

# Japan

## Highlights

- Japan is one of the 14 OECD countries where at least half of 25-34 year-olds have a tertiary education). Between 2000 and 2021, the share of 25-34 year-olds with tertiary attainment increased by 17 percentage points.
- As is the case in all OECD countries, a majority of students enrolled at tertiary level in Japan are bachelor's students (70%). Short-cycle tertiary students make up the second largest group of tertiary students at 19%.
- Across primary to tertiary education, Japan spend an average of USD 12 474 per student in 2019 (in equivalent USD converted using PPPs for GDP) on educational institutions. At tertiary level only, the average expenditure per student in Japan is USD 19 504 per year.
- Public spending on primary to tertiary education was 7.8% of total government expenditure in Japan, lower than the OECD average. The share of private expenditure at tertiary level reached 67%, which was above the OECD average of 31%.
- In Japan, 79% of tertiary students are enrolled in independent private institutions, well above the OECD average of 17%.
- Annual teaching hours in Japan are 750 hours at primary level, 609 hours at lower secondary level (general programmes) and 507 hours at upper secondary level (general programmes). At the upper secondary level, 71% of teachers' working time is formally dedicated to non-teaching tasks in Japan, which is above the OECD average.
- In Japan, early childhood education starts offering intentional education objectives at age 3 and 3% of children under 3 are enrolled in early childhood education. But 95% of 3-5 year-old children are enrolled in education, which is above the OECD average.

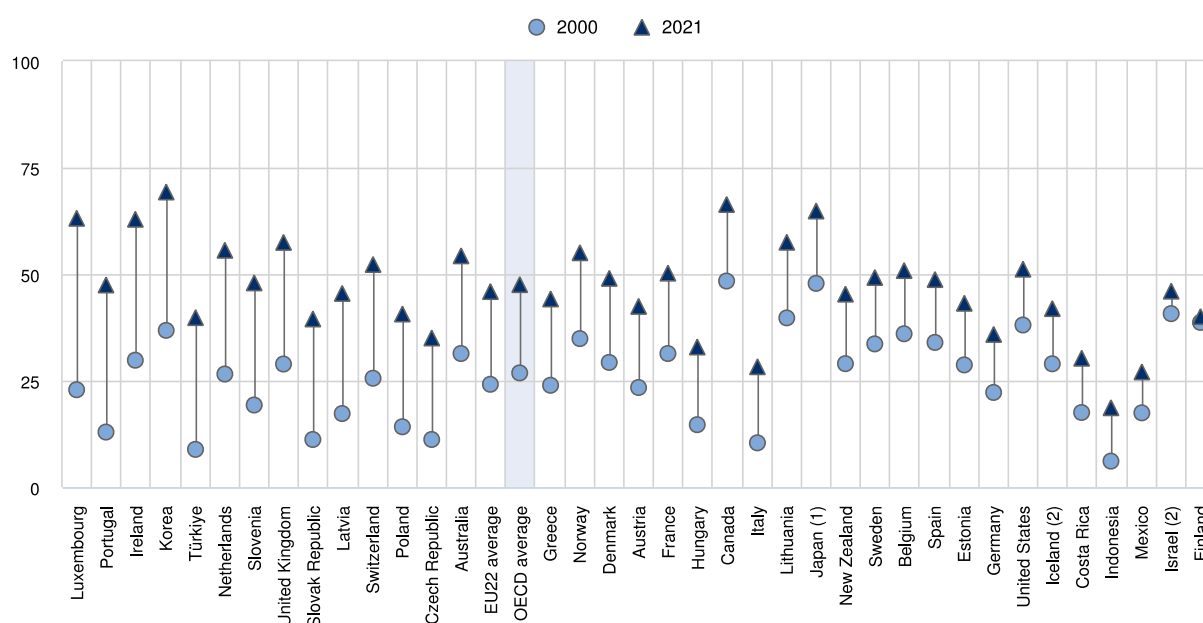
## Focus on tertiary education

- Educational attainment has been increasing throughout the OECD, in particular at tertiary level. Between 2000 and 2021, the share of 25-34 year-olds with tertiary attainment increased on average by 21 percentage points. In Japan, the share also increased albeit at a slower pace, by 17 percentage points (from 48% in 2000 to 65% in 2021) (Figure 1). Japan is one of the 14 OECD countries where at least half of 25-34 year-olds have a tertiary education.
- In most OECD countries including in Japan, tertiary-educated adults have higher rates of participation in non-formal education and training than those with a lower level of educational attainment. In 2012, 55% of 25-64 year-olds with tertiary attainment in Japan had participated in non-formal education and training in the twelve months prior to being surveyed, compared to 21% of their peers with below upper secondary attainment.

- Entering tertiary education often means costs for students and their families, in terms of tuition fees, foregone earnings and living expenses, although they may also receive financial support to help them afford it. However, public policies on tuition fees and financial support for students differ greatly across countries. In Japan, public institutions charge tuition fees of USD 5 144 for students at bachelor's level and of USD 5 139 at master's level.
- Over the decades, independent private institutions have been established to meet increased demand for tertiary education. On average across the OECD, 17% of students are enrolled in independent private institutions, but this figure masks large differences between countries. In Japan, 79% of tertiary students are enrolled in such institutions. Independent private institutions charge higher annual tuition fees on average than public institutions for master's programmes in all OECD countries and other participants with available data, except in Chile and Lithuania.
- Enabling students to enrol on a part-time basis is an important way to facilitate access to tertiary education. Many part-time students would not be able to study full time, for example because they have child-care responsibilities or have to work to fund their studies. The share of part-time students at the tertiary level in Japan is 7%, below the OECD average (22%). Compared to 2013, it has decreased.
- Staff at tertiary level tend to start their careers relatively late due to the length of the education they need to qualify. In Japan, only 2% of academic staff are aged under 30, below the OECD average (8%). In contrast, the share of academic staff aged 50 or over is 47%, which is above the OECD average by 7 percentage points.

**Figure 1. Trends in the share of tertiary-educated 25-34 year-olds (2000 and 2021)**

In per cent



1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group).

2. Year of reference differs from 2000: 2002 for Israel and 2003 for Iceland.

Countries are ranked in descending order of the difference in the share of tertiary-educated 25-34 year-olds between 2000 and 2021.

**Source:** OECD (2022), Education at a Glance Database, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-A.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf)).

## Access to education, participation and progress

- Compulsory education begins at the age of 6 and ends at the age of 15 in Japan. The range of ages for which at least 90% of the population are enrolled is longer than the period of compulsory education and goes from the age of 4 to the age of 17. This is similar to most other OECD countries, where more than 90% of the population are also enrolled for longer than the period of compulsory education.
- The age at which children enter early childhood education differs widely across countries. In Japan, early childhood education starts offering intentional education objectives at age 3 and 3% of children under 3 are enrolled in early childhood education. Across OECD countries, the average enrolment rate among children below the age of 3 is 27%, but the rates range from less than 1% to 63%. The enrolment rate among 3-5 year-olds increases substantially in all OECD countries. In Japan, 95% of all children of this age are enrolled in early childhood education, which is above the OECD average.
- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. In Japan, the share is 51% (OECD average 55%). In contrast, men are overrepresented among graduates of vocational upper secondary programmes in most OECD countries, as is the case in Japan where they make up 57% of all vocational upper secondary graduates, slightly above the OECD average (55%).
- One significant difference across countries' education systems is on whether or not vocational upper secondary programmes provide access to tertiary education. In 12 OECD countries and other participants, including Japan, almost all vocational upper secondary graduates have direct access to tertiary education.
- As is the case in all OECD countries, a majority of students enrolled at tertiary level in Japan are bachelor's students (70%). However, the next commonest enrolment level varies from country to country. In Japan, short-cycle tertiary students make up the second largest group of tertiary students at 19%. This is also the case in 13 other OECD countries, while in the remaining 26 countries with available data, master's students form the second largest group.

## Financial resources invested in education

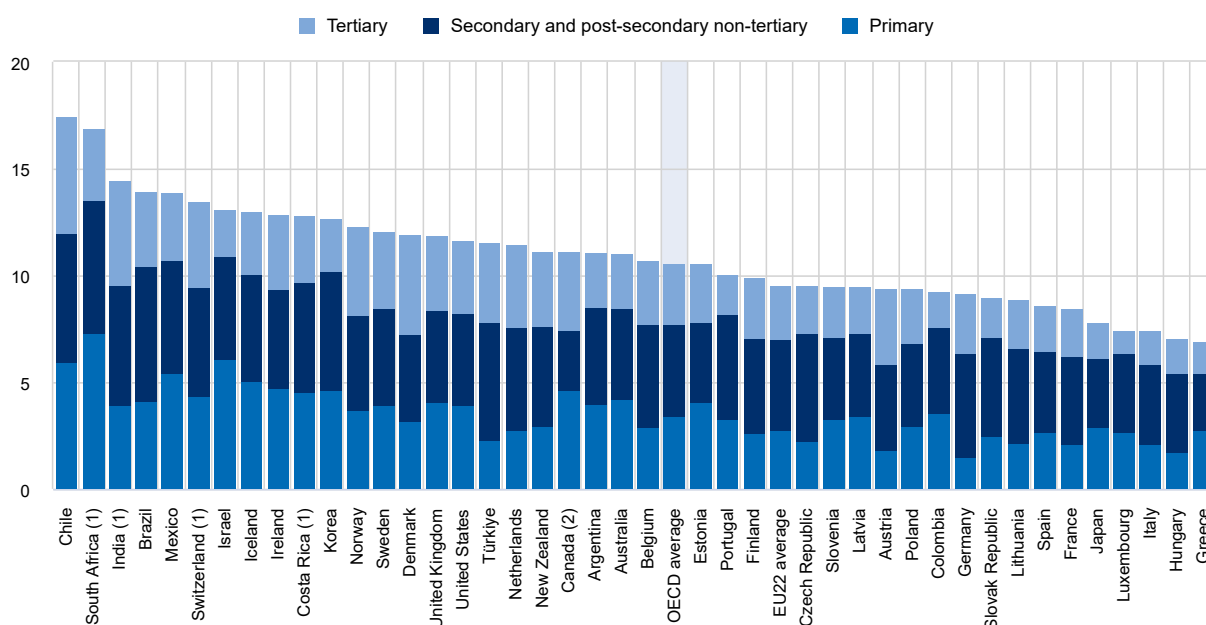
- All OECD countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average 4.9% of their gross domestic product (GDP) on primary to tertiary educational institutions. In Japan, the corresponding share was 4.0%.
- Public spending on primary to tertiary education was 7.8% of total government expenditure in Japan (Figure 2), lower than the OECD average (10.6%). Also, relative to GDP, public spending on primary to tertiary education (3.0%) is lower than the OECD average (4.4%).
- Spending on educational institutions as share of GDP is an important measures of the importance that countries place on education in their budgeting decisions. However, they do not show the total amount of funding per student because GDP levels and student numbers vary from country to country. Across primary to tertiary education, OECD countries spend an average of USD 11 990 per student (in equivalent USD converted using PPPs for GDP) on educational institutions each year. In comparison, Japan spent USD 12 474 per student in 2019. Its cumulative expenditure on educating a student from the age of 6 to 15 was USD 101 399, which was slightly below the OECD average of USD 105 502.
- Across OECD countries, the provision of education at primary and secondary levels in terms of curricula, teaching styles and organisational management leads, on average, to similar patterns of expenditure per student from primary to post-secondary non-tertiary levels. OECD countries as a

whole spend on average around USD 9 923 per student at primary and USD 11 400 per student at secondary level. In Japan, the values are USD 9 379 at primary and USD 11 493 per student at secondary level.

- In contrast to lower levels of education, spending on tertiary education varies widely across OECD countries. Expenditure per student at tertiary level in Japan is higher than at other levels of education, as is the case in almost all other OECD countries. The average expenditure per student in Japan is USD 19 504 per year, which is about USD 10 100 higher than that of the primary level and USD 8 000 higher than that of the secondary level. It is above the OECD average, but similar to many other countries.
- Public funding dominates non-tertiary education (primary, secondary and post-secondary non-tertiary) in all OECD countries, even after transfers to the private sector. On average across the OECD, private funding accounts for 10% of expenditure at primary, secondary and post-secondary non-tertiary levels, while this share was 7% in Japan in 2019. In contrast, private expenditure at tertiary level was higher in all OECD countries. In Japan, the share of private expenditure at tertiary level reached 67%, which was above the OECD average of 31%.

**Figure 2. Composition of total public expenditure on education as a percentage of total government expenditure (2019)**

Primary to tertiary education (including R&D), in per cent



1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

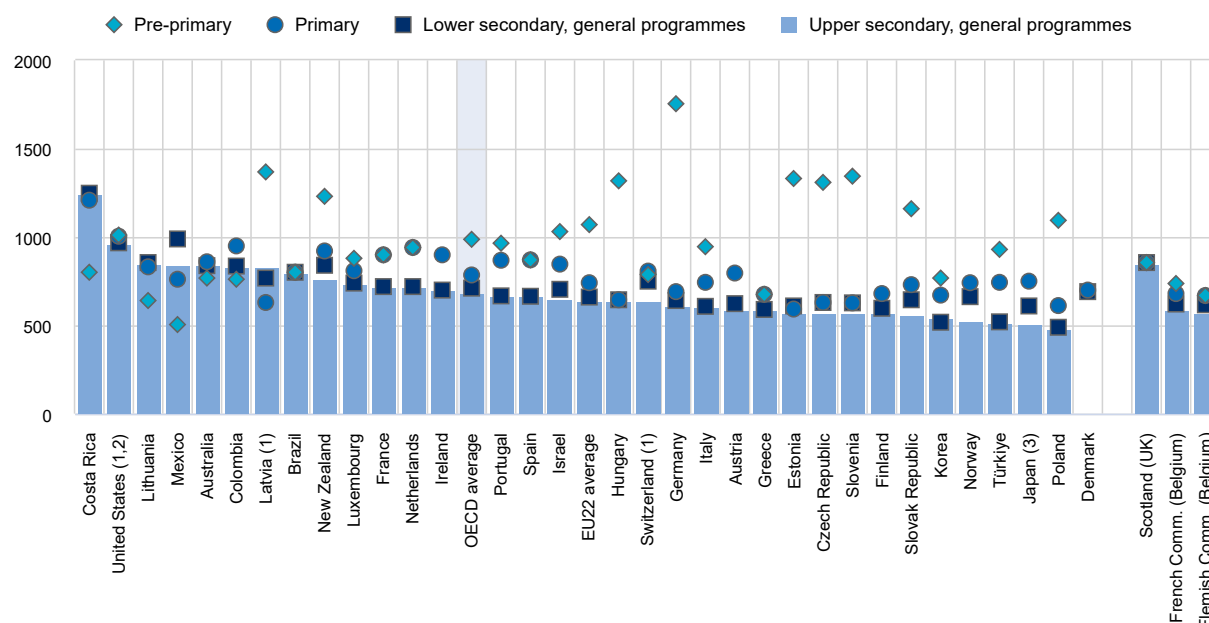
**Source:** OECD/UIS/Eurostat (2022), Table C4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-C.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf)).

## Teachers, the learning environment and the organisation of schools

- Between 2015 and 2021, on average across OECD countries with data for all reference years, the statutory salaries of teachers at lower secondary level (general programmes) with 15 years of experience and the most prevalent qualifications increased by 6%. In contrast, in Japan, statutory salaries of teachers at lower secondary level largely stayed flat (in real terms).
- The average number of teaching hours per year required from a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases. This is also the case in Japan.
- Based on official regulations or agreements, annual teaching hours in Japan are 750 hours at primary level, 609 hours at lower secondary level (general programmes) and 507 hours at upper secondary level (general programmes) (Figure 3).
- During their working hours, teachers also perform various non-teaching tasks such as lesson planning and preparation, marking students' work and communicating or co-operating with parents or guardians. At the upper secondary level, 71% of teachers' working time is formally dedicated to non-teaching tasks such as lesson planning and preparation preparation, marking students' work and others in Japan, compared to an average of 56% across OECD countries.
- The duration of initial teacher education for primary and lower secondary teachers ranges from 2.5 years to 6.5 years across OECD countries. In Japan, initial teacher education typically lasts 4 years for prospective lower secondary teachers (general programmes). It is the same length for prospective primary teachers. As is the case in almost all OECD countries, a tertiary degree is awarded to prospective teachers of primary and secondary education upon completion of their initial teacher training.
- Continuing professional development is compulsory for all teachers of general programmes in most countries with data, but Japan is an exception. At secondary level, professional development activities are compulsory for teachers in some circumstances.

**Figure 3. Teaching time of teachers, by level of education (2021)**

Net statutory teaching time in hours per year, in public institutions



1. Actual teaching time (in Latvia except for pre-primary level).

2. Reference year differs from 2021. Refer to the source table for details.

3. Average planned teaching time in each school at the beginning of the school year.

Countries and other participants are ranked in descending order of the number of teaching hours per year in general upper secondary education.

**Source:** OECD (2022), Table D4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-D.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-D.pdf)).

## COVID-19: The second year of the pandemic

- Most countries conducted assessments of the impact of school closures on learning outcomes at various levels of education and along several dimensions. Japan has conducted studies to evaluate the effects of the pandemic and its impact on primary and lower secondary, education. The assessments covered mathematics and reading.
- In school year 2022, national programmes to support students affected by the pandemic were implemented in Japan at pre-primary, primary, lower secondary, upper secondary general and vocational level. At primary to upper secondary education, measures to address the effects of the COVID-19 pandemic included, psychosocial and mental health support to students and additional water, sanitation and hygiene services.
- The increased digitalisation of education has been a major consequence of the COVID-19 pandemic in many OECD countries. At primary and secondary (general programme) levels, Japan has responded to the pandemic with the introduction of one computing device for each student and an enhanced provision of digitalised assessments/exams, digital tools at school, distance learning, hybrid learning, in-service digital training to teachers and digital training to students.

## References

OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/3197152b-en>.


OECD (2022), “Regional education”, *OECD Regional Statistics (database)*, <https://dx.doi.org/10.1787/213e806c-en>.

## More information

**For more information on Education at a Glance 2022 and to access the full set of Indicators, see:** <https://doi.org/10.1787/3197152b-en>.

For more information on the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, see Annex 3 ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3.pdf)).

For general information on the methodology, please refer to the OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications (<https://doi.org/10.1787/9789264304444-en>).

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 the Education GPS:

<https://gpseducation.oecd.org/>

The data on educational responses during COVID-19 were collected and processed by the OECD based on the Joint Survey on National Responses to COVID-19 School Closures, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO); the UNESCO Institute for Statistics (UIS); the United Nations Children's Fund (UNICEF); the World Bank; and the OECD.

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### Questions can be directed to:

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# Korea

## The output of educational institutions and the impact of learning

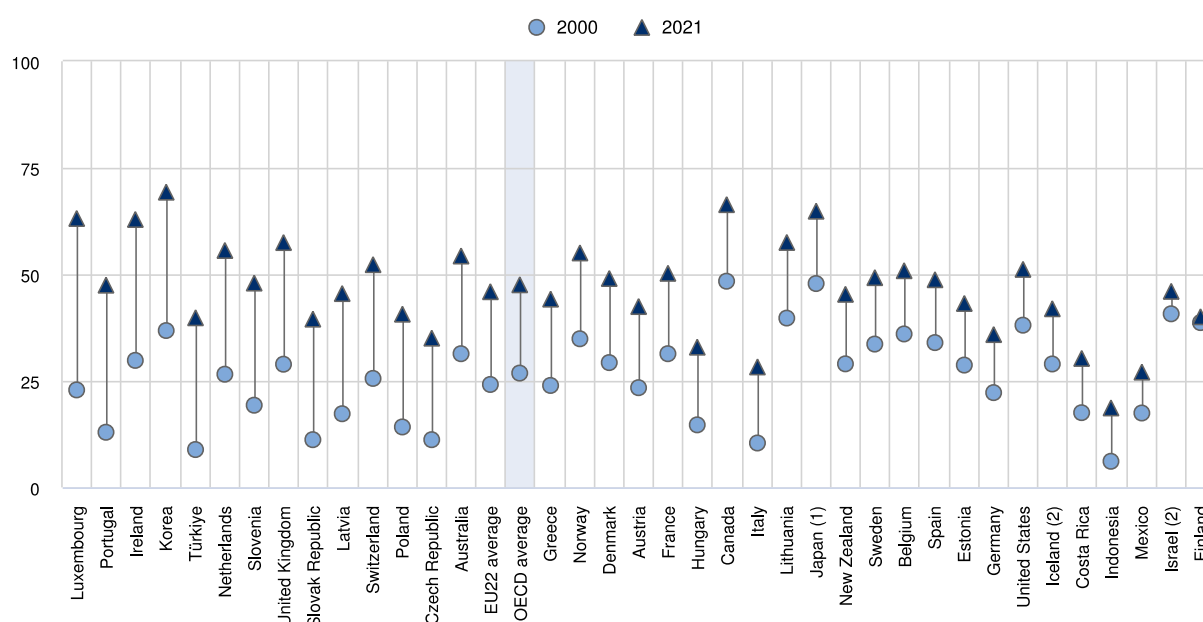
- Educational attainment has been increasing throughout the OECD, in particular at tertiary level. Between 2000 and 2021, the share of 25-34 year-olds with tertiary attainment increased on average by 21 percentage points. In Korea, the share increased at an even faster pace, by 32 percentage points (from 37% in 2000 to 69% in 2021) (Figure 1). Korea is one of the 14 OECD countries where at least half of 25-34 year-olds have a tertiary education.
- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. Although the general increase in educational attainment has seen a parallel decline in the share of 25-34 year-olds without upper secondary attainment, 14% of young adults across the OECD still left school without an upper secondary qualification. In Korea, the share is 2%, which is lower than the OECD average.
- Higher educational attainment is often associated with better employment prospects but Korea is an exception. In 2021 the employment rate among 25-34 year-olds with tertiary education in Korea was 12 percentage points higher than among those with below upper secondary attainment and 13 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. On average across OECD countries, the employment rate among 25-34 year-olds with a tertiary qualification was 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. While the positive link between educational attainment and employment rates holds for both men and for women across the OECD, it is particularly strong for women. On average, across OECD countries the employment rate for women with below upper secondary attainment was 43%, compared to 82% of those with tertiary attainment. These figures were 69% and 88% for men, respectively. In Korea, 56% of women with below upper secondary attainment were employed in 2021, compared to 73% of those with tertiary attainment. In contrast, the figures were 75% and 80% for men.
- Across the OECD, the labour market benefits of tertiary attainment have proved especially strong during economic crises. However, this was not the case during the COVID-19 pandemic in Korea. Between 2019 and 2020, unemployment for 25-34 year-old workers with below upper secondary attainment fell by 0.1 percentage points, while it rose by 0.2 percentage points for workers with upper secondary attainment and decreased by 0.1 percentage points for workers with tertiary attainment. In 2021, unemployment for workers with below upper secondary attainment increased by 0.2 percentage points, compared to 2020, while it fell by 0.6 percentage points for workers with upper secondary attainment and by 0.4 percentage points for workers with tertiary attainment.
- Educational attainment affects not just employment prospects, but also wage levels. On average across the OECD, 25-64 year-old workers with upper secondary or post-secondary non-tertiary attainment earn 29% more than workers with below upper secondary attainment, while those with tertiary attainment earn about twice as much. In Korea, the earnings advantage of tertiary-educated workers was smaller than the OECD average. In 2020, workers with upper secondary attainment

earned 33% more than those with below upper secondary attainment and those with tertiary attainment earned 86% more.

- National averages provide only an incomplete picture of the situation in any given country. In most OECD countries, there are large differences in educational attainment across subnational regions. However, this is not the case in Korea. Educational attainment is similar across most regions. In 2020, the difference between the region with the highest share of 25-64 year-olds with tertiary attainment (Sejong, at 73%) and that with the lowest share (Chungcheongnam-do, at 45%) was 29 percentage points. These subnational variations do not only reflect differences in education opportunities. To a large degree, they are due to economic conditions and internal migration patterns.

**Figure 1. Trends in the share of tertiary-educated 25-34 year-olds (2000 and 2021)**

In per cent



1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group).

2. Year of reference differs from 2000: 2002 for Israel and 2003 for Iceland.

Countries are ranked in descending order of the difference in the share of tertiary-educated 25-34 year-olds between 2000 and 2021.

**Source:** OECD (2022), Education at a Glance Database, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-A.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf)).

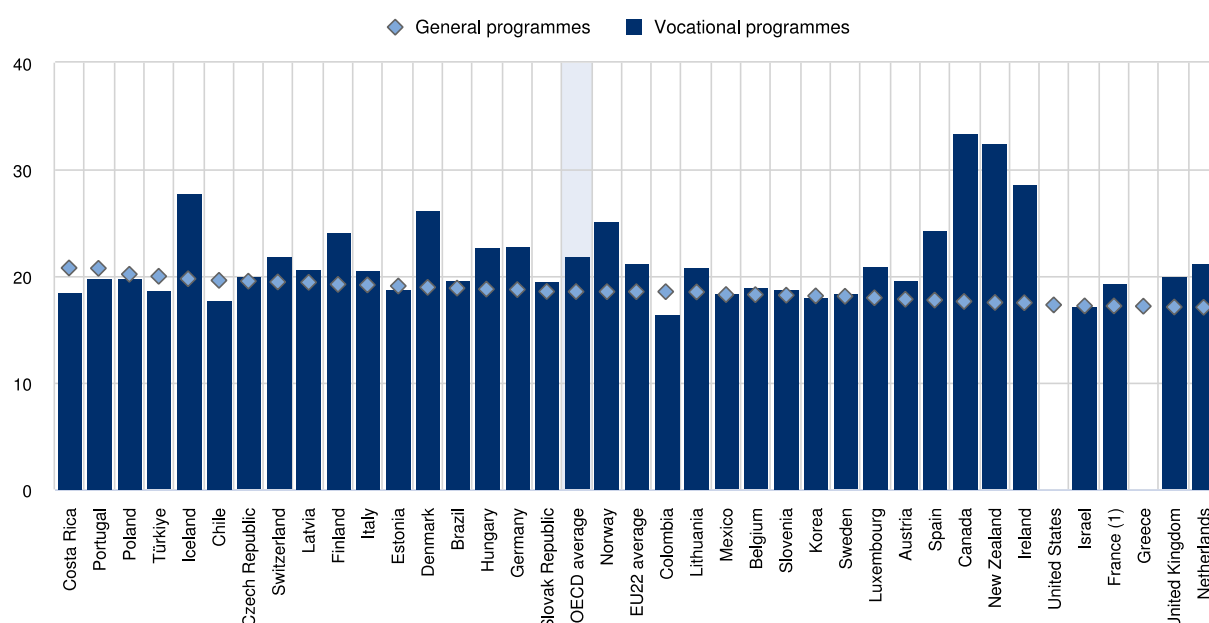
## Access to education, participation and progress

- Compulsory education begins at the age of 6 and ends at the age of 14 in Korea. The range of ages for which at least 90% of the population are enrolled is longer than the period of compulsory education and goes from the age of 2 to the age of 16. This is similar to most other OECD countries, where more than 90% of the population are also enrolled for longer than the period of compulsory education.

- The age at which children enter early childhood education differs widely across countries. In Korea, early childhood education starts offering intentional education objectives for children younger than 1 and 63% of children under 3 are enrolled in early childhood education. Across OECD countries, the average enrolment rate among children below the age of 3 is 27%, but the rates range from less than 1% to 63%. The enrolment rate among 3-5 year-olds increases substantially in all OECD countries. In Korea, 94% of all children of this age are enrolled in early childhood education, which is above the OECD average.
- The average age of graduation from general upper secondary programmes varies from 17 to 21 years across OECD countries and is 18 years in Korea. Differences in the average age of graduation from vocational upper secondary education are much larger and vary from 16 to 34 years across the OECD. These differences largely depend on whether vocational upper secondary students usually enrol in these programmes towards the end of their compulsory education or in mid-career. In Korea, the average age of graduation from vocational upper secondary education is 18 years, which is below the OECD average at 22 years (Figure 2).

**Figure 2. Average age of first-time upper secondary graduates, by programme orientation (2020)**

In years



1. Average age is based on all graduates instead of first-time graduates.

Countries are ranked in descending order of the average age of first-time upper secondary graduates in general programmes.

**Source:** OECD/Eurostat/UIS (2022), Tables B3.1 and B3.2. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

- One significant difference across countries' education systems is on whether or not vocational upper secondary programmes provide access to tertiary education. In 12 OECD countries and other participants, including Korea, all vocational upper secondary graduates have direct access to tertiary education.
- As is the case in all OECD countries, a majority of students enrolled at tertiary level in Korea are bachelor's students (69%). However, the next commonest enrolment level varies from country to

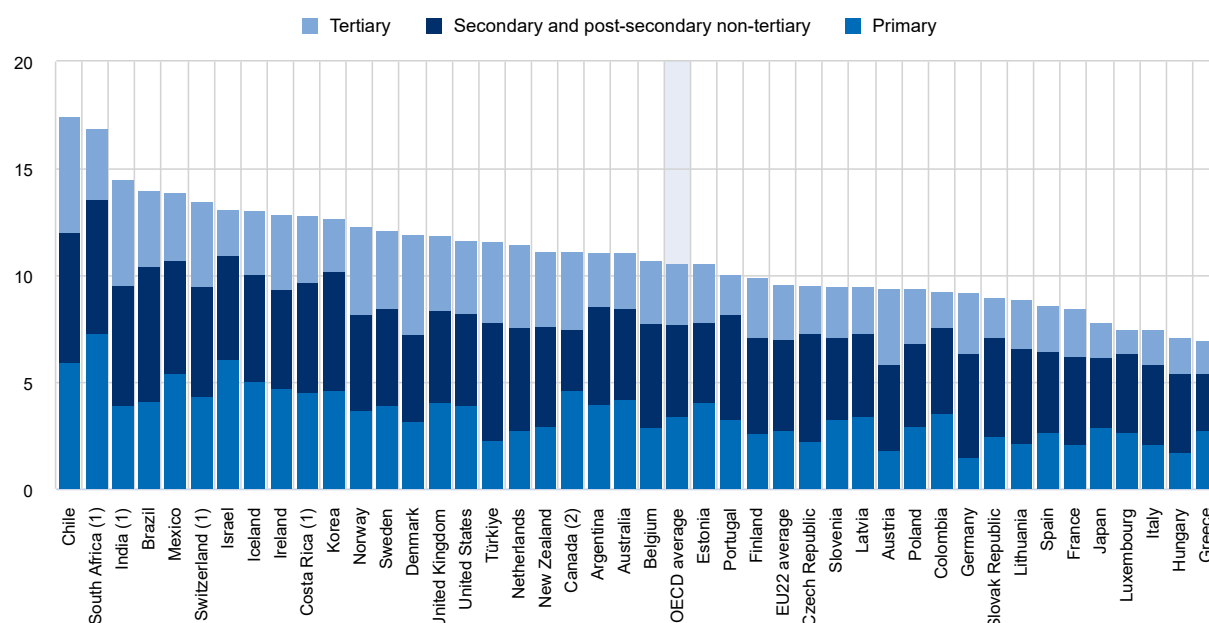
country. In Korea, short-cycle tertiary students make up the second largest group of tertiary students at 21%. This is also the case in 13 other OECD countries, while in the remaining 26 countries with available data, master's students form the second largest group.

## Financial resources invested in education

- All OECD countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average 4.9% of their gross domestic product (GDP) on primary to tertiary educational institutions. In Korea, the corresponding share was 5.3%.
- Public spending on primary to tertiary education was 12.7% of total government expenditure in Korea (Figure 3), higher than the OECD average (10.6%). In contrast, relative to GDP, public spending on primary to tertiary education (4.3%) is lower than the OECD average (4.4%).
- Spending on educational institutions as share of GDP or public budgets are important measures of the importance that countries place on education in their budgeting decisions. However, they do not show the total amount of funding per student because GDP levels, public budgets and student numbers vary from country to country. Across primary to tertiary education, OECD countries spend an average of USD 11 990 per student (in equivalent USD converted using PPPs for GDP) on educational institutions each year. In comparison, Korea spent USD 13 819 per student in 2019. Its cumulative expenditure on educating a student from the age of 6 to 15 was USD 144 485, which was significantly above the OECD average of USD 105 502.
- Across OECD countries, the provision of education at primary and secondary levels in terms of curricula, teaching styles and organisational management leads, on average, to similar patterns of expenditure per student from primary to post-secondary non-tertiary levels. OECD countries as a whole spend on average around USD 9 923 per student at primary and USD 11 400 per student at secondary level. In Korea, the values are USD 13 341 at primary and USD 17 078 per student at secondary level, which are among the highest across OECD countries.
- In contrast to lower levels of education, spending on tertiary education varies widely across OECD countries. Expenditure per student at tertiary level in Korea is lower than at other levels of education, in contrast to almost all other OECD countries. The average expenditure per student in Korea is USD 11 287 per year, which is about USD 2 100 lower than that of the primary level and USD 5 800 lower than that of the secondary level. It is among the lowest across OECD countries. The average expenditure at tertiary level (USD 17 559) is driven up by high values in a few countries. At 21%, the share of research and development (R&D) expenditure makes up a smaller fraction of expenditure on tertiary education in Korea than on average across OECD countries (29%).
- Public funding dominates non-tertiary education (primary, secondary and post-secondary non-tertiary) in all OECD countries, even after transfers to the private sector. On average across the OECD, private funding accounts for 10% of expenditure at primary, secondary and post-secondary non-tertiary levels, the same share observed in Korea in 2019. In contrast, private expenditure at tertiary level was higher in all OECD countries. In Korea, the share of private expenditure at tertiary level reached 62%, which was above the OECD average of 31%, after public-to-private transfers. These latter accounted for 16% of expenditure on educational institutions at this level.

**Figure 3. Composition of total public expenditure on education as a percentage of total government expenditure (2019)**

Primary to tertiary education (including R&D), in per cent



1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

**Source:** OECD/UIS/Eurostat (2022), Table C4.1. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-C.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf)).

## Teachers, the learning environment and the organisation of schools

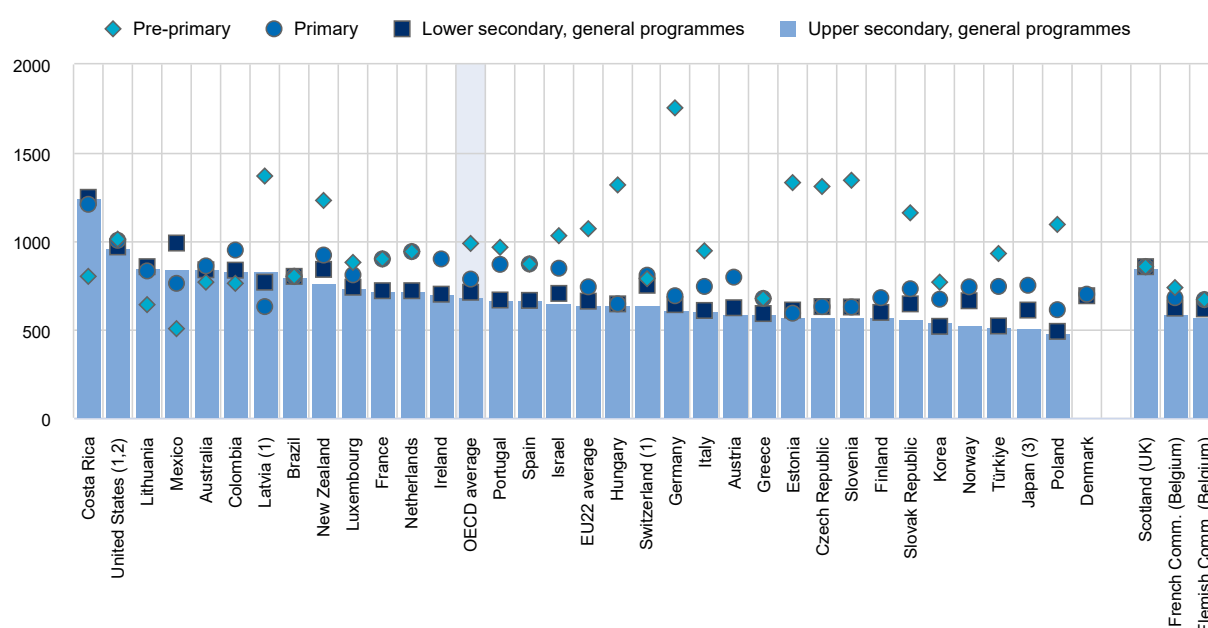
- Between 2015 and 2021, on average across OECD countries, the statutory salaries of teachers at lower secondary level (general programmes) with 15 years of experience and the most prevalent qualifications increased by 6% in real terms. In Korea, salaries increased by 7%.
- The average number of teaching hours per year required from a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases. This is also the case in Korea.
- Based on official regulations or agreements, annual teaching hours in Korea are 767 hours per year at pre-primary level, 672 hours at primary level, 517 hours at lower secondary level (general programmes) and 544 hours at upper secondary level (general programmes) (Figure 4).
- During their working hours, teachers also perform various non-teaching tasks such as lesson planning and preparation, marking students' work and communicating or co-operating with parents or guardians. At the upper secondary level, 64% of teachers' working time is formally dedicated to non-teaching activities in Korea, compared to an average of 56% across OECD countries.
- The duration of initial teacher education for primary and lower secondary teachers ranges from 2.5 years to 6.5 years across OECD countries. In Korea, initial teacher education typically lasts 4 years for prospective lower secondary teachers (general programmes). It is the same length for

prospective primary teachers. As is the case in almost all OECD countries, a tertiary degree is awarded to prospective teachers of all levels of education upon completion of their initial teacher training.

- Continuing professional development is compulsory for all teachers of general programmes in most countries with data, and Korea is no exception. At secondary level, professional development activities are compulsory for all teachers.

**Figure 4. Teaching time of teachers, by level of education (2021)**

Net statutory teaching time in hours per year, in public institutions



1. Actual teaching time (in Latvia except for pre-primary level).

2. Reference year differs from 2021. Refer to the source table for details.

3. Average planned teaching time in each school at the beginning of the school year.

Countries and other participants are ranked in descending order of the number of teaching hours per year in general upper secondary education.

**Source:** OECD (2022), Table D4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-D.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-D.pdf)).

## Focus on tertiary education

- Among 25-64 year-olds in Korea, bachelor's degrees are the most common tertiary attainment at 33% of the population followed by short-cycle tertiary qualifications at 14% and master's and doctoral degrees with 4%. This is similar to the OECD average, where bachelor's degrees are most common (19%), followed by master's degrees (14%) and short cycle tertiary qualifications (7%).
- In most OECD countries including in Korea, tertiary-educated adults have higher rates of participation in non-formal education and training than those with a lower level of educational attainment. In 2012, 70% of 25-64 year-olds with tertiary attainment in Korea had participated in non-formal education and training in the twelve months prior to being surveyed, compared to 21% of their peers with below upper secondary attainment.

- Over the decades, independent private institutions have been established to meet increased demand for tertiary education. On average across the OECD, 17% of students are enrolled in independent private institutions, but this figure masks large differences between countries. In Korea, 80% of tertiary students are enrolled in such institutions. Independent private institutions charge higher annual tuition fees on average than public institutions for master's programmes in all OECD countries and other participants with available data, except in Chile and Lithuania.
- Staff at tertiary level tend to start their careers relatively late due to the length of the education they need to qualify. In Korea, only 1% of academic staff are aged under 30, below the OECD average (8%). In contrast, the share of academic staff aged 50 or over is 50%, which is above the OECD average by 10 percentage points.

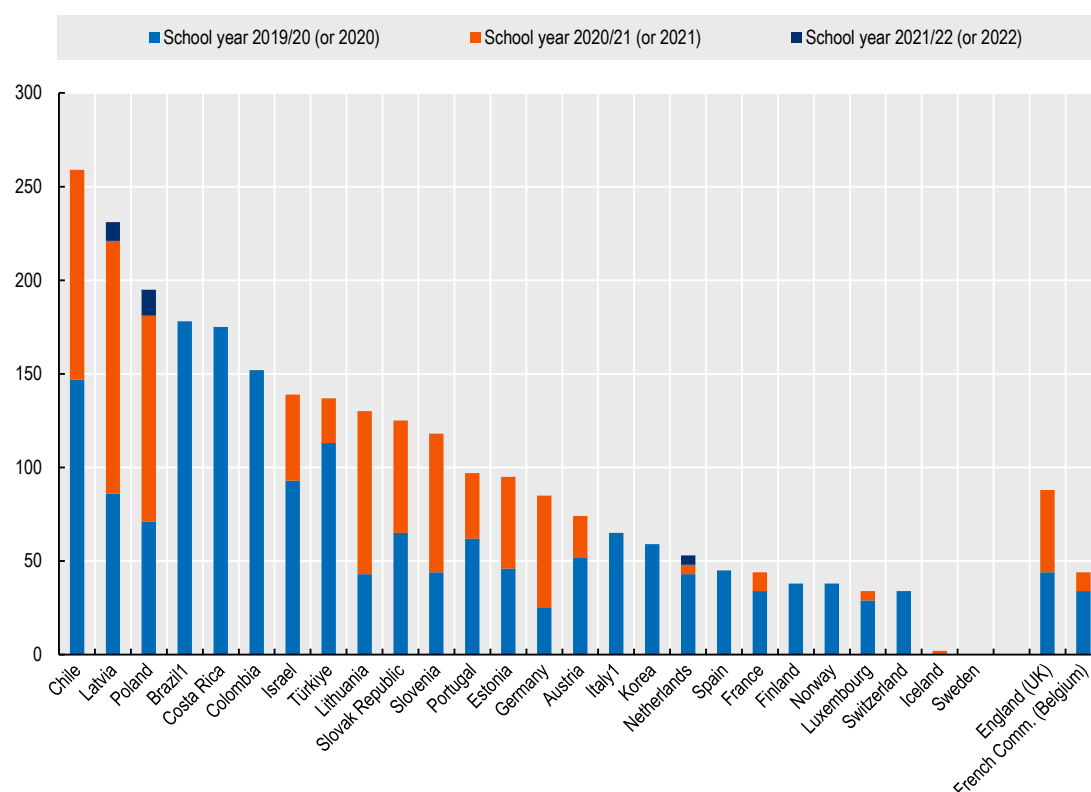
## COVID-19: The second year of the pandemic

- The COVID-19 pandemic disrupted traditional schooling in 2020 and the first half of 2021, leading to school closures across all OECD countries. While most shut down their premises entirely in the wake of the pandemic in 2020, by 2021 the situation had improved and returned to normal in most countries in 2022. In Korea, primary and secondary schools were entirely closed for 54-59 days in 2020 and stayed open in 2021 and 2022 (Figure 5).
- National examinations have also been affected by the pandemic. At general upper secondary level, 18 OECD countries postponed their national examinations during the school year 2019/20, while 10 countries even cancelled them entirely. In 2020/21, national examinations were postponed in 9 countries and cancelled in 6 countries. Korea rescheduled its national examinations in 2020.
- Most countries conducted assessments of the impact of school closures on learning outcomes at various levels of education and along several dimensions. Korea has conducted studies to evaluate the effects of the pandemic and its impact on primary, lower secondary, upper secondary general and vocational education. Standardised national assessments were conducted for lower and upper secondary students, covering the subjects of mathematics, reading and science. Like many other countries, Korea also evaluated dimensions such as the effectiveness of distance-learning strategies during school closures, non-cognitive skills as well as the mental health and well-being of students.
- As was the case for the 2021 school year, in 2022 national programmes to support students affected by the pandemic were implemented in Korea at pre-primary, primary, lower secondary, upper secondary general and vocational level. At primary to upper secondary education, measures to address the effects of the COVID-19 pandemic included accelerated education or catch-up programmes for students who dropped out of school, cash transfers to increase enrolment among students from disadvantaged families, early warning systems to identify students at risk of dropping out, targeted instruction to students' level by grouping students according to proficiency rather than age, psychosocial and mental health support to students, individualised self-learning programmes, tutoring programmes or financial support for tutoring to address learning losses and additional water, sanitation and hygiene services. The government has already assessed the effectiveness of these programmes.
- The increased digitalisation of education has been a major consequence of the COVID-19 pandemic in many OECD countries. At primary to upper secondary level, Korea has responded to the pandemic with an enhanced provision of digitalised assessments/exams, digital tools at school, distance learning, hybrid learning, in-service and pre-service digital training to teachers and digital training to students.
- The challenges related to the COVID-19 pandemic have created additional costs for education systems. Preliminary budget estimates for 2021 suggest that, compared to 2020, the education

budget at pre-primary to upper secondary level in Korea increased strongly (by more than 5%, in nominal terms), while it increased slightly (by between 1% and 5%) at the tertiary level.

**Figure 5. School closures due to COVID-19 (2020, 2021 and the first quarter of 2022)**

Number of instruction days of full closure of lower secondary schools excluding school holidays, public holidays and weekends



**Note:** The data underlying this report were produced through the Survey on Joint National Responses to COVID 19, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), the World Bank (WB), and the Organisation for Economic Co-operation and Development (OECD). Data for other levels of education are available at <https://www.oecd.org/education/Results-4th-wave-COVID-Survey-OECD-database.xlsx>.

1. Data for 2021 and 2022 are missing.

Countries and other participants are ranked in descending order of the total number of days lower secondary schools were fully closed during the school years 2019/20 (2020), 2020/21 (2021) and 2021/22 (2022).

**Source:** OECD/UIS/UNESCO/UNICEF/WB (2022).

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OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/69096873-en>.


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## More information

**For more information on Education at a Glance 2022 and to access the full set of Indicators, see:**  
<https://doi.org/10.1787/3197152b-en>

For more information on the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, See Annex 3 ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3.pdf)).

For general information on the methodology, please refer to the OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications (<https://doi.org/10.1787/9789264304444-en>).

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.

Data on subnational regions for selected indicators are available in the *OECD Regional Statistics* (database) (OECD, 2022). When interpreting the results on subnational entities, readers should take into account that the population size of subnational entities can vary widely within countries. For example, regional variation in enrolment may be influenced by students attending school in a different region from their area of residence, particularly at higher levels of education. Also, regional disparities tend to be higher when more subnational entities are used in the analysis.

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<https://gpseducation.oecd.org/>

The data on educational responses during COVID-19 were collected and processed by the OECD based on the Joint Survey on National Responses to COVID-19 School Closures, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO); the UNESCO Institute for Statistics (UIS); the United Nations Children's Fund (UNICEF); the World Bank; and the OECD.

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# Latvia

## Highlights

- **The share of young adults with tertiary attainment has increased considerably in Latvia in recent decades.** In 2021, 46% of 25-34 year-olds had a tertiary degree compared to only 17% in 2000. On average across the OECD, the share of young adults with a tertiary degree increased from 27% to 48% in the same period.
- **Many tertiary students do not graduate from their programme on-time in Latvia.** The cross-cohort completion rate of bachelor's students in Latvia is 48%, the lowest among countries with available data. The cross-cohort completion rate of students in short-cycle programmes is also relatively low at 58%.
- **In Latvia, a tertiary degree in information and communication technologies (ICT) yields better relative earnings than any other field of study.** A full-time full-year tertiary graduate aged 25-64 with an ICT degree earns more than twice as much as a worker with upper secondary attainment on average. In contrast, a tertiary graduate with an education degree earns only about 7% more than a worker with upper secondary attainment on average.
- **The average actual salaries of teachers in Latvia increased substantially between 2015 and 2021.** At lower secondary level, the actual salaries of teachers aged 25-64 increased by 59% in real terms in this period. However, the average actual salaries of lower secondary teachers remained low at USD 29 169 in 2021, compared to USD 50 026 on average across the OECD.
- **Latvia spends less per student on formal education in primary to tertiary institutions than the OECD average.** In 2019, expenditure per student in primary to tertiary education was USD 8 461 (in equivalent USD converted using PPPs for GDP) in Latvia, compared to USD 11 990 per student on average across the OECD.

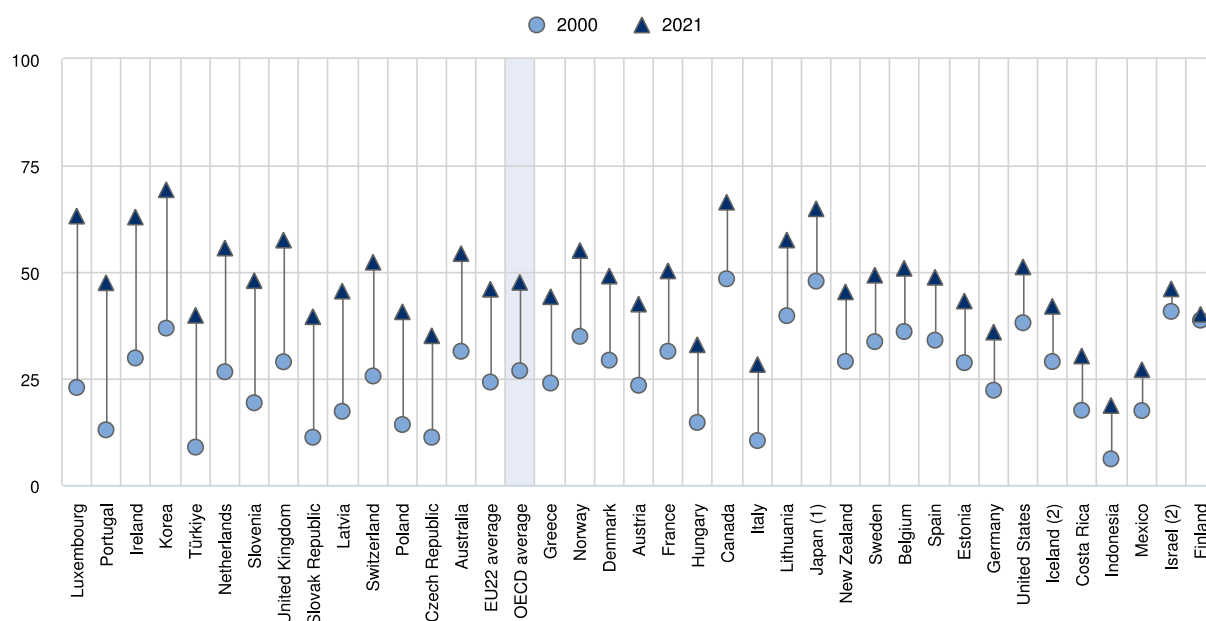
## The output of educational institutions and the impact of learning

- Educational attainment has been increasing throughout the OECD, in particular at tertiary level. Between 2000 and 2021, the share of 25-34 year-olds with tertiary attainment increased on average by 21 percentage points. In Latvia, the share increased at an even faster pace, by 28 percentage points (up to 46% in 2021) (Figure 1). Latvia is one of the 24 OECD countries where tertiary education is the most common highest level of attainment among 25-34 year-olds.
- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. The general increase in educational attainment has seen a parallel decline in the share of 25-34 year-olds without upper secondary attainment. On average, the share of young adults without upper secondary attainment decreased by 5 percentage points between 2011 and 2021 across the OECD. However, 14% of young adults across the OECD still left school without an upper secondary qualification. In Latvia, the share of 25-34 year-olds without upper secondary

attainment has remained below the OECD average at 11% in 2021, which represents a decrease of 7 percentage points compared to 2011.

**Figure 1. Trends in the share of tertiary-educated 25-34 year-olds (2000 and 2021)**

In per cent



1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group).

2. Year of reference differs from 2000: 2002 for Israel and 2003 for Iceland.

Countries are ranked in descending order of the difference in the share of tertiary-educated 25-34 year-olds between 2000 and 2021.

**Source:** OECD (2022), *Education at a Glance Database*, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-A.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf)).

- Higher educational attainment is often associated with better employment prospects and Latvia is no exception. In 2021, the employment rate among 25-34 year-olds with tertiary education in Latvia was 27 percentage points higher than among those with below upper secondary attainment and 11 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. On average across OECD countries, the employment rate among 25-34 year-olds with a tertiary qualification was 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. While the positive link between educational attainment and employment rates holds for both men and for women across the OECD, it is particularly strong for women. In Latvia, 32% of women with below upper secondary attainment were employed in 2021, compared to 84% of those with tertiary attainment. In contrast, the figures were 74% and 91% for men.
- Across the OECD, the labour market benefits of tertiary attainment have proved especially strong during economic crises. This was also the case during the COVID-19 pandemic in Latvia. Between 2019 and 2020, unemployment for 25-34 year-old workers with below upper secondary attainment increased by 5.7 percentage points, by 1.8 percentage points for workers with upper secondary attainment and by 2.4 percentage points for workers with tertiary attainment. In 2021,

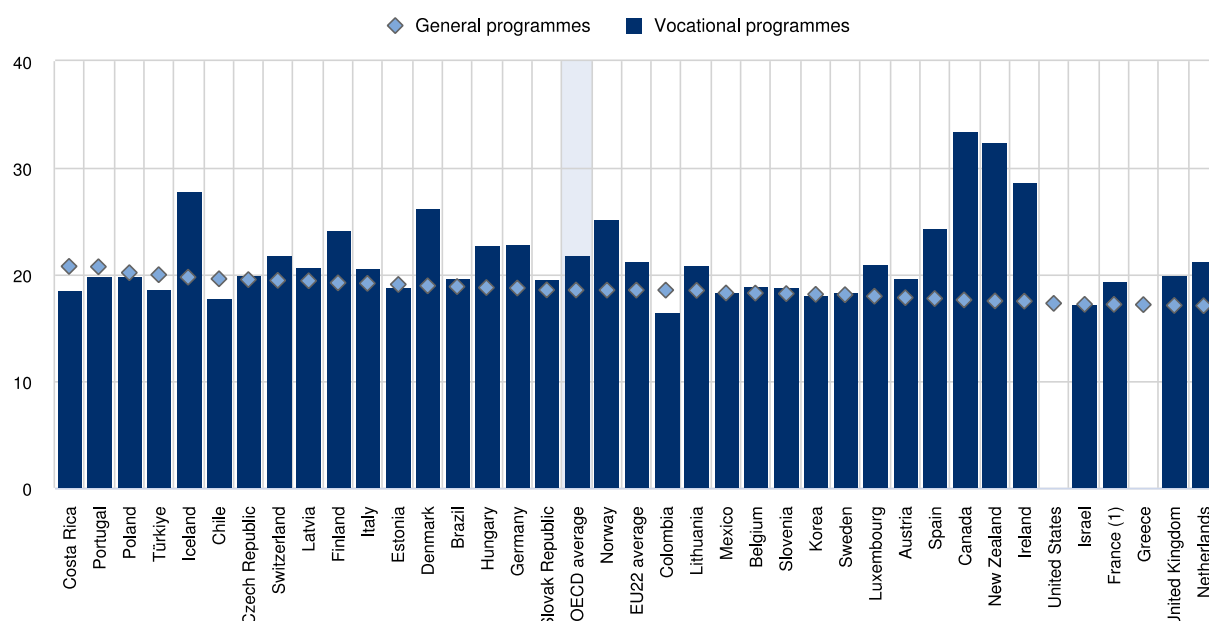
unemployment for workers with below upper secondary attainment fell by 4.5 percentage points compared to 2020, while it rose by 1.2 percentage points for workers with upper secondary attainment and decreased by 1.4 percentage points for workers with tertiary attainment.

- Educational attainment affects not just employment prospects, but also wage levels. On average across the OECD, 25-64 year-old workers with upper secondary or post-secondary non-tertiary attainment earn 29% more than workers with below upper secondary attainment, while those with tertiary attainment earn about twice as much. In Latvia, the earnings advantage of tertiary-educated workers was smaller than the OECD average. In 2020, workers with upper secondary or post-secondary non-tertiary attainment earned 7% more than those with below upper secondary attainment and those with tertiary attainment earned 58% more.
- In most countries, earnings increase with age for workers with all levels of educational attainment, but the increase in pay is more pronounced among tertiary-educated. On average across OECD countries, among full-time full-year workers, younger adults (25-34 year-olds) with at least a bachelor's or equivalent degree earned 39% more than their peers with upper secondary attainment in 2020. Among 45-54 year-olds, this premium rises to 75% more. Latvia is the only country where younger adults enjoy a higher earnings advantage from at least a bachelor's or equivalent degree than their older peers.

## Access to education, participation and progress

- Compulsory education begins at the age of 5 in Latvia, when it becomes mandatory for children to attend pre-primary programmes. It is then compulsory for children to complete basic education, a 9-year programme for children aged 7 to 16 years. The range of ages for which at least 90% of the population are enrolled is longer than the period of compulsory education and goes from the age of 4 to the age of 18. This is similar to most other OECD countries, where more than 90% of the population are also enrolled for longer than the period of compulsory education. In Latvia, this is partly because it is mandatory for students who do not complete a basic education programme by the age of 16 to continue studying until the age of 18. In addition, there are universal and free entitlements to early childhood education before the age at which it becomes compulsory.
- The age at which children enter early childhood education differs widely across countries. In Latvia, where early childhood education starts offering intentional education objectives at the age of 1.5, 16% of 1 year-olds and 72% of 2 year-olds are enrolled in early childhood education. Overall, 31% of children under 3 are enrolled in early childhood education. Across OECD countries, the average enrolment rate among children below the age of 3 is 27%, but the rates range from less than 1% to 63%. The enrolment rate among 3-5 year-olds increases substantially in all OECD countries. In Latvia, 93% of all children of this age are enrolled in early childhood education, which is 10 percentage points above the OECD average.
- The average age of graduation from general upper secondary programmes varies from 17 to 21 years across OECD countries and is 19 years in Latvia. Differences in the average age of graduation from vocational upper secondary education are much larger and vary from 16 to 34 years across the OECD. These differences largely depend on whether vocational upper secondary students usually enrol in these programmes towards the end of their compulsory education or in mid-career. In Latvia, the average age of graduation from vocational upper secondary education is 21 years, which is slightly below the OECD average at 22 years (Figure 2).

**Figure 2. Average age of first-time upper secondary graduates, by programme orientation (2020)**  
In years



1. Average age is based on all graduates instead of first-time graduates.

Countries are ranked in descending order of the average age of first-time upper secondary graduates in general programmes.

**Source:** OECD/Eurostat/UIS (2022), Tables B3.1 and B3.2. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. In Latvia, the share is 54%, which is similar to the OECD average of 55%. In contrast, men are overrepresented among graduates of vocational upper secondary programmes in most OECD countries, as is the case in Latvia where they make up 56% of all vocational upper secondary graduates, slightly above the OECD average (55%).
- In Latvia, 62% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (significantly above the OECD average of 54%). Of these students, (14% of 18-24 year-olds) combine their education or training with some form of employment in Latvia, compared to 17% on average across the OECD.
- One significant difference across countries' education systems is on whether or not vocational upper secondary programmes provide access to tertiary education. In 12 OECD countries and other participants, all vocational upper secondary graduates have direct access to tertiary education. In Latvia 92% of graduates from vocational upper secondary programme have direct access to tertiary education.
- In order to facilitate more flexible learning in vocational education, amendments to the Latvian Vocational Education Law in 2022 outline the possibility for students to receive state-recognized certificates for both full and partial completion of vocational education programmes. Learners therefore have the opportunity to accumulate and transfer recognized vocational qualifications on a basis that is more suited to their individual needs.
- As is the case in all OECD countries, a majority of students enrolled at tertiary level in Latvia are bachelor's students (56%). However, the next commonest enrolment level varies from country to

country. In Latvia, master's students make up the second largest group of tertiary students at 23%. This is also the case in 25 other OECD countries, while in the remaining 14 countries with available data, short-cycle tertiary students form the second largest group.

- At 30%, business, administration and law was the most popular field of study among new entrants into tertiary education, which is the case in most OECD countries. Despite the growing need for digital skills and the good employment prospects of students with degrees in information and communication technologies (ICT), only a small fraction of entrants into tertiary education choose this field. In Latvia, 94% of 25-64 year-olds with a tertiary ICT qualification are employed, but ICT students make up only 8% of new entrants into tertiary education. However, this is above the OECD average of 6%.

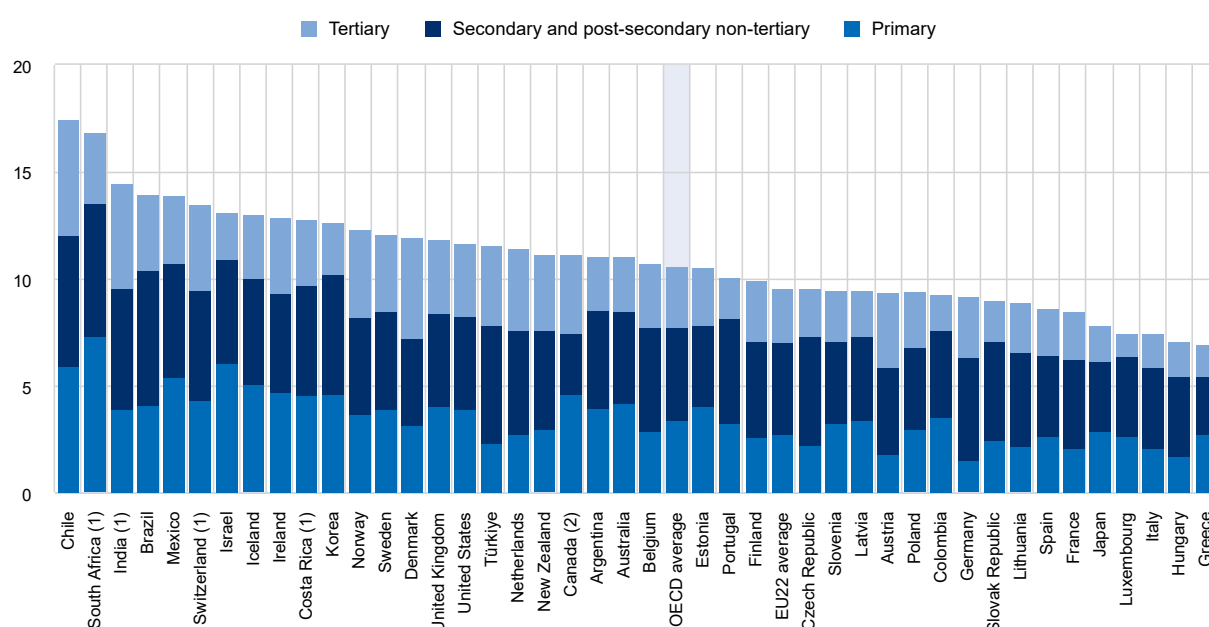
## Financial resources invested in education

- All OECD countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average 4.9% of their gross domestic product (GDP) on formal education in primary to tertiary educational institutions. In Latvia, the corresponding share was 4.3%. Between 2008 and 2019, funding for educational institutions from all sources fell by 7% in Latvia. However, over the same period of time, the increase in GDP was higher with 9%. As a consequence, expenditure on educational institutions as a share of GDP fell by 0.8 percentage points over the same time period.
- Public spending on primary to tertiary education was 9.5% of total government expenditure in Latvia (Figure 3), lower than the OECD average (10.6%). Also, relative to GDP, public spending on primary to tertiary education in Latvia (3.6%) is lower than the OECD average (4.4%).
- Spending on educational institutions as share of GDP and public budgets are important measures of the importance that countries place on education in their budgeting decisions. However, they do not show the total amount of funding per student because GDP levels, public budgets and student numbers vary from country to country. Across primary to tertiary education, OECD countries spend an average of USD 11 990 per student (in equivalent USD converted using PPPs for GDP) on educational institutions each year. In comparison, Latvia spent USD 8 461 per student in 2019. Its cumulative expenditure on formal education (excluding non-formal education such as interest-related extra-curricular education) for a student from the age of 6 to 15 was USD 69 013, which was significantly below the OECD average of USD 105 502.
- Across OECD countries, the provision of education at primary and secondary levels in terms of curricula, teaching styles and organisational management leads, on average, to similar patterns of expenditure per student from primary to post-secondary non-tertiary levels. OECD countries as a whole spend on average around USD 9 923 per student at primary and USD 11 400 per student at secondary level. In Latvia, the values are USD 6 865 at primary and USD 7 889 per student at secondary level, which are among the lowest across OECD countries.
- In contrast to lower levels of education, spending on tertiary education varies widely across OECD countries. Expenditure per student at tertiary level in Latvia is higher than at other levels of education, as is the case in almost all other OECD countries. The average expenditure per student in Latvia is USD 12 186 per year, which is about USD 5 300 higher than that of the primary level and USD 4 300 higher than that of the secondary level. It is below the OECD average, but similar to many other countries. The average expenditure at tertiary level (USD 17 559) is driven up by high values in a few countries. At 24%, the share of research and development (R&D) expenditure makes up a smaller fraction of expenditure on tertiary education in Latvia than on average across OECD countries (29%).

- Between 2015 and 2019, current expenditure on tertiary education grew by 11% on average across the OECD (in constant 2015 prices), outpacing the average growth in current expenditure on non-tertiary education, which increased by 8% in the same period. The growth in current expenditure on tertiary education was particularly pronounced in Latvia, where the change in tertiary expenditure was more than 45 percentage points higher than for non-tertiary expenditure. In Latvia, this was reflected in changes in staff salary expenditure at tertiary education, which were over 60 percentage points higher than changes at non-tertiary levels.
- Public funding dominates non-tertiary education (primary, secondary and post-secondary non-tertiary) in all OECD countries, even after transfers to the private sector. On average across the OECD, private funding accounts for 10% of expenditure at primary, secondary and post-secondary non-tertiary levels, while this share was 6% in Latvia in 2019. In contrast, private expenditure at tertiary level was higher in all OECD countries. In Latvia, the share of private expenditure at tertiary level reached 34%, which was slightly above the OECD average of 31%.

**Figure 3. Composition of total public expenditure on education as a percentage of total government expenditure (2019)**

Primary to tertiary education (including R&D), in per cent



1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

**Source:** OECD/UIS/Eurostat (2022), Table C4.1. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-C.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf)).

## Teachers, the learning environment and the organisation of schools

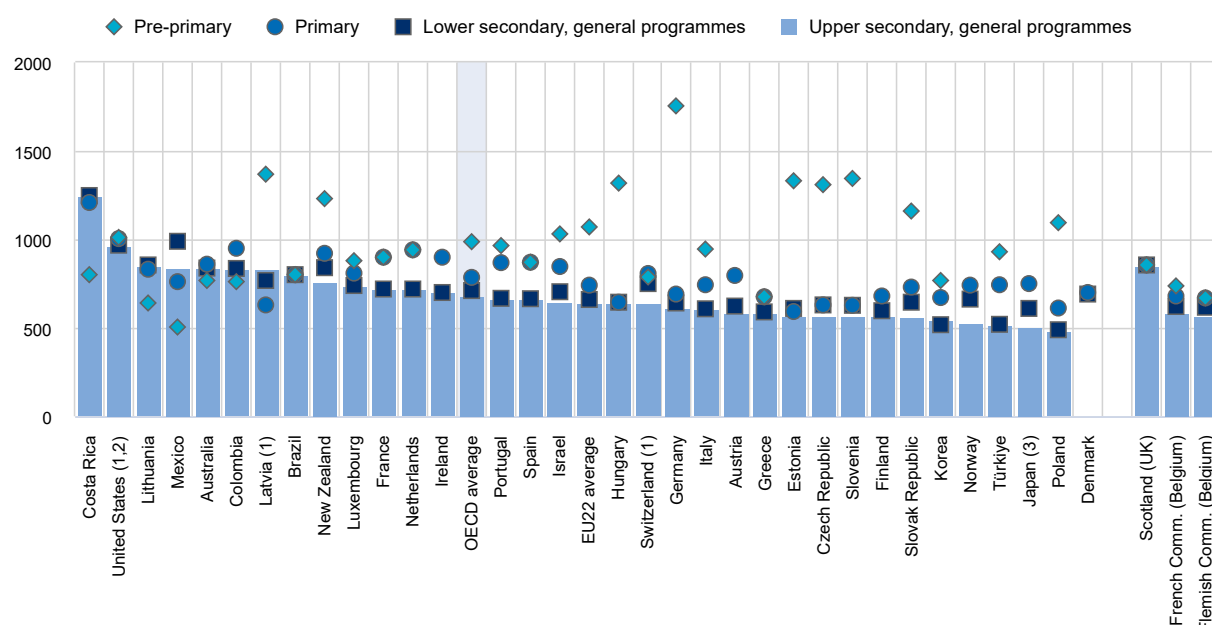
- The salaries of teachers and school heads are an important determinant of the attractiveness of the teaching profession, but they also represent the single largest expenditure item in formal education. In most OECD countries, the statutory salaries of teachers (and school heads) in public educational institutions increase with the level of education they teach, and also with experience. Actual salaries also increase with the level of education. On average across OECD countries,

actual salaries range from USD 41 941 at the pre-primary level to USD 53 682 at the upper secondary level. In Latvia, actual salaries average USD 21 959 at pre-primary level and USD 31 864 at upper secondary level.

- Between 2015 and 2021, on average across OECD countries in the EU, the actual salaries of teachers at lower secondary level (general programmes) aged 25-64 increased by 18% in real terms. In Latvia, salaries increased more, by 59% in the same period.
- The attractiveness of the teaching profession to recent graduates may be affected by the salaries of teachers compared to those of other professions. In Latvia, the statutory starting salaries of lower secondary teachers in general programmes represent 93% of the average earnings of a worker who graduated from a bachelor's programme in the last two years. In most other countries with available data, the starting salaries of lower secondary teachers is also lower than the average earnings of graduates from bachelor's programmes. As master's graduates tend to earn more than those with only a bachelor's or equivalent degree, it would be expected that the starting salaries of teachers would be less competitive when compared to graduates of master's programmes or equivalent than to graduates of bachelor's programmes or equivalent. For master's graduates, teachers' starting salaries represent only 68% of the average earnings of full-time full-year workers who graduated in the last two years.
- To improve the attractiveness of teaching, the Latvian government has been working on gradually increasing teachers' salaries. On 1 September 2022, the minimum monthly salary for primary and secondary school teachers increased by 8.4%, from EUR 830 to 900 (for teachers working 30 hours a week). For teachers working in pre-school, the minimum monthly salary increased by 11.2%, from EUR 872 to 970 (for teachers working 40 hours a week).
- The average number of teaching hours per year required from a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases. This is also the case in Latvia.
- Based on official regulations or agreements, annual teaching hours in Latvia are 1 368 hours per year at pre-primary level, 630 hours at primary level, 768 hours at lower secondary level (general programmes) and 832 hours at upper secondary level (general programmes) (Figure 4).
- During their working hours, teachers also perform various non-teaching tasks such as lesson planning and preparation, marking students' work and communicating or co-operating with parents or guardians. At the upper secondary level, 37% of teachers' working time is formally dedicated to non-teaching activities in Latvia, compared to an average of 56% across OECD countries.
- The duration of initial teacher education for primary and lower secondary teachers ranges from 2.5 years to 6.5 years across OECD countries. In Latvia, initial teacher education typically last 4 years for prospective lower secondary teachers (general programmes). It is the same length for prospective primary teachers. As is the case in almost all OECD countries, a tertiary degree is awarded to prospective teachers of all levels of education upon completion of their initial teacher training.
- Continuing professional development is compulsory for all teachers of general programmes in most countries with data, and Latvia is no exception. At secondary level, professional development activities are compulsory for all teachers.

**Figure 4. Teaching time of teachers, by level of education (2021)**

Net statutory teaching time in hours per year, in public institutions



1. Actual teaching time (in Latvia except for pre-primary level).

2. Reference year differs from 2021. Refer to the source table for details.

3. Average planned teaching time in each school at the beginning of the school year.

Countries and other participants are ranked in descending order of the number of teaching hours per year in general upper secondary education.

**Source:** OECD (2022), Table D4.1. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-D.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-D.pdf)).

## Focus on tertiary education

- Among 25-64 year-olds in Latvia, master's degrees are the most common tertiary attainment at 19% of the population followed by bachelor's degrees at 16% and short-cycle tertiary qualifications with 4%. This is different from the OECD average, where bachelor's degrees are most common (19%), followed by master's degrees (14%) and short cycle tertiary qualifications (7%). As in all OECD countries, only a small fraction of the population holds a doctoral degree: the share is less than 1% in Latvia. Since 2020, a new model of doctoral studies has been under development in Latvia to improve the quality and attractiveness of doctoral education, with the creation of a unified promotion procedure and a new framework for funding (European Commission, 2022<sup>[1]</sup>).
- On average, tertiary attainment generates a wide range of labour-market benefits, including high employment rates. Yet, there are significant differences depending on the field of study. In 2021, employment rates in Latvia were highest among tertiary-educated individuals who studied nursing and associate fields with 95% and lowest among those who studied law at 78%. However, these differences need to be put into perspective. Even among 25-64 year-olds with tertiary attainment in the field with the lowest employment rate, this was 5.6 percentage points higher than among those with upper secondary attainment (all fields combined).
- Wages also differ according to the field of study. In Latvia, tertiary attainment in information and communication technologies generates the highest earnings. Full-time full-year workers aged 25-64 with a tertiary degree in this field earn on average more than twice as much as workers with

upper secondary attainment (all fields combined). In contrast, tertiary attainment in the field of education leads to the lowest wages. Workers with this educational background earn on average 7% more than the wage of workers with upper secondary attainment (all fields combined).

- Despite the labour market advantages of a tertiary degree, many tertiary students do not graduate on time or do not graduate at all. Cross-cohort completion rates compare the number of new entrants to a given level of education with the number of graduates after the theoretical duration of the programme. In Latvia, the cross-cohort completion rate of bachelor's students is 48%, the lowest among countries with available data. The cross-cohort completion rate of students in short-cycle programmes is also relatively low at 58%.
- In all OECD countries with cross-cohort data, tertiary completion rates are higher for women than for men at bachelor's level. In Latvia, the cross-cohort completion rate was 50% for women in bachelor's programmes, whilst it was 47% for men. In contrast, the cross-cohort completion rate for women in short-cycle programmes was 57% in Latvia, which was 3 percentage points lower than that of men.
- In most OECD countries including in Latvia, tertiary-educated adults have higher rates of participation in non-formal education and training than those with a lower level of educational attainment. In 2021, 13% of 25-64 year-olds with tertiary attainment in Latvia had participated in non-formal education and training in the four weeks prior to being surveyed, compared to 3% of their peers with upper secondary or post-secondary non-tertiary attainment.
- Entering tertiary education often means costs for students and their families, in terms of tuition fees, foregone earnings and living expenses, although they may also receive financial support to help them afford it. However, public policies on tuition fees and financial support for students differ greatly across countries. In Latvia, comparatively high levels of tuition fees are combined with low levels of financial support for students. Public institutions charge tuition fees of USD 4 715 for national students at bachelor's level and of USD 4 898 at master's level.
- OECD countries have different approaches to providing financial support to students enrolled in tertiary education, but in general countries with the highest level of public transfers to the private sector are those that also tend to have the highest tuition fees. In six OECD countries and other participants, at least 80% of national students receive public financial support in the form of student loans, scholarships or grants. In another six countries and other participants, less than 25% of students receive financial support. In these countries and other participants, public financial support is targeted on selected groups of students, such as those from socio-economically disadvantaged families. In Latvia, 4% of students receive public financial support in the form of government-guaranteed private loans.
- Over the decades, independent private institutions have been established to meet increased demand for tertiary education. On average across the OECD, 17% of students are enrolled in independent private institutions, but this figure masks large differences between countries. In Latvia, 23% of tertiary students are enrolled in such institutions. Independent private institutions charge higher annual tuition fees on average than public institutions for master's programmes in all OECD countries and other participants with available data, except in Chile and Lithuania. In Latvia, the average annual tuition fees for master's programmes in independent private institutions are 16% higher than in public institutions. In 6 OECD countries with data, tuition fees are more than twice as high in independent private institutions.
- Enabling students to enrol on a part time basis is an important way to facilitate access to tertiary education. Many part-time students would not be able to study full time, for example because they have child-care responsibilities or have to work to fund their studies. The share of part-time students at the tertiary level in Latvia is 28%, above the OECD average (22%). Compared to 2013, the share of part-time students has increased by 1 percentage point in Latvia, whilst it decreased by 2 percentage points on average.

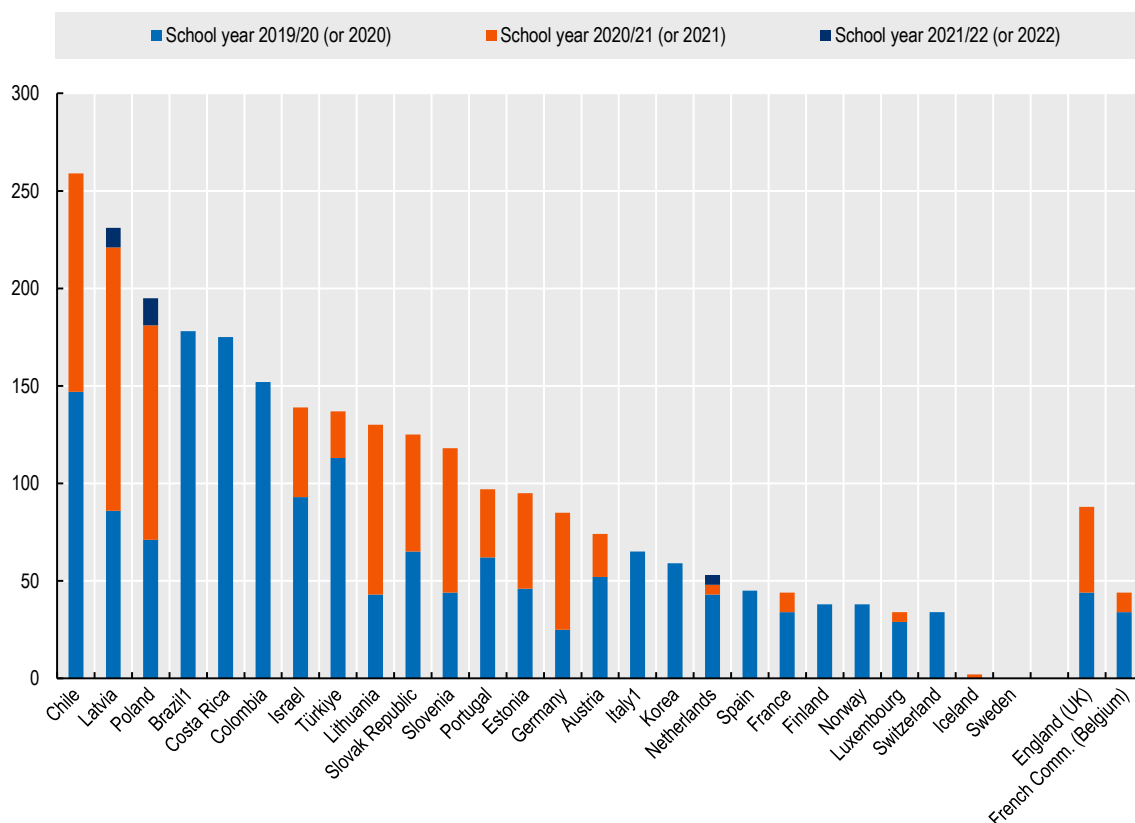
- Staff at tertiary level tend to start their careers relatively late due to the length of the education they need to qualify. In Latvia, only 4% of academic staff are aged under 30, below the OECD average (8%). In contrast, the share of academic staff aged 50 or over is 48%, which is above the OECD average by 8 percentage points. However, the trends in academic staff's ages between 2015 and 2020 in Latvia show a tendency for academic staff to become younger.

## COVID-19: The second year of the pandemic

- The COVID-19 pandemic disrupted traditional schooling in 2020 and the first half of 2021, leading to school closures across all OECD countries. While most shut down their premises entirely in the wake of the pandemic in 2020, by 2021 the situation had improved and returned to normal in most countries in 2022. In Latvia, primary and secondary schools were entirely closed for 47-86 days during the school year 2019/20, for 105-173 days in 2020/21 and up to 15 days in 2021/22 (Figure 5). Partial closures reached 38-68 days in 2020/21 and up to 13 days in 2021/22.
- Teacher absences also affected the regular operation of schools during the pandemic, whether due to COVID-19 infections or because of precautionary quarantine. In Latvia, primary and lower secondary classes with absent teachers in public institutions were closed during the pandemic. At pre-primary level, classes with absent teachers were either closed, or students were assigned to other classes.
- National examinations have also been affected by the pandemic. At general upper secondary level, 18 OECD countries postponed their national examinations during the school year 2019/20, while 10 countries even cancelled them entirely. In 2020/21, national examinations were postponed in 9 countries and cancelled in 6 countries. Latvia rescheduled its national examinations in 2019/20 and went ahead with them as planned in 2020/21, with some adjustments to the content and the mode of administration.
- Most countries conducted assessments of the impact of school closures on learning outcomes at various levels of education and along several dimensions. Latvia has conducted studies to evaluate the effects of the pandemic and its impact on primary, lower secondary, upper secondary general and vocational education. The assessments covered mathematics, reading and science. Like many other countries, Latvia also evaluated dimensions such as the effectiveness of distance-learning strategies during school closures, non-cognitive skills, and the relations between parents and students during lockdowns, as well as the mental health and wellbeing of students and teachers.
- In school year 2022, national programmes to support students affected by the pandemic were implemented in Latvia at, primary, lower secondary, upper secondary general and vocational and tertiary level. At primary to upper secondary education, measures to address the effects of the COVID-19 pandemic included accelerated education or catch-up programmes for students who dropped out of school, community mobilisation campaigns to bring students back to school, early warning systems to identify students at risk of dropping out, referral systems for students in need of specialised services, psychosocial and mental health support to students, increased instruction time through summer schools, extended school days or the school week or academic year and additional water, sanitation and hygiene services. The government has already assessed the effectiveness of these programmes.
- The increased digitalisation of education has been a major consequence of the COVID-19 pandemic in many OECD countries. At lower secondary level, Latvia has responded to the pandemic with an enhanced provision of digital tools at school, distance learning, hybrid learning, in-service and pre-service digital training to teachers and digital training to students. Moving forward, the development of e-learning tools and digital competences are key goals in the Latvian Educational Development Guidelines for 2021-27 (Izglītības un zinātnes ministrija, 2021<sup>[2]</sup>).

**Figure 5. School closures due to COVID-19 (2020, 2021 and the first quarter of 2022)**

Number of instruction days of full closure of lower secondary schools excluding school holidays, public holidays and weekends



**Note:** The data underlying this report were produced through the Survey on Joint National Responses to COVID 19, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), the World Bank (WB), and the Organisation for Economic Co-operation and Development (OECD). Data for other levels of education are available at <https://www.oecd.org/education/Results-4th-wave-COVID-Survey-OECD-database.xlsx>.

1. Data for 2021 and 2022 are missing.

Countries and other participants are ranked in descending order of the total number of days lower secondary schools were fully closed during the school years 2019/20 (2020), 2020/21 (2021) and 2021/22 (2022).

**Source:** OECD/UIS/UNESCO/UNICEF/WB (2022).

- The challenges related to the COVID-19 pandemic have created additional costs for education systems. Preliminary budget estimates for 2021 suggest that, compared to 2020, the education budget at pre-primary to tertiary level in Latvia slightly increased (by between 1% and 5%, in nominal terms).
- The COVID-19 pandemic had a significant impact on adult learning in most OECD countries. In 2020, the share of adults who participated in a formal or non-formal education and training activity in the four weeks prior to being surveyed decreased by 2 percentage points on average across OECD countries compared with 2019. However, in 2021, participation in non-formal education and training returned to pre-pandemic levels in most countries. In Latvia, a similar pattern emerged. From 2019 to 2020, the share of adults participating in a formal or non-formal education and training activity fell by 1 percentage point. From 2020 to 2021, it increased by 2 percentage points and has thus increased above pre-pandemic levels to 9%. This was still lower than the average share of adults who participated in formal or non-formal education and training across the OECD, which was 14%.

- Young adults who are not in employment, education or training (NEET) for prolonged periods are at risk of adverse economic and social outcomes in both the short and the long term. After remaining constant during the COVID-19 pandemic in 2020, the share of 18-24 year-olds who are NEET in Latvia rose in 2021. The share of NEET among young adults was 13% in 2021, an increase of 2 percentage points compared to 2019.

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European Commission (2022), *National Reform Programme of Latvia: 2022 Progress Report*, [https://ec.europa.eu/info/sites/default/files/2022\\_nrp\\_latvia\\_en.pdf](https://ec.europa.eu/info/sites/default/files/2022_nrp_latvia_en.pdf) (accessed on 4 September 2022).

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OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/69096873-en>.


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## More information

**For more information on Education at a Glance 2022 and to access the full set of indicators, see:** <https://doi.org/10.1787/3197152b-en>

For more information on the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, See Annex 3 ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3.pdf)).

For general information on the methodology, please refer to the *OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications* (<https://doi.org/10.1787/9789264304444-en>).

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.

Data on subnational regions for selected indicators are available in the *OECD Regional Statistics (database)* (OECD, 2022). When interpreting the results on subnational entities, readers should take into account that the population size of subnational entities can vary widely within countries. For example, regional variation in enrolment may be influenced by students attending school in a different region from their area of residence, particularly at higher levels of education. Also, regional disparities tend to be higher when more subnational entities are used in the analysis.

Explore, compare and visualise more data and analysis using the Education GPS: <https://gpseducation.oecd.org/>

The data on educational responses during COVID-19 were collected and processed by the OECD based on the Joint Survey on National Responses to COVID-19 School Closures, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO); the UNESCO Institute for Statistics (UIS); the United Nations Children's Fund (UNICEF); the World Bank; and the OECD.

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### Questions can be directed to:

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# Lithuania

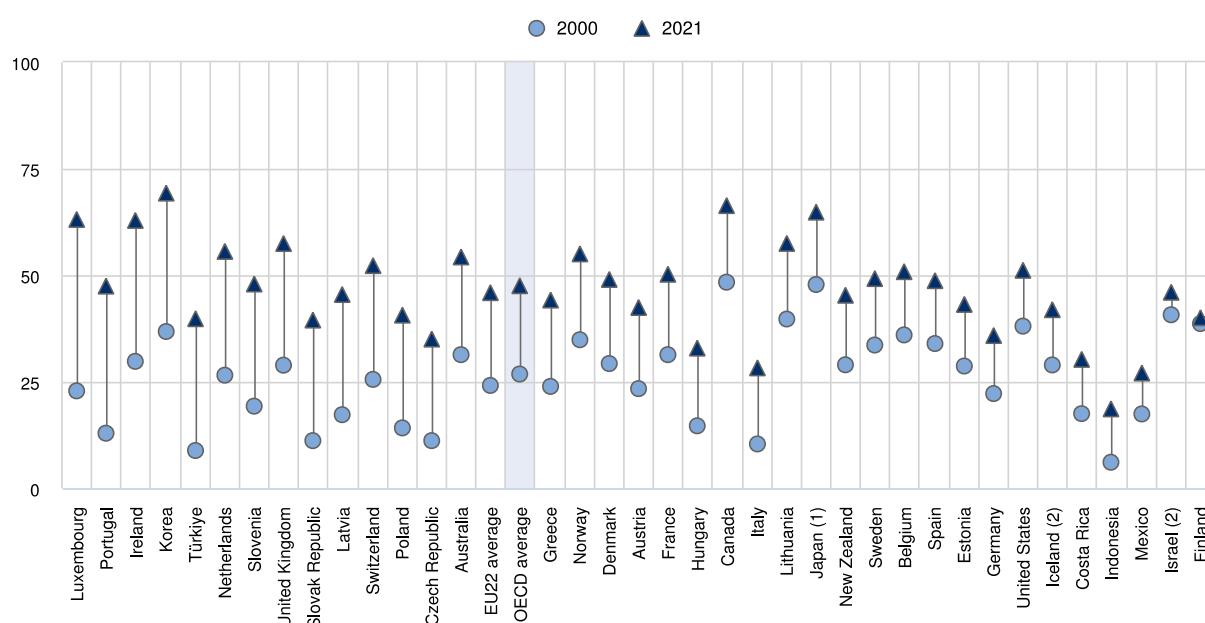
## The output of educational institutions and the impact of learning

- Educational attainment has been increasing throughout the OECD, in particular at tertiary level. Between 2000 and 2021, the share of 25-34 year-olds with tertiary attainment increased on average by 21 percentage points. In Lithuania, the share also increased albeit at a slower pace, by 18 percentage points (from 40% in 2000 to 57% in 2021) (Figure 1). Lithuania is one of the 14 OECD countries where at least half of 25-34 year-olds have a tertiary education.
- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. Although the general increase in educational attainment has seen a parallel decline in the share of 25-34 year-olds without upper secondary attainment, 14% of young adults across the OECD still left school without an upper secondary qualification. In Lithuania, the share is 7%, which is lower than the OECD average.
- Higher educational attainment is often associated with better employment prospects and Lithuania is no exception. In 2021 the employment rate among 25-34 year-olds with tertiary education in Lithuania was 35 percentage points higher than among those with below upper secondary attainment and 13 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. On average across OECD countries, the employment rate among 25-34 year-olds with a tertiary qualification was 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. While the positive link between educational attainment and employment rates holds for both men and for women across the OECD, it is particularly strong for women. In Lithuania, 40% of women with below upper secondary attainment were employed in 2021, compared to 90% of those with tertiary attainment. In contrast, the figures were 62% and 93% for men.
- Across the OECD, the labour market benefits of tertiary attainment have proved especially strong during economic crises. This was also the case during the COVID-19 pandemic in Lithuania. Between 2019 and 2020, unemployment for 25-34 year-old workers with below upper secondary attainment increased by 4.6 percentage points, by 3.1 percentage points for workers with upper secondary attainment and by 1.1 percentage points for workers with tertiary attainment. In 2021, unemployment for workers with below upper secondary attainment fell by 4.2 percentage points, compared to 2020, by 2.2 percentage points for workers with upper secondary attainment and by 0.5 percentage points for workers with tertiary attainment.
- Educational attainment affects not just employment prospects, but also wage levels. On average across the OECD, 25-64 year-old workers with upper secondary or post-secondary non-tertiary attainment earn 29% more than workers with below upper secondary attainment, while those with tertiary attainment earn about twice as much. In Lithuania, the earnings advantage of tertiary-educated workers was slightly smaller than the OECD average. In 2018, workers with upper secondary or post-secondary non-tertiary attainment earned 23% more than those with below upper secondary attainment and those with tertiary attainment earned also about twice as much.

- National averages provide only an incomplete picture of the situation in any given country. In most OECD countries, there are large differences in educational attainment across subnational regions. This is also the case in Lithuania. In 2021, the difference between the region with the highest share of 25-64 year-olds with tertiary attainment (Vilnius Region, at 61%) and that with the lowest share (Central and Western Lithuania, at 39%) was 22 percentage points. These subnational variations do not only reflect differences in education opportunities. To a large degree, they are due to economic conditions and internal migration patterns.

**Figure 1. Trends in the share of tertiary-educated 25-34 year-olds (2000 and 2021)**

In per cent



1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group).

2. Year of reference differs from 2000: 2002 for Israel and 2003 for Iceland.

Countries are ranked in descending order of the difference in the share of tertiary-educated 25-34 year-olds between 2000 and 2021.

**Source:** OECD (2022), Education at a Glance Database, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-A.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf)).

## Access to education, participation and progress

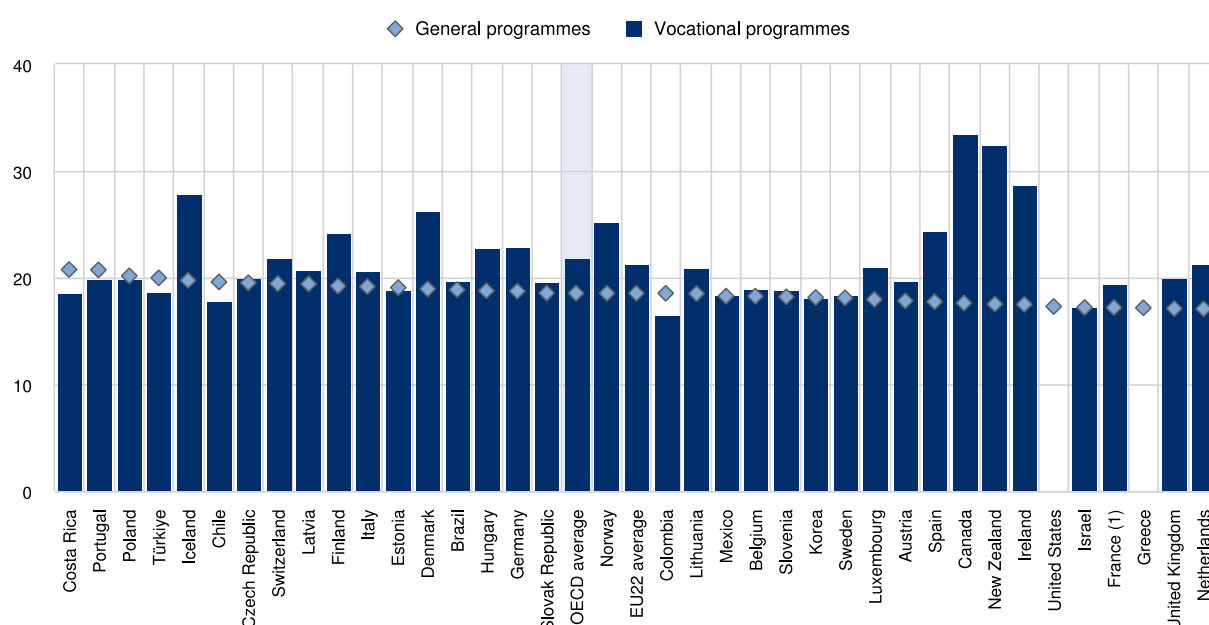
- Compulsory education begins at the age of 7 and ends at the age of 16 in Lithuania. The range of ages for which at least 90% of the population are enrolled is longer than the period of compulsory education and goes from the age of 4 to the age of 18. This is similar to most other OECD countries, where more than 90% of the population are also enrolled for longer than the period of compulsory education.
- The age at which children enter early childhood education differs widely across countries. In Lithuania, early childhood education starts offering intentional education objectives for children younger than 1 and 30% of children under 3 are enrolled in early childhood education. Across OECD countries, the average enrolment rate among children below the age of 3 is 27%, but the rates range from less than 1% to 63%. The enrolment rate among 3-5 year-olds increases

substantially in all OECD countries. In Lithuania, 90% of all children of this age are enrolled in early childhood education, which is above the OECD average.

- The average age of graduation from general upper secondary programmes varies from 17 to 21 years across OECD countries and is 19 years in Lithuania. Differences in the average age of graduation from vocational upper secondary education are much larger and vary from 16 to 34 years across the OECD. These differences largely depend on whether vocational upper secondary students usually enrol in these programmes towards the end of their compulsory education or in mid-career. In Lithuania, the average age of graduation from vocational upper secondary education is 21 years, which is slightly below the OECD average at 22 years (Figure 2).

**Figure 2. Average age of first-time upper secondary graduates, by programme orientation (2020)**

In years



1. Average age is based on all graduates instead of first-time graduates.

Countries are ranked in descending order of the average age of first-time upper secondary graduates in general programmes.

**Source:** OECD/Eurostat/UIS (2022), Tables B3.1 and B3.2. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. In Lithuania, the share is 54% (OECD average 55%). In contrast, men are overrepresented among graduates of vocational upper secondary programmes in most OECD countries, as is the case in Lithuania where they make up 67% of all vocational upper secondary graduates, above the OECD average (55%).
- In Lithuania, 55% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (slightly above the OECD average of 54%). A subset of these students (11% of 18-24 year-olds) combine their education or training with some form of employment in Lithuania, compared to 17% on average across the OECD.
- One significant difference across countries' education systems is on whether or not vocational upper secondary programmes provide access to tertiary education. In 12 OECD countries and

other participants, all vocational upper secondary graduates have direct access to tertiary education. In Lithuania 94% of graduates from vocational upper secondary programme have direct access to tertiary education.

- As is the case in all OECD countries, a majority of students enrolled at tertiary level in Lithuania are bachelor's students (72%). However, the next commonest enrolment level varies from country to country. In Lithuania, master's students make up the second largest group of tertiary students at 25%. This is also the case in 25 other OECD countries, while in the remaining 14 countries with available data, short-cycle tertiary students form the second largest group.
- At 28%, business, administration and law was the most popular field of study among new entrants into tertiary education in Lithuania, which is the case in most OECD countries. Despite the growing need for digital skills and the good employment prospects of students with degrees in information and communication technologies (ICT), only a small fraction of entrants into tertiary education choose this field. In Lithuania, 94% of 25-64 year-olds with a tertiary ICT qualification are employed, but ICT students make up 7% of new entrants into tertiary education. However, this is above the OECD average of 6%.

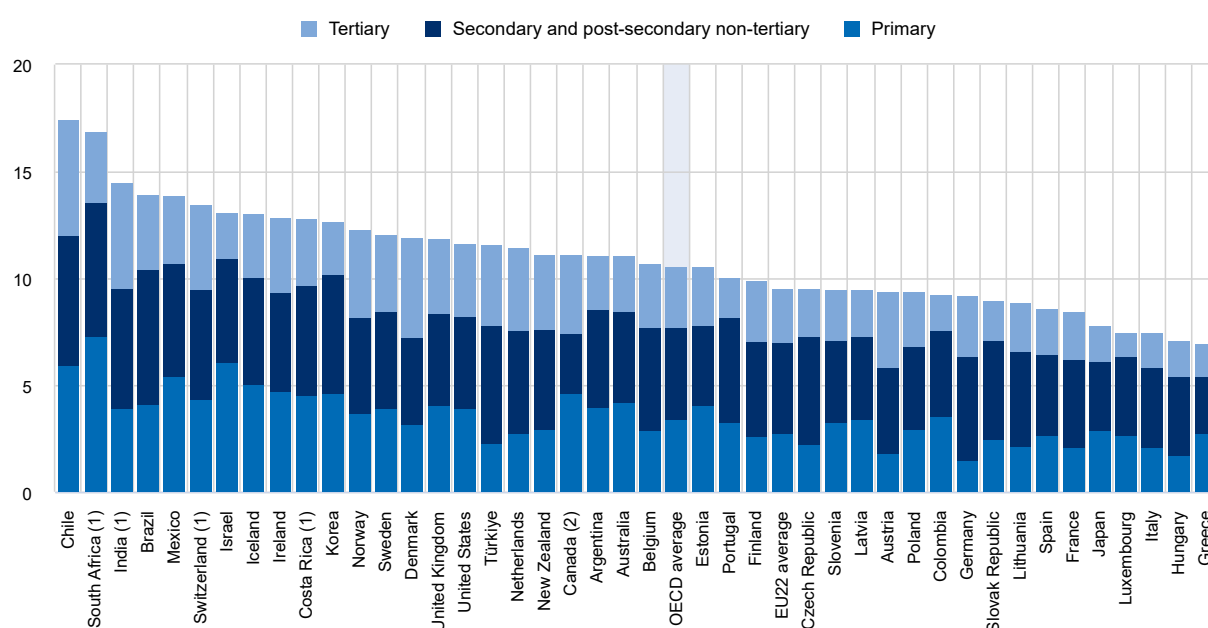
## Financial resources invested in education

- All OECD countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average 4.9% of their gross domestic product (GDP) on primary to tertiary educational institutions. In Lithuania, the corresponding share was 3.5%.
- Public spending on primary to tertiary education was 8.9% of total government expenditure in Lithuania (Figure 3), lower than the OECD average (10.6%). Also, relative to GDP, public spending on primary to tertiary education (3.1%) is lower than the OECD average (4.4%).
- Spending on educational institutions as share of GDP or public budgets are important measures of the importance that countries place on education in their budgeting decisions. However, they do not show the total amount of funding per student because GDP levels, public budgets and student numbers vary from country to country. Across primary to tertiary education, OECD countries spend an average of USD 11 990 per student (in equivalent USD converted using PPPs for GDP) on educational institutions each year. In comparison, Lithuania spent USD 8 135 per student in 2019. Its cumulative expenditure on educating a student from the age of 6 to 15 was USD 72 114, which was significantly below the OECD average of USD 105 502.
- Across OECD countries, the provision of education at primary and secondary levels in terms of curricula, teaching styles and organisational management leads, on average, to similar patterns of expenditure per student from primary to post-secondary non-tertiary levels. OECD countries as a whole spend on average around USD 9 923 per student at primary and USD 11 400 per student at secondary level. In Lithuania, the values are USD 7 095 at primary and USD 7 227 per student at secondary level, which are among the lowest across OECD countries.
- In contrast to lower levels of education, spending on tertiary education varies widely across OECD countries. Expenditure per student at tertiary level in Lithuania is higher than at other levels of education, as is the case in almost all other OECD countries. The average expenditure per student in Lithuania is USD 11 039 per year, which is about USD 3 900 higher than that of the primary level and USD 3 800 higher than that of the secondary level. It is among the lowest across OECD countries. The average expenditure at tertiary level (USD 17 559) is driven up by high values in a few countries. At 29%, the share of research and development (R&D) expenditure makes up a similar fraction of expenditure on tertiary education in Lithuania to the average across OECD countries.

- Public funding dominates non-tertiary education (primary, secondary and post-secondary non-tertiary) in all OECD countries, even after transfers to the private sector. On average across the OECD, private funding accounts for 10% of expenditure at primary, secondary and post-secondary non-tertiary levels, while this share was 5% in Lithuania in 2019. In contrast, private expenditure at tertiary level was higher in all OECD countries. In Lithuania, the share of private expenditure at tertiary level reached 28%, which was slightly below the OECD average of 31%.

**Figure 3. Composition of total public expenditure on education as a percentage of total government expenditure (2019)**

Primary to tertiary education (including R&D), in per cent



1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

**Source:** OECD/UIS/Eurostat (2022), Table C4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-C.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf)).

## Teachers, the learning environment and the organisation of schools

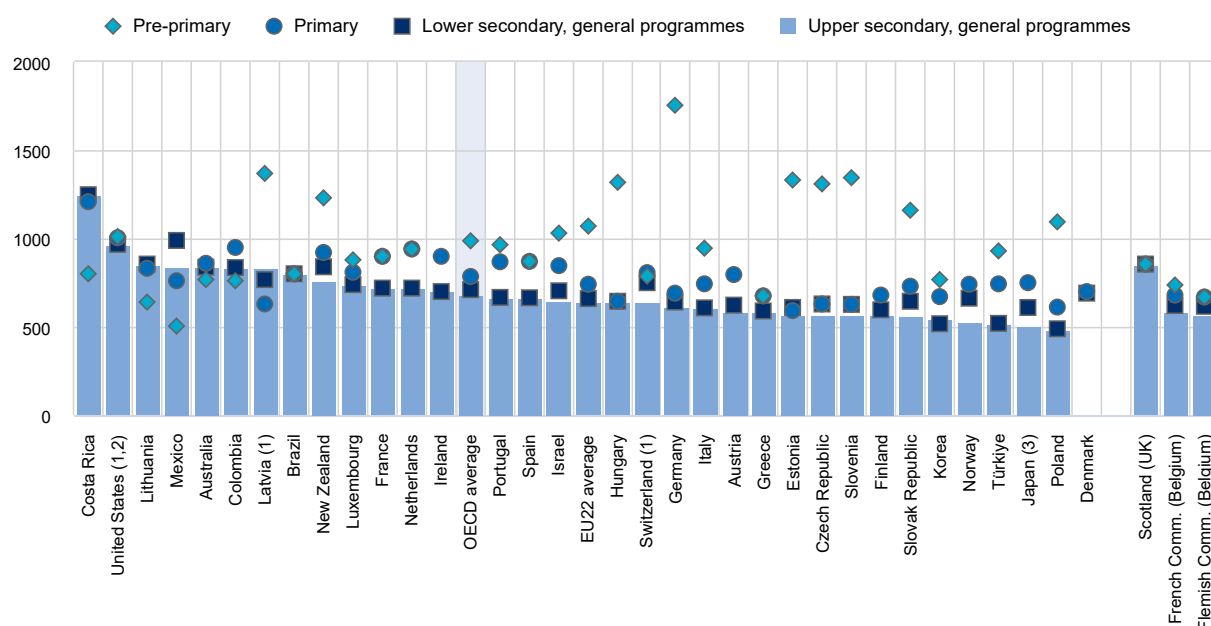
- The salaries of teachers and school heads are an important determinant of the attractiveness of the teaching profession, but they also represent the single largest expenditure item in formal education. In most OECD countries, the statutory salaries of teachers (and school heads) in public educational institutions increase with the level of education they teach, and also with experience. Actual salaries also increase with the level of education. On average across OECD countries, actual salaries range from USD 41 941 at the pre-primary level to USD 53 682 at the upper secondary level. In Lithuania, actual salaries average USD 41 256 at pre-primary level and USD 41 256 at upper secondary level.
- Between 2015 and 2021, on average across OECD countries, the statutory salaries of teachers at lower secondary level (general programmes) with 15 years of experience and the most prevalent

qualifications increased by 6% in real terms. In Lithuania, salaries increased more than the OECD average, by 80%.

- Teachers' average actual salaries remain lower than earnings of tertiary-educated workers in almost all OECD countries, and at almost all levels of education. However, Lithuania is one of the few exceptions to this rule. Lower secondary (general programme) teachers in Lithuania earn 30.8% more than other tertiary-educated workers.
- The average number of teaching hours per year required from a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases.
- Based on official regulations or agreements, annual teaching hours in Lithuania are 640 hours per year at pre-primary level, 830 hours at primary level, 854 hours at lower secondary level (general programmes) and 854 hours at upper secondary level (general programmes) (Figure 4).

**Figure 4. Teaching time of teachers, by level of education (2021)**

Net statutory teaching time in hours per year, in public institutions



1. Actual teaching time (in Latvia except for pre-primary level).

2. Reference year differs from 2021. Refer to the source table for details.

3. Average planned teaching time in each school at the beginning of the school year.

Countries and other participants are ranked in descending order of the number of teaching hours per year in general upper secondary education.

**Source:** OECD (2022), Table D4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-D.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-D.pdf)).

- During their working hours, teachers also perform various non-teaching tasks such as lesson planning and preparation, marking students' work and communicating or co-operating with parents or guardians. At the upper secondary level, 43% of teachers' working time is formally dedicated to non-teaching activities in Lithuania, compared to an average of 56% across OECD countries.
- The duration of initial teacher education for primary and lower secondary teachers ranges from 2.5 years to 6.5 years across OECD countries. In Lithuania, initial teacher education typically lasts 4 years for prospective lower secondary teachers (general programmes). It is the same length for

prospective primary teachers. As is the case in almost all OECD countries, a tertiary degree is awarded to prospective teachers of all levels of education upon completion of their initial teacher training.

- Continuing professional development is compulsory for all teachers of general programmes in most countries with data, but Lithuania is an exception. At secondary level, professional development activities are compulsory for teachers in some circumstances.

## Focus on tertiary education

- Among 25-64 year-olds in Lithuania, bachelor's degrees are the most common tertiary attainment at 30% of the population followed by master's degrees with 15%. This is similar to the OECD average, where bachelor's degrees are most common (19%), followed by master's degrees (14%) and short cycle tertiary qualifications (7%). As in all OECD countries and other participants, only a small fraction of the population holds a doctoral degree: the share is 1% in Lithuania.
- On average, tertiary attainment generates a wide range of labour-market benefits, including high employment rates. Yet, there are significant differences depending on the field of study. In 2021, employment rates in Lithuania were highest among tertiary-educated individuals who studied information and communication technologies with 94% and lowest among those who studied arts at 88%. However, these differences need to be put into perspective. Even among 25-64 year-olds with tertiary attainment in the field with the lowest employment rate, this was 13.8 percentage points higher than among those with upper secondary attainment (all fields combined).
- Despite the labour market advantages of a tertiary degree, many tertiary students do not graduate on time or do not graduate at all. In Lithuania, 59% of bachelor's students graduate within the theoretical programme duration. Across the OECD, the completion rate within the theoretical programme duration ranges from 12% to 69%. Completion rates three years after the theoretical programme duration are significantly higher in most countries and the differences between OECD countries somewhat narrower. In Lithuania, 65% of bachelor's students have graduated within three years after the end of the theoretical programme duration, compared to 68% on average across the OECD.
- In all OECD countries, tertiary completion rates are higher for women than for men. In Lithuania, 73% of women graduated within three years after the end of the theoretical programme duration at bachelor's level, compared to 56% of men. On average across the OECD, there is little systematic difference between the completion rates of public and private institutions, but the figures differ from country to country. In Lithuania, 66% of bachelor's students graduate from public institutions within three years after the end of the theoretical programme duration, while the share is 56% for private institutions.
- In most OECD countries including in Lithuania, tertiary-educated adults have higher rates of participation in non-formal education and training than those with a lower level of educational attainment. In 2021, 14% of 25-64 year-olds with tertiary attainment in Lithuania had participated in non-formal education and training in the four weeks prior to being surveyed, compared to 2% of their peers with below upper secondary attainment.
- Entering tertiary education often means costs for students and their families, in terms of tuition fees, foregone earnings and living expenses, although they may also receive financial support to help them afford it. However, public policies on tuition fees and financial support for students differ greatly across countries. In Lithuania, mid-range levels of tuition fees are combined with high levels of financial support for students. Public institutions charge tuition fees of USD 4 020 for national students at bachelor's level and of USD 7 893 at master's level.

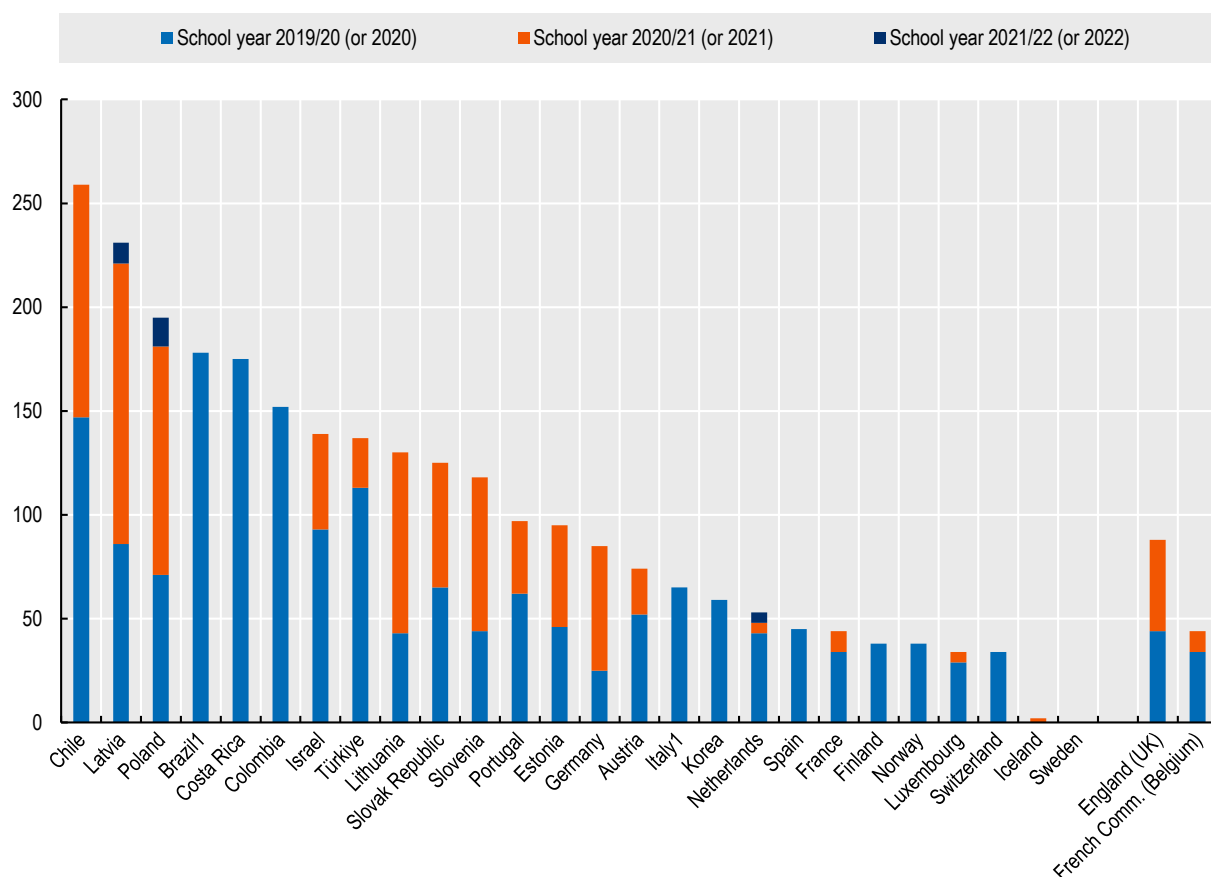
- OECD countries have different approaches to providing financial support to students enrolled in tertiary education, but in general countries with the highest level of public transfers to the private sector are those that also tend to have the highest tuition fees. In six OECD countries and other participants, at least 80% of national students receive public financial support in the form of student loans, scholarships or grants. In another six countries and other participants, less than 25% of students receive financial support. In these countries, public financial support is targeted on selected groups of students, such as those from socio-economically disadvantaged families. Lithuania falls between the two groups, with 60% of students receiving financial support.
- Over the decades, independent private institutions have been established to meet increased demand for tertiary education. On average across the OECD, 17% of students are enrolled in independent private institutions, but this figure masks large differences between countries. In Lithuania, 11% of tertiary students are enrolled in such institutions. Independent private institutions charge higher annual tuition fees on average than public institutions for master's programmes in all OECD countries and other participants with available data, except in Chile and Lithuania.
- Enabling students to enrol on a part-time basis is an important way to facilitate access to tertiary education. Many part-time students would not be able to study full time, for example because they have child-care responsibilities or have to work to fund their studies. The share of part-time students at the tertiary level in Lithuania is 17%, below the OECD average (22%). Compared to 2013, it has decreased by 11 percentage points.
- Staff at tertiary level tend to start their careers relatively late due to the length of the education they need to qualify. In Lithuania, only 5% of academic staff are aged under 30, below the OECD average (8%). In contrast, the share of academic staff aged 50 or over is 40%, which is the same as the OECD average.

## COVID-19: The second year of the pandemic

- The COVID-19 pandemic disrupted traditional schooling in 2020 and the first half of 2021, leading to school closures across all OECD countries. While most shut down their premises entirely in the wake of the pandemic in 2020, by 2021 the situation had improved and returned to normal in most countries in 2022. In Lithuania, primary and secondary schools were entirely closed for 38-43 days during the school year 2019/20, for 42-97 days in 2020/21 and stayed open in 2021/22 (Figure 5).
- National examinations have also been affected by the pandemic. At general upper secondary level, 18 OECD countries postponed their national examinations during the school year 2019/20, while 10 countries even cancelled them entirely. In 2020/21, national examinations were postponed in 9 countries and cancelled in 6 countries. Lithuania rescheduled its national examinations in 2019/20 and in 2020/21.
- In school year 2022, national programmes to support students affected by the pandemic were implemented in Lithuania at pre-primary, primary, lower secondary, upper secondary general and vocational level. At primary to upper secondary education, measures to address the effects of the COVID-19 pandemic included, additional school nutrition services, psychosocial and mental health support to students.

**Figure 5. School closures due to COVID-19 (2020, 2021 and the first quarter of 2022)**

Number of instruction days of full closure of lower secondary schools excluding school holidays, public holidays and weekends



**Note:** The data underlying this report were produced through the Survey on Joint National Responses to COVID 19, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), the World Bank (WB), and the Organisation for Economic Co-operation and Development (OECD). Data for other levels of education are available at <https://www.oecd.org/education/Results-4th-wave-COVID-Survey-OECD-database.xlsx>.

1. Data for 2021 and 2022 are missing.

Countries and other participants are ranked in descending order of the total number of days lower secondary schools were fully closed during the school years 2019/20 (2020), 2020/21 (2021) and 2021/22 (2022).

**Source:** OECD/UIS/UNESCO/UNICEF/WB (2022).

- The increased digitalisation of education has been a major consequence of the COVID-19 pandemic in many OECD countries. At lower secondary level, Lithuania has responded to the pandemic with an enhanced provision of digitalised assessments/exams, digital tools at school, distance learning, hybrid learning, in-service and pre-service digital training to teachers and digital training to students.
- The challenges related to the COVID-19 pandemic have created additional costs for education systems. Preliminary budget estimates for 2021 suggest that, compared to 2020, the education budget at pre-primary to tertiary level in Lithuania increased strongly (by more than 5%, in nominal terms).
- The COVID-19 pandemic had a significant impact on adult learning in most OECD countries. In 2020, the share of adults who participated in a formal or non-formal education and training activity in the four weeks prior to being surveyed decreased by 2 percentage points on average across OECD countries compared with 2019. However, in 2021, participation in non-formal education and

training returned to pre-pandemic levels in most countries. In Lithuania, a similar pattern emerged. From 2019 to 2020, the share of adults participating in a formal or non-formal education and training activity remained unchanged. From 2020 to 2021, it increased by 1 percentage point and has thus increased above pre-pandemic levels.

- Young adults who are not in employment, education or training (NEET) for prolonged periods are at risk of adverse economic and social outcomes in both the short and the long term. After increasing during the COVID-19 pandemic in 2020, the share of 18-24 year-olds who are NEET in Lithuania stagnated in 2021. The share of NEET among young adults was 15% in 2021, above pre-COVID levels.

## References

OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/69096873-en>.


OECD (2022), "Regional education", *OECD Regional Statistics (database)*, <https://dx.doi.org/10.1787/213e806c-en>.

## More information

**For more information on Education at a Glance 2022 and to access the full set of indicators, see:** <https://doi.org/10.1787/3197152b-en>

For more information on the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, See Annex 3 ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3.pdf)).

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# Luxembourg

## The output of educational institutions and the impact of learning

- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. Although the general increase in educational attainment has seen a parallel decline in the share of 25-34 year-olds without upper secondary attainment, 14% of young adults across the OECD still left school without an upper secondary qualification. In Luxembourg, the share is 10%, which is lower than the OECD average.
- Educational attainment affects not just employment prospects, but also wage levels. On average across the OECD, 25-64 year-old workers with upper secondary or post-secondary non-tertiary attainment earn 29% more than workers with below upper secondary attainment, while those with tertiary attainment earn about twice as much. In Luxembourg, the earnings advantage of tertiary-educated workers was similar to the OECD average. In 2020, workers with upper secondary or post-secondary non-tertiary attainment earned 23% more than those with below upper secondary attainment and those with tertiary attainment earned also about twice as much.

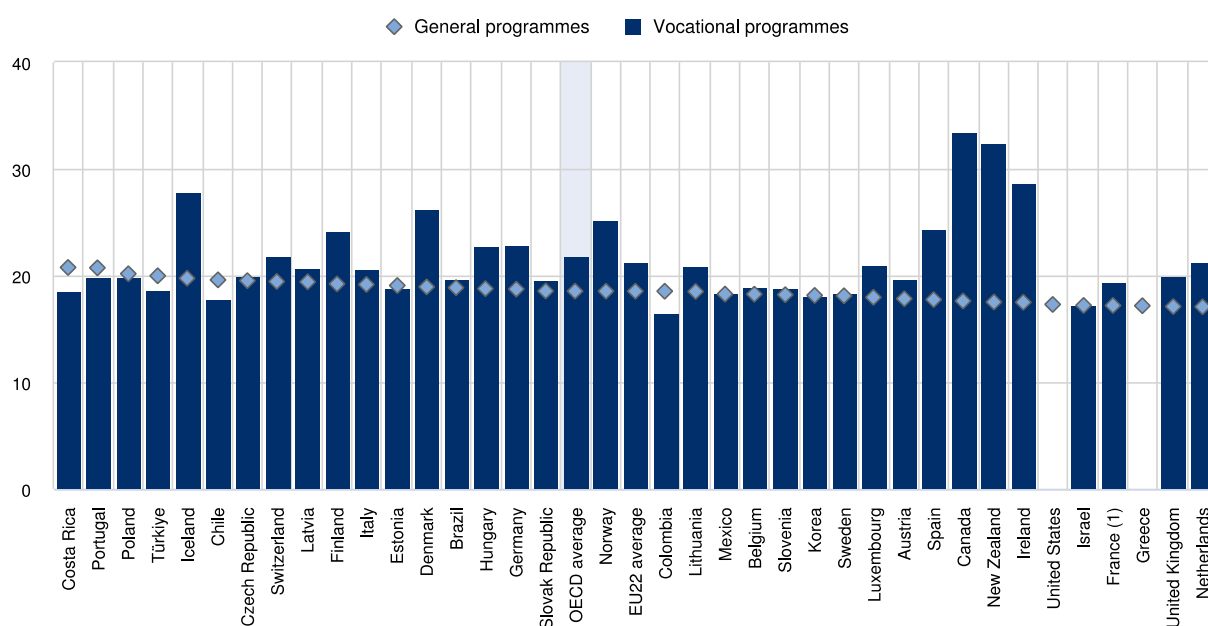
## Access to education, participation and progress

- Compulsory education begins at the age of 4 and ends at the age of 16 in Luxembourg. The range of ages for which at least 90% of the population are enrolled is identical to the period of compulsory education and goes from the age of 4 to the age of 16. This differs from most other OECD countries, where more than 90% of the population are enrolled for longer than the period of compulsory education.
- The age at which children enter early childhood education differs widely across countries. In Luxembourg, early childhood education starts offering intentional education objectives for children younger than 1 and 1% of children under 3 are enrolled in early childhood education. Across OECD countries, the average enrolment rate among children below the age of 3 is 27%, but the rates range from less than 1% to 63%. The enrolment rate among 3-5 year-olds increases substantially in all OECD countries. In Luxembourg, 88% of all children of this age are enrolled in early childhood education, which is slightly above the OECD average.
- The average age of graduation from general upper secondary programmes varies from 17 to 21 years across OECD countries and is 18 years in Luxembourg. Differences in the average age of graduation from vocational upper secondary education are much larger and vary from 16 to 34 years across the OECD. These differences largely depend on whether vocational upper secondary students usually enrol in these programmes towards the end of their compulsory education or in mid-career. In Luxembourg, the average age of graduation from vocational upper secondary education is 21 years, which is slightly below the OECD average at 22 years (Figure 1).
- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. In Luxembourg, the share is 55% (OECD average 55%). In contrast, men

are overrepresented among graduates of vocational upper secondary programmes in most OECD countries, as is the case in Luxembourg where they make up 52% of all vocational upper secondary graduates, below the OECD average (55%).

**Figure 1. Average age of first-time upper secondary graduates, by programme orientation (2020)**

In years



1. Average age is based on all graduates instead of first-time graduates.

Countries are ranked in descending order of the average age of first-time upper secondary graduates in general programmes.

**Source:** OECD/Eurostat/UIS (2022), Tables B3.1 and B3.2. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

- In Luxembourg, 66% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (significantly above the OECD average of 54%). A subset of these students (13% of 18-24 year-olds) combine their education or training with some form of employment in Luxembourg, compared to 17% on average across the OECD.
- One significant difference across countries' education systems is on whether or not vocational upper secondary programmes provide access to tertiary education. In 12 OECD countries and other participants, all vocational upper secondary graduates have direct access to tertiary education. In Luxembourg only 50% of graduates from vocational upper secondary programme have direct access to tertiary education.
- As is the case in all OECD countries, a majority of students enrolled at tertiary level in Luxembourg are bachelor's students (41%). However, the next commonest enrolment level varies from country to country. In Luxembourg, master's students make up the second largest group of tertiary students at 36%. This is also the case in 25 other OECD countries, while in the remaining 14 countries with available data, short-cycle tertiary students form the second largest group.
- At 27%, business, administration and law was the most popular field of study among new entrants into tertiary education in Luxembourg, which is the case in most OECD countries. Despite the growing need for digital skills and the good employment prospects of students with degrees in

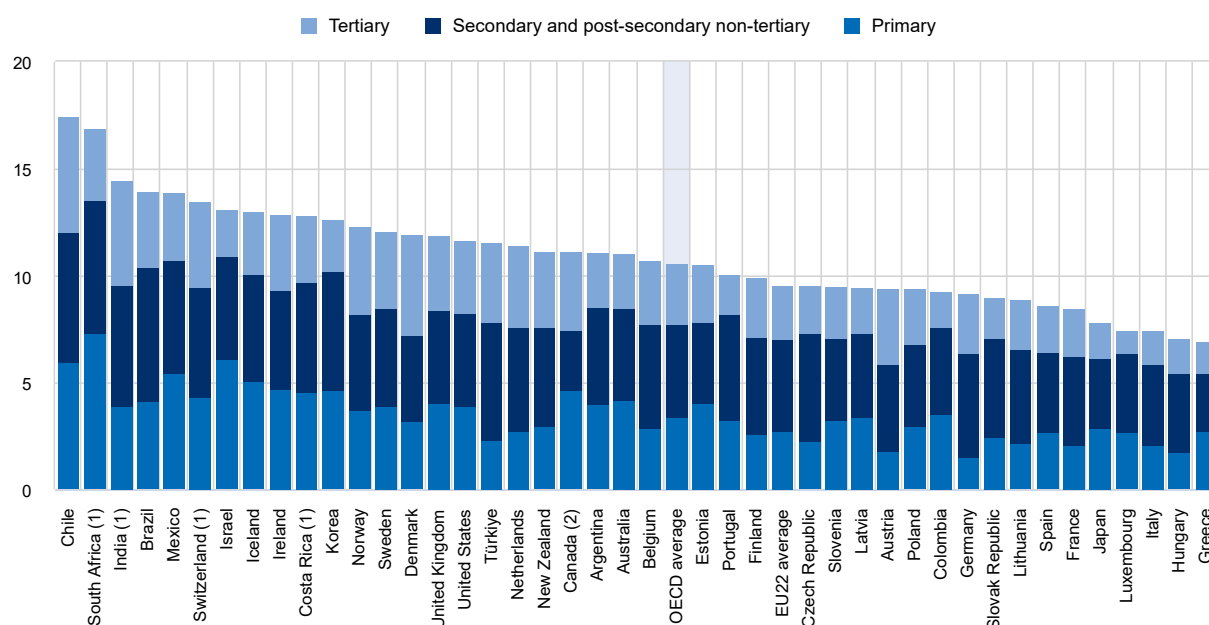
information and communication technologies (ICT), only a small fraction of entrants into tertiary education choose this field. In Luxembourg, 87% of 25-64 year-olds with a tertiary ICT qualification are employed, but ICT students make up 10% of new entrants into tertiary education. However, this is above the OECD average of 6%.

## Financial resources invested in education

- All OECD countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average 4.9% of their gross domestic product (GDP) on primary to tertiary educational institutions. In Luxembourg, the corresponding share was 3.3%.
- Public spending on primary to tertiary education was 7.5% of total government expenditure in Luxembourg (Figure 2), lower than the OECD average (10.6%). Also, relative to GDP, public spending on primary to tertiary education (3.2%) is lower than the OECD average (4.4%).
- Spending on educational institutions as share of GDP or public budgets are important measures of the importance that countries place on education in their budgeting decisions. However, they do not show the total amount of funding per student because GDP levels, public budgets and student numbers vary from country to country. Across primary to tertiary education, OECD countries spend an average of USD 11 990 per student (in equivalent USD converted using PPPs for GDP) on educational institutions each year. In comparison, Luxembourg spent USD 25 433 per student in 2019. Its cumulative expenditure on educating a student from the age of 6 to 15 was USD 233 024, which was significantly above the OECD average of USD 105 502.
- Across OECD countries, the provision of education at primary and secondary levels in terms of curricula, teaching styles and organisational management leads, on average, to similar patterns of expenditure per student from primary to post-secondary non-tertiary levels. OECD countries as a whole spend on average around USD 9 923 per student at primary and USD 11 400 per student at secondary level. In Luxembourg, the values are USD 22 203 at primary and USD 24 736 per student at secondary level, which are among the highest across OECD countries.
- In contrast to lower levels of education, spending on tertiary education varies widely across OECD countries. Expenditure per student at tertiary level in Luxembourg is higher than at other levels of education, as is the case in almost all other OECD countries. The average expenditure per student in Luxembourg is USD 51 978 per year, which is about USD 29 800 higher than that of the primary level and USD 27 200 higher than that of the secondary level. It is among the highest across OECD countries. The average expenditure at tertiary level (USD 17 559) is driven up by high values in a few countries, including in Luxembourg. At 42%, the share of research and development (R&D) expenditure makes up a larger fraction of expenditure on tertiary education in Luxembourg than on average across OECD countries (29%).
- Public funding dominates non-tertiary education (primary, secondary and post-secondary non-tertiary) in all OECD countries, even after transfers to the private sector. On average across the OECD, private funding accounts for 10% of expenditure at primary, secondary and post-secondary non-tertiary levels, while this share was 3% in Luxembourg in 2019. In contrast, private expenditure at tertiary level was higher in all OECD countries. In Luxembourg, the share of private expenditure at tertiary level reached 5%, which was significantly below the OECD average of 31%.

**Figure 2. Composition of total public expenditure on education as a percentage of total government expenditure (2019)**

Primary to tertiary education (including R&D), in per cent



1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

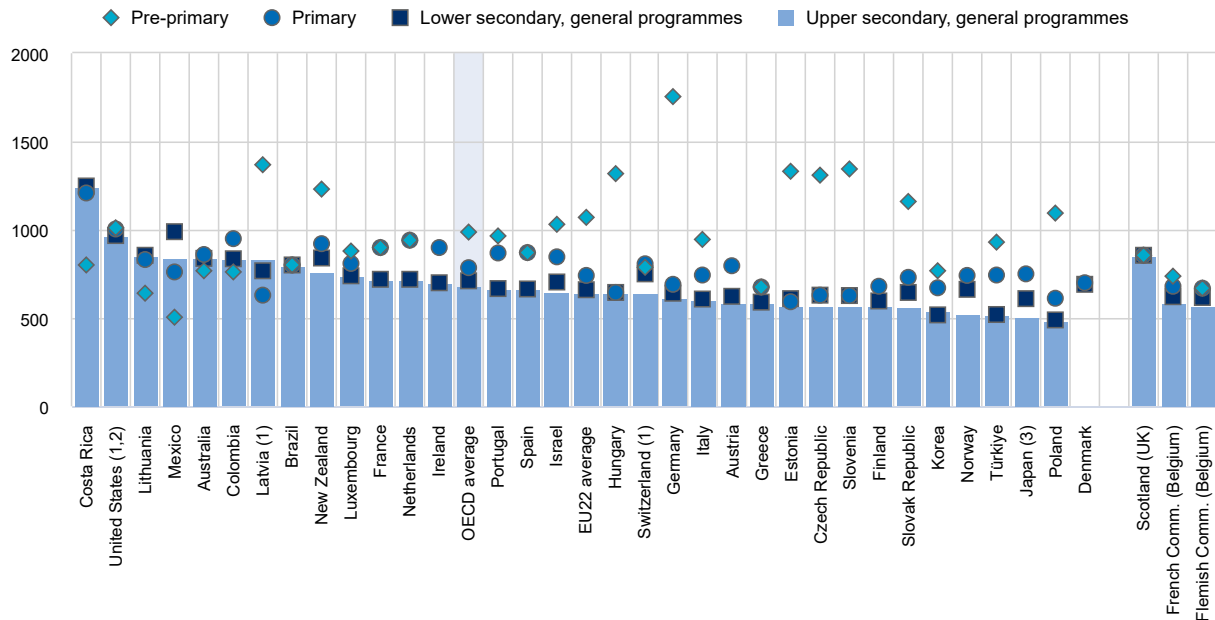
**Source:** OECD/UIS/Eurostat (2022), Table C4.1. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-C.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf)).

## Teachers, the learning environment and the organisation of schools

- The average number of teaching hours per year required from a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases. This is also the case in Luxembourg. Based on official regulations or agreements, annual teaching hours in Luxembourg are 880 hours per year at pre-primary level, 810 hours at primary level, 739 hours at lower secondary level (general programmes) and 739 hours at upper secondary level (general programmes) (Figure 3).
- During their working hours, teachers also perform various non-teaching tasks such as lesson planning and preparation, marking students' work and communicating or co-operating with parents or guardians. At the upper secondary level, 40% of teachers' working time is formally dedicated to non-teaching activities in Luxembourg, compared to an average of 56% across OECD countries.
- The duration of initial teacher education for primary and lower secondary teachers ranges from 2.5 years to 6.5 years across OECD countries. In Luxembourg, initial teacher education typically lasts 5 years for prospective lower secondary teachers (general programmes). It is shorter for prospective primary teachers, at 4 years. As is the case in almost all OECD countries, a tertiary degree is awarded to prospective teachers of all levels of education upon completion of their initial teacher training.

Figure 3. Teaching time of teachers, by level of education (2021)

Net statutory teaching time in hours per year, in public institutions



1. Actual teaching time (in Latvia except for pre-primary level).

2. Reference year differs from 2021. Refer to the source table for details.

3. Average planned teaching time in each school at the beginning of the school year.

Countries and other participants are ranked in descending order of the number of teaching hours per year in general upper secondary education.

Source: OECD (2022), Table D4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-D.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-D.pdf)).

## Focus on tertiary education

- Among 25-64 year-olds in Luxembourg, master's degrees are the most common tertiary attainment at 29% of the population followed by bachelor's degrees at 15% and short-cycle tertiary qualifications with 4%. This is different from the OECD average, where bachelor's degrees are most common (19%), followed by master's degrees (14%) and short cycle tertiary qualifications (7%). As in all OECD countries and other participants, only a small fraction of the population holds a doctoral degree: the share is 2% in Luxembourg.
- On average, tertiary attainment generates a wide range of labour-market benefits, including high employment rates. Yet, there are significant differences depending on the field of study. In 2021, employment rates in Luxembourg were highest among tertiary-educated individuals who studied business, administration and law with 89% and lowest among those who studied arts and humanities, social sciences, journalism and information at 82%. However, these differences need to be put into perspective. Even among 25-64 year-olds with tertiary attainment in the field with the lowest employment rate, this was 9.9 percentage points higher than among those with upper secondary attainment (all fields combined).
- In most OECD countries including in Luxembourg, tertiary-educated adults have higher rates of participation in non-formal education and training than those with a lower level of educational attainment. In 2021, 21% of 25-64 year-olds with tertiary attainment in Luxembourg had

participated in non-formal education and training in the four weeks prior to being surveyed, compared to 5% of their peers with below upper secondary attainment.

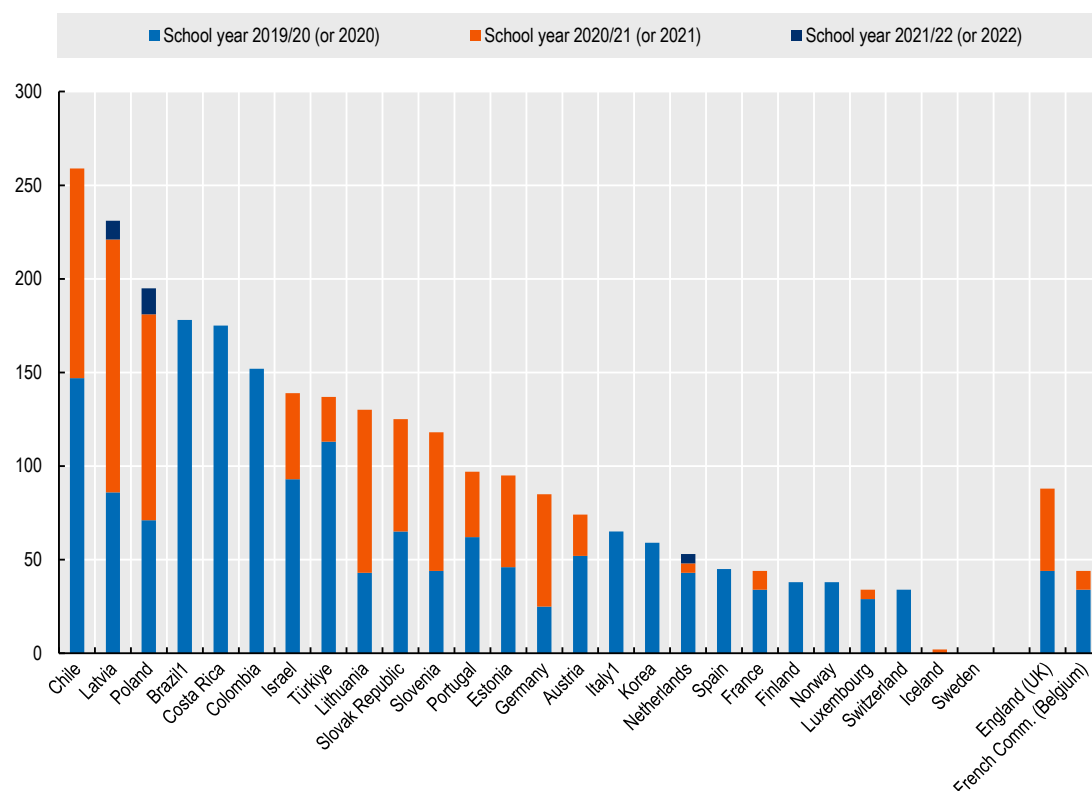
- Giving students the possibility to study part-time is an important instrument to facilitate access to tertiary education. Many part-time students are students that would not be able to study full-time, for example because they have child-care obligations or have to work to fund their studies. With 20%, the share of part-time students at the tertiary level in Luxembourg is slightly below the OECD average (22%).
- Staff at tertiary level tend to start their careers relatively late due to the length of the education they need to qualify. In Luxembourg, 29% of academic staff are aged under 30, above the OECD average (8%). In contrast, the share of academic staff aged 50 or over is 13%, which is below the OECD average by 27 percentage points.

## COVID-19: The second year of the pandemic

- The COVID-19 pandemic disrupted traditional schooling in 2020 and the first half of 2021, leading to school closures across all OECD countries. While most shut down their premises entirely in the wake of the pandemic in 2020, by 2021 the situation had improved and returned to normal in most countries in 2022. In Luxembourg, primary and secondary schools were entirely closed for 29-38 days during the school year 2019/20 and for 5-10 days in 2020/21 depending on the education level and stayed open in 2021/22 (Figure 4). Partial closures reached 19-43 days during the school year 2019/20 and up to 73 days in 2020/21.
- Teacher absences also affected the regular operation of schools during the pandemic, whether due to COVID-19 infections or because of precautionary quarantine. However, only approximately half of countries collected information on teacher absenteeism. Luxembourg collected such data at pre-primary and primary level. In contrast to the majority of countries with available data, teacher absenteeism in Luxembourg increased strongly (by more than 5%) between 2019/20 and 2021/22.
- Most countries conducted assessments of the impact of school closures on learning outcomes at various levels of education and along several dimensions. Luxembourg has conducted studies to evaluate the effects of the pandemic on the impact on primary and lower secondary education. The assessments covered mathematics and reading. Like many other countries, Luxembourg also evaluated dimensions such as non-cognitive skills, the relations between parents and students during lockdowns as well as the mental health and well-being of students and teachers. The standardised national assessment EpStan does not include upper secondary level, but the upper secondary level has been included in other studies related to COVID-19 conducted by academic researchers.
- In school year 2022, national programmes to support students affected by the pandemic were implemented in Luxembourg at pre-primary, primary, lower secondary, upper secondary general and tertiary level. At primary to upper secondary education, measures to address the effects of the COVID-19 pandemic included, increased instruction time through summer schools, extended school days or the school week or academic year and additional water, sanitation and hygiene services. The government has already assessed the effectiveness of these programmes.

**Figure 4. School closures due to COVID-19 (2020, 2021 and the first quarter of 2022)**

Number of instruction days of full closure of lower secondary schools excluding school holidays, public holidays and weekends



**Note:** The data underlying this report were produced through the Survey on Joint National Responses to COVID 19, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), the World Bank (WB), and the Organisation for Economic Co-operation and Development (OECD). Data for other levels of education are available at <https://www.oecd.org/education/Results-4th-wave-COVID-Survey-OECD-database.xlsx>.

1. Data for 2021 and 2022 are missing.

Countries and other participants are ranked in descending order of the total number of days lower secondary schools were fully closed during the school years 2019/20 (2020), 2020/21 (2021) and 2021/22 (2022).

**Source:** OECD/UIS/UNESCO/UNICEF/WB (2022).

- The challenges related to the COVID-19 pandemic have created additional costs for education systems. Preliminary budget estimates for 2021 suggest that, compared to 2020, the education budget at pre-primary level in Luxembourg increased slightly (by between 1% and 5%, in nominal terms), while it increased strongly (by more than 5%) at primary to upper secondary level.
- The COVID-19 pandemic had a significant impact on adult learning in most OECD countries. In 2020, the share of adults who participated in a formal or non-formal education and training activity in the four weeks prior to being surveyed decreased by 2 percentage points on average across OECD countries compared with 2019. However, in 2021, participation in non-formal education and training returned to pre-pandemic levels in most countries. In Luxembourg, a different pattern emerged. From 2019 to 2020, the share of adults participating in a formal or non-formal education and training activity fell by 3 percentage points. From 2020 to 2021, it increased by 2 percentage points and has thus remained below pre-pandemic levels.
- Young adults who are not in employment, education or training (NEET) for prolonged periods are at risk of adverse economic and social outcomes in both the short and the long term. After

increasing during the COVID-19 pandemic in 2020, the share of 18-24 year-olds who are NEET in Luxembourg rose also in 2021. The share of NEET among young adults was 12% in 2021, above pre-COVID levels.

## References

OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/69096873-en>.


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## More information

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# Mexico

## Highlights

- With 27%, Mexico has the lowest tertiary attainment rate among 25-34 olds in the OECD. The country also shows large differences in educational attainment across subnational regions, with some regions having particularly low rates of tertiary attainment. In 2020, there was an 18 percentage-point difference between the region with the highest share of 25-34 year-olds with tertiary attainment (Mexico City at 30%) and that with the lowest share (Chiapas at 12%).
- The earnings advantages for workers with tertiary attainment in Mexico are close to the OECD average. Full-time, full-year workers with tertiary attainment earn on average 58% more than workers with upper secondary attainment.
- Mexico is one of the few countries, where employment rates for men with tertiary attainment are lower than for men with upper secondary attainment (86% vs. 88%). In contrast, the employment rates for women with tertiary attainment are 20 percentage points higher than for women with upper secondary attainment (74% vs. 54%).
- In Mexico, only 31% of individuals reported having basic ICT skills (which entails activities such as knowing how to send an email with an attachment), which is less than the OECD average (55%). 23% of the individuals reported to have standards ICT skills and only 7% reported to have advanced skills.
- The majority of students enrolled at tertiary level in Mexico are bachelor's students (89%) while master's students, who are the second largest group of tertiary students, make up just 7% of students.
- The average expenditure per student at tertiary level is among the lowest across OECD countries in Mexico. The country spends USD 7 341 annually per student, which is about USD 4 400 more than the spending at primary level and USD 4 500 more than the spending at secondary level. Across OECD countries, the average expenditure at tertiary level is USD 17 559. The share of research and development (R&D) expenditure makes up a smaller fraction of expenditure on tertiary education in Mexico (15%) than on average across OECD countries (33%).
- Between 2015 and 2021, in Mexico, the statutory salaries of teachers at lower secondary level (general programmes) with 15 years of experience and the most prevalent qualifications increased by 3% in real terms reaching USD 44 349, which is less than the OECD average at USD 51 246 (6% increase on the same period).

## The output of educational institutions and the impact of learning

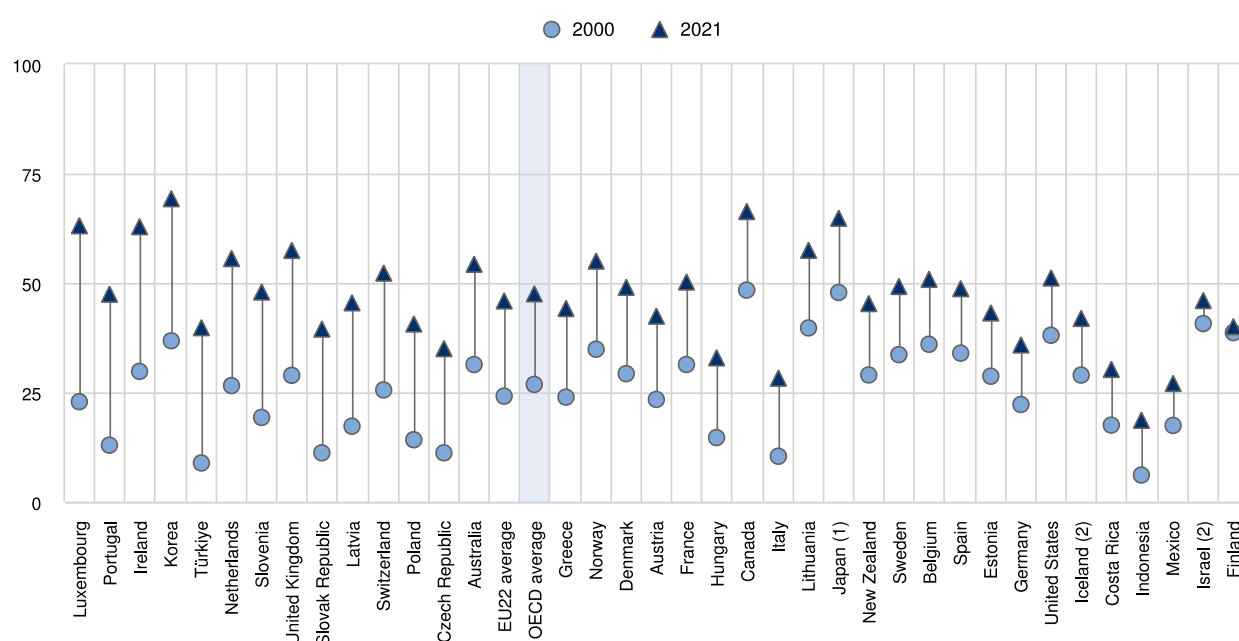
- Educational attainment has been increasing throughout the OECD, in particular at tertiary level. Between 2000 and 2021, the share of 25-34 year-olds with tertiary attainment increased on average by 21 percentage points. In Mexico, the share also increased albeit at a slower pace, by 10 percentage points (from 17% in 2000 to 27% in 2021) (Figure 1). Mexico remains one of the

two OECD countries, where below upper secondary education is still more common than upper secondary or post-secondary non-tertiary or education as the highest level of attainment among 25-34 year-olds.

- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. Although the general increase in educational attainment has seen a parallel decline in the share of 25-34 year-olds without upper secondary attainment, 14% of young adults across the OECD still left school without an upper secondary qualification. In Mexico, the share is 44%, which is higher than the OECD average.

**Figure 1. Trends in the share of tertiary-educated 25-34 year-olds (2000 and 2021)**

In per cent



1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group).

2. Year of reference differs from 2000: 2002 for Israel and 2003 for Iceland.

Countries are ranked in descending order of the difference in the share of tertiary-educated 25-34 year-olds between 2000 and 2021.

**Source:** OECD (2022), *Education at a Glance Database*, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-A.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf)).

- Higher educational attainment is often associated with better employment prospects and Mexico is no exception. In 2000, the employment rate among 25-34 year-olds with tertiary education in Mexico was 14 percentage points higher than among those with below upper secondary attainment and 9 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. On average across OECD countries, the employment rate among 25-34 year-olds with a tertiary qualification was 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. While the positive link between educational attainment and employment rates holds for both men and for women across the OECD, it is particularly strong for women. In Mexico, 44% of women with below upper secondary attainment were employed in 2021, compared to 74% of those with tertiary attainment. In contrast, the figures were 89% and 86% for men.

- Across the OECD, the labour market benefits of tertiary attainment have proved especially strong during economic crises. In Mexico, in 2019 the unemployment rates of tertiary-educated adults was higher than adults with below upper secondary or upper secondary or post-secondary non-tertiary attainment. During the COVID-19 pandemic in Mexico, between 2019 and 2020, unemployment for 25-34 year-old workers with below upper secondary attainment increased by 0.9 percentage points, by 1.4 percentage points for workers with upper secondary attainment and by 0.8 percentage points for workers with tertiary attainment. In 2021, unemployment for workers with below upper secondary attainment fell by 0.3 percentage points, by 0.4 percentage points for workers with upper secondary attainment and by 0.6 percentage points for workers with tertiary attainment.
- Educational attainment affects not just labour market prospects, but also wage levels. On average across the OECD, 25-64 year-old workers with upper secondary or post-secondary non-tertiary attainment earn 29% more than workers with below upper secondary attainment, while those with tertiary attainment earn about twice as much. In Mexico, the earnings advantage of tertiary-educated workers was even greater than the OECD average: in 2018, workers with upper secondary attainment earned 34% more than those with below upper secondary attainment and those with tertiary attainment earned more than twice as much.
- National averages provide an incomplete picture of the situation in any given country. In most OECD countries, there are large differences in educational attainment across subnational regions. This is also the case in Mexico. In 2020, the difference between the region with the highest share of 25-64 year-olds with tertiary attainment (Tlaxcala at 32%) and that with the lowest share (Yucatán at 2%) was 30 percentage points. These subnational variations might not only reflect differences in education opportunities but they are also due to economic conditions and internal migration patterns.

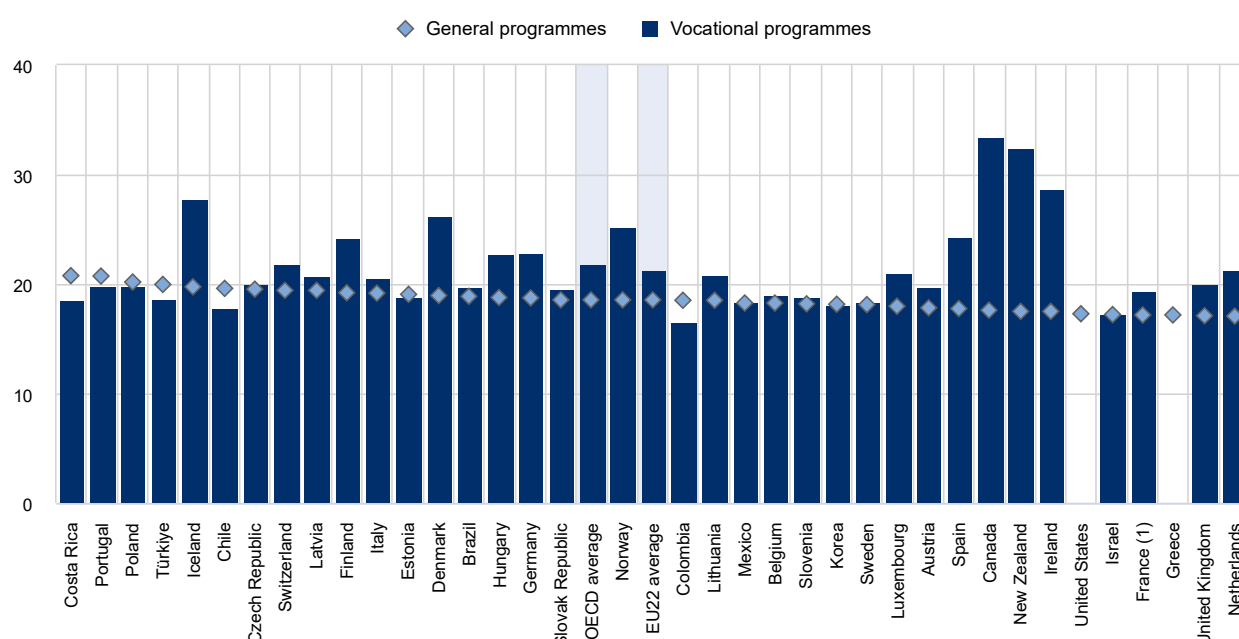
### Access to education, participation and progress

- Compulsory education lasts from the age of 3 to the age of 17 in Mexico. The range of ages for which at least 90% of the population are enrolled is shorter than the period of compulsory education and goes from the age of 5 to the age of 13. This differs from most other OECD countries, where more than 90% of the population are enrolled for longer than the period of compulsory education and is also shorter than the OECD average where 90% of the population is enrolled from the age of 4 to the age of 17.
- The age at which children enter early childhood education differs widely across countries. In Mexico, early childhood education starts offering intentional education objectives for children younger than 1 and 5% of children under 3 are enrolled in early childhood education. Across OECD countries, the average enrolment rate among children below the age of 3 is 27%, and the rates range across OECD countries from less than 1% to 63%. The enrolment rate among 3-5 year-olds increases substantially in all OECD countries. In Mexico, 71% of all children of this age are enrolled in early childhood education, which is below the OECD average (83%).
- The average age of graduation from general upper secondary programmes varies from 17 to 21 years across OECD countries and is 18 years in Mexico. Differences in the average age of graduation from vocational upper secondary education are much larger and vary from 16 to 34 years across the OECD. These differences largely depend on whether vocational upper secondary students usually enrol in these programmes towards the end of their compulsory education or in mid-career. In Mexico, the average age of graduation from vocational upper secondary education is 18 years, which is below the OECD average at 22 years (Figure 2).
- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. In Mexico, the share is 54% (OECD average 55%). In contrast, men are

overrepresented among graduates of vocational upper secondary programmes in most OECD countries, but not in Mexico where they make up 50% of all vocational upper secondary graduates, below the OECD average (55%).

- In Mexico, 39% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (significantly below the OECD average of 54%). Of these students, 11% combine their education or training with some form of employment in Mexico, compared to 17% on average across the OECD.

**Figure 2. Average age of first-time upper secondary graduates, by programme orientation (2020)**  
In years



1. Average age is based on all graduates instead of first-time graduates.

Countries are ranked in descending order of the average age of first-time upper secondary graduates in general programmes.

**Source:** OECD/Eurostat/UIS (2022), Tables B3.1 and B3.2. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

- One significant difference across countries' education systems is on whether or not vocational upper secondary programmes provide access to tertiary education. In 12 OECD countries and other participants, all vocational upper secondary graduates have direct access to tertiary education. In Mexico 97% of graduates from vocational upper secondary programme have direct access to tertiary education.
- As is the case in all OECD countries, a majority of students enrolled at tertiary level in Mexico are bachelor's students (89%). However, the next commonest enrolment level varies from country to country. In Mexico, master's students make up the second largest group of tertiary students at 7%. This is also the case in 25 other OECD countries, while in the remaining 14 countries with available data, short-cycle tertiary students form the second largest group.
- At 33%, business, administration and law was the most popular field of study among new entrants into tertiary education, which is the case in most OECD countries. Despite the growing need for digital skills and the good employment prospects of students with degrees in ICT, only a small fraction of entrants into tertiary education choose this field. In Mexico, 83% of 25-64 year-olds with

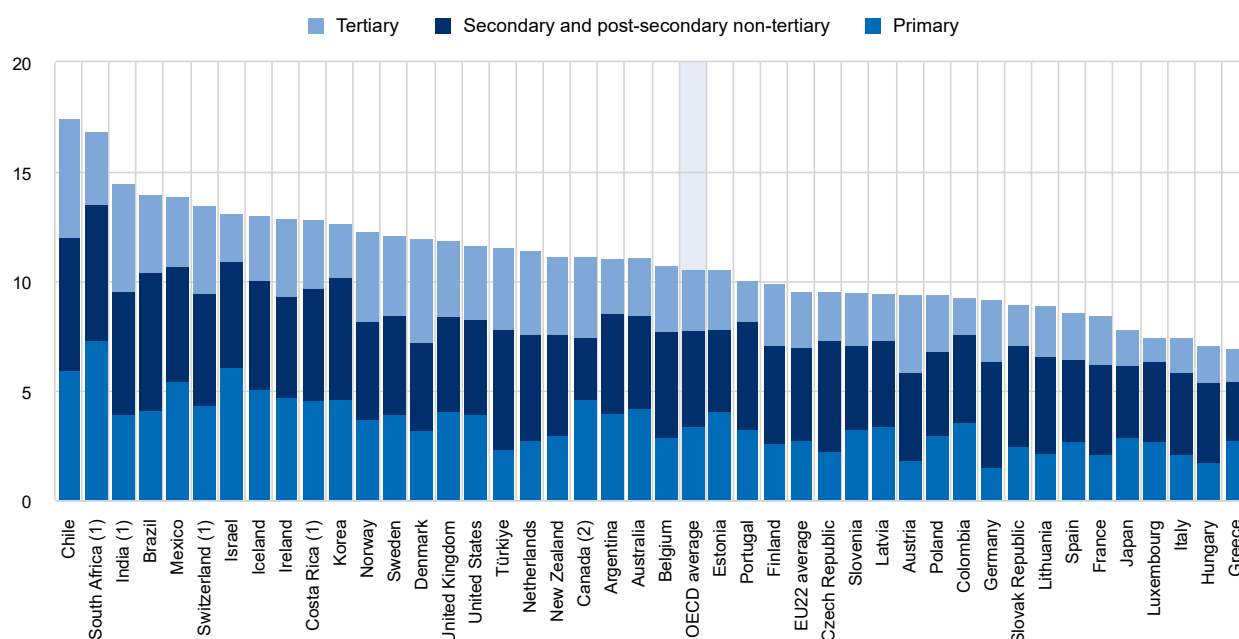
a tertiary ICT qualification are employed, but ICT students make up only 5% of new entrants into tertiary education. This is similar to the OECD average of 6%.

### Financial resources invested in education

- All OECD countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average 4.9% of their gross domestic product (GDP) on primary to tertiary educational institutions. In Mexico, the corresponding share was 4.6%. Between 2008 and 2019, funding for educational institutions from all sources grew by 18% in Mexico. However, over the same period of time, the increase in GDP was higher with 23%. As a consequence, expenditure on educational institutions as a share of GDP fell by 0.2 percentage points over the same time period.
- Public spending on primary to tertiary education was 13.9% of total government expenditure in Mexico (Figure 3), higher than the OECD average (10.6%). In contrast, relative to GDP, public spending on primary to tertiary education is below the OECD average.

**Figure 3. Composition of total public expenditure on education as a percentage of total government expenditure (2019)**

Primary to tertiary education (including R&D), in per cent



1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

**Source:** OECD/UIS/Eurostat (2022), Table C4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-C.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf)).

- Across OECD countries, the provision of education at primary and secondary levels in terms of curricula, teaching styles and organisational management leads, on average, to similar patterns of expenditure per student from primary to post-secondary non-tertiary levels. OECD countries as a whole spend on average USD 10 722 per student at primary and USD 11 400 per student at secondary level. In Mexico, the values are USD 2 977 at primary and USD 2 890 per student at secondary level, which are among the lowest across OECD countries.

- In contrast to lower levels of education, spending on tertiary education varies widely across OECD countries. Expenditure per student at tertiary level in Mexico is higher than at other levels of education, as is the case in almost all other OECD countries. The average expenditure per student in Mexico is USD 7 341 per year, which is about USD 4 400 higher than that of the primary level and USD 4 500 higher than that of the secondary level. It is among the lowest across OECD countries. The average expenditure at tertiary level (USD 17 559) is driven up by high values in a few countries. At 15%, the share of research and development (R&D) expenditure makes up a smaller fraction of expenditure on tertiary education in Mexico than on average across OECD countries (33%).

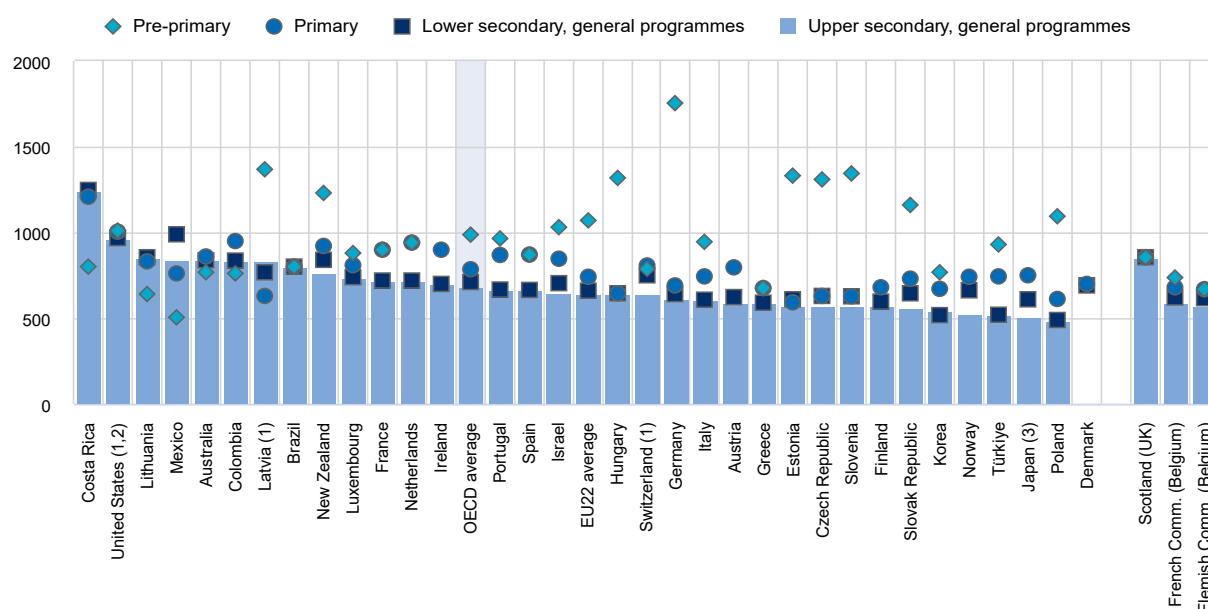
Public funding dominates non-tertiary education (primary, secondary and post-secondary non-tertiary) in all OECD countries, even after transfers to the private sector. On average across the OECD, private funding accounts for 10% of expenditure at primary, secondary and post-secondary non-tertiary levels, while this share was 19% in Mexico in 2019. In contrast, private expenditure at tertiary level was higher in all OECD countries. In Mexico, the share of private expenditure at tertiary level reached 44%, which was above the OECD average of 31%.

## Teachers, the learning environment and the organisation of schools

- Between 2015 and 2021, on average across OECD countries, the statutory salaries of teachers at lower secondary level (general programmes) with 15 years of experience and the most prevalent qualifications increased by 6% in real terms. In Mexico, salaries increased less than the OECD average, by 3%.

**Figure 4. Teaching time of teachers, by level of education (2021)**

Net statutory teaching time in hours per year, in public institutions



1. Actual teaching time (in Latvia except for pre-primary level).

2. Reference year differs from 2021. Refer to the source table for details.

3. Average planned teaching time in each school at the beginning of the school year.

Countries and other participants are ranked in descending order of the number of teaching hours per year in general upper secondary education.

**Source:** OECD (2022), Table D4.1. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-D.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-D.pdf)).

The average number of teaching hours per year required from a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases. Based on official regulations or agreements, annual teaching hours in Mexico are 505 hours per year at pre-primary level, 760 hours at primary level, 988 hours at lower secondary level (general programmes) and 843 hours at upper secondary level (general programmes) (Figure 4).

### Focus on tertiary education

- Among 25-64 year-olds in Mexico, bachelor's degrees are the most common tertiary attainment at 18% followed by master's degrees with 2% and short-cycle tertiary qualifications with 1%. On average across OECD countries, the bachelor's degrees are also the most common (19%), followed by master's degrees (14%) and short cycle tertiary qualifications (7%). As in all OECD countries, only a small fraction of the population holds a doctoral degree: the share is less than 1% in Mexico.
- On average, tertiary attainment generates a wide range of labour-market benefits, including high employment rates. Yet, there are significant differences depending on the field of study. In 2021, employment rates in Mexico were highest among tertiary-educated individuals who studied ICT with 83% and lowest among those who studied natural sciences, mathematics and statistics at 73%. However, these differences need to be put into perspective. Even among 25-64 year-olds with tertiary attainment in the field with the lowest employment rate, this was 3.5 percentage points higher than among those with upper secondary attainment (all fields combined).
- In most OECD countries including in Mexico, tertiary-educated adults have higher rates of participation in non-formal education and training than those with a lower level of educational attainment. In 2017, 17% of 25-64 year-olds with tertiary attainment in Mexico had participated in non-formal education and training in the twelve months prior to being surveyed, compared to 17% of their peers with below upper secondary attainment.

Over the decades, independent private institutions have been established to meet increased demand for tertiary education. On average across the OECD, 17% of students are enrolled in independent private institutions. In Mexico, 36% of tertiary students are enrolled in such institutions. Independent private institutions charge higher annual tuition fees on average than public institutions for master's programmes in all OECD countries and other participants with available data, except in Chile and Lithuania.

### COVID-19: The second year of the pandemic

- Teacher absences affected the regular operation of schools during the pandemic, whether due to COVID-19 infections or because of precautionary quarantine. However, only approximately half of countries collected information on teacher absenteeism. Mexico collected such data and in contrast to many other countries, teacher absenteeism increased slightly (by between 1% and 5%) between 2019/20 and 2021/22.
- National examinations have also been affected by the pandemic. At general upper secondary level, 18 OECD countries postponed their national examinations during the school year 2019/20, while 10 countries even cancelled them entirely. In 2020/21, national examinations were postponed in 9 countries and cancelled in 6 countries. Mexico rescheduled its national examinations in 2019/20 and in 2020/21.
- Most countries conducted assessments of the impact of school closures on learning outcomes at various levels of education and along several dimensions. Mexico has conducted studies to evaluate the effects of the pandemic on the impact on primary, upper secondary general and

vocational education. The assessments covered mathematics and reading and science. Like many other countries, Mexico also evaluated dimensions such as the well-being of students or the effectiveness of distance-learning strategies.

- In school year 2022, national programmes to support students affected by the pandemic were implemented in Mexico at pre-primary, primary, lower secondary, upper secondary general and vocational and tertiary level. At primary to upper secondary education, measures to address the effects of the COVID-19 pandemic included: accelerated education or catch-up programmes for students who dropped out of school, community mobilisation campaigns to bring students back to school, adjustments to subject curricula, early warning systems to identify students at risk of dropping out, referral systems for students in need of specialised services, psychosocial and mental health support to students, individualised self-learning programmes, increased instruction time through summer schools, extended school days or the school week or academic year, tutoring programmes or financial support for tutoring and additional water, sanitation and hygiene services. The government has already assessed the effectiveness of these programmes.
- The increased digitalisation of education has been a major consequence of the COVID-19 pandemic in many OECD countries. At lower secondary level, Mexico has responded to the pandemic with an enhanced provision of distance learning and digital training to students.
- The challenges related to the COVID-19 pandemic have created additional costs for education systems. Preliminary budget estimates for 2021 suggest that, compared to 2020, the education budget at pre-primary level in Mexico declined slightly (by between 1% and 5%, in nominal terms) at primary to tertiary level.
- The COVID-19 pandemic had a significant impact on adult learning in most OECD countries. In 2020, the share of adults who participated in a formal or non-formal education and training activity in the four weeks prior to being surveyed decreased by 2 percentage points on average across OECD countries compared with 2019. However, in 2021, participation in non-formal education and training returned to pre-pandemic levels in most countries. From 2019 to 2020, the share of adults participating in a formal or non-formal education training activity. From 2020 to 2021, it and has thus increased above pre-pandemic levels.
- Young adults who are neither employed nor in formal education or training (NEET) for prolonged periods are at risk of adverse economic and social outcomes in both the short and the long term. After increasing during the COVID-19 pandemic in 2020, the share of 18-24 year-olds who are NEET in Mexico declined in 2021. The share of NEET among young adults was 22% in 2021, at pre-COVID levels.

## References

OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/69096873-en>.


OECD (2022), "Regional education", *OECD Regional Statistics (database)*, <https://dx.doi.org/10.1787/213e806c-en>.

## More information

**For more information on Education at a Glance 2022 and to access the full set of Indicators, see:**  
<https://doi.org/10.1787/3197152b-en>

For more information on the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, see Annex 3 ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3.pdf)).

For general information on the methodology, please refer to the *OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications* (<https://doi.org/10.1787/9789264304444-en>).

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.

Data on subnational regions for selected indicators are available in the *OECD Regional Statistics* (database) (OECD, 2022). When interpreting the results on subnational entities, readers should take into account that the population size of subnational entities can vary widely within countries. For example, regional variation in enrolment may be influenced by students attending school in a different region from their area of residence, particularly at higher levels of education. Also, regional disparities tend to be higher when more subnational entities are used in the analysis.

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<https://gpseducation.oecd.org/>

The data on educational responses during COVID-19 were collected and processed by the OECD based on the Joint Survey on National Responses to COVID-19 School Closures, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO); the UNESCO Institute for Statistics (UIS); the United Nations Children's Fund (UNICEF); the World Bank; and the OECD.

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### Questions can be directed to:

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# Netherlands

## Highlights

- In 2019, the Netherlands spent 5.1% of gross domestic product (GDP) on primary to tertiary educational institutions compared to an OECD average of 4.9
- The average expenditure per tertiary student in the Netherlands is USD 20 889 per year, which is about USD 10 700 higher than that of the primary level and about USD 6 000 higher than that of the secondary level. It is among the highest across OECD countries.
- Despite large rises in the number of young people completing higher education, it continues to be associated with better employment prospects. In 2021 the employment rate among 25-34 year-olds with tertiary education in the Netherlands was 6 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. Those with a tertiary education also earn more and were less likely to become unemployed as a result of the Covid-19 pandemic.
- Tertiary completion rates in the Netherlands are similar to other OECD countries, 71% of bachelor's students have graduated within three years after the end of the theoretical programme duration, compared to 68% on average across the OECD.
- In all OECD countries, tertiary completion rates are higher for women than for men. In the Netherlands, 78% of women graduated within three years after the end of the theoretical programme duration at bachelor's level, compared to 64% of men.
- The Netherlands is popular destination for international students. They make up 13% of all tertiary enrolments in the Netherlands, compared to 7% on average across OECD countries.

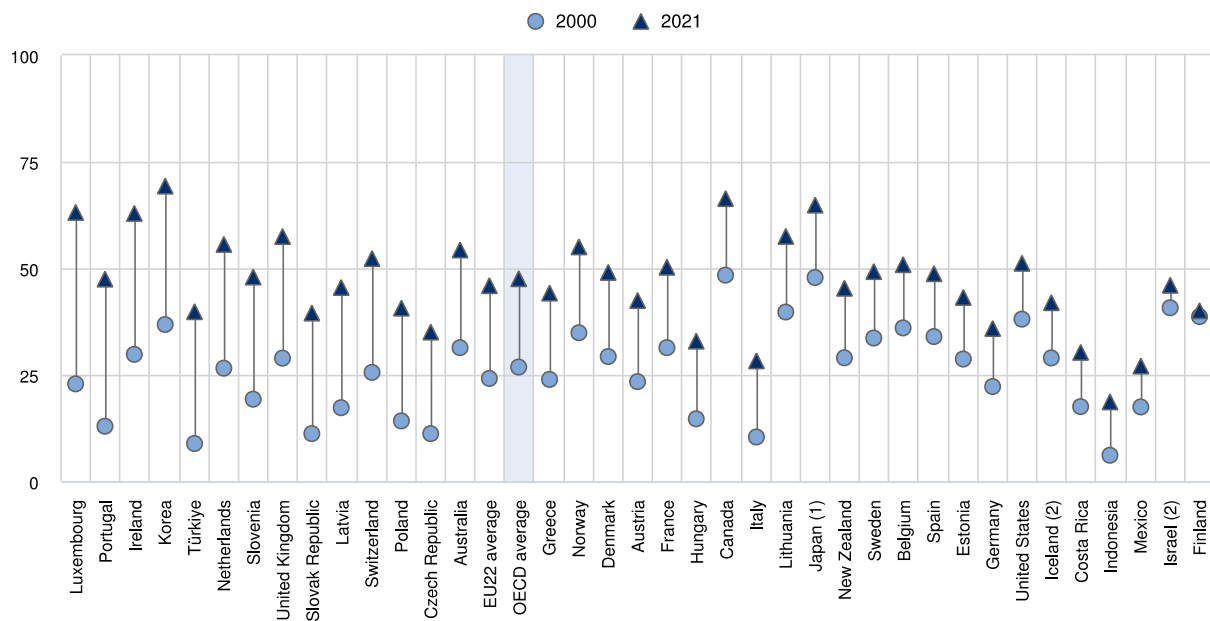
## The output of educational institutions and the impact of learning

- Educational attainment has been increasing throughout the OECD, in particular at tertiary level. Between 2000 and 2021, the share of 25-34 year-olds with tertiary attainment increased on average by 21 percentage points. In the Netherlands, the share increased at an even faster pace, by 29 percentage points (from 27% in 2000 to 56% in 2021) (Figure 1). The Netherlands is one of the 14 OECD countries where at least half of 25-34 year-olds have a tertiary education.
- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. Although the general increase in educational attainment has seen a parallel decline in the share of 25-34 year-olds without upper secondary attainment, 14% of young adults across the OECD still left school without an upper secondary qualification. In the Netherlands, the share is 10%, which is lower than the OECD average.
- Higher educational attainment is often associated with better employment prospects and the Netherlands is no exception. In 2021 the employment rate among 25-34 year-olds with tertiary education in the Netherlands was 20 percentage points higher than among those with below upper secondary attainment and 6 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. On average across OECD countries, the employment rate

among 25-34 year-olds with a tertiary qualification was 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. While the positive link between educational attainment and employment rates holds for both men and for women across the OECD, it is particularly strong for women. In the Netherlands, 62% of women with below upper secondary attainment were employed in 2021, compared to 89% of those with tertiary attainment. In contrast, the figures were 77% and 93% for men.

**Figure 1. Trends in the share of tertiary-educated 25-34 year-olds (2000 and 2021)**

In per cent



1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group).

2. Year of reference differs from 2000: 2002 for Israel and 2003 for Iceland.

Countries are ranked in descending order of the difference in the share of tertiary-educated 25-34 year-olds between 2000 and 2021.

**Source:** OECD (2022), Education at a Glance Database, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-A.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf)).

- Across the OECD, the labour market benefits of tertiary attainment have proved especially strong during economic crises. This was also the case during the COVID-19 pandemic in the Netherlands. Between 2019 and 2020, unemployment for 25-34 year-old workers with below upper secondary attainment increased by 1.5 percentage points, by 0.6 percentage points for workers with upper secondary attainment and by 0.3 percentage points for workers with tertiary attainment. In 2021, unemployment for workers with below upper secondary attainment fell by 2.1 percentage points, compared to 2020 by 0.2 percentage points for workers with upper secondary attainment and increased by 0.7 percentage points for workers with tertiary attainment.
- Educational attainment affects not just employment prospects, but also wage levels. On average across the OECD, 25-64 year-old workers with upper secondary or post-secondary non-tertiary attainment earn 29% more than workers with below upper secondary attainment, while those with tertiary attainment earn about twice as much. In the Netherlands, the earnings advantage of

tertiary-educated workers was smaller than the OECD average. In 2020, workers with upper secondary or post-secondary non-tertiary attainment earned 21% more than those with below upper secondary attainment and those with tertiary attainment earned 87% more.

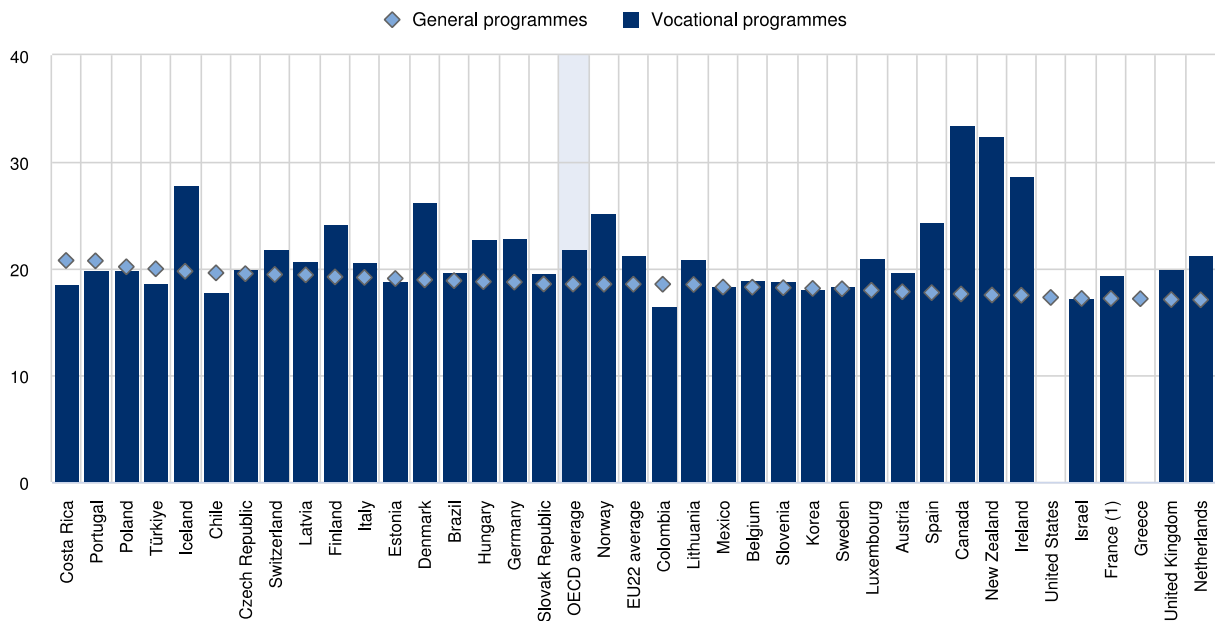
## Access to education, participation and progress

- Compulsory education begins at the age of 5 and ends at the age of 18 in the Netherlands. The range of ages for which at least 90% of the population are enrolled is identical to the period of compulsory education and goes from the age of 4 to the age of 17. This differs from most other OECD countries, where more than 90% of the population are enrolled for longer than the period of compulsory education.
- The average age of graduation from general upper secondary programmes varies from 17 to 21 years across OECD countries and is 17 years in the Netherlands. Differences in the average age of graduation from vocational upper secondary education are much larger and vary from 16 to 34 years across the OECD. These differences largely depend on whether vocational upper secondary students usually enrol in these programmes towards the end of their compulsory education or in mid-career. In the Netherlands, the average age of graduation from vocational upper secondary education is 21 years, which is slightly below the OECD average at 22 years (Figure 2).
- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. In the Netherlands, the share is 54% (OECD average 55%). In contrast, men are overrepresented among graduates of vocational upper secondary programmes in most OECD countries, but not in the Netherlands where they make up 49% of all vocational upper secondary graduates, below the OECD average (55%).
- In the Netherlands, 68% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (significantly above the OECD average of 54%). A subset of these students (47% of 18-24 year-olds) combine their education or training with some form of employment in the Netherlands, compared to 17% on average across the OECD.
- One significant difference across countries' education systems is on whether or not vocational upper secondary programmes provide access to tertiary education. In 12 OECD countries and other participants, all vocational upper secondary graduates have direct access to tertiary education. In the Netherlands only 49% of graduates from vocational upper secondary programme have direct access to tertiary education.
- As is the case in all OECD countries, a majority of students enrolled at tertiary level in the Netherlands are bachelor's students (74%). However, the next commonest enrolment level varies from country to country. In the Netherlands, master's students make up the second largest group of tertiary students at 21%. This is also the case in 25 other OECD countries, while in the remaining 14 countries with available data, short-cycle tertiary students form the second largest group.
- At 28%, business, administration and law was the most popular field of study among new entrants into tertiary education in the Netherlands, which is the case in most OECD countries. Despite the growing need for digital skills and the good employment prospects of students with degrees in information and communication technologies (ICT), only a small fraction of entrants into tertiary education choose this field. In the Netherlands, 93% of 25-64 year-olds with a tertiary ICT qualification are employed, but ICT students make up only 5% of new entrants into tertiary education. This is below the OECD average of 6%.
- The Netherlands is popular destination for international students. They make up 13% of all tertiary enrolments in the Netherlands, compared to 7% on average across OECD countries. A quarter of these students come from neighbouring countries. In OECD countries, the share of international

students tends to rise with the level of education studied, this is the case in the Netherlands where 11% of those enrolled in Bachelor's programmes are international students, compared to 19% of Master's enrolments and 48% of Doctoral enrolments.

**Figure 2. Average age of first-time upper secondary graduates, by programme orientation (2020)**

In years



1. Average age is based on all graduates instead of first-time graduates.

Countries are ranked in descending order of the average age of first-time upper secondary graduates in general programmes.

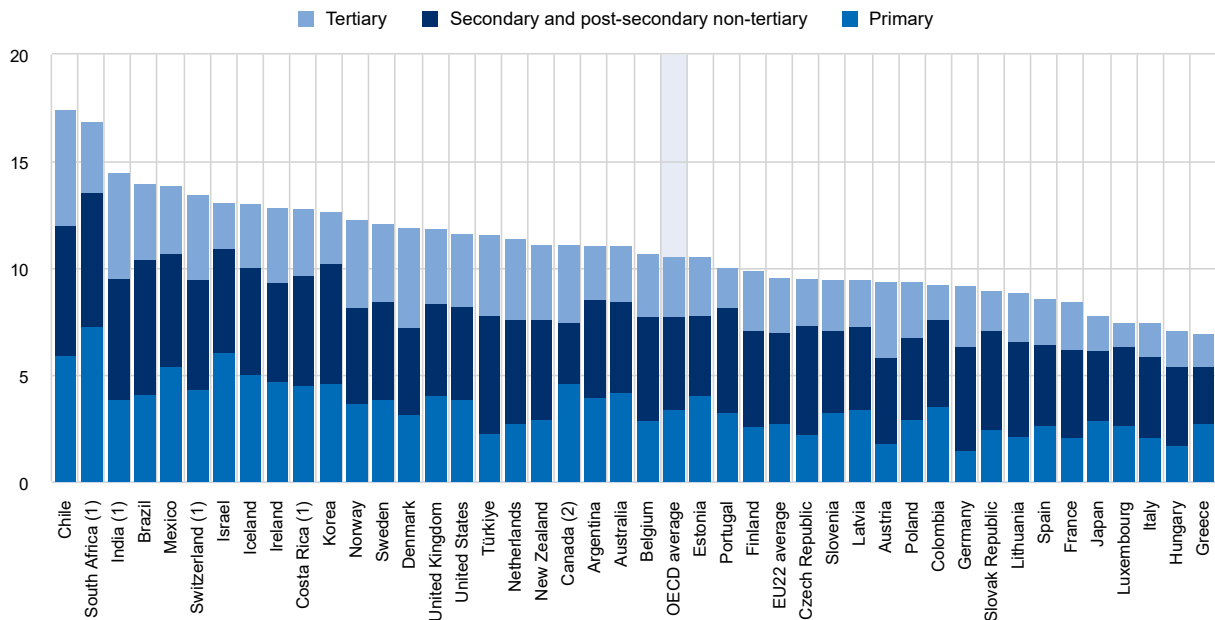
**Source:** OECD/Eurostat/UIS (2022), Tables B3.1 and B3.2. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

## Financial resources invested in education

- All OECD countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average 4.9% of their gross domestic product (GDP) on primary to tertiary educational institutions. In the Netherlands, the corresponding share was 5.1%. Between 2008 and 2019, funding for educational institutions from all sources grew by 17% in the Netherlands. Over the same period of time, the increase in GDP was lower with 11%. As a consequence, expenditure on educational institutions as a share of GDP grew by 0.3 percentage points over the same time period.
- Public spending on primary to tertiary education was 11.4% of total government expenditure in the Netherlands (Figure 3), higher than the OECD average (10.6%). Also, relative to GDP, public spending on primary to tertiary education (4.8%) is higher than the OECD average (4.4%).

**Figure 3. Composition of total public expenditure on education as a percentage of total government expenditure (2019)**

Primary to tertiary education (including R&D), in per cent



1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

**Source:** OECD/UIS/Eurostat (2022), Table C4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-C.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf)).

- Spending on educational institutions as share of GDP or public budgets are important measures of the importance that countries place on education in their budgeting decisions. However, they do not show the total amount of funding per student because GDP levels, public budgets and student numbers vary from country to country. Across primary to tertiary education, OECD countries spend an average of USD 11 990 per student (in equivalent USD converted using PPPs for GDP) on educational institutions each year. In comparison, the Netherlands spent USD 14 720 per student in 2019. Its cumulative expenditure on educating a student from the age of 6 to 15 was USD 119 584, which was above the OECD average of USD 105 502.
- Across OECD countries, the provision of education at primary and secondary levels in terms of curricula, teaching styles and organisational management leads, on average, to similar patterns of expenditure per student from primary to post-secondary non-tertiary levels. OECD countries as a whole spend on average around USD 9 923 per student at primary and USD 11 400 per student at secondary level. In the Netherlands, the values are USD 10 150 at primary and USD 14 902 per student at secondary level, which are among the highest across OECD countries.
- In contrast to lower levels of education, spending on tertiary education varies widely across OECD countries. Expenditure per student at tertiary level in the Netherlands is higher than at other levels of education, as is the case in almost all other OECD countries. The average expenditure per tertiary student in the Netherlands is USD 20 889 per year, which is about USD 10 700 higher than that of the primary level and about USD 6 000 higher than that of the secondary level. It is

among the highest across OECD countries. The OECD average expenditure at tertiary level (USD 17 559) is driven up by high values in a few countries such as Luxembourg (USD 51 978), the United Kingdom (USD 29 688) and the United States (USD 35 347). At 36%, the share of research and development (R&D) expenditure makes up a larger fraction of expenditure on tertiary education in the Netherlands than on average across OECD countries (29%).

- Public funding dominates non-tertiary education (primary, secondary and post-secondary non-tertiary) in all OECD countries, even after transfers to the private sector. On average across the OECD, private funding accounts for 10% of expenditure at primary, secondary and post-secondary non-tertiary levels, while this share was 14% in the Netherlands in 2019. In contrast, private expenditure at tertiary level was higher in all OECD countries. In the Netherlands, the share of private expenditure at tertiary level reached 28%, which was slightly below the OECD average of 31%.

### Teachers, the learning environment and the organisation of schools

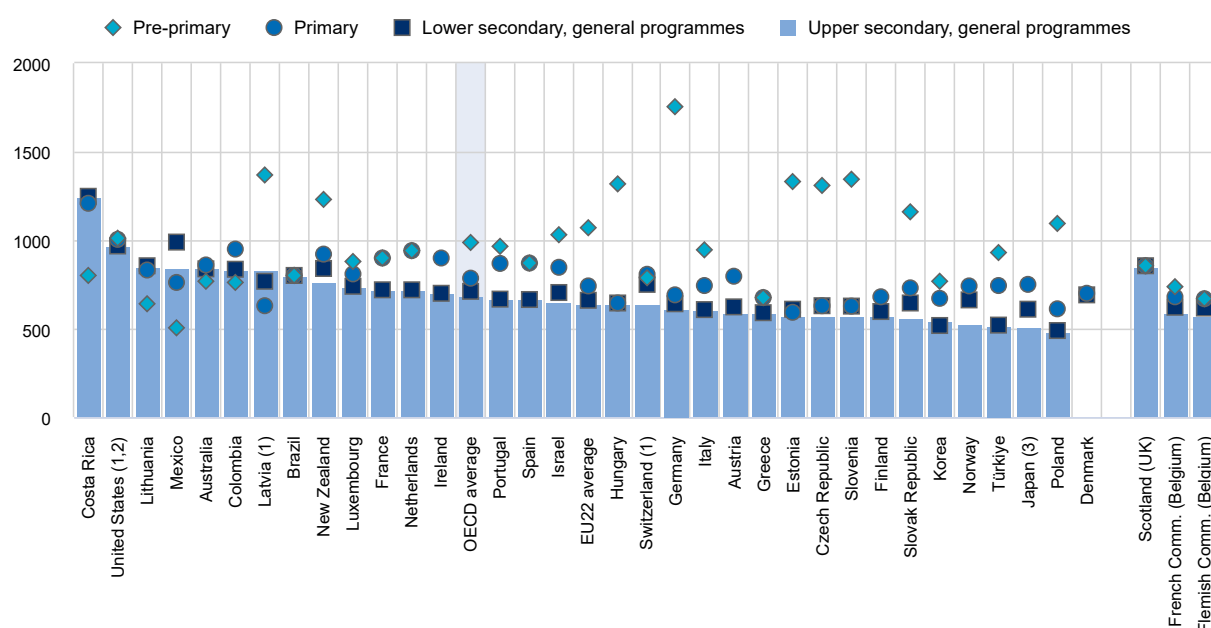
- The salaries of teachers and school heads are an important determinant of the attractiveness of the teaching profession, but they also represent the single largest expenditure item in formal education. In most OECD countries, the statutory salaries of teachers (and school heads) in public educational institutions increase with the level of education they teach, and also with experience. Actual salaries also increase with the level of education. On average across OECD countries, actual salaries range from USD 41 941 at the pre-primary level to USD 53 682 at the upper secondary level. In the Netherlands, actual salaries average USD 65 219 at pre-primary level and USD 79 182 at upper secondary level.
- Between 2015 and 2021, on average across OECD countries, the statutory salaries of teachers at lower secondary level (general programmes) with 15 years of experience and the most prevalent qualifications increased by 6% in real terms. In the Netherlands, salaries increased less than the OECD average, by 5%.
- Teachers' average actual salaries remain lower than earnings of tertiary-educated workers in almost all OECD countries, and at almost all levels of education. This is also the case in the Netherlands. Lower secondary (general programme) teachers in the Netherlands earn 12.8% less than other tertiary-educated workers. In contrast school head actual salaries in the Netherlands are only slightly higher than the earnings of other tertiary educated workers. This is different from most OECD countries, where school heads tend to earn well above the average earnings of tertiary educated workers.
- The average number of teaching hours per year required from a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases. This is also the case in the Netherlands.
- Based on official regulations or agreements, annual teaching hours in the Netherlands are 940 hours per year at pre-primary level, 940 hours at primary level, 720 hours at lower secondary level (general programmes) and 720 hours at upper secondary level (general programmes) (Figure 4).
- During their working hours, teachers also perform various non-teaching tasks such as lesson planning and preparation, marking students' work and communicating or co-operating with parents or guardians. At the upper secondary level, 57% of teachers' working time is formally dedicated to non-teaching activities in the Netherlands, compared to an average of 56% across OECD countries.
- The duration of initial teacher education for primary and lower secondary teachers ranges from 2.5 years to 6.5 years across OECD countries. In the Netherlands, initial teacher education

typically lasts 4 years for prospective lower secondary teachers (general programmes). It is the same length for prospective primary teachers. As is the case in almost all OECD countries, a tertiary degree is awarded to prospective teachers of all levels of education upon completion of their initial teacher training.

- Continuing professional development is compulsory for all teachers of general programmes in most countries with data, but the Netherlands is an exception. At secondary level, professional development activities are not compulsory.

**Figure 4. Teaching time of teachers, by level of education (2021)**

Net statutory teaching time in hours per year, in public institutions



1. Actual teaching time (in Latvia except for pre-primary level).

2. Reference year differs from 2021. Refer to the source table for details.

3. Average planned teaching time in each school at the beginning of the school year.

Countries and other participants are ranked in descending order of the number of teaching hours per year in general upper secondary education.

**Source:** OECD (2022), Table D4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-D.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-D.pdf)).

## Focus on tertiary education

- Among 25-64 year-olds in the Netherlands, bachelor's degrees are the most common tertiary attainment at 24% of the population followed by master's degrees with 16% and short-cycle tertiary qualifications with 2%. This is similar to the OECD average, where bachelor's degrees are most common (19%), followed by master's degrees (14%) and short cycle tertiary qualifications (7%). As in all OECD countries and other participants, only a small fraction of the population holds a doctoral degree: the share is 1% in the Netherlands.
- On average, tertiary attainment generates a wide range of labour-market benefits, including high employment rates. Yet, there are significant differences depending on the field of study. In 2021, employment rates in the Netherlands were highest among tertiary-educated individuals who

studied medical and dental fields or information and communication technologies with 93% and lowest among those who studied natural sciences, mathematics and statistics or education at 86%. However, these differences need to be put into perspective. Even among 25-64 year-olds with tertiary attainment in the field with the lowest employment rate, this was 2.6 percentage points higher than among those with upper secondary attainment (all fields combined).

- Despite the labour market advantages of a tertiary degree, many tertiary students do not graduate on time or do not graduate at all. In the Netherlands, 29% of bachelor's students graduate within the theoretical programme duration. Across the OECD, the completion rate within the theoretical programme duration ranges from 12% to 69%. Completion rates three years after the theoretical programme duration are significantly higher in most countries and the differences between OECD countries somewhat narrower. In the Netherlands, 71% of bachelor's students have graduated within three years after the end of the theoretical programme duration, compared to 68% on average across the OECD.
- In all OECD countries, tertiary completion rates are higher for women than for men. In the Netherlands, 78% of women graduated within three years after the end of the theoretical programme duration at bachelor's level, compared to 64% of men.
- In most OECD countries including in the Netherlands, tertiary-educated adults have higher rates of participation in non-formal education and training than those with a lower level of educational attainment. In 2021, 24% of 25-64 year-olds with tertiary attainment in the Netherlands had participated in non-formal education and training in the four weeks prior to being surveyed, compared to 9% of their peers with below upper secondary attainment.
- Entering tertiary education often means costs for students and their families, in terms of tuition fees, foregone earnings and living expenses, although they may also receive financial support to help them afford it. However, public policies on tuition fees and financial support for students differ greatly across countries. The Netherlands has comparatively low levels of tuition fees, public institutions charge tuition fees of USD 2 622 for national students at bachelor's level.
- Over the decades, independent private institutions have been established to meet increased demand for tertiary education. On average across the OECD, 17% of students are enrolled in independent private institutions, but this figure masks large differences between countries. In the Netherlands, 16% of tertiary students are enrolled in such institutions. Independent private institutions charge higher annual tuition fees on average than public institutions for master's programmes in all OECD countries and other participants with available data, except in Chile and Lithuania.
- Giving students the possibility to study part-time is an important instrument to facilitate access to tertiary education. Many part-time students are students that would not be able to study full-time, for example because they have child-care obligations or have to work to fund their studies. With 19%, the share of part-time students at the tertiary level in the Netherlands is slightly below the OECD average (22%).
- Staff at tertiary level tend to start their careers relatively late due to the length of the education they need to qualify. In the Netherlands, 17% of academic staff are aged under 30, above the OECD average (8%). In contrast, the share of academic staff aged 50 or over is 33%, which is below the OECD average by 7 percentage points.

## COVID-19: The second year of the pandemic

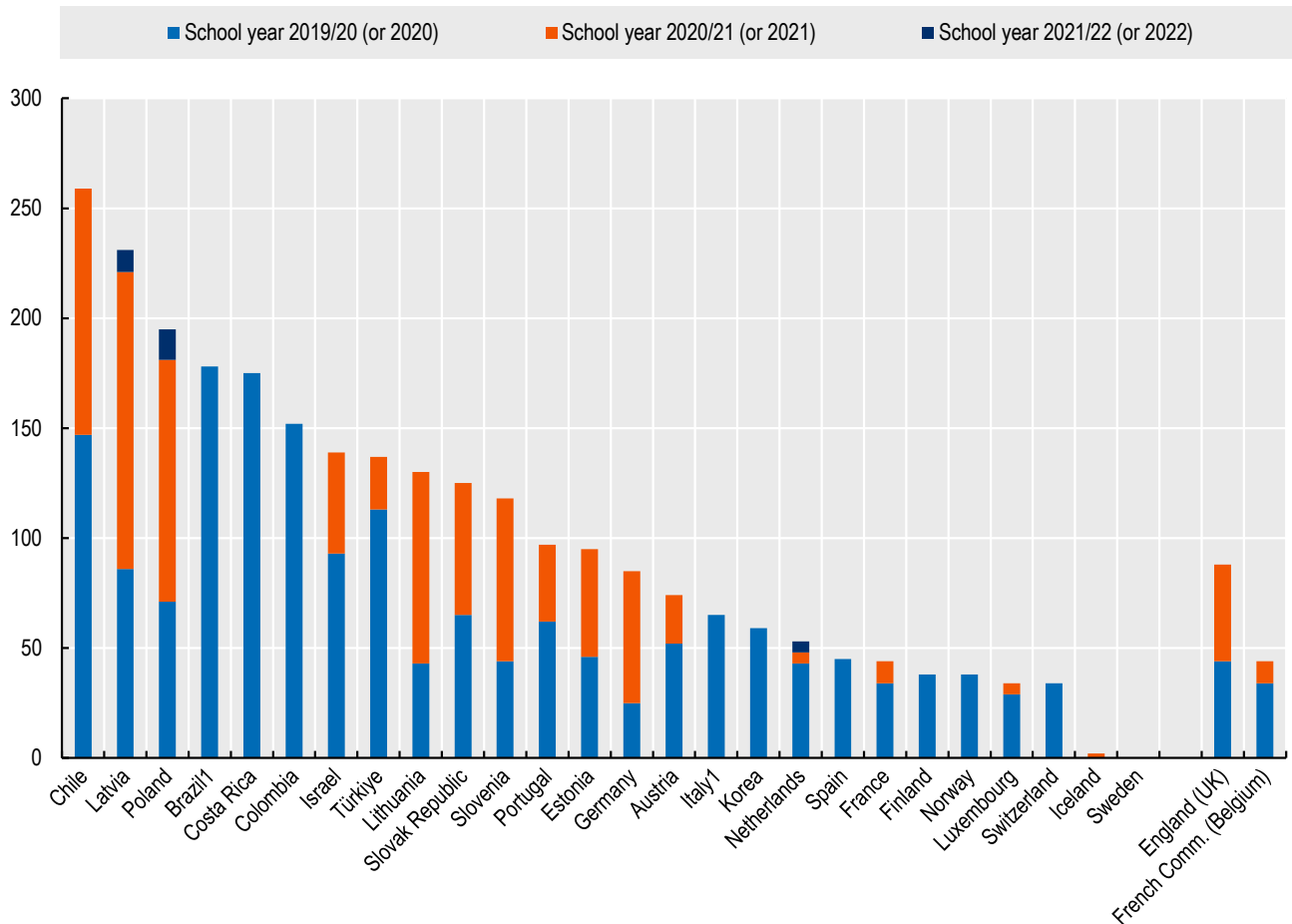
- The COVID-19 pandemic disrupted traditional schooling in 2020 and the first half of 2021, leading to school closures across all OECD countries. While most shut down their premises entirely in the wake of the pandemic in 2020, by 2021 the situation had improved and returned to normal in most

countries in 2022. In the Netherlands, primary and secondary schools except for upper secondary vocational programmes were entirely closed for up to 43 days during the school year 2019/20, for up to 5 days in 2020/21 and 5 days in 2021/22 (Figure 5). Partial closures reached 36-60 days during the school year 2019/20 and 25-84 days in 2020/21.

- National examinations have also been affected by the pandemic. At general upper secondary level, 18 OECD countries postponed their national examinations during the school year 2019/20, while 10 countries even cancelled them entirely. In 2020/21, national examinations were postponed in 9 countries and cancelled in 6 countries. The Netherlands cancelled its national examinations in 2019/20 and rescheduled them in 2020/21.
- Most countries conducted assessments of the impact of school closures on learning outcomes at various levels of education and along several dimensions. The Netherlands has conducted studies to evaluate the effects of the pandemic and its impact on primary, lower secondary, upper secondary general and vocational education. The assessments covered mathematics, reading and science. Like many other countries, the Netherlands also evaluated dimensions such as the effectiveness of distance-learning strategies during school closures, non-cognitive skills as well as the mental health and well-being of students and teachers.
- The challenges related to the COVID-19 pandemic have created additional costs for education systems. Preliminary budget estimates for 2021 suggest that, compared to 2020, the education budget at pre-primary to tertiary level in the Netherlands increased strongly (by more than 5%, in nominal terms).
- The COVID-19 pandemic had a significant impact on adult learning in most OECD countries. In 2020, the share of adults who participated in a formal or non-formal education and training activity in the four weeks prior to being surveyed decreased by 2 percentage points on average across OECD countries compared with 2019. However, in 2021, participation in non-formal education and training returned to pre-pandemic levels in most countries. In the Netherlands, a similar pattern emerged. From 2019 to 2020, the share of adults participating in a formal or non-formal education and training activity fell by 1 percentage point. From 2020 to 2021, it increased by 8 percentage points and has thus increased above pre-pandemic levels.
- Young adults who are not in employment, education or training (NEET) for prolonged periods are at risk of adverse economic and social outcomes in both the short and the long term. After increasing during the COVID-19 pandemic in 2020, the share of 18-24 year-olds who are NEET in the Netherlands declined in 2021. The share of NEET among young adults was 5% in 2021, below pre-COVID levels.

**Figure 5. School closures due to COVID-19 (2020, 2021 and the first quarter of 2022)**

Number of instruction days of full closure of lower secondary schools excluding school holidays, public holidays and weekends



**Note:** The data underlying this report were produced through the Survey on Joint National Responses to COVID 19, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), the World Bank (WB), and the Organisation for Economic Co-operation and Development (OECD). Data for other levels of education are available at <https://www.oecd.org/education/Results-4th-wave-COVID-Survey-OECD-database.xlsx>.

1. Data for 2021 and 2022 are missing.

Countries and other participants are ranked in descending order of the total number of days lower secondary schools were fully closed during the school years 2019/20 (2020), 2020/21 (2021) and 2021/22 (2022).

**Source:** OECD/UIS/UNESCO/UNICEF/WB (2022).

## References

OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/3197152b-en>


OECD (2022), "Regional education", *OECD Regional Statistics (database)*, <https://dx.doi.org/10.1787/213e806c-en>.

## More information

**For more information on Education at a Glance 2022 and to access the full set of Indicators, see:**  
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For more information on the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, See Annex 3 ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3.pdf)).

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# New Zealand

## The output of educational institutions and the impact of learning

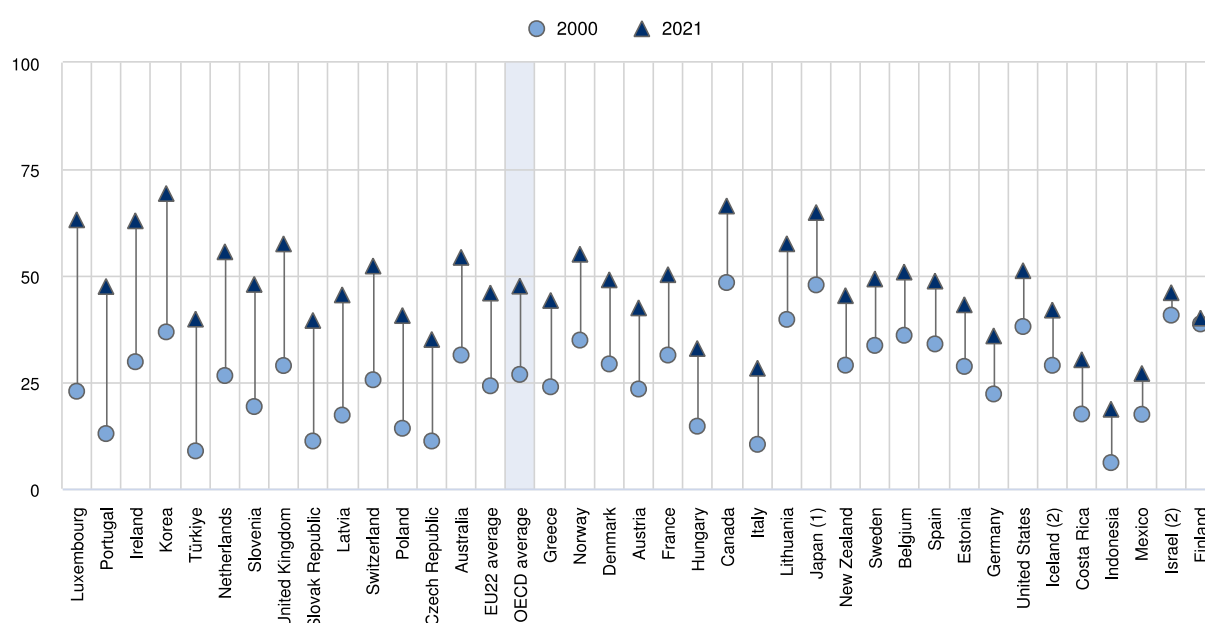
- Educational attainment has been increasing throughout the OECD, in particular at tertiary level. Between 2000 and 2021, the share of 25-34 year-olds with tertiary attainment increased on average by 21 percentage points. In New Zealand, the share also increased albeit at a slower pace, by 16 percentage points (from 29% in 2000 to 45% in 2021) (Figure 1). New Zealand is one of the 24 OECD countries where tertiary education is the most common highest level of attainment among 25-34 year-olds.
- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. Although the general increase in educational attainment has seen a parallel decline in the share of 25-34 year-olds without upper secondary attainment, 14% of young adults across the OECD still left school without an upper secondary qualification. In New Zealand, the share is 13%, which is lower than the OECD average.
- Higher educational attainment is often associated with better employment prospects and New Zealand is no exception. In 2021 the employment rate among 25-34 year-olds with tertiary education in New Zealand was 21 percentage points higher than among those with below upper secondary attainment and 7 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. On average across OECD countries, the employment rate among 25-34 year-olds with a tertiary qualification was 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. While the positive link between educational attainment and employment rates holds for both men and for women across the OECD, it is particularly strong for women. In New Zealand, 56% of women with below upper secondary attainment were employed in 2021, compared to 86% of those with tertiary attainment. In contrast, the figures were 77% and 93% for men.
- Across the OECD, the labour market benefits of tertiary attainment have proved especially strong during economic crises. This was also the case during the COVID-19 pandemic in New Zealand. Between 2019 and 2020, unemployment for 25-34 year-old workers with below upper secondary attainment increased by 2.2 percentage points, remained constant for workers with upper secondary attainment and increased by 0.8 percentage points for workers with tertiary attainment. In 2021, unemployment for workers with below upper secondary attainment fell by 2 percentage points, compared to 2020, by 0.2 percentage points for workers with upper secondary attainment and by 0.6 percentage points for workers with tertiary attainment.
- Educational attainment affects not just employment prospects, but also wage levels. On average across the OECD, 25-64 year-old workers with upper secondary or post-secondary non-tertiary attainment earn 29% more than workers with below upper secondary attainment, while those with tertiary attainment earn about twice as much. In New Zealand, the earnings advantage of tertiary-educated workers was smaller than the OECD average. In 2020, workers with upper secondary or

post-secondary non-tertiary attainment earned 12% more than those with below upper secondary attainment and those with tertiary attainment earned 49% more.

- National averages provide only an incomplete picture of the situation in any given country. In most OECD countries, there are large differences in educational attainment across subnational regions. This is also the case in New Zealand. In 2020, the difference between the region with the highest share of 25-64 year-olds with tertiary attainment (Wellington, at 48%) and that with the lowest share (Southland, at 20%) was 28 percentage points. These subnational variations do not only reflect differences in education opportunities. To a large degree, they are due to economic conditions and internal migration patterns.

**Figure 1. Trends in the share of tertiary-educated 25-34 year-olds (2000 and 2021)**

In per cent



1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group).

2. Year of reference differs from 2000: 2002 for Israel and 2003 for Iceland.

Countries are ranked in descending order of the difference in the share of tertiary-educated 25-34 year-olds between 2000 and 2021.

**Source:** OECD (2022), Education at a Glance Database, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-A.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf)).

## Access to education, participation and progress

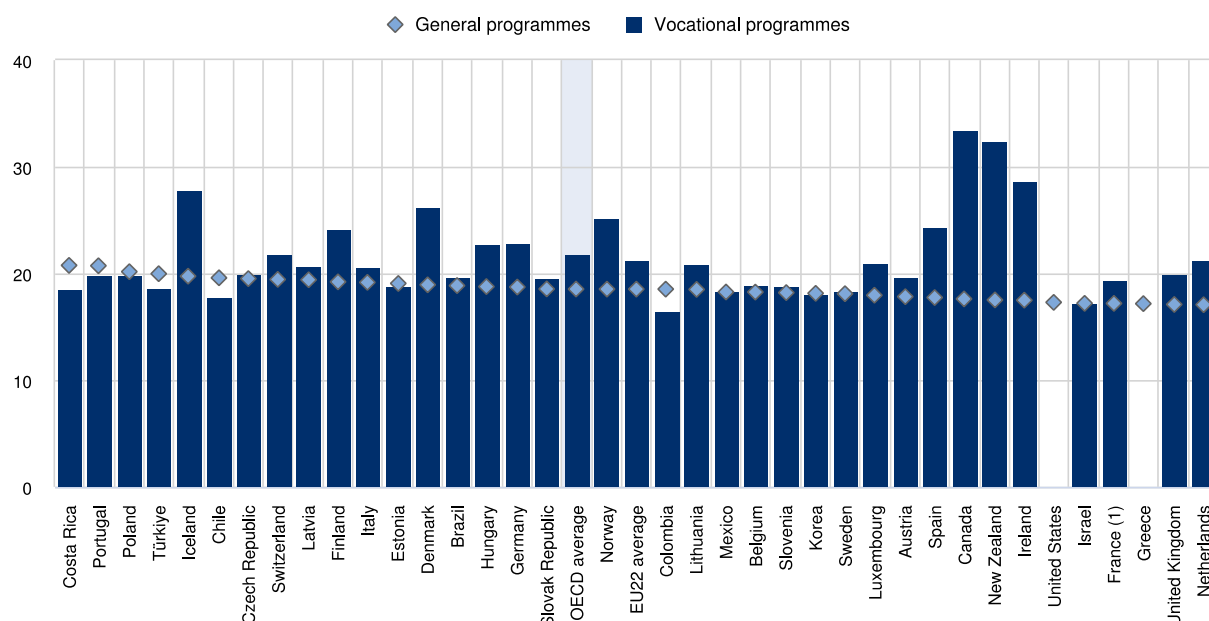
- Compulsory education begins at the age of 5 and ends at the age of 16 in New Zealand. The range of ages for which at least 90% of the population are enrolled is identical to the period of compulsory education and goes from the age of 5 to the age of 16. This differs from most other OECD countries, where more than 90% of the population are enrolled for longer than the period of compulsory education.
- The age at which children enter early childhood education differs widely across countries. In New Zealand, early childhood education starts offering intentional education objectives for children

younger than 1 and 39% of children under 3 are enrolled in early childhood education. Across OECD countries, the average enrolment rate among children below the age of 3 is 27%, but the rates range from less than 1% to 63%. The enrolment rate among 3-5 year-olds increases substantially in all OECD countries. In New Zealand, 59% of all children of this age are enrolled in early childhood education, which is below the OECD average. In interpreting this enrolment rate among 3-5 year-olds, it's important to note that primary education begins from age 5 in New Zealand, so most 5-year-olds are enrolled in school, and are therefore not enrolled in early childhood education.

- The average age of graduation from general upper secondary programmes varies from 17 to 21 years across OECD countries and is 18 years in New Zealand. Differences in the average age of graduation from vocational upper secondary education are much larger and vary from 16 to 34 years across the OECD. These differences largely depend on whether vocational upper secondary students usually enrol in these programmes towards the end of their compulsory education or in mid-career. In New Zealand, the average age of graduation from vocational upper secondary education is 32 years, which is above the OECD average at 22 years (Figure 2).
- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. In New Zealand, men and women are equally represented. In contrast, men are overrepresented among graduates of vocational upper secondary programmes in most OECD countries, but not in New Zealand where they make up 43% of all vocational upper secondary graduates, below the OECD average (55%).
- In New Zealand, 31% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (significantly below the OECD average of 54%). A subset of these students (16% of 18-24 year-olds) combine their education or training with some form of employment in New Zealand, compared to 17% on average across the OECD.
- One significant difference across countries' education systems is on whether or not vocational upper secondary programmes provide access to tertiary education. In 12 OECD countries and other participants, all vocational upper secondary graduates have direct access to tertiary education. In contrast, in New Zealand vocational upper secondary graduates do not have direct access to tertiary education.
- As is the case in all OECD countries, a majority of students enrolled at tertiary level in New Zealand are bachelor's students (71%). However, the next commonest enrolment level varies from country to country. In New Zealand, short-cycle tertiary students make up the second largest group of tertiary students at 17%. This is also the case in 13 other OECD countries, while in the remaining 26 countries with available data, master's students form the second largest group.

**Figure 2. Average age of first-time upper secondary graduates, by programme orientation (2020)**

In years



1. Average age is based on all graduates instead of first-time graduates.

Countries are ranked in descending order of the average age of first-time upper secondary graduates in general programmes.

**Source:** OECD/Eurostat/UIS (2022), Tables B3.1 and B3.2. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

## Financial resources invested in education

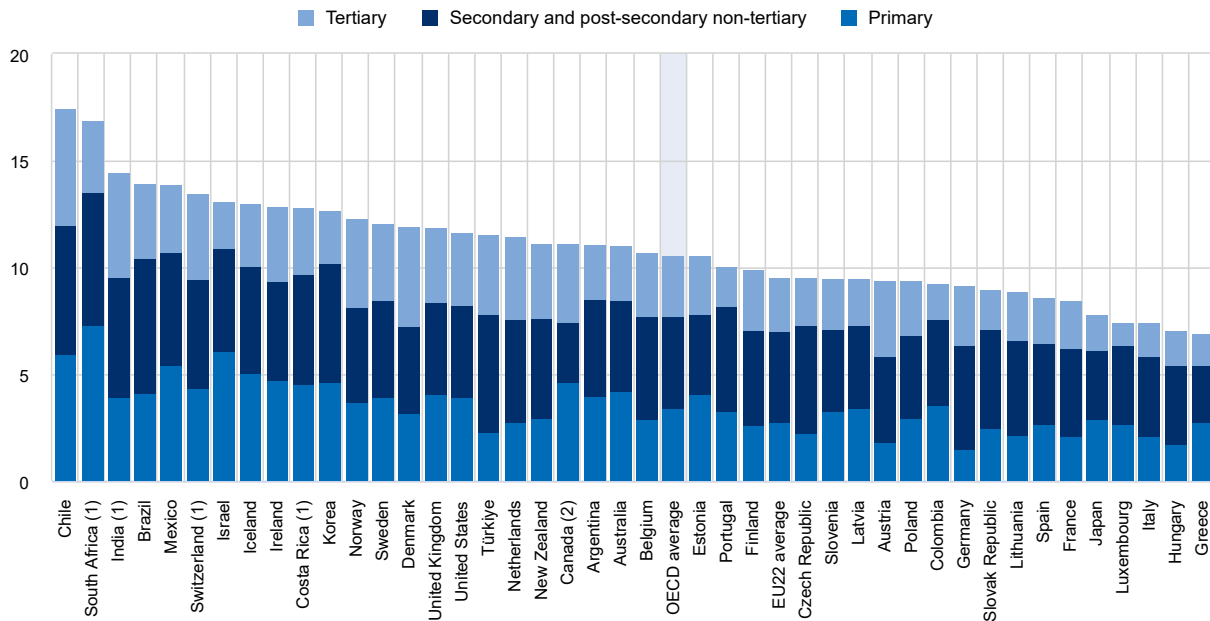
- All OECD countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average 4.9% of their gross domestic product (GDP) on primary to tertiary educational institutions. In New Zealand, the corresponding share was 5.1%. Between 2008 and 2019, funding for educational institutions from all sources grew by 14% in New Zealand. However, over the same period of time, the increase in GDP was higher with 38%. As a consequence, expenditure on educational institutions as a share of GDP fell by 1.1 percentage points over the same time period.
- Public spending on primary to tertiary education was 11.2% of total government expenditure in New Zealand (Figure 3), higher than the OECD average (10.6%). Also, relative to GDP, public spending on primary to tertiary education (4.6%) is higher than the OECD average (4.4%).
- Across OECD countries, the provision of education at primary and secondary levels in terms of curricula, teaching styles and organisational management leads, on average, to similar patterns of expenditure per student from primary to post-secondary non-tertiary levels. OECD countries as a whole spend on average around USD 9 923 per student at primary and USD 11 400 per student at secondary level. In New Zealand, the values are USD 7 578 at primary and USD 9 336 per student at secondary level, which are among the lowest across OECD countries.
- In contrast to lower levels of education, spending on tertiary education varies widely across OECD countries. Expenditure per student at tertiary level in New Zealand is higher than at other

levels of education, as is the case in almost all other OECD countries. The average expenditure per student in New Zealand is USD 18 641 per year, which is about USD 11 100 higher than that of the primary level and USD 9 300 higher than that of the secondary level. It is above the OECD average, but similar to many other countries. The average expenditure at tertiary level (USD 17 559) is driven up by high values in a few countries. At 21%, the share of research and development (R&D) expenditure makes up a smaller fraction of expenditure on tertiary education in New Zealand than on average across OECD countries (29%).

- Public funding dominates non-tertiary education (primary, secondary and post-secondary non-tertiary) in all OECD countries, even after transfers to the private sector. On average across the OECD, private funding accounts for 10% of expenditure at primary, secondary and post-secondary non-tertiary levels, while this share was 13% in New Zealand in 2019. In contrast, private expenditure at tertiary level was higher in all OECD countries. In New Zealand, the share of private expenditure at tertiary level reached 46%, which was above the OECD average of 31%, after public-to-private transfers. These latter accounted for 16% of expenditure on educational institutions at this level.

**Figure 3. Composition of total public expenditure on education as a percentage of total government expenditure (2019)**

Primary to tertiary education (including R&D), in per cent



1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

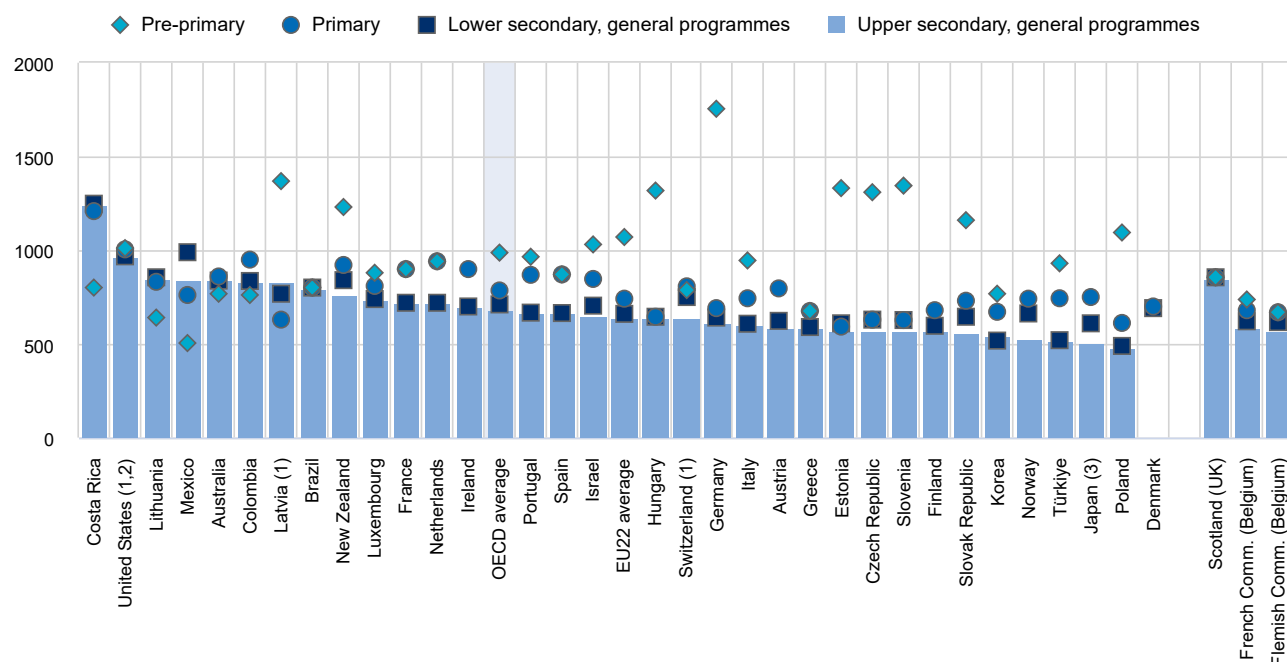
**Source:** OECD/UIS/Eurostat (2022), Table C4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-C.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf)).

## Teachers, the learning environment and the organisation of schools

- The salaries of teachers and school heads are an important determinant of the attractiveness of the teaching profession, but they also represent the single largest expenditure item in formal education. In most OECD countries, the statutory salaries of teachers (and school heads) in public educational institutions increase with the level of education they teach, and also with experience. Actual salaries also increase with the level of education. On average across OECD countries, actual salaries range from USD 47 538 at the primary level to USD 53 682 at the upper secondary level. In New Zealand, actual salaries average USD 48 878 at primary level and USD 53 335 at upper secondary level.
- Between 2015 and 2021, on average across OECD countries, the statutory salaries of teachers at lower secondary level (general programmes) with 15 years of experience and the most prevalent qualifications increased by 6% in real terms. In New Zealand, salaries increased more than the OECD average, by 9%.
- Teachers' average actual salaries remain lower than earnings of tertiary-educated workers in almost all OECD countries, and at almost all levels of education. This is also the case in New Zealand. Lower secondary (general programme) teachers in New Zealand earn 7.8% less than other tertiary-educated workers. In contrast school head actual salaries in New Zealand are much higher than the earnings of other tertiary educated workers. This is similar to most OECD countries, where school heads tend to earn well above the average earnings of tertiary educated workers.
- The average number of teaching hours per year required from a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases. This is also the case in New Zealand.
- Based on official regulations or agreements, annual teaching hours in New Zealand are 1 230 hours per year at pre-primary level, 922 hours at primary level, 840 hours at lower secondary level (general programmes) and 760 hours at upper secondary level (general programmes) (Figure 4).
- The duration of initial teacher education for primary and lower secondary teachers ranges from 2.5 years to 6.5 years across OECD countries. In New Zealand, initial teacher education typically lasts 3 years for prospective lower secondary teachers (general programmes). It is the same length for prospective primary teachers. As is the case in almost all OECD countries, a tertiary degree is awarded to prospective teachers of all levels of education upon completion of their initial teacher training.
- Continuing professional development is compulsory for all teachers of general programmes in most countries with data, but New Zealand is an exception. At secondary level, professional development activities are not compulsory.

**Figure 4. Teaching time of teachers, by level of education (2021)**

Net statutory teaching time in hours per year, in public institutions



1. Actual teaching time (in Latvia except for pre-primary level).

2. Reference year differs from 2021. Refer to the source table for details.

3. Average planned teaching time in each school at the beginning of the school year.

Countries and other participants are ranked in descending order of the number of teaching hours per year in general upper secondary education.

**Source:** OECD (2022), Table D4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-D.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-D.pdf)).

## Focus on tertiary education

- Among 25-64 year-olds in New Zealand, bachelor's degrees are the most common tertiary attainment at 29% of the population followed by master's degrees with 6% and short-cycle tertiary qualifications with 4%. This is similar to the OECD average, where bachelor's degrees are most common (19%), followed by master's degrees (14%) and short cycle tertiary qualifications (7%). As in all OECD countries and other participants, only a small fraction of the population holds a doctoral degree: the share is 1% in New Zealand.
- Despite the labour market advantages of a tertiary degree, many tertiary students do not graduate on time or do not graduate at all. In New Zealand, 33% of bachelor's students graduate within the theoretical programme duration. Across the OECD, the completion rate within the theoretical programme duration ranges from 12% to 69%. Completion rates three years after the theoretical programme duration are significantly higher in most countries and the differences between OECD countries somewhat narrower. In New Zealand, 77% of bachelor's students have graduated within three years after the end of the theoretical programme duration, compared to 68% on average across the OECD.
- In all OECD countries, tertiary completion rates are higher for women than for men. In New Zealand, 80% of women graduated within three years after the end of the theoretical

programme duration at bachelor's level, compared to 73% of men. On average across the OECD, there is little systematic difference between the completion rates of public and private institutions, but the figures differ from country to country. In New Zealand, 77% of bachelor's students graduate from public institutions within three years after the end of the theoretical programme duration, while the share is 81% for private institutions.

- In most OECD countries including in New Zealand, tertiary-educated adults have higher rates of participation in non-formal education and training than those with a lower level of educational attainment. In 2015, 74% of 25-64 year-olds with tertiary attainment in New Zealand had participated in non-formal education and training in the twelve months prior to being surveyed, compared to 46% of their peers with below upper secondary attainment.
- Entering tertiary education often means costs for students and their families, in terms of tuition fees, foregone earnings and living expenses, although they may also receive financial support to help them afford it. However, public policies on tuition fees and financial support for students differ greatly across countries. In New Zealand, comparatively high levels of tuition fees are combined with high levels of financial support for students. Public institutions charge tuition fees of USD 4 621 for national students at bachelor's level and of USD 5 951 at master's level.
- OECD countries have different approaches to providing financial support to students enrolled in tertiary education, but in general countries with the highest level of public transfers to the private sector are those that also tend to have the highest tuition fees. In six OECD countries and other participants, including New Zealand, at least 80% of national students receive public financial support in the form of student loans, scholarships or grants. In another six countries and other participants, less than 25% of students receive financial support. In these countries, public financial support is targeted on selected groups of students, such as those from socio-economically disadvantaged families.
- Enabling students to enrol on a part-time basis is an important way to facilitate access to tertiary education. Many part-time students would not be able to study full time, for example because they have child-care responsibilities or have to work to fund their studies. The share of part-time students at the tertiary level in New Zealand is 44%, above the OECD average (22%). Compared to 2013, it has remained constant.
- Staff at tertiary level tend to start their careers relatively late due to the length of the education they need to qualify. In New Zealand, only 10% of academic staff are aged under 30, slightly above the OECD average (8%). In contrast, the share of academic staff aged 50 or over is 46%, which is above the OECD average by 6 percentage points.

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- Young adults who are not in employment, education or training (NEET) for prolonged periods are at risk of adverse economic and social outcomes in both the short and the long term. After increasing during the COVID-19 pandemic in 2020, the share of 18-24 year-olds who are NEET in New Zealand declined in 2021. The share of NEET among young adults was 13% in 2021, at pre-COVID levels.

## References

OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/69096873-en>.


OECD (2022), "Regional education", *OECD Regional Statistics (database)*, <https://dx.doi.org/10.1787/213e806c-en>.

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# Norway

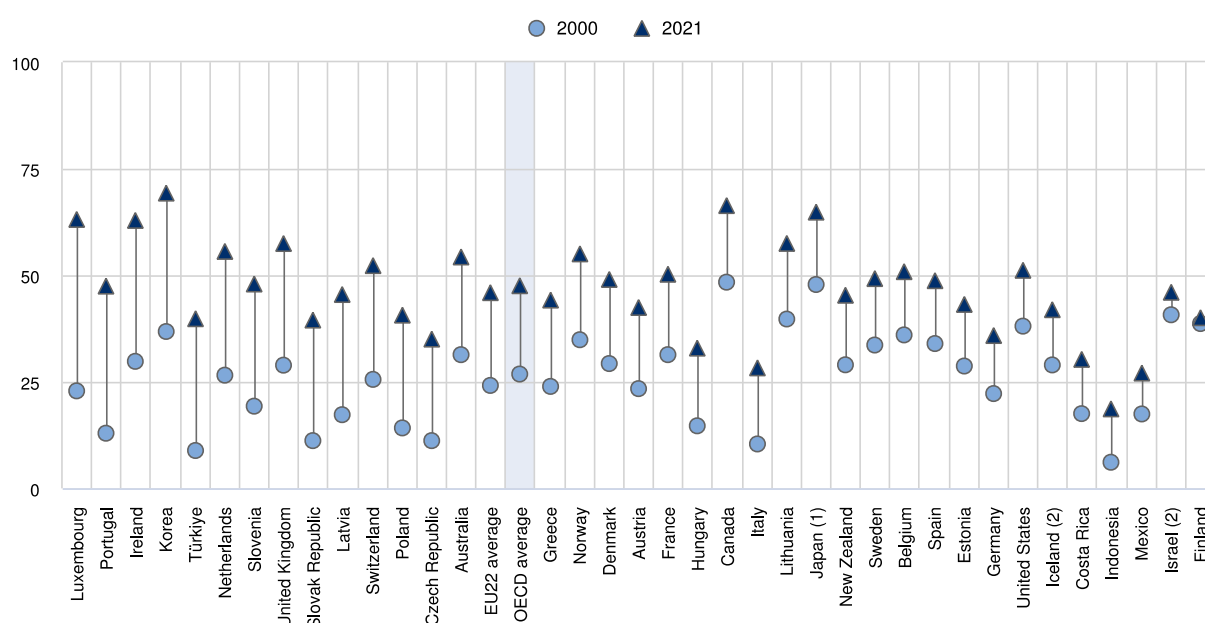
## The output of educational institutions and the impact of learning

- Educational attainment has been increasing throughout the OECD, in particular at tertiary level. Between 2000 and 2021, the share of 25-34 year-olds with tertiary attainment increased on average by 21 percentage points. In Norway, the increase was 20 percentage points (from 35% in 2000 to 55% in 2021) (Figure 1). Norway is one of the 14 OECD countries where at least half of 25-34 year-olds have a tertiary education.
- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. Although the general increase in educational attainment has seen a parallel decline in the share of 25-34 year-olds without upper secondary attainment, 14% of young adults across the OECD still left school without an upper secondary qualification. In Norway, the share is 17%, which is higher than the OECD average.
- Higher educational attainment is often associated with better employment prospects and Norway is no exception. In 2021 the employment rate among 25-34 year-olds with tertiary education in Norway was 25 percentage points higher than among those with below upper secondary attainment and 4 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. On average across OECD countries, the employment rate among 25-34 year-olds with a tertiary qualification was 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. While the positive link between educational attainment and employment rates holds for both men and for women across the OECD, it is particularly strong for women. In Norway, 52% of women with below upper secondary attainment were employed in 2021, compared to 88% of those with tertiary attainment. In contrast, the figures were 72% and 88% for men.
- Across the OECD, the labour market benefits of tertiary attainment have proved especially strong during economic crises. This was also the case during the COVID-19 pandemic in Norway. Between 2019 and 2020, unemployment for 25-34 year-old workers with below upper secondary attainment increased by 3.4 percentage points, by 1.8 percentage points for workers with upper secondary attainment and by 1.1 percentage points for workers with tertiary attainment. In 2021, unemployment for workers with below upper secondary attainment fell by 0.7 percentage points, compared to 2020, by 1.7 percentage points for workers with upper secondary attainment and by 0.6 percentage points for workers with tertiary attainment.
- Educational attainment affects not just employment prospects, but also wage levels. On average across the OECD, 25-64 year-old workers with upper secondary or post-secondary non-tertiary attainment earn 29% more than workers with below upper secondary attainment, while those with tertiary attainment earn about twice as much. In Norway, the earnings advantage of tertiary-educated workers was smaller than the OECD average. In 2020, workers with upper secondary or post-secondary non-tertiary attainment earned 34% more than those with below upper secondary attainment and those with tertiary attainment earned 70% more.

- National averages provide only an incomplete picture of the situation in any given country. In most OECD countries, there are large differences in educational attainment across subnational regions. This is also the case in Norway. In 2021, the difference between the region with the highest share of 25-64 year-olds with tertiary attainment (Oslo and Viken, at 52%) and that with the lowest share (Innlandet, at 39%) was 13 percentage points. These subnational variations do not only reflect differences in education opportunities. To a large degree, they are due to economic conditions and internal migration patterns.

**Figure 1. Trends in the share of tertiary-educated 25-34 year-olds (2000 and 2021)**

In per cent



1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group).

2. Year of reference differs from 2000: 2002 for Israel and 2003 for Iceland.

Countries are ranked in descending order of the difference in the share of tertiary-educated 25-34 year-olds between 2000 and 2021.

**Source:** OECD (2022), Education at a Glance Database, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-A.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf)).

## Access to education, participation and progress

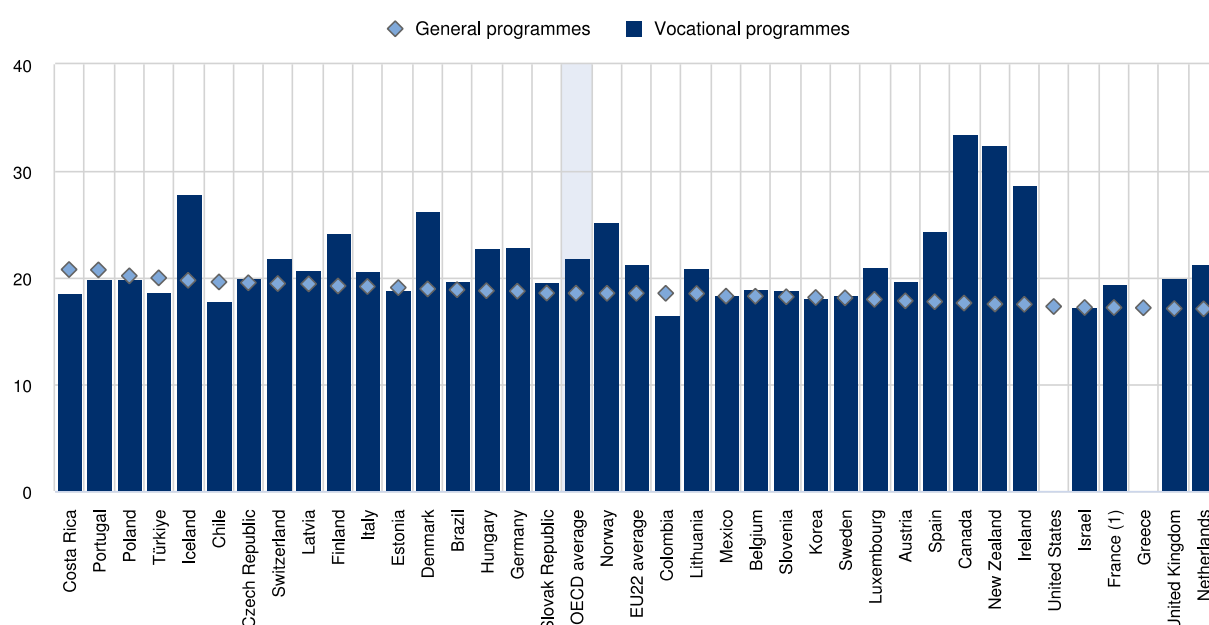
- Compulsory education begins at the age of 6 and ends at the age of 16 in Norway. The range of ages for which at least 90% of the population are enrolled is longer than the period of compulsory education and goes from the age of 2 to the age of 18. This is similar to most other OECD countries, where more than 90% of the population are also enrolled for longer than the period of compulsory education.
- The age at which children enter early childhood education differs widely across countries. In Norway, early childhood education starts offering intentional education objectives for children younger than 1 and 58% of children under 3 are enrolled in early childhood education. Across OECD countries, the average enrolment rate among children below the age of 3 is 27%, but the rates range from less than 1% to 63%. The enrolment rate among 3-5 year-olds increases

substantially in all OECD countries. In Norway, 97% of all children of this age are enrolled in early childhood education, which is above the OECD average.

- The average age of graduation from general upper secondary programmes varies from 17 to 21 years across OECD countries and is 19 years in Norway. Differences in the average age of graduation from vocational upper secondary education are much larger and vary from 16 to 34 years across the OECD. These differences largely depend on whether vocational upper secondary students usually enrol in these programmes towards the end of their compulsory education or in mid-career. In Norway, the average age of graduation from vocational upper secondary education is 25 years, which is above the OECD average at 22 years (Figure 2).

**Figure 2. Average age of first-time upper secondary graduates, by programme orientation (2020)**

In years



1. Average age is based on all graduates instead of first-time graduates.

Countries are ranked in descending order of the average age of first-time upper secondary graduates in general programmes.

**Source:** OECD/Eurostat/UIS (2022), Tables B3.1 and B3.2. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. In Norway, the share is 58% (OECD average 55%). In contrast, men are overrepresented among graduates of vocational upper secondary programmes in most OECD countries, as is the case in Norway where they make up 61% of all vocational upper secondary graduates, above the OECD average (55%).
- In Norway, 64% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (significantly above the OECD average of 54%). A subset of these students (32% of 18-24 year-olds) combine their education or training with some form of employment in Norway, compared to 17% on average across the OECD.
- One significant difference across countries' education systems is on whether or not vocational upper secondary programmes provide access to tertiary education. In 12 OECD countries and

other participants, including Norway, all vocational upper secondary graduates have direct access to tertiary education, when ISCED 5 is included. Access to ISCED 6 or ISCED 7 is limited.

- As is the case in all OECD countries, a majority of students enrolled at tertiary level in Norway are bachelor's students (66%). However, the next commonest enrolment level varies from country to country. In Norway, master's students make up the second largest group of tertiary students at 28%. This is also the case in 25 other OECD countries, while in the remaining 14 countries with available data, short-cycle tertiary students form the second largest group.
- At 17%, business, administration and law was the most popular field of study among new entrants into tertiary education in Norway, which is the case in most OECD countries. Despite the growing need for digital skills and the good employment prospects of students with degrees in information and communication technologies (ICT), only a small fraction of entrants into tertiary education choose this field. In Norway, 89% of 25-64 year-olds with a tertiary ICT qualification are employed, but ICT students make up 6% of new entrants into tertiary education. This is the same level as the OECD average.

## Financial resources invested in education

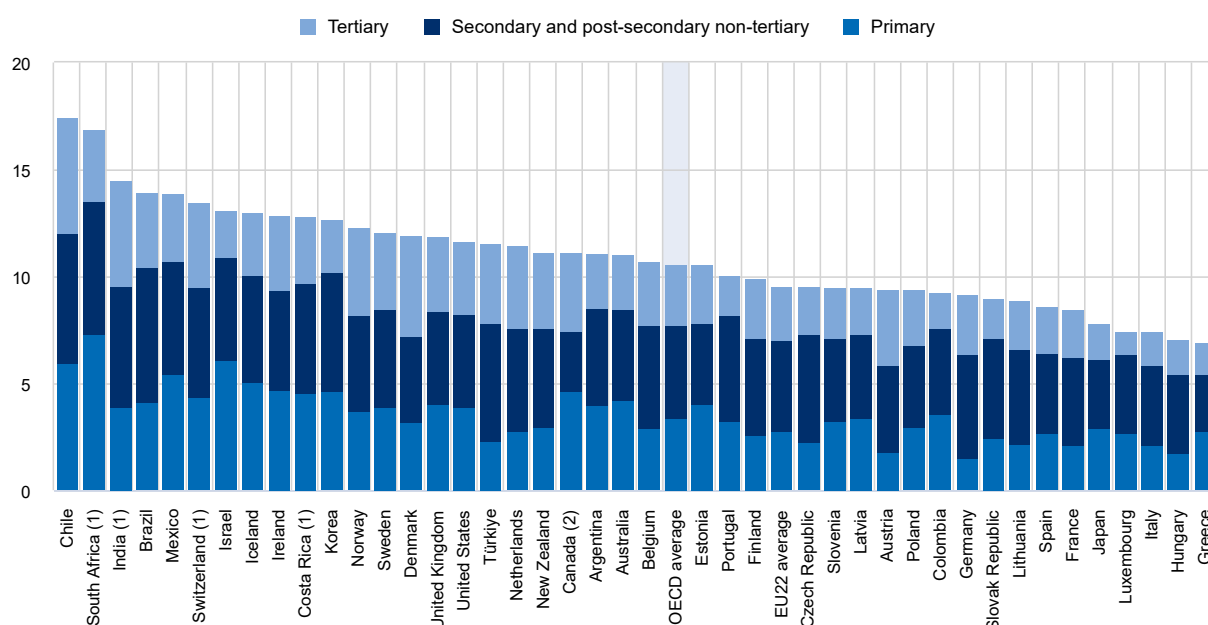
- All OECD countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average 4.9% of their gross domestic product (GDP) on primary to tertiary educational institutions. In Norway, the corresponding share was 6.6%. Between 2008 and 2019, funding for educational institutions from all sources grew by 28% in Norway. Over the same period of time, the increase in mainland GDP was lower with 20%. As a consequence, expenditure on educational institutions as a share of GDP grew by 0.4 percentage points over the same time period.
- Public spending on primary to tertiary education was 12.4% of total government expenditure in Norway (Figure 3), higher than the OECD average (10.6%). Also, relative to GDP, public spending on primary to tertiary education (7.4%) is higher than the OECD average (4.4%).
- Spending on educational institutions as share of GDP or public budgets are important measures of the importance that countries place on education in their budgeting decisions. However, they do not show the total amount of funding per student because GDP levels, public budgets and student numbers vary from country to country. Across primary to tertiary education, OECD countries spend an average of USD 11 990 per student (in equivalent USD converted using PPPs for GDP) on educational institutions each year. In comparison, Norway spent USD 17 757 per student in 2019. Its cumulative expenditure on educating a student from the age of 6 to 15 was USD 153 335, which was significantly above the OECD average of USD 105 502.
- Across OECD countries, the provision of education at primary and secondary levels in terms of curricula, teaching styles and organisational management leads, on average, to similar patterns of expenditure per student from primary to post-secondary non-tertiary levels. OECD countries as a whole spend on average around USD 9 923 per student at primary and USD 11 400 per student at secondary level. In Norway, the values are USD 15 334 at primary and USD 16 192 per student at secondary level, which are among the highest across OECD countries.
- In contrast to lower levels of education, spending on tertiary education varies widely across OECD countries. Expenditure per student at tertiary level in Norway is higher than at other levels of education, as is the case in almost all other OECD countries. The average expenditure per student in Norway is USD 25 019 per year, which is about USD 9 700 higher than that of the primary level and USD 8 800 higher than that of the secondary level. It is among the highest across OECD countries. The average expenditure at tertiary level (USD 17 559) is driven up by high values in a few countries. At 38%, the share of research and development (R&D) expenditure

makes up a larger fraction of expenditure on tertiary education in Norway than on average across OECD countries (29%).

- Public funding dominates non-tertiary education (primary, secondary and post-secondary non-tertiary) in all OECD countries, even after transfers to the private sector. On average across the OECD, private funding accounts for 10% of expenditure at primary, secondary and post-secondary non-tertiary levels, while this share was 1% in Norway in 2019. In contrast, private expenditure at tertiary level was higher in all OECD countries. In Norway, the share of private expenditure at tertiary level reached 6%, which was significantly below the OECD average of 31%, after public-to-private transfers. These latter accounted for 3% of expenditure on educational institutions at this level.

**Figure 3. Composition of total public expenditure on education as a percentage of total government expenditure (2019)**

Primary to tertiary education (including R&D), in per cent



1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

**Source:** OECD/UIS/Eurostat (2022), Table C4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-C.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf)).

## Teachers, the learning environment and the organisation of schools

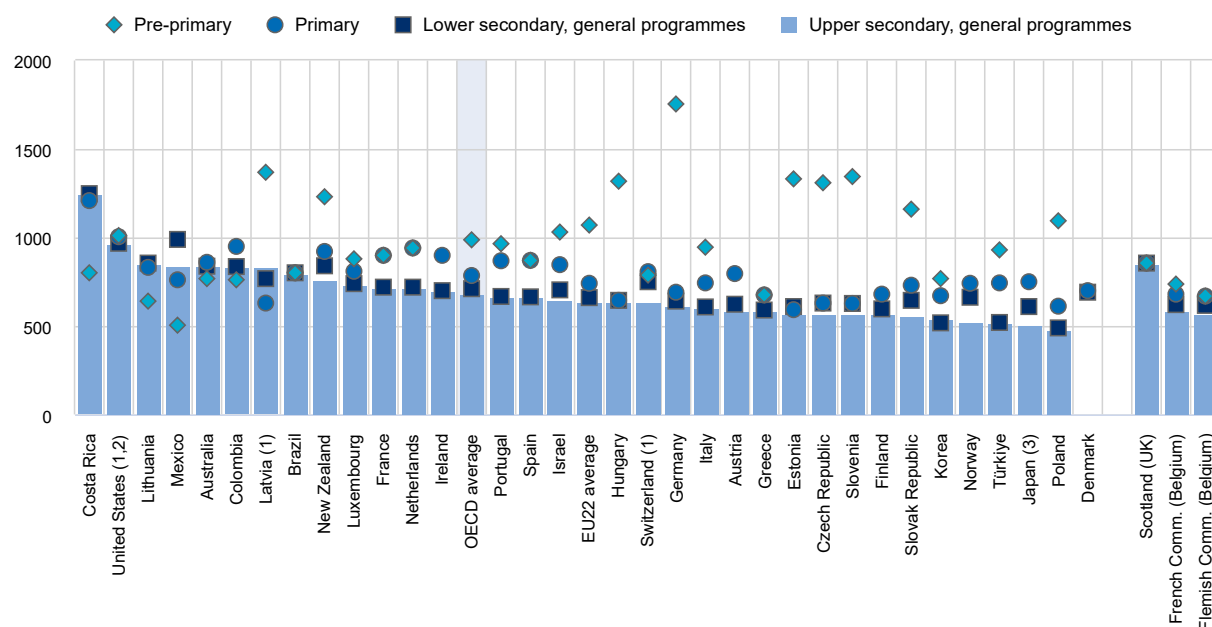
- The salaries of teachers and school heads are an important determinant of the attractiveness of the teaching profession, but they also represent the single largest expenditure item in formal education. In most OECD countries, the statutory salaries of teachers (and school heads) in public educational institutions increase with the level of education they teach, and also with experience. Actual salaries also increase with the level of education. On average across OECD countries, actual salaries range from USD 41 941 at the pre-primary level to USD 53 682 at the upper

secondary level. In Norway, actual salaries average USD 49 185 at pre-primary level and USD 58 947 at upper secondary level.

- Between 2015 and 2021, on average across OECD countries, the statutory salaries of teachers at lower secondary level (general programmes) with 15 years of experience and the most prevalent qualifications increased by 6% in real terms. In Norway, salaries increased less than the OECD average, by 2%.
- Teachers' average actual salaries remain lower than earnings of tertiary-educated workers in almost all OECD countries, and at almost all levels of education. This is also the case in Norway. Lower secondary (general programme) teachers in Norway earn 25.2% less than other tertiary-educated workers. School head actual salaries in Norway are only slightly higher than the earnings of other tertiary educated workers. This is different from most OECD countries, where school heads tend to earn well above the average earnings of tertiary educated workers.
- The average number of teaching hours per year required from a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases. This is also the case in Norway.
- Based on official regulations or agreements, annual teaching hours in Norway are 741 hours at primary level, 663 hours at lower secondary level (general programmes) and 523 hours at upper secondary level (general programmes) (Figure 4).
- During their working hours, teachers also perform various non-teaching tasks such as lesson planning and preparation, marking students' work and communicating or co-operating with parents or guardians. At the upper secondary level, 69% of teachers' working time in general programmes in Norway is formally dedicated to non-teaching activities, compared to an average of 56% for upper secondary teachers across OECD countries.
- The duration of initial teacher education for primary and lower secondary teachers ranges from 2.5 years to 6.5 years across OECD countries. In Norway, initial teacher education typically lasts 5 years for prospective lower secondary teachers (general programmes). It is the same length for prospective primary teachers. As is the case in almost all OECD countries, a tertiary degree is awarded to prospective teachers of all levels of education upon completion of their initial teacher training.
- Continuing professional development is compulsory for all teachers of general programmes in most countries with data, but Norway is an exception. At secondary level, professional development activities are compulsory for teachers in some circumstances.

Figure 4. Teaching time of teachers, by level of education (2021)

Net statutory teaching time in hours per year, in public institutions



1. Actual teaching time (in Latvia except for pre-primary level).

2. Reference year differs from 2021. Refer to the source table for details.

3. Average planned teaching time in each school at the beginning of the school year.

Countries and other participants are ranked in descending order of the number of teaching hours per year in general upper secondary education.

Source: OECD (2022), Table D4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-D.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-D.pdf)).

## Focus on tertiary education

- Among 25-64 year-olds in Norway, bachelor's degrees are the most common tertiary attainment at 21% of the population followed by master's degrees with 13% and short-cycle tertiary qualifications with 11%. This is similar to the OECD average, where bachelor's degrees are most common (19%), followed by master's degrees (14%) and short cycle tertiary qualifications (7%). As in all OECD countries and other participants, only a small fraction of the population holds a doctoral degree: the share is 1% in Norway.
- On average, tertiary attainment generates a wide range of labour-market benefits, including high employment rates. Yet, there are significant differences depending on the field of study. In 2021, employment rates in Norway were highest among tertiary-educated individuals who studied engineering, manufacturing and construction with 92% and lowest among those who studied natural sciences, mathematics and statistics at 85%. However, these differences need to be put into perspective. Even among 25-64 year-olds with tertiary attainment in the field with the lowest employment rate, this was 4.2 percentage points higher than among those with upper secondary attainment (all fields combined).
- Wages also differ according to the field of study. In Norway, tertiary attainment in medical and dental fields generates the highest earnings. Full-time full-year workers aged 25-64 with a tertiary degree in this field earn on average 67% more than workers with upper secondary attainment (all

fields combined). In contrast, tertiary attainment in arts leads to the lowest wages. Workers with this educational background earn on average 10% less than the wage of workers with upper secondary attainment (all fields combined).

- Despite the labour market advantages of a tertiary degree, many tertiary students do not graduate on time or do not graduate at all. In Norway, 49% of bachelor's students graduate within the theoretical programme duration. Across the OECD, the completion rate within the theoretical programme duration ranges from 12% to 69%. Completion rates three years after the theoretical programme duration are significantly higher in most countries and the differences between OECD countries somewhat narrower. In Norway, 74% of bachelor's students have graduated within three years after the end of the theoretical programme duration, compared to 68% on average across the OECD.
- In all OECD countries, tertiary completion rates are higher for women than for men. In Norway, 79% of women graduated within three years after the end of the theoretical programme duration at bachelor's level, compared to 67% of men. On average across the OECD, there is little systematic difference between the completion rates of public and private institutions, but the figures differ from country to country. In Norway, 76% of bachelor's students graduate from public institutions within three years after the end of the theoretical programme duration, while the share is 65% for private institutions.
- In most OECD countries including in Norway, tertiary-educated adults have higher rates of participation in non-formal education and training than those with a lower level of educational attainment. In 2021, 18% of 25-64 year-olds with tertiary attainment in Norway had participated in non-formal education and training in the four weeks prior to being surveyed, compared to 8% of their peers with below upper secondary attainment.
- Entering tertiary education often means costs for students and their families, in terms of tuition fees, foregone earnings and living expenses, although they may also receive financial support to help them afford it. However, public policies on tuition fees and financial support for students differ greatly across countries. In Norway, no tuition fees are combined with high levels of financial support for students. Public institutions do not charge tuition fees for students at bachelor's or master's level.
- OECD countries have different approaches to providing financial support to students enrolled in tertiary education, but in general countries with the highest level of public transfers to the private sector are those that also tend to have the highest tuition fees. In six OECD countries and other participants, at least 80% of national students receive public financial support in the form of student loans, scholarships or grants. In another six countries and other participants, less than 25% of students receive financial support. In these countries, public financial support is targeted on selected groups of students, such as those from socio-economically disadvantaged families. Norway falls between the two groups, with 59% of students receiving financial support.
- Over the decades, independent private institutions have been established to meet increased demand for tertiary education. On average across the OECD, 17% of students are enrolled in independent private institutions, but this figure masks large differences between countries. In Norway, 10% of tertiary students are enrolled in such institutions. Independent private institutions charge higher annual tuition fees on average than public institutions for master's programmes in all OECD countries and other participants with available data, except in Chile and Lithuania. Public institutions in Norway charge no tuition fees for master's programmes.
- Enabling students to enrol on a part-time basis is an important way to facilitate access to tertiary education. Many part-time students would not be able to study full time, for example because they have child-care responsibilities or have to work to fund their studies. The share of part-time students at the tertiary level in Norway is 34%, above the OECD average (22%). Compared to 2013, it has decreased by 3 percentage points.

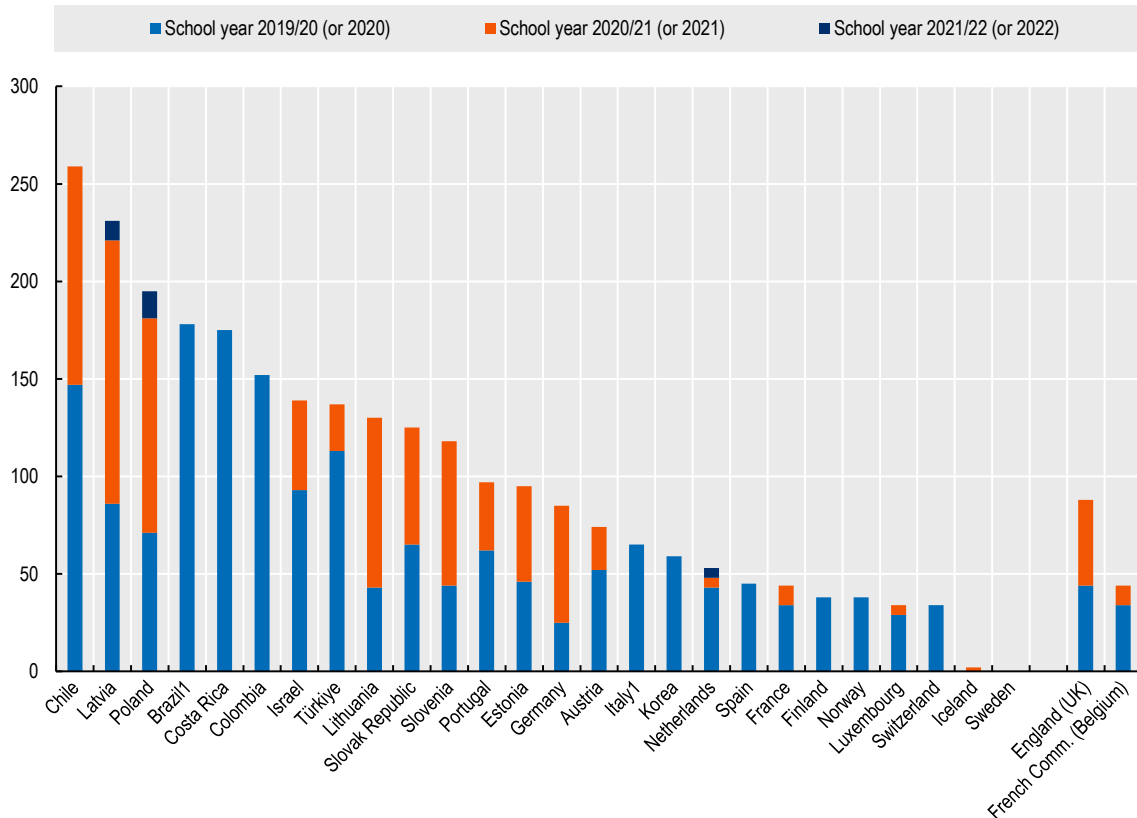
- Staff at tertiary level tend to start their careers relatively late due to the length of the education they need to qualify. In Norway, 21% of academic staff are aged under 30, above the OECD average (8%). In contrast, the share of academic staff aged 50 or over is 34%, which is below the OECD average by 6 percentage points.

## COVID-19: The second year of the pandemic

- The COVID-19 pandemic disrupted traditional schooling in 2020 and the first half of 2021, leading to school closures across all OECD countries. While most shut down their premises entirely in the wake of the pandemic in 2020, by 2021 the situation had improved and returned to normal in most countries in 2022. In Norway, primary and secondary schools were entirely closed for 29-38 days during the school year 2019/20 and stayed open in 2020/21 and 2021/22 (Figure 5).
- Teacher absences also affected the regular operation of schools during the pandemic, whether due to COVID-19 infections or because of precautionary quarantine. However, only approximately half of countries collected information on teacher absenteeism. Norway collected such data. In contrast to many other countries, teacher absenteeism increased slightly (by between 1% and 5%) between 2019/20 and 2021/22.
- National examinations have also been affected by the pandemic. At general upper secondary level, 18 OECD countries postponed their national examinations during the school year 2019/20, while 10 countries even cancelled them entirely. In 2020/21, national examinations were postponed in 9 countries and cancelled in 6 countries. Norway cancelled its national examinations in 2019/20 and in 2020/21.
- Most countries conducted assessments of the impact of school closures on learning outcomes at various levels of education and along several dimensions. Norway has conducted studies to evaluate the effects of the pandemic on the impact on primary, lower secondary, upper secondary general and vocational education. The assessments covered mathematics and reading. Like many other countries, Norway also evaluated dimensions such as non-cognitive skills as well as the mental health and well-being of students.
- No national programmes to support students affected by the pandemic were implemented in Norway in contrast to many other OECD countries. However, capacity was increased to accommodate more students. At primary to upper secondary education, measures to address the effects of the COVID-19 pandemic included additional water, sanitation and hygiene services.
- The challenges related to the COVID-19 pandemic have created additional costs for education systems. Preliminary budget estimates for 2021 suggest that, compared to 2020, the education budget at pre-primary to tertiary level in Norway increased slightly (by between 1% and 5%, in nominal terms).
- The COVID-19 pandemic had a significant impact on adult learning in most OECD countries. In 2020, the share of adults who participated in a formal or non-formal education and training activity in the four weeks prior to being surveyed decreased by 2 percentage points on average across OECD countries compared with 2019. However, in 2021, participation in non-formal education and training returned to pre-pandemic levels in most countries. In Norway, a similar pattern emerged. From 2019 to 2020, the share of adults participating in a formal or non-formal education and training activity fell by 3 percentage points. From 2020 to 2021, it increased by 3 percentage points and has thus increased above pre-pandemic levels.

**Figure 5. School closures due to COVID-19 (2020, 2021 and the first quarter of 2022)**

Number of instruction days of full closure of lower secondary schools excluding school holidays, public holidays and weekends



**Note:** The data underlying this report were produced through the Survey on Joint National Responses to COVID 19, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), the World Bank (WB), and the Organisation for Economic Co-operation and Development (OECD). Data for other levels of education are available at <https://www.oecd.org/education/Results-4th-wave-COVID-Survey-OECD-database.xlsx>.

1. Data for 2021 and 2022 are missing.

Countries and other participants are ranked in descending order of the total number of days lower secondary schools were fully closed during the school years 2019/20 (2020), 2020/21 (2021) and 2021/22 (2022).

**Source:** OECD/UIS/UNESCO/UNICEF/WB (2022).

## References

OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/69096873-en>.


OECD (2022), "Regional education", *OECD Regional Statistics (database)*, <https://dx.doi.org/10.1787/213e806c-en>.

## More information

**For more information on Education at a Glance 2022 and to access the full set of Indicators, see:**  
<https://doi.org/10.1787/3197152b-en>

For more information on the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, See Annex 3 ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3.pdf)).

For general information on the methodology, please refer to the OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications (<https://doi.org/10.1787/9789264304444-en>).

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.

Data on subnational regions for selected indicators are available in the *OECD Regional Statistics* (database) (OECD, 2022). When interpreting the results on subnational entities, readers should take into account that the population size of subnational entities can vary widely within countries. For example, regional variation in enrolment may be influenced by students attending school in a different region from their area of residence, particularly at higher levels of education. Also, regional disparities tend to be higher when more subnational entities are used in the analysis.

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<https://gpseducation.oecd.org/>

The data on educational responses during COVID-19 were collected and processed by the OECD based on the Joint Survey on National Responses to COVID-19 School Closures, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO); the UNESCO Institute for Statistics (UIS); the United Nations Children's Fund (UNICEF); the World Bank; and the OECD.

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### Questions can be directed to:

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# Poland

## The output of educational institutions and the impact of learning

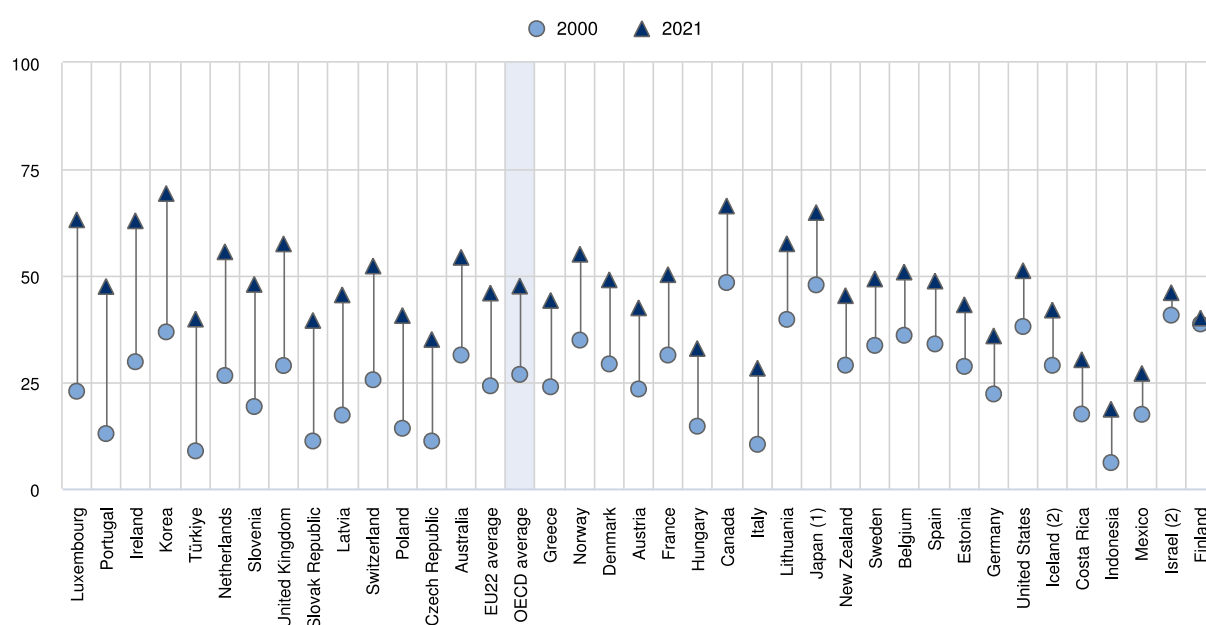
- Educational attainment has been increasing throughout the OECD, in particular at tertiary level. Between 2000 and 2021, the share of 25-34 year-olds with tertiary attainment increased on average by 21 percentage points. In Poland, the share increased at an even faster pace, by 26 percentage points (from 14% in 2000 to 41% in 2021) (Figure 1). Poland remains one of the 12 OECD countries where tertiary education is still less common than upper secondary or post-secondary non-tertiary education as the highest level of attainment among 25-34 year-olds.
- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. Although the general increase in educational attainment has seen a parallel decline in the share of 25-34 year-olds without upper secondary attainment, 14% of young adults across the OECD still left school without an upper secondary qualification. In Poland, the share is 7%, which is lower than the OECD average.
- Higher educational attainment is often associated with better employment prospects and Poland is no exception. In 2021 the employment rate among 25-34 year-olds with tertiary education in Poland was 41 percentage points higher than among those with below upper secondary attainment and 10 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. On average across OECD countries, the employment rate among 25-34 year-olds with a tertiary qualification was 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. While the positive link between educational attainment and employment rates holds for both men and for women across the OECD, it is particularly strong for women. In Poland, 31% of women with below upper secondary attainment were employed in 2021, compared to 88% of those with tertiary attainment. In contrast, the figures were 60% and 95% for men.
- Across the OECD, the labour market benefits of tertiary attainment have proved especially strong during economic crises. This was also the case during the COVID-19 pandemic in Poland. Between 2019 and 2020, unemployment for 25-34 year-old workers with below upper secondary attainment increased by 0.3 percentage points, by 0.2 percentage points for workers with upper secondary attainment and remained constant for workers with tertiary attainment. In 2021, unemployment for workers with below upper secondary attainment fell by 1.1 percentage points, compared to 2020, while it rose by 0.2 percentage points for workers with upper secondary attainment and remained constant for workers with tertiary attainment.
- Educational attainment affects not just employment prospects, but also wage levels. On average across the OECD, 25-64 year-old workers with upper secondary or post-secondary non-tertiary attainment earn 29% more than workers with below upper secondary attainment, while those with tertiary attainment earn about twice as much. In Poland, the earnings advantage of tertiary-educated workers was smaller than the OECD average. In 2020, workers with upper secondary or

post-secondary non-tertiary attainment earned 17% more than those with below upper secondary attainment and those with tertiary attainment earned 80% more.

- National averages provide only an incomplete picture of the situation in any given country. In most OECD countries, there are large differences in educational attainment across subnational regions. This is also the case in Poland. In 2021, the difference between the region with the highest share of 25-64 year-olds with tertiary attainment (Warsaw, at 57%) and that with the lowest share (Warmian-Masuria, at 25%) was 32 percentage points. These subnational variations do not only reflect differences in education opportunities. To a large degree, they are due to economic conditions and internal migration patterns.

**Figure 1. Trends in the share of tertiary-educated 25-34 year-olds (2000 and 2021)**

In per cent



1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group).

2. Year of reference differs from 2000: 2002 for Israel and 2003 for Iceland.

Countries are ranked in descending order of the difference in the share of tertiary-educated 25-34 year-olds between 2000 and 2021.

**Source:** OECD (2022), Education at a Glance Database, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-A.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf)).

## Access to education, participation and progress

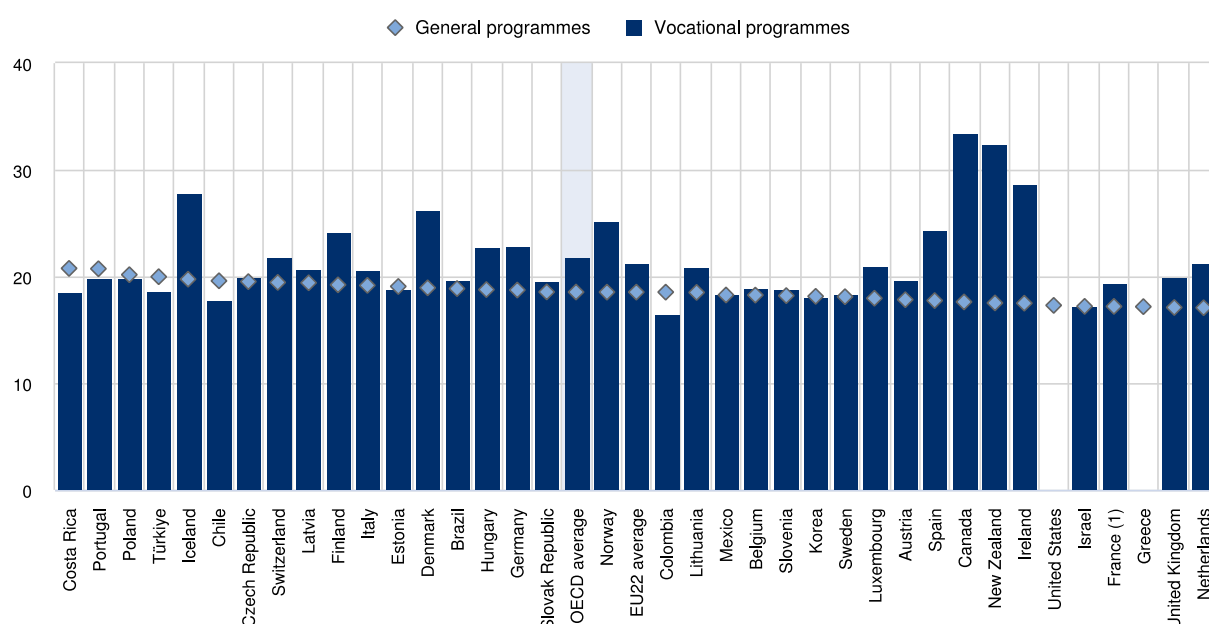
- Compulsory education begins at the age of 6 and ends at the age of 15 in Poland. The range of ages for which at least 90% of the population are enrolled is longer than the period of compulsory education and goes from the age of 4 to the age of 18. This is similar to most other OECD countries, where more than 90% of the population are also enrolled for longer than the period of compulsory education.
- The age at which children enter early childhood education differs widely across countries. In Poland, early childhood education starts offering intentional education objectives at age 3 and 2%

of children under 3 are enrolled in early childhood education. Across OECD countries, the average enrolment rate among children below the age of 3 is 27%, but the rates range from less than 1% to 63%. The enrolment rate among 3-5 year-olds increases substantially in all OECD countries. In Poland, 88% of all children of this age are enrolled in early childhood education, which is slightly above the OECD average.

- The average age of graduation from general upper secondary programmes varies from 17 to 21 years across OECD countries and is 20 years in Poland. Differences in the average age of graduation from vocational upper secondary education are much larger and vary from 16 to 34 years across the OECD. These differences largely depend on whether vocational upper secondary students usually enrol in these programmes towards the end of their compulsory education or in mid-career. In Poland, the average age of graduation from vocational upper secondary education is 20 years, which is below the OECD average at 22 years (Figure 2).
- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. In Poland, the share is 60% (OECD average 55%). In contrast, men are overrepresented among graduates of vocational upper secondary programmes in most OECD countries, as is the case in Poland where they make up 62% of all vocational upper secondary graduates, above the OECD average (55%).
- In Poland, 57% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (slightly above the OECD average of 54%). A subset of these students (8% of 18-24 year-olds) combine their education or training with some form of employment in Poland, compared to 17% on average across the OECD.
- One significant difference across countries' education systems is on whether or not vocational upper secondary programmes provide access to tertiary education. In 12 OECD countries and other participants, all vocational upper secondary graduates have direct access to tertiary education. In Poland 74% of graduates from vocational upper secondary programme have direct access to tertiary education.
- As is the case in all OECD countries, a majority of students enrolled at tertiary level in Poland are bachelor's students (66%). However, the next commonest enrolment level varies from country to country. In Poland, master's students make up the second largest group of tertiary students at 32%. This is also the case in 25 other OECD countries, while in the remaining 14 countries with available data, short-cycle tertiary students form the second largest group.
- At 23%, business, administration and law was the most popular field of study among new entrants into tertiary education in Poland, which is the case in most OECD countries. Despite the growing need for digital skills and the good employment prospects of students with degrees in information and communication technologies (ICT), only a small fraction of entrants into tertiary education choose this field. In Poland, 97% of 25-64 year-olds with a tertiary ICT qualification are employed, but ICT students make up 6% of new entrants into tertiary education. This is the same level as the OECD average.

**Figure 2. Average age of first-time upper secondary graduates, by programme orientation (2020)**

In years



1. Average age is based on all graduates instead of first-time graduates.

Countries are ranked in descending order of the average age of first-time upper secondary graduates in general programmes.

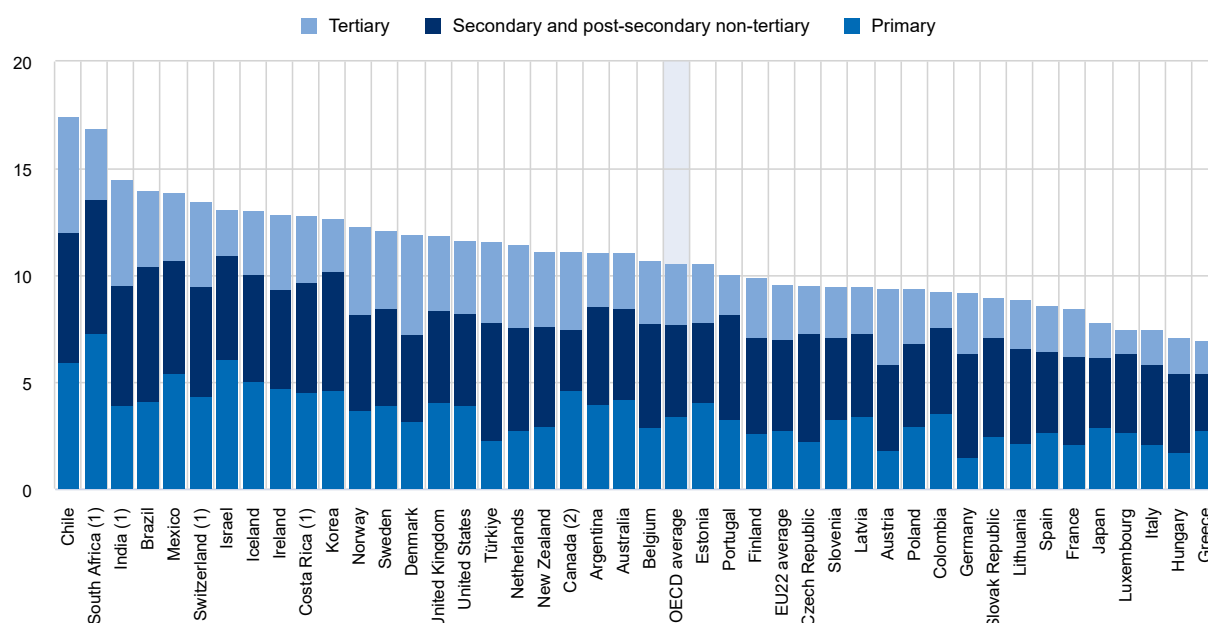
**Source:** OECD/Eurostat/UIS (2022), Tables B3.1 and B3.2. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

## Financial resources invested in education

- All OECD countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average 4.9% of their gross domestic product (GDP) on primary to tertiary educational institutions. In Poland, the corresponding share was 4.5%. Between 2008 and 2019, funding for educational institutions from all sources grew by 30% in Poland. However, over the same period of time, the increase in GDP was higher with 47%. As a consequence, expenditure on educational institutions as a share of GDP fell by 0.6 percentage points over the same time period.
- Public spending on primary to tertiary education was 9.4% of total government expenditure in Poland (Figure 3), lower than the OECD average (10.6%). Also, relative to GDP, public spending on primary to tertiary education (3.9%) is lower than the OECD average (4.4%).
- Spending on educational institutions as share of GDP or public budgets are important measures of the importance that countries place on education in their budgeting decisions. However, they do not show the total amount of funding per student because GDP levels, public budgets and student numbers vary from country to country. Across primary to tertiary education, OECD countries spend an average of USD 11 990 per student (in equivalent USD converted using PPPs for GDP) on educational institutions each year. In comparison, Poland spent USD 9 611 per student in 2019. Its cumulative expenditure on educating a student from the age of 6 to 15 was USD 87 741, which was significantly below the OECD average of USD 105 502.

**Figure 3. Composition of total public expenditure on education as a percentage of total government expenditure (2019)**

Primary to tertiary education (including R&D), in per cent



1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

**Source:** OECD/UIS/Eurostat (2022), Table C4.1. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-C.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf)).

- Across OECD countries, the provision of education at primary and secondary levels in terms of curricula, teaching styles and organisational management leads, on average, to similar patterns of expenditure per student from primary to post-secondary non-tertiary levels. OECD countries as a whole spend on average around USD 9 923 per student at primary and USD 11 400 per student at secondary level. In Poland, the values are USD 8 949 at primary and USD 8 689 per student at secondary level.
- In contrast to lower levels of education, spending on tertiary education varies widely across OECD countries. Expenditure per student at tertiary level in Poland is higher than at other levels of education, as is the case in almost all other OECD countries. The average expenditure per student in Poland is USD 12 912 per year, which is about USD 4 000 higher than that of the primary level and USD 4 200 higher than that of the secondary level. It is below the OECD average, but similar to many other countries. The average expenditure at tertiary level (USD 17 559) is driven up by high values in a few countries. At 30%, the share of research and development (R&D) expenditure makes up a larger fraction of expenditure on tertiary education in Poland than on average across OECD countries (29%).
- Public funding dominates non-tertiary education (primary, secondary and post-secondary non-tertiary) in all OECD countries, even after transfers to the private sector. On average across the OECD, private funding accounts for 10% of expenditure at primary, secondary and post-secondary non-tertiary levels, the same share observed in Poland in 2019. In contrast, private expenditure at

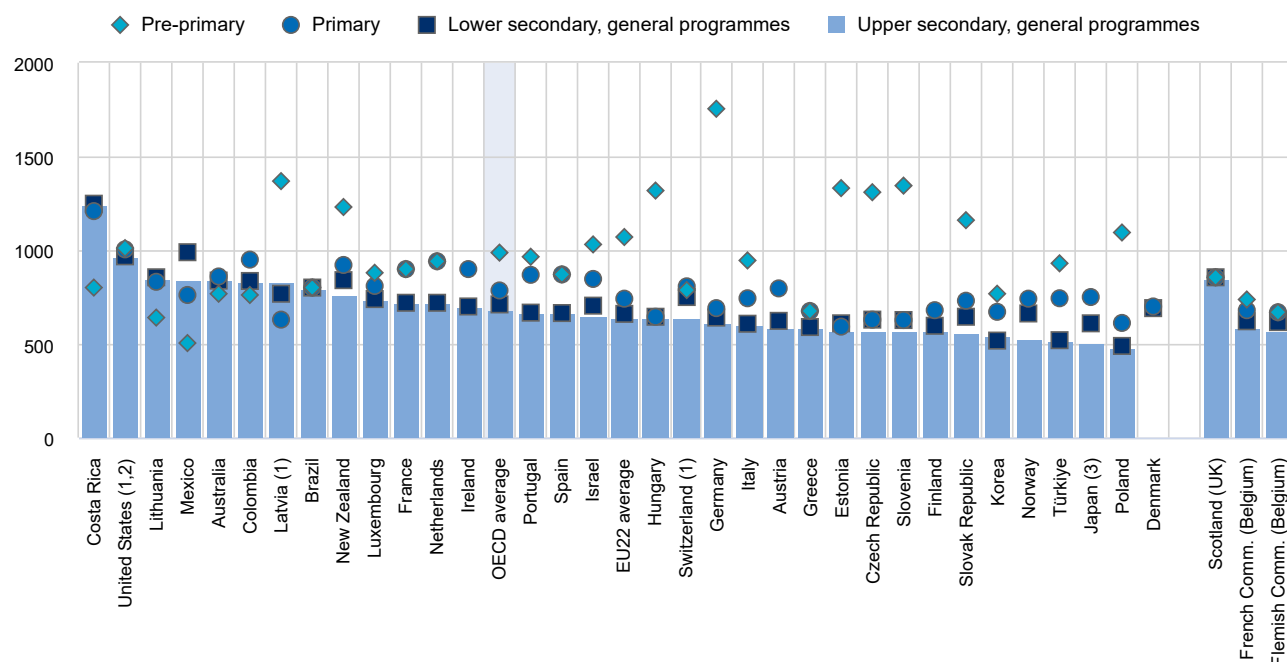
tertiary level was higher in all OECD countries. In Poland, the share of private expenditure at tertiary level reached 18%, which was below the OECD average of 31%, after public-to-private transfers. These latter accounted for 8% of expenditure on educational institutions at this level.

## Teachers, the learning environment and the organisation of schools

- Between 2015 and 2021, on average across OECD countries, the statutory salaries of teachers at lower secondary level (general programmes) with 15 years of experience and the most prevalent qualifications increased by 6% in real terms. In Poland, salaries increased more than the OECD average, by 18%.
- The average number of teaching hours per year required from a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases. This is also the case in Poland.
- Based on official regulations or agreements, annual teaching hours in Poland are 1 095 hours per year at pre-primary level, 611 hours at primary level, 489 hours at lower secondary level (general programmes) and 483 hours at upper secondary level (general programmes) (Figure 4).
- During their working hours, teachers also perform various non-teaching tasks such as lesson planning and preparation, marking students' work and communicating or co-operating with parents or guardians. At the upper secondary level, 66% of teachers' working time is formally dedicated to non-teaching activities in Poland, compared to an average of 56% across OECD countries.
- The duration of initial teacher education for primary and lower secondary teachers ranges from 2.5 years to 6.5 years across OECD countries. In Poland, initial teacher education typically lasts 5 years for prospective lower secondary teachers (general programmes). It is the same length for prospective primary teachers. As is the case in almost all OECD countries, a tertiary degree is awarded to prospective teachers of all levels of education upon completion of their initial teacher training.
- Continuing professional development is compulsory for all teachers of general programmes in most countries with data, but Poland is an exception. At secondary level, professional development activities are compulsory for teachers in some circumstances.

Figure 4. Teaching time of teachers, by level of education (2021)

Net statutory teaching time in hours per year, in public institutions



1. Actual teaching time (in Latvia except for pre-primary level).

2. Reference year differs from 2021. Refer to the source table for details.

3. Average planned teaching time in each school at the beginning of the school year.

Countries and other participants are ranked in descending order of the number of teaching hours per year in general upper secondary education.

**Source:** OECD (2022), Table D4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-D.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-D.pdf)).

## Focus on tertiary education

- Among 25-64 year-olds in Poland, master's degrees are the most common tertiary attainment at 25% of the population followed by bachelor's degrees at 8% and short-cycle tertiary qualifications with less than 1%. This is different from the OECD average, where bachelor's degrees are most common (19%), followed by master's degrees (14%) and short cycle tertiary qualifications (7%). As in all OECD countries and other participants, only a small fraction of the population holds a doctoral degree: the share is 1% in Poland.
- On average, tertiary attainment generates a wide range of labour-market benefits, including high employment rates. Yet, there are significant differences depending on the field of study. In 2021, employment rates in Poland were highest among tertiary-educated individuals who studied information and communication technologies with 97% and lowest among those who studied arts at 86%. However, these differences need to be put into perspective. Even among 25-64 year-olds with tertiary attainment in the field with the lowest employment rate, this was 12.4 percentage points higher than among those with upper secondary attainment (all fields combined).
- Despite the labour market advantages of a tertiary degree, many tertiary students do not graduate on time or do not graduate at all. In Poland, 50% of bachelor's students graduate within the

theoretical programme duration. Across the OECD, the completion rate within the theoretical programme duration ranges from 12% to 69%. Completion rates three years after the theoretical programme duration are significantly higher in most countries and the differences between OECD countries somewhat narrower. In Poland, 69% of bachelor's students have graduated within three years after the end of the theoretical programme duration, compared to 68% on average across the OECD.

- In all OECD countries, tertiary completion rates are higher for women than for men. In Poland, 77% of women graduated within three years after the end of the theoretical programme duration at bachelor's level, compared to 60% of men. On average across the OECD, there is little systematic difference between the completion rates of public and private institutions, but the figures differ from country to country. In Poland, the same share of bachelor's students (69%) graduate from public and private institutions within three years after the end of the theoretical programme duration.
- In most OECD countries including in Poland, tertiary-educated adults have higher rates of participation in non-formal education and training than those with a lower level of educational attainment. In 2021, 10% of 25-64 year-olds with tertiary attainment in Poland had participated in non-formal education and training in the four weeks prior to being surveyed, compared to 1% of their peers with below upper secondary attainment.
- Over the decades, independent private institutions have been established to meet increased demand for tertiary education. On average across the OECD, 17% of students are enrolled in independent private institutions, but this figure masks large differences between countries. In Poland, 30% of tertiary students are enrolled in such institutions. Independent private institutions charge higher annual tuition fees on average than public institutions for master's programmes in all OECD countries and other participants with available data, except in Chile and Lithuania.
- Enabling students to enrol on a part-time basis is an important way to facilitate access to tertiary education. Many part-time students would not be able to study full time, for example because they have child-care responsibilities or have to work to fund their studies. The share of part-time students at the tertiary level in Poland is 30%, above the OECD average (22%). Compared to 2013, it has decreased by 17 percentage points.
- Staff at tertiary level tend to start their careers relatively late due to the length of the education they need to qualify. In Poland, only 4% of academic staff are aged under 30, below the OECD average (8%). In contrast, the share of academic staff aged 50 or over is 39%, which is slightly below the OECD average by 1 percentage point.

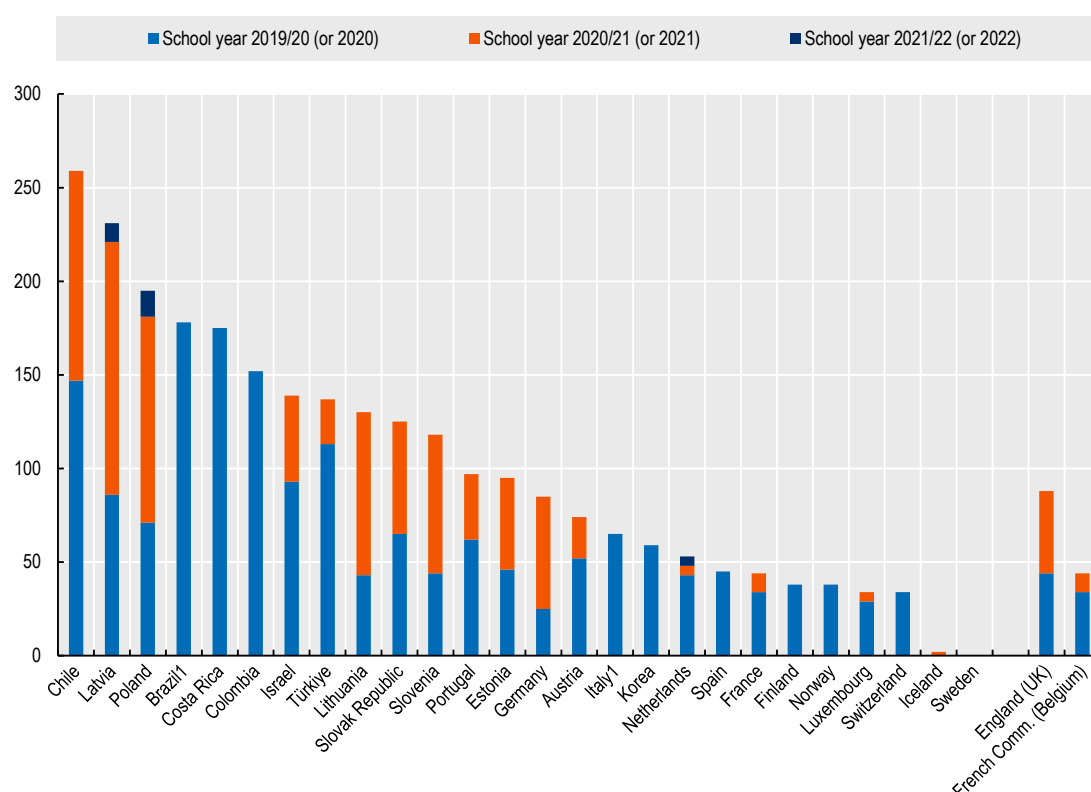
## COVID-19: The second year of the pandemic

- The COVID-19 pandemic disrupted traditional schooling in 2020 and the first half of 2021, leading to school closures across all OECD countries. While most shut down their premises entirely in the wake of the pandemic in 2020, by 2021 the situation had improved and returned to normal in most countries in 2022. In Poland, primary and secondary schools were entirely closed for 47-71 days during the school year 2019/20, for 21-110 days in 2020/21 and up to 14 days in 2021/22 (Figure 5). Partial closures reached up to 24 days during the school year 2019/20, 11-110 days in 2020/21 and up to 23 days in 2021/22.
- National examinations have also been affected by the pandemic. At general upper secondary level, 18 OECD countries postponed their national examinations during the school year 2019/20, while 10 countries even cancelled them entirely. In 2020/21, national examinations were postponed in 9 countries and cancelled in 6 countries. Poland rescheduled its national examinations in 2019/20.
- Most countries conducted assessments of the impact of school closures on learning outcomes at various levels of education and along several dimensions. Poland has conducted studies to

evaluate the effects of the pandemic on the impact on primary, lower secondary, upper secondary general and vocational education. The assessments covered mathematics, reading and science. Like many other countries, Poland also evaluated dimensions such as non-cognitive skills, the relations between parents and students during lockdowns as well as the mental health and well-being of students.

**Figure 5. School closures due to COVID-19 (2020, 2021 and the first quarter of 2022)**

Number of instruction days of full closure of lower secondary schools excluding school holidays, public holidays and weekends



**Note:** The data underlying this report were produced through the Survey on Joint National Responses to COVID 19, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), the World Bank (WB), and the Organisation for Economic Co-operation and Development (OECD). Data for other levels of education are available at <https://www.oecd.org/education/Results-4th-wave-COVID-Survey-OECD-database.xlsx>.

1. Data for 2021 and 2022 are missing.

Countries and other participants are ranked in descending order of the total number of days lower secondary schools were fully closed during the school years 2019/20 (2020), 2020/21 (2021) and 2021/22 (2022).

**Source:** OECD/UIS/UNESCO/UNICEF/WB (2022).

- In school year 2022, national programmes to support students affected by the pandemic were implemented in Poland at, primary, lower secondary, upper secondary general and vocational and tertiary level. At primary to upper secondary education, measures to address the effects of the COVID-19 pandemic included accelerated education or catch-up programmes for students who dropped out of school, adjustments to subject curricula, referral systems for students in need of specialised services, psychosocial and mental health support to students, increased instruction time through summer schools, extended school days or the school week or academic year. The government has already assessed the effectiveness of these programmes.

- The increased digitalisation of education has been a major consequence of the COVID-19 pandemic in many OECD countries. At lower secondary level, Poland has responded to the pandemic with an enhanced provision of digitalised assessments/exams, digital tools at school, distance learning, hybrid learning, in-service digital training to teachers and digital training to students.
- The challenges related to the COVID-19 pandemic have created additional costs for education systems. Preliminary budget estimates for 2021 suggest that, compared to 2020, the education budget at pre-primary to upper secondary level in Poland increased slightly (by between 1% and 5%, in nominal terms), while it increased strongly (by more than 5%) at the tertiary level.
- The COVID-19 pandemic had a significant impact on adult learning in most OECD countries. In 2020, the share of adults who participated in a formal or non-formal education and training activity in the four weeks prior to being surveyed decreased by 2 percentage points on average across OECD countries compared with 2019. However, in 2021, participation in non-formal education and training returned to pre-pandemic levels in most countries. In Poland, a similar pattern emerged. From 2019 to 2020, the share of adults participating in a formal or non-formal education and training activity fell by 1 percentage point. From 2020 to 2021, it increased by 2 percentage points and has thus reached pre-pandemic levels.
- Young adults who are not in employment, education or training (NEET) for prolonged periods are at risk of adverse economic and social outcomes in both the short and the long term. After increasing during the COVID-19 pandemic in 2020, the share of 18-24 year-olds who are NEET in Poland rose also in 2021. The share of NEET among young adults was 14% in 2021, above pre-COVID levels.

## References

OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/69096873-en>.


OECD (2022), "Regional education", *OECD Regional Statistics (database)*, <https://dx.doi.org/10.1787/213e806c-en>.

## More information

**For more information on Education at a Glance 2022 and to access the full set of Indicators, see:** <https://doi.org/10.1787/3197152b-en>

For more information on the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, See Annex 3 ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3.pdf)).

For general information on the methodology, please refer to the OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications (<https://doi.org/10.1787/9789264304444-en>).

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.

Data on subnational regions for selected indicators are available in the *OECD Regional Statistics (database)* (OECD, 2022). When interpreting the results on subnational entities, readers should take into account that the population size of subnational entities can vary widely within countries. For example, regional variation in enrolment may be influenced by students attending school in a different region from

their area of residence, particularly at higher levels of education. Also, regional disparities tend to be higher when more subnational entities are used in the analysis.

Explore, compare and visualise more data and analysis using the Education GPS:

<https://gpseducation.oecd.org/>

The data on educational responses during COVID-19 were collected and processed by the OECD based on the Joint Survey on National Responses to COVID-19 School Closures, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO); the UNESCO Institute for Statistics (UIS); the United Nations Children's Fund (UNICEF); the World Bank; and the OECD.

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# Portugal

## Highlights

- In Portugal, the share of 25-34 year-olds with tertiary attainment increased substantially over the last two decades (from 13% in 2000 to 47% in 2021). Although the tertiary education is the most common highest level of attainment among Portuguese young adults, there is still 17% of 25-34 year-olds without upper secondary attainment, 3 percentage points higher than the OECD average.
- The spending per student across primary to tertiary education in Portugal is lower than the OECD average. In 2019, Portugal spent USD 10 535 per student (in equivalent USD converted using PPPs for GDP) compared to the OECD average of USD 11 990 per student.
- Between 2015 and 2021, the statutory salaries of lower secondary teachers in Portugal increased 3%, less than the average across OECD countries (6%). Lower secondary (general programmes) teachers in Portugal earn 33% more than other tertiary-educated workers. Portugal is one of the few countries where teachers' average actual salaries remain higher than earnings of tertiary-educated workers since, as a group, the teaching population is ageing and, consequently, a large proportion of teachers are close to the top of their teaching career.
- Together with salaries, the working hours present some key measures of the working lives of the teachers. Following the OECD countries, the number of teaching hours per year required from teachers in Portugal tends to decrease as the level of education increases. The annual teaching hours are 965 hours per year at pre-primary level, 869 hours at primary level, and 667 hours at lower secondary level and at upper secondary level (general programmes).
- For teachers, the proportion of their statutory working time spent teaching provides information on the amount of time available for non-teaching activities. In Portugal, teachers at the upper secondary level formally dedicated 51% of their working time to non-teaching activities. The average across OECD and partner countries is 56%.
- The share of all 17-years-old Portuguese enrolled in the general upper secondary programmes (mainly scientific-humanistic upper secondary courses) is higher than the share enrolled in the upper secondary vocational education (57% against 35%) Still, both percentages are slightly above the OECD averages.
- In Portugal, the average age of graduation from vocational upper secondary education is 20 years below the OECD average at 22 years old. All the graduates from vocational upper secondary have direct access to tertiary education.
- In 2020, the average age of new entrants into long first degree, bachelor's and master's programmes were 19, 21 and 24 respectively (against OECD averages of 21, 22 and 27, respectively). The lower representation of the adult (18 years old or more) population among the new entrants in the tertiary education indicates Portugal needs to contribute further to the upskilling and reskilling of this population.

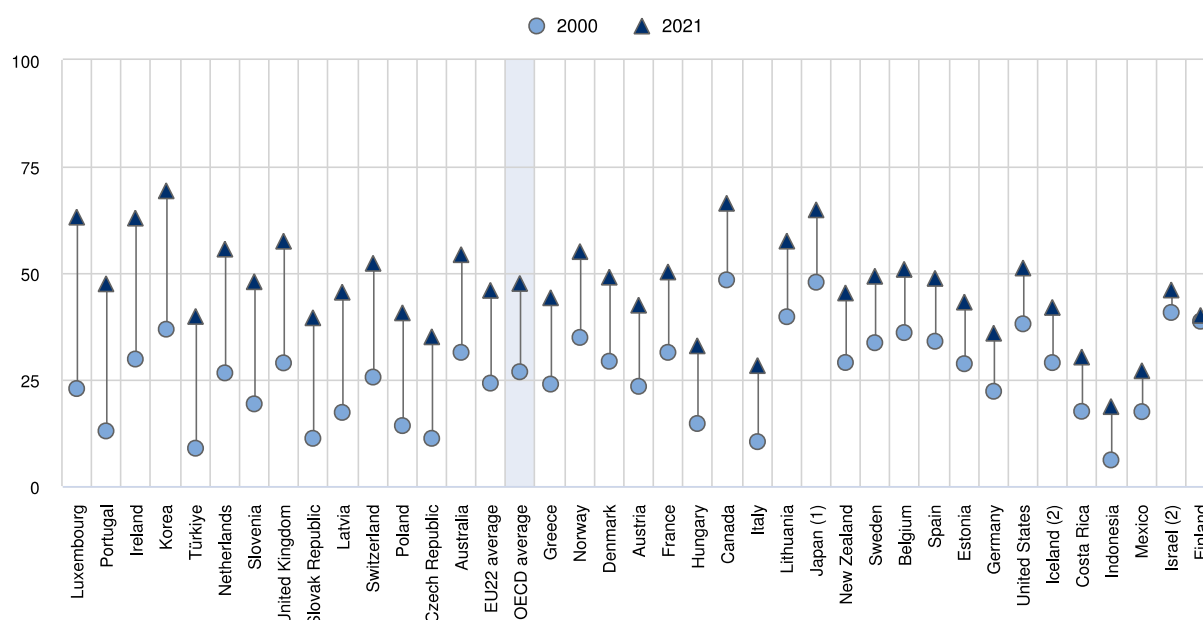
## Significant educational progress but challenges remain

### *Trends in educational attainment in Portugal*

- Educational attainment has been increasing throughout the OECD, in particular at tertiary level. Between 2000 and 2021, the share of 25-34 year-olds with tertiary attainment increased on average by 21 percentage points. In Portugal, the share increased at an even faster pace, by 35 percentage points (from 13% in 2000 to 47% in 2021) (Figure 1). Portugal is one of the 24 OECD countries where tertiary education is the most common highest level of attainment among 25-34 year-olds.

**Figure 1. Trends in the share of tertiary-educated 25-34 year-olds (2000 and 2021)**

In per cent



1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group).

2. Year of reference differs from 2000: 2002 for Israel and 2003 for Iceland.

Countries are ranked in descending order of the difference in the share of tertiary-educated 25-34 year-olds between 2000 and 2021.

**Source:** OECD (2022), Education at a Glance Database, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-A.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf)).

- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. Although the general increase in educational attainment has seen a parallel decline in the share of 25-34 year-olds without upper secondary attainment, 14% of young adults across the OECD still left school without an upper secondary qualification. In Portugal, the share is 17%, which is higher than the OECD average.
- In Portugal, there has been a considerable improvement in participation among diverse student groups due to the strong policy focus on inclusion in education, with the establishment of comprehensive frameworks to provide individual support to all students who need it. Nevertheless,

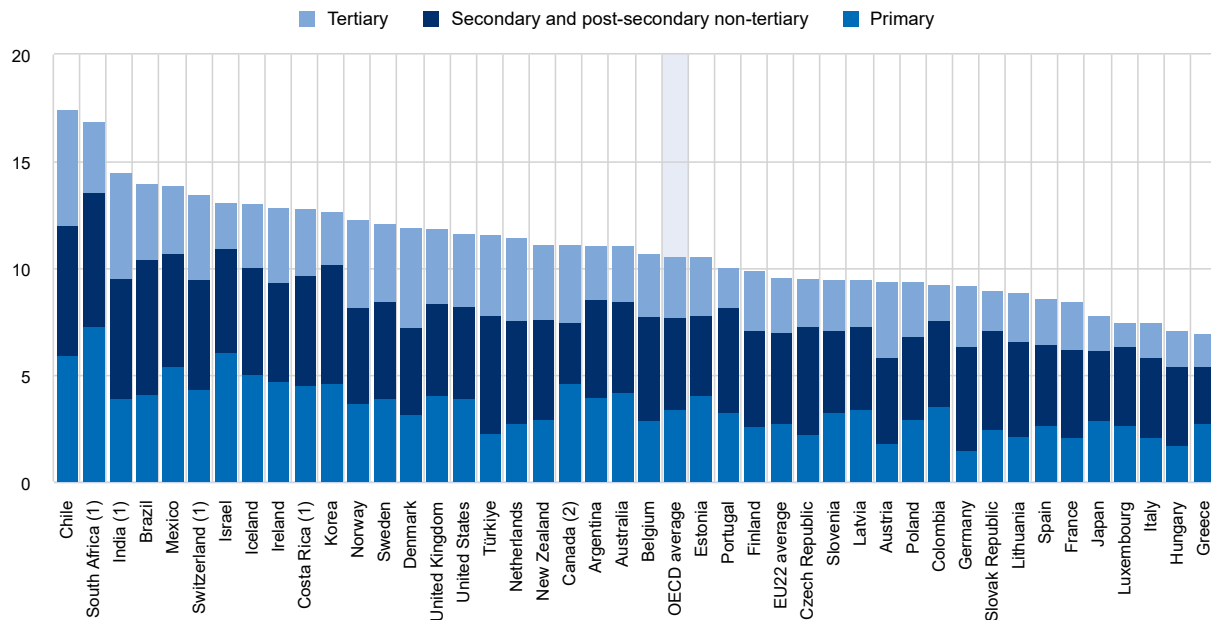
students' background and personal characteristics still have a significant impact on their educational outcomes (OECD, 2022<sup>[1]</sup>).

### ***Financial resources invested in education***

- All OECD countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average 4.9% of their gross domestic product (GDP) on primary to tertiary educational institutions. In Portugal, the corresponding share was 4.8%. Between 2008 and 2019, funding for educational institutions from all sources grew by 12% in Portugal. Over the same period, the increase in GDP was lower 5%. Consequently, expenditure on educational institutions as a share of GDP grew by 0.3 percentage points over the same time period (from 4.5% to 4.8%). Public spending on primary to tertiary education was 10% of total government expenditure in Portugal, also lower than the OECD average (10.6%) (Figure 2).
- Spending on educational institutions as share of GDP or public budgets are important measures that countries place on education in their budgeting decisions. However, they do not show the total amount of funding per student because GDP levels, public budgets and student numbers vary from country to country. Across primary to tertiary education, OECD countries spend an average of USD 11 990 per student (in equivalent USD converted using PPPs for GDP) on educational institutions each year. In comparison, Portugal spent USD 10 535 per student in 2019. Its cumulative expenditure on educating a student from the age of 6 to 15 was USD 98 983, which was slightly below the OECD average of USD 105 502.
- Across OECD countries, the provision of education at primary and secondary levels in terms of curricula, teaching styles and organisational management leads, on average, to similar patterns of expenditure per student from primary to post-secondary non-tertiary levels. OECD countries as a whole spend on average around USD 9 923 per student at primary and USD 11 400 per student at secondary level. In Portugal, the values are USD 8 992 at primary and USD 11 162 per student at secondary level.
- In contrast to lower levels of education, spending on tertiary education varies widely across OECD countries. Expenditure per student at tertiary level in Portugal is higher than at other levels of education, as is the case in almost all other OECD countries. The average expenditure per student in Portugal is USD 11 858 per year, which is about USD 2 900 higher than that of the primary level and USD 700 higher than that of the secondary level. It is among the lowest across OECD countries. The average expenditure at tertiary level (USD 17 559) is driven up by high values in a few countries. At 25%, the share of research and development (R&D) expenditure makes up a smaller fraction of expenditure on tertiary education in Portugal than on average across OECD countries (29%).
- Public funding dominates non-tertiary education (primary, secondary and post-secondary non-tertiary) in all OECD countries, even after transfers to the private sector. Private funding accounts for 10% of expenditure at primary, secondary and post-secondary non-tertiary levels on average across OECD, while this share was 11% in Portugal in 2019. At the tertiary level the share of private expenditure reached 31%, which was the same as the OECD average.

**Figure 2. Composition of total public expenditure on education as a percentage of total government expenditure (2019)**

Primary to tertiary education (including R&D), in per cent



1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

**Source:** OECD/UIS/Eurostat (2022), Table C4.1. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-C.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf)).

### Labour market outcomes

- Higher educational attainment is often associated with better employment prospects and Portugal is no exception. In 2021 the employment rate among 25-34 year-olds with tertiary education in Portugal was 14 percentage points higher than among those with below upper secondary attainment and 5 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. On average across OECD countries, the employment rate among 25-34 year-olds with a tertiary qualification was 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. However, Portugal still has 70% of the 25-34 year-olds with below secondary attainment employed which is 12% higher than the OECD average.
- While the positive link between educational attainment and employment rates holds for both men and for women across the OECD, it is particularly strong for women. In Portugal, 63% of women with below upper secondary attainment were employed in 2021, compared to 86% of those with tertiary attainment. In contrast, the figures were 74% and 80% for men.
- On average, tertiary attainment generates a wide range of labour-market benefits, including high employment rates. Yet, there are significant differences depending on the field of study. In 2021, employment rates in Portugal were highest among tertiary-educated individuals who studied information and communication technologies with 96% and lowest among those who studied

natural sciences, mathematics and statistics at 83%. However, these differences need to be put into perspective. Even among 25-64 year-olds with tertiary attainment in the field with the lowest employment rate, this was 0.3 percentage points higher than among those with upper secondary attainment (all fields combined).

- Across the OECD, the labour market benefits of tertiary attainment have proved especially strong during economic crises. This was also the case during the COVID-19 pandemic in Portugal. Between 2019 and 2020, unemployment for 25-34 year-old workers with below upper secondary attainment increased by 2.3 percentage points, by 3.5 percentage points for workers with upper secondary attainment and by 1.2 percentage points for workers with tertiary attainment. In 2021, unemployment for workers with below upper secondary attainment remained constant, compared to 2020 while it rose by 0.8 percentage points for workers with upper secondary attainment and decreased by 0.4 percentage points for workers with tertiary attainment.
- Educational attainment affects not just employment prospects, but also wage levels. On average across the OECD, 25-64 year-old workers with upper secondary or post-secondary non-tertiary attainment earn 29% more than workers with below upper secondary attainment, while those with tertiary attainment earn about twice as much. In Portugal, the earnings advantage of tertiary-educated workers was even greater than the OECD average. In 2020, workers with upper secondary or post-secondary non-tertiary attainment earned 25% more than those with below upper secondary attainment and those with tertiary attainment earned more than twice as much.
- Wages also differ according to the field of study. In Portugal, tertiary attainment in information and communication technologies generates the highest earnings. Full-time full-year workers aged 25-64 with a tertiary degree in this field earn on average more than twice as much as workers with upper secondary attainment (all fields combined). In contrast, tertiary attainment in arts leads to the lowest wages. Workers with this educational background earn on average 26% more than the wage of workers with upper secondary attainment (all fields combined).
- The share of young people neither employed nor in formal education or training (NEET) provides indications on the transition from education to the labour market. In Portugal, 14.3% of young people in the age group 18-24 are NEET, 1.8 percentage points lower than the OECD average. In the age group 25-29 this percentage is 16.3%, still below the OECD average (17.6%).

### **An experienced and qualified teaching body but ageing, lacking the benefits of local management and with limited opportunities for collaboration**

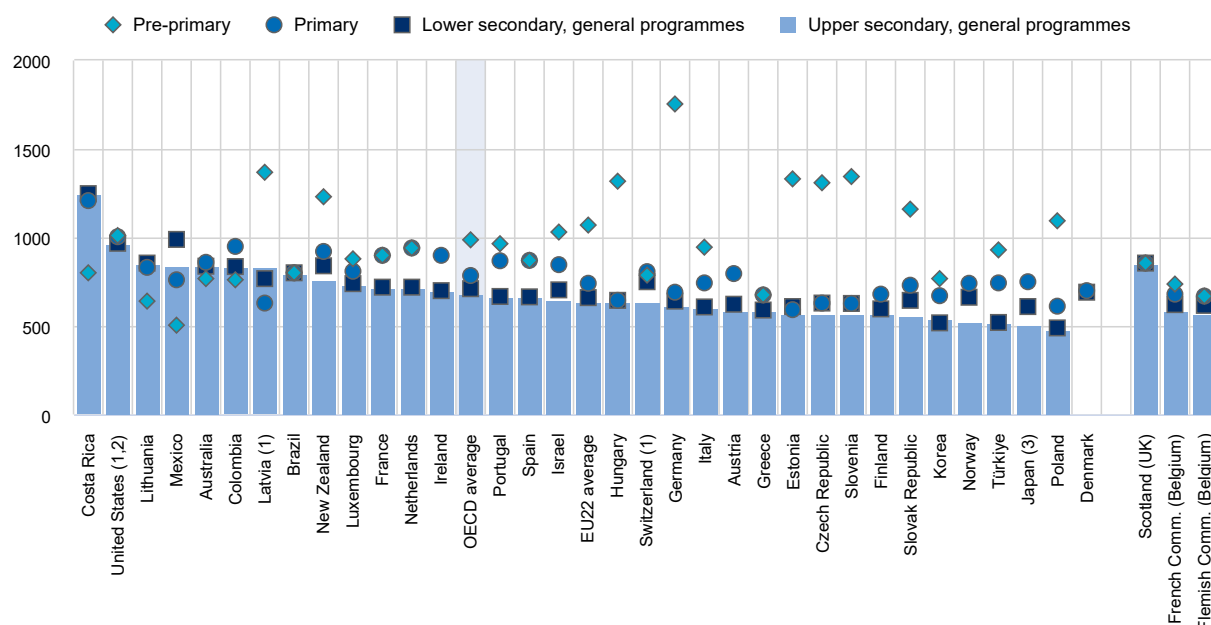
- While teachers should meet minimum qualification requirements to enter the teaching profession and become fully qualified teachers, some teachers may have higher qualification levels. The most prevalent level of qualification of teachers aged 25-64 among the 25 OECD countries and other participants with available data is the bachelor's degree. In Portugal, at all levels of school education, the proportion of teachers aged 25-64 with a master's degree or higher, is about 88%. The high qualification levels of teachers in Portugal are explained by the requirement that teacher candidates undertake pedagogical training at master's level in education, as part of pre-service preparation.
- The teaching profession in Portugal is experienced and ageing. At all levels of the education system, 45% or more teachers are above 50 years of age, a proportion that is above the OECD average of about 40%. (OECD, 2021<sup>[2]</sup>)
- The salaries of teachers and school heads are an important determinant of the attractiveness of the teaching profession, but they also represent the single largest expenditure item in formal education. In most OECD countries, the statutory salaries of teachers (and school heads) in public educational institutions increase with the level of education they teach, and also with experience.

Actual salaries also increase with the level of education. On average across OECD countries, actual salaries range from USD 41 941 at the pre-primary level to USD 53 682 at the upper secondary level. In Portugal actual salaries average USD 52 095 at pre-primary level and USD 50 209 at upper secondary level. It is worth noting that in Portugal, regardless of the teaching level, all teachers are paid on the same salary range, which consists of ten levels of four years each, except the fifth level which lasts two years. Therefore, the differences observed in actual salaries between levels of education results from differences in the structure of the teacher population by experience between levels of education.

- Between 2015 and 2021, on average across OECD countries, the statutory salaries of teachers at lower secondary level (general programmes) with 15 years of experience and the most prevalent qualifications increased by 6% in real terms. In Portugal, salaries increased less than the OECD average, by 3%.
- Teachers' average actual salaries remain lower than earnings of tertiary-educated workers in almost all OECD countries, and at almost all levels of education. However, Portugal is one of the few exceptions to this rule, since, as a group, the teaching population is ageing and, consequently, a large proportion of teachers are close to the top salaries in their teaching career. Lower secondary (general programmes) teachers in Portugal earn 33.1% more than other tertiary-educated workers. Likewise, school heads' actual salaries in Portugal are much higher than the earnings of other tertiary educated workers. This is similar to most OECD countries, where school heads tend to earn well above the average earnings of tertiary educated workers.
- Together with the salaries, teaching hours and the extent of the non-teaching duties may also affect the decision to join the teaching profession. The average number of teaching hours per year required from a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases. This is also the case in Portugal. Based on official regulations or agreements, annual teaching hours in Portugal are 965 hours per year at pre-primary level, 869 hours at primary level, 667 hours at lower secondary level (general programmes) and 667 hours at upper secondary level (general programmes) (Figure 3).
- Regulations in Portugal specify teachers' total annual statutory working time and the allocation of time spent at school. At the upper secondary level, 51% of teachers' working time is formally dedicated to non-teaching activities in Portugal, compared to an average of 56% across OECD and partner countries. During their working hours, teachers also perform various non-teaching tasks such as lesson planning and preparation, marking students' work and communicating or co-operating with parents or guardians.
- Participation in professional development activities is considered an important responsibility of teachers at all levels of education, as it is mandatory for all teachers at all levels in 25 countries and other participants. Only four countries, including Portugal, allow teachers to participate in professional development activities at their own discretion at all levels. However, Portuguese teachers engage little in significant collective learning activities and many never participate in such activities as co-teaching or peer observation. Portuguese teachers rarely benefit from formal induction programmes, few cost-free opportunities exist for ongoing professional development activities and almost no classroom observations of teaching practice occur. Similarly, Portuguese school leaders have access to minimal ongoing professional development for the purposes of developing their instructional leadership capacities (Liebowitz et al., 2018<sup>[3]</sup>).
- While Portugal benefits from experienced and well-paid teaching staff, to better improve the learning environment and the organisation of schools there could be benefits from increasing relevant opportunities for the professional development of teachers, greater incentives to engage in collaborative work and giving more autonomy to schools to choose the teachers whose profiles better suit their needs (Liebowitz et al., 2018<sup>[3]</sup>).

**Figure 3. Teaching time of teachers, by level of education (2021)**

Net statutory teaching time in hours per year, in public institutions



1. Actual teaching time (in Latvia except for pre-primary level).

2. Reference year differs from 2021. Refer to the source table for details.

3. Average planned teaching time in each school at the beginning of the school year.

Countries and other participants are ranked in descending order of the number of teaching hours per year in general upper secondary education.

**Source:** OECD (2022), Table D4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-D.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-D.pdf)).

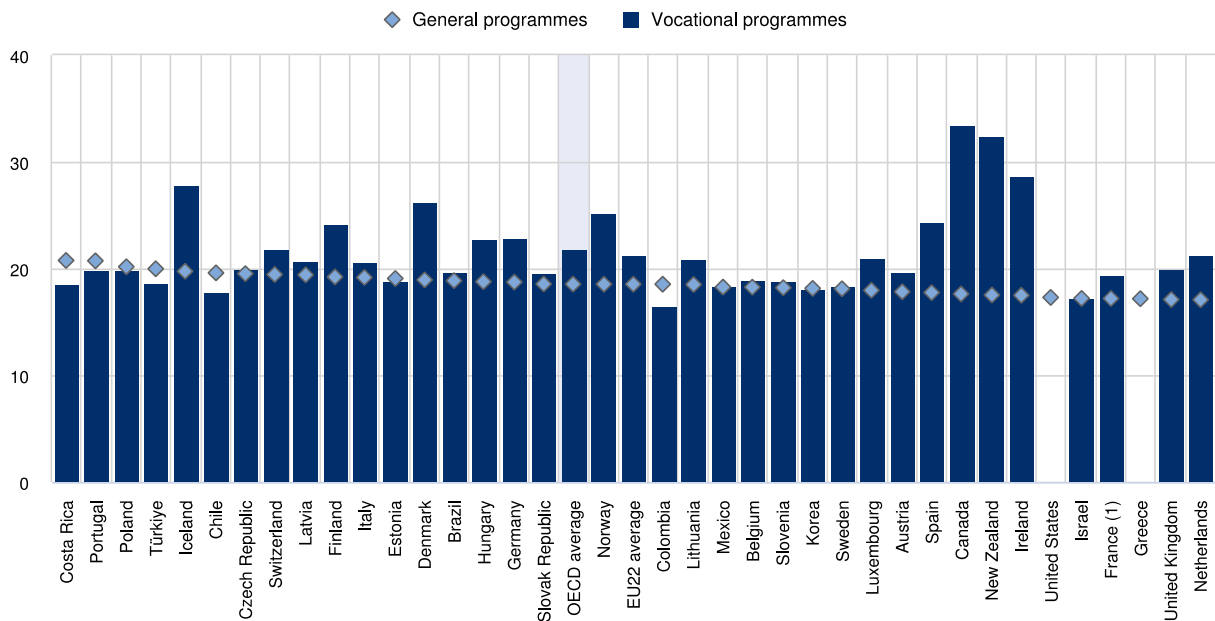
## Educational supply has considerably diversified but may be too fragmented at the upper secondary level

- Compulsory education begins at the age of 6 and ends at the age of 18 in Portugal. The range of ages for which at least 90% of the population are enrolled is longer than the period of compulsory education and goes from the age of 4 to the age of 17. This is similar to most other OECD countries, where more than 90% of the population are also enrolled for longer than the period of compulsory education. In Portugal, the upper secondary level is part of compulsory education and includes general and vocational programmes.
- The enrolment rate of all 17-years-old Portuguese in the general upper secondary programmes is 57%, and 35% in the vocational upper secondary, slightly above the OECD averages (55% and 31% respectively). In both programs, the enrolment rate decreases with age, following the trend observed in the OECD average.
- The average age of graduation from general upper secondary programmes varies from 17 to 21 years across OECD countries and is 21 years in Portugal. Differences in the average age of graduation from vocational upper secondary education are much larger and vary from 16 to 34 years across the OECD. These differences largely depend on whether vocational upper secondary students usually enrol in these programmes towards the end of their compulsory education or in mid-career. In Portugal, the average age of graduation from vocational upper

secondary education is 20 years, which is below the OECD average at 22 years (Figure 4). Portugal is one of the 12 OECD countries where all vocational upper secondary graduates have direct access to tertiary education.

**Figure 4. Average age of first-time upper secondary graduates, by programme orientation (2020)**

In years



1. Average age is based on all graduates instead of first-time graduates.

Countries are ranked in descending order of the average age of first-time upper secondary graduates in general programmes.

**Source:** OECD/Eurostat/UIS (2022), Tables B3.1 and B3.2. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. In Portugal, the share is 55% (OECD average 55%). In contrast, men are overrepresented among graduates of vocational upper secondary programmes in most OECD countries, as is the case in Portugal where they make up 54% of all vocational upper secondary graduates, slightly below the OECD average (55%).
- In Portugal, 61% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (above the OECD average of 54%). A subset of these students (5% of 18-24 year-olds) combine their education or training with some form of employment in Portugal, compared to 17% on average across the OECD.
- In the last few years, Portuguese authorities have been promoting the vocational education and training (VET) pathways as a measure to reduce drop-out rates, increase secondary completion rates and provide professional training to facilitate entry into the job market.

## Portugal's higher education system has expanded but needs to contribute further to the upskilling and reskilling of the adult

- In Portugal, the tertiary education level is provided by a binary education system comprising polytechnics and universities.
- In 2020, the total number of students enrolled in tertiary education in Portugal was 380 235. As is the case in all OECD countries, a majority of students enrolled at the tertiary level in Portugal are bachelor's students (57%). However, the next commonest enrolment level varies from country to country. In Portugal, master's students make up the second largest group of tertiary students at 33%. This is also the case in 25 other OECD countries, while in the remaining 14 countries with available data, short-cycle tertiary students form the second largest group. In Portugal, only 5% of students are enrolled in a short-cycle tertiary programme.
- At 24%, business, administration and law was the most popular field of study among new entrants into tertiary education in Portugal, which is the case in most OECD countries. Despite the growing need for digital skills and the good employment prospects of students with degrees in information and communication technologies (ICT), only a small fraction of entrants into tertiary education choose this field. In Portugal, 96% of 25-64 year-olds with a tertiary ICT qualification are employed, but ICT students make up only 3% of new entrants into tertiary education. This is below the OECD average of 6%. Education is also a field of study with the lowest demand. Only 4% of the new tertiary entrants in Portugal sought to follow a career in education. This fact, along with the ageing teaching workforce, raises concerns about a shortage of teachers in the near future in Portugal.
- Over the decades, independent private institutions have been established to meet the increased demand for tertiary education. On average across the OECD, 17% of students are enrolled in independent private institutions, but this figure masks large differences between countries. In Portugal, 19% of tertiary students are enrolled in such institutions. Independent private institutions charge higher annual tuition fees on average than public institutions for master's programmes in all OECD countries and other participants with available data, except in Chile and Lithuania.
- Enabling students to enrol on a part-time basis is an important way to facilitate access to tertiary education. Many part-time students would not be able to study full time, for example because they have child-care responsibilities or have to work to fund their studies. The share of part-time students at the tertiary level in Portugal is 5%, below the OECD average (22%). It remained at a similar level (with a difference of less than 1 percentage point between 2013 and 2020)
- Despite the labour market advantages of a tertiary degree, many tertiary students do not graduate on time or do not graduate at all. In Portugal, 38% of bachelor's students graduate within the theoretical programme duration. Across the OECD, the completion rate within the theoretical programme duration ranges from 12% to 69%. Completion rates three years after the theoretical programme duration are significantly higher in most countries and the differences between OECD countries are somewhat narrower. In Portugal, 72% of bachelor's students have graduated within three years after the end of the theoretical programme duration, compared to 68% on average across the OECD.
- In all OECD countries, tertiary completion rates are higher for women than for men. In Portugal, 79% of women graduated within three years after the end of the theoretical programme duration at the bachelor's level, compared to 63% of men. On average across the OECD, there is little systematic difference between the completion rates of public and private institutions, but the figures differ from country to country. In Portugal, 73% of bachelor's students graduate from public institutions within three years after the end of the theoretical programme duration, while the share is 69% for private institutions.

- Among 25-64 year-olds in Portugal, master's degrees are the most common tertiary attainment at 21% of the population followed by bachelor's degrees at 9% and short-cycle tertiary qualifications with less than 1%. This is different from the OECD average, where bachelor's degrees are most common (19%), followed by master's degrees (14%) and short cycle tertiary qualifications (7%). As in all OECD countries and other participants, only a small fraction of the population holds a doctoral degree: the share is 1% in Portugal.
- National averages provide only an incomplete picture of the situation in any given country. In most OECD countries, there are large differences in educational attainment across subnational regions. This is also the case in Portugal. In 2021, the difference between the region with the highest share of 25-64 year-olds with tertiary attainment (Metropolitan area of Lisbon, at 41%) and that with the lowest share (Autonomous Region of the Azores, at 17%) was 24 percentage points. These subnational variations do not only reflect differences in education opportunities. To a large degree, they are due to economic conditions and internal migration patterns.
- In most OECD countries including in Portugal, tertiary-educated adults have higher rates of participation in non-formal education and training than those with a lower level of educational attainment. In 2021, 21% of 25-64 year-olds with tertiary attainment in Portugal had participated in non-formal education and training in the four weeks prior to being surveyed, compared to 3% of their peers with below upper secondary attainment.
- However, higher education in Portugal is largely oriented to the needs of the traditional age groups of students. In 2020, the average age of new entrants into long first degree, bachelor's and master's programmes was 19, 21 and 24 respectively (against OECD averages of 21, 22 and 27, respectively). The higher education institutions offer only moderately diversified and relatively inflexible study opportunities, which is a commonly mentioned barrier limiting the role of these tertiary institutions in upskilling and reskilling (OECD, 2022<sup>[4]</sup>). Also, the population of Portugal is ageing at a faster pace than populations in most OECD countries which is likely to reduce demand for higher education among traditional student populations. This places additional pressure for higher education institutions to adjust their provision to encourage adult populations to engage in upskilling and reskilling in higher education (OECD, forthcoming<sup>[5]</sup>).
- Over time, the introduction of new admission routes to higher education has helped to widen and diversify access to higher education. Procedures for applicants aged over 23, initially introduced in 2006, were simplified in 2014, while more recent policies have aimed to increase participation in higher education among those graduating from the vocational tracks of upper secondary education. Additionally, higher education institutions, namely the polytechnics, have adjusted their offerings to this new student population (OECD, forthcoming<sup>[5]</sup>).

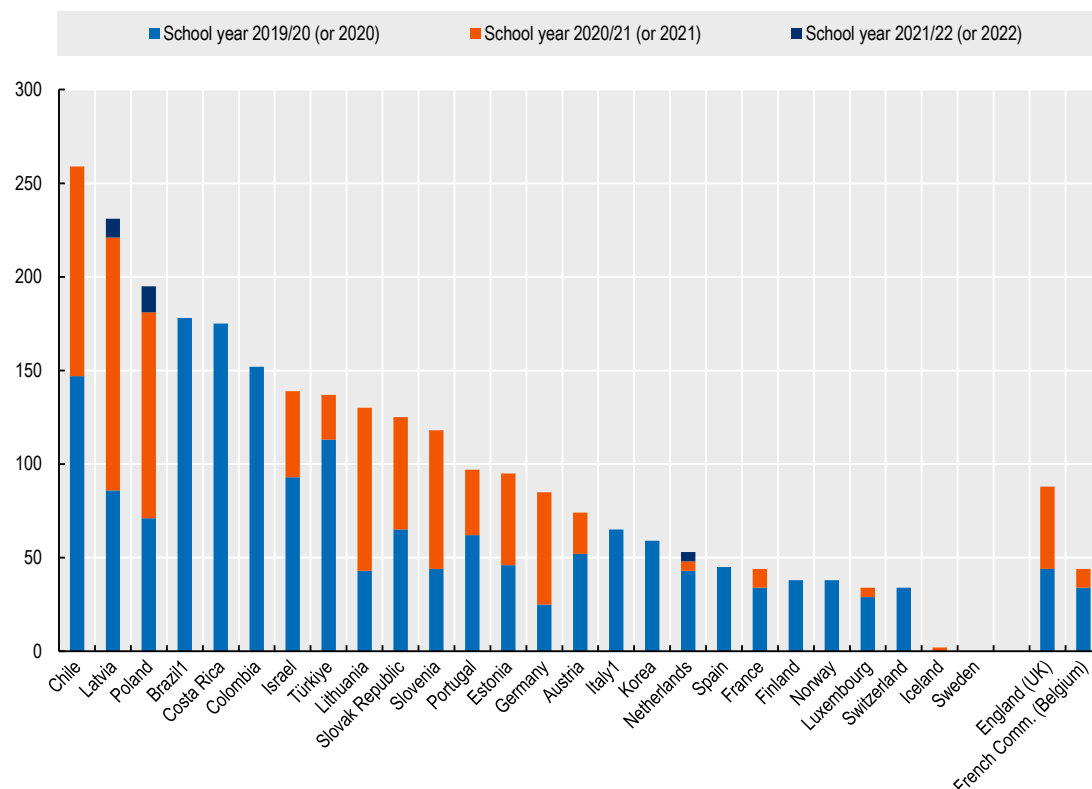
## COVID-19: The second year of the pandemic

- The COVID-19 pandemic disrupted traditional schooling in 2020 and the first half of 2021, leading to school closures across all OECD countries. While most shut down their premises entirely in the wake of the pandemic in 2020, by 2021 the situation had improved and returned to normal in most countries in 2022. In Portugal, primary and secondary schools were entirely closed for 47-62 days during the school year 2019/20, for 25-45 days in 2020/21 and stayed open in 2021/22 (Figure 5). There were no partial closures in 2019/20, 2020/21 and 2021/22.
- Teacher absences also affected the regular operation of schools during the pandemic, whether due to COVID-19 infections or because of precautionary quarantine. However, only approximately half of countries collected information on teacher absenteeism. Portugal collected such data. In contrast to many other countries, teacher absenteeism increased slightly (by between 1% and 5%) between 2019/20 and 2021/22.

- National examinations have also been affected by the pandemic. At general upper secondary level, 18 OECD countries postponed their national examinations during the school year 2019/20, while 10 countries even cancelled them entirely. In 2020/21, national examinations were postponed in 9 countries and cancelled in 6 countries. Portugal rescheduled its national examinations in 2019/20 and in 2020/21.
- Most countries conducted assessments of the impact of school closures on learning outcomes at various levels of education and along several dimensions. Portugal has conducted studies to evaluate the effects of the pandemic and its impact on primary, lower secondary, upper secondary general and vocational education. The assessments covered mathematics, reading and science. Like many other countries, Portugal also evaluated dimensions such as the effectiveness of distance-learning strategies during school closures, non-cognitive skills the relations between parents and students during lockdowns as well as the mental health and well-being of students and teachers.
- In school year 2022, national programmes to support students affected by the pandemic were implemented in Portugal at pre-primary, primary, lower secondary, upper secondary general and vocational and tertiary level. At primary to upper secondary education, measures to address the effects of the COVID-19 pandemic included, community mobilisation campaigns to bring students back to school, early warning systems to identify students at risk of dropping out, referral systems for students in need of specialised services, additional school nutrition services, psychosocial and mental health support to students, automatic re-enrolment of students in school, tutoring programmes or financial support for tutoring and additional water, sanitation and hygiene services. The government has already assessed the effectiveness of these programmes.
- The increased digitalisation of education has been a major consequence of the COVID-19 pandemic in many OECD countries. At lower secondary level, Portugal has responded to the pandemic with an enhanced provision of digitalised assessments/exams, digital tools at school, distance learning, hybrid learning, in-service digital training to teachers and digital training to students.
- The challenges related to the COVID-19 pandemic have created additional costs for education systems. Preliminary budget estimates for 2021 suggest that, compared to 2020, the education budget at pre-primary to upper secondary level in Portugal increased slightly (by between 1% and 5%, in nominal terms), while it increased strongly (by more than 5%) at the tertiary level.
- The COVID-19 pandemic had a significant impact on adult learning in most OECD countries. In 2020, the share of adults who participated in a formal or non-formal education and training activity in the four weeks prior to being surveyed decreased by 2 percentage points on average across OECD countries compared with 2019. However, in 2021, participation in non-formal education and training returned to pre-pandemic levels in most countries. In Portugal, a similar pattern emerged. From 2019 to 2020, the share of adults participating in a formal or non-formal education and training activity remained unchanged. From 2020 to 2021, it increased by 3 percentage points and has thus increased above pre-pandemic levels.
- Young adults who are not in employment, education or training (NEET) for prolonged periods are at risk of adverse economic and social outcomes in both the short and the long term. After increasing during the COVID-19 pandemic in 2020, the share of 18-24 year-olds who are NEET in Portugal declined in 2021. The share of NEET among young adults was 14% in 2021, above pre-COVID levels.

**Figure 5. School closures due to COVID-19 (2020, 2021 and the first quarter of 2022)**

Number of instruction days of full closure of lower secondary schools excluding school holidays, public holidays and weekends



**Note:** The data underlying this report were produced through the Survey on Joint National Responses to COVID 19, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), the World Bank (WB), and the Organisation for Economic Co-operation and Development (OECD). Data for other levels of education are available at <https://www.oecd.org/education/Results-4th-wave-COVID-Survey-OECD-database.xlsx>

1. Data for 2021 and 2022 are missing.

Countries and other participants are ranked in descending order of the total number of days lower secondary schools were fully closed during the school years 2019/20 (2020), 2020/21 (2021) and 2021/22 (2022).

**Source:** OECD/UIS/UNESCO/UNICEF/WB (2022).

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## More information

**For more information on Education at a Glance 2022 and to access the full set of Indicators, see:**  
<https://doi.org/10.1787/3197152b-en>

For more information on the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, see Annex 3 ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_Annex3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_Annex3.pdf)).

For general information on the methodology, please refer to the OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications (<https://doi.org/10.1787/9789264304444-en>).

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.

Data on subnational regions for selected indicators are available in the *OECD Regional Statistics (database)* (OECD, 2022). When interpreting the results on subnational entities, readers should take into account that the population size of subnational entities can vary widely within countries. For example, regional variation in enrolment may be influenced by students attending school in a different region from their area of residence, particularly at higher levels of education. Also, regional disparities tend to be higher when more subnational entities are used in the analysis.

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The data on educational responses during COVID-19 were collected and processed by the OECD based on the Joint Survey on National Responses to COVID-19 School Closures, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO); the UNESCO Institute for Statistics (UIS); the United Nations Children's Fund (UNICEF); the World Bank; and the OECD.

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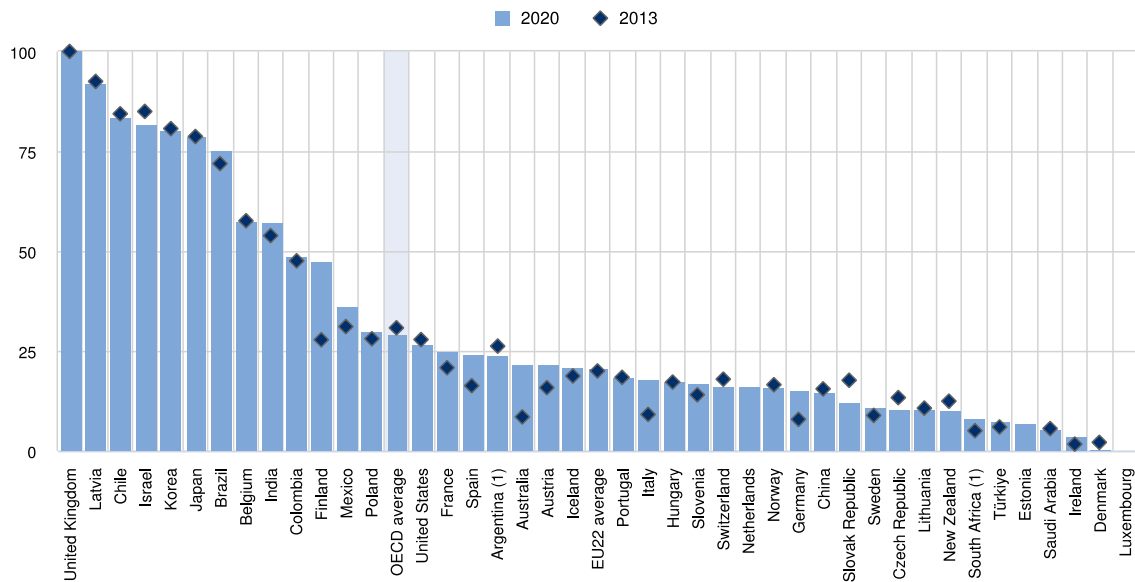
# Saudi Arabia

## Access to education, participation and progress

- Compulsory education begins at the age of 6 and ends at the age of 14 in Saudi Arabia. The range of ages for which at least 90% of the population are enrolled is longer than the period of compulsory education and goes from the age of 7 to the age of 17. This is similar to most OECD countries, where more than 90% of the population are also enrolled for longer than the period of compulsory education.
- In Saudi Arabia, the large majority of tertiary students (95%) are enrolled in public educational institutions (OECD average: 71%), while only a small portion are enrolled in private institutions (5%). The share of tertiary students enrolled in private institutions in Saudi Arabia remained the same between 2013 and 2020 (Figure 1).
- Enrolment rates are lower among the population aged 25 and above. In Saudi Arabia, 12% of the 25-29 year-olds (at the same level as the OECD average) and 1% of 30-39 year-olds were enrolled in tertiary education in 2020.
- In 2020, foreign students represented 4% of all tertiary students in Saudi Arabia, 1 percentage point below the value in 2015 and 3 percentage points below the OECD total in 2020. In Saudi Arabia, 43% of foreign students enrolled in tertiary education comes from neighbouring countries.

**Figure 1. Share of tertiary students in private institutions (2013, 2020)**

In per cent



1. Year of reference 2019.

Countries are ranked in descending order of the share of tertiary students enrolled in private institutions in 2020.

**Source:** OECD/UIS/Eurostat (2022), Table B1.2. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

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# Slovak Republic

## The output of educational institutions and the impact of learning

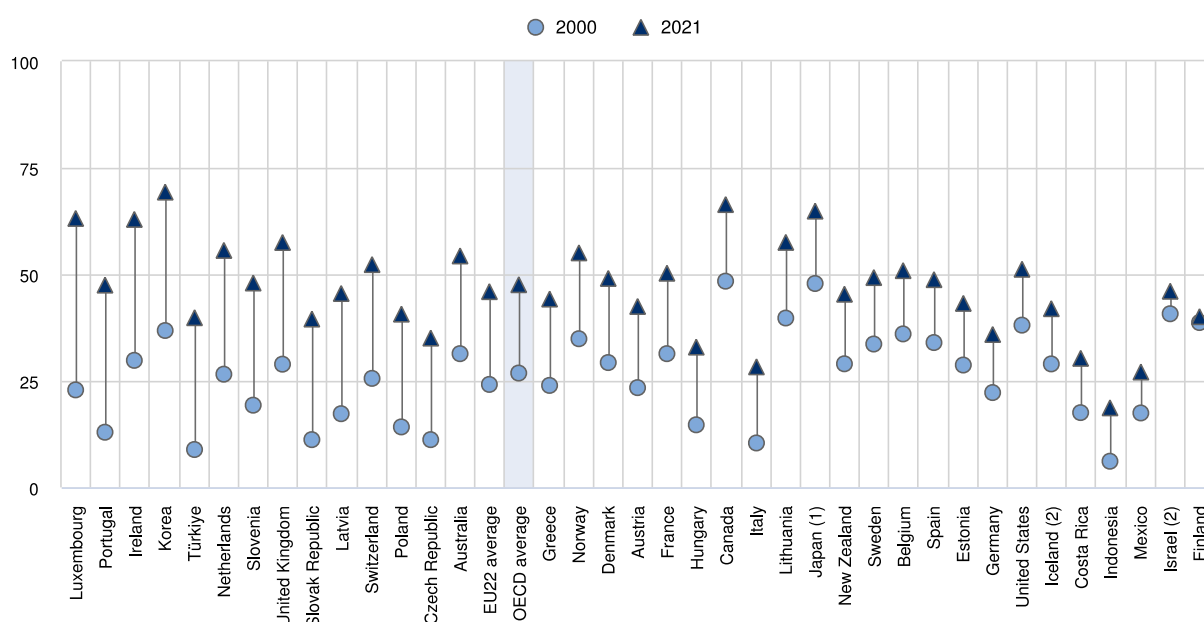
- Educational attainment has been increasing throughout the OECD, in particular at tertiary level. Between 2000 and 2021, the share of 25-34 year-olds with tertiary attainment increased on average by 21 percentage points. In the Slovak Republic, the share increased at an even faster pace, by 28 percentage points (from 11% in 2000 to 39% in 2021) (Figure 1). The Slovak Republic remains one of the 12 OECD countries where tertiary education is still less common than upper secondary or post-secondary non-tertiary education as the highest level of attainment among 25-34 year-olds.
- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. Although the general increase in educational attainment has seen a parallel decline in the share of 25-34 year-olds without upper secondary attainment, 14% of young adults across the OECD still left school without an upper secondary qualification. In the Slovak Republic, the share is 6%, which is lower than the OECD average.
- Higher educational attainment is often associated with better employment prospects and the Slovak Republic is no exception. In 2021 the employment rate among 25-34 year-olds with tertiary education in the Slovak Republic was 58 percentage points higher than among those with below upper secondary attainment and 0 percentage points lower than among those with upper secondary or post-secondary non-tertiary attainment. On average across OECD countries, the employment rate among 25-34 year-olds with a tertiary qualification was 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. While the positive link between educational attainment and employment rates holds for both men and for women across the OECD, it is particularly strong for women. In the Slovak Republic, 18% of women with below upper secondary attainment were employed in 2021, compared to 79% of those with tertiary attainment. In contrast, the figures were 33% and 90% for men.
- Across the OECD, the labour market benefits of tertiary attainment have proved especially strong during economic crises. However, this was not the case during the COVID-19 pandemic in the Slovak Republic. Between 2019 and 2020, unemployment for 25-34 year-old workers with below upper secondary attainment fell by 5.2 percentage points, while it rose by 1.4 percentage points for workers with upper secondary attainment and by 1.5 percentage points for workers with tertiary attainment. In 2021, unemployment for workers with below upper secondary attainment increased by 7.4 percentage points, compared to 2020, by 0.4 percentage points for workers with upper secondary attainment and remained constant for workers with tertiary attainment.
- Educational attainment affects not just employment prospects, but also wage levels. On average across the OECD, 25-64 year-old workers with upper secondary or post-secondary non-tertiary attainment earn 29% more than workers with below upper secondary attainment, while those with tertiary attainment earn about twice as much. In the Slovak Republic, the earnings advantage of

tertiary-educated workers was even greater than the OECD average. In 2020, workers with upper secondary attainment earned 42% more than those with below upper secondary attainment and those with tertiary attainment earned more than twice as much.

- National averages provide only an incomplete picture of the situation in any given country. In most OECD countries, there are large differences in educational attainment across subnational regions. This is also the case in the Slovak Republic. In 2021, the difference between the region with the highest share of 25-64 year-olds with tertiary attainment (Bratislava Region, at 47%) and that with the lowest share (West Slovakia, at 24%) was 23 percentage points. These subnational variations do not only reflect differences in education opportunities. To a large degree, they are due to economic conditions and internal migration patterns.

**Figure 1. Trends in the share of tertiary-educated 25-34 year-olds (2000 and 2021)**

In per cent



1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group).

2. Year of reference differs from 2000: 2002 for Israel and 2003 for Iceland.

Countries are ranked in descending order of the difference in the share of tertiary-educated 25-34 year-olds between 2000 and 2021.

**Source:** OECD (2022), Education at a Glance Database, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-A.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf)).

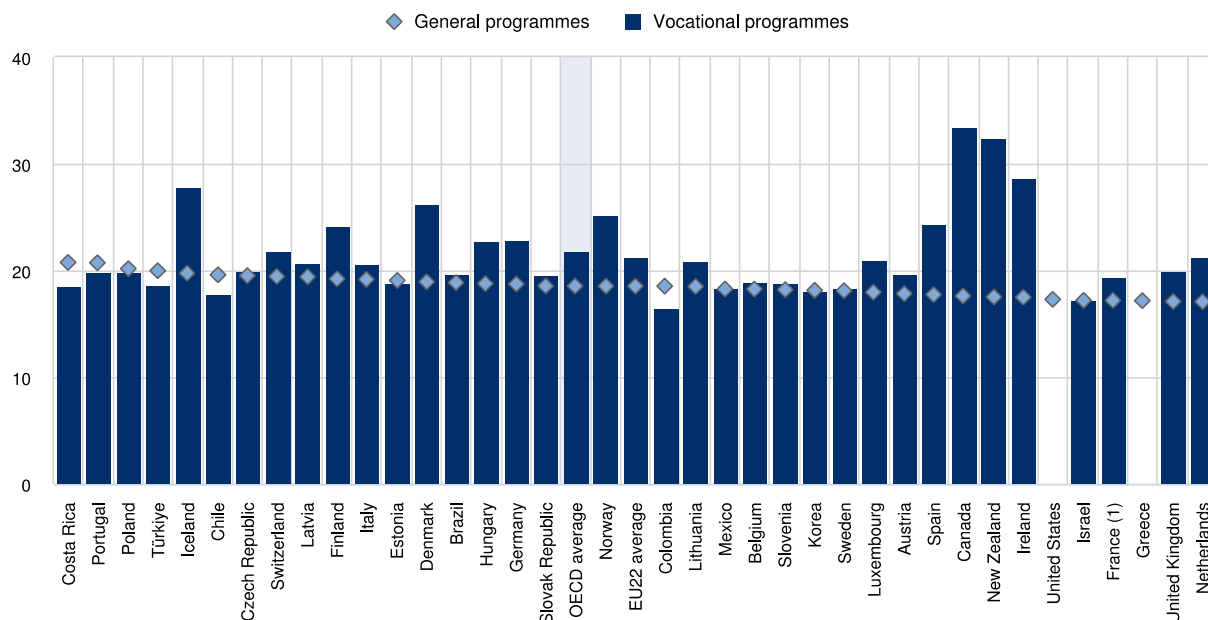
## Access to education, participation and progress

- Compulsory education begins at the age of 6 and ends at the age of 16 in the Slovak Republic. The range of ages for which at least 90% of the population are enrolled is identical to the period of compulsory education and goes from the age of 6 to the age of 16. This differs from most other OECD countries, where more than 90% of the population are enrolled for longer than the period of compulsory education.

- The age at which children enter early childhood education differs widely across countries. In the Slovak Republic, early childhood education starts offering intentional education objectives at age 3 and 5% of children under 3 are enrolled in early childhood education. Across OECD countries, the average enrolment rate among children below the age of 3 is 27%, but the rates range from less than 1% to 63%. The enrolment rate among 3-5 year-olds increases substantially in all OECD countries. In the Slovak Republic, 78% of all children of this age are enrolled in early childhood education, which is slightly below the OECD average.
- The average age of graduation from general upper secondary programmes varies from 17 to 21 years across OECD countries and is 19 years in the Slovak Republic. Differences in the average age of graduation from vocational upper secondary education are much larger and vary from 16 to 34 years across the OECD. These differences largely depend on whether vocational upper secondary students usually enrol in these programmes towards the end of their compulsory education or in mid-career. In the Slovak Republic, the average age of graduation from vocational upper secondary education is 20 years, which is below the OECD average at 22 years (Figure 2).
- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. In the Slovak Republic, the share is 59% (OECD average 55%). In contrast, men are overrepresented among graduates of vocational upper secondary programmes in most OECD countries, as is the case in the Slovak Republic where they make up 55% of all vocational upper secondary graduates, the same as the OECD average.
- In the Slovak Republic, 59% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (above the OECD average of 54%). A subset of these students (2% of 18-24 year-olds) combine their education or training with some form of employment in the Slovak Republic, compared to 17% on average across the OECD.
- One significant difference across countries' education systems is on whether or not vocational upper secondary programmes provide access to tertiary education. In 12 OECD countries and other participants, all vocational upper secondary graduates have direct access to tertiary education. In the Slovak Republic 76% of graduates from vocational upper secondary programme have direct access to tertiary education.
- As is the case in all OECD countries, a majority of students enrolled at tertiary level in the Slovak Republic are bachelor's students (57%). However, the next commonest enrolment level varies from country to country. In the Slovak Republic, master's students make up the second largest group of tertiary students at 37%. This is also the case in 25 other OECD countries, while in the remaining 14 countries with available data, short-cycle tertiary students form the second largest group.
- At 19%, business, administration and law was the most popular field of study among new entrants into tertiary education in the Slovak Republic, which is the case in most OECD countries. Despite the growing need for digital skills and the good employment prospects of students with degrees in information and communication technologies (ICT), only a small fraction of entrants into tertiary education choose this field. In the Slovak Republic, 91% of 25-64 year-olds with a tertiary ICT qualification are employed, but ICT students make up 6% of new entrants into tertiary education. This is the same level as the OECD average.

**Figure 2. Average age of first-time upper secondary graduates, by programme orientation (2020)**

In years



1. Average age is based on all graduates instead of first-time graduates.

Countries are ranked in descending order of the average age of first-time upper secondary graduates in general programmes.

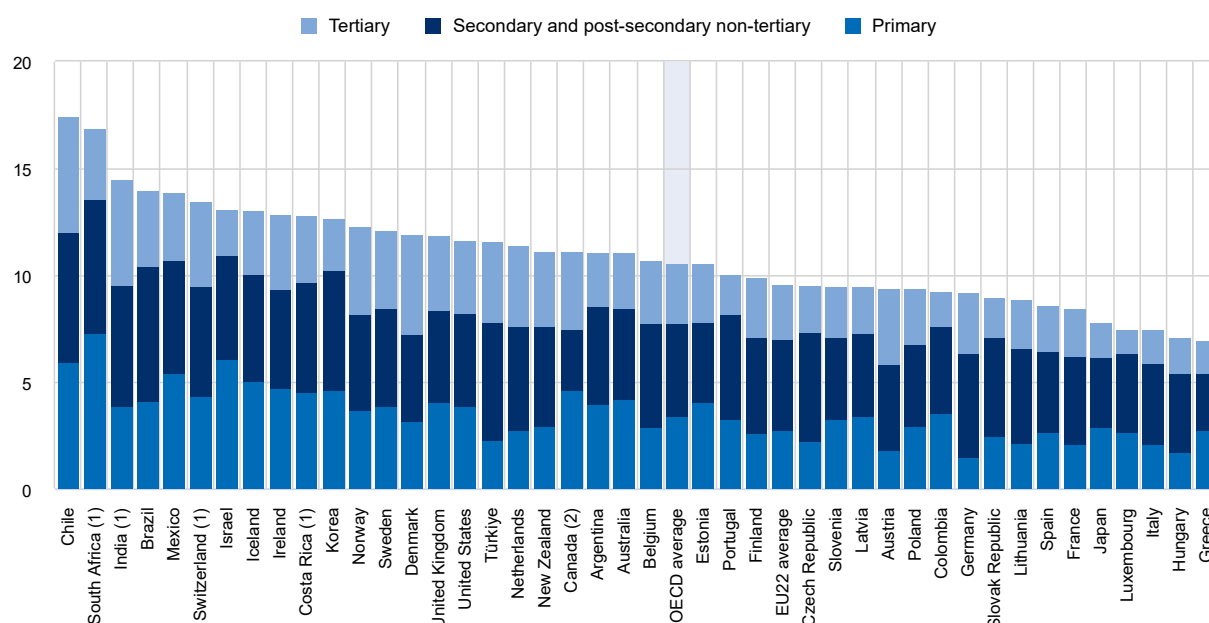
**Source:** OECD/Eurostat/UIS (2022), Tables B3.1 and B3.2. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

## Financial resources invested in education

- All OECD countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average 4.9% of their gross domestic product (GDP) on primary to tertiary educational institutions. In the Slovak Republic, the corresponding share was 3.9%. Between 2008 and 2019, funding for educational institutions from all sources grew by 46% in the Slovak Republic. Over the same period of time, the increase in GDP was lower with 27%. As a consequence, expenditure on educational institutions as a share of GDP grew by 0.5 percentage points over the same time period.
- Public spending on primary to tertiary education was 9% of total government expenditure in the Slovak Republic (Figure 3), lower than the OECD average (10.6%). Also, relative to GDP, public spending on primary to tertiary education (3.7%) is lower than the OECD average (4.4%).
- Spending on educational institutions as share of GDP or public budgets are important measures of the importance that countries place on education in their budgeting decisions. However, they do not show the total amount of funding per student because GDP levels, public budgets and student numbers vary from country to country. Across primary to tertiary education, OECD countries spend an average of USD 11 990 per student (in equivalent USD converted using PPPs for GDP) on educational institutions each year. In comparison, the Slovak Republic spent USD 8 478 per student in 2019. Its cumulative expenditure on educating a student from the age of 6 to 15 was USD 75 300, which was significantly below the OECD average of USD 105 502.

**Figure 3. Composition of total public expenditure on education as a percentage of total government expenditure (2019)**

Primary to tertiary education (including R&D), in per cent



1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

**Source:** OECD/UIS/Eurostat (2022), Table C4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-C.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf)).

- Across OECD countries, the provision of education at primary and secondary levels in terms of curricula, teaching styles and organisational management leads, on average, to similar patterns of expenditure per student from primary to post-secondary non-tertiary levels. OECD countries as a whole spend on average around USD 9 923 per student at primary and USD 11 400 per student at secondary level. In the Slovak Republic, the values are USD 7 972 at primary and USD 7 458 per student at secondary level, which are among the lowest across OECD countries.
- In contrast to lower levels of education, spending on tertiary education varies widely across OECD countries. Expenditure per student at tertiary level in the Slovak Republic is higher than at other levels of education, as is the case in almost all other OECD countries. The average expenditure per student in the Slovak Republic is USD 12 749 per year, which is about USD 4 800 higher than that of the primary level and USD 5 300 higher than that of the secondary level. It is below the OECD average, but similar to many other countries. The average expenditure at tertiary level (USD 17 559) is driven up by high values in a few countries. At 21%, the share of research and development (R&D) expenditure makes up a smaller fraction of expenditure on tertiary education in the Slovak Republic than on average across OECD countries (29%).
- Public funding dominates non-tertiary education (primary, secondary and post-secondary non-tertiary) in all OECD countries, even after transfers to the private sector. On average across the OECD, private funding accounts for 10% of expenditure at primary, secondary and post-secondary non-tertiary levels, while this share was 8% in the Slovak Republic in 2019. In contrast, private

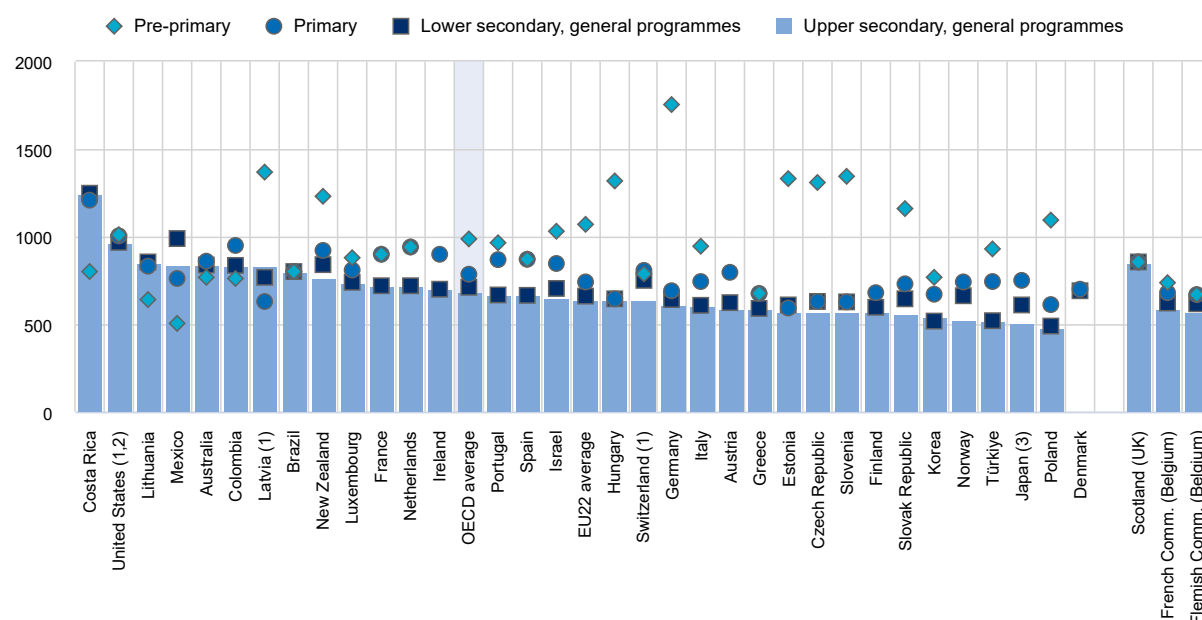
expenditure at tertiary level was higher in all OECD countries. In the Slovak Republic, the share of private expenditure at tertiary level reached 27%, which was slightly below the OECD average of 31%, after public-to-private transfers. These latter accounted for 4% of expenditure on educational institutions at this level.

## Teachers, the learning environment and the organisation of schools

- The salaries of teachers and school heads are an important determinant of the attractiveness of the teaching profession, but they also represent the single largest expenditure item in formal education. In most OECD countries, the statutory salaries of teachers (and school heads) in public educational institutions increase with the level of education they teach, and also with experience. Actual salaries also increase with the level of education. On average across OECD countries, actual salaries range from USD 41 941 at the pre-primary level to USD 53 682 at the upper secondary level. In the Slovak Republic, actual salaries average USD 20 731 at pre-primary level and USD 28 524 at upper secondary level.
- Between 2015 and 2021, on average across OECD countries, the statutory salaries of teachers at lower secondary level (general programmes) with 15 years of experience and the most prevalent qualifications increased by 6% in real terms. In the Slovak Republic, salaries increased more than the OECD average, by 18%.
- Teachers' average actual salaries remain lower than earnings of tertiary-educated workers in almost all OECD countries, and at almost all levels of education. This is also the case in the Slovak Republic. Lower secondary (general programme) teachers in the Slovak Republic earn 23.4% less than other tertiary-educated workers.
- The average number of teaching hours per year required from a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases. This is also the case in the Slovak Republic.
- Based on official regulations or agreements, annual teaching hours in the Slovak Republic are 1 161 hours per year at pre-primary level, 729 hours at primary level, 645 hours at lower secondary level (general programmes) and 561 hours at upper secondary level (general programmes) (Figure 4).
- During their working hours, teachers also perform various non-teaching tasks such as lesson planning and preparation, marking students' work and communicating or co-operating with parents or guardians. At the upper secondary level, 64% of teachers' working time is formally dedicated to non-teaching activities in the Slovak Republic, compared to an average of 56% across OECD countries.
- Continuing professional development is compulsory for all teachers of general programmes in most countries with data, and the Slovak Republic is no exception. At secondary level, professional development activities are compulsory for all teachers.

Figure 4. Teaching time of teachers, by level of education (2021)

Net statutory teaching time in hours per year, in public institutions



1. Actual teaching time (in Latvia except for pre-primary level).

2. Reference year differs from 2021. Refer to the source table for details.

3. Average planned teaching time in each school at the beginning of the school year.

Countries and other participants are ranked in descending order of the number of teaching hours per year in general upper secondary education.

**Source:** OECD (2022), Table D4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-D.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-D.pdf)).

## Focus on tertiary education

- Among 25-64 year-olds in the Slovak Republic, master's degrees are the most common tertiary attainment at 23% of the population followed by bachelor's degrees at 4% and short-cycle tertiary qualifications with less than 1%. This is different from the OECD average, where bachelor's degrees are most common (19%), followed by master's degrees (14%) and short cycle tertiary qualifications (7%). As in all OECD countries and other participants, only a small fraction of the population holds a doctoral degree: the share is 1% in the Slovak Republic.
- On average, tertiary attainment generates a wide range of labour-market benefits, including high employment rates. Yet, there are significant differences depending on the field of study. In 2021, employment rates in the Slovak Republic were highest among tertiary-educated individuals who studied information and communication technologies with 91% and lowest among those who studied arts and humanities, social sciences, journalism and information at 86%. However, these differences need to be put into perspective. Even among 25-64 year-olds with tertiary attainment in the field with the lowest employment rate, this was 7.6 percentage points higher than among those with upper secondary attainment (all fields combined).
- In most OECD countries including in the Slovak Republic, tertiary-educated adults have higher rates of participation in non-formal education and training than those with a lower level of educational attainment. In 2021, 7% of 25-64 year-olds with tertiary attainment in

the Slovak Republic had participated in non-formal education and training in the four weeks prior to being surveyed, compared to 1% of their peers with below upper secondary attainment.

- Over the decades, independent private institutions have been established to meet increased demand for tertiary education. On average across the OECD, 17% of students are enrolled in independent private institutions, but this figure masks large differences between countries. In the Slovak Republic, 12% of tertiary students are enrolled in such institutions. Independent private institutions charge higher annual tuition fees on average than public institutions for master's programmes in all OECD countries and other participants with available data, except in Chile and Lithuania.
- Enabling students to enrol on a part-time basis is an important way to facilitate access to tertiary education. Many part-time students would not be able to study full time, for example because they have child-care responsibilities or have to work to fund their studies. The share of part-time students at the tertiary level in the Slovak Republic is 19%, slightly below the OECD average (22%). Compared to 2013, it has decreased by 12 percentage points.
- Staff at tertiary level tend to start their careers relatively late due to the length of the education they need to qualify. In the Slovak Republic, only 4% of academic staff are aged under 30, below the OECD average (8%). In contrast, the share of academic staff aged 50 or over is 42%, which is slightly above the OECD average by 2 percentage points.

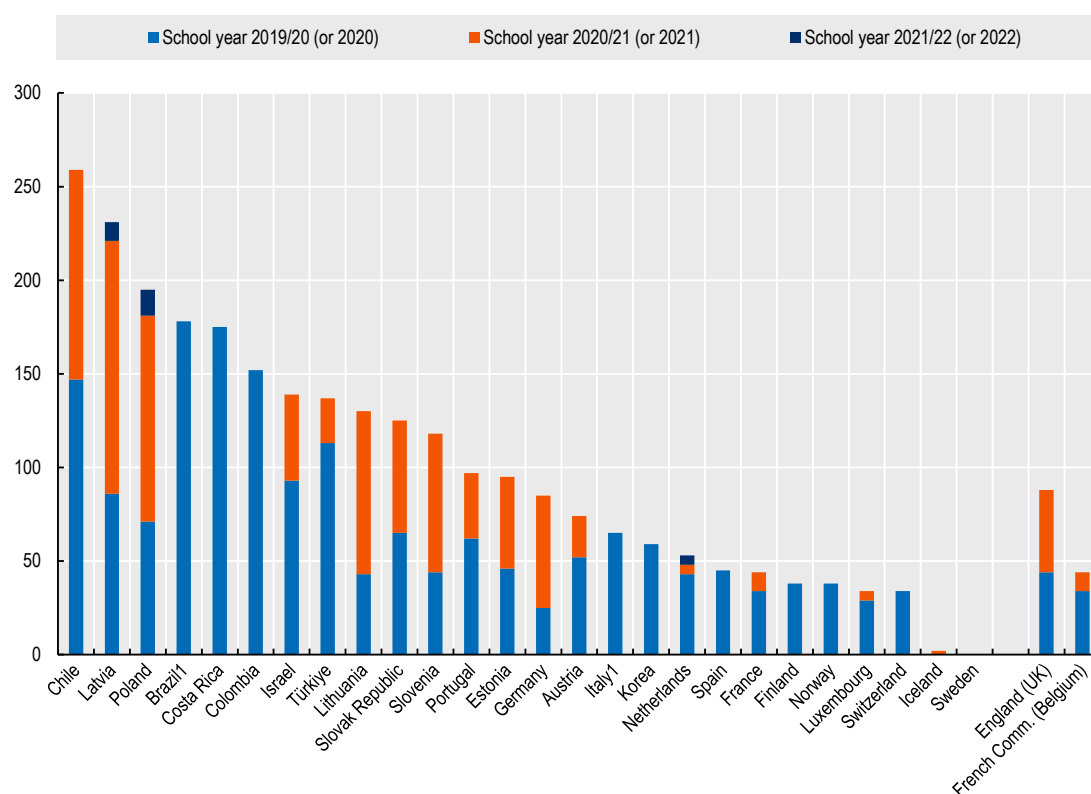
## COVID-19: The second year of the pandemic

- The COVID-19 pandemic disrupted traditional schooling in 2020 and the first half of 2021, leading to school closures across all OECD countries. While most shut down their premises entirely in the wake of the pandemic in 2020, by 2021 the situation had improved and returned to normal in most countries in 2022. In the Slovak Republic, primary and secondary schools were entirely closed for 50-65 days during the school year 2019/20, for 20-70 days in 2020/21 and stayed open in 2021/22 (Figure 5). Partial closures reached up to 15 days in 2021/22.
- National examinations have also been affected by the pandemic. At general upper secondary level, 18 OECD countries postponed their national examinations during the school year 2019/20, while 10 countries even cancelled them entirely. In 2020/21, national examinations were postponed in 9 countries and cancelled in 6 countries. The Slovak Republic cancelled its national examinations in 2019/20 and rescheduled them in 2020/21.
- Most countries conducted assessments of the impact of school closures on learning outcomes at various levels of education and along several dimensions. The Slovak Republic has conducted studies to evaluate the effects of the pandemic on the impact on primary, lower secondary, upper secondary general and vocational education. The assessments covered mathematics and reading. Like many other countries, the Slovak Republic also evaluated dimensions such as the effectiveness of distance-learning strategies during school closures.
- In school year 2022, national programmes to support students affected by the pandemic were implemented in the Slovak Republic at pre-primary, primary, lower secondary, upper secondary general and vocational level. At primary to upper secondary education, measures to address the effects of the COVID-19 pandemic included accelerated education or catch-up programmes for students who dropped out of school, psychosocial and mental health support to students, tutoring programmes or financial support for tutoring. The government does not plan to assess the effectiveness of these programmes.
- The increased digitalisation of education has been a major consequence of the COVID-19 pandemic in many OECD countries. At lower secondary level, the Slovak Republic has responded

to the pandemic with an enhanced provision of digitalised assessments/exams, digital tools at school, in-service and pre-service digital training to teachers and digital training to students.

**Figure 5. School closures due to COVID-19 (2020, 2021 and the first quarter of 2022)**

Number of instruction days of full closure of lower secondary schools excluding school holidays, public holidays and weekends



**Note:** The data underlying this report were produced through the Survey on Joint National Responses to COVID 19, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), the World Bank (WB), and the Organisation for Economic Co-operation and Development (OECD). Data for other levels of education are available at <https://www.oecd.org/education/Results-4th-wave-COVID-Survey-OECD-database.xlsx>.

1. Data for 2021 and 2022 are missing.

Countries and other participants are ranked in descending order of the total number of days lower secondary schools were fully closed during the school years 2019/20 (2020), 2020/21 (2021) and 2021/22 (2022).

**Source:** OECD/UIS/UNESCO/UNICEF/WB (2022).

- The challenges related to the COVID-19 pandemic have created additional costs for education systems. Preliminary budget estimates for 2021 suggest that, compared to 2020, the education budget at pre-primary to upper secondary level in the Slovak Republic increased strongly (by more than 5%, in nominal terms), while it increased slightly (by between 1% and 5%) at the tertiary level.
- The COVID-19 pandemic had a significant impact on adult learning in most OECD countries. In 2020, the share of adults who participated in a formal or non-formal education and training activity in the four weeks prior to being surveyed decreased by 2 percentage points on average across OECD countries compared with 2019. However, in 2021, participation in non-formal education and training returned to pre-pandemic levels in most countries. In the Slovak Republic, a similar pattern emerged. From 2019 to 2020, the share of adults participating in a formal or non-formal education

and training activity fell by 1 percentage point. From 2020 to 2021, it increased by 2 percentage points and has thus increased above pre-pandemic levels.

- Young adults who are not in employment, education or training (NEET) for prolonged periods are at risk of adverse economic and social outcomes in both the short and the long term. After increasing during the COVID-19 pandemic in 2020, the share of 18-24 year-olds who are NEET in the Slovak Republic stagnated in 2021. The share of NEET among young adults was 14% in 2021, above pre-COVID levels.

## References

OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/69096873-en>.


OECD (2022), "Regional education", *OECD Regional Statistics (database)*, <https://dx.doi.org/10.1787/213e806c-en>.

## More information

**For more information on Education at a Glance 2022 and to access the full set of Indicators, see:** <https://doi.org/10.1787/3197152b-en>

For more information on the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, See Annex 3 ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_Annex3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_Annex3.pdf)).

For general information on the methodology, please refer to the OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications (<https://doi.org/10.1787/9789264304444-en>).

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.

Data on subnational regions for selected indicators are available in the *OECD Regional Statistics (database)* (OECD, 2022). When interpreting the results on subnational entities, readers should take into account that the population size of subnational entities can vary widely within countries. For example, regional variation in enrolment may be influenced by students attending school in a different region from their area of residence, particularly at higher levels of education. Also, regional disparities tend to be higher when more subnational entities are used in the analysis.

Explore, compare and visualise more data and analysis using the Education GPS:

<https://gpseducation.oecd.org/>

The data on educational responses during COVID-19 were collected and processed by the OECD based on the Joint Survey on National Responses to COVID-19 School Closures, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO); the UNESCO Institute for Statistics (UIS); the United Nations Children's Fund (UNICEF); the World Bank; and the OECD.

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### Questions can be directed to:

Directorate for Education and Skills

[EDU.EAG@oecd.org](mailto:EDU.EAG@oecd.org)

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# Slovenia

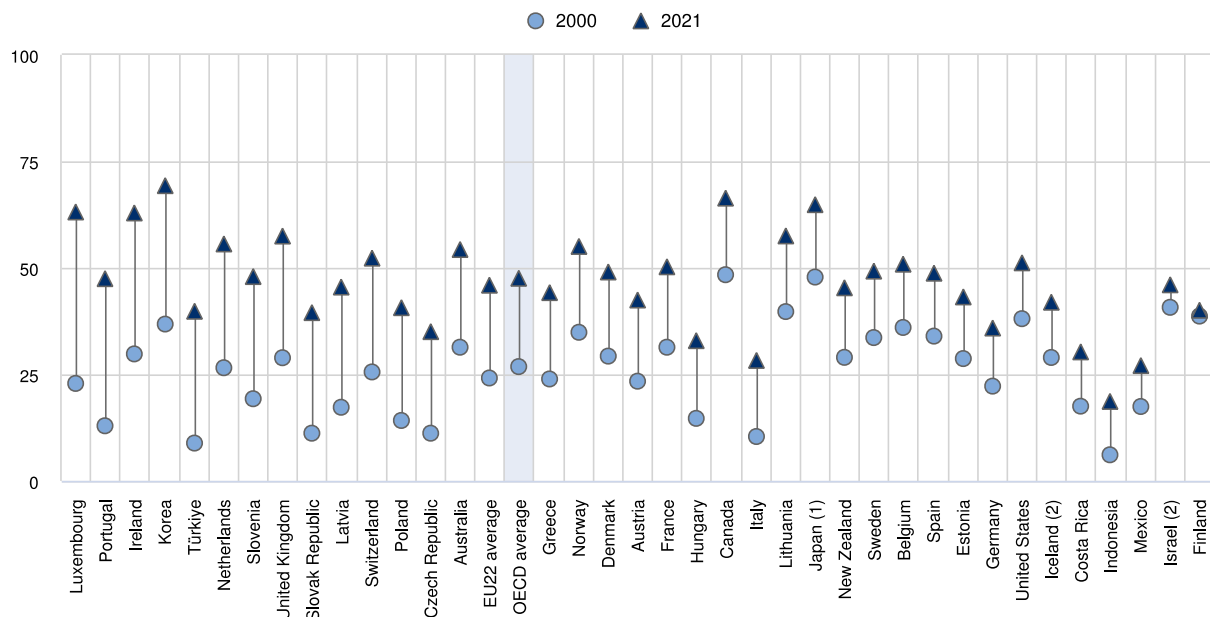
## The output of educational institutions and the impact of learning

- Educational attainment has been increasing throughout the OECD, in particular at tertiary level. Between 2000 and 2021, the share of 25-34 year-olds with tertiary attainment increased on average by 21 percentage points. In Slovenia, the share increased at an even faster pace, by 29 percentage points (from 19% in 2000 to 48% in 2021) (Figure 1). Slovenia is one of the 24 OECD countries where tertiary education is the most common highest level of attainment among 25-34 year-olds.
- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. Although the general increase in educational attainment has seen a parallel decline in the share of 25-34 year-olds without upper secondary attainment, 14% of young adults across the OECD still left school without an upper secondary qualification. In Slovenia, the share is 4%, which is lower than the OECD average.
- Higher educational attainment is often associated with better employment prospects and Slovenia is no exception. In 2021 the employment rate among 25-34 year-olds with tertiary education in Slovenia was 30 percentage points higher than among those with below upper secondary attainment and 5 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. On average across OECD countries, the employment rate among 25-34 year-olds with a tertiary qualification was 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. While the positive link between educational attainment and employment rates holds for both men and for women across the OECD, it is particularly strong for women. In Slovenia, 41% of women with below upper secondary attainment were employed in 2021, compared to 87% of those with tertiary attainment. In contrast, the figures were 68% and 90% for men.
- Across the OECD, the labour market benefits of tertiary attainment have proved especially strong during economic crises. This was also the case during the COVID-19 pandemic in Slovenia. Between 2019 and 2020, unemployment for 25-34 year-old workers with below upper secondary attainment increased by 3.8 percentage points, by 1.1 percentage points for workers with upper secondary attainment and decreased by 0.2 percentage points for workers with tertiary attainment. In 2021, unemployment for workers with below upper secondary attainment fell by 2.1 percentage points, compared to 2020, by 0.4 percentage points for workers with upper secondary attainment and increased by 0.6 percentage points for workers with tertiary attainment.
- National averages provide only an incomplete picture of the situation in any given country. In most OECD countries, there are large differences in educational attainment across subnational regions. This is also the case in Slovenia. In 2021, the difference between the region with the highest share of 25-64 year-olds with tertiary attainment (Western Slovenia, at 46%) and that with the lowest share (Eastern Slovenia, at 35%) was 11 percentage points. These subnational variations do not

only reflect differences in education opportunities. To a large degree, they are due to economic conditions and internal migration patterns.

**Figure 1. Trends in the share of tertiary-educated 25-34 year-olds (2000 and 2021)**

In per cent



1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group).

2. Year of reference differs from 2000: 2002 for Israel and 2003 for Iceland.

Countries are ranked in descending order of the difference in the share of tertiary-educated 25-34 year-olds between 2000 and 2021.

**Source:** OECD (2022), Education at a Glance Database, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-A.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf)).

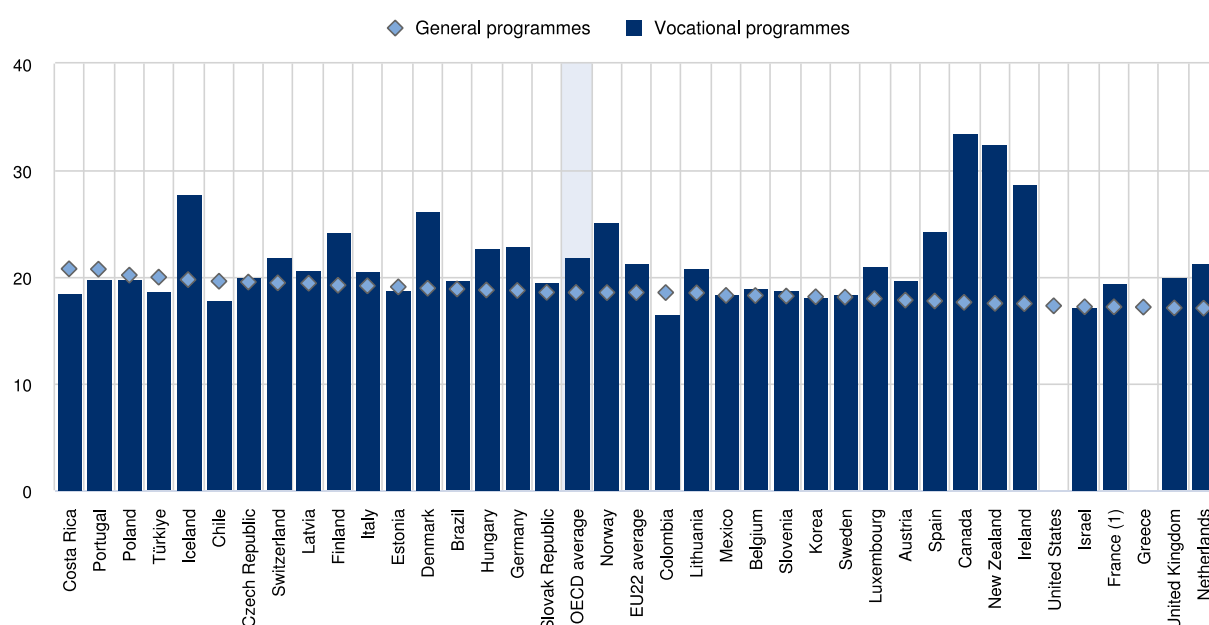
## Access to education, participation and progress

- Compulsory education begins at the age of 6 and ends at the age of 14 in Slovenia. The range of ages for which at least 90% of the population are enrolled is longer than the period of compulsory education and goes from the age of 4 to the age of 18. This is similar to most other OECD countries, where more than 90% of the population are also enrolled for longer than the period of compulsory education.
- The age at which children enter early childhood education differs widely across countries. In Slovenia, early childhood education starts offering intentional education objectives for children younger than 1 and 46% of children under 3 are enrolled in early childhood education. Across OECD countries, the average enrolment rate among children below the age of 3 is 27%, but the rates range from less than 1% to 63%. The enrolment rate among 3-5 year-olds increases substantially in all OECD countries. In Slovenia, 93% of all children of this age are enrolled in early childhood education, which is above the OECD average.
- The average age of graduation from general upper secondary programmes varies from 17 to 21 years across OECD countries and is 18 years in Slovenia. Differences in the average age of

graduation from vocational upper secondary education are much larger and vary from 16 to 34 years across the OECD. These differences largely depend on whether vocational upper secondary students usually enrol in these programmes towards the end of their compulsory education or in mid-career. In Slovenia, the average age of graduation from vocational upper secondary education is 19 years, which is below the OECD average at 22 years (Figure 2).

**Figure 2. Average age of first-time upper secondary graduates, by programme orientation (2020)**

In years



1. Average age is based on all graduates instead of first-time graduates.

Countries are ranked in descending order of the average age of first-time upper secondary graduates in general programmes.

**Source:** OECD/Eurostat/UIS (2022), Tables B3.1 and B3.2. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. In Slovenia, the share is 62% (OECD average 55%). In contrast, men are overrepresented among graduates of vocational upper secondary programmes in most OECD countries, as is the case in Slovenia where they make up 57% of all vocational upper secondary graduates, slightly above the OECD average (55%).
- In Slovenia, 73% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (significantly above the OECD average of 54%). A subset of these students (10% of 18-24 year-olds) combine their education or training with some form of employment in Slovenia, compared to 17% on average across the OECD.
- One significant difference across countries' education systems is on whether or not vocational upper secondary programmes provide access to tertiary education. In 12 OECD countries and other participants, all vocational upper secondary graduates have direct access to tertiary education. In Slovenia only 68% of graduates from vocational upper secondary programme have direct access to tertiary education.

- As is the case in all OECD countries, a majority of students enrolled at tertiary level in Slovenia are bachelor's students (55%). However, the next commonest enrolment level varies from country to country. In Slovenia, master's students make up the second largest group of tertiary students at 27%. This is also the case in 25 other OECD countries, while in the remaining 14 countries with available data, short-cycle tertiary students form the second largest group.
- At 20%, business, administration and law was the most popular field of study among new entrants into tertiary education in Slovenia, which is the case in most OECD countries. Despite the growing need for digital skills and the good employment prospects of students with degrees in information and communication technologies (ICT), only a small fraction of entrants into tertiary education choose this field. In Slovenia, 94% of 25-64 year-olds with a tertiary ICT qualification are employed, but ICT students make up 6% of new entrants into tertiary education. This is the same level as the OECD average.

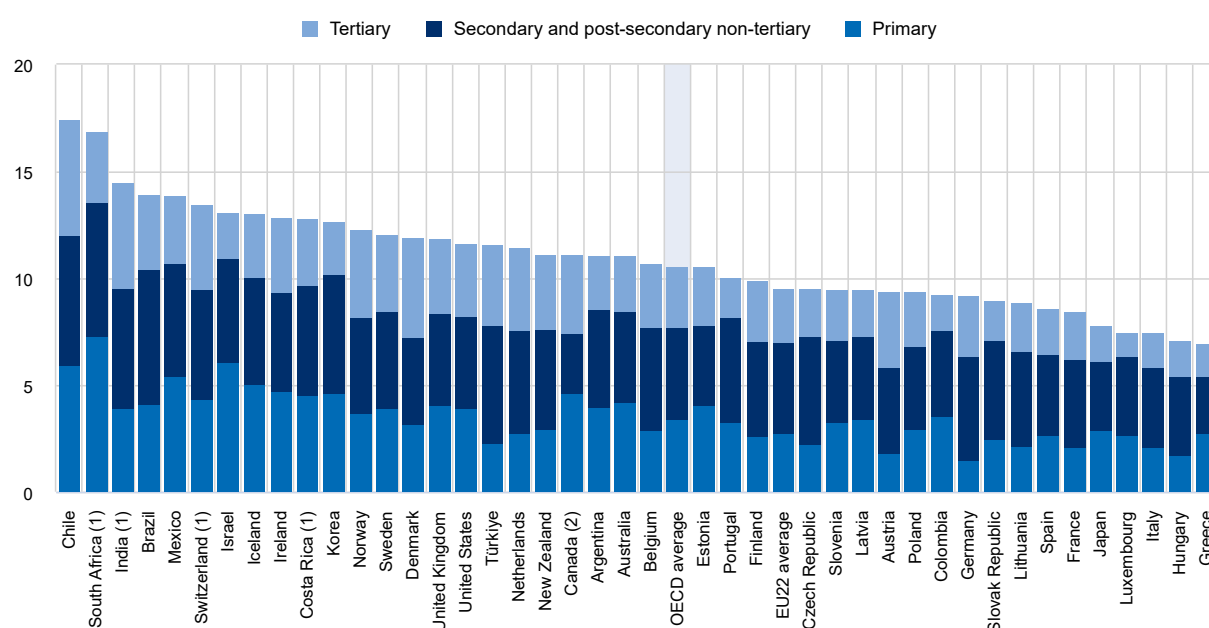
## Financial resources invested in education

- All OECD countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average 4.9% of their gross domestic product (GDP) on primary to tertiary educational institutions. In Slovenia, the corresponding share was 4.2%. Between 2008 and 2019, funding for educational institutions from all sources fell by 1% in Slovenia. However, over the same period of time, the increase in GDP was higher with 12%. As a consequence, expenditure on educational institutions as a share of GDP fell by 0.5 percentage points over the same time period.
- Public spending on primary to tertiary education was 9.5% of total government expenditure in Slovenia (Figure 3), lower than the OECD average (10.6%). Also, relative to GDP, public spending on primary to tertiary education (4.1%) is lower than the OECD average (4.4%).
- Spending on educational institutions as share of GDP or public budgets are important measures of the importance that countries place on education in their budgeting decisions. However, they do not show the total amount of funding per student because GDP levels, public budgets and student numbers vary from country to country. Across primary to tertiary education, OECD countries spend an average of USD 11 990 per student (in equivalent USD converted using PPPs for GDP) on educational institutions each year. In comparison, Slovenia spent USD 10 829 per student in 2019. Its cumulative expenditure on educating a student from the age of 6 to 15 was USD 102 336, which was slightly below the OECD average of USD 105 502.
- Across OECD countries, the provision of education at primary and secondary levels in terms of curricula, teaching styles and organisational management leads, on average, to similar patterns of expenditure per student from primary to post-secondary non-tertiary levels. OECD countries as a whole spend on average around USD 9 923 per student at primary and USD 11 400 per student at secondary level. In Slovenia, the values are USD 9 562 at primary and USD 10 160 per student at secondary level.
- In contrast to lower levels of education, spending on tertiary education varies widely across OECD countries. Expenditure per student at tertiary level in Slovenia is higher than at other levels of education, as is the case in almost all other OECD countries. The average expenditure per student in Slovenia is USD 15 267 per year, which is about USD 5 700 higher than that of the primary level and USD 5 100 higher than that of the secondary level. It is below the OECD average, but similar to many other countries. The average expenditure at tertiary level (USD 17 559) is driven up by high values in a few countries. At 22%, the share of research and development (R&D) expenditure makes up a smaller fraction of expenditure on tertiary education in Slovenia than on average across OECD countries (29%).

- Public funding dominates non-tertiary education (primary, secondary and post-secondary non-tertiary) in all OECD countries, even after transfers to the private sector. On average across the OECD, private funding accounts for 10% of expenditure at primary, secondary and post-secondary non-tertiary levels, while this share was 9% in Slovenia in 2019. In contrast, private expenditure at tertiary level was higher in all OECD countries. In Slovenia, the share of private expenditure at tertiary level reached 11%, which was significantly below the OECD average of 31%.

**Figure 3. Composition of total public expenditure on education as a percentage of total government expenditure (2019)**

Primary to tertiary education (including R&D), in per cent



1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

**Source:** OECD/UIS/Eurostat (2022), Table C4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-C.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf)).

## Teachers, the learning environment and the organisation of schools

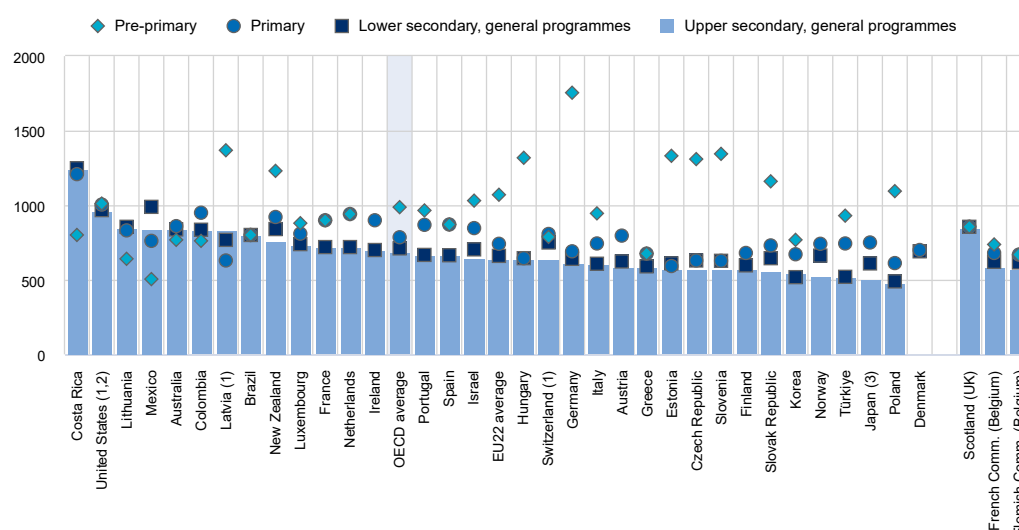
- The salaries of teachers and school heads are an important determinant of the attractiveness of the teaching profession, but they also represent the single largest expenditure item in formal education. In most OECD countries, the statutory salaries of teachers (and school heads) in public educational institutions increase with the level of education they teach, and also with experience. Actual salaries also increase with the level of education. On average across OECD countries, actual salaries range from USD 41 941 at the pre-primary level to USD 53 682 at the upper secondary level. In Slovenia, actual salaries average USD 34 952 at pre-primary level and USD 46 098 at upper secondary level.
- Between 2015 and 2021, on average across OECD countries, the statutory salaries of teachers at lower secondary level (general programmes) with 15 years of experience and the most prevalent

qualifications increased by 6% in real terms. In Slovenia, salaries increased more than the OECD average, by 14%.

- Teachers' average actual salaries remain lower than earnings of tertiary-educated workers in almost all OECD countries, and at almost all levels of education. This is also the case in Slovenia. Lower secondary (general programme) teachers in Slovenia earn 10.3% less than other tertiary-educated workers. In contrast school head actual salaries in Slovenia are much higher than the earnings of other tertiary educated workers. This is similar to most OECD countries, where school heads tend to earn well above the average earnings of tertiary educated workers.
- The average number of teaching hours per year required from a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases. This is also the case in Slovenia.
- Based on official regulations or agreements, annual teaching hours in Slovenia are 1 344 hours per year at pre-primary level, 627 hours at primary level, 627 hours at lower secondary level (general programmes) and 570 hours at upper secondary level (general programmes) (Figure 4).

**Figure 4. Teaching time of teachers, by level of education (2021)**

Net statutory teaching time in hours per year, in public institutions



1. Actual teaching time (in Latvia except for pre-primary level).

2. Reference year differs from 2021. Refer to the source table for details.

3. Average planned teaching time in each school at the beginning of the school year.

Countries and other participants are ranked in descending order of the number of teaching hours per year in general upper secondary education.

**Source:** OECD (2022), Table D4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-D.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-D.pdf)).

- The duration of initial teacher education for primary and lower secondary teachers ranges from 2.5 years to 6.5 years across OECD countries. In Slovenia, initial teacher education typically lasts 5 years for prospective lower secondary teachers (general programmes). It is the same length for prospective primary teachers. As is the case in almost all OECD countries, a tertiary degree is awarded to prospective teachers of all levels of education upon completion of their initial teacher training.

- Continuing professional development is compulsory for all teachers of general programmes in most countries with data, and Slovenia is no exception. At secondary level, professional development activities are compulsory for all teachers.

## Focus on tertiary education

- Among 25-64 year-olds in Slovenia, master's degrees are the most common tertiary attainment at 18% of the population followed by bachelor's degrees at 9% and short-cycle tertiary qualifications with 8%. This is different from the OECD average, where bachelor's degrees are most common (19%), followed by master's degrees (14%) and short-cycle tertiary qualifications (7%) and can be in large part contributed to the fact that master's degrees in Slovenia also include pre-Bologna academic bachelor's degrees, which accounted for a large share of graduates until 2016. As in all OECD countries and other participants, only a small fraction of the population holds a doctoral degree: the share is 5% in Slovenia, which includes doctoral degrees as well as pre-Bologna master's of science degrees.
- On average, tertiary attainment generates a wide range of labour-market benefits, including high employment rates. Yet, there are significant differences depending on the field of study. In 2021, employment rates in Slovenia were highest among tertiary-educated individuals who studied information and communication technologies with 94% and lowest among those who studied arts at 84%. However, these differences need to be put into perspective. Even among 25-64 year-olds with tertiary attainment in the field with the lowest employment rate, this was 8.4 percentage points higher than among those with upper secondary attainment (all fields combined).
- Wages also differ according to the field of study. In Slovenia, tertiary attainment in medical and dental fields generates the highest earnings. Full-time full-year workers aged 25-64 with a tertiary degree in this field earn on average more than twice as much as workers with upper secondary attainment (all fields combined). In contrast, tertiary attainment in the field of education leads to the lowest wages. Workers with this educational background earn on average 38% more than the wage of workers with upper secondary attainment (all fields combined).
- Despite the labour market advantages of a tertiary degree, many tertiary students do not graduate on time or do not graduate at all. In Slovenia, 38% of bachelor's students graduate within the theoretical programme duration. Across the OECD, the completion rate within the theoretical programme duration ranges from 12% to 69%. Completion rates three years after the theoretical programme duration are significantly higher in most countries and the differences between OECD countries somewhat narrower. In Slovenia, 56% of bachelor's students have graduated within three years after the end of the theoretical programme duration, compared to 68% on average across the OECD.
- In all OECD countries, tertiary completion rates are higher for women than for men. In Slovenia, 64% of women graduated within three years after the end of the theoretical programme duration at bachelor's level, compared to 47% of men. On average across the OECD, there is little systematic difference between the completion rates of public and private institutions, but the figures differ from country to country. In Slovenia, 57% of bachelor's students graduate from public institutions within three years after the end of the theoretical programme duration, while the share is 38% for private institutions.
- In most OECD countries including in Slovenia, tertiary-educated adults have higher rates of participation in non-formal education and training than those with a lower level of educational attainment. In 2021, 28% of 25-64 year-olds with tertiary attainment in Slovenia had participated in non-formal education and training in the four weeks prior to being surveyed, compared to 3% of their peers with below upper secondary attainment.

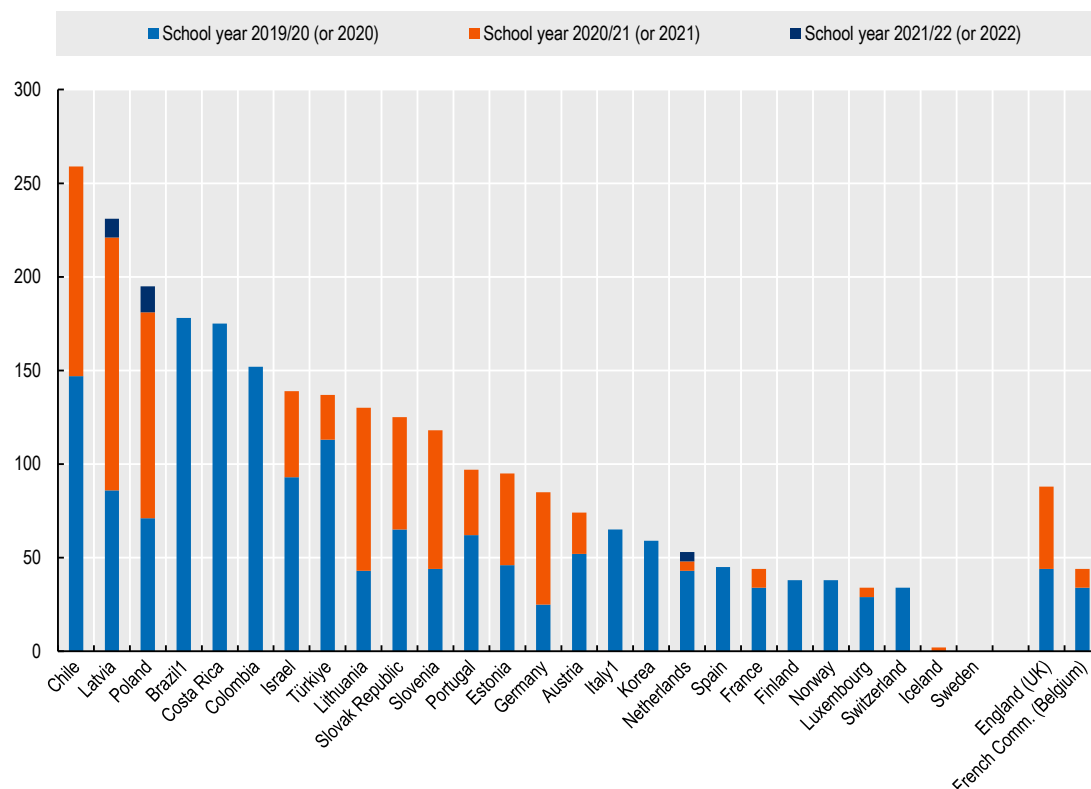
- Over the decades, independent private institutions have been established to meet increased demand for tertiary education. On average across the OECD, 17% of students are enrolled in independent private institutions, but this figure masks large differences between countries. In Slovenia, 11% of tertiary students are enrolled in such institutions. Independent private institutions charge higher annual tuition fees on average than public institutions for master's programmes in all OECD countries and other participants with available data, except in Chile and Lithuania.
- Enabling students to enrol on a part-time basis is an important way to facilitate access to tertiary education. Many part-time students would not be able to study full time, for example because they have child-care responsibilities or have to work to fund their studies. The share of part-time students at the tertiary level in Slovenia is 23%, slightly above the OECD average (22%). Compared to 2013, it has increased by 1 percentage point.
- Staff at tertiary level tend to start their careers relatively late due to the length of the education they need to qualify. In Slovenia, only 4% of academic staff are aged under 30, below the OECD average (8%). In contrast, the share of academic staff aged 50 or over is 40%, which is the same as the OECD average.

## COVID-19: The second year of the pandemic

- The COVID-19 pandemic disrupted traditional schooling in 2020 and the first half of 2021, leading to school closures across all OECD countries. While most shut down their premises entirely in the wake of the pandemic in 2020, by 2021 the situation had improved and returned to normal in most countries in 2022. In Slovenia, primary and secondary schools were entirely closed for 39-44 days during the school year 2019/20, for 55-79 days in 2020/21 and stayed open in 2021/22 (Figure 5). Partial closures reached 7-27 days during the school year 2019/20 and up to 43 days in 2020/21.
- National examinations have also been affected by the pandemic. At general upper secondary level, 18 OECD countries postponed their national examinations during the school year 2019/20, while 10 countries even cancelled them entirely. In 2020/21, national examinations were postponed in 9 countries and cancelled in 6 countries. Slovenia rescheduled its national examinations in 2019/20.
- Most countries conducted assessments of the impact of school closures on learning outcomes at various levels of education and along several dimensions. Slovenia has conducted studies to evaluate the effects of the pandemic on the impact on primary, lower secondary, upper secondary general and vocational education. The assessments covered mathematics, reading and science. Like many other countries, Slovenia also evaluated dimensions such as the effectiveness of distance-learning strategies during school closures, non-cognitive skills the relations between parents and students during lockdowns as well as the mental health and well-being of students and teachers.
- No national programmes to support students affected by the pandemic were implemented in Slovenia in contrast to many other OECD countries. At primary to upper secondary education, measures to address the effects of the COVID-19 pandemic included, referral systems for students in need of specialised services, psychosocial and mental health support to students and additional water, sanitation and hygiene services.
- The increased digitalisation of education has been a major consequence of the COVID-19 pandemic in many OECD countries. At lower secondary level, Slovenia has responded to the pandemic with an enhanced provision of digitalised assessments/exams, digital tools at school, distance learning, hybrid learning, in-service and pre-service digital training to teachers and digital training to students.

**Figure 5. School closures due to COVID-19 (2020, 2021 and the first quarter of 2022)**

Number of instruction days of full closure of lower secondary schools excluding school holidays, public holidays and weekends



**Note:** The data underlying this report were produced through the Survey on Joint National Responses to COVID 19, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), the World Bank (WB), and the Organisation for Economic Co-operation and Development (OECD). Data for other levels of education are available at <https://www.oecd.org/education/Results-4th-wave-COVID-Survey-OECD-database.xlsx>.

1. Data for 2021 and 2022 are missing.

Countries and other participants are ranked in descending order of the total number of days lower secondary schools were fully closed during the school years 2019/20 (2020), 2020/21 (2021) and 2021/22 (2022).

**Source:** OECD/UIS/UNESCO/UNICEF/WB (2022).

- The challenges related to the COVID-19 pandemic have created additional costs for education systems. Preliminary budget estimates for 2021 suggest that, compared to 2020, the education budget at pre-primary to tertiary level in Slovenia increased slightly (by between 1% and 5%, in nominal terms).
- The COVID-19 pandemic had a significant impact on adult learning in most OECD countries. In 2020, the share of adults who participated in a formal or non-formal education and training activity in the four weeks prior to being surveyed decreased by 2 percentage points on average across OECD countries compared with 2019. However, in 2021, participation in non-formal education and training returned to pre-pandemic levels in most countries. In Slovenia, a similar pattern emerged. From 2019 to 2020, the share of adults participating in a formal or non-formal education and training activity fell by 3 percentage points. From 2020 to 2021, it increased by 11 percentage points and has thus increased above pre-pandemic levels.
- Young adults who are not in employment, education or training (NEET) for prolonged periods are at risk of adverse economic and social outcomes in both the short and the long term. After

increasing during the COVID-19 pandemic in 2020, the share of 18-24 year-olds who are NEET in Slovenia declined in 2021. The share of NEET among young adults was 8% in 2021, below pre-COVID levels.

## References

OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/69096873-en>.


OECD (2022), "Regional education", *OECD Regional Statistics (database)*, <https://dx.doi.org/10.1787/213e806c-en>.

## More information

**For more information on Education at a Glance 2022 and to access the full set of Indicators, see:** <https://doi.org/10.1787/3197152b-en>

For more information on the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, See Annex 3 ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_Annex3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_Annex3.pdf)).

For general information on the methodology, please refer to the OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications (<https://doi.org/10.1787/9789264304444-en>).

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.

Data on subnational regions for selected indicators are available in the *OECD Regional Statistics* (database) (OECD, 2022). When interpreting the results on subnational entities, readers should take into account that the population size of subnational entities can vary widely within countries. For example, regional variation in enrolment may be influenced by students attending school in a different region from their area of residence, particularly at higher levels of education. Also, regional disparities tend to be higher when more subnational entities are used in the analysis.

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The data on educational responses during COVID-19 were collected and processed by the OECD based on the Joint Survey on National Responses to COVID-19 School Closures, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO); the UNESCO Institute for Statistics (UIS); the United Nations Children's Fund (UNICEF); the World Bank; and the OECD.

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# South Africa

## The output of educational institutions and the impact of learning

- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. Although the general increase in educational attainment has seen a parallel decline in the share of 25-34 year-olds without upper secondary attainment, 14% of young adults across the OECD still left school without an upper secondary qualification. In South Africa, the share is 46%, which is higher than the OECD average.
- Higher educational attainment is often associated with better employment prospects and South Africa is no exception. In 2020 the employment rate among 25-34 year-olds with tertiary education in South Africa was 29 percentage points higher than among those with below upper secondary attainment and 19 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. On average across OECD countries, the employment rate among 25-34 year-olds with a tertiary qualification was 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. While the positive link between educational attainment and employment rates holds for both men and for women across the OECD, it is particularly strong for women. In South Africa, 26% of women with below upper secondary attainment were employed in 2020, compared to 61% of those with tertiary attainment. In contrast, the figures were 41% and 67% for men.
- Across the OECD, the labour market benefits of tertiary attainment have proved especially strong during economic crises. This was also the case during the COVID-19 pandemic in South Africa. Between 2019 and 2020, unemployment for 25-34 year-old workers with below upper secondary attainment increased by 1.8 percentage points, by 1.7 percentage points for workers with upper secondary attainment and by 2.3 percentage points for workers with tertiary attainment.

## Access to education, participation and progress

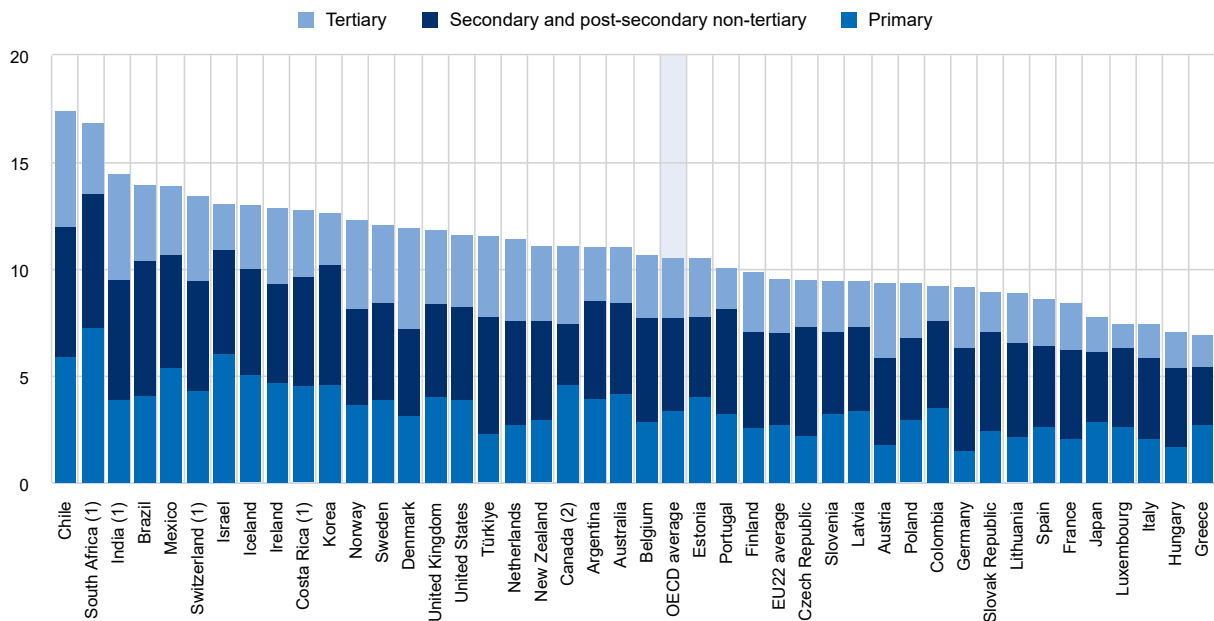
- Compulsory education begins at the age of 7 and ends at the age of 15 in South Africa. The range of ages for which at least 90% of the population are enrolled is shorter than the period of compulsory education and goes from the age of 1 to the age of 14. This differs from most OECD countries, where more than 90% of the population are enrolled for longer than the period of compulsory education.
- In South Africa, 43% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (significantly below the OECD average of 54%). A subset of these students (1% of 18-24 year-olds) combine their education or training with some form of employment in South Africa, compared to 17% on average across the OECD.

## Financial resources invested in education

- Public spending on primary to tertiary education was 16.9% of total government expenditure in South Africa (Figure 1), higher than the OECD average (10.6%). Also, relative to GDP, public spending on primary to tertiary education (6.7%) is higher than the OECD average (4.4%).

**Figure 1. Composition of total public expenditure on education as a percentage of total government expenditure (2019)**

Primary to tertiary education (including R&D), in per cent



1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

**Source:** OECD/UIS/Eurostat (2022), Table C4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-C.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf)).

## Focus on tertiary education

- Among 25-64 year-olds in South Africa, short-cycle tertiary qualifications are the most common tertiary attainment at 8% of the population followed by bachelor's degrees at 7% and master's and doctoral degrees with 1%. This is different from the OECD average, where bachelor's degrees are most common (19%), followed by master's degrees (14%) and short cycle tertiary qualifications (7%).

## References

OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/69096873-en>.


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# Spain

## Highlights

- **Tertiary education has become the most common level of education attained among 25-34 year-olds** in Spain. The share of tertiary-educated 25-34 year-olds increased from 34% in 2000 to 49% in 2021. At the other spectrum of educational attainment, **28% 25-34 year-olds still not have an upper secondary degree** in Spain, which is twice as much as the average across OECD countries.
- The **likelihood of being employed increases with the level of educational attainment but varies by field of study**. In Spain, 25-64 year-olds with a tertiary degree in information and communication technology (ICT) enjoy the best employment prospective, with an employment rate of 88%. However, **ICT students made up only 6% of new entrants into tertiary education** in Spain. This is the same level as the OECD average.
- **Less than two third of vocational upper secondary graduates in Spain has direct access to tertiary education** in 2020. This limits the possibilities of graduates to pursue the further studies and reduces the attractiveness of vocational education. The average age of graduation from vocational is 24 years in Spain, slightly above the OECD average of 22 years.
- **In 2019, Spain spent 4.3% of its gross domestic product (GDP) on primary to tertiary educational institutions, compared to the average of 4.9% across OECD countries.**
- Spain reported **relatively large share of senior academic staff among OECD countries**. In 2020, 47% of academic staff in Spain are aged 50 or over compared to 40% on average across OECD countries.

## The output of educational institutions and the impact of learning

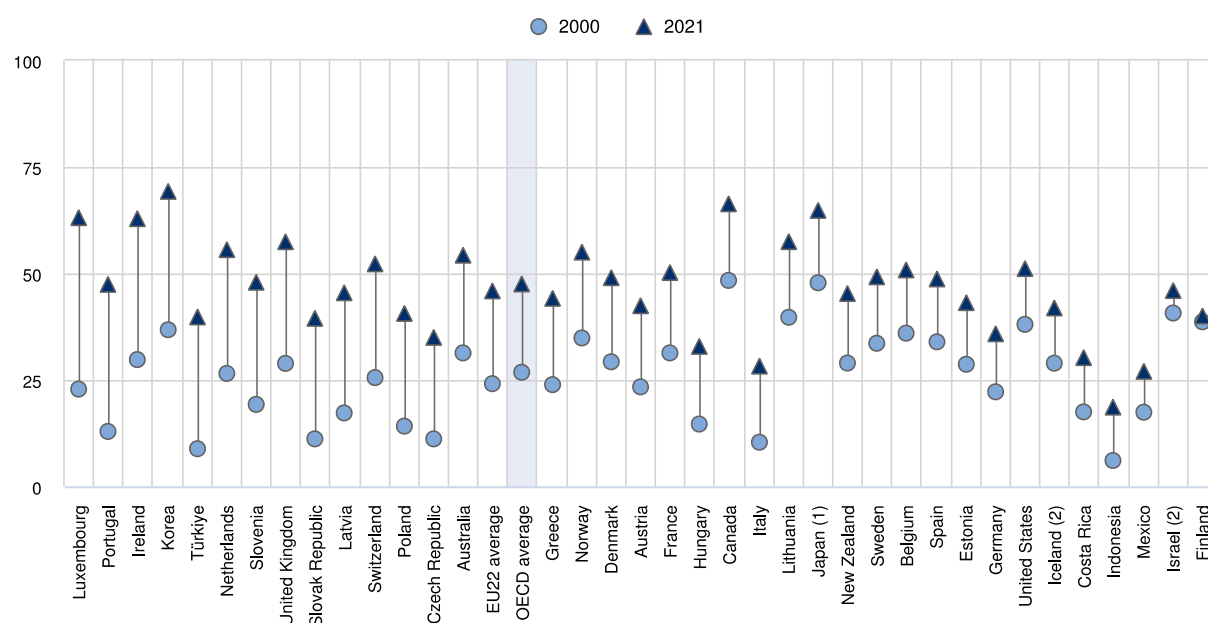
- Educational attainment has been increasing throughout the OECD, in particular at tertiary level. Between 2000 and 2021, the share of 25-34 year olds with tertiary attainment increased on average by 21 percentage points (from 27% to 48%). In Spain, the share also increased albeit at a slower pace, by 15 percentage points (from 34% in 2000 to 49% in 2021) (Figure 1). Spain is one of the 24 OECD countries where tertiary education is the most common highest level of attainment among 25-34 year olds.
- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. Although the general increase in educational attainment has seen a parallel decline in the share of 25-34 year olds without upper secondary attainment, 14% of young adults across the OECD still left school without an upper secondary qualification in 2021, a decrease of 5 percentage points since 2011. In Spain, the share decreased from 35% in 2011 to 28% in 2021.
- National averages provide only an incomplete picture of the situation in any given country. In most OECD countries, there are large differences in educational attainment across subnational regions. This is also the case in Spain. In 2021, the difference between the region with the highest share of

25-64 year-olds with tertiary attainment (Basque Country, at 56%) and that with the lowest share (Ceuta, at 25%) was 31 percentage points. The variations in educational attainment across regions reflect, to some extent, the difference in economic conditions and internal migration patterns.

- Higher educational attainment is often associated with better employment prospects and Spain is no exception. In 2021, the employment rate among 25-34 year-olds with tertiary education in Spain is 19 percentage points higher than among those with below upper secondary attainment and 9 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. On average across OECD countries, the employment rate among 25-34 year-olds with a tertiary qualification is 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. While the positive link between educational attainment and employment rates holds for both men and for women across the OECD, it is particularly strong for women. In Spain, 49% of women with below upper secondary attainment are employed, compared to 77% of those with tertiary attainment. In contrast, the figures are 66% and 80% for men.
- Across the OECD, the labour market benefits of tertiary attainment have proved especially strong during economic crises. This was also the case during the COVID-19 pandemic in Spain. Between 2019 and 2020, unemployment for 25-34 year-old workers with below upper secondary attainment increased by 4.1 percentage points, by 3.6 percentage points for workers with upper secondary attainment and by 3.3 percentage points for workers with tertiary attainment. In 2021, unemployment for workers with below upper secondary attainment remained constant, while it fell by 1.8 percentage points for workers with upper secondary attainment and by 2 percentage points for workers with tertiary attainment.
- Educational attainment affects not just employment prospects, but also wage levels. On average across the OECD, in 2020, full- and part-time workers aged 25-64 with upper secondary or post-secondary non-tertiary attainment earn 29% more than workers with below upper secondary attainment, while those with tertiary attainment earn about twice as much. In Spain, the earnings advantage of tertiary-educated workers was similar than the OECD average. In 2019, workers with upper secondary or post-secondary non-tertiary attainment earned 32% more than those with below upper secondary attainment and those with tertiary attainment earned 91% more.

Figure 1. Trends in the share of tertiary-educated 25-34 year-olds (2000 and 2021)

In per cent



1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group).

2. Year of reference differs from 2000: 2002 for Israel and 2003 for Iceland.

Countries are ranked in descending order of the difference in the share of tertiary-educated 25-34 year-olds between 2000 and 2021.

Source: OECD (2022), Education at a Glance Database, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3.pdf)).

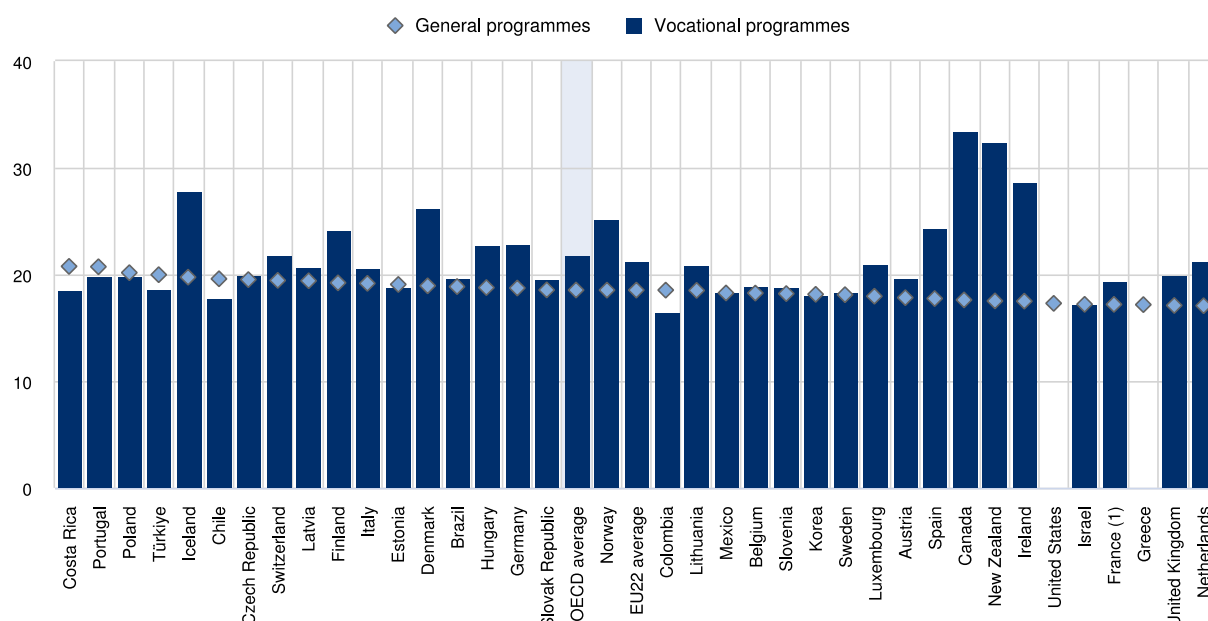
## Access to education, participation and progress

- Compulsory education lasts from the age of 6 to the age of 16 in Spain. The range of ages for which at least 90% of the population are enrolled is longer than the period of compulsory education and goes from the age of 3 to the age of 17. This is similar to most other OECD countries, where more than 90% of the population are also enrolled for longer than the period of compulsory education in 2020.
- The age at which children enter early childhood education differs widely across countries. In Spain, early childhood education starts offering intentional education objectives for children younger than 1 and 41% of children under 3 are enrolled in early childhood education in 2020. Across OECD countries, the average enrolment rate among children below the age of 3 is 27%, but the rates range from less than 1% to 63%. The enrolment rate among 3-5 year-olds increases substantially in all OECD countries. In Spain, 97% of all children of this age are enrolled in early childhood education, which is above the OECD average of 83%.
- The average age of graduation from general upper secondary programmes varies from 17 to 21 years across OECD countries and is 18 years in Spain. Differences in the average age of graduation from vocational upper secondary education are much larger and vary from 16 to 34 years across the OECD. These differences largely depend on whether vocational upper secondary students usually enrol in these programmes towards the end of their compulsory

education or in mid-career. In Spain, the average age of graduation from vocational upper secondary education is 24 years, which is above the OECD average at 22 (Figure 2).

- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. In Spain, the share is 55% in 2020, similar to the OECD average. In contrast, men are overrepresented among graduates of vocational upper secondary programmes in most OECD countries, but not in Spain where they make up 50% of all vocational upper secondary graduates, below the OECD average (55%).
- In Spain, in 2021, 62% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (largely above the OECD average of 54%). Of these students, 8% combine their education or training with some form of employment in Spain, compared to 17% on average across the OECD.
- One significant difference across countries' education systems is on whether or not vocational upper secondary programmes provide access to tertiary education. In 12 OECD countries, all vocational upper secondary graduates have direct access to tertiary education in 2020. In Spain only 59% of graduates from vocational upper secondary programme have direct access to tertiary education.
- As is the case in all OECD countries, a majority of students enrolled at tertiary level in Spain are bachelor's students in 2020 (57% in Spain and 63% on average across the OECD). However, the next commonest enrolment level varies from country to country. In Spain, short-cycle tertiary students make up the second largest group of tertiary students at 22%. This is also the case in 9 other OECD countries, while in the remaining 27 countries with available data, master's students form the second largest group.
- At 20%, business, administration and law was the most popular field of study among new entrants into tertiary education in Spain, which is the case in most OECD countries in 2020. Despite the growing need for digital skills and the good employment prospects of students with degrees in ICT, only a small fraction of entrants into tertiary education choose this field. In Spain, 88% of 25-64 year olds with a tertiary ICT qualification are employed, but ICT students make up only 6% of new entrants into tertiary education. This is the same level as the OECD average.

**Figure 2. Average age of first-time upper secondary graduates, by programme orientation (2020)**  
In years



1. Average age is based on all graduates instead of first-time graduates.

Countries are ranked in descending order of the average age of first-time upper secondary graduates in general programmes.

**Source:** OECD/Eurostat/UIS (2022), Tables B3.1 and B3.2. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3.pdf))

## Financial resources invested in education

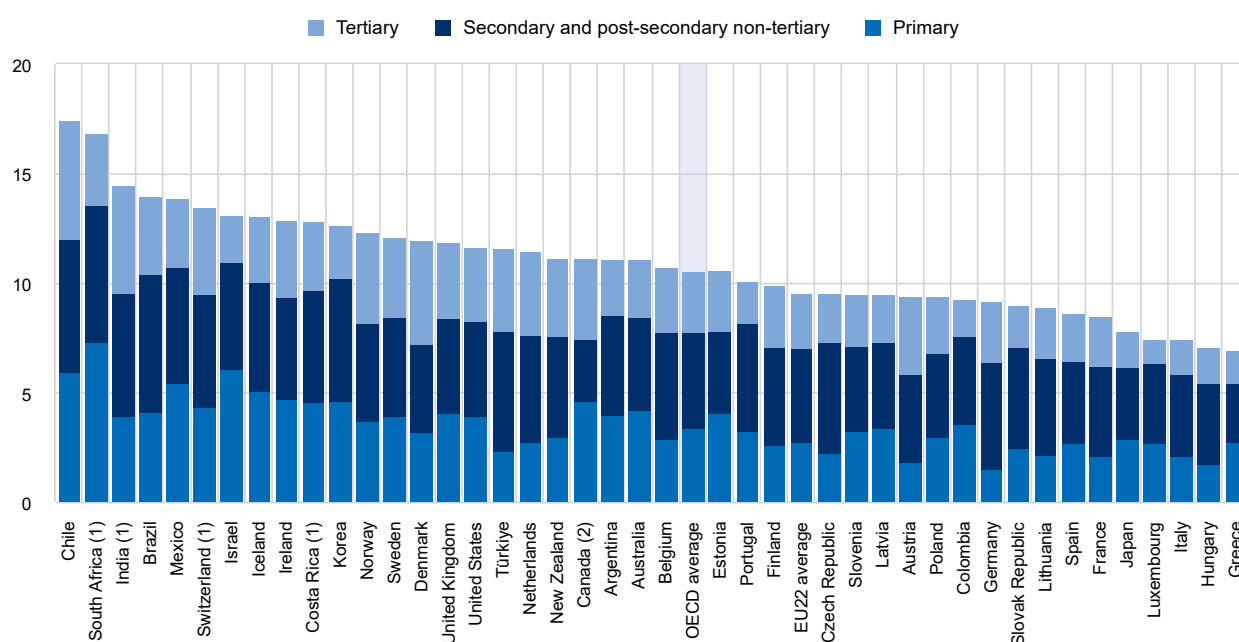
- All OECD and partner countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average 4.9% of their GDP on primary to tertiary educational institutions (including R&D). In Spain, the corresponding share was lower than the OECD average, at 4.3%. Relative to total government expenditure, public spending on primary to tertiary education (including R&D) was 8.6%, below the OECD average of 10.6% (Figure 3).
- Between 2008 and 2019, funding for educational institutions from all sources grew by 10% in Spain. Over the same period of time, the increase in GDP was lower with 7%. As a consequence, expenditure on educational institutions as a share of GDP grew by 0.1 percentage points over the same time period.
- Spending on educational institutions as share of GDP or public budgets are important measures of the importance that countries place on education in their budgeting decisions. However, they do not show the total amount of funding per student because GDP levels, public budgets and student numbers vary from country to country. Across primary to tertiary education (including R&D), OECD countries spend an average of USD 11 990 per student (in equivalent USD converted using PPPs for GDP) on educational institutions each year. In comparison, Spain spent USD 10 694 per student in 2019. Its cumulative expenditure on educating a student from the age of 6 to 15 was USD 93 094, which was below the OECD average of USD 105 502.
- Across OECD countries, the provision of education at primary and secondary levels in terms of curricula, teaching styles and organisational management leads, on average, to similar patterns of

expenditure per student from primary to post-secondary non-tertiary levels. OECD countries as a whole spent on average around USD 9 923 per student at primary and USD 11 400 per student at secondary level. In Spain, the values were USD 8 580 at primary and USD 10 706 per student at secondary level in 2019.

- Expenditure per student at tertiary level in Spain is higher than at other levels of education, as is the case in almost all other OECD countries. In 2019, the average expenditure per student at tertiary level (including R&D) in Spain was USD 14 237 per year, which was about USD 5 700 higher than that of the primary level and USD 3 500 higher than that of the secondary level. This average expenditure per student at tertiary level in Spain was below the OECD average (USD 17 559), but similar to many other countries. In other words, the average expenditure at tertiary level was driven up by high values in a few countries. At 25%, the share of research and development (R&D) expenditure made up a smaller fraction of expenditure on tertiary education in Spain than on average across OECD countries (29%).
- Public funding dominates non-tertiary education (primary, secondary and post-secondary non-tertiary) in all OECD countries, even after transfers to the private sector. In 2019, private funding in Spain accounted for 13% of expenditure at primary, secondary and post-secondary non-tertiary levels, compared to the OECD average of 10%. In contrast, private expenditure at tertiary level is higher in all OECD countries. In Spain, the share of private expenditure at tertiary level was 33%, which was slightly above the OECD average of 31%.

**Figure 3. Composition of total public expenditure on education as a percentage of total government expenditure (2019)**

Primary to tertiary education (including R&D), in per cent



1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

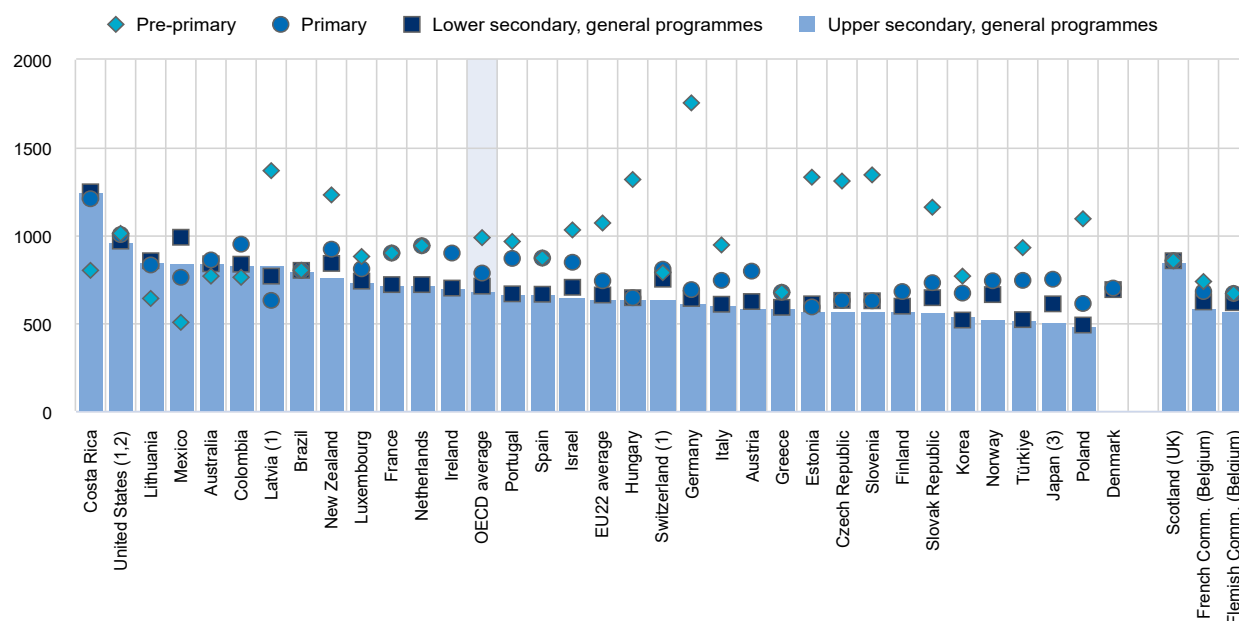
**Source:** OECD/UIS/Eurostat (2022), Table C4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3.pdf))

## Teachers, the learning environment and the organisation of schools

- Between 2015 and 2021, on average across OECD countries, the statutory salaries of teachers at lower secondary level (general programmes) with 15 years of experience and the most prevalent qualifications increased by 6% in real terms. In Spain, salaries increased by a similar percentage as the OECD average, by 5%.
- The average number of teaching hours per year required from a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases. This is also the case in Spain. Based on official regulations or agreements, in 2021, annual teaching hours in Spain are 871 hours per year at pre-primary and primary levels, 665 hours at lower secondary (general programmes) and upper secondary (general programmes) levels (Figure 4).
- During their working hours, teachers also perform various non-teaching tasks such as lesson planning and preparation, marking students' work and communicating or co-operating with parents or guardians. In 2021, at the upper secondary level, 53% of teachers' working time is formally dedicated to non-teaching activities in Spain, compared to an average of 56% across OECD and partner countries.
- The duration of initial teacher education for primary and lower secondary teachers ranges from 2.5 years to 6.5 years across OECD countries. In Spain, initial teacher education typically last 5 years for prospective lower secondary teachers (general programmes). It is shorter for prospective primary teachers, at 4 years. As is the case in almost all OECD countries, a tertiary degree is awarded to prospective teachers of all levels of education upon completion of their initial teacher training.
- Continuing professional development is compulsory to some extent for teachers of general programmes in most countries with data, and Spain is not an exception. In Spain, as defined by the national regulation, continuing professional development is a right and an obligation of all teachers and a responsibility of education administrations and schools themselves.

**Figure 4. Teaching time of teachers, by level of education (2021)**

Net statutory teaching time in hours per year, in public institutions



1. Actual teaching time (in Latvia except for pre-primary level).

2. Reference year differs from 2021. Refer to the source table for details.

3. Average planned teaching time in each school at the beginning of the school year.

Countries and other participants are ranked in descending order of the number of teaching hours per year in general upper secondary education.

**Source:** OECD (2022), Table D4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3.pdf))

## Focus on tertiary education

- In 2021, among 25-64 year-olds in Spain, master's or equivalent degrees are the most common tertiary attainment at 16% of the population followed by short-cycle tertiary qualifications at 12% and bachelor's or equivalent degrees with 11%. This is different from the OECD average, where bachelor's or equivalent degrees are most common (19%), followed by master's or equivalent degrees (14%) and short-cycle tertiary qualifications (7%). As in all OECD countries, only a small fraction of adults holds a doctoral or equivalent degree: the share is 1% in Spain.
- On average, tertiary attainment generates a wide range of labour-market benefits, including high employment rates. Yet, there are significant differences depending on the field of study. In 2021, employment rates in Spain are highest among tertiary-educated adults who studied ICT with 88% and lowest among those who studied the broad field of arts and humanities, social sciences, journalism and information or the field of education at 78%. However, these differences need to be put into perspective. Even among 25-64 year-olds with tertiary attainment in the fields with the lowest employment rate, this is 7 percentage points higher than among those with upper secondary attainment (all fields combined).
- Despite the labour market advantages of a tertiary degree, many tertiary students do not graduate on time or do not graduate at all. In Spain, 37% of bachelor's students graduate within the theoretical programme duration in 2020. Across the OECD, the completion rate within the theoretical programme duration ranges from 12% to 69%. Completion rates three years after the theoretical programme duration are significantly higher in most countries and the differences

between OECD countries somewhat narrower. In Spain, 72% of bachelor's students have graduated within three years after the end of the theoretical programme duration, compared to 68% on average across the OECD.

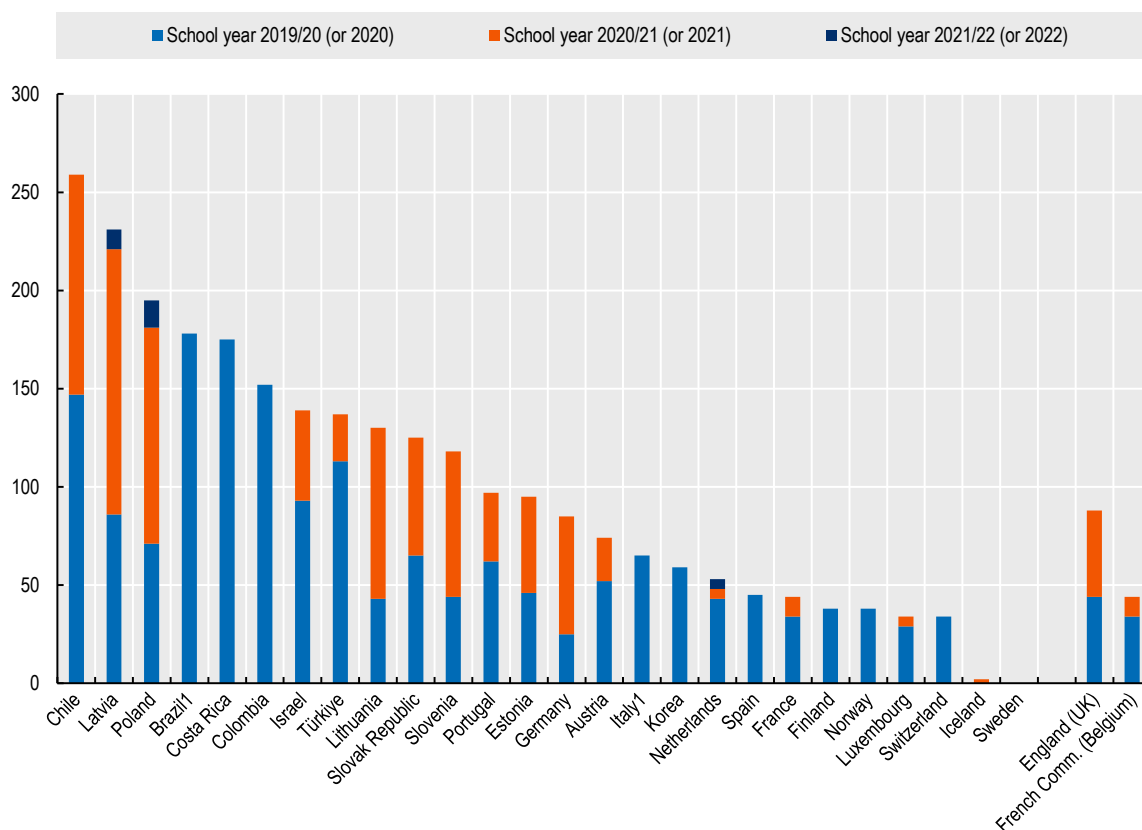
- In all OECD countries, tertiary completion rates are higher for women than for men. In Spain, 79% of women graduated within three years after the end of the theoretical programme duration at bachelor's level, compared to 64% of men.
- Across the OECD, there is little difference between the completion rates of public and private institutions, but the figures differ from country to country. In Spain, 71% of bachelor's students graduate from public institutions within three years after the end of the theoretical programme duration, while the share is 82% for private institutions.
- In most OECD countries including in Spain, tertiary-educated adults have higher rates of participation in non-formal education and training than those with a lower level of educational attainment. In 2021, 18% of 25-64 year-olds with tertiary attainment in Spain had participated in non-formal education and training in the four weeks prior to being surveyed, compared to 4% of their peers with below upper secondary attainment. These rates are similar to the average across OECD countries taking part in surveys with the same reference period, where 16% of tertiary-educated adults compared to 4% of adults with below upper secondary attainment had participated in non-formal education and training.
- Entering tertiary education often means costs for students and their families, in terms of tuition fees, foregone earnings and living expenses, although they may also receive financial support to help them afford it. However, public policies on tuition fees and financial support for students differ greatly across countries. In Spain, mid-range levels of tuition fees are combined with intermediate levels of financial support for students. For the academic reference year 2018/19, public institutions in Spain charged tuition fees of USD 1 768 for national students at bachelor's level and of USD 2 581 at master's level.
- OECD countries have different approaches providing financial support to students enrolled in tertiary education, but in general countries with the highest level of public transfers to the private sector are those that also tend to have the highest tuition fees. In six OECD countries and other participants at least 80% of national students receive public financial support in the form of student loans, scholarships or grants. In another six countries less than 25% of students receive financial support. In these countries and other participants, public financial support is targeted on selected groups of students, such as those from socio-economically disadvantaged families. Spain falls between the two groups, with 44% of students receiving financial support.
- Over the decades, independent private institutions have been established to meet increased demand for tertiary education. On average across the OECD, 17% of students are enrolled in independent private institutions, but this figure masks large differences between countries in 2020. In Spain, 22% of tertiary students are enrolled in such institutions. Independent private institutions charge higher annual tuition fees on average than public institutions for master's programmes in all OECD countries and other participants with available data, except in Chile and Lithuania.
- Enabling students to study part time is an important way to facilitate access to tertiary education. Many part-time students would not be able to study full time, for example because they have child-care responsibilities or have to work to fund their studies. In 2020, the share of part-time students at the tertiary level in Spain is 25%, above the OECD average of 21%. Compared to 2013, it has decreased by 2 percentage points.
- Staff at tertiary level tend to start their careers relatively late due to the length of the education they need to qualify. In Spain, only 3% of academic staff are aged under 30, below the OECD average of 8% in 2020. In contrast, the share of academic staff aged 50 or over is 47%, which is above the OECD average by 7 percentage points.

## COVID-19: The second year of the pandemic

- The COVID-19 pandemic disrupted traditional schooling in 2020 and the first half of 2021, leading to school closures across all OECD countries. While most shut down their premises entirely in the wake of the pandemic in 2020, by 2021 the situation had improved and returned to normal in most countries in 2022. In Spain, primary and secondary schools were entirely closed for 45 days in 2019/20, and stayed open during the school years 2020/21 and 2021/22 (Figure 5). There were no partial closures over these three school years.
- Teacher absences also affected the regular operation of schools during the pandemic, whether due to COVID-19 infections or because of precautionary quarantine. However, only approximately half of countries collected information on teacher absenteeism. Spain collected such data. It shows that teacher absenteeism remained constant between school years 2019/20 and 2021/22.
- National examinations have also been affected by the pandemic. At general upper secondary level, 18 OECD countries postponed their national examinations during the school year 2019/20, while 10 countries even cancelled them entirely. In 2020/21, national examinations were postponed in 9 countries and cancelled in 6 countries. Spain rescheduled its national examinations in the school year 2019/20.
- Most countries conducted assessments of the impact of school closures on learning outcomes at various levels of education and along several dimensions. Spain has conducted studies to evaluate the effects of the pandemic on the impact on primary, lower secondary, upper secondary general education. Like many other countries, Spain also evaluated dimensions such as the mental health and well-being of students as well as the effectiveness of distance-learning strategies during school closures.
- In the school year 2021/22, national programmes to support students affected by the pandemic were implemented in Spain at pre-primary, primary, lower secondary, upper secondary general and vocational and tertiary level. At primary to upper secondary education, measures to address the effects of the COVID-19 pandemic included: early warning systems to identify students at risk of dropping out, automatic re-enrolment of students in school. The government is assessing the effectiveness of these programmes.
- The increased digitalisation of education has been a major consequence of the COVID-19 pandemic in many OECD countries. At lower secondary level, Spain has responded to the pandemic with an enhanced provision of digital tools at school, distance learning, hybrid learning, in-service and pre-service digital training to teachers and digital training to students.
- The COVID-19 pandemic had a significant impact on adult learning in most OECD countries. In 2020, the share of adults who participated in formal or non-formal education and training in the four weeks prior to being surveyed decreased by 2 percentage points on average across OECD countries compared with 2019. However, in 2021, participation in non-formal education and training returned to pre-pandemic levels in most countries. In Spain, from 2019 to 2020, the share of adults participating in formal or non-formal education training remained unchanged. From 2020 to 2021, it increased by 3 percentage points and has thus increased above pre-pandemic levels.
- Young adults who are not in employment, education or training (NEET) for prolonged periods are at risk of adverse economic and social outcomes in both the short and the long term. After increasing during the COVID-19 pandemic in 2020, the share of 18-24 year-olds who are NEET in Spain declined in 2021. The share of NEET among 18-24 year-olds was 19% in 2021, at pre-COVID levels.

**Figure 5. School closures due to COVID-19 (2020, 2021 and the first quarter of 2022)**

Number of instruction days of full closure of lower secondary schools excluding school holidays, public holidays and weekends



**Note:** The data underlying this report were produced through the Survey on Joint National Responses to COVID 19, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), the World Bank (WB), and the Organisation for Economic Co-operation and Development (OECD). Data for other levels of education are available at <https://www.oecd.org/education/Results-4th-wave-COVID-Survey-OECD-database.xlsx>.

1. Data for 2021 and 2022 are missing.

Countries and other participants are ranked in descending order of the total number of days lower secondary schools were fully closed during the school years 2019/20 (2020), 2020/21 (2021) and 2021/22 (2022).

**Source:** OECD/UIS/UNESCO/UNICEF/WB (2022).

## References

OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/69096873-en>.

OECD (2022), "Regional education", *OECD Regional Statistics (database)*, <https://dx.doi.org/10.1787/213e806c-en>.

## More information

**For more information on Education at a Glance 2022 and to access the full set of Indicators, see:**  
<https://doi.org/10.1787/3197152b-en>.

For more information on the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, see Annex 3 ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3.pdf)).

For general information on the methodology, please refer to the OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications (<https://doi.org/10.1787/9789264304444-en>).

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.

Data on subnational regions for selected indicators are available in the *OECD Regional Statistics* (database) (OECD, 2022). When interpreting the results on subnational entities, readers should take into account that the population size of subnational entities can vary widely within countries. For example, regional variation in enrolment may be influenced by students attending school in a different region from their area of residence, particularly at higher levels of education. Also, regional disparities tend to be higher when more subnational entities are used in the analysis.

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<https://gpseducation.oecd.org/>

The data on educational responses during COVID-19 were collected and processed by the OECD based on the Joint Survey on National Responses to COVID-19 School Closures, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO); the UNESCO Institute for Statistics (UIS); the United Nations Children's Fund (UNICEF); the World Bank; and the OECD.

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# España

## Aspectos destacados

- **La educación terciaria se ha convertido en el nivel educativo más común alcanzado por las personas de 25 a 34 años** en España. La proporción de personas de 25 a 34 años con nivel educativo de terciaria aumentó del 34 % en 2000 al 49 % en 2021. En el otro extremo del espectro de logros educativos, el **28 % de las personas de 25 a 34 años todavía no tienen un título de segunda etapa de educación secundaria**, el doble de la media de los países de la OCDE.
- La **probabilidad de tener un empleo aumenta con el nivel educativo alcanzado, pero varía según el campo de estudio**. En España, las personas de 25 a 64 años con un título universitario en tecnologías de la información y la comunicación (TIC) cuentan con las mejores perspectivas con una tasa de empleo del 88 %. Sin embargo, los **estudiantes de TIC representan solo el 6 % de los nuevos matriculados en la educación terciaria** en España, mismo nivel que la media de la OCDE.
- **Menos de dos tercios de los graduados en programas de segunda etapa de educación secundaria vía profesional en España tienen acceso directo a la educación terciaria** en 2020. Esto limita las posibilidades de los graduados de continuar sus estudios y reduce el atractivo de los programas de formación profesional. La edad media de graduación en formación profesional es de 24 años en España, ligeramente por encima de la media de la OCDE de 22 años.
- **En 2019, España gastó el 4,3 % de su producto interior bruto (PIB) en instituciones de educación primaria a educación terciaria. La media en los países de la OCDE fue del 4,9 %.**
- España cuenta con una **proporción relativamente alta de personal académico de mayor edad en comparación con la media de los países de la OCDE**. En 2020, el 47 % del personal académico en España tiene 50 años o más, en comparación con el 40 % de media en los países de la OCDE.

## Los resultados de las instituciones educativas y el impacto del aprendizaje

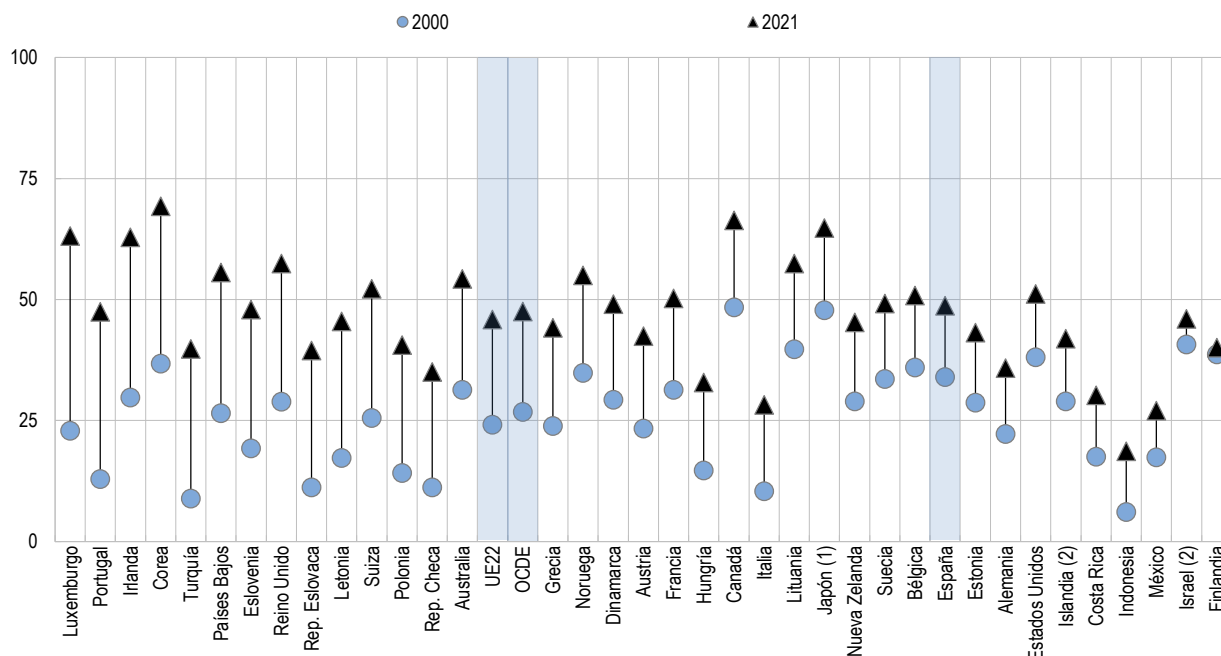
- El nivel educativo ha aumentado en toda la OCDE, en particular en el nivel terciario. Entre 2000 y 2021, la proporción de personas de 25 a 34 años con educación terciaria aumentó una media de 21 puntos porcentuales (del 27 % al 48 %). En España, la participación también aumentó, aunque a un ritmo más lento, 15 puntos porcentuales (del 34 % en 2000 al 49 % en 2021) (Gráfico 1). España es uno de los 24 países de la OCDE donde el nivel terciario es el nivel educativo más común alcanzado por las personas de 25 a 34 años es el nivel terciario.
- La segunda etapa de la educación secundaria a menudo se considera la cualificación mínima para una participación exitosa en el mercado laboral. Aunque el aumento general en el nivel educativo ha visto una disminución paralela en la proporción de personas de 25 a 34 años sin estudios de segunda etapa de la educación secundaria, todavía el 14 % de los adultos jóvenes en la OCDE abandonaron la educación sin una calificación de segunda etapa de educación secundaria en

2021, una disminución de 5 puntos porcentuales desde 2011. En España, el porcentaje pasó del 35 % en 2011 al 28 % en 2021.

- Las medias nacionales brindan solo una imagen incompleta de la situación en un país determinado. En la mayoría de los países de la OCDE, existen grandes diferencias en el logro educativo entre las regiones subnacionales. Este es el caso de España. En 2021, la diferencia entre la comunidad con mayor porcentaje de personas de 25 a 64 años con estudios terciarios (País Vasco, con un 56 %) y la de menor porcentaje (Ceuta, con un 25 %) es de 31 puntos porcentuales. Las variaciones en el nivel educativo entre las regiones subnacionales reflejan, hasta cierto punto, la diferencia en las condiciones económicas y los patrones de migración interna.
- Un mayor nivel educativo se asocia a menudo con mejores perspectivas de empleo y España no es una excepción. En 2021, la tasa de empleo entre las personas de 25 a 34 años con educación terciaria en España es 19 puntos porcentuales más alta que entre aquellos con un título inferior a la segunda etapa de educación secundaria y 9 puntos porcentuales más que entre aquellos con un título de segunda etapa de educación secundaria o postsecundaria no terciaria. De media en los países de la OCDE, la tasa de empleo entre las personas de 25 a 34 años con una cualificación terciaria es 26 puntos porcentuales más alta que entre aquellos con un nivel inferior a la segunda etapa de educación secundaria y 8 puntos porcentuales más alta que entre aquellos con un título de segunda etapa de educación secundaria o postsecundaria no terciaria. Si bien el vínculo positivo entre el logro educativo y las tasas de empleo se mantiene tanto para hombres como para mujeres en toda la OCDE, es particularmente significativo para las mujeres. En España, el 49 % de las mujeres con un nivel educativo inferior a la segunda etapa de educación secundaria están empleadas, frente al 77 % de las que tienen un título terciario. En cambio, las cifras son del 66 % y del 80 % para los hombres.
- En toda la OCDE, los beneficios para el mercado laboral de la educación terciaria han demostrado ser especialmente importantes durante las crisis económicas. Este fue el caso durante la pandemia de la COVID-19 en España. Entre 2019 y 2020, el desempleo de los trabajadores de 25 a 34 años con un nivel inferior a la segunda etapa de educación secundaria aumentó en 4,1 puntos porcentuales, en 3,6 puntos porcentuales para los trabajadores con un título de segunda etapa de educación secundaria y en 3,3 puntos porcentuales para los trabajadores con un título de educación terciaria. En 2021, el desempleo de los trabajadores con un nivel inferior a la segunda etapa de educación secundaria se mantuvo constante, mientras que se redujo en 1,8 puntos porcentuales para los trabajadores con un título de segunda etapa de educación secundaria y en 2 puntos porcentuales para los trabajadores con un título de educación terciaria.
- El nivel educativo no solo afecta a las perspectivas de empleo, sino también a los niveles salariales. De media en toda la OCDE, en 2020, los trabajadores a tiempo completo y parcial de 25 a 64 años con un nivel de segunda etapa de educación secundaria o postsecundaria no terciaria ganan un 29 % más que los trabajadores con un nivel inferior al nivel de segunda etapa de educación secundaria, mientras que aquellos con un título terciario ganan aproximadamente dos veces más. En España, la ventaja salarial de los trabajadores con educación terciaria fue similar a la media de la OCDE. En 2019, los trabajadores con un título de educación secundaria de segunda etapa o postsecundaria no terciaria ganaron un 32 % más que aquellos con un nivel inferior a la segunda etapa de educación secundaria y aquellos con un título de educación terciaria ganaron un 91 % más.

### Gráfico 1. Evolución del porcentaje de población de entre 25 y 34 años con nivel de educación terciaria (2000 y 2021)

En porcentaje



1. Los datos sobre educación terciaria incluyen programas de segunda etapa de educación secundaria o postsecundaria no terciaria (menos del 5 % de los adultos se encuentran en este grupo).

2. El año de referencia difiere de 2000: 2002 para Israel y 2003 para Islandia.

Los países están ordenados de forma decreciente según la diferencia en la proporción de personas de 25 a 34 años con nivel educativo de terciaria entre 2000 y 2021.

**Fuente:** OCDE (2022), *Education at a Glance Database*, <http://stats.oecd.org/>. Ver la sección *Fuentes* para más información y Anexo 3 para notas ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3.pdf)).

### Acceso a la educación, participación y progreso

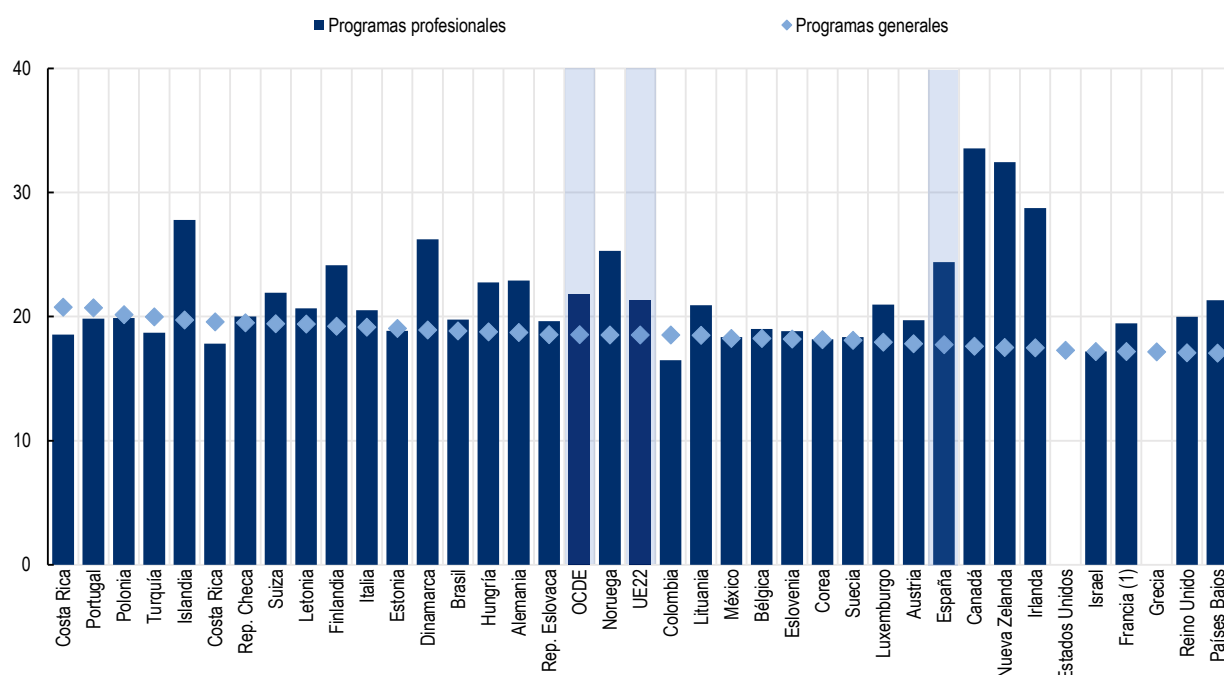
- La educación obligatoria se extiende desde los 6 años hasta los 16 años en España. El rango de edades para el que está matriculado al menos el 90 % de la población es más largo que el período de educación obligatoria y va desde los 3 hasta los 17 años. Esto es similar a la mayoría de los otros países de la OCDE, donde más del 90 % de la población también están matriculados por más tiempo que el período de educación obligatoria en 2020.
- La edad a la que los niños y niñas acceden a la educación y atención a la primera infancia difiere mucho entre los países. En España, la educación y atención a la primera infancia cuenta con objetivos educativos intencionados para los niños y niñas menores de 1 año y en 2020 el 41 % de los niños y niñas menores de 3 años están matriculados en educación infantil. En los países de la OCDE, la tasa media de escolarización entre los niños y niñas menores de 3 años es del 27 %, pero las tasas van desde menos del 1 % al 63 %. La tasa de escolarización entre los niños de 3 a 5 años aumenta sustancialmente en todos los países de la OCDE. En España, el 97 % de todos los niños y niñas de esta edad están matriculados en educación infantil, por encima de la media de la OCDE (83 %).
- La edad media de graduación de los programas de la segunda etapa de educación secundaria general varía de los 17 a los 21 años en los países de la OCDE y es de 18 años en España. Las

diferencias en la edad media de graduación de segunda etapa de la educación secundaria profesional son mucho mayores y varían de los 16 a los 34 años en la OCDE. Estas diferencias dependen, en gran medida, de cuándo se matriculan los estudiantes de la segunda etapa de educación secundaria vía profesional, que puede ser al final de su educación obligatoria o en un momento más avanzado de su carrera profesional. En España, la edad media de graduación de la segunda etapa de educación secundaria profesional es de 24 años, por encima de la media de la OCDE que es de 22 años (Gráfico 2).

- En casi todos los países de la OCDE, las mujeres son mayoría entre las personas graduadas en la segunda etapa de la educación secundaria general son mujeres. En España, la tasa es del 55 % en 2020, similar a la media de la OCDE. Por el contrario, los hombres están sobrerrepresentados entre los graduados de programas de segunda etapa de educación secundaria profesional en la mayoría de los países de la OCDE, pero no en España, donde los hombres representan el 50 % de todos los graduados en la vía profesional, por debajo de la media de la OCDE (55 %).
- En España, en 2021, el 62 % de los jóvenes de entre 18 y 24 años siguen estudiando o formándose a tiempo completo o a tiempo parcial en la segunda etapa de educación secundaria o en la educación terciaria (muy por encima de la media de la OCDE del 54 %). De estos estudiantes, el 8 % combina su educación o formación con algún tipo de empleo en España, frente al 17 % de media en la OCDE.
- Una diferencia significativa entre los sistemas educativos es si los programas de educación secundaria profesional brindan o no acceso a la educación terciaria. En 12 países de la OCDE, todos los graduados de la segunda etapa de educación secundaria profesional tienen acceso directo a la educación terciaria en 2020. En España, solo el 59 % de los graduados en un programa de segunda etapa de educación secundaria profesional tienen acceso directo a la educación terciaria.
- Como es el caso en todos los países de la OCDE, la mayoría de los estudiantes matriculados en el nivel terciario en España cursan estudios de grado en 2020 (57 % en España y 63 % de media en la OCDE). Sin embargo, el siguiente nivel de matriculación más común varía de un país a otro. En España, los matriculados en estudios de educación terciaria de ciclo corto constituyen el segundo grupo más grande de estudiantes de educación terciaria con un 22 %. Este también es el caso en otros 9 países de la OCDE, mientras que, en los 27 países restantes con datos disponibles, los estudiantes de máster forman el segundo grupo más grande.
- Con un 20 %, ciencias empresariales, administración y derecho fue el campo de estudio más popular entre los nuevos matriculados en la educación terciaria en España, como es el caso en la mayoría de los países de la OCDE en 2020. A pesar de la creciente necesidad de habilidades digitales y las buenas perspectivas de empleo de los estudiantes que titulan en el campo de las tecnologías de la información y la comunicación (TIC), solo una pequeña porción de los estudiantes elige este campo. En España, el 88 % de las personas de entre 25 y 64 años con una cualificación terciaria en TIC tienen empleo, pero los estudiantes de TIC representan solo el 6 % de las nuevas matrículas de educación terciaria, mismo valor que la media de la OCDE.

## Gráfico 2. Edad media de los graduados por primera vez en la segunda etapa de educación secundaria, por orientación del programa (2020)

En años



1. La edad media se basa en todos los graduados en lugar de los graduados por primera vez.

Los países están ordenados de forma decreciente según la edad media de los graduados de la segunda etapa de educación secundaria por primera vez en programas generales.

**Fuente:** OECD/Eurostat/UIS (2022), Tablas B3.1 y B3.2. Ver la sección *Fuentes* para más información y Anexo 3 para notas ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3.pdf)).

## Recursos financieros invertidos en educación

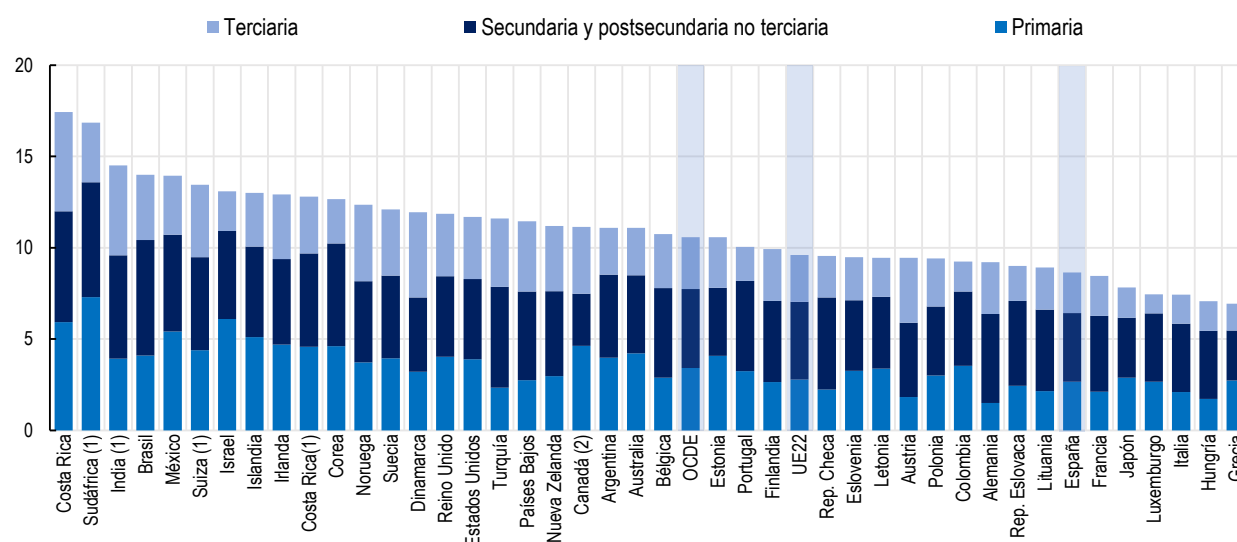
- Todos los países de la OCDE y asociados dedican una parte sustancial de su producción nacional a las instituciones educativas. En 2019, los países de la OCDE gastaron de media el 4,9 % de su PIB en instituciones de educación primaria a terciaria (incluyendo I+D). En España, la proporción correspondiente fue inferior a la media de la OCDE, con un 4,3 %. En relación con el gasto público total, el gasto público en educación primaria a terciaria (incluyendo I+D) fue del 8,6 %, por debajo de la media de la OCDE del 10,6 % (Gráfico 3).
- Entre 2008 y 2019, la financiación de las instituciones educativas por todas las fuentes creció un 10 % en España. Durante el mismo período de tiempo, el aumento del PIB fue menor con un 7 %. Como consecuencia, el gasto en instituciones educativas como porcentaje del PIB creció 0,1 puntos porcentuales durante el mismo período.
- El gasto en instituciones educativas como porcentaje del PIB o de los presupuestos públicos son medidas importantes de la relevancia que los países otorgan a la educación en sus decisiones presupuestarias. Sin embargo, no muestran la cantidad total de financiación por estudiante porque los niveles del PIB, los presupuestos públicos y el número de estudiantes varían de un país a otro. Desde la educación primaria hasta la terciaria (incluida la I+D), los países de la OCDE gastan una media de 11 990 dólares por estudiante (en dólares equivalentes convertidos según la paridad de poder adquisitivo para el PIB) en instituciones educativas cada año. En comparación, España

gastó 10 694 dólares por estudiante en 2019. Su gasto acumulado en la educación de un estudiante de 6 a 15 años fue de 93 094 dólares, por debajo de la media de la OCDE de 105 502 dólares.

- En los países de la OCDE, la oferta educativa en primaria y secundaria en términos de planes de estudio, estilos de enseñanza y gestión organizativa conduce, en promedio, a patrones similares de gasto por estudiante desde primaria hasta educación postsecundaria no terciaria. Los países de la OCDE en su conjunto se gastaron de media alrededor de 9923 dólares por estudiante en primaria y 11 400 dólares por estudiante en secundaria. En España, los valores fueron de 8580 dólares en primaria y 10 706 dólares en secundaria en 2019.
- El gasto por estudiante en educación terciaria en España es mayor que en otros niveles educativos, como es el caso en casi todos los demás países de la OCDE. En 2019, el gasto medio por estudiante en educación terciaria (incluyendo la I+D) en España fue de 14 237 dólares al año, unos 5700 dólares más que en primaria y 3500 dólares más que en secundaria. El gasto medio por alumno o alumna de educación terciaria en España estuvo por debajo de la media de la OCDE (17 559 dólares), pero similar al de muchos otros países. En otras palabras, el gasto medio en educación terciaria se vio elevado por los altos valores de un pequeño grupo de países. Con un 25 %, la proporción del gasto en investigación y desarrollo (I+D) en educación terciaria representó una fracción menor en España que en la media de los países de la OCDE (29 %).
- La financiación pública domina la educación no terciaria (primaria, secundaria y postsecundaria no terciaria) en todos los países de la OCDE, incluso después de las transferencias al sector privado. En 2019, la financiación privada en España supuso el 13 % del gasto en primaria, secundaria y postsecundaria no terciaria, frente al 10 % de media de la OCDE. Por el contrario, el gasto privado en educación terciaria es mayor en todos los países de la OCDE. En España, la proporción del gasto privado en educación terciaria fue del 33 %, ligeramente superior a la media de la OCDE del 31 %.

### Gráfico 3. Composición del gasto público total en educación como porcentaje del gasto público total (2019)

Educación primaria a terciaria (incluyendo I+D), en porcentaje



1. El año de referencia difiere de 2019. Para más detalle consulte la tabla fuente.

2. Educación primaria incluye programas de pre-primaria.

Los países están clasificados en orden decreciente del gasto público total en educación como porcentaje del gasto público total.

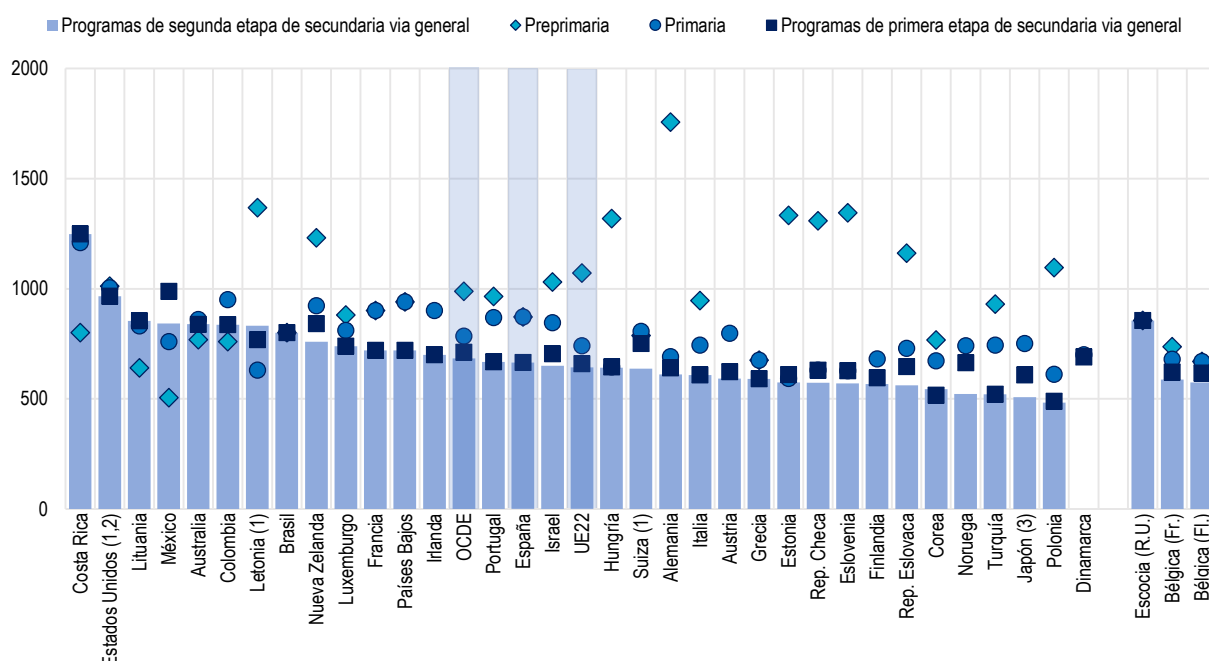
**Fuente:** OECD/UIS/Eurostat (2022), Tabla C4.1. Consulte la sección *Fuente* para obtener más información y el Anexo 3 para las notas. ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3.pdf)).

## Profesorado, el contexto de aprendizaje y la organización de los centros educativos

- Entre el año 2015 y el 2021, de media en los países de la OCDE, los salarios reglamentarios del profesorado de primera etapa de educación secundaria (programas generales) con 15 años de experiencia y las cualificaciones más habituales aumentaron un 6 % en términos reales. En España, los salarios aumentaron de forma similar a la media de la OCDE, un 5%.
- En los países de la OCDE, el promedio de horas de enseñanza al año de un docente medio en las instituciones educativas públicas tiende a disminuir a medida que aumenta el nivel educativo. Este es también el caso de España. En base a la normativa o acuerdos oficiales, en 2021, las horas lectivas anuales en España son 871 horas al año en los niveles de infantil y primaria y 665 horas en los niveles de primera etapa de secundaria (programas generales) y segunda etapa de educación secundaria (programas generales) (Gráfico 4).
- Durante su horario de trabajo, los docentes también realizan varias tareas no docentes, como planificar y preparar las clases, corregir el trabajo del alumnado y comunicarse o cooperar con los padres o tutores. En 2021, en el nivel de segunda etapa de secundaria, el 53 % del horario de trabajo de los docentes se dedica formalmente a actividades no docentes en España, en comparación con una media del 56 % en los países de la OCDE y asociados.
- La duración de la formación inicial del profesorado de primaria y primera etapa de secundaria oscila entre 2,5 y 6,5 años en los países de la OCDE. En España, la formación inicial del profesorado suele durar cinco años para los futuros profesores de primera etapa de secundaria (programas generales). Es más corto para los futuros maestros de primaria, 4 años. Como es el caso en casi todos los países de la OCDE, se otorga un título de nivel terciario a los futuros docentes de todos los niveles de educación al finalizar su formación docente inicial.
- El desarrollo profesional continuo es obligatorio en cierta medida para los docentes de programas generales en la mayoría de los países con datos y España no es una excepción. En España, tal y como lo define la normativa nacional, el desarrollo profesional continuo es un derecho y una obligación de todo el profesorado y una responsabilidad de las administraciones educativas y de los propios centros.

## Gráfico 4. Tiempo de instrucción del profesorado por nivel educativo (2021)

Instrucción obligatoria neta en horas por año, en instituciones públicas



1. Tiempo de instrucción real (en Letonia excepto para el nivel preescolar).

2. El año de referencia difiere de 2021. Consulte la tabla de origen para obtener más detalles.

3. Tiempo de instrucción medio previsto en cada centro al inicio del curso escolar.

Los países y otros participantes están ordenados de forma decreciente según el número de horas lectivas por año en la segunda etapa de educación secundaria vía general.

**Fuente:** OCDE (2022), Tabla D4.1. Consulte la sección *Fuente* para obtener más información y el Anexo 3 para obtener notas ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3.pdf)).

## Educación terciaria

- En 2021, entre las personas de 25 a 64 años en España, los másteres o títulos equivalentes son el título de nivel terciario más común con un 16 % de la población, seguidas de las cualificaciones terciarias de ciclo corto con un 12 % y los grados o títulos equivalentes con un 11 %. Esto es diferente a la media de la OCDE, donde los títulos de grado o equivalentes son los más comunes (19 %), seguidos de másteres o títulos equivalentes (14 %) y títulos de nivel terciario de ciclo corto (7 %). Como en todos los países de la OCDE, solo una pequeña fracción de la población adulta tiene un doctorado o un título equivalente; la proporción es del 1% en España.
- En promedio, la titulación terciaria genera una amplia gama de beneficios en el mercado laboral, incluidas altas tasas de empleo. Sin embargo, existen diferencias significativas según el área de estudio. En 2021, las tasas de empleo en España son más altas entre las personas adultas con educación terciaria que estudiaron TIC con un 88 % y más bajas entre aquellos que estudiaron los campos amplios de artes y humanidades, de ciencias sociales, periodismo e información o de educación, con un 78 %. Sin embargo, estas diferencias deben ser puestas en perspectiva. Aun así, la tasa de empleo entre las personas de 25 a 64 años con educación terciaria en las áreas con la tasa de empleo más baja es 7 puntos porcentuales más elevada que la de entre aquellos con el nivel de segunda etapa de educación secundaria (incluyendo todos los campos).

- A pesar de las ventajas del mercado laboral de un título terciario, muchos estudiantes terciarios no se gradúan a tiempo o no se gradúan en absoluto. En España, el 37 % de los estudiantes de grado se gradúan dentro de la duración teórica del programa en 2020. En toda la OCDE, la tasa de finalización dentro de la duración teórica del programa oscila entre el 12 % y el 69 %. Las tasas de finalización tres años después de la duración teórica del programa son significativamente más altas en la mayoría de los países y las diferencias entre los países de la OCDE son algo más estrechas. En España, el 72 % de los estudiantes de grado se han graduado considerados tres años posteriores a la duración teórica del programa, en comparación con el 68 % de la media de la OCDE.
- En todos los países de la OCDE, las tasas de finalización de la educación terciaria son más altas para las mujeres que para los hombres. En España, el 79 % de las mujeres se gradúan considerados los tres años siguientes a la finalización de la duración teórica del programa de grado, frente al 64 % de los hombres.
- En toda la OCDE, hay poca diferencia entre las tasas de finalización de las instituciones públicas y privadas, pero las cifras difieren de un país a otro. En España, el 71% de los estudiantes de grado en instituciones públicas se gradúan tras los tres años posteriores al final de la duración teórica del programa, mientras que la proporción es del 82 % para instituciones privadas.
- En la mayoría de los países de la OCDE, incluida España, las personas adultas con educación terciaria tienen tasas más altas de participación en la educación y formación no formal que aquellos con un nivel educativo más bajo. En 2021, el 18 % de las personas de entre 25 y 64 años con educación terciaria en España había participado en educación y formación no formal en las cuatro semanas anteriores a la encuesta de recogida de información, en comparación con el 4 % de sus homólogos con un nivel inferior a la segunda etapa de educación secundaria. Estas tasas son similares a la media de los países de la OCDE que aportaron información con el mismo período de referencia, donde el 16 % de las personas adultas con educación terciaria había participado en educación y formación no formal en comparación con el 4 % de las personas adultas con un nivel inferior a la segunda etapa de educación secundaria.
- El ingreso a la educación terciaria a menudo significa un gasto para los estudiantes y sus familias, en términos de precios de matrícula, ingresos no percibidos y gastos de manutención, aunque también pueden recibir apoyo financiero para ayudar a costear los estudios. Sin embargo, las políticas públicas sobre los precios de matrícula y el apoyo financiero para los estudiantes difieren mucho entre países. En España, los niveles medios de precios de matrícula se combinan con niveles intermedios de apoyo financiero para los estudiantes. Para el año académico de referencia 2018/19, las instituciones públicas en España cobraron precios públicos de matrícula de 1 768 dólares para estudiantes nacionales de nivel de grado y de 2 581 dólares a los de nivel de máster.
- Los países de la OCDE tienen diferentes enfoques para brindar apoyo financiero a los estudiantes matriculados en educación terciaria, pero en general los países con el nivel más alto de transferencias públicas al sector privado son los que también tienden a tener los precios de matrícula más altos. En seis países de la OCDE y otros participantes, al menos el 80 % de los estudiantes nacionales reciben apoyo financiero público en forma de préstamos, becas o subvenciones para estudiantes. En otros seis países, menos del 25 % de los estudiantes reciben apoyo financiero. En estos países y otros participantes, el apoyo financiero público se dirige a grupos seleccionados de estudiantes, como los de familias socioeconómicamente desfavorecidas. España se encuentra entre los dos grupos, donde el 44 % de los estudiantes reciben apoyo financiero.
- A lo largo de las décadas, se han establecido instituciones privadas independientes para satisfacer la creciente demanda de la educación terciaria. De media en la OCDE, el 17 % de los estudiantes están matriculados en instituciones privadas independientes, pero esta cifra oculta grandes diferencias entre países en 2020. En España, el 22 % de los estudiantes de educación terciaria

están matriculados en dichas instituciones. Las instituciones privadas independientes cobran de media precios de matrícula anuales más altos que las instituciones públicas para los programas de máster en todos los países de la OCDE y otros participantes con datos disponibles, excepto en Chile y Lituania.

- Permitir que los estudiantes estudien a tiempo parcial es una forma importante de facilitar el acceso a la educación terciaria. Muchos estudiantes a tiempo parcial no podrían estudiar a tiempo completo, por ejemplo, porque tienen responsabilidades de cuidado de niños o tienen que trabajar para financiar sus estudios. En 2020, la proporción de estudiantes a tiempo parcial en el nivel terciario en España es del 25 %, por encima de la media de la OCDE del 21 %. En comparación con 2013, este dato ha disminuido en 2 puntos porcentuales.
- El personal de nivel terciario tiende a comenzar su carrera relativamente tarde debido a la duración de la educación que necesita para cualificarse. En España, solo el 3 % del personal académico tiene menos de 30 años, por debajo de la media de la OCDE del 8 % en 2020. En cambio, la proporción de personal académico de 50 años o más es del 47 %, por encima de la media de la OCDE en 7 puntos porcentuales.

## COVID-19: El segundo año de la pandemia

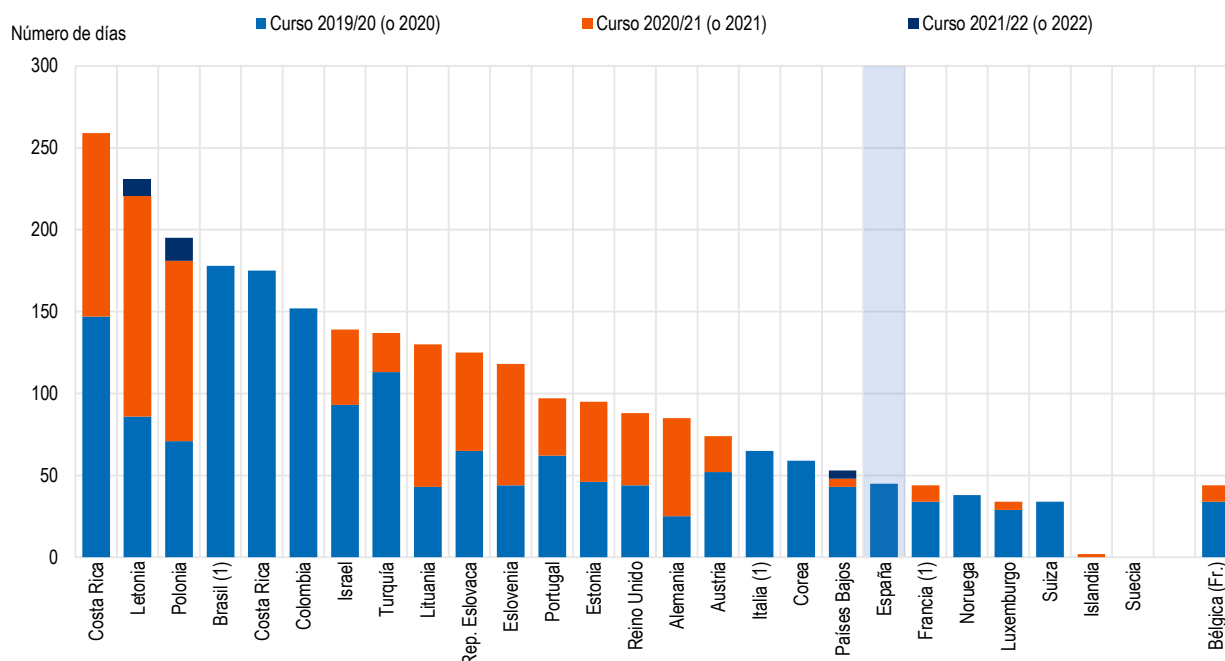
- La pandemia de COVID-19 interrumpió la educación tradicional en 2020 y la primera mitad de 2021, lo que provocó el cierre de escuelas en todos los países de la OCDE. Si bien la mayoría cerró sus instalaciones por completo a raíz de la pandemia en 2020, para 2021 la situación había mejorado y vuelto a la normalidad en la mayoría de los países en 2022. En España, los centros de educación primaria y secundaria estuvieron completamente cerrados durante 45 días en 2019/20, y permanecieron abiertos durante los cursos escolares 2020/21 y 2021/22 (Gráfico 5). No hubo cierres parciales durante estos tres cursos escolares.
- Las ausencias de los docentes también afectaron al funcionamiento regular de los centros durante la pandemia, ya sea por contagios de COVID-19 o por la cuarentena preventiva. Sin embargo, solo aproximadamente la mitad de los países recopilaban información sobre el absentismo docente, entre ellos España, donde se mantuvo constante en los cursos escolares 2019/20 y 2021/22.
- Los exámenes nacionales también se han visto afectados por la pandemia. En la segunda etapa de educación secundaria general, 18 países de la OCDE pospusieron sus exámenes nacionales durante el curso escolar 2019/20, mientras que 10 países incluso los cancelaron por completo. En 2020/21, los exámenes nacionales se pospusieron en 9 países y se cancelaron en 6 países. España reprogramó sus exámenes nacionales en el curso escolar 2019/20.
- La mayoría de los países realizaron evaluaciones del impacto del cierre de escuelas en los resultados del aprendizaje en varios niveles educativos y en varias dimensiones. España ha realizado estudios para evaluar los efectos de la pandemia en el impacto en educación primaria, en la primera etapa de educación secundaria y en la segunda etapa de educación secundaria general. Como muchos otros países, España también evaluó dimensiones como la efectividad de las estrategias de aprendizaje a distancia durante el cierre de escuelas, así como la salud mental y el bienestar de los estudiantes.
- En el curso escolar 2021/22, se implementaron en España programas nacionales para apoyar a los estudiantes afectados por la pandemia en los niveles de preprimaria, primaria, primera etapa de educación secundaria, segunda etapa de educación secundaria (general y profesional) y terciaria. Desde la educación primaria hasta la segunda etapa de secundaria, las medidas para abordar los efectos de la pandemia de COVID-19 incluyeron: sistemas de alerta temprana para

identificar a los estudiantes en riesgo de abandonar la escuela y reinscripción automática de los estudiantes en la escuela. El gobierno está evaluando la eficacia de estos programas.

- La creciente digitalización de la educación ha sido una consecuencia importante de la pandemia de COVID-19 en muchos países de la OCDE. En la primera etapa de educación secundaria, España ha respondido a la pandemia con una mejor oferta de herramientas digitales en la escuela, aprendizaje a distancia, aprendizaje híbrido, formación digital al profesorado, tanto en la formación continua como en la formación inicial del profesorado, así como formación digital para estudiantes.
- La pandemia de COVID-19 tuvo un impacto significativo en el aprendizaje de personas adultas en la mayoría de los países de la OCDE. En 2020, la proporción de personas adultas que participaron en educación y formación formal o no formal en las cuatro semanas anteriores a la encuesta disminuyó de media 2 puntos porcentuales en los países de la OCDE en comparación con 2019. Sin embargo, en 2021, la participación en educación y formación no formal volvieron a los niveles anteriores a la pandemia en la mayoría de los países. En España, de 2019 a 2020, la proporción de personas adultas que participaron en educación y formación formal o no formal se mantuvo sin cambios. De 2020 a 2021, aumentó en 3 puntos porcentuales y, por lo tanto, ha aumentado por encima de los niveles previos a la pandemia.
- Las personas adultas jóvenes que no están en educación ni empleadas (*NEET*) durante períodos prolongados están en riesgo de situaciones económicas y sociales adversas, tanto a corto como a largo plazo. Después de aumentar durante la pandemia de COVID-19 en 2020, la proporción de jóvenes de 18 a 24 años que son *NEET* en España disminuyó en 2021. La proporción de *NEET* entre los jóvenes de 18 a 24 años fue del 19 % en 2021, niveles pre-COVID.

### Gráfico 5. Cierre de los centros educativos debido a la COVID-19 (2020, 2021 y el primer trimestre de 2022)

Número de días de instrucción en los que los centros que imparten la primera etapa de educación secundaria permanecieron cerrados, excluyendo las vacaciones escolares, los días festivos y los fines de semana



**Nota:** Los datos que sustentan este informe se han obtenido a través de la *Encuesta sobre Respuestas Nacionales Conjuntas al COVID 19*, un esfuerzo de colaboración realizado por la Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura (UNESCO), el Fondo de las Naciones Unidas para la Infancia (UNICEF), el Banco Mundial (BM) y la Organización para la Cooperación y el Desarrollo Económicos (OCDE). Los datos para otros niveles educativos están disponibles en: <https://www.oecd.org/education/Results-4th-wave-COVID-Survey-OECD-database.xlsx>.

1. Faltan los datos para 2021 y 2022.

Los países y otros participantes están ordenados de forma decreciente según el número total de días que los centros de enseñanza de primera etapa de educación secundaria estuvieron completamente cerrados durante los años escolares 2019/20 (2020), 2020/21 (2021) y 2021/22 (2022).

**Fuente:** OECD/UIS/UNESCO/UNICEF/WB (2022).

## Referencias

OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/69096873-en>.

OECD (2022), "Regional education", *OECD Regional Statistics (database)*, <https://dx.doi.org/10.1787/213e806c-en>.

## Más información

**Para más Información sobre *Education at a Glance 2022* y para acceder al conjunto de todos los indicadores, visite:** <https://doi.org/10.1787/3197152b-en>.

Para más información en la metodología usada durante la recogida de datos para cada indicador, las referencias a las fuentes y notas específicas de cada país, visite el Anexo 3 ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3.pdf)).

Para información general sobre metodología, visite el manual *OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications* (<https://doi.org/10.1787/9789264304444-en>).

Para obtener datos actualizados, consulte el sitio <http://dx.doi.org/10.1787/eag-data-en> y consulte el *StatLinks* bajo las tablas y gráficos que aparecen en la publicación.

Los datos de regiones subnacionales en una selección de indicadores están disponibles en *Regional Statistics (database)* (OECD, 2022). A la hora de interpretar los datos de entidades subnacionales, el lector debe tener en cuenta que el tamaño de la población de las entidades subnacionales puede variar mucho dentro de los países. Por ejemplo, la variación regional en escolarización puede verse afectada por el alumnado escolarizado en una región diferente a la de su área de residencia, particularmente en los niveles superiores de educación. Además, las disparidades regionales tienden a ser mayores cuando se utilizan más entidades subnacionales en el análisis.

Explore, compare y visualice más datos y análisis con *Education GPS*:

<https://gpseducation.oecd.org/>

Los datos sobre las respuestas educativas durante la COVID-19 fueron recogidos y procesados por la OCDE a partir de la encuesta *Joint National Responses to COVID-19 School Closures*, un esfuerzo de colaboración realizado por la Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura (UNESCO); el Instituto de Estadística de la UNESCO (IEU); el Fondo de las Naciones Unidas para la Infancia (UNICEF); el Banco Mundial y la OCDE.

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### Las preguntas pueden ser dirigidas a:

Dirección de educación y habilidades

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# Sweden

## The output of educational institutions and the impact of learning

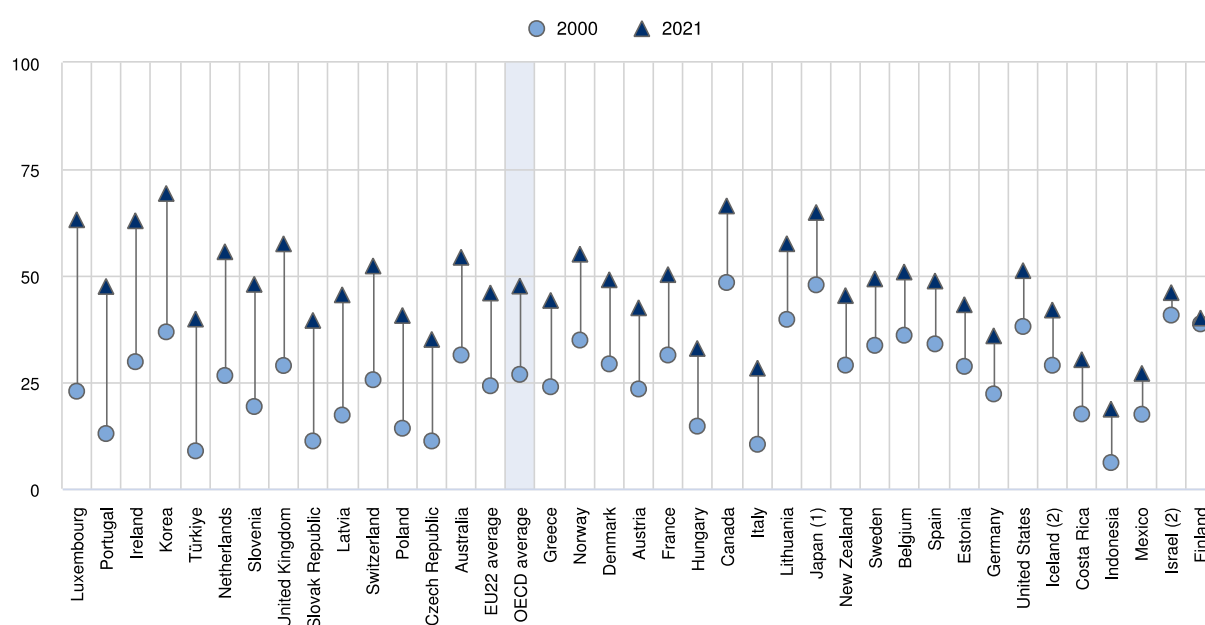
- Educational attainment has been increasing throughout the OECD, in particular at tertiary level. Between 2000 and 2021, the share of 25-34 year-olds with tertiary attainment increased on average by 21 percentage points. In Sweden, the share also increased albeit at a slower pace, by 16 percentage points (from 34% in 2000 to 49% in 2021) (Figure 1). Sweden is one of the 24 OECD countries where tertiary education is the most common highest level of attainment among 25-34 year-olds.
- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. Although the general increase in educational attainment has seen a parallel decline in the share of 25-34 year-olds without upper secondary attainment, 14% of young adults across the OECD still left school without an upper secondary qualification. In Sweden, the share is 16%, which is higher than the OECD average.
- Higher educational attainment is often associated with better employment prospects and Sweden is no exception. In 2021 the employment rate among 25-34 year-olds with tertiary education in Sweden was 26 percentage points higher than among those with below upper secondary attainment and 5 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. On average across OECD countries, the employment rate among 25-34 year-olds with a tertiary qualification was 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. While the positive link between educational attainment and employment rates holds for both men and for women across the OECD, it is particularly strong for women. In Sweden, 46% of women with below upper secondary attainment were employed in 2021, compared to 85% of those with tertiary attainment. In contrast, the figures were 71% and 87% for men.
- Across the OECD, the labour market benefits of tertiary attainment have proved especially strong during economic crises. This was also the case during the COVID-19 pandemic in Sweden. Between 2019 and 2020, unemployment for 25-34 year-old workers with below upper secondary attainment increased by 6.7 percentage points, by 1.5 percentage points for workers with upper secondary attainment and by 2 percentage points for workers with tertiary attainment. In 2021, unemployment for workers with below upper secondary attainment increased by 1.7 percentage points, compared to 2020, by 0.1 percentage points for workers with upper secondary attainment and decreased by 0.6 percentage points for workers with tertiary attainment.
- Educational attainment affects not just employment prospects, but also wage levels. On average across the OECD, 25-64 year-old workers with upper secondary or post-secondary non-tertiary attainment earn 29% more than workers with below upper secondary attainment, while those with tertiary attainment earn about twice as much. In Sweden, the earnings advantage of tertiary-educated workers was smaller than the OECD average. In 2020, workers with upper secondary or

post-secondary non-tertiary attainment earned 30% more than those with below upper secondary attainment and those with tertiary attainment earned 61% more.

- National averages provide only an incomplete picture of the situation in any given country. In most OECD countries, there are large differences in educational attainment across subnational regions. This is also the case in Sweden. In 2021, the difference between the region with the highest share of 25-64 year-olds with tertiary attainment (Stockholm, at 56%) and that with the lowest share (North Middle Sweden, at 36%) was 21 percentage points. These subnational variations do not only reflect differences in education opportunities. To a large degree, they are due to economic conditions and internal migration patterns.

**Figure 1. Trends in the share of tertiary-educated 25-34 year-olds (2000 and 2021)**

In per cent



1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group).

2. Year of reference differs from 2000: 2002 for Israel and 2003 for Iceland.

Countries are ranked in descending order of the difference in the share of tertiary-educated 25-34 year-olds between 2000 and 2021.

**Source:** OECD (2022), Education at a Glance Database, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-A.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf)).

## Access to education, participation and progress

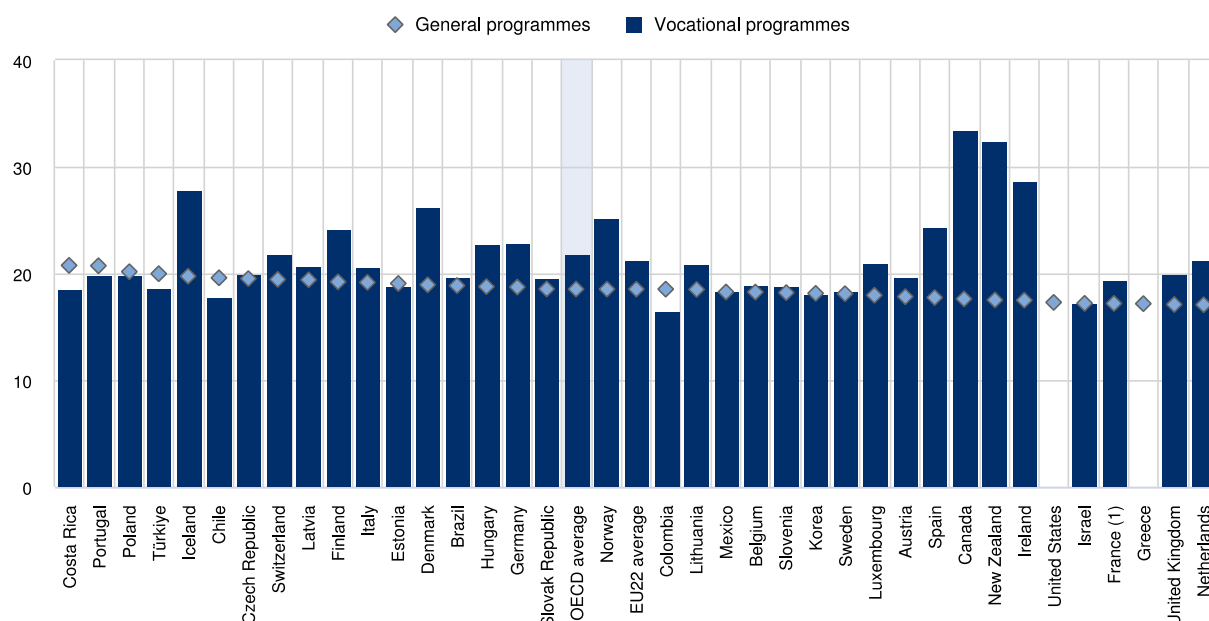
- Compulsory education begins at the age of 6 and ends at the age of 15 in Sweden. The range of ages for which at least 90% of the population are enrolled is longer than the period of compulsory education and goes from the age of 2 to the age of 18. This is similar to most other OECD countries, where more than 90% of the population are also enrolled for longer than the period of compulsory education.
- The age at which children enter early childhood education differs widely across countries. In Sweden, early childhood education starts offering intentional education objectives at age 1 and

48% of children under 3 are enrolled in early childhood education. Across OECD countries, the average enrolment rate among children below the age of 3 is 27%, but the rates range from less than 1% to 63%. The enrolment rate among 3-5 year-olds increases substantially in all OECD countries. In Sweden, 95% of all children of this age are enrolled in early childhood education, which is above the OECD average.

- The average age of graduation from general upper secondary programmes varies from 17 to 21 years across OECD countries and is 18 years in Sweden. Differences in the average age of graduation from vocational upper secondary education are much larger and vary from 16 to 34 years across the OECD. These differences largely depend on whether vocational upper secondary students usually enrol in these programmes towards the end of their compulsory education or in mid-career. In Sweden, the average age of graduation from vocational upper secondary education is 18 years, which is below the OECD average at 22 years (Figure 2).
- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. In Sweden, the share is 53% (OECD average 55%). In contrast, men are overrepresented among graduates of vocational upper secondary programmes in most OECD countries, as is the case in Sweden where they make up 60% of all vocational upper secondary graduates, above the OECD average (55%).
- In Sweden, 49% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (below the OECD average of 54%). A subset of these students (15% of 18-24 year-olds) combine their education or training with some form of employment in Sweden, compared to 17% on average across the OECD.
- One significant difference across countries' education systems is on whether or not vocational upper secondary programmes provide access to tertiary education. In 12 OECD countries and other participants, all vocational upper secondary graduates have direct access to tertiary education. In Sweden only 31% of graduates from vocational upper secondary programme have direct access to tertiary education.
- As is the case in all OECD countries, a majority of students enrolled at tertiary level in Sweden are bachelor's students (57%). However, the next commonest enrolment level varies from country to country. In Sweden, master's students make up the second largest group of tertiary students at 32%. This is also the case in 25 other OECD countries, while in the remaining 14 countries with available data, short-cycle tertiary students form the second largest group.
- At 19%, engineering, manufacturing and construction was the most popular field of study among new entrants into tertiary education in Sweden, in contrast to most OECD countries where the broad field of business, administration and law was most popular. Despite the growing need for digital skills and the good employment prospects of students with degrees in information and communication technologies (ICT), only a small fraction of entrants into tertiary education choose this field. In Sweden, 91% of 25-64 year-olds with a tertiary ICT qualification are employed, but ICT students make up 6% of new entrants into tertiary education. This is the same level as the OECD average.

**Figure 2. Average age of first-time upper secondary graduates, by programme orientation (2020)**

In years



1. Average age is based on all graduates instead of first-time graduates.

Countries are ranked in descending order of the average age of first-time upper secondary graduates in general programmes.

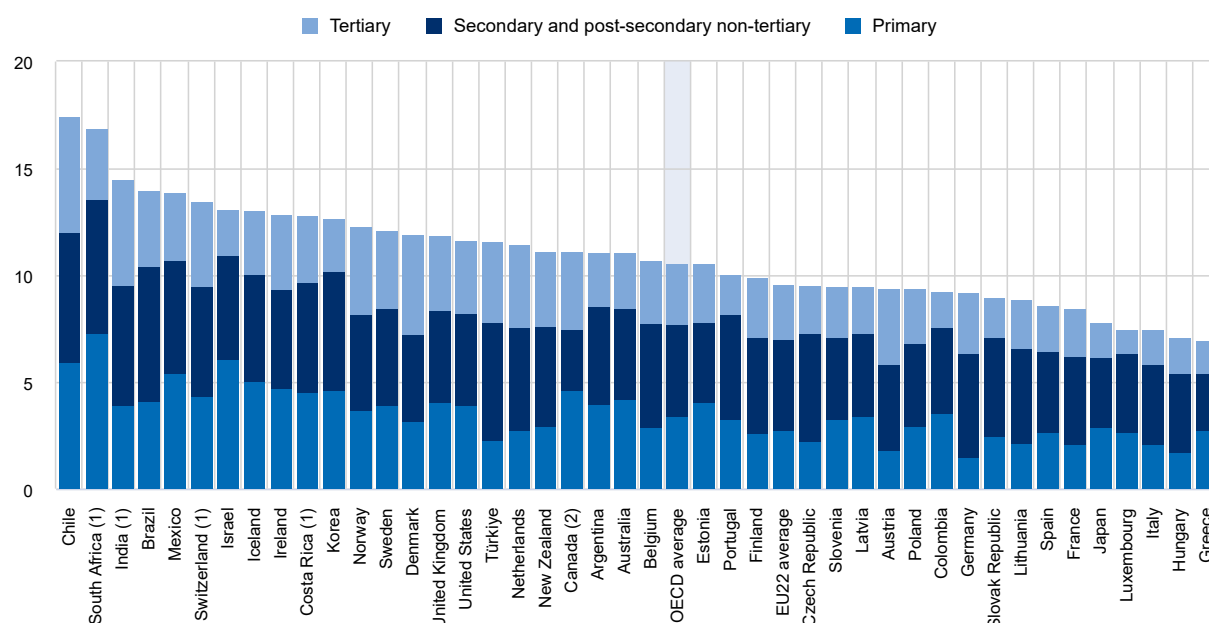
**Source:** OECD/Eurostat/UIS (2022), Tables B3.1 and B3.2. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

## Financial resources invested in education

- All OECD countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average 4.9% of their gross domestic product (GDP) on primary to tertiary educational institutions. In Sweden, the corresponding share was 5.5%. Between 2008 and 2019, funding for educational institutions from all sources grew by 28% in Sweden. Over the same period of time, the increase in GDP was lower with 23%. As a consequence, expenditure on educational institutions as a share of GDP grew by 0.2 percentage points over the same time period.
- Public spending on primary to tertiary education was 12.1% of total government expenditure in Sweden (Figure 3), higher than the OECD average (10.6%). Also, relative to GDP, public spending on primary to tertiary education (5.9%) is higher than the OECD average (4.4%).
- Spending on educational institutions as share of GDP or public budgets are important measures of the importance that countries place on education in their budgeting decisions. However, they do not show the total amount of funding per student because GDP levels, public budgets and student numbers vary from country to country. Across primary to tertiary education, OECD countries spend an average of USD 11 990 per student (in equivalent USD converted using PPPs for GDP) on educational institutions each year. In comparison, Sweden spent USD 15 337 per student in 2019. Its cumulative expenditure on educating a student from the age of 6 to 15 was USD 133 025, which was significantly above the OECD average of USD 105 502.

**Figure 3. Composition of total public expenditure on education as a percentage of total government expenditure (2019)**

Primary to tertiary education (including R&D), in per cent



1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

**Source:** OECD/UIS/Eurostat (2022), Table C4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-C.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf)).

- Across OECD countries, the provision of education at primary and secondary levels in terms of curricula, teaching styles and organisational management leads, on average, to similar patterns of expenditure per student from primary to post-secondary non-tertiary levels. OECD countries as a whole spend on average around USD 9 923 per student at primary and USD 11 400 per student at secondary level. In Sweden, the values are USD 13 234 at primary and USD 13 311 per student at secondary level, which are among the highest across OECD countries.
- In contrast to lower levels of education, spending on tertiary education varies widely across OECD countries. Expenditure per student at tertiary level in Sweden is higher than at other levels of education, as is the case in almost all other OECD countries. The average expenditure per student in Sweden is USD 26 046 per year, which is about USD 12 800 higher than that of the primary level and USD 12 700 higher than that of the secondary level. It is among the highest across OECD countries. The average expenditure at tertiary level (USD 17 559) is driven up by high values in a few countries, including in Sweden. At 54%, the share of research and development (R&D) expenditure makes up a larger fraction of expenditure on tertiary education in Sweden than on average across OECD countries (29%).
- Public funding dominates non-tertiary education (primary, secondary and post-secondary non-tertiary) in all OECD countries, even after transfers to the private sector. On average across the OECD, private funding accounts for 10% of expenditure at primary, secondary and post-secondary non-tertiary levels, while this share was 0% in Sweden in 2019. In contrast, private expenditure at

tertiary level was higher in all OECD countries. In Sweden, the share of private expenditure at tertiary level reached 12%, which was significantly below the OECD average of 31%.

## Teachers, the learning environment and the organisation of schools

- The salaries of teachers and school heads are an important determinant of the attractiveness of the teaching profession, but they also represent the single largest expenditure item in formal education. In most OECD countries, the statutory salaries of teachers (and school heads) in public educational institutions increase with the level of education they teach, and also with experience. Actual salaries also increase with the level of education. On average across OECD countries, actual salaries range from USD 41 941 at the pre-primary level to USD 53 682 at the upper secondary level. In Sweden, actual salaries average USD 42 850 at pre-primary level and USD 51 531 at upper secondary level.
- Teachers' average actual salaries remain lower than earnings of tertiary-educated workers in almost all OECD countries, and at almost all levels of education. This is also the case in Sweden. Lower secondary (general programme) teachers in Sweden earn 16.2% less than other tertiary-educated workers. In contrast school head actual salaries in Sweden are only slightly higher than the earnings of other tertiary educated workers. This is different from most OECD countries, where school heads tend to earn well above the average earnings of tertiary educated workers.
- Continuing professional development is compulsory for all teachers of general programmes in most countries with data, but Sweden is an exception. At secondary level, professional development activities are compulsory for teachers in some circumstances.

## Focus on tertiary education

- Among 25-64 year-olds in Sweden, bachelor's degrees are the most common tertiary attainment at 19% of the population followed by master's degrees with 16% and short-cycle tertiary qualifications with 10%. This is similar to the OECD average, where bachelor's degrees are most common (19%), followed by master's degrees (14%) and short cycle tertiary qualifications (7%). As in all OECD countries and other participants, only a small fraction of the population holds a doctoral degree: the share is 2% in Sweden.
- On average, tertiary attainment generates a wide range of labour-market benefits, including high employment rates. Yet, there are significant differences depending on the field of study. In 2021, employment rates in Sweden were highest among tertiary-educated individuals who studied nursing and associate fields with 94% and lowest among those who studied arts at 80%. Among 25-64 year-olds with tertiary attainment in the field with the lowest employment rate, this was 5.1 percentage points lower than among those with upper secondary attainment (all fields combined).
- Wages also differ according to the field of study. In Sweden, tertiary attainment in medical and dental fields generates the highest earnings. Full-time full-year workers aged 25-64 with a tertiary degree in this field earn on average 68% more than workers with upper secondary attainment (all fields combined). In contrast, tertiary attainment in the field of education leads to the lowest wages. Workers with this educational background earn on average 1% more than the wage of workers with upper secondary attainment (all fields combined).
- Despite the labour market advantages of a tertiary degree, many tertiary students do not graduate on time or do not graduate at all. In Sweden, 33% of bachelor's students graduate within the theoretical programme duration. Across the OECD, the completion rate within the theoretical programme duration ranges from 12% to 69%. Completion rates three years after the theoretical

programme duration are significantly higher in most countries and the differences between OECD countries somewhat narrower. In Sweden, 61% of bachelor's students have graduated within three years after the end of the theoretical programme duration, compared to 68% on average across the OECD.

- In all OECD countries, tertiary completion rates are higher for women than for men. In Sweden, 69% of women graduated within three years after the end of the theoretical programme duration at bachelor's level, compared to 49% of men. On average across the OECD, there is little systematic difference between the completion rates of public and private institutions, but the figures differ from country to country. In Sweden, 60% of bachelor's students graduate from public institutions within three years after the end of the theoretical programme duration, while the share is 72% for private institutions.
- In most OECD countries including in Sweden, tertiary-educated adults have higher rates of participation in non-formal education and training than those with a lower level of educational attainment. In 2021, 35% of 25-64 year-olds with tertiary attainment in Sweden had participated in non-formal education and training in the four weeks prior to being surveyed, compared to 16% of their peers with below upper secondary attainment.
- Entering tertiary education often means costs for students and their families, in terms of tuition fees, foregone earnings and living expenses, although they may also receive financial support to help them afford it. However, public policies on tuition fees and financial support for students differ greatly across countries. In Sweden, no tuition fees are combined with high levels of financial support for students. Public institutions do not charge tuition fees for national students.
- OECD countries have different approaches to providing financial support to students enrolled in tertiary education, but in general countries with the highest level of public transfers to the private sector are those that also tend to have the highest tuition fees. In six OECD countries and other participants, including Sweden, at least 80% of national students receive public financial support in the form of student loans, scholarships or grants. In another six countries and other participants, less than 25% of students receive financial support. In these countries, public financial support is targeted on selected groups of students, such as those from socio-economically disadvantaged families.
- Enabling students to enrol on a part-time basis is an important way to facilitate access to tertiary education. Many part-time students would not be able to study full time, for example because they have child-care responsibilities or have to work to fund their studies. The share of part-time students at the tertiary level in Sweden is 43%, above the OECD average (22%). Compared to 2013, it has decreased by 4 percentage points.
- Staff at tertiary level tend to start their careers relatively late due to the length of the education they need to qualify. In Sweden, only 5% of academic staff are aged under 30, below the OECD average (8%). In contrast, the share of academic staff aged 50 or over is 43%, which is above the OECD average by 3 percentage points.

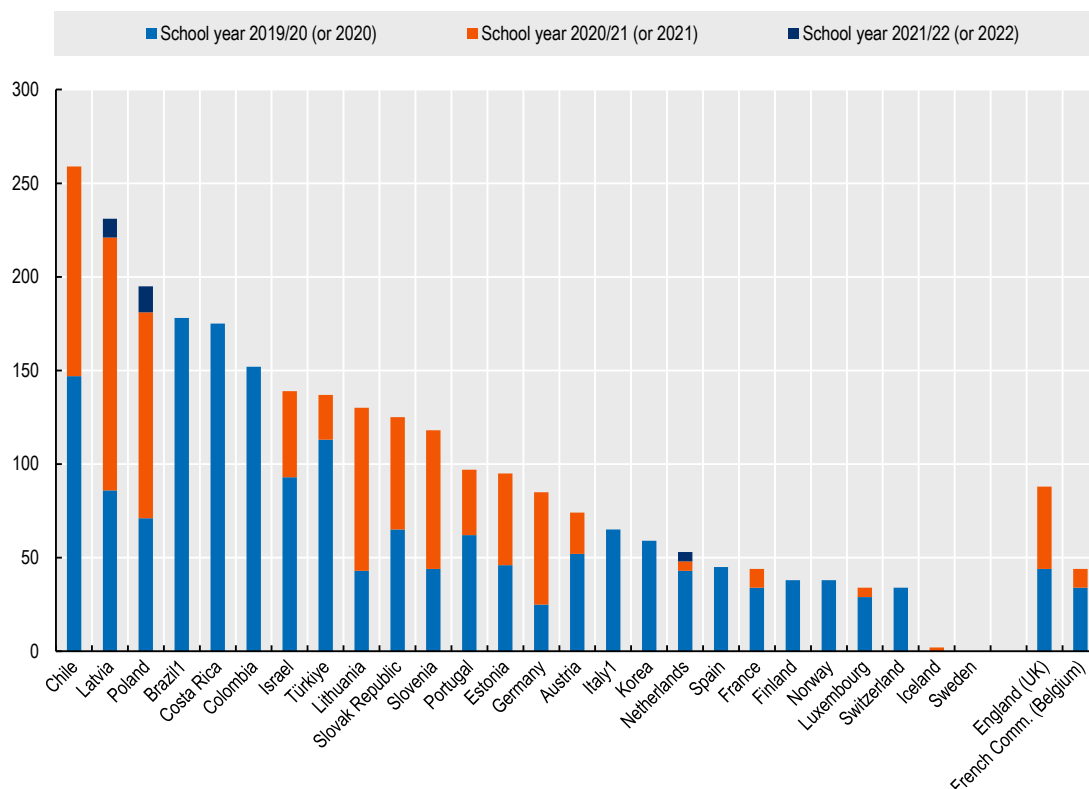
## COVID-19: The second year of the pandemic

- The COVID-19 pandemic disrupted traditional schooling in 2020 and the first half of 2021, leading to school closures across all OECD countries. While most shut down their premises entirely in the wake of the pandemic in 2020, by 2021 the situation had improved and returned to normal in most countries in 2022. In Sweden, primary and lower secondary schools stayed open while upper secondary schools were entirely closed for up to 69 days during the school year 2019/20, for up to 10 days in 2020/21 and stayed open in 2021/22 (Figure 4). Partial closures reached up to 43 days in 2020/21.

- Teacher absences also affected the regular operation of schools during the pandemic, whether due to COVID-19 infections or because of precautionary quarantine. However, only approximately half of countries collected information on teacher absenteeism. Sweden collected such data. In contrast to many other countries, teacher absenteeism increased strongly (by more than 5%) between 2019/20 and 2021/22.
- National examinations have also been affected by the pandemic. At general upper secondary level, 18 OECD countries postponed their national examinations during the school year 2019/20, while 10 countries even cancelled them entirely. In 2020/21, national examinations were postponed in 9 countries and cancelled in 6 countries. Sweden cancelled its national examinations in spring terms 2019/20 and in 2020/21.
- Most countries conducted assessments of the impact of school closures on learning outcomes at various levels of education and along several dimensions. Sweden has conducted studies to evaluate the effects of the pandemic on the impact on primary, lower secondary, upper secondary general and vocational education. The assessments covered mathematics, reading and science. Like many other countries, Sweden also evaluated dimensions such as the effectiveness of distance-learning strategies during school closures as well as the mental health and well-being of students and teachers.
- In school year 2022, national programmes to support students affected by the pandemic were implemented in Sweden at pre-primary, primary, lower secondary, upper secondary general and vocational level. At primary to upper secondary education, measures to address the effects of the COVID-19 pandemic included, psychosocial and mental health support to students, increased instruction time through summer schools, extended school days or the school week or academic year. The government does not plan to assess the effectiveness of these programmes.
- The challenges related to the COVID-19 pandemic have created additional costs for education systems. Preliminary budget estimates for 2021 suggest that, compared to 2020, the education budget at pre-primary to tertiary level in Sweden increased slightly (by between 1% and 5%, in nominal terms).
- The COVID-19 pandemic had a significant impact on adult learning in most OECD countries. In 2020, the share of adults who participated in a formal or non-formal education and training activity in the four weeks prior to being surveyed decreased by 2 percentage points on average across OECD countries compared with 2019. However, in 2021, participation in non-formal education and training returned to pre-pandemic levels in most countries. In Sweden, a similar pattern emerged. From 2019 to 2020, the share of adults participating in a formal or non-formal education and training activity fell by 6 percentage points. From 2020 to 2021, it increased by 6 percentage points and has thus increased above pre-pandemic levels.
- Young adults who are not in employment, education or training (NEET) for prolonged periods are at risk of adverse economic and social outcomes in both the short and the long term. After increasing during the COVID-19 pandemic in 2020, the share of 18-24 year-olds who are NEET in Sweden declined in 2021. The share of NEET among young adults was 12% in 2021, at pre-COVID levels.

**Figure 4. School closures due to COVID-19 (2020, 2021 and the first quarter of 2022)**

Number of instruction days of full closure of lower secondary schools excluding school holidays, public holidays and weekends



**Note:** The data underlying this report were produced through the Survey on Joint National Responses to COVID 19, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), the World Bank (WB), and the Organisation for Economic Co-operation and Development (OECD). Data for other levels of education are available at <https://www.oecd.org/education/Results-4th-wave-COVID-Survey-OECD-database.xlsx>.

1. Data for 2021 and 2022 are missing.

Countries and other participants are ranked in descending order of the total number of days lower secondary schools were fully closed during the school years 2019/20 (2020), 2020/21 (2021) and 2021/22 (2022).

**Source:** OECD/UIS/UNESCO/UNICEF/WB (2022).

## References

OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/69096873-en>.


OECD (2022), "Regional education", *OECD Regional Statistics (database)*, <https://dx.doi.org/10.1787/213e806c-en>.

## More information

**For more information on Education at a Glance 2022 and to access the full set of Indicators, see:**  
<https://doi.org/10.1787/3197152b-en>

For more information on the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, See Annex 3 ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_Annex3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_Annex3.pdf)).

For general information on the methodology, please refer to the OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications (<https://doi.org/10.1787/9789264304444-en>).

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.

Data on subnational regions for selected indicators are available in the *OECD Regional Statistics* (database) (OECD, 2022). When interpreting the results on subnational entities, readers should take into account that the population size of subnational entities can vary widely within countries. For example, regional variation in enrolment may be influenced by students attending school in a different region from their area of residence, particularly at higher levels of education. Also, regional disparities tend to be higher when more subnational entities are used in the analysis.

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<https://gpseducation.oecd.org/>

The data on educational responses during COVID-19 were collected and processed by the OECD based on the Joint Survey on National Responses to COVID-19 School Closures, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO); the UNESCO Institute for Statistics (UIS); the United Nations Children's Fund (UNICEF); the World Bank; and the OECD.

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### Questions can be directed to:

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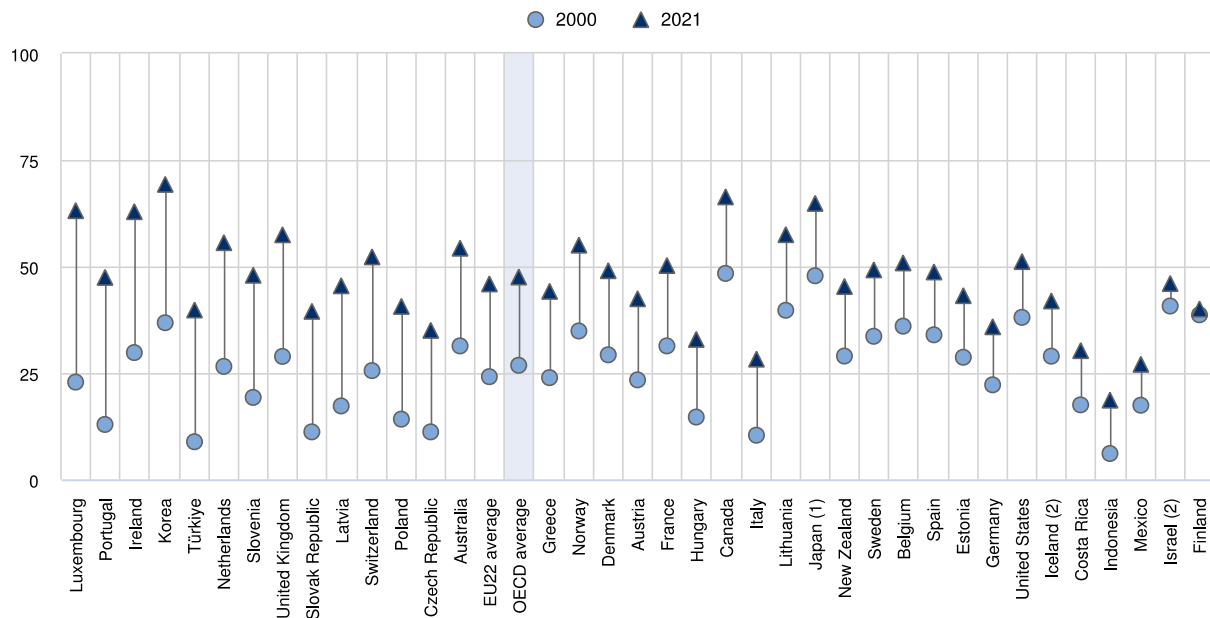
# Switzerland

## The output of educational institutions and the impact of learning

- Educational attainment has been increasing throughout the OECD, in particular at tertiary level. Between 2000 and 2021, the share of 25-34 year-olds with tertiary attainment increased on average by 21 percentage points. In Switzerland, the share increased at an even faster pace, by 27 percentage points (from 26% in 2000 to 52% in 2021) (Figure 1). Switzerland is one of the 14 OECD countries where at least half of 25-34 year-olds have a tertiary education.
- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. Although the general increase in educational attainment has seen a parallel decline in the share of 25-34 year-olds without upper secondary attainment, 14% of young adults across the OECD still left school without an upper secondary qualification. In Switzerland, the share is 8%, which is lower than the OECD average.
- Higher educational attainment is often associated with better employment prospects and Switzerland is no exception. In 2021 the employment rate among 25-34 year-olds with tertiary education in Switzerland was 25 percentage points higher than among those with below upper secondary attainment and 4 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. On average across OECD countries, the employment rate among 25-34 year-olds with a tertiary qualification was 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. While the positive link between educational attainment and employment rates holds for both men and for women across the OECD, it is particularly strong for women. In Switzerland, 54% of women with below upper secondary attainment were employed in 2021, compared to 89% of those with tertiary attainment. In contrast, the figures were 76% and 92% for men.
- Across the OECD, the labour market benefits of tertiary attainment have proved especially strong during economic crises. This was also the case during the COVID-19 pandemic in Switzerland. Between 2019 and 2020, unemployment for 25-34 year-old workers with below upper secondary attainment increased by 3.6 percentage points, by 0.8 percentage points for workers with upper secondary attainment and decreased by 0.2 percentage points for workers with tertiary attainment. In 2021, unemployment for workers with below upper secondary attainment increased by 0.5 percentage points, compared to 2020, by 0.1 percentage points for workers with upper secondary attainment and by 0.2 percentage points for workers with tertiary attainment.
- Educational attainment affects not just employment prospects, but also wage levels. On average across the OECD, 25-64 year-old workers with upper secondary or post-secondary non-tertiary attainment earn 29% more than workers with below upper secondary attainment, while those with tertiary attainment earn about twice as much. In Switzerland, the earnings advantage of tertiary-educated workers was smaller than the OECD average. In 2020, workers with upper secondary attainment earned 25% more than those with below upper secondary attainment and those with tertiary attainment earned 88% more.

**Figure 1. Trends in the share of tertiary-educated 25-34 year-olds (2000 and 2021)**

In per cent



1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group).

2. Year of reference differs from 2000: 2002 for Israel and 2003 for Iceland.

Countries are ranked in descending order of the difference in the share of tertiary-educated 25-34 year-olds between 2000 and 2021.

Source: OECD (2022), Education at a Glance Database, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-A.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf)).

## Access to education, participation and progress

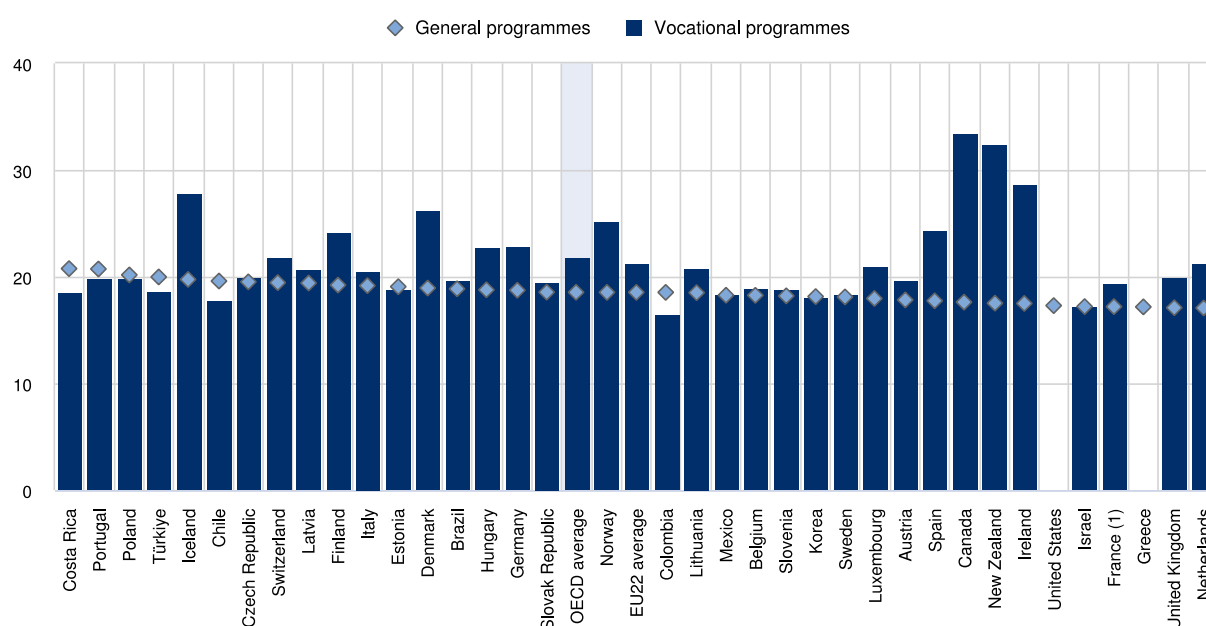
- The average age of graduation from general upper secondary programmes varies from 17 to 21 years across OECD countries and is 19 years in Switzerland. Differences in the average age of graduation from vocational upper secondary education are much larger and vary from 16 to 34 years across the OECD. These differences largely depend on whether vocational upper secondary students usually enrol in these programmes towards the end of their compulsory education or in mid-career. In Switzerland, the average age of graduation from vocational upper secondary education is 22 years, which is the same as the OECD average (Figure 2).
- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. In Switzerland, the share is 57% (OECD average 55%). In contrast, men are overrepresented among graduates of vocational upper secondary programmes in most OECD countries, as is the case in Switzerland where they make up 56% of all vocational upper secondary graduates, slightly above the OECD average (55%).
- In Switzerland, 55% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (slightly above the OECD average of 54%). A subset of these students (32% of 18-24 year-olds) combine their education or training with some form of employment in Switzerland, compared to 17% on average across the OECD.
- One significant difference across countries' education systems is on whether or not vocational upper secondary programmes provide access to tertiary education. In 12 OECD countries and

other participants, all vocational upper secondary graduates have direct access to tertiary education. In Switzerland 90% of graduates from vocational upper secondary programme have direct access to tertiary education.

- As is the case in all OECD countries, a majority of students enrolled at tertiary level in Switzerland are bachelor's students (67%). However, the next commonest enrolment level varies from country to country. In Switzerland, master's students make up the second largest group of tertiary students at 24%. This is also the case in 25 other OECD countries, while in the remaining 14 countries with available data, short-cycle tertiary students form the second largest group.
- At 27%, business, administration and law was the most popular field of study among new entrants into tertiary education in Switzerland, which is the case in most OECD countries. Despite the growing need for digital skills and the good employment prospects of students with degrees in information and communication technologies (ICT), only a small fraction of entrants into tertiary education choose this field. In Switzerland, 91% of 25-64 year-olds with a tertiary ICT qualification are employed, but ICT students make up only 4% of new entrants into tertiary education. This is below the OECD average of 6%.

**Figure 2. Average age of first-time upper secondary graduates, by programme orientation (2020)**

In years



1. Average age is based on all graduates instead of first-time graduates.

Countries are ranked in descending order of the average age of first-time upper secondary graduates in general programmes.

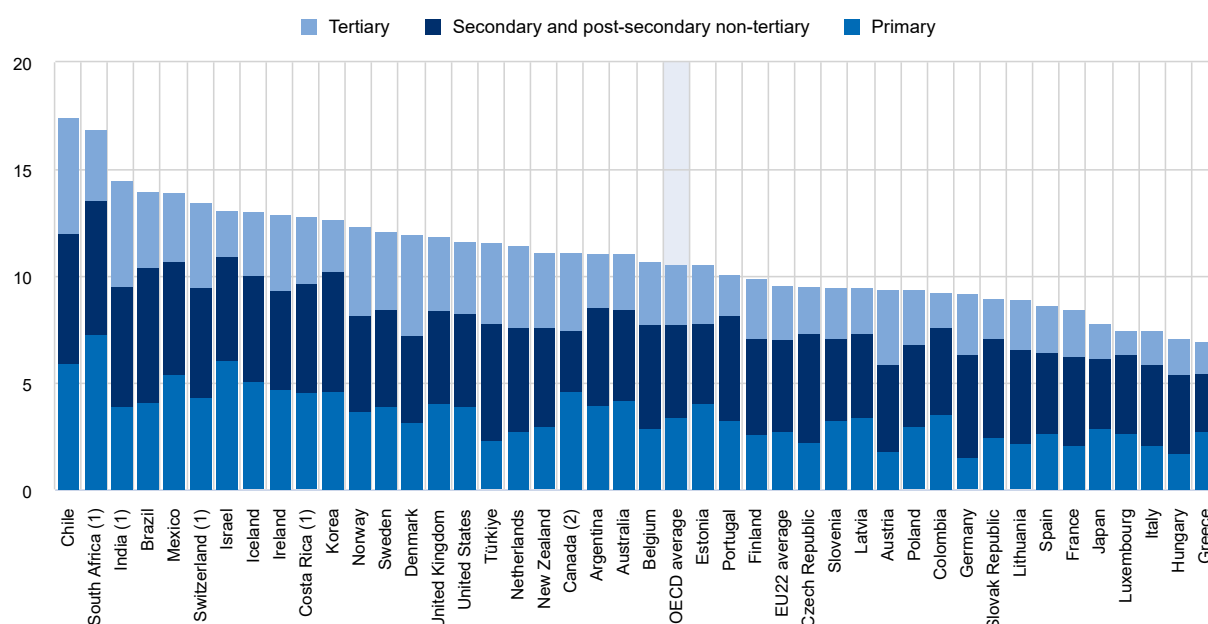
**Source:** OECD/Eurostat/UIS (2022), Tables B3.1 and B3.2. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

## Financial resources invested in education

- Public spending on primary to tertiary education was 13.5% of total government expenditure in Switzerland (Figure 3), higher than the OECD average (10.6%). In contrast, relative to GDP, public spending on primary to tertiary education (4.4%) is the same as the OECD average.

**Figure 3. Composition of total public expenditure on education as a percentage of total government expenditure (2019)**

Primary to tertiary education (including R&D), in per cent



1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

**Source:** OECD/UIS/Eurostat (2022), Table C4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-C.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf)).

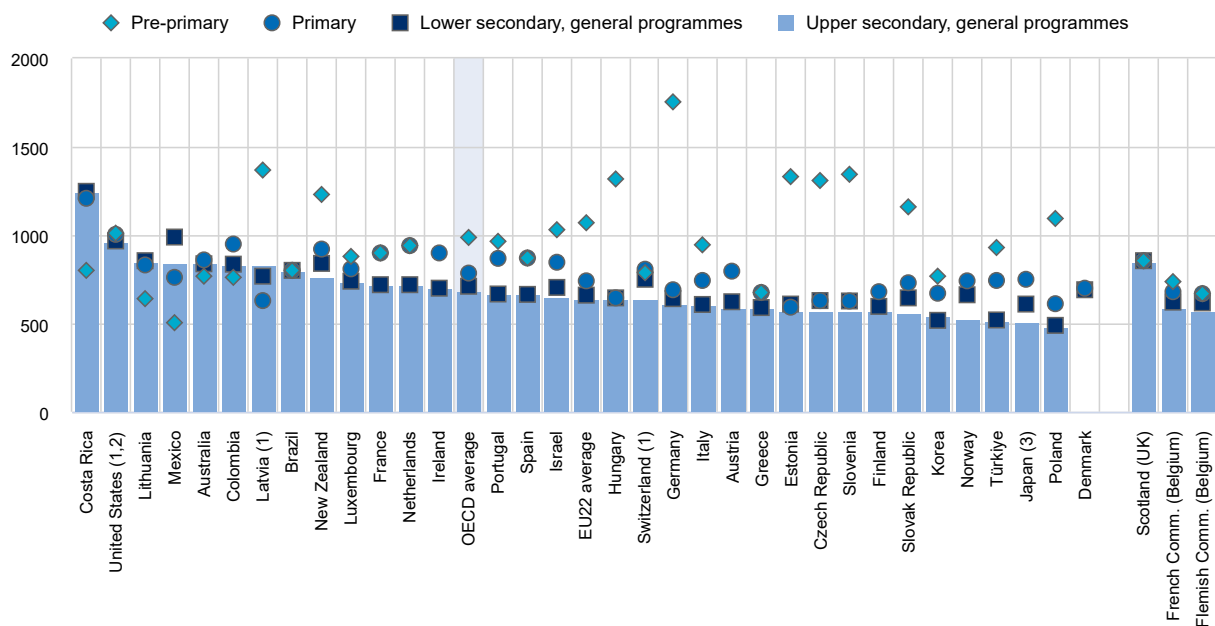
## Teachers, the learning environment and the organisation of schools

- The average number of teaching hours per year required from a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases. This is also the case in Switzerland.
- Based on official regulations or agreements, annual teaching hours in Switzerland are 788 hours per year at pre-primary level, 806 hours at primary level, 750 hours at lower secondary level (general programmes) and 638 hours at upper secondary level (general programmes) (Figure 4).
- During their working hours, teachers also perform various non-teaching tasks such as lesson planning and preparation, marking students' work and communicating or co-operating with parents or guardians. At the upper secondary level, 66% of teachers' working time is formally dedicated to non-teaching activities in Switzerland, compared to an average of 56% across OECD countries.

- The duration of initial teacher education for primary and lower secondary teachers ranges from 2.5 years to 6.5 years across OECD countries. In Switzerland, initial teacher education typically lasts 5 years for prospective lower secondary teachers (general programmes). It is shorter for prospective primary teachers, at 3 years. As is the case in almost all OECD countries, a tertiary degree is awarded to prospective teachers of all levels of education upon completion of their initial teacher training.

**Figure 4. Teaching time of teachers, by level of education (2021)**

Net statutory teaching time in hours per year, in public institutions



1. Actual teaching time (in Latvia except for pre-primary level).

2. Reference year differs from 2021. Refer to the source table for details.

3. Average planned teaching time in each school at the beginning of the school year.

Countries and other participants are ranked in descending order of the number of teaching hours per year in general upper secondary education.

**Source:** OECD (2022), Table D4.1. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-D.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-D.pdf)).

### Focus on tertiary education

- Among 25-64 year-olds in Switzerland, bachelor's degrees and short-cycle tertiary qualifications are the most common tertiary attainment at 24% of the population each followed by master's degrees with 18%. This is similar to the OECD average, where bachelor's degrees are most common (19%), followed by master's degrees (14%) and short cycle tertiary qualifications (7%). As in all OECD countries and other participants, only a small fraction of the population holds a doctoral degree: the share is 3% in Switzerland.
- On average, tertiary attainment generates a wide range of labour-market benefits, including high employment rates. Yet, there are significant differences depending on the field of study. In 2021, employment rates in Switzerland were highest among tertiary-educated individuals who studied engineering, manufacturing and construction with 93% and lowest among those who studied arts

at 82%. However, these differences need to be put into perspective. Even among 25-64 year-olds with tertiary attainment in the field with the lowest employment rate, this was 0.8 percentage points higher than among those with upper secondary attainment (all fields combined).

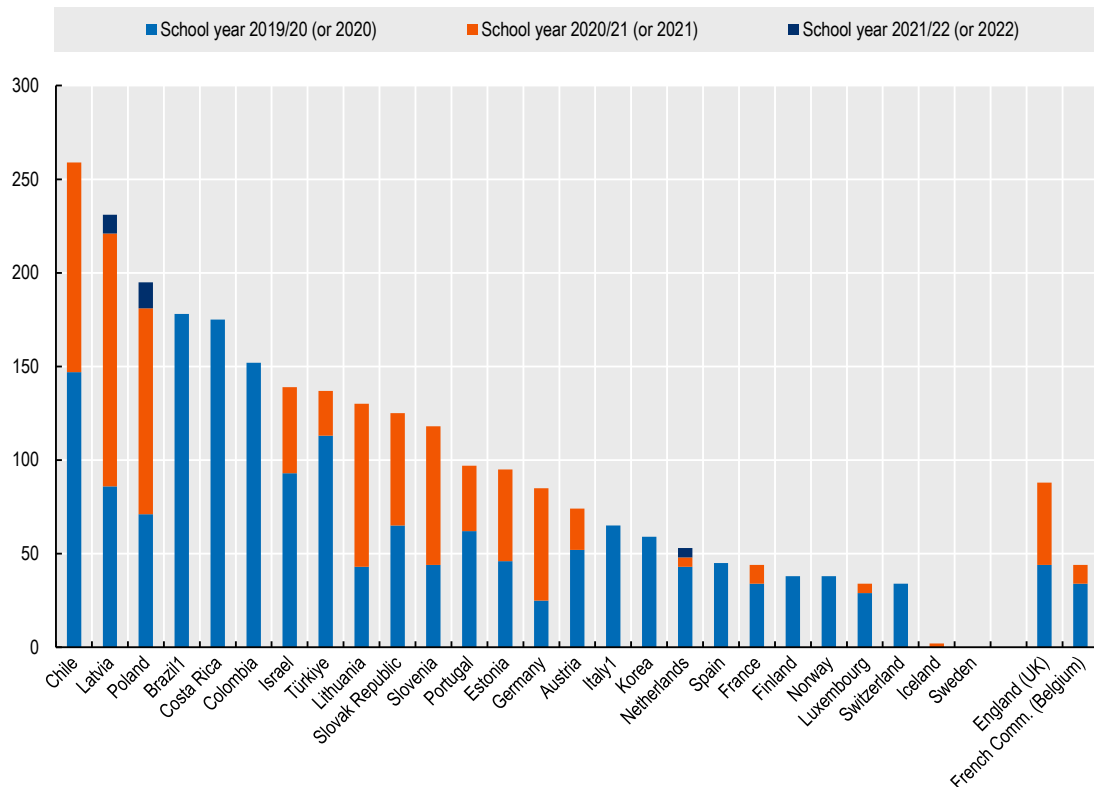
- Wages also differ according to the field of study. In Switzerland, tertiary attainment in medical and dental fields generates the highest earnings. Full-time full-year workers aged 25-64 with a tertiary degree in this field earn on average 97% more than workers with upper secondary attainment (all fields combined). In contrast, tertiary attainment in arts leads to the lowest wages. Workers with this educational background earn on average 9% more than the wage of workers with upper secondary attainment (all fields combined).
- Despite the labour market advantages of a tertiary degree, many tertiary students do not graduate on time or do not graduate at all. In Switzerland, 39% of bachelor's students graduate within the theoretical programme duration. Across the OECD, the completion rate within the theoretical programme duration ranges from 12% to 69%. Completion rates three years after the theoretical programme duration are significantly higher in most countries and the differences between OECD countries somewhat narrower. In Switzerland, 81% of bachelor's students have graduated within three years after the end of the theoretical programme duration, compared to 68% on average across the OECD.
- In all OECD countries, tertiary completion rates are higher for women than for men. In Switzerland, 84% of women graduated within three years after the end of the theoretical programme duration at bachelor's level, compared to 78% of men.
- In most OECD countries including in Switzerland, tertiary-educated adults have higher rates of participation in non-formal education and training than those with a lower level of educational attainment. In 2021, 28% of 25-64 year-olds with tertiary attainment in Switzerland had participated in non-formal education and training in the four weeks prior to being surveyed, compared to 5% of their peers with below upper secondary attainment.
- OECD countries have different approaches to providing financial support to students enrolled in tertiary education, but in general countries with the highest level of public transfers to the private sector are those that also tend to have the highest tuition fees. In six OECD countries and other participants, at least 80% of national students receive public financial support in the form of student loans, scholarships or grants. In another six countries and other participants, including Switzerland, less than 25% of students receive financial support. In these countries, public financial support is targeted on selected groups of students, such as those from socio-economically disadvantaged families.
- Over the decades, independent private institutions have been established to meet increased demand for tertiary education. On average across the OECD, 17% of students are enrolled in independent private institutions, but this figure masks large differences between countries. In Switzerland, 8% of tertiary students are enrolled in such institutions. Independent private institutions charge higher annual tuition fees on average than public institutions for master's programmes in all OECD countries and other participants with available data, except in Chile and Lithuania.
- Enabling students to enrol on a part-time basis is an important way to facilitate access to tertiary education. Many part-time students would not be able to study full time, for example because they have child-care responsibilities or have to work to fund their studies. The share of part-time students at the tertiary level in Switzerland is 26%, above the OECD average (22%). Compared to 2013, it has increased by 2 percentage points.
- Staff at tertiary level tend to start their careers relatively late due to the length of the education they need to qualify. In Switzerland, only 2% of academic staff are aged under 30, below the OECD average (8%). In contrast, the share of academic staff aged 50 or over is 49%, which is above the OECD average by 9 percentage points.

## COVID-19: The second year of the pandemic

- The COVID-19 pandemic disrupted traditional schooling in 2020 and the first half of 2021, leading to school closures across all OECD countries. While most shut down their premises entirely in the wake of the pandemic in 2020, by 2021 the situation had improved and returned to normal in most countries in 2022. In Switzerland, primary and secondary schools were entirely closed for 34-56 days during the school year 2019/20 and stayed open in 2020/21 and 2021/22 (Figure 5). There were no partial closures in 2019/20, 2020/21 and 2021/22.
- National examinations have also been affected by the pandemic. At general upper secondary level, 18 OECD countries postponed their national examinations during the school year 2019/20, while 10 countries even cancelled them entirely. In 2020/21, national examinations were postponed in 9 countries and cancelled in 6 countries. Switzerland rescheduled its national examinations in 2019/20 and went ahead as planned with them in 2020/21.
- Most countries conducted assessments of the impact of school closures on learning outcomes at various levels of education and along several dimensions. Switzerland has conducted studies to evaluate the effects of the pandemic on the impact on primary as well as upper secondary general and vocational education.
- No national programmes to support students affected by the pandemic were implemented in Switzerland in contrast to many other OECD countries. At primary to upper secondary education, measures to address the effects of the COVID-19 pandemic included additional hygiene services.
- The COVID-19 pandemic had a significant impact on adult learning in most OECD countries. In 2020, the share of adults who participated in a formal or non-formal education and training activity in the four weeks prior to being surveyed decreased by 2 percentage points on average across OECD countries compared with 2019. However, in 2021, participation in non-formal education and training returned to pre-pandemic levels in most countries. In Switzerland, a different pattern emerged. From 2019 to 2020, the share of adults participating in a formal or non-formal education and training activity fell by 5 percentage points. From 2020 to 2021, it fell by 5 percentage points.
- Young adults who are not in employment, education or training (NEET) for prolonged periods are at risk of adverse economic and social outcomes in both the short and the long term. After remaining constant during the COVID-19 pandemic in 2020, the share of 18-24 year-olds who are NEET in Switzerland rose in 2021. The share of NEET among young adults was 11% in 2021, above pre-COVID levels.

**Figure 5. School closures due to COVID-19 (2020, 2021 and the first quarter of 2022)**

Number of instruction days of full closure of lower secondary schools excluding school holidays, public holidays and weekends



**Note:** The data underlying this report were produced through the Survey on Joint National Responses to COVID 19, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), the World Bank (WB), and the Organisation for Economic Co-operation and Development (OECD). Data for other levels of education are available at <https://www.oecd.org/education/Results-4th-wave-COVID-Survey-OECD-database.xlsx>.

1. Data for 2021 and 2022 are missing.

Countries and other participants are ranked in descending order of the total number of days lower secondary schools were fully closed during the school years 2019/20 (2020), 2020/21 (2021) and 2021/22 (2022).

**Source:** OECD/UIS/UNESCO/UNICEF/WB (2022).

## References

OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/69096873-en>.


OECD (2022), "Regional education", *OECD Regional Statistics (database)*, <https://dx.doi.org/10.1787/213e806c-en>.

## More information

**For more information on Education at a Glance 2022 and to access the full set of Indicators, see:**  
<https://doi.org/10.1787/3197152b-en>

For more information on the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, See Annex 3 ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3.pdf)).

For general information on the methodology, please refer to the OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications (<https://doi.org/10.1787/9789264304444-en>).

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.

Data on subnational regions for selected indicators are available in the *OECD Regional Statistics* (database) (OECD, 2022). When interpreting the results on subnational entities, readers should take into account that the population size of subnational entities can vary widely within countries. For example, regional variation in enrolment may be influenced by students attending school in a different region from their area of residence, particularly at higher levels of education. Also, regional disparities tend to be higher when more subnational entities are used in the analysis.

Explore, compare and visualise more data and analysis using the Education GPS:

<https://gpseducation.oecd.org/>

The data on educational responses during COVID-19 were collected and processed by the OECD based on the Joint Survey on National Responses to COVID-19 School Closures, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO); the UNESCO Institute for Statistics (UIS); the United Nations Children's Fund (UNICEF); the World Bank; and the OECD.

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### Questions can be directed to:

Directorate for Education and Skills

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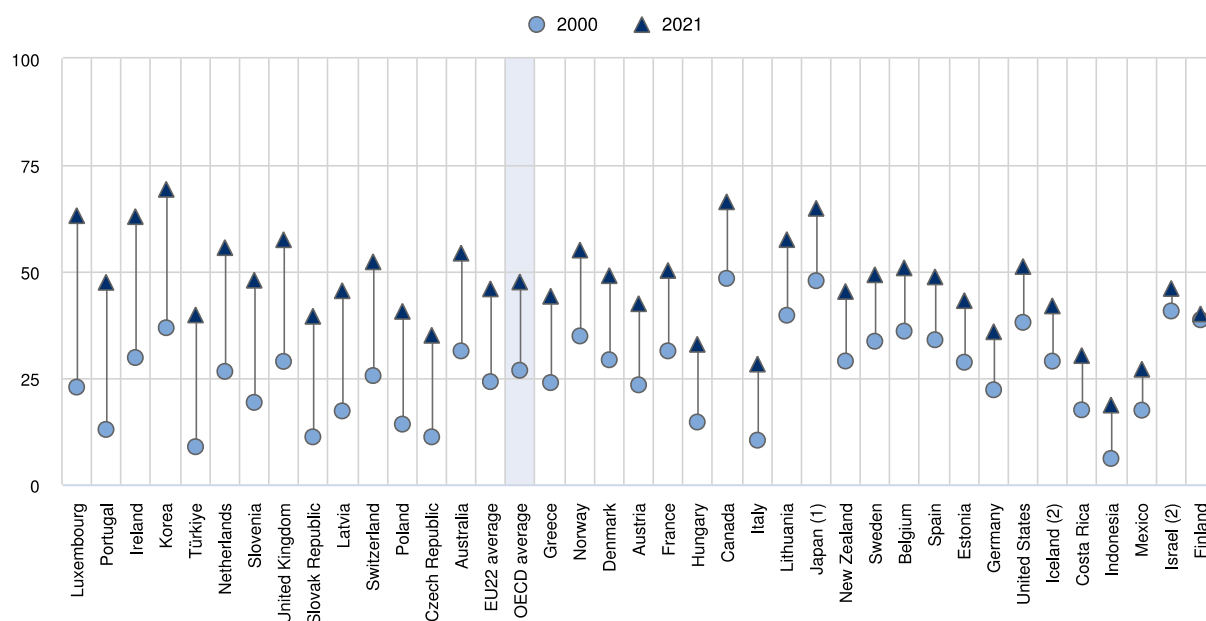
# Türkiye

## The output of educational institutions and the impact of learning

- Educational attainment has been increasing throughout the OECD, in particular at tertiary level. Between 2000 and 2021, the share of 25-34 year-olds with tertiary attainment increased on average by 21 percentage points. In Türkiye, the share increased at an even faster pace, by 31 percentage points (from 9% in 2000 to 40% in 2021) (Figure 1). Türkiye is one of the 24 OECD countries where tertiary education is the most common highest level of attainment among 25-34 year-olds.
- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. Although the general increase in educational attainment has seen a parallel decline in the share of 25-34 year-olds without upper secondary attainment, 14% of young adults across the OECD still left school without an upper secondary qualification. In Türkiye, the share is 36%, which is higher than the OECD average.
- Higher educational attainment is often associated with better employment prospects and Türkiye is no exception. In 2021 the employment rate among 25-34 year-olds with tertiary education in Türkiye was 20 percentage points higher than among those with below upper secondary attainment and 10 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. On average across OECD countries, the employment rate among 25-34 year-olds with a tertiary qualification was 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. While the positive link between educational attainment and employment rates holds for both men and for women across the OECD, it is particularly strong for women. In Türkiye, 24% of women with below upper secondary attainment were employed in 2021, compared to 59% of those with tertiary attainment. In contrast, the figures were 79% and 83% for men.
- Educational attainment affects not just employment prospects, but also wage levels. On average across the OECD, 25-64 year-old workers with upper secondary or post-secondary non-tertiary attainment earn 29% more than workers with below upper secondary attainment, while those with tertiary attainment earn about twice as much. In Türkiye, the earnings advantage of tertiary-educated workers was even greater than the OECD average. In 2020, workers with upper secondary attainment earned 31% more than those with below upper secondary attainment and those with tertiary attainment earned more than twice as much.
- National averages provide only an incomplete picture of the situation in any given country. In most OECD countries, there are large differences in educational attainment across subnational regions. This is also the case in Türkiye. In 2020, the difference between the region with the highest share of 25-64 year-olds with tertiary attainment (Ankara, at 32%) and that with the lowest share (Southeastern Anatolia - Middle, at 13%) was 20 percentage points. These subnational variations do not only reflect differences in education opportunities. To a large degree, they are due to economic conditions and internal migration patterns.

Figure 1. Trends in the share of tertiary-educated 25-34 year-olds (2000 and 2021)

In per cent



1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group).

2. Year of reference differs from 2000: 2002 for Israel and 2003 for Iceland.

Countries are ranked in descending order of the difference in the share of tertiary-educated 25-34 year-olds between 2000 and 2021.

Source: OECD (2022), Education at a Glance Database, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-A.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf)).

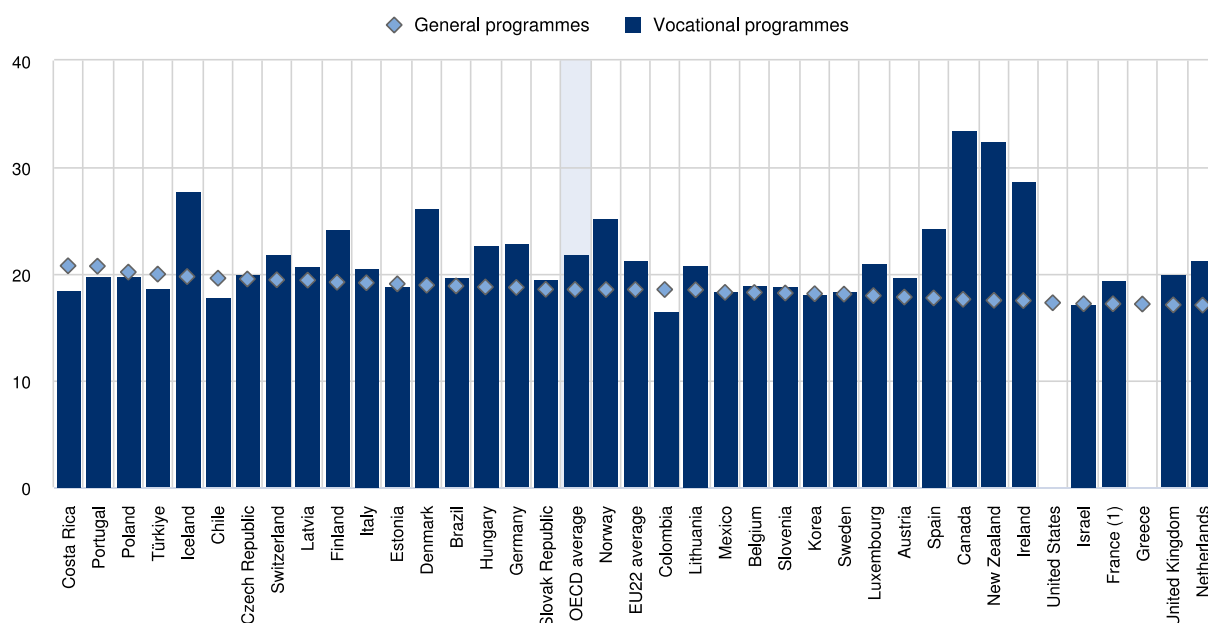
## Access to education, participation and progress

- Compulsory education begins at the age of 6 and ends at the age of 17 in Türkiye. The range of ages for which at least 90% of the population are enrolled is shorter than the period of compulsory education and goes from the age of 6 to the age of 15. This differs from most other OECD countries, where more than 90% of the population are enrolled for longer than the period of compulsory education.
- The age at which children enter early childhood education differs widely across countries. In Türkiye, early childhood education starts offering intentional education objectives for children younger than 1 and 0% of children under 3 are enrolled in early childhood education. Across OECD countries, the average enrolment rate among children below the age of 3 is 27%, but the rates range from less than 1% to 63%. The enrolment rate among 3-5 year-olds increases substantially in all OECD countries. In Türkiye, 41% of all children of this age are enrolled in early childhood education institutions belonging to the Ministry of Education, which is below the OECD average.
- The average age of graduation from general upper secondary programmes varies from 17 to 21 years across OECD countries and is 20 years in Türkiye. Differences in the average age of graduation from vocational upper secondary education are much larger and vary from 16 to 34 years across the OECD. These differences largely depend on whether vocational upper secondary students usually enrol in these programmes towards the end of their compulsory

education or in mid-career. In Türkiye, the average age of graduation from vocational upper secondary education is 19 years, which is below the OECD average at 22 years (Figure 2).

**Figure 2. Average age of first-time upper secondary graduates, by programme orientation (2020)**

In years



1. Average age is based on all graduates instead of first-time graduates.

Countries are ranked in descending order of the average age of first-time upper secondary graduates in general programmes.

**Source:** OECD/Eurostat/UIS (2022), Tables B3.1 and B3.2. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. In Türkiye, the share is 52% (OECD average 55%). In contrast, men are overrepresented among graduates of vocational upper secondary programmes in most OECD countries, as is the case in Türkiye where they make up 53% of all vocational upper secondary graduates, slightly below the OECD average (55%).
- In Türkiye, 40% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (significantly below the OECD average of 54%). A subset of these students (11% of 18-24 year-olds) combine their education or training with some form of employment in Türkiye, compared to 17% on average across the OECD.
- One significant difference across countries' education systems is on whether or not vocational upper secondary programmes provide access to tertiary education. In 12 OECD countries and other participants, all vocational upper secondary graduates have direct access to tertiary education. In Türkiye, 99% of graduates from vocational upper secondary programme have access to tertiary education, but students need to take additional courses to enter tertiary education.
- As is the case in all OECD countries, a majority of students enrolled at tertiary level in Türkiye are bachelor's students (55%). However, the next commonest enrolment level varies from country to country. In Türkiye, short-cycle tertiary students make up the second largest group of tertiary

students at 38%. This is also the case in 13 other OECD countries, while in the remaining 26 countries with available data, master's students form the second largest group.

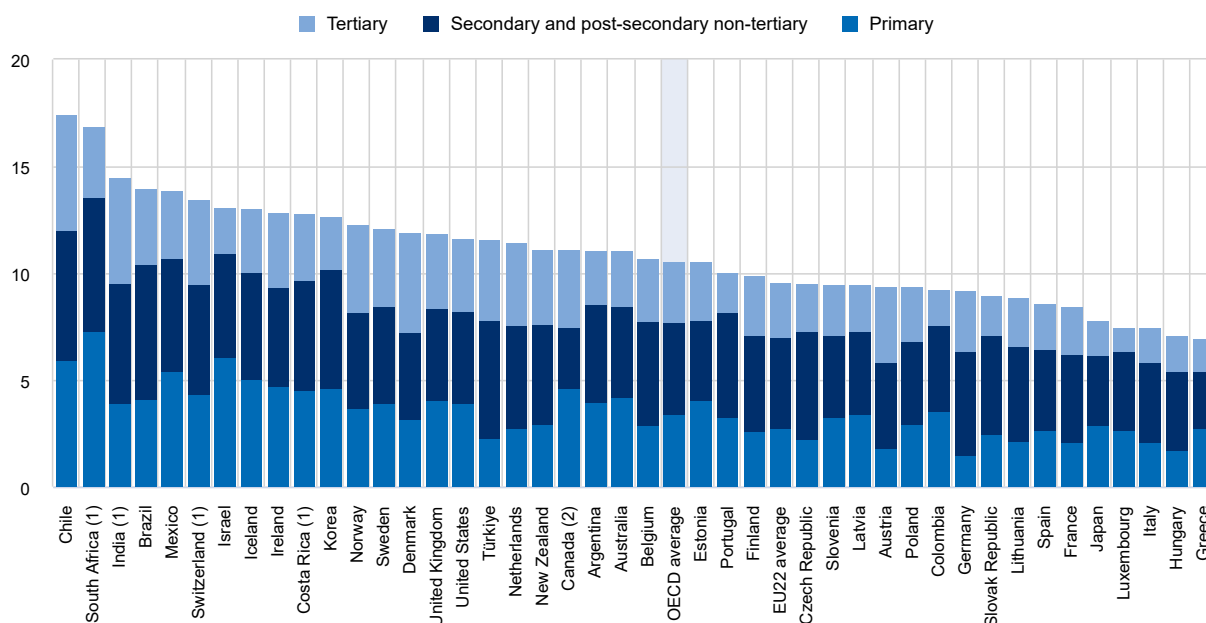
- At 28%, business, administration and law was the most popular field of study among new entrants into tertiary education in Türkiye, which is the case in most OECD countries. Despite the growing need for digital skills and the good employment prospects of students with degrees in information and communication technologies (ICT), only a small fraction of entrants into tertiary education choose this field. In Türkiye, 74% of 25-64 year-olds with a tertiary ICT qualification are employed, but ICT students make up only 3% of new entrants into tertiary education. This is below the OECD average of 6%.

## Financial resources invested in education

- All OECD countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average 4.9% of their gross domestic product (GDP) on primary to tertiary educational institutions. In Türkiye, the corresponding share was 5.2%.
- Public spending on primary to tertiary education was 11.6% of total government expenditure in Türkiye (Figure 3), higher than the OECD average (10.6%). In contrast, relative to GDP, public spending on primary to tertiary education (4.1%) is lower than the OECD average (4.4%).
- Spending on educational institutions as share of GDP or public budgets are important measures of the importance that countries place on education in their budgeting decisions. However, they do not show the total amount of funding per student because GDP levels, public budgets and student numbers vary from country to country. Across primary to tertiary education, OECD countries spend an average of USD 11 990 per student (in equivalent USD converted using PPPs for GDP) on educational institutions each year. In comparison, Türkiye spent USD 5 743 per student in 2019. Its cumulative expenditure on educating a student from the age of 6 to 15 was USD 46 709, which was significantly below the OECD average of USD 105 502.
- Across OECD countries, the provision of education at primary and secondary levels in terms of curricula, teaching styles and organisational management leads, on average, to similar patterns of expenditure per student from primary to post-secondary non-tertiary levels. OECD countries as a whole spend on average around USD 9 923 per student at primary and USD 11 400 per student at secondary level. In Türkiye, the values are USD 4 400 at primary and USD 5 110 per student at secondary level, which are among the lowest across OECD countries.
- In contrast to lower levels of education, spending on tertiary education varies widely across OECD countries. Expenditure per student at tertiary level in Türkiye is higher than at other levels of education, as is the case in almost all other OECD countries. The average expenditure per student in Türkiye is USD 9 455 per year, which is about USD 5 100 higher than that of the primary level and USD 4 300 higher than that of the secondary level. It is among the lowest across OECD countries. The average expenditure at tertiary level (USD 17 559) is driven up by high values in a few countries. At 19%, the share of research and development (R&D) expenditure makes up a smaller fraction of expenditure on tertiary education in Türkiye than on average across OECD countries (29%).
- Public funding dominates non-tertiary education (primary, secondary and post-secondary non-tertiary) in all OECD countries, even after transfers to the private sector. On average across the OECD, private funding accounts for 10% of expenditure at primary, secondary and post-secondary non-tertiary levels, while this share was 25% in Türkiye in 2019. In contrast, private expenditure at tertiary level was higher in all OECD countries. In Türkiye, the share of private expenditure at tertiary level reached 31%, which was the same as the OECD average.

**Figure 3. Composition of total public expenditure on education as a percentage of total government expenditure (2019)**

Primary to tertiary education (including R&D), in per cent



1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

**Source:** OECD/UIS/Eurostat (2022), Table C4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-C.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf)).

## Teachers, the learning environment and the organisation of schools

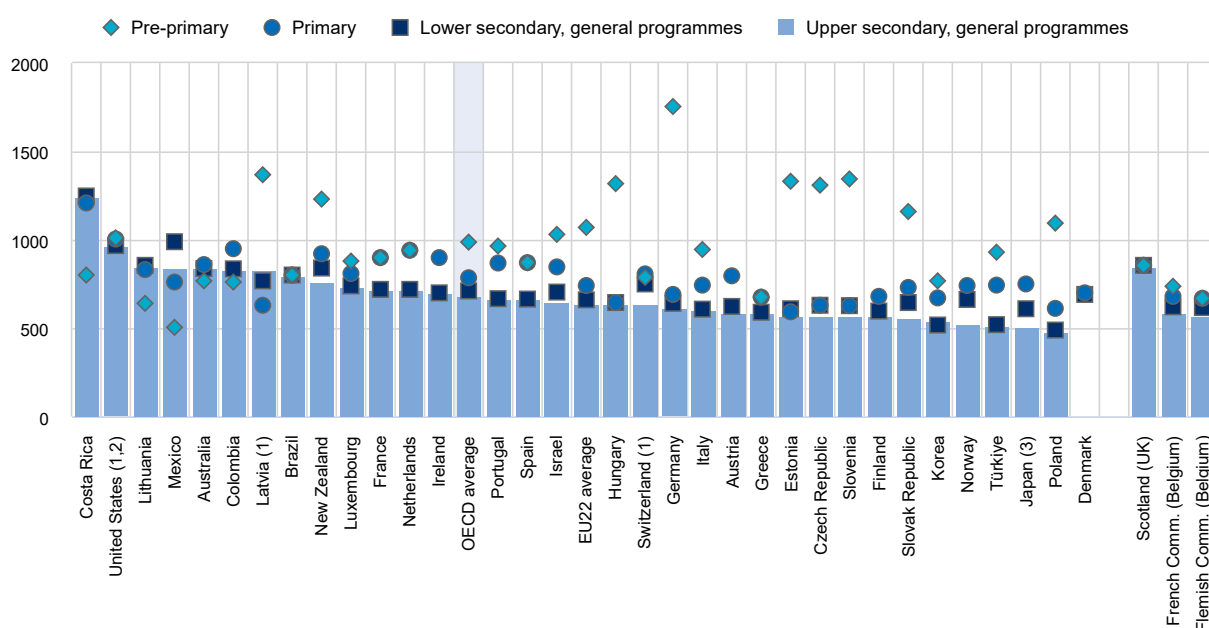
- Between 2015 and 2021, on average across OECD countries, the statutory salaries of teachers at lower secondary level (general programmes) with 15 years of experience and the most prevalent qualifications increased by 6% in real terms. In Türkiye, salaries increased less than the OECD average, by 5%.
- The average number of teaching hours per year required from a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases. This is also the case in Türkiye.
- Based on official regulations or agreements, annual teaching hours in Türkiye are 930 hours per year at pre-primary level, 744 hours at primary level, 521 hours at lower secondary level (general programmes) and 521 hours at upper secondary level (general programmes) (Figure 4).
- During their working hours, teachers also perform various non-teaching tasks such as lesson planning and preparation, marking students' work and communicating or co-operating with parents or guardians. At the upper secondary level, 67% of teachers' working time is formally dedicated to non-teaching activities in Türkiye, compared to an average of 56% across OECD countries.
- The duration of initial teacher education for primary and lower secondary teachers ranges from 2.5 years to 6.5 years across OECD countries. In Türkiye, initial teacher education typically lasts

4 years for prospective lower secondary teachers (general programmes). It is the same length for prospective primary teachers. As is the case in almost all OECD countries, a tertiary degree is awarded to prospective teachers of all levels of education upon completion of their initial teacher training.

- Continuing professional development is compulsory for all teachers of general programmes in most countries with data, and Türkiye is no exception. At secondary level, professional development activities are compulsory for all teachers.

**Figure 4. Teaching time of teachers, by level of education (2021)**

Net statutory teaching time in hours per year, in public institutions



1. Actual teaching time (in Latvia except for pre-primary level).

2. Reference year differs from 2021. Refer to the source table for details.

3. Average planned teaching time in each school at the beginning of the school year.

Countries and other participants are ranked in descending order of the number of teaching hours per year in general upper secondary education.

**Source:** OECD (2022), Table D4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-D.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-D.pdf)).

## Focus on tertiary education

- Among 25-64 year-olds in Türkiye, bachelor's degrees are the most common tertiary attainment at 16% of the population followed by short-cycle tertiary qualifications at 7% and master's degrees with 2%. This is similar to the OECD average, where bachelor's degrees are most common (19%), followed by master's degrees (14%) and short cycle tertiary qualifications (7%). As in all OECD countries and other participants, only a small fraction of the population holds a doctoral degree: the share is less than 1% in Türkiye.
- On average, tertiary attainment generates a wide range of labour-market benefits, including high employment rates. Yet, there are significant differences depending on the field of study. In 2021, employment rates in Türkiye were highest among tertiary-educated individuals who studied

engineering, manufacturing and construction with 78% and lowest among those who studied arts and humanities, social sciences, journalism and information at 67%. However, these differences need to be put into perspective. Even among 25-64 year-olds with tertiary attainment in the field with the lowest employment rate, this was 7.9 percentage points higher than among those with upper secondary attainment (all fields combined).

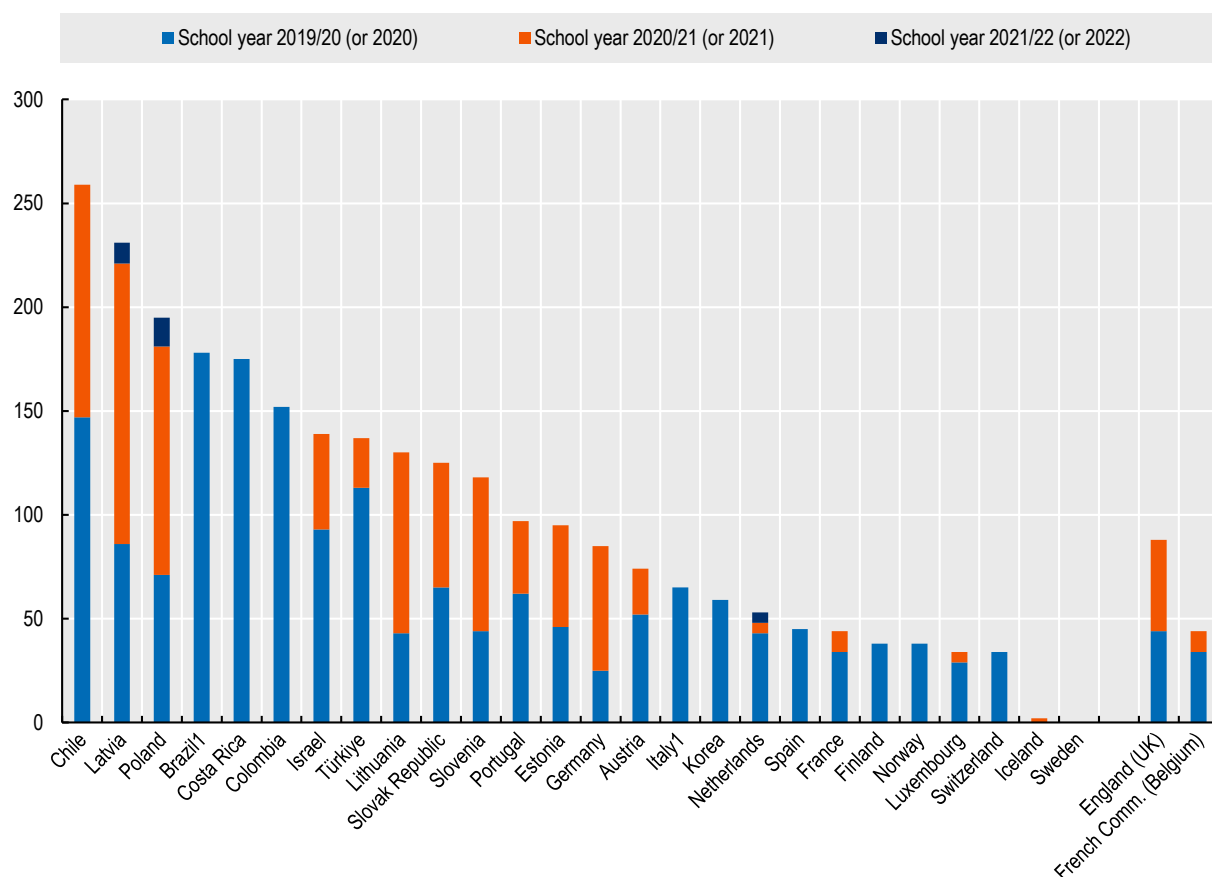
- In most OECD countries including in Türkiye, tertiary-educated adults have higher rates of participation in non-formal education and training than those with a lower level of educational attainment. In 2021, 1% of 25-64 year-olds with tertiary attainment in Türkiye had participated in non-formal education and training in the four weeks prior to being surveyed, compared to 1% of their peers with below upper secondary attainment.
- Over the decades, independent private institutions have been established to meet increased demand for tertiary education. On average across the OECD, 17% of students are enrolled in independent private institutions, but this figure masks large differences between countries. In Türkiye, 8% of tertiary students are enrolled in such institutions. Independent private institutions charge higher annual tuition fees on average than public institutions for master's programmes in all OECD countries and other participants with available data, except in Chile and Lithuania.
- Staff at tertiary level tend to start their careers relatively late due to the length of the education they need to qualify. In Türkiye, 17% of academic staff are aged under 30, above the OECD average (8%). In contrast, the share of academic staff aged 50 or over is 20%, which is below the OECD average by 20 percentage points.

## COVID-19: The second year of the pandemic

- The COVID-19 pandemic disrupted traditional schooling in 2020 and the first half of 2021, leading to school closures across all OECD countries. While most shut down their premises entirely in the wake of the pandemic in 2020, by 2021 the situation had improved and returned to normal in most countries in 2022. In Türkiye, primary and secondary schools were entirely closed for 98-113 days during the school year 2019/20, for 24-38 days in 2020/21 and stayed open in 2021/22 (Figure 5). Partial closures reached 34-39 days during the school year 2019/20 and 40-42 days in 2020/21.
- National examinations have also been affected by the pandemic. At general upper secondary level, 18 OECD countries postponed their national examinations during the school year 2019/20, while 10 countries even cancelled them entirely. In 2020/21, national examinations were postponed in 9 countries and cancelled in 6 countries. Türkiye rescheduled its national examinations in 2019/20 and in 2020/21.
- Most countries conducted assessments of the impact of school closures on learning outcomes at various levels of education and along several dimensions. Türkiye has conducted studies to evaluate the effects of the pandemic on the impact on primary, lower secondary, upper secondary general and vocational education. The assessments covered mathematics, reading and science.

**Figure 5. School closures due to COVID-19 (2020, 2021 and the first quarter of 2022)**

Number of instruction days of full closure of lower secondary schools excluding school holidays, public holidays and weekends



**Note:** The data underlying this report were produced through the Survey on Joint National Responses to COVID 19, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), the World Bank (WB), and the Organisation for Economic Co-operation and Development (OECD). Data for other levels of education are available at <https://www.oecd.org/education/Results-4th-wave-COVID-Survey-OECD-database.xlsx>.

1. Data for 2021 and 2022 are missing.

Countries and other participants are ranked in descending order of the total number of days lower secondary schools were fully closed during the school years 2019/20 (2020), 2020/21 (2021) and 2021/22 (2022).

**Source:** OECD/UIS/UNESCO/UNICEF/WB (2022).

- In school year 2022, national programmes to support students affected by the pandemic were implemented in Türkiye at pre-primary, primary, lower secondary, upper secondary general and vocational level. At primary to upper secondary education, measures to address the effects of the COVID-19 pandemic included accelerated education or catch-up programmes for students who dropped out of school, community mobilisation campaigns to bring students back to school, cash transfers to increase enrolment among students from disadvantaged families, referral systems for students in need of specialised services, psychosocial and mental health support to students, automatic re-enrolment of students in school, tutoring programmes or financial support for tutoring and additional water, sanitation and hygiene services. The government has already assessed the effectiveness of these programmes.

- The challenges related to the COVID-19 pandemic have created additional costs for education systems. Preliminary budget estimates for 2021 suggest that, compared to 2020, the education budget at pre-primary to upper secondary level in Türkiye increased strongly (by more than 5%, in nominal terms), while it increased slightly (by between 1% and 5%) at the tertiary level.
- The COVID-19 pandemic had a significant impact on adult learning in most OECD countries. In 2020, the share of adults who participated in a formal or non-formal education and training activity in the four weeks prior to being surveyed decreased by 2 percentage points on average across OECD countries compared with 2019. However, in 2021, participation in non-formal education and training returned to pre-pandemic levels in most countries. In Türkiye, a similar pattern emerged. From 2019 to 2020, the share of adults participating in a formal or non-formal education and training activity remained unchanged. From 2020 to 2021, it increased by 1 percentage point and has thus reached pre-pandemic levels.
- Young adults who are not in employment, education or training (NEET) for prolonged periods are at risk of adverse economic and social outcomes in both the short and the long term. After increasing during the COVID-19 pandemic in 2020, the share of 18-24 year-olds who are NEET in Türkiye declined in 2021. The share of NEET among young adults was 33% in 2021, below pre-COVID levels.

## References

OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/69096873-en>.


OECD (2022), “Regional education”, *OECD Regional Statistics (database)*, <https://dx.doi.org/10.1787/213e806c-en>.

## More information

**For more information on Education at a Glance 2022 and to access the full set of Indicators, see:** <https://doi.org/10.1787/3197152b-en>

For more information on the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, See Annex 3 ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_Annex3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_Annex3.pdf)).

For general information on the methodology, please refer to the OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications (<https://doi.org/10.1787/9789264304444-en>).

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.

Data on subnational regions for selected indicators are available in the *OECD Regional Statistics* (database) (OECD, 2022). When interpreting the results on subnational entities, readers should take into account that the population size of subnational entities can vary widely within countries. For example, regional variation in enrolment may be influenced by students attending school in a different region from their area of residence, particularly at higher levels of education. Also, regional disparities tend to be higher when more subnational entities are used in the analysis.

Explore, compare and visualise more data and analysis using the Education GPS:

<https://gpseducation.oecd.org/>

The data on educational responses during COVID-19 were collected and processed by the OECD based on the Joint Survey on National Responses to COVID-19 School Closures, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO); the UNESCO Institute for Statistics (UIS); the United Nations Children's Fund (UNICEF); the World Bank; and the OECD.

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# United Kingdom

## Highlights

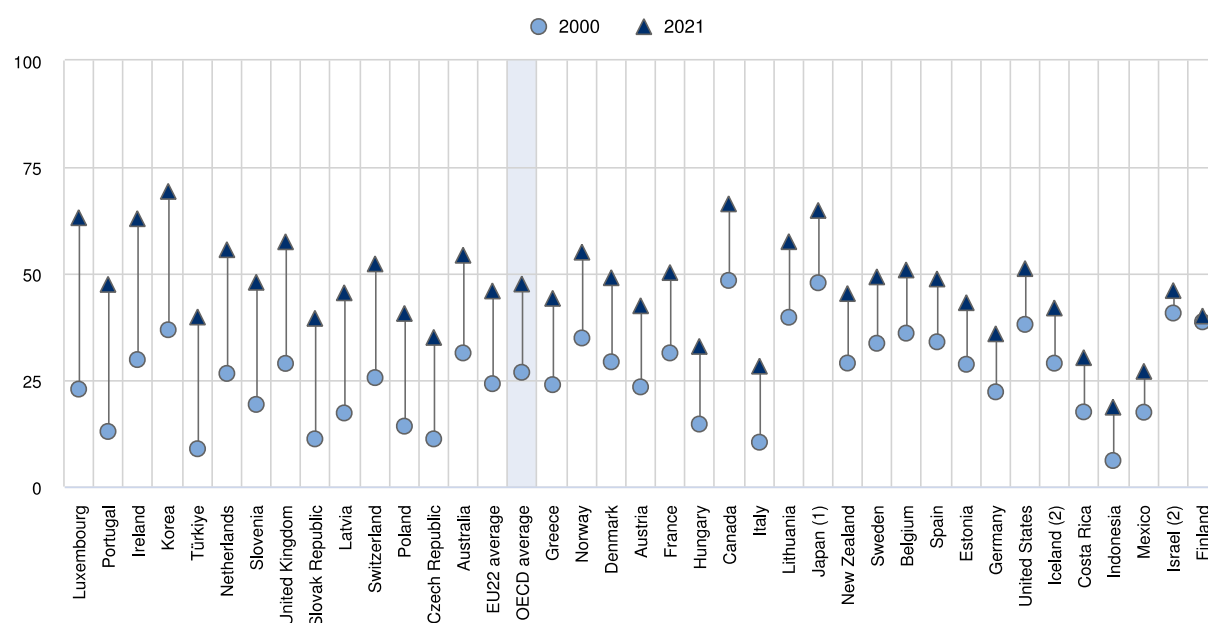
- **The share of young adults with tertiary attainment has increased considerably in the United Kingdom in recent decades.** In 2021, 57% of 25-34 year-olds had a tertiary degree compared to only 29% in 2000. On average across the OECD, the share of young adults with a tertiary degree increased from 27% to 48% in the same period.
- **Higher educational attainment is strongly related to improved wage prospects in the United Kingdom.** In 2020, workers with upper secondary attainment in the United Kingdom earned 42% more than those with below upper secondary attainment, and those with tertiary attainment earned more than twice as much. This earnings advantage was greater than across the OECD on average.
- **The United Kingdom has the highest completion rate among OECD countries with available data at bachelor's level.** In the United Kingdom, 69% of bachelor's students graduate within the theoretical programme duration. Across OECD countries with data, the completion rate within the theoretical programme duration ranges from 12% to 69%.
- **The United Kingdom invests more per student than the OECD average at all levels of education.** Expenditure per student at tertiary level in the United Kingdom is higher than at other levels of education, and it is the third highest among OECD countries. The average expenditure per student in the United Kingdom is USD 29 688 per year at the tertiary level, which is about USD 17 800 higher than that of the primary level and USD 16 600 higher than that of the secondary level.
- **Teachers in public primary and secondary schools in England and Scotland earn less than other tertiary-educated workers on average.** The average salary of lower secondary teachers in England is 5.3% less than other tertiary-educated workers, while teachers in Scotland earn 10.9% less. On average, teachers earned 9.5% less than other tertiary-educated workers across the OECD.

## The output of educational institutions and the impact of learning

- Educational attainment has been increasing throughout the OECD, in particular at tertiary level. Between 2000 and 2021, the share of 25-34 year-olds with tertiary attainment increased on average by 21 percentage points. In the United Kingdom, the share increased at an even faster pace, by 29 percentage points (from 29% in 2000 to 57% in 2021) (Figure 1). The United Kingdom is one of the 14 OECD countries where at least half of 25-34 year-olds have a tertiary education.
- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. Although the general increase in educational attainment has seen a parallel decline in the share of 25-34 year-olds without upper secondary attainment, 14% of young adults across the OECD still left school without an upper secondary qualification. In the United Kingdom, the share is 12%, which is lower than the OECD average.

**Figure 1. Trends in the share of tertiary-educated 25-34 year-olds (2000 and 2021)**

In per cent



1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group).

2. Year of reference differs from 2000: 2002 for Israel and 2003 for Iceland.

Countries are ranked in descending order of the difference in the share of tertiary-educated 25-34 year-olds between 2000 and 2021.

Source: OECD (2022), Education at a Glance Database, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-A.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf)).

- Higher educational attainment is often associated with better employment prospects and the United Kingdom is no exception. In 2021 the employment rate among 25-34 year-olds with tertiary education in the United Kingdom was 26 percentage points higher than among those with below upper secondary attainment and 7 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. On average across OECD countries, the employment rate among 25-34 year-olds with a tertiary qualification was 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. While the positive link between educational attainment and employment rates holds for both men and for women across the OECD, it is particularly strong for women. In the United Kingdom, 52% of women with below upper secondary attainment were employed in 2021, compared to 88% of those with tertiary attainment. In contrast, the figures were 72% and 93% for men.
- Across the OECD, the labour market benefits of tertiary attainment have proved especially strong during economic crises. This was also the case during the COVID-19 pandemic in the United Kingdom. Between 2019 and 2020, unemployment for 25-34 year-old workers with below upper secondary attainment increased by 0.5 percentage points in the United Kingdom, by 0.4 percentage points for workers with upper secondary attainment and by 0.7 percentage points for workers with tertiary attainment. In 2021, unemployment for workers with below upper secondary attainment increased by 1.4 percentage points in the United Kingdom compared to 2020, by 0.7 percentage points for workers with upper secondary attainment and decreased by 0.5 percentage points for workers with tertiary attainment.

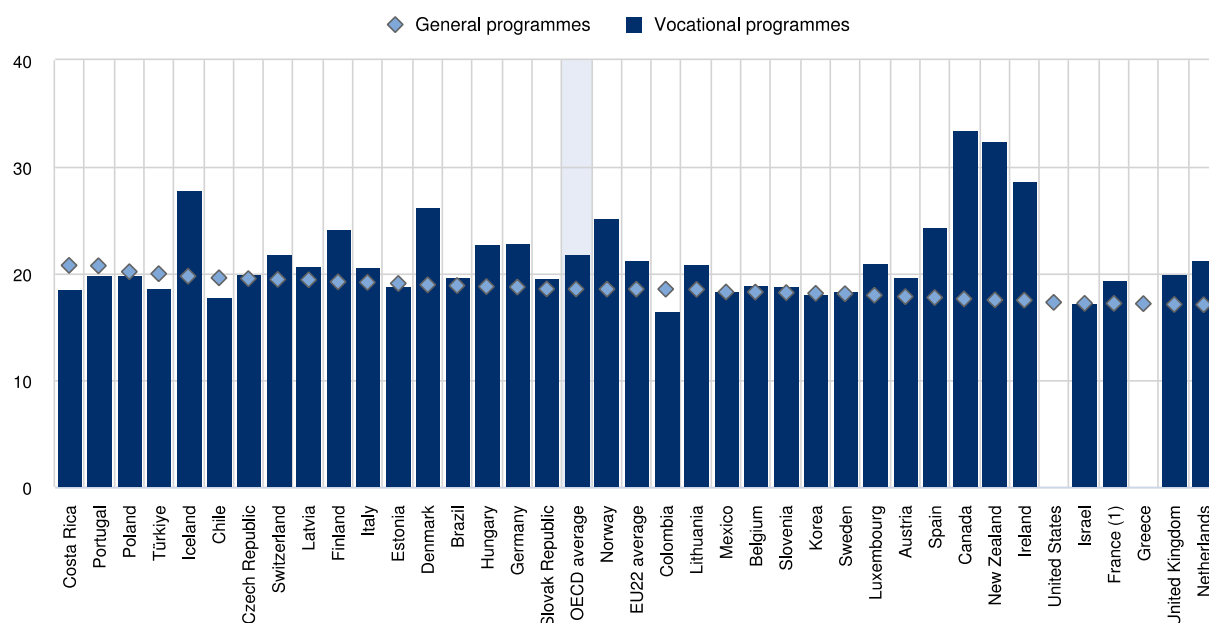
- Educational attainment affects not just employment prospects, but also wage levels. On average across the OECD, 25-64 year-old workers with upper secondary or post-secondary non-tertiary attainment earn 29% more than workers with below upper secondary attainment, while those with tertiary attainment earn about twice as much. In the United Kingdom, the earnings advantage of tertiary-educated workers was even greater than the OECD average. In 2020, workers with upper secondary attainment earned 42% more than those with below upper secondary attainment and those with tertiary attainment earned more than twice as much.
- National averages provide only an incomplete picture of the situation in any given country. In most OECD countries, there are large differences in educational attainment across subnational regions. This is also the case in the United Kingdom. In 2021, the difference between the region with the highest share of 25-64 year-olds with tertiary attainment (Greater London, at 70%) and that with the lowest share (North East England, at 40%) was 30 percentage points. These subnational variations do not only reflect differences in education opportunities. To a large degree, they are due to economic conditions and internal migration patterns.

### Access to education, participation and progress

- The age at which children enter early childhood education differs widely across countries. In the United Kingdom, early childhood education starts offering intentional education objectives for children younger than 1 and 19% of children under 3 are enrolled in early childhood education. Across OECD countries, the average enrolment rate among children below the age of 3 is 27%, but the rates range from less than 1% to 63%. The enrolment rate among 3-5 year-olds increases substantially in all OECD countries. In the United Kingdom, 72% of all children of this age are enrolled in early childhood education, which is below the OECD average of 83%. However, many children in this age group are enrolled in primary education instead, which begins at the age of 4 in Northern Ireland and 5 in England, Scotland and Wales.
- The average age of graduation from general upper secondary programmes varies from 17 to 21 years across OECD countries and is 17 years in the United Kingdom. Differences in the average age of graduation from vocational upper secondary education are much larger and vary from 16 to 34 years across the OECD. These differences largely depend on whether vocational upper secondary students usually enrol in these programmes towards the end of their compulsory education or in mid-career. In the United Kingdom, the average age of graduation from vocational upper secondary education is 20 years, which is below the OECD average at 22 years (Figure 2).
- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. In the United Kingdom, men and women are equally represented. In contrast, men are overrepresented among graduates of vocational upper secondary programmes in most OECD countries, but not in the United Kingdom where they make up 46% of all vocational upper secondary graduates, below the OECD average (55%).
- In the United Kingdom, 45% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (significantly below the OECD average of 54%). A subset of these students (19% of 18-24 year-olds) combine their education or training with some form of employment in the United Kingdom, compared to 17% on average across the OECD.

**Figure 2. Average age of first-time upper secondary graduates, by programme orientation (2020)**

In years



1. Average age is based on all graduates instead of first-time graduates.

Countries are ranked in descending order of the average age of first-time upper secondary graduates in general programmes.

**Source:** OECD/Eurostat/UIS (2022), Tables B3.1 and B3.2. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

- One significant difference across countries' education systems is on whether or not vocational upper secondary programmes provide access to tertiary education. In 12 OECD countries and other participants, all vocational upper secondary graduates have direct access to tertiary education. In the United Kingdom only 49% of graduates from vocational upper secondary programme have direct access to tertiary education.
- As is the case in all OECD countries, a majority of students enrolled at tertiary level in the United Kingdom are bachelor's students (63%). However, the next commonest enrolment level varies from country to country. In the United Kingdom, master's students make up the second largest group of tertiary students at 19%. This is also the case in 25 other OECD countries, while in the remaining 14 countries with available data, short-cycle tertiary students form the second largest group.
- At 27%, business, administration and law was the most popular field of study among new entrants into tertiary education in the United Kingdom, which is the case in most OECD countries. Despite the growing need for digital skills and the good employment prospects of students with degrees in information and communication technologies (ICT), only a small fraction of entrants into tertiary education choose this field. In the United Kingdom, 85% of 25-64 year-olds with a tertiary ICT qualification are employed, but ICT students make up 6% of new entrants into tertiary education. This is the same level as the OECD average. Over the past decade, the popularity of this field has, however, increased. Data from the University and College Admissions Service (UCAS) showed that the number of acceptances to computer science courses increased by nearly 50% between 2011 and 2020 (UCAS, 2021<sup>[1]</sup>). Recognising the importance of this field of study, the UK

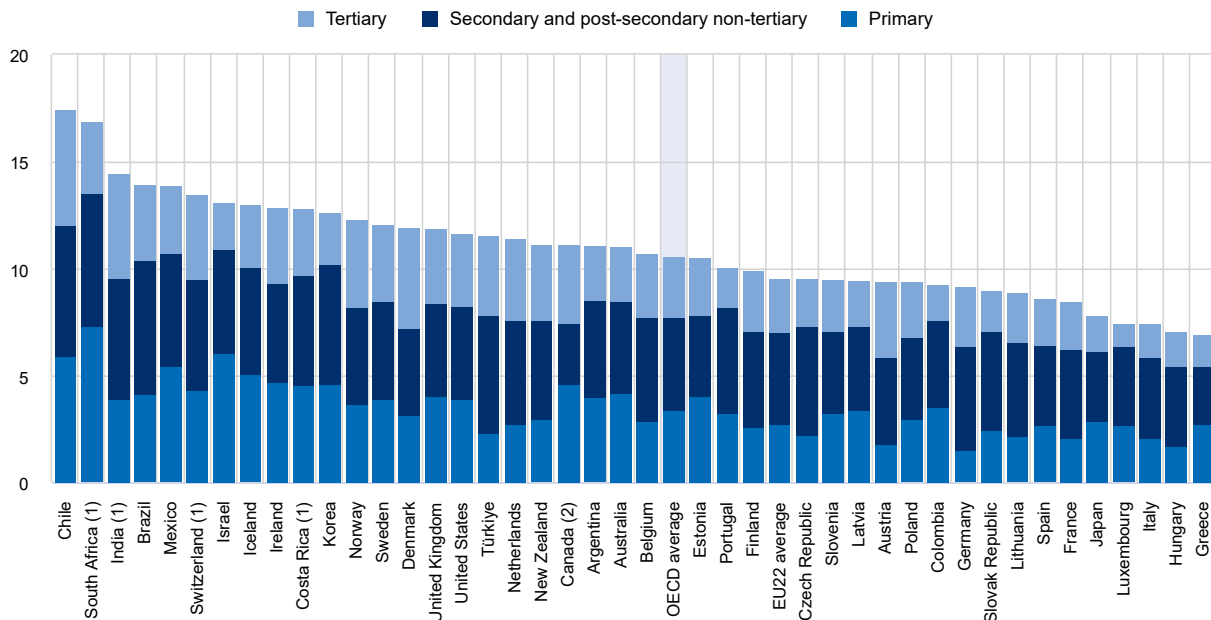
Government has made significant investments to improve the teaching of computer science in schools, including GBP 84 million for the creation of a National Centre for Computing Education in 2018 to train teachers and provide them with supporting resources.

## Financial resources invested in education

- All OECD countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average 4.9% of their gross domestic product (GDP) on primary to tertiary educational institutions. In the United Kingdom, the corresponding share was 6%.
- Public spending on primary to tertiary education was 11.9% of total government expenditure in the United Kingdom (Figure 3), higher than the OECD average (10.6%). Also, relative to GDP, public spending on primary to tertiary education (4.9%) is higher than the OECD average (4.4%).
- Spending on educational institutions as share of GDP or public budgets are important measures of the importance that countries place on education in their budgeting decisions. However, they do not show the total amount of funding per student because GDP levels, public budgets and student numbers vary from country to country. Across primary to tertiary education, OECD countries spend an average of USD 11 990 per student (in equivalent USD converted using PPPs for GDP) on educational institutions each year. In comparison, the United Kingdom spent USD 15 453 per student in 2019. Its cumulative expenditure on educating a student from the age of 6 to 15 was USD 123 983, which was above the OECD average of USD 105 502.
- Across OECD countries, the provision of education at primary and secondary levels in terms of curricula, teaching styles and organisational management leads, on average, to similar patterns of expenditure per student from primary to post-secondary non-tertiary levels. OECD countries as a whole spend on average around USD 9 923 per student at primary and USD 11 400 per student at secondary level. In the United Kingdom, the values are USD 11 936 at primary and USD 13 041 per student at secondary level.
- In contrast to lower levels of education, spending on tertiary education varies widely across OECD countries. Expenditure per student at tertiary level in the United Kingdom is higher than at other levels of education, as is the case in almost all other OECD countries. The average expenditure per student in the United Kingdom is USD 29 688 per year, which is about USD 17 800 higher than that of the primary level and USD 16 600 higher than that of the secondary level. It is among the highest across OECD countries. The average expenditure at tertiary level (USD 17 559) is driven up by high values in a few countries. At 20%, the share of research and development (R&D) expenditure makes up a smaller fraction of expenditure on tertiary education in the United Kingdom than on average across OECD countries (29%).
- Public funding dominates non-tertiary education (primary, secondary and post-secondary non-tertiary) in all OECD countries, even after transfers to the private sector. On average across the OECD, private funding accounts for 10% of expenditure at primary, secondary and post-secondary non-tertiary levels, while this share was 16% in the United Kingdom in 2019. In contrast, private expenditure at tertiary level was higher in all OECD countries. In the United Kingdom, the share of private expenditure at tertiary level reached 73%, which was significantly above the OECD average of 31%, after public-to-private transfers. These latter accounted for 25% of expenditure on educational institutions at this level.

**Figure 3. Composition of total public expenditure on education as a percentage of total government expenditure (2019)**

Primary to tertiary education (including R&D), in per cent



1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

**Source:** OECD/UIS/Eurostat (2022), Table C4.1. See *Source* section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-C.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf)).

## Teachers, the learning environment and the organisation of schools

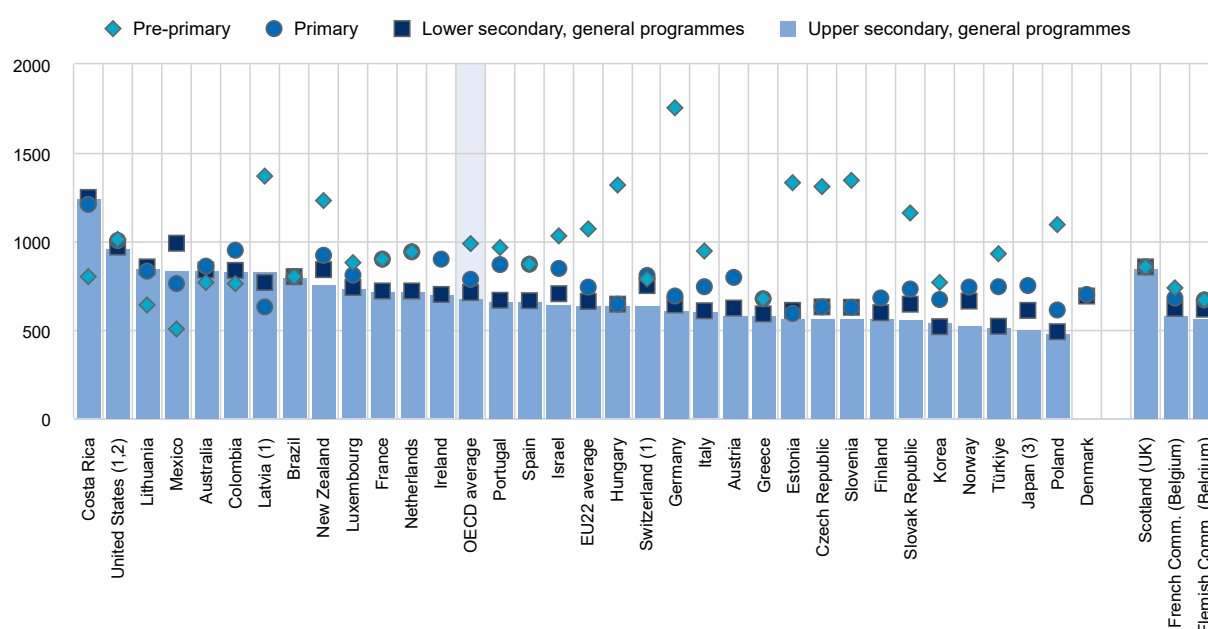
- The salaries of teachers and school heads are an important determinant of the attractiveness of the teaching profession, but they also represent the single largest expenditure item in formal education. In most OECD countries, the statutory salaries of teachers (and school heads) in public educational institutions increase with the level of education they teach, and also with experience. Actual salaries also increase with the level of education. On average across OECD countries, actual salaries range from USD 41 941 at the pre-primary level to USD 53 682 at the upper secondary level. In England (UK), actual salaries average USD 47 451 at pre-primary level and USD 52 718 at upper secondary level. In Scotland (UK), actual salaries average USD 49 612 at pre-primary level and USD 49 612 at upper secondary level.
- Between 2015 and 2021, on average across OECD countries, the statutory salaries of teachers at lower secondary level (general programmes) with 15 years of experience and the most prevalent qualifications increased by 6% in real terms. In England (UK), salaries increased less than the OECD average, by 4%. In Scotland (UK), on the other hand, salaries increased more than the OECD average, by 9%.
- Teachers' average actual salaries remain lower than earnings of tertiary-educated workers in almost all OECD countries, and at almost all levels of education. This is also the case in England and Scotland (UK). Lower secondary (general programme) teachers in England (UK) earn 5.3%

less than other tertiary-educated workers, while teachers in Scotland (UK) earn 10.9% less. In contrast school head actual salaries in England and Scotland (UK) are much higher than the earnings of other tertiary educated workers. This is similar to most OECD countries, where school heads tend to earn well above the average earnings of tertiary educated workers.

- The average number of teaching hours per year required from a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases. In contrast, teachers at all levels of education have to teach the same number of hours in Scotland (UK).
- Based on official regulations or agreements, annual teaching hours in Scotland (UK) are 855 hours per year at all levels of education from pre-primary to upper secondary (Figure 4).

**Figure 4. Teaching time of teachers, by level of education (2021)**

Net statutory teaching time in hours per year, in public institutions



1. Actual teaching time (in Latvia except for pre-primary level).

2. Reference year differs from 2021. Refer to the source table for details.

3. Average planned teaching time in each school at the beginning of the school year.

Countries and other participants are ranked in descending order of the number of teaching hours per year in general upper secondary education.

**Source:** OECD (2022), Table D4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-D.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-D.pdf)).

- During their working hours, teachers also perform various non-teaching tasks such as lesson planning and preparation, marking students' work and communicating or co-operating with parents or guardians. At the upper secondary level, 37% of teachers' working time is formally dedicated to non-teaching activities in Scotland (UK), compared to an average of 56% across OECD countries.
- The duration of initial teacher education for primary and lower secondary teachers ranges from 2.5 years to 6.5 years across OECD countries. In both England and Scotland (UK), initial teacher education typically lasts 4 years for prospective lower secondary teachers (general programmes). It is the same length for prospective primary teachers in both nations. As is the case in almost all

OECD countries, a tertiary degree is awarded to prospective teachers of all levels of education upon completion of their initial teacher training.

- Continuing professional development is compulsory for all teachers of general programmes in most countries with data, and Scotland (UK) is no exception. At secondary level, professional development activities are compulsory for all teachers.

## Focus on tertiary education

- Among 25-64 year-olds in the United Kingdom, bachelor's degrees are the most common tertiary attainment at 26% of the population followed by master's degrees with 13% and short-cycle tertiary qualifications with 9%. This is similar to the OECD average, where bachelor's degrees are most common (19%), followed by master's degrees (14%) and short cycle tertiary qualifications (7%). As in all OECD countries and other participants, only a small fraction of the population holds a doctoral degree: the share is 2% in the United Kingdom compared to 1% on average across the OECD.
- On average, tertiary attainment generates a wide range of labour-market benefits, including high employment rates. Yet, there are significant differences depending on the field of study. In 2021, employment rates in the United Kingdom were highest among tertiary-educated individuals who studied engineering, manufacturing and construction with 87% and lowest among those who studied health and welfare at 82%. However, these differences need to be put into perspective. Even among 25-64 year-olds with tertiary attainment in the field with the lowest employment rate, this was 2.4 percentage points higher than among those with upper secondary attainment (all fields combined).
- Wages also differ according to the field of study. In the United Kingdom, tertiary attainment in engineering, manufacturing and construction generates the highest earnings. Full-time full-year workers aged 25-64 with a tertiary degree in this field earn on average 56% more than workers with upper secondary attainment (all fields combined). In contrast, tertiary attainment in arts and humanities, social sciences, journalism and information leads to the lowest wages. Workers with this educational background earn on average 2% more than the wage of workers with upper secondary attainment (all fields combined).
- Despite the labour market advantages of a tertiary degree, many tertiary students do not graduate on time or do not graduate at all. In the United Kingdom, 69% of bachelor's students graduate within the theoretical programme duration, the highest share among OECD countries with available data. Across the OECD, the completion rate within the theoretical programme duration ranges from 12% to 69%. Completion rates three years after the theoretical programme duration are significantly higher in most countries and the differences between OECD countries somewhat narrower. In the United Kingdom, 85% of bachelor's students have graduated within three years after the end of the theoretical programme duration, which was also the highest among OECD countries with data. On average, 68% of bachelor's students graduated within three years after the end of the theoretical programme duration.
- In all OECD countries, tertiary completion rates are higher for women than for men. In the United Kingdom, 87% of women graduated within three years after the end of the theoretical programme duration at bachelor's level, compared to 82% of men.
- In most OECD countries including in the United Kingdom, tertiary-educated adults have higher rates of participation in non-formal education and training than those with a lower level of educational attainment. In 2021, 19% of 25-64 year-olds with tertiary attainment in the United Kingdom had participated in non-formal education and training in the four weeks prior to being surveyed, compared to 5% of their peers with below upper secondary attainment. Across

the OECD, 16% of adults with tertiary attainment had undertaken non-formal education and training in the four weeks prior to being surveyed, compared to 4% of those with below upper secondary attainment.

- Entering tertiary education often means costs for students and their families, in terms of tuition fees, foregone earnings and living expenses, although they may also receive financial support to help them afford it. However, public policies on tuition fees and financial support for students differ greatly across countries. In the United Kingdom, tuition fees at tertiary level vary according to students' home regions and their region of study within the United Kingdom. At USD 12 255, tuition fees for home students in England (UK) are the highest for a bachelor's programme in publicly supported institutions across OECD countries with available data. In contrast, home students studying full-time in Scotland (UK) are not required to pay tuition fees when studying for a first tertiary degree (Hubble, Bolton and Lewis, 2021<sup>[2]</sup>).
- OECD countries have different approaches to providing financial support to students enrolled in tertiary education, but in general countries with the highest level of public transfers to the private sector are those that also tend to have the highest tuition fees. In six OECD countries and other participants, including England (UK), at least 80% of national students receive public financial support in the form of student loans, scholarships or grants. In another six countries and other participants, less than 25% of students receive financial support. In these countries, public financial support is targeted on selected groups of students, such as those from socio-economically disadvantaged families.
- Enabling students to enrol on a part-time basis is an important way to facilitate access to tertiary education. Many part-time students would not be able to study full time, for example because they have child-care responsibilities or have to work to fund their studies. The share of part-time students at the tertiary level in the United Kingdom is 19%, slightly below the OECD average (22%). Compared to 2013, it has decreased by 9 percentage points.
- Staff at tertiary level tend to start their careers relatively late due to the length of the education they need to qualify. In the United Kingdom, only 6% of academic staff are aged under 30, slightly below the OECD average (8%). In contrast, the share of academic staff aged 50 or over is 37%, which is below the OECD average by 3 percentage points.

## COVID-19: The second year of the pandemic

- The COVID-19 pandemic disrupted traditional schooling in 2020 and the first half of 2021, leading to school closures across all OECD countries. While most shut down their premises entirely in the wake of the pandemic in 2020, by 2021 the situation had improved and returned to normal in most countries in 2022. In England (UK), primary schools were fully closed for 34 days and partially closed for 38 days, while secondary schools were fully closed for 44 days and partially closed for 28 days during the school year 2019/20 (Figure 5).<sup>1</sup> In 2020/21, both primary and secondary schools were fully closed for 44 days. In 2021/22, schools at all levels of education remained fully open.

<sup>1</sup> In this context, schools were "fully closed" when there were government-mandated and/or recommended closures of educational institutions (e.g. the closure of buildings for students) affecting all or most of the student population enrolled at a given level of education. In many countries, including in England (UK), schools were still open for vulnerable students and/or children of key workers, despite school closures at the national level. Schools were "partially closed" when there was a government-mandated and/or recommended re-opening of schools in certain areas, or a phased re-opening by grade level or age, or the use of a hybrid model combining in-person education at school and distance education.

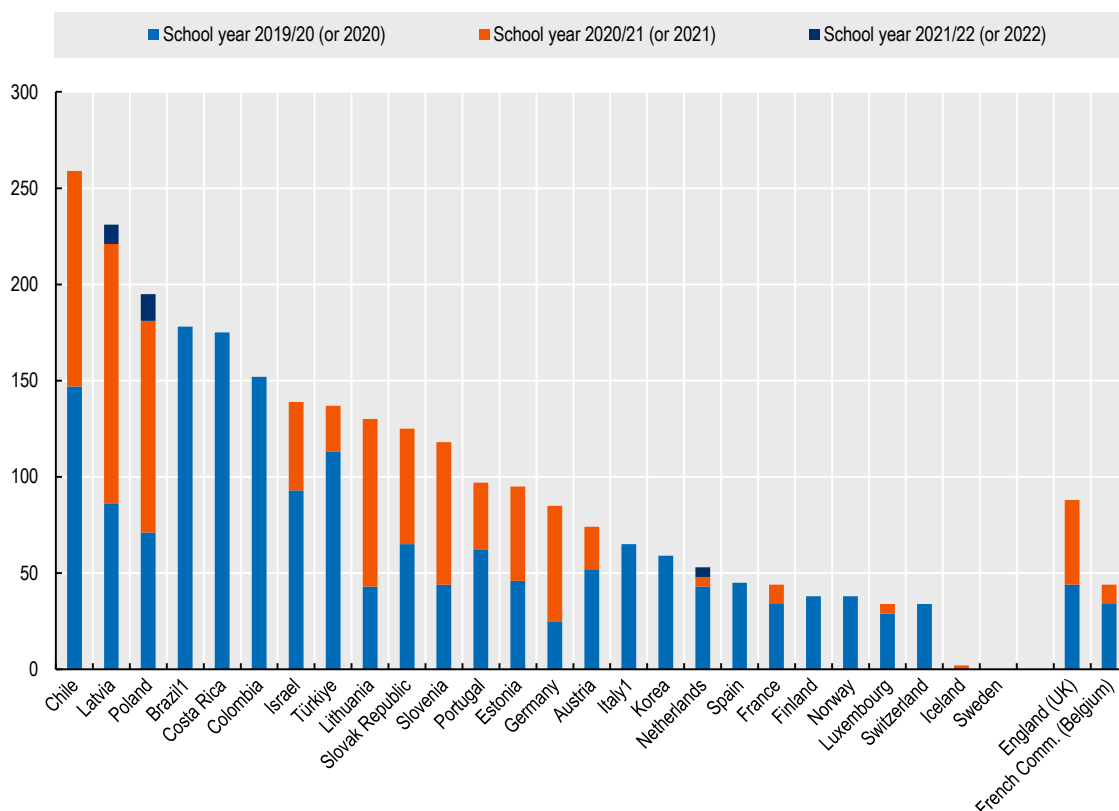
- National examinations have also been affected by the pandemic. At general upper secondary level, 18 OECD countries postponed their national examinations during the school year 2019/20, while 10 countries even cancelled them entirely. In 2020/21, national examinations were postponed in 9 countries and cancelled in 6 countries. England (UK) cancelled its national examinations in 2019/20 and in 2020/21.
- Most countries conducted assessments of the impact of school closures on learning outcomes at various levels of education and along several dimensions. England (UK) has conducted studies to evaluate the effects of the pandemic and its impact on primary, lower secondary, upper secondary general and vocational education. The assessments covered mathematics and reading. Like many other countries, England (UK) also evaluated dimensions such as the relations between parents and students during lockdowns as well as the mental health and well-being of students and teachers.
- In school year 2022, national programmes to support students affected by the pandemic were implemented in England (UK) at pre-primary, primary, lower secondary, upper secondary general and vocational and tertiary level. At primary to upper secondary education, measures to address the effects of the COVID-19 pandemic included accelerated education or catch-up programmes for students who dropped out of school, referral systems for students in need of specialised services, psychosocial and mental health support to students, tutoring programmes or financial support for tutoring.<sup>2</sup>
- The challenges related to the COVID-19 pandemic have created additional costs for education systems. Preliminary budget estimates for 2021 suggest that, compared to 2020, the education budget at pre-primary to upper secondary level in the United Kingdom increased slightly (by between 1% and 5%, in nominal terms), while it increased strongly (by more than 5%) at the tertiary level.
- The COVID-19 pandemic had a significant impact on adult learning in most OECD countries. In 2020, the share of adults who participated in a formal or non-formal education and training activity in the four weeks prior to being surveyed decreased by 2 percentage points on average across OECD countries compared with 2019. However, in 2021, participation in non-formal education and training returned to pre-pandemic levels in most countries. In the United Kingdom, the share of adults participating in a formal or non-formal education and training activity remained unchanged between 2019 and 2020. From 2020 to 2021, it increased by 1 percentage point and has thus increased above pre-pandemic levels.
- Young adults who are not in employment, education or training (NEET) for prolonged periods are at risk of adverse economic and social outcomes in both the short and the long term. After increasing during the COVID-19 pandemic in 2020, the share of 18-24 year-olds who are NEET in the United Kingdom declined in 2021. The share of NEET among young adults was 14% in 2021, at pre-COVID levels.

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<sup>2</sup> More information about education recovery support measures can be found at the following website: <https://www.gov.uk/government/publications/education-recovery-support/education-recovery-support--2>

**Figure 5. School closures due to COVID-19 (2020, 2021 and the first quarter of 2022)**

Number of instruction days of full closure of lower secondary schools excluding school holidays, public holidays and weekends



**Note:** The data underlying this report were produced through the Survey on Joint National Responses to COVID 19, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), the World Bank (WB), and the Organisation for Economic Co-operation and Development (OECD). Data for other levels of education are available at <https://www.oecd.org/education/Results-4th-wave-COVID-Survey-OECD-database.xlsx>.

1. Data for 2021 and 2022 are missing.

Countries and other participants are ranked in descending order of the total number of days lower secondary schools were fully closed during the school years 2019/20 (2020), 2020/21 (2021) and 2021/22 (2022).

**Source:** OECD/UIS/UNESCO/UNICEF/WB (2022).

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## More information

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# United States

## Highlights

- **Tertiary education is prevalent among young adults in the United States.** In 2021, 51% of 25-34 year-olds held a tertiary qualification, and only 6% were without an upper secondary qualification.
- **Higher educational attainment and better employment prospects are strongly linked in the United States.** In 2021, the employment rate among 25-34 year-olds with a tertiary degree was 16 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment, which is twice the OECD average of 8 percentage points.
- **In the United States, a tertiary degree in engineering, manufacturing or construction yields on average the highest earnings compared to other fields of study.** In contrast, tertiary attainment in the field of education leads to the lowest earnings.
- **Among OECD countries, the United States is the most popular destination for tertiary education.** In 2020, 15% of all international students in the world enrolled in tertiary programmes in the United States.
- **The United States invests more per student than the OECD average across all levels of education.** However annual expenditure per student at primary and secondary levels varies widely across states, by as much as three times in 2019.
- **Public primary and secondary teachers in the United States earn less, on average, than other tertiary-educated workers.** In 2021, average actual salaries of lower secondary teachers were only 61% of the average earnings of other tertiary-educated workers, which was lower than the OECD average (90%).

## The output of educational institutions and the impact of learning

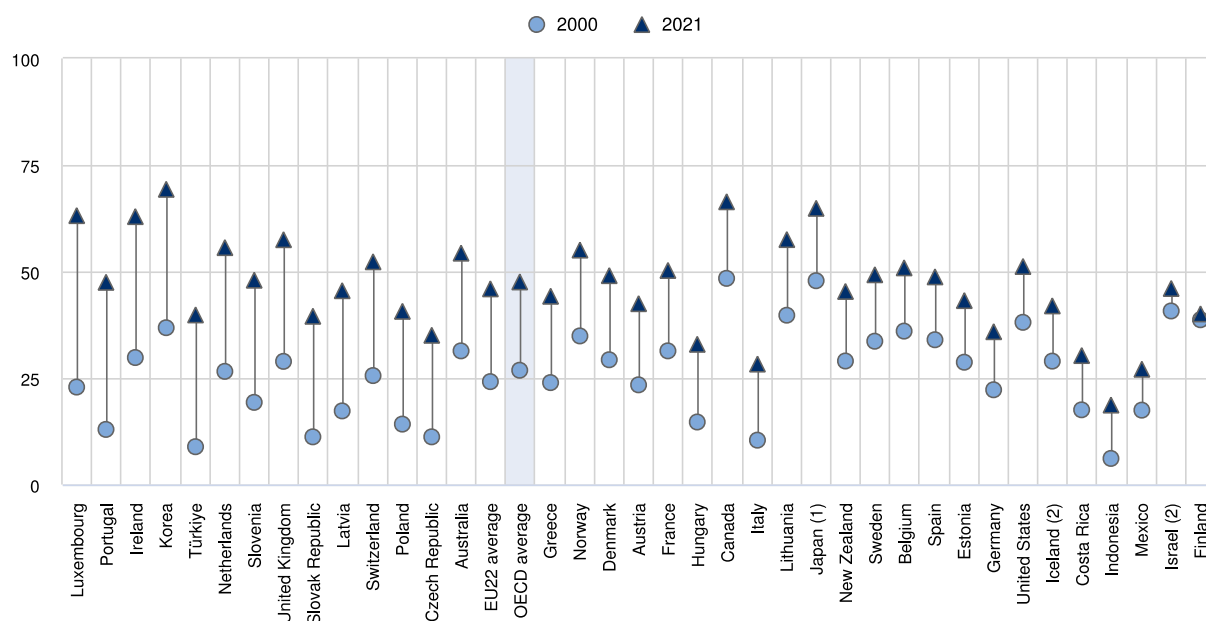
- Educational attainment has been increasing throughout the OECD, in particular at tertiary level. Between 2000 and 2021, the share of 25-34 year-olds with tertiary attainment increased on average by 21 percentage points. In the United States, the share also increased albeit at a slower pace, by 13 percentage points (from 38% in 2000 to 51% in 2021) (Figure 1). The United States is one of the 14 OECD countries where at least half of 25-34 year-olds have a tertiary education.
- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. Although the general increase in educational attainment has seen a parallel decline in the share of 25-34 year-olds without upper secondary attainment, 14% of young adults across the OECD still left school without an upper secondary qualification. In the United States, the share is 6%, which is lower than the OECD average.
- Higher educational attainment is often associated with better employment prospects and the United States is no exception. In 2021, the employment rate among 25-34 year-olds with tertiary education in the United States was 31 percentage points higher than among those with

below upper secondary attainment and 16 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. On average across OECD countries, the employment rate among 25-34 year-olds with a tertiary qualification was 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. While the positive link between educational attainment and employment rates holds for both men and for women across the OECD, it is particularly strong for women. In the United States, 38% of women with below upper secondary attainment were employed in 2021, compared to 81% of those with tertiary attainment. In contrast, the figures were 64% and 87% for men.

- Across the OECD, the labour market benefits of tertiary attainment have proved especially strong during economic crises. This was also the case during the COVID-19 pandemic in the United States. Between 2020 and 2021, unemployment for workers with below upper secondary attainment increased by 2.3 percentage points and by 2.2 percentage points for workers with upper secondary attainment, but only by 0.9 percentage points for workers with tertiary attainment.
- Educational attainment affects not just employment prospects, but also wage levels. On average across the OECD, 25-64 year-old workers with upper secondary or post-secondary non-tertiary attainment earn 29% more than workers with below upper secondary attainment, while those with tertiary attainment earn about twice as much. In the United States, the earnings advantage of tertiary-educated workers was even greater than the OECD average. In 2020, workers with upper secondary attainment earned 44% more than those with below upper secondary attainment and those with tertiary attainment earned more than twice as much.
- National averages provide only an incomplete picture of the situation in any given country. In most OECD countries, there are large differences in educational attainment across subnational regions. This is also the case in the United States. In 2019, the difference between the region with the highest share of 25-64 year-olds with tertiary attainment (District of Columbia, at 67%) and that with the lowest share (West Virginia, at 32%) was 35 percentage points. These subnational variations not only reflect differences in education opportunities, but also economic conditions and internal migration patterns.

Figure 1. Trends in the share of tertiary-educated 25-34 year-olds (2000 and 2021)

In per cent



1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group).

2. Year of reference differs from 2000: 2002 for Israel and 2003 for Iceland.

Countries are ranked in descending order of the difference in the share of tertiary-educated 25-34 year-olds between 2000 and 2021.

Source: OECD (2022), *Education at a Glance Database*, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes (link tbc).

## Access to education, participation and progress

- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. However, in the United States, men and women are equally represented.
- In the United States, 45% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (substantially below the OECD average of 54%). A subset of these students (18% of 18-24 year-olds) combine their education or training with some form of employment in the United States, compared to 17% on average across the OECD.
- As is the case in all OECD countries, a majority of students enrolled at tertiary level in the United States are bachelor's students (52%). However, the next commonest enrolment level varies from country to country. In the United States, short-cycle tertiary students make up the second largest group of tertiary students at 32%. This is also the case in 13 other OECD countries, while in the remaining 26 countries with available data, master's students form the second largest group.

## Financial resources invested in education

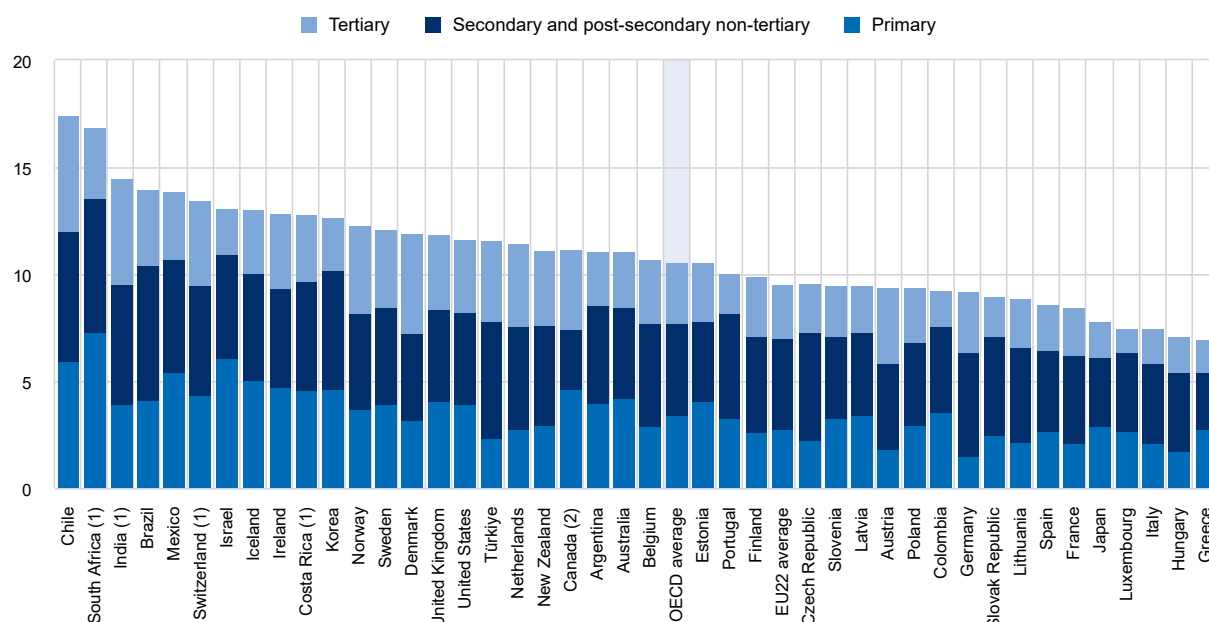
- All OECD countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average 4.9% of their gross domestic product (GDP) on primary

to tertiary educational institutions. In the United States, the corresponding share was 6%. Between 2008 and 2019, funding for educational institutions from all sources grew by 12% in the United States. However, over the same period of time, the increase in GDP was higher with 20%. As a consequence, expenditure on educational institutions as a share of GDP fell by 0.5 percentage points over the same time period.

- Public spending on primary to tertiary education was 11.7% of total government expenditure in the United States (Figure 2), higher than the OECD average (10.6%). Also, relative to GDP, public spending on primary to tertiary education (4.6%) is higher than the OECD average (4.4%).
- Spending on educational institutions as share of GDP or public budgets are important measures of the importance that countries place on education in their budgeting decisions. However, they do not show the total amount of funding per student because GDP levels, public budgets and student numbers vary from country to country. Across primary to tertiary education, OECD countries spend an average of USD 11 990 per student (in equivalent USD converted using PPPs for GDP) on educational institutions each year. In comparison, the United States spent USD 19 382 per student in 2019. Its cumulative expenditure on educating a student from the age of 6 to 15 was USD 143 383, which was significantly above the OECD average of USD 105 502.
- Across OECD countries, the provision of education at primary and secondary levels in terms of curricula, teaching styles and organisational management leads, on average, to similar patterns of expenditure per student from primary to post-secondary non-tertiary levels. In 2019, OECD countries as a whole spent on average USD 9 923 per student at primary and USD 11 400 per student at secondary level. In comparison, the United States, spent USD 13 780 per student at primary and USD 15 538 at secondary level, which were among the highest across OECD countries.
- However, annual expenditure per student at primary and secondary levels combined varies greatly across regions of the United States. In 2019, the region with the highest value (District of Columbia, USD 28 210) spent about three times as much per student as the region with the lowest value (Idaho, USD 9 103).
- In contrast to lower levels of education, spending on tertiary education varies widely across OECD countries. Expenditure per student at tertiary level in the United States is higher than at other levels of education, as is the case in almost all other OECD countries. The average expenditure per student in the United States in 2019 was USD 35 347 per year, which was USD 21 567 higher than that of the primary level and USD 19 809 higher than that of the secondary level. It is among the highest across OECD countries. The average expenditure at tertiary level (USD 17 559) is driven up by high values such as these in a few countries. At 12%, the share of research and development (R&D) expenditure makes up a smaller fraction of expenditure on tertiary education in the United States than on average across OECD countries (29%).
- Public funding dominates non-tertiary education (primary, secondary and post-secondary non-tertiary) in all OECD countries, even after transfers to the private sector. On average across the OECD, private funding accounts for 10% of expenditure at primary, secondary and post-secondary non-tertiary levels, while this share was 8% in the United States in 2019. In contrast, private expenditure at tertiary level was higher in all OECD countries. In the United States, the share of private expenditure at tertiary level reached 64%, which was significantly above the OECD average of 31%.

**Figure 2. Composition of total public expenditure on education as a percentage of total government expenditure (2019)**

Primary to tertiary education (including R&D), in per cent



1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

**Source:** OECD/UIS/Eurostat (2022), Table C4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-C.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf)).

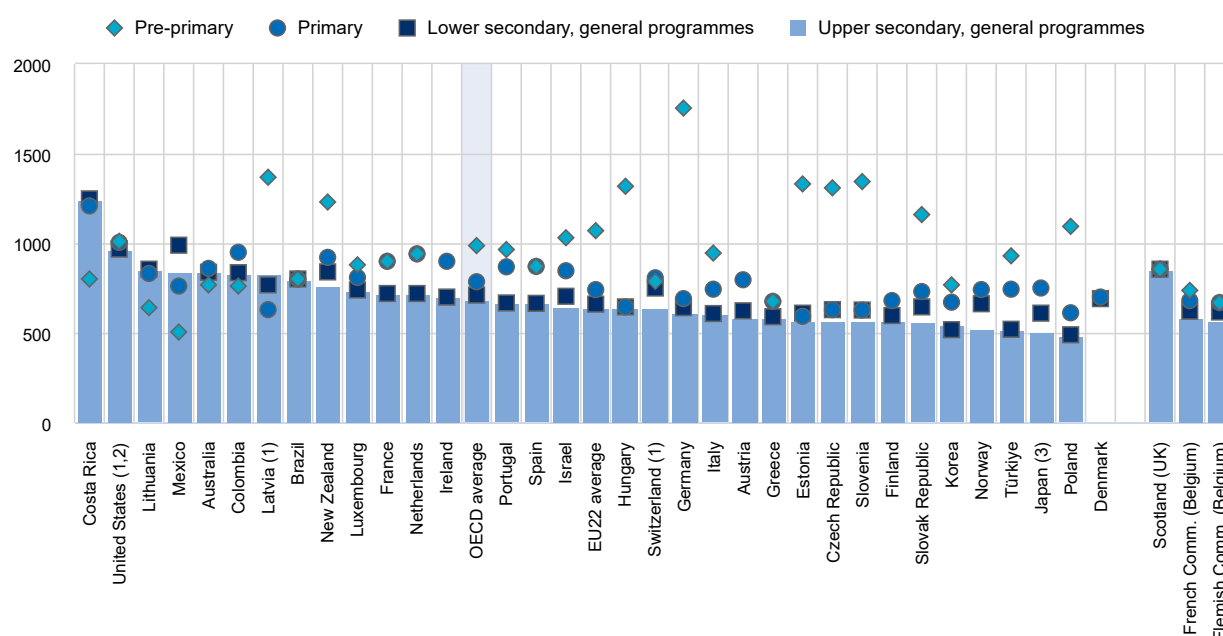
## Teachers, the learning environment and the organisation of schools

- The salaries of teachers and school heads are an important determinant of the attractiveness of the teaching profession, but they also represent the single largest expenditure item in formal education. In most OECD countries, the statutory salaries of teachers (and school heads) in public educational institutions increase with the level of education they teach, and also with experience. Actual salaries also increase with the level of education taught. On average across OECD countries, actual salaries range from USD 41 941 at the pre-primary level to USD 53 682 at the upper secondary level. In the United States, actual salaries averaged USD 56 199 at the pre-primary level and USD 62 569 at the upper secondary level in 2021.
- Teacher and school head salaries vary widely across the United States. For example, in 2021, salaries of teachers with 15 years of experience at primary and secondary levels were over USD 80 000 in California, but below USD 50 000 in Arizona. For both teachers and school heads, the subnational variation in the actual salaries was greater at the primary level than at lower and upper secondary levels.
- Between 2015 and 2021, on average across OECD countries, the statutory salaries of teachers at lower secondary level (general programmes) with 15 years of experience and the most prevalent qualifications increased by 6% in constant dollars. In the United States, salaries remained fairly stable between the years.

- Teachers' average actual salaries remain lower than earnings of tertiary-educated workers in almost all OECD countries, and at almost all levels of education. This is also the case in the United States. In 2021, lower secondary teachers in the United States earned 38.7% less than other tertiary-educated workers. In contrast, school head actual salaries in the United States were only slightly higher than the earnings of other tertiary educated workers. This is different from most OECD countries, where school heads tend to earn well above the average earnings of tertiary educated workers.
- The average number of teaching hours per year required from a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases. This is also the case in the United States. In the latest year available, annual teaching hours in the United States were 1 011 hours per year at pre-primary level, 1 004 hours at primary level, 966 hours at lower secondary level (general programmes) and 966 hours at upper secondary level (general programmes) (Figure 3).

**Figure 3. Teaching time of teachers, by level of education (2021)**

Net statutory teaching time in hours per year, in public institutions



1. Actual teaching time (in Latvia except for pre-primary level).

2. Reference year differs from 2021. Refer to the source table for details.

3. Average planned teaching time in each school at the beginning of the school year.

Countries and other participants are ranked in descending order of the number of teaching hours per year in general upper secondary education.

**Source:** OECD (2022), Table D4.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-D.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-D.pdf)).

## Focus on tertiary education

- Among 25-64 year-olds in the United States, bachelor's degrees are the most common tertiary attainment at 25% of the population followed by master's degrees with 12% and short-cycle tertiary qualifications with 11%. This is similar to the OECD average, where bachelor's degrees are most common (19%), followed by master's degrees (14%) and short cycle tertiary qualifications (7%).

As in all OECD countries and other participants, only a small fraction of the population holds a doctoral degree: the share is 2% in the United States.

- In the United States, the shares of 25-64 year-olds with a tertiary qualification in the fields of arts or humanities, social sciences, journalism and information (30%) and in natural sciences, mathematics and statistics (10%) were the highest among OECD countries. On average across OECD countries, the shares are 18% and 5% respectively.
- On average, tertiary attainment generates a wide range of labour-market benefits, including high employment rates. Yet, there are significant differences depending on the field of study. In 2021, employment rates in the United States were highest among tertiary-educated individuals who studied engineering, manufacturing and construction with 88% and lowest among those who studied education at 80%. However, these differences need to be put into perspective. Even among 25-64 year-olds with tertiary attainment in the field with the lowest employment rate, this was 13.4 percentage points higher than among those with upper secondary attainment.
- Wages also differ according to the field of study. In the United States, tertiary attainment in engineering, manufacturing and construction generates the highest earnings. Full-time full-year workers aged 25-64 with a tertiary degree in this field earn on average more than twice as much as workers with upper secondary attainment. In contrast, tertiary attainment in the field of education leads to the lowest wages. Workers with this educational background only earn on average 26% more than the wage of workers with upper secondary attainment.
- Despite the labour market advantages of a tertiary degree, many tertiary students do not graduate on time or do not graduate at all. In the United States, 49% of bachelor's students graduate within the theoretical programme duration. Across the OECD, the completion rate within the theoretical programme duration ranges from 12% to 69%. Completion rates three years after the theoretical programme duration are significantly higher in most countries and the differences between OECD countries are somewhat narrower. In the United States, 77% of bachelor's students have graduated within two years after the end of the theoretical programme duration, compared to 68% on average across the OECD (within three years after the end of the theoretical programme duration).
- In all OECD countries, tertiary completion rates are higher for women than for men. In the United States, 53% of women graduated within the theoretical programme duration at bachelor's level, compared to 45% of men. On average across the OECD, the completion rate of students in public institutions is lower than that of private institutions, but the figures differ from country to country. In the United States, 42% of bachelor's students graduate from public institutions within the theoretical programme duration, while the share is 62% for private institutions.
- In the United States, only 12% of students who enter a full-time short-cycle programme graduate from any tertiary programme within the theoretical duration (OECD average is 44%). However, the completion rate three years after the theoretical programme duration reaches 43%. It can partly be explained by intentional fluidity between short-cycle tertiary and bachelor's programmes.
- Entering tertiary education often means costs for students and their families, in terms of tuition fees, foregone earnings and living expenses, although they may also receive financial support to help them afford it. Public policies on tuition fees and financial support for students differ greatly across countries. In the United States, comparatively high levels of tuition fees are combined with high levels of financial support for students. However, over one-third of expenditure on tertiary institutions still comes from households. Public institutions in the United States charge average tuition fees of USD 9 212 for national in-state students at bachelor's level and USD 12 171 at master's level.
- OECD countries have different approaches to providing financial support to students enrolled in tertiary education, but in general countries with the highest level of public transfers to the private sector are those that also tend to have the highest tuition fees. In six OECD countries and other participants, including the United States, at least 80% of national students receive public financial

support in the form of student loans, scholarships or grants. In another six countries and other participants, less than 25% of students receive financial support. In these countries and other participants, public financial support is targeted on selected groups of students, such as those from socio-economically disadvantaged families.

- Over the decades, independent private institutions have provided an alternative to help meet the increasing demand for tertiary education. On average across the OECD, 17% of students are enrolled in independent private institutions, but this figure masks large differences between countries. In the United States, 27% of tertiary students are enrolled in such institutions. Independent private institutions charge higher annual tuition fees on average than public institutions for master's programmes in all OECD countries and other participants with available data, except in Chile and Lithuania.
- Enabling students to study part time is an important way to facilitate access to tertiary education. Many part-time students would not be able to study full time, for example because they have child-care responsibilities or have to work to fund their studies. The share of part-time students at the tertiary level in the United States is 38%, above the OECD average (22%). Compared to 2013, it has remained constant.
- The United States is the top OECD destination country for mobile tertiary students: 957 000 foreign students were enrolled in the United States in 2020, representing 15% of international education market share. However, this is only 5% of the total tertiary enrolment in the country. In comparison, its closest neighbour, Canada, holds 5% of international education market share, but foreign students make up 18% of the total tertiary enrolment.

## COVID-19: The second year of the pandemic

- In the United States, the U.S. Department of Education reinstituted the accountability rules of the Every Student Succeeds Act (ESSA) in the school year 2021/22, mandating each state implement annual state-wide standardised tests in reading and math in grades 3-8, and once in high schools. In the spring of 2022, a standardised national assessment (National Assessment of Education Progress) was administered at the primary and secondary levels to observe the impact of school closures on learning outcomes during the pandemic.
- The United States has conducted studies to evaluate the effects of the pandemic on students, parents, and teachers, such as the School Pulse Panel which includes information on topics such as mental health and well-being, instructional mode, learning recovery, student absenteeism and school staffing.
- In the school year 2021/22, national programmes to support students affected by the pandemic were implemented in the United States at the primary and secondary levels. The U.S. Department of Agriculture supported free meals to all students during the school year and continuation of providing meals and meal supplements to students during COVID-19 related school closures.
- The challenges related to the COVID-19 pandemic have created additional costs for education systems. Preliminary budget estimates for 2021 suggest that, compared to 2020, the education budget at primary to tertiary level in the United States increased strongly (by more than 5%, in nominal terms). Through the Elementary and Secondary School Emergency Relief (ESSER) Fund, the U.S. government dispersed USD 189.5 billion in grants throughout the pandemic to school districts at the discretion of individual states. ESSER funds have been used for various needs, such as strengthening the use of digital/online learning and academic programmes during summer vacation (National Conference of State Legislatures, 2022<sup>[1]</sup>).
- Young adults who are not in employment, education or training (NEET) for prolonged periods are at risk of adverse economic and social outcomes in both the short and the long term. After

increasing from 15% in 2019 to 19% during the COVID-19 pandemic in 2020, the share of 18-24 year-olds who were NEET in the United States declined to 17% in 2021.

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