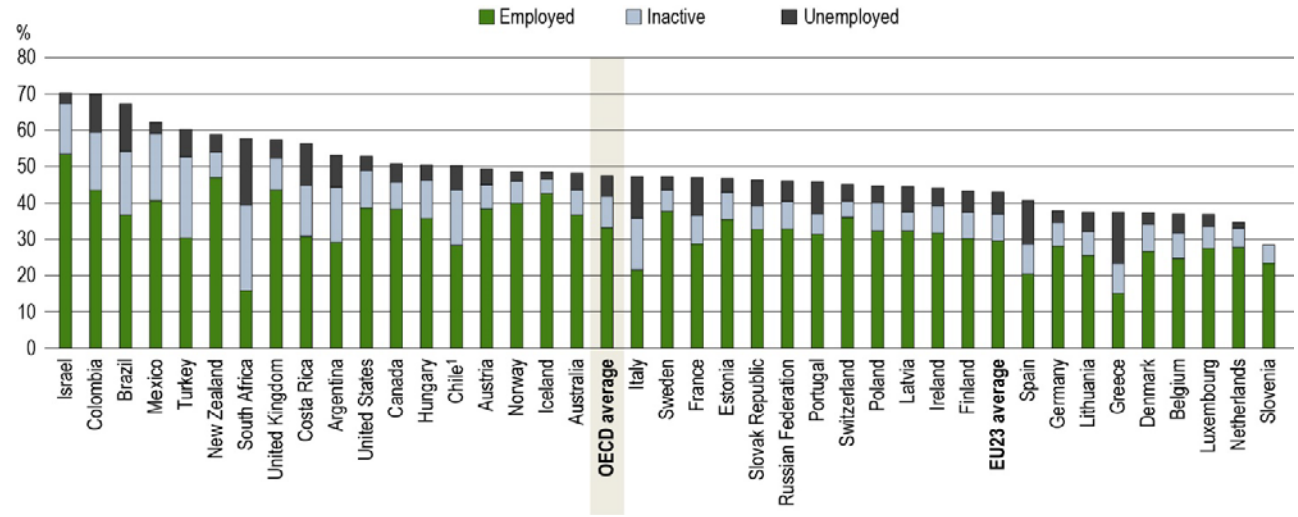
9%. Consequently, the enrolment of children under 3 is in Israel is much higher than other OECD countries: 56% attend ECEC settings in Israel compared to 36% on average across OECD countries.

- On average across OECD countries, less than half of the children in early childhood educational development programmes (ISCED 01) are enrolled in private institutions; in Israel this provision is 100% private. The governance structure changes significantly between ISCED 01 and pre-primary education (ISCED 02). At pre-primary level, a smaller share of children attend private institutions: 36% of children are enrolled in private institutions in Israel, similar to the average share across OECD countries (34%).
- Sustained public financial support is critical for the growth and quality of ECEC programmes. Appropriate funding helps to recruit trained staff who are qualified to support children's cognitive, social and emotional development. Total expenditure on ECEC services in Israel amounts to 1.2% of GDP, more than the OECD average (0.8% of GDP), despite annual expenditure per child (USD 4 568[1]) being half the amount spent on average across OECD countries (USD 8 605).

Lower education enrolment rates among younger adults is associated with Israel's military service

- Military service in Israel lasts almost three years for men and two years for women, affecting international comparisons of the enrolment rates of young adults. In 2017, 66% of 15-19 year-olds were considered students in Israel compared to 84% on average across OECD countries. Among 20-24 year-olds, the share of students is 21% in Israel against an OECD average of 42%. These lower shares are partly explained by young adults delaying their enrolment due to military service. Similarly, the above-average share of students among 25-29 year-olds in Israel is explained by end of the military service. Among this age group, 20% are still studying while on average across OECD countries this share is 16%.

Figure 3. Percentage of 18-24 year-olds not in education, by labour-market status (2018)



1. Year of reference differs from 2018. Refer to the source table for more details.
Countries are ranked in descending order of the total percentage of 18-24 year-olds not in education.
Source: OECD (2019), Table A2.1. See Source section for more information and Annex 3 for notes (https://doi.org/10.1787/f8d7880d-en).

- In Israel, 70% of young people leave education between the age of 18 and 24, the highest rate across OECD countries (see Figure 3). Among 18-24 year-olds, 16.9% are neither in education nor in employment or training (NEET) and 53% are not in education and employed – the highest share across OECD countries, where the average is 33%. This is explained by the fact that conscripts into the army

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

are considered to be employed. Israelis aged 18-24 who leave education mostly enter military service or the labour market. This particular situation in Israel also helps to explain why 18-24 year-olds have one of the lowest share of unemployed across OECD countries: 2.8% are not in education and unemployed compared to 5.7% on average.

- In a large number of OECD countries, the majority of female NEETs are inactive (no longer looking for work), and a larger share of male NEETs are unemployed. In Israel, the majority of 18-24 year-olds NEETs are inactive for both genders (15.4% of young women and 12.6% of young men are not in education and inactive), above the OECD average of 10.8% of women and 6.5% of men. The remaining NEETs, 2.4% of women in that age group and 3.2% of men, are unemployed, below the OECD averages of 5.0% and 6.4% respectively.

Israel's expenditure on education is very high in relation to GDP but expenditure per student is still below the OECD average

- Israel spends one of the highest shares of its GDP on education across all levels from primary to tertiary, and the highest share, after New Zealand and Norway, when considering primary, secondary and post-secondary non-tertiary education. Israel spends the equivalent of 6.0% of its GDP on primary to tertiary education: 4.5% on non-tertiary education (above the OECD average of 3.5%), and 1.4% on tertiary education, almost on a par with the OECD average of 1.5%. Over the period 2010-16 total expenditure on education as a share of GDP increased by 8%, the highest across all OECD countries.
- However Israel spends less on education per student than most other OECD countries. Israel spends a total of USD 8 891 per student per year compared to USD 10 502 on average across OECD countries. Spending per student on tertiary education is well below the OECD average (at USD 11 153 versus USD 15 556). Despite a sharp increase since 2010, expenditure on primary, secondary and post-secondary non-tertiary education is also below the OECD average: USD 8 365 in Israel versus USD 9 357 on average across OECD countries.
- Between 2010 and 2016, expenditure on primary, secondary and post-secondary non-tertiary education grew by 42% in Israel compared to only 5% on average across OECD countries. The number of students grew by 14% over the same period in Israel while it remained stable on average across OECD countries. These trends result in a larger increase in expenditure per student in Israel (25%) than on average across OECD countries (5%). This means that Israel is on course to catch up with the OECD average if the country keeps increasing its spending per student.
- In Israel, 19% of expenditure on educational institutions is private, slightly above the OECD average of 17%. The largest difference in public and private expenditure is at the tertiary level, where private investment covers 44% of tertiary education compared to the OECD average of 32%.

Teachers' salaries have significantly increased in recent years, contributing to the efforts to replace retiring teachers with top talent

- With large proportions of teachers in many OECD countries set to reach retirement age in the next decade, governments will be under pressure to recruit and train new teachers. The situation in Israel is less pressing as the share of teachers aged 50 years or over is 26%, below the OECD average of 36%. Nevertheless, given the compelling evidence that the calibre of teachers is the most significant in-school determinant of student achievement, concerted efforts must be made to attract top talent to the teaching profession and provide high-quality training.
- Since 2005, teachers' salaries in Israel have increased significantly due to the application of education reforms: 56% in pre-primary education, 40% in primary education, 52% in lower secondary education and 50% in upper secondary education. In comparison, on average across OECD countries the increases were 10% in primary, 9% in lower secondary and 6% in upper secondary education.

- In Israel the salaries of teachers with 15 years of experience and the most prevalent qualifications are about 5% higher for pre-primary teachers than for upper secondary teachers. This difference is due to the "New Horizon" reform, begun in 2008 and almost fully implemented by 2014, which increased salaries for pre-primary, primary and lower secondary teachers. Another reform, launched in 2012 and still being implemented, aims to raise salaries for upper secondary teachers.

References

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

OECD (2018), *OECD Economic Surveys: Israel 2018*, OECD Publishing, Paris, https://dx.doi.org/10.1787/eco_surveys-isr-2018-en. [2]

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/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: EducationGPS

http://gpseducation.oecd.org/CountryProfile?primaryCountry=ISR&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 Israel in Education at a Glance 2019

Source	Main topics in *Education at a Glance*	Israel		OECD average	
Tertiary education					
	Educational attainment of 25-64 year-olds	**2018**			
Table A1.1	Short-cycle tertiary	14%		7%	
	Bachelor's or equivalent	23%		17%	
	Master's or equivalent	12%		13%	
	Doctoral or equivalent	1%		1%	
	Tertiary attainment of 25-34 year-olds, by gender	**2008**	**2018**	**2008**	**2018**
Table A1.2	Men	36%	38%	31%	38%
	Women	49%	58%	40%	51%
	Total	42%	48%	35%	44%
	Distribution of first-time tertiary entrants by education level	**2017**			
Table B4.1	Short-cycle tertiary	26%		17%	
	Bachelor's or equivalent	74%		76%	
	Master's or equivalent	**		7%	
	Share of international or foreign students, by education level[1]	**2017**			
Table B6.1	Bachelor's or equivalent	3%		4%	
	Master's or equivalent	4%		13%	
	Doctoral or equivalent	7%		22%	
	All tertiary levels of education	3%		6%	
	Employment rate of 25-64 year-olds, by educational attainment	**2018**			
Table A3.1	Short-cycle tertiary	84%		82%	
	Bachelor's or equivalent	87%		84%	
	Master's or equivalent	90%		88%	
	Doctoral or equivalent	93%		92%	
	All tertiary levels of education	87%		85%	
	Employment rate of tertiary-educated 25-64 year-olds, by field of study	**2018**			
Table A3.4	Education	**		84%	
	Business and administration and law	**		86%	
	Engineering, manufacturing and construction	**		89%	
	Health and welfare	**		87%	
	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	110		120	
	Bachelor's or equivalent	151		144	
	Master's, doctoral or equivalent	202		191	
	All tertiary levels of education	156		157	
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	44%		41%	
	Percentage of first-time upper secondary graduates with a vocational qualification	**2017**			
Table B3.1	Vocational programmes	42%		40%	
	Age at graduation from upper secondary education, by programme orientation	**2017**			
Figure B3.1	General programmes	17		18	
	Vocational programmes	17		21	
	Share of women among upper secondary graduates, by programme orientation	**2017**			
Figure B3.2	General programmes	51%		55%	
	Vocational programmes	50%		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	71%		78%	
	Unemployment rate	6%		7%	
	Inactivity rate	25%		16%	
	Total expenditure on upper secondary educational institutions, in USD[2] per full-time equivalent student, by programme orientation	**2016**			
Table C1.1	General programmes	USD 6 286		USD 9 397	
	Vocational programmes	USD 16 115		USD 10 922	
Early childhood education and care (ECEC)					
	Enrolment rate of 3-5 year-olds in education	**2017**			
Table B2.2	ECEC and primary education	99%		87%	
	Share of children enrolled in private institutions	**2017**			
Table B2.3	Pre-primary level (ISCED 02)	36%		34%	
	Ratio of children to teaching staff	**2017**			
Table B2.3	Pre-primary level (ISCED 02)	22		16	
	Expenditure on children aged 3-5 enrolled in education	**2016**			
Table B2.4	Annual expenditure per child, in USD[2] per child	USD 5 469		USD 8 141	

Source	Main topics in *Education at a Glance*	Israel		OECD average	
Social outcomes and adult learning					
	Participation in formal and/or non-formal education, by educational attainment	**2016**			
Table A7.1	Below upper secondary	22%		n.a.	
	Upper secondary or post-secondary non-tertiary	43%		n.a.	
	Tertiary	68%		n.a.	
	Participation in cultural or sporting activities in the last 12 months, by educational attainment	**2017**			
Table A6.1	Below upper secondary	**		n.a.	
	Upper secondary or post-secondary non-tertiary	50%		n.a.	
	Tertiary	61%		n.a.	
Financial resources invested in education					
	Total expenditure on educational institutions, by level of education[2]	**2016**			
		USD/student	**% GDP**	**USD/student**	**% GDP**
Table C1.1 and C2.1	Primary	USD 8 498	2.4%	USD 8 470	1.5%
	Lower secondary	**	**	USD 9 884	0.9%
	Upper secondary	USD 8 330	2.1%	USD 10 368	1.1%
	Tertiary (including R&D)	USD 11 153	1.4%	USD 15 556	1.5%
	Share of expenditure on educational institutions, by final source of funds	**2016**			
		Public	**Private**	**Public**	**Private**
Table C3.1	Primary, secondary and post-secondary non-tertiary	89%	11%	90%	10%
	Tertiary (including R&D)	56%	44%	66%	32%
	Total public expenditure on primary to tertiary education	**2016**			
Table C4.1	As a percentage of total government expenditure	12.9%		10.8%	
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**			
		Teachers	**School heads**	**Teachers**	**School heads**
Table D3.2a	Pre-primary	0.85	**	0.78	**
	Primary	0.88	1.6	0.84	1.25
	Lower secondary (general programmes)	0.96	1.56	0.88	1.34
	Upper secondary (general programmes)	0.94	1.65	0.93	1.43
	Annual statutory salaries of teachers in public institutions, based on most prevalent qualifications, at different points in teachers' careers[2]	**2018**			
		Starting salary	**Salary after 15 years of experience**	**Starting salary**	**Salary after 15 years of experience**
Table D3.1a	Pre-primary	USD 24 352	USD 35 025	USD 31 276	USD 42 078
	Primary	USD 21 276	USD 31 532	USD 33 058	USD 45 947
	Lower secondary (general programmes)	USD 21 389	USD 34 860	USD 34 230	USD 47 675
	Upper secondary (general programmes)	USD 22 629	USD 33 449	USD 35 859	USD 49 804
	Organisation of teachers' working time in public institutions over the school year	**2018**			
		Net teaching time	**Total statutory working time**	**Net teaching time**	**Total statutory working time**
Tables D4.1a and D4.1b	Pre-primary	1 029 hours	1 066 hours	1 024 hours	1 613 hours
	Primary	843 hours	1 235 hours	783 hours	1 612 hours
	Lower secondary (general programmes)	696 hours	1 178 hours	709 hours	1 634 hours
	Upper secondary (general programmes)	623 hours	1 195 hours	667 hours	1 629 hours
	Percentage of teachers who are 50 years old or over	**2017**			
Table D5.1	Primary to upper secondary	26%		36%	
	Share of female teachers, in public and private institutions	**2017**			
Table D5.2	Primary	85%		83%	
	Lower secondary	79%		69%	
	Total number of compulsory instruction time, by level of education	**2019**			
Table D1.1	Primary	5 751 hours		4 568 hours	
	Lower secondary	2 952 hours		3 022 hours	
	Upper secondary	2 800 hours		**	
	Average class size by level of education	**2017**			
Table D2.1	Primary	27		21	
	Lower secondary	28		23	

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

** 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.