

# Estonia

## Ensuring equal opportunities for students across socio-economic backgrounds

- Tuition fees in public institutions in Estonia are among the lowest for a bachelor's programme across countries with available data. There are no tuition fees for a bachelor's degree for national students.
- Across most OECD countries, socio-economic status influences learning outcomes more than gender and immigrant status. In Estonia, the proportion of children from the bottom quartile of the PISA index of economic, social and cultural status (ESCS) achieving at least PISA level 2 in reading in 2018 was 10% lower than that of children from the top ESCS quartile, a smaller share than the OECD average of 29%.
- Students from lower socio-economic background are more likely to enter upper secondary vocational programmes than general ones. In Estonia, students without any tertiary-educated parent represented 61% of entrants to upper secondary vocational programmes, compared to 49% among entrants to general programmes.
- International student mobility at the tertiary level has risen steadily reaching about 5 000 students in Estonia and representing 11% of tertiary students in 2019. The largest share of international tertiary students studying in Estonia comes from Finland. Students from low and lower-middle income countries are generally less likely to study abroad. In 2019, they represented 29% of international students in OECD countries, compared to 27% in Estonia.
- Large differences in educational attainment may lead to starker earnings inequality in many countries. In Estonia, 26% of 25-64 year-old adults with below upper secondary attainment earned at or below half the median earnings in 2019, below the OECD average of 27%.

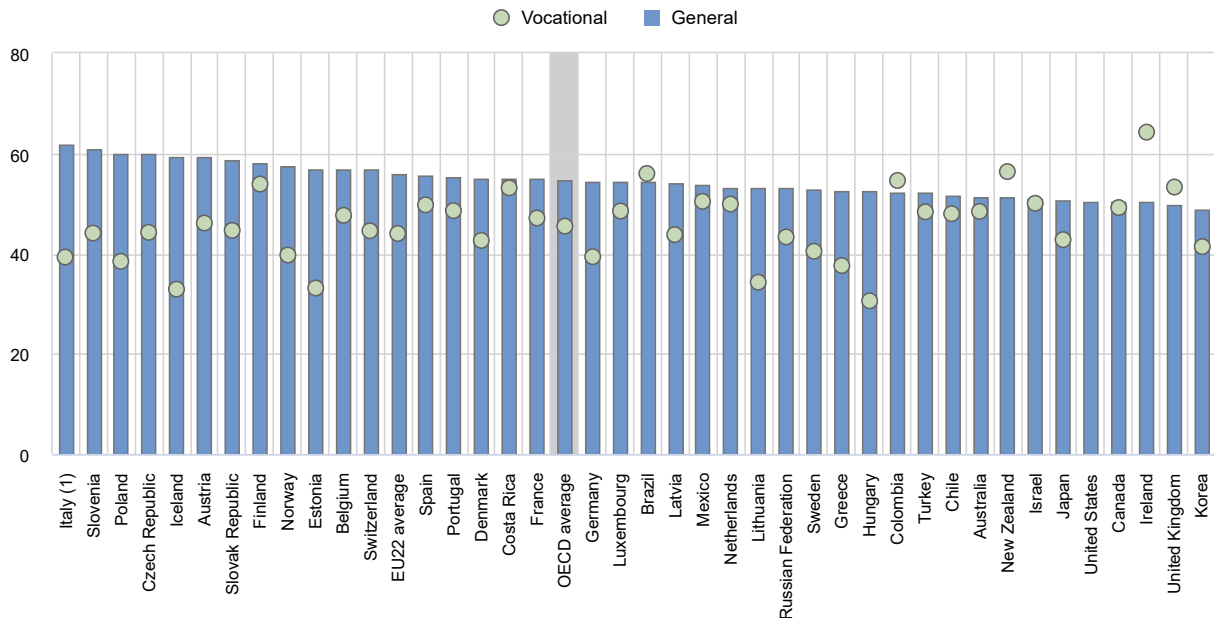
## Gender inequalities in education and outcomes

- In Estonia, 1.9% of students in lower secondary and 4.2% in upper secondary initial education (which includes students of all ages in formal upper secondary general education) repeated a grade in 2019, compared to 1.9% and 3% respectively on average across OECD countries. Boys are more likely to repeat a grade at lower secondary initial education than girls. In Estonia, 60% of repeaters at lower secondary level were boys, slightly lower than the OECD average of 61%. At upper secondary level, the share of boys repeating a grade in Estonia decreases to 42%, compared to 57% on average across OECD countries.
- Men are more likely than women to pursue a vocational track at upper secondary level in most OECD countries. This is also the case in Estonia, where 67% of upper secondary vocational graduates in 2019 were men (compared to the OECD average of 55%). Women are generally more likely to graduate from upper secondary general programmes. This is also the case in Estonia, where women represent 57% of graduates from upper secondary general programmes, compared to 55% on average across OECD countries (Figure 1).

- Tertiary education has been expanding in the last decades, and, in 2020, 25-34 year-old women were more likely than men to achieve tertiary education in all OECD countries. In Estonia, 55% of 25-34 year-old women had a tertiary qualification in 2020 compared to 33% of their male peers, while on average across OECD countries the shares were 52% among young women and 39% among young men.
- Gender differences in the distribution of tertiary entrants across fields of study are significant. Women tend to be under-represented in certain fields of science, technology, engineering and mathematics (STEM) across most OECD countries. On average, 26% of new entrants in engineering, manufacturing and construction and 20% in information and communication technologies were women in 2019. In Estonia, women represented 28% of new entrants in engineering, manufacturing and construction programmes and 25% in information and communication technologies. In contrast, they represented 88% of new entrants to the field of education, a sector traditionally dominated by women. In Estonia, men represent 17% of teachers across all levels of education, compared to 30% on average across OECD countries.
- Young women are less likely to be employed than young men, particularly those with lower levels of education. Only 44% of 25-34 year-old women with below upper secondary attainment were employed in 2020 compared to 79% of men in Estonia. This gender difference is larger than the average across OECD countries, where 43% of women and 69% of men with below upper secondary attainment are employed.
- In nearly all OECD countries and at all levels of educational attainment, 25-64 year-old women earn less than their male peers: their earnings correspond to 76%-78% of men's earnings on average across OECD countries. This proportion varies more across educational attainment levels within countries than on average across OECD countries. Compared to other education levels, women with below upper secondary education in Estonia have the lowest earnings relative to men with a similar education level, earning 59% as much, while those with tertiary education earn 75% as much.

Figure 1. Share of women among upper secondary graduates, by programme orientation (2019)

In per cent



1. Includes post-secondary non-tertiary level.

Countries are ranked in descending order of the share of women in general programmes.

Source: OECD (2021). Table B3.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2021\\_Annex3\\_ChapterB.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2021_Annex3_ChapterB.pdf)).

## Education and migration background

- On average across the OECD, foreign-born adults (25-64 year-olds) account for 22% of all adults with below upper secondary attainment, 14% of those attaining upper secondary or post-secondary non-tertiary attainment, and 18% of tertiary-educated adults. But in Estonia, the share of foreign-born adults among all adults with a given level of educational attainment is the highest among tertiary-educated adults (15% in 2020).
- Foreign-born adults have more difficulty finding a job than their native-born peers as they face various challenges, such as discrepancies in credential recognition, skills, and language. Thus, foreign-born workers are likely to have a lower reservation wage (the lowest wage rate at which a worker would be willing to accept a particular type of job). As a result, the employment rate for foreign-born adults with low educational attainment is higher than the rate for their native-born peers in many countries. On average across OECD countries, among adults without upper secondary attainment, 57% of native-born adults are employed compared to 61% of foreign-born adults. In Estonia, the employment rate of foreign-born adults without upper secondary attainment was 64% in 2020, slightly higher than that of their native-born peers (62%).
- The likelihood of being employed increases with the level of educational attainment, but foreign-born adults with tertiary attainment generally have lower employment prospects than their native-born peers. On average across OECD countries, 86% of native-born tertiary-educated adults are employed compared to 79% for foreign-born tertiary-educated adults. In Estonia, among tertiary-educated adults, 87% of native-born adults and 78% of foreign-born adults are employed.

Foreign-born adults who arrived in the country at an early age have spent some years in their host country's education system and gained nationally recognised credentials. As a result, their labour-market outcomes are generally better than that of those who arrived at a later age with a foreign qualification. In Estonia, among foreign-born adults with tertiary attainment, 83% of those who arrived by the age of 15 are employed, compared to 75% of those who arrived in the country at age 16 or later.

- Foreign-born young adults (15-29 year-olds) are also more likely to be neither employed nor in education or training (NEET) than native-born young adults. On average across OECD countries, 18.8% of foreign-born and 13.7% of native-born adults are NEET. In Estonia, the difference is 10 percentage points (22.3% compared to 11.8%). Early arrival in the country is generally associated with a lower risk of becoming NEET. In Estonia, the share of NEETs among foreign-born young adults who arrived by the age of 15 is 16%, while the share of NEETs among those who arrived at age 16 or later is 26%.
- In many OECD countries, foreign-born adults earn less than native-born adults. This pay gap may narrow with higher levels of educational attainment. On average across OECD countries, foreign-born adults with below secondary attainment working full-time earn 89% as much as their native-born peers, while this gap disappears among tertiary-educated adults. In Estonia, in 2019, among adults with below upper secondary attainment, the earnings of foreign-born full-time workers represented 86% that of their native-born peers, 81% among adults with upper secondary or post-secondary non-tertiary attainment, and 83% among those with a tertiary-education.

## COVID-19: 18 months into the pandemic

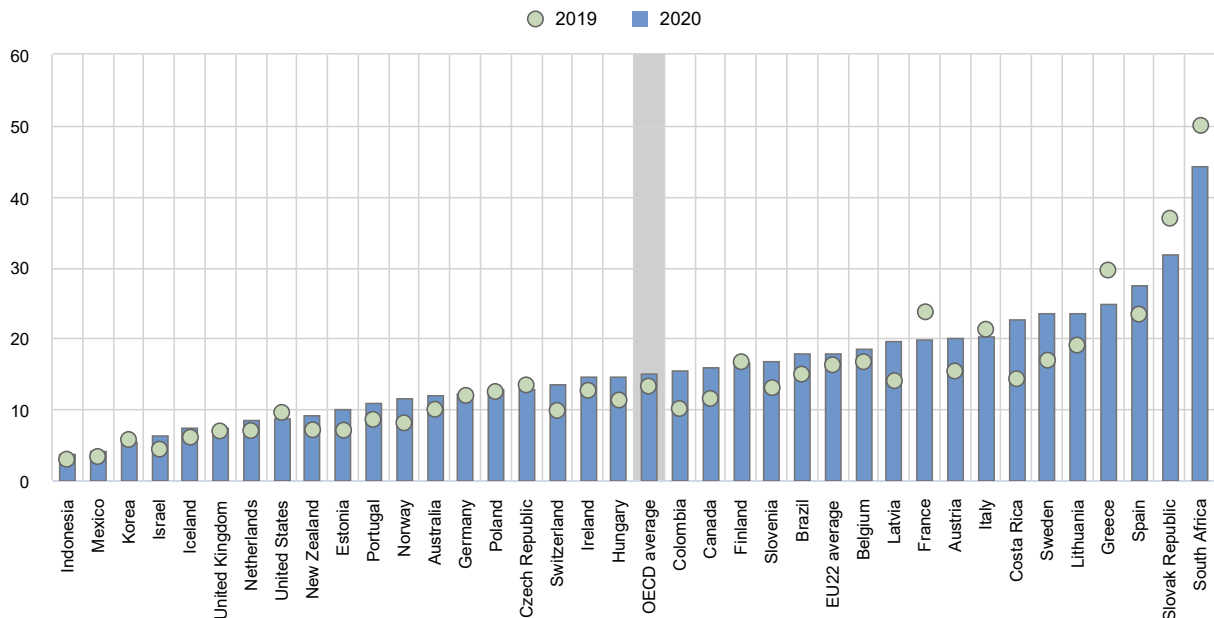
- The spread of COVID-19 has continued to impede access to in-person education in many countries around the world in 2021. By mid-May 2021, 37 OECD and partner countries had experienced periods of full school closure since the start of 2020.
- The number of instructional days when schools were fully closed since the start of 2020 due to the pandemic (excluding school holidays, public holidays and weekends) varies significantly between countries and increases with the level of education. Estonia is an exception. In Estonia, pre-primary schools did not fully close between 1 January 2020 and 20 May 2021. Meanwhile primary schools closed for 95 days, lower secondary for 95 days and upper secondary general schools for 95 days. In comparison, respective closures were 55, 78, 92 and 101 days on average across the OECD.
- In many countries, schools did not fully close but remained open with reduced capacity. Schools at upper secondary (general) level in Estonia, for instance, experienced 18 days of partial opening between January 2020 and May 2021, all of which took place in 2021. This was lower than the total number of days of partial opening in the OECD on average (57 days), where there were 27 days of partially open instruction in 2020, and 30 days in 2021. When adding both the number of days where schools were fully and partially closed, learning in upper secondary general education was disrupted by 113 days in Estonia between January 2020 and May 2021.
- The impact of COVID-19 and school closures on educational equity has been a concern for many countries. 30 out of the 36 OECD and partner countries surveyed, including Estonia, declared that additional measures were taken to support the education of children who might face additional barriers to learning during the pandemic. 22 of these countries, including Estonia, stated that they had subsidised devices for students to help them access education. Measures to encourage disadvantaged or vulnerable students to return to school after closures were also implemented in 29 OECD and partner countries, including in Estonia.
- Countries have faced difficult decisions on how to best manage their resources to ensure that students can continue to access quality education in the safest possible conditions and to minimise disruption to learning. Before the pandemic, total public expenditure on primary, secondary and

post-secondary non-tertiary education in Estonia reached 3% of gross domestic product (GDP) in 2018, which was lower than the OECD average of 3.2%. About two-thirds of OECD and partner countries reported increases in the funding allocated to primary and secondary schools to help them cope with the crisis in 2020. Compared to the previous year, Estonia reported an increase in the fiscal year education budget for primary and lower secondary general education in both 2020 and 2021.

- 20 OECD and partner countries, although not Estonia, stated that the allocation of additional public funds to support the educational response to the pandemic in primary and secondary schools was based on the number of students or classes. At the same time, 16 countries targeted additional funds at socio-economically disadvantaged students as a way to ensure that resources targeted those that needed them the most, though this was not the case in Estonia. In Estonia, need-based economic support was available even before the pandemic and therefore there was no need to introduce a new approach.
- Countries' approach to prioritise teachers in vaccination campaigns against COVID-19 has varied. In total, 19 OECD and partner countries, including Estonia, have prioritised at least some teachers as part of the government's plans to vaccinate the population on a national level (as of 20 May 2021).
- The impact of the pandemic on the economy has raised concerns about the prospects of young adults, especially those leaving education earlier than others. In Estonia, the unemployment rate among 25-34 year-olds with below upper secondary attainment was 10.1% in 2020, an increase of 3 percentage points from the previous year. In comparison, the average youth unemployment rate of 15.1% in 2020 across OECD countries represented an increase of 2 percentage points from 2019 (Figure 2).
- At the same time, the number of adults participating in formal and/or non-formal education and training decreased by 27% on average in the OECD between the second quarter of 2019 and the second quarter of 2020 (i.e. during the peak of the first wave of COVID-19 in many OECD countries). In Estonia, the participation of adults in formal and/or non-formal education and training in this period decreased by 40% in Estonia.
- Despite the impact of the crisis on employment, the share of NEETs among 18-24 year-olds did not greatly increase in most OECD and partner countries during the first year of the COVID-19 pandemic. On average, the share of 18-24 year-old NEETs in OECD countries rose from 14.4% in 2019 to 16.1% in 2020. In Estonia, the share of 18-24 year-old NEETs was 9.3% in 2019, which increased to 12.6% in 2020.

**Figure 2. Trends in unemployment rates of 25-34 year-olds with below upper secondary attainment (2019 and 2020)**

In per cent



**Compare your country:** <https://www.compareyourcountry.org/education-at-a-glance-2021/en/2/3044+3045+3046/trend//OAVG>

Countries are ranked in ascending order of the unemployment rate of 25-34 year-olds with below upper secondary attainment in 2020.

**Source:** OECD (2021), Table A3.3. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2021\\_Annex3\\_ChapterA.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2021_Annex3_ChapterA.pdf)).

## Investing in education

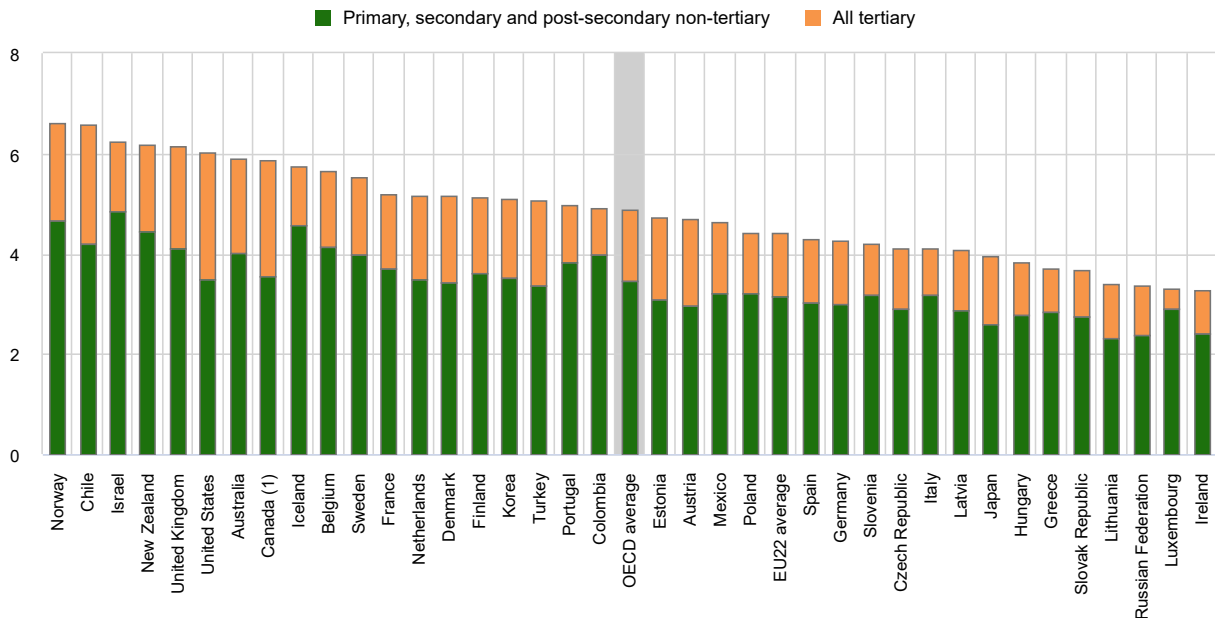
- Annual expenditure per student on educational institutions provides an indication of the investment countries make on each student. After accounting for public-to-private transfers, public expenditure on primary to tertiary educational institutions per full-time student in Estonia was USD 8 909 in 2018 (in equivalent USD converted using PPPs for GDP) compared to USD 10 000 on average across OECD countries.
- Expenditure on core educational services such as instruction and teaching make up the largest share of education expenditure. However, ancillary services (such as student welfare) and research and development (R&D) activities also influence the level of expenditure per student. In primary to tertiary education, 84% of institutions' expenditure per student is devoted to core educational services in Estonia (compared to 89% on average across OECD countries). This share is generally lower at the tertiary level due to expenditure on research and development, including in Estonia where 56% of total expenditure is devoted to core educational services.
- The provision of education across public and private institutions influences the allocation of resources between levels of education and types of institution. In 2018, Estonia spent USD 8 466 per student at primary, secondary and post-secondary non-tertiary education, USD 1 988 lower than the OECD average of USD 10 454. At tertiary level, Estonia invested USD 17 433 per student, USD 368 more than the OECD average. Expenditure per student on public educational institutions is higher than on private institutions on average across OECD countries. This is also the case

in Estonia, where total expenditure on primary to tertiary public institutions amounts to USD 10 335 per student, compared to USD 9 274 on private institutions.

- Between 2012 and 2018, expenditure per student from primary to tertiary education increased at an average annual growth rate of 1.6% across OECD countries. In Estonia, expenditure on educational institutions grew at an average annual rate of 3.1%, while the number of students fell on average by 0.9% per year over this period. This resulted in an average annual growth rate of 4% in expenditure per student over this period.
- The share of national wealth devoted to educational institutions is lower in Estonia than on average among OECD countries. In 2018, Estonia spent 4.7% of its GDP on primary to tertiary educational institutions, which is 0.2 percentage points lower than the OECD average. Across levels of education, Estonia devoted a lower share of GDP than the OECD average at non-tertiary levels and a higher share at tertiary level (Figure 3).
- The share of capital costs on total expenditure on educational institutions is higher than the OECD average at primary to tertiary level in Estonia. At primary, secondary and post-secondary non-tertiary level, capital costs account for 10% of total spending on educational institutions, 2 percentage points above the OECD average (8%). At the tertiary level, capital costs represent 18%, higher than the average across OECD countries of 11%.
- Compensation of teachers and other staff employed in educational institutions represents the largest share of current expenditure from primary to tertiary education. In 2018, Estonia allocated 69% of its current expenditure to staff compensation, compared to 74% on average across OECD countries. Staff compensation tends to make up a smaller share of current expenditure on tertiary institutions due to the higher costs of facilities and equipment at this level. In Estonia, staff compensation represents 62% of current expenditure on tertiary institutions compared to 73% at non-tertiary levels. On average across OECD countries, the share is 68% at tertiary level and 77% at non-tertiary level.

Figure 3. Total expenditure on educational institutions as a percentage of GDP (2018)

In per cent



Compare your country: <https://www.compareyourcountry.org/education-at-a-glance-2021/en/5/3059+3060+3061+3062+3063+3064/default>

1. Primary, secondary and post-secondary non-tertiary education includes pre-primary programmes.

Countries are ranked in descending order of total expenditure on educational institutions as a percentage of GDP.

Source: OECD (2021), Table C2.1. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2021\\_Annex3\\_ChapterC.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2021_Annex3_ChapterC.pdf)).

## Working conditions of school teachers

- Teachers' actual salaries reflect their statutory salaries and additional work-related payments. Average actual salaries also depend on the characteristics of the teaching population such as their age, level of experience and qualification level. In Estonia, teachers' average actual salaries (after conversion to USD using PPPs for private consumption) amount to USD 23 605 at the pre-primary level (ISCED 02; data also include ISCED 01), USD 30 892 at the primary level, USD 30 892 at the general lower secondary level and USD 30 892 at the general upper secondary level. On average across OECD countries, teachers' average actual salaries were USD 40 707, USD 45 687, USD 47 988 and USD 51 749 at the pre-primary, primary, lower secondary and upper secondary level respectively (Figure 4).
- Teachers' average actual salaries remained lower than those of tertiary-educated workers in almost all countries, and at almost all levels of education. Teachers' average actual salaries at pre-primary (ISCED 02; data also include ISCED 01), primary and general secondary levels of education were between 81% and 96% of the earnings of tertiary-educated workers on average across OECD countries and economies. In Estonia, the proportion ranged from 73% to 95% at pre-primary, primary and general secondary levels of education.
- The average number of teaching hours per year required of a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases: it ranged from 989 hours at pre-primary level (ISCED 02), to 791 hours at primary level, 723 hours at lower

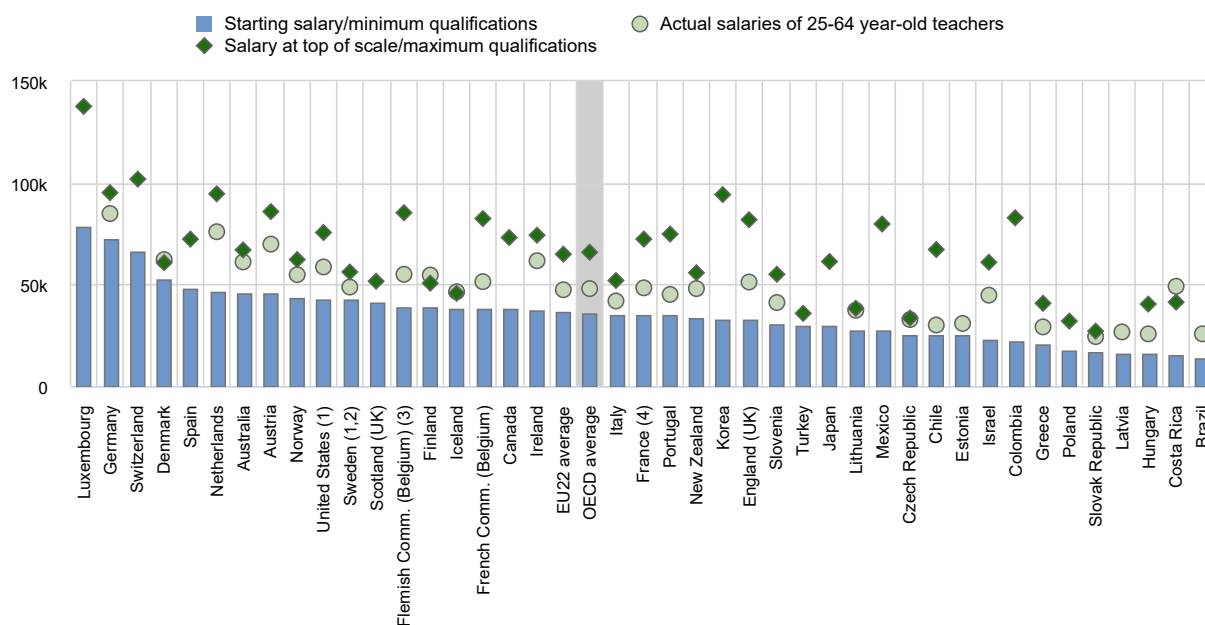


secondary level (general programmes) and 685 hours at upper secondary level (general programmes) in 2020. In Estonia, teachers teach 1 326 hours per year at pre-primary level, 592 hours per year at primary level, 609 hours at lower secondary level (general programmes) and 574 hours at upper secondary level (general programmes).

- During their working time, teachers also perform various tasks other than teaching itself such as lesson planning and preparation, marking students' work and communicating or co-operating with parents or guardians. At the lower secondary level, teachers in Estonia spend 40% of their statutory working time on teaching, compared to 44% on average among countries with available data.
- In primary and secondary education, about 35% of teachers are at least 50 years old on average across OECD countries and may reach retirement age in the next decade, while the size of the school-age population is projected to increase in some countries, putting many governments under pressure to recruit and train new teachers. In 2019, 46% of primary teachers in Estonia were at least 50 years old, which was higher than the OECD average of 33%. On average across OECD countries, the proportion of teachers aged at least 50 years old increases with higher levels of education taught, to 36% in lower secondary education and 40% in upper secondary education. In Estonia, this proportion varies from 55% at lower secondary level to 52% at upper secondary level.

Figure 4. Lower secondary teachers' average actual salaries compared to the statutory starting and top of the scale salaries (2020)

Annual statutory salaries of teachers in public institutions, in equivalent USD converted using PPPs



Compare your country: <https://www.compareyourcountry.org/education-at-a-glance-2021/en/7/all/default>

Note: Actual salaries include bonuses and allowances.

1. Actual base salaries.
2. Salaries at the top of the scale and the minimum qualifications, instead of the maximum qualifications.
3. Salaries at the top of the scale and the most prevalent qualifications, instead of the maximum qualifications.
4. Includes the average of fixed bonuses for overtime hours.

Countries and economies are ranked in descending order of starting salaries for lower secondary teachers with the minimum qualifications.

Source: OECD (2021), Table D3.3 and 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/EAG2021\\_Annex3\\_ChapterD.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2021_Annex3_ChapterD.pdf)).

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## More information

**For more information on Education at a Glance 2021 and to access the full set of Indicators, see:**  
<https://doi.org/10.1787/b35a14e5-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/EAG2021\\_Annex3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2021_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, 2021). 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 Survey on Joint 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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