

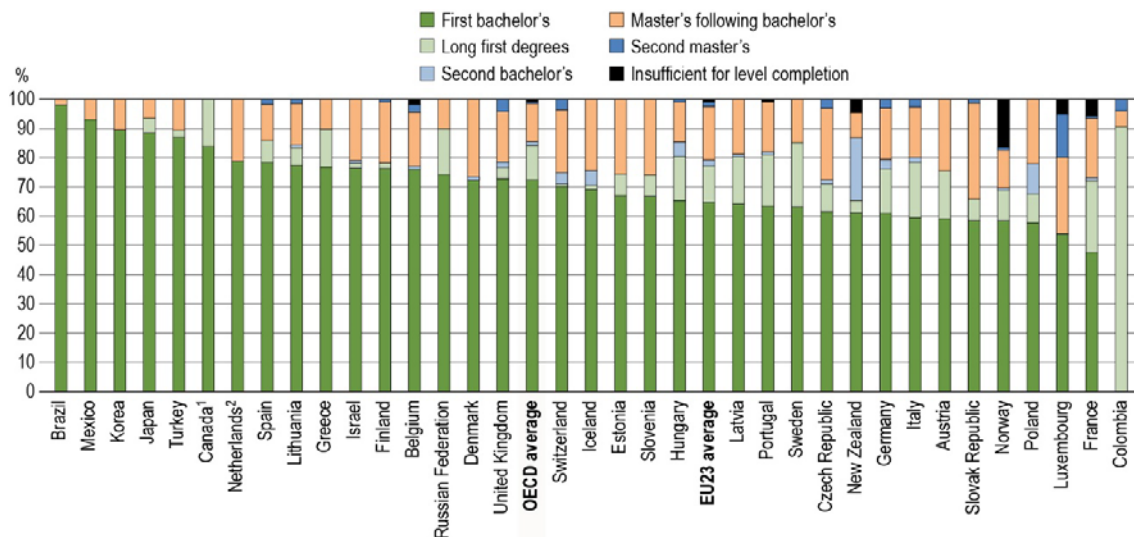
Education at a Glance: OECD Indicators (OECD, 2019^[1]) is the authoritative source for information on the state of education around the world. It provides data on the structure, finances and performance of education systems in OECD and partner countries.

Luxembourg

- A master's degree is the commonest qualification held by tertiary-educated adults in Luxembourg. **The employment advantage of a master's degree over a bachelor's is double the OECD average.**
- Participation by tertiary-educated adults in formal and/or non-formal education and training in Luxembourg is significant. **Luxembourg has one of the highest shares of participating adults who are in non-job-related education** among countries with available data.
- While Luxembourg reports higher levels of work-life balance than on average, **work-life balance decreases with higher educational attainment**, a similar trend to other countries.
- In primary and secondary education in Luxembourg, **the share of instruction time devoted to learning second and other languages is the highest among OECD countries.**

Figure 1. Share of bachelor's and master's students by educational programme (2017)

Students in full-time and part-time programmes in both public and private institutions



Note: Long first degrees and programmes insufficient for level completion include programmes classified at both bachelor's and master's levels.

1. Excludes private institutions at short-cycle tertiary level.

2. Master's following a bachelor's programme include second or further bachelor's degrees.

Countries are ranked in descending order of the share of students enrolled in first bachelor's degrees or equivalent programmes.

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

Tertiary-educated adults are most likely to hold a master's degree, which offers good employment prospects

- In Luxembourg, a master's or equivalent degree is the commonest tertiary qualification: 22% of 25-64 year-olds have a master's degree; above the OECD average of 13%. In addition to first master's programmes, students in Luxembourg are more likely to enrol in a second master's. Among master's and bachelor's students in Luxembourg, 26% enrol in a master following a bachelor, double the OECD average and 15% enrol in second or further degree programmes, the highest rate among countries with available data, while the OECD average stands at 1% (Figure 1).
- Adults with the most advanced qualifications (master's and doctoral or equivalent degrees) have the best employment prospects. In Luxembourg, employment rates are 8 percentage points higher for those with a master's degree than those with a bachelor's, double the OECD average employment advantage.
- Luxembourg's tertiary education system is characterised by the largest share of international tertiary students in the OECD (47%, compared with 6% on average), most of whom come from neighbouring countries (58%). It also has the largest share of national tertiary students enrolled abroad (75% against an average of 2% across OECD countries). Despite the recent creation of the University of Luxembourg (established in 2003), Luxembourg's tertiary education system is very attractive, with 22 international students for every 100 national tertiary students home and abroad, just behind Australia (27) and New Zealand (24).
- The share of adults who have studied business, administration and law is expanding: 44% of tertiary graduates in 2017 had studied this broad field, compared to 36% for the overall tertiary-educated adult population. In contrast, across OECD countries, this field has remained constant, accounting for 24% of both recent tertiary graduates and all tertiary-educated adults. The pattern for upper secondary vocational graduates is similar: 33% graduated in business, administration and law in Luxembourg in 2017, one of the highest shares among OECD countries alongside Germany (33%) and Switzerland (34%), against 18% on average.
- In contrast, doctoral students tend to specialise in the science and technology-related fields of study. Natural sciences, mathematics and statistics attracted the largest share of doctoral graduates – 23% in Luxembourg, on par with the OECD average. Information and communication technologies (ICT) was the second favourite, with more than 22% of doctoral students, against an OECD average of 4%. In contrast, business, administration and law, which accounted for the largest share of graduates at bachelor's and master's level, represents 13% at doctoral level, against 9% on average.

Unlike some other countries with prominent upper secondary vocational programmes, few students leave education after upper secondary in Luxembourg

- Vocational programmes are a strong component of the upper secondary or post-secondary non-tertiary education system in Luxembourg: 60% of first-time upper secondary graduates and 100% of post-secondary non-tertiary graduates obtained a vocational qualification in 2017.
- However, in contrast to many other countries with high levels of vocational upper secondary education (60% or more of upper secondary graduates), few adults leave education at this stage in Luxembourg. Among 25-34 year-olds, 32% have upper secondary or post-secondary non-tertiary education as the highest level attained, compared to 41% on average across OECD countries. Among OECD countries, only the United Kingdom and Luxembourg combine an above-average share of upper secondary vocational graduates with a below-average share of adults with upper secondary or post-secondary non-tertiary education.
- In Luxembourg, women make up 53% of upper secondary vocational graduates, compared to 46% on average across OECD countries. However, women are less strongly represented at post-secondary non-

tertiary education where they make up only 19% of graduates, far below the OECD average of 54%. This gender gap may relate to the fields of study at this programme level: 80% of post-secondary non-tertiary graduates obtained a qualification in engineering, manufacturing and construction in 2017, a field where women accounted for only 4% of graduates.

- Educational institutions in Luxembourg spent more per student at primary, secondary and post-secondary non-tertiary level than any other OECD country in 2016. Average expenditure per student at this level reached USD 19 770¹ per student in 2016, more than double the OECD average of USD 9 357. However, expenditure per student on upper secondary education is similar for both general and vocational programmes in Luxembourg. In contrast, on average OECD countries spend 17% more per student on vocational upper secondary programmes than on general ones.

Tertiary-educated adults are more likely to participate in adult education and sporting or cultural activities than those with lower attainment

- Tertiary-educated adults are more likely to participate in adult education in Luxembourg than in other countries participating in the Adult Education Survey (AES) on average, but the difference in participation by educational attainment is larger. Participation in formal and/or non-formal education and training in Luxembourg is 29 percentage points higher for tertiary educated adults (70%) than for those who completed upper secondary or post-secondary non-tertiary education (41%), against 20 percentage points on average across countries taking part in the AES.
- While the commonest reason to participate in non-formal adult education is improving skills for a current or future job, Luxembourg has one of the largest shares of non-job-related education among the countries taking part in the AES: 23% of participating adults undertook non-formal education that was not job related, the fourth highest across countries with available data after Austria, France and Italy.
- Social connections are stronger in Luxembourg than on average and increase with educational attainment. For instance, 84% of adults reported participating in sporting or cultural activities in the previous 12 months compared to 78% on average across countries with available data. The share among tertiary-educated adults reaches 97% (average: 92%) and 88% for those with upper secondary or post-secondary non-tertiary education (average: 77%).
- While Luxembourg reports greater levels of work-life balance than the average, this declines with educational attainment, which is similar to the trend on average. While 38% of adults with upper secondary education reported difficulties in fulfilling their family obligations over the past 12 months because of the amount of time they spend at work, this rose to 45% among tertiary-educated adults. The averages for countries with available data were 50% and 51%, respectively.

The school curriculum in Luxembourg emphasises learning languages

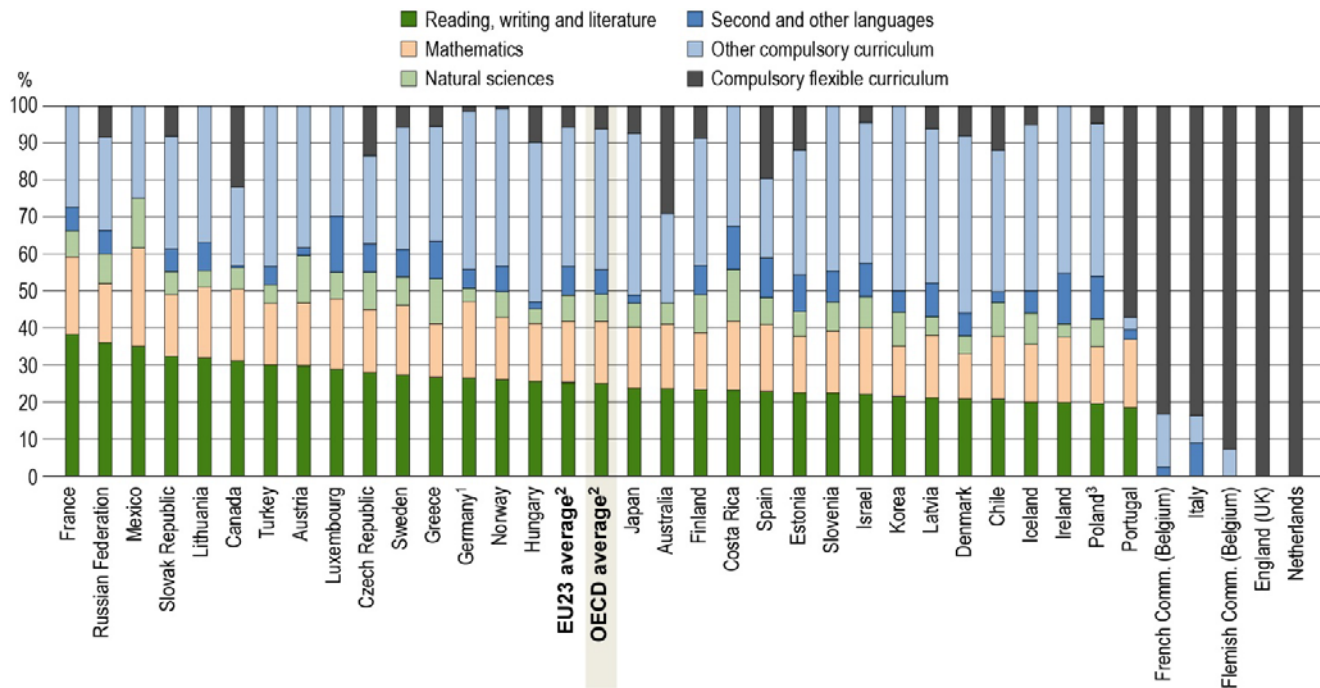
- Students in Luxembourg spend 63% of the compulsory instruction time at primary level on three subjects: reading, writing and literature (29%, against 25% on average across OECD countries); mathematics (19%, against 17% on average); and a second language (15%, against 6% on average) (Figure 2). Learning another language is strongly emphasised in the curriculum in Luxembourg. Among 8-11 year-olds, 21% of compulsory instruction time is spent learning a second language, compared to 6-10% on average across OECD countries. At secondary school, students spend 12% of the compulsory instruction

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

time on second language (OECD average: 9%) plus 20% on another language, which is 4 times the OECD average of 5%.

Figure 2. Instruction time per subject in primary education (2019)

As a percentage of total compulsory instruction time, in public institutions



Note: 1. Year of reference 2018.

2. Excludes England (United Kingdom), Flemish Comm. (Belgium), French Comm. (Belgium), Italy, the Netherlands and Portugal.

3. Excludes the first three years of primary education, as large proportion of the time allocated to compulsory subjects is flexible.

Countries and economies are ranked in descending order of the proportion of instruction hours devoted to second language.


Source: OECD (2019), Table D1.3a. See Source section for more information and Annex 3 for notes (<https://doi.org/10.1787/f8d7880d-en>).

- Class sizes are smaller in Luxembourg than in most other OECD countries. Public institutions in Luxembourg report the smallest class sizes at primary level (15 students) and amongst the smallest class sizes at lower secondary (19 students) compared to the OECD averages of 21 and 23 respectively. Teachers are highly qualified and need a master's or equivalent degree to teach at general lower and upper secondary level, a higher qualification than is required at primary level. Teaching hours in Luxembourg are slightly longer than the OECD average, 810 hours per year in primary education (OECD average: 788) and 739 hours in lower secondary general education (OECD average: 717).
- High teacher salaries in Luxembourg make the profession relatively attractive compared to other countries. Teachers' statutory salaries are the highest across OECD countries at primary and upper secondary level, relative to other tertiary-educated workers. The statutory salaries of pre-primary and primary teachers in Luxembourg with 15 years experience are 88% higher than those of other tertiary-educated workers while those of secondary teachers are twice as high. In comparison, on average across OECD countries, teachers earn less than other tertiary-educated workers at every level of education taught, with the exception of upper secondary where they earn only 5% more.

References

- OECD (2019), *Education at a Glance 2019: OECD Indicators*, OECD Publishing, Paris, [1]
<https://dx.doi.org/10.1787/f8d7880d-en>.
- OECD (2018), *Education at a Glance 2018: OECD Indicators*, OECD Publishing, Paris, [2]
<https://dx.doi.org/10.1787/eag-2018-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/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:  **Education GPS**

<http://gpseducation.oecd.org/CountryProfile?primaryCountry=LUX&treshold=10&topic=EO>.

<p>Questions can be directed to:</p> <p>Marie-Helene Doumet Directorate for Education and Skills marie-helene.doumet@oecd.org</p>	<p>Country note author:</p> <p>Karinne Logez Directorate for Education and Skills karinne.logez@oecd.org</p>
--	---

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

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.

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 Luxembourg in Education at a Glance 2019

Source	Main topics in <i>Education at a Glance</i>	Luxembourg		OECD average		EU23 average	
Tertiary education							
Educational attainment of 25-64 year-olds							
2018							
Table A1.1	Short-cycle tertiary	4%		7%		5%	
	Bachelor's or equivalent	15%		17%		14%	
	Master's or equivalent	22%		13%		15%	
	Doctoral or equivalent	2%		1%		1%	
Tertiary attainment of 25-34 year-olds, by gender							
2008							
Table A1.2	Men	35%	52%	31%	38%	28%	36%
	Women	43%	57%	40%	51%	38%	50%
	Total	39%	55%	35%	44%	33%	43%
Distribution of first-time tertiary entrants by education level							
2017							
Table B4.1	Short-cycle tertiary	20%		17%		12%	
	Bachelor's or equivalent	80%		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	26%		4%		7%	
	Master's or equivalent	76%		13%		13%	
	Doctoral or equivalent	85%		22%		22%	
	All tertiary levels of education	47%		6%		9%	
Employment rate of 25-64 year-olds, by educational attainment							
2018							
Table A3.1	Short-cycle tertiary	80%		82%		82%	
	Bachelor's or equivalent	81%		84%		84%	
	Master's or equivalent	89%		88%		88%	
	Doctoral or equivalent	92%		92%		93%	
	All tertiary levels of education	86%		85%		86%	
Employment rate of tertiary-educated 25-64 year-olds, by field of study							
2018							
Table A3.4	Education	89%		84%		85%	
	Business and administration and law	90%		86%		87%	
	Engineering, manufacturing and construction	95%		89%		89%	
	Health and welfare	89%		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	122		120		121	
	Bachelor's or equivalent	139		144		138	
	Master's, doctoral or equivalent	159		191		174	
	All tertiary levels of education	148		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	32%		41%		44%	
Percentage of first-time upper secondary graduates with a vocational qualification							
2017							
Table B3.1	Vocational programmes	60%		40%		46%	
Age at graduation from upper secondary education, by programme orientation							
2017							
Figure B3.1	General programmes	18		18		19	
	Vocational programmes	20		21		21	
Share of women among upper secondary graduates, by programme orientation							
2017							
Figure B3.2	General programmes	54%		55%		56%	
	Vocational programmes	53%		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	84%		78%		79%	
	Unemployment rate	5%		7%		8%	
	Inactivity rate	11%		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 20 673		USD 9 397		USD 9 671	
	Vocational programmes	USD 21 587		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	88%		87%		90%	
Share of children enrolled in private institutions							
2017							
Table B2.3	Pre-primary level (ISCED 02)	10%		34%		27%	
Ratio of children to teaching staff							
2017							
Table B2.3	Pre-primary level (ISCED 02)	**		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 17 539		USD 8 141		USD 8 926	

Source	Main topics in <i>Education at a Glance</i>	Luxembourg		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	21%		n.a.		26%	
	Upper secondary or post-secondary non-tertiary	41%		n.a.		44%	
	Tertiary	70%		n.a.		66%	
Participation in cultural or sporting activities in the last 12 months, by educational attainment⁴		2015					
Table A6.1	Below upper secondary	68%		n.a.		56%	
	Upper secondary or post-secondary non-tertiary	88%		n.a.		77%	
	Tertiary	97%		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 17 913	1.1%	USD 8 470	1.5%	USD 8 548	1.3%
	Lower secondary	USD 21 739	0.8%	USD 9 884	0.9%	USD 10 302	0.9%
	Upper secondary	USD 21 231	0.9%	USD 10 368	1.1%	USD 10 308	1.0%
	Tertiary (including R&D)	USD 48 407	0.5%	USD 15 556	1.5%	USD 15 963	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	94%	3%	90%	10%	92%	8%
	Tertiary (including R&D)	92%	6%	66%	32%	73%	24%
Total public expenditure on primary to tertiary education		2016					
Table C4.1	As a percentage of total government expenditure	7.4%		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	**	**	0.78	**	0.78	1.16
	Primary	**	**	0.84	1.25	0.85	1.24
	Lower secondary (general programmes)	**	**	0.88	1.34	0.89	1.34
	Upper secondary (general programmes)	**	**	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 74 400	USD 108 624	USD 31 276	USD 42 078	USD 30 615	USD 41 354
	Primary	USD 74 400	USD 108 624	USD 33 058	USD 45 947	USD 32 987	USD 45 748
	Lower secondary (general programmes)	USD 84 320	USD 116 312	USD 34 230	USD 47 675	USD 34 261	USD 47 772
	Upper secondary (general programmes)	USD 84 320	USD 116 312	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	**	**	1 024 hours	1 613 hours	1 062 hours	1 550 hours
	Primary	**	**	783 hours	1 612 hours	754 hours	1 539 hours
	Lower secondary (general programmes)	**	**	709 hours	1 634 hours	673 hours	1 572 hours
	Upper secondary (general programmes)	**	**	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	**		36%		39%	
Share of female teachers, in public and private institutions		2017					
Table D5.2	Primary	**		83%		87%	
	Lower secondary	**		69%		72%	
Total number of compulsory instruction time, by level of education		2019					
Table D1.1	Primary	5 544 hours		4 568 hours		4 258 hours	
	Lower secondary	2 535 hours		3 022 hours		3 002 hours	
	Upper secondary	845 hours		**		**	
Average class size by level of education		2017					
Table D2.1	Primary	16		21		20	
	Lower secondary	19		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>.