Czech Republic

Ensuring equal opportunities for students across socio-economic backgrounds

- Socio-economic status may significantly impact students' participation in education, particularly at levels of education that rely, in many countries, most heavily on private expenditure, such as early childhood education and care and tertiary education. This is less the case in the Czech Republic: private sources accounted for 10% of total expenditure in pre-primary institutions, lower than the OECD average of 17%. At tertiary level, 17% of expenditure comes from private sources in the Czech Republic, compared to 30% on average across OECD countries.
- Across most OECD countries, socio-economic status influences learning outcomes more than gender and immigrant status. In the Czech Republic, 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 32% lower than that of children from the top ESCS quartile, a larger share than the OECD average of 29%.
- International student mobility at the tertiary level has risen steadily reaching about 45 900 students in the Czech Republic and representing 14% of tertiary students in 2019. The largest share of foreign tertiary students studying in the Czech Republic comes from the Slovak Republic. 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 15% in the Czech Republic.
- Large differences in educational attainment may lead to starker earnings inequality in many countries. In the Czech Republic, 29% of 25-64 year-old adults with below upper secondary attainment earned at or below half the median earnings in 2018, above the OECD average of 27%.

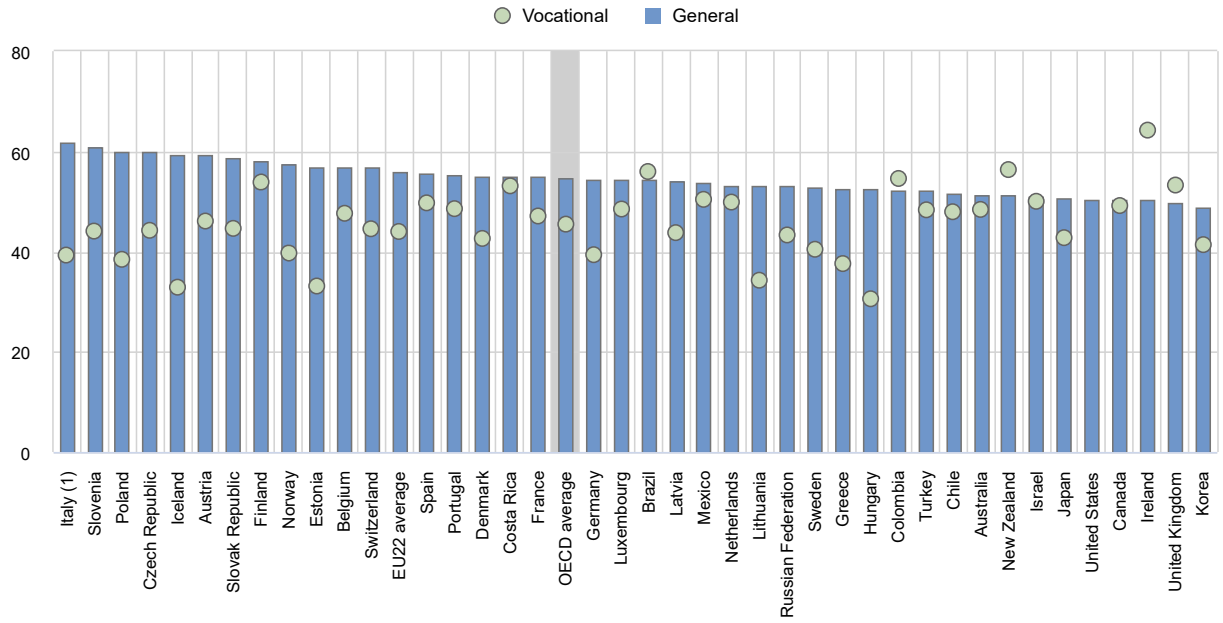
Gender inequalities in education and outcomes

- In the Czech Republic, 0.8% of students in lower secondary and 8.2% in upper secondary initial 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 the Czech Republic, 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 the Czech Republic increases to 64%, 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 the Czech Republic, where 56% 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 the Czech Republic, where women represent 60% 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 the Czech Republic, 40% of 25-34 year-old women had a tertiary qualification in 2020 compared to 26% 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 the Czech Republic, women represented 32% of new entrants in engineering, manufacturing and construction programmes and 17% in information and communication technologies. In contrast, they represented 83% of new entrants to the field of education, a sector traditionally dominated by women. In the Czech Republic, men represent 24% 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 42% of 25-34 year-old women with below upper secondary attainment were employed in 2020 compared to 73% of men in the Czech Republic. 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 tertiary education in the Czech Republic have the lowest earnings relative to men with a similar education level, earning 73% as much, while those with below upper secondary education earn 86% as much.
- On average across OECD countries with available data, 25-64 year-old women tend to participate slightly more in adult learning than men of the same age. In the Czech Republic, 43% of women participated in formal and/or non-formal education and training in 2016, compared to 50% of men. Family reasons were reported as barriers to participation in formal and/or non-formal education and training by 40% of women compared to 19% of men.

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).

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. In the Czech Republic as in most OECD countries, the share of foreign-born adults among all adults with a given level of educational attainment is the highest among adults with below upper secondary attainment (7%) 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 the Czech Republic, the employment rate of foreign-born adults without upper secondary attainment was 77% in 2020, higher than that of their native-born peers (55%).
- 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

the Czech Republic, among tertiary-educated adults, 86% of native-born adults and 82% of foreign-born adults are employed.

Cross-regional disparities in education

- National level data often hide important regional inequalities in children's access and participation to education. In general, inequalities across regions tend to widen at non-compulsory levels of education. For example, in the majority of countries, the variation in enrolment rate of 3-5 year-olds is often greater than the variation among 6-14 year-olds. This is the case in the Czech Republic, where the enrolment rate of 3-5 year-olds varies from 80% in the region of Northwest to 90% in the region of Central Moravia whereas the enrolment of 6-14 year-olds varies from 94% to 100% across regions. Similarly, the enrolment rate of 15-19 year-olds varies from 62% to 100% in the Czech Republic.
- Tertiary attainment may vary significantly within a country. In the Czech Republic, the share of 25-64 year-old adults with tertiary education varies from 14% in the region of Northwest to 46% in the region of Prague, one of the highest regional variations across OECD countries with available data.
- On average across OECD and partner countries with subnational data on labour-force status, there is more regional variation in employment rates among those with below upper secondary education (17 percentage points) than for those with tertiary education (8 percentage points). In the Czech Republic, there is a difference of 29 percentage points in the employment rate of adults with below upper secondary education between different regions of the country compared to 6 percentage points for tertiary-educated adults.
- The proportion of young people who are NEET shows significant subnational as well as national variation across OECD and partner countries. In the Czech Republic, the difference in the share of 18-24 year-old NEETs between regions with the highest and lowest value is 13 percentage points, compared to 11 percentage points on average across OECD countries.

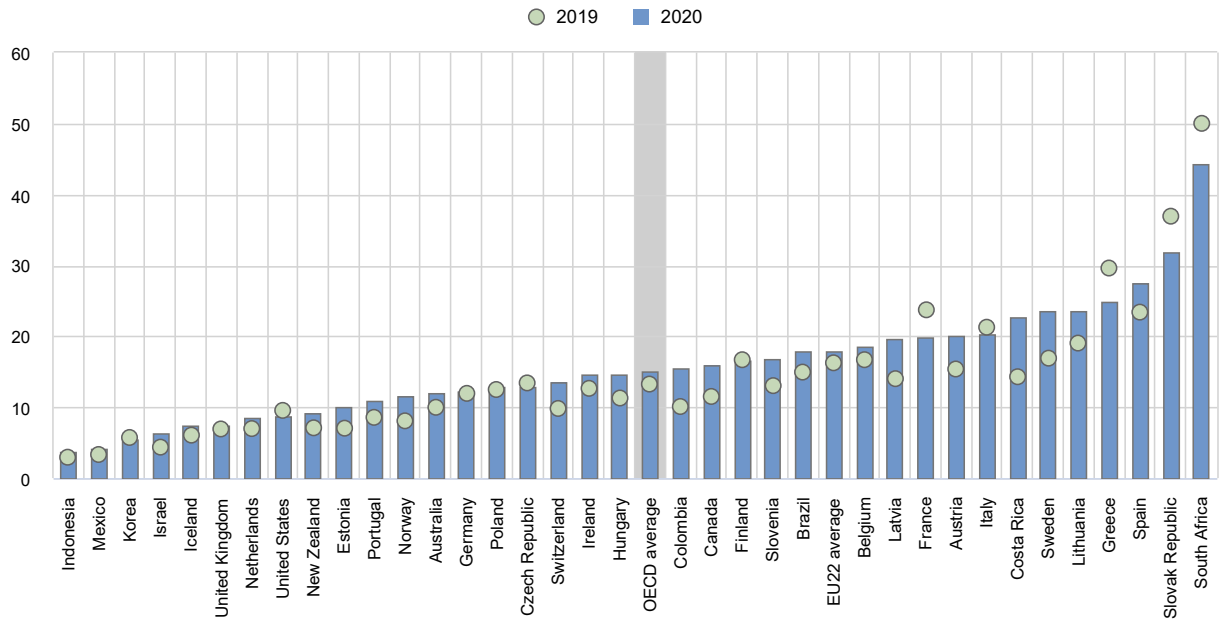
COVID-19: 18 months into the pandemic

- 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. The Czech Republic follows this pattern. In the Czech Republic, pre-primary schools were fully closed for an average of 28 days between 1 January 2020 and 20 May 2021. Meanwhile primary schools closed for 94 days, lower secondary for 141 days and upper secondary general schools for 155 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 the Czech Republic for instance experienced 55 days of partial opening between January 2020 and May 2021, all of which took place in 2020. 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 at least 210 days in the Czech Republic between January 2020 and May 2021.

- 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 the Czech Republic reached 2.8% 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 2019, the Czech Republic reported no change in the fiscal year education budget for primary and lower secondary general education in 2020.
- 20 OECD and partner countries, although not the Czech Republic, 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 the Czech Republic.
- Countries' approach to prioritise teachers in vaccination campaigns against COVID-19 has varied. In total, 19 OECD and partner countries, including the Czech Republic, 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 the Czech Republic, the unemployment rate among 25-34 year-olds with below upper secondary attainment was 12.8% in 2020, a decrease of 1 percentage point 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 the Czech Republic, the participation of adults in formal and/or non-formal education and training in this period decreased by 54% in the Czech Republic.

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).

Investing in education

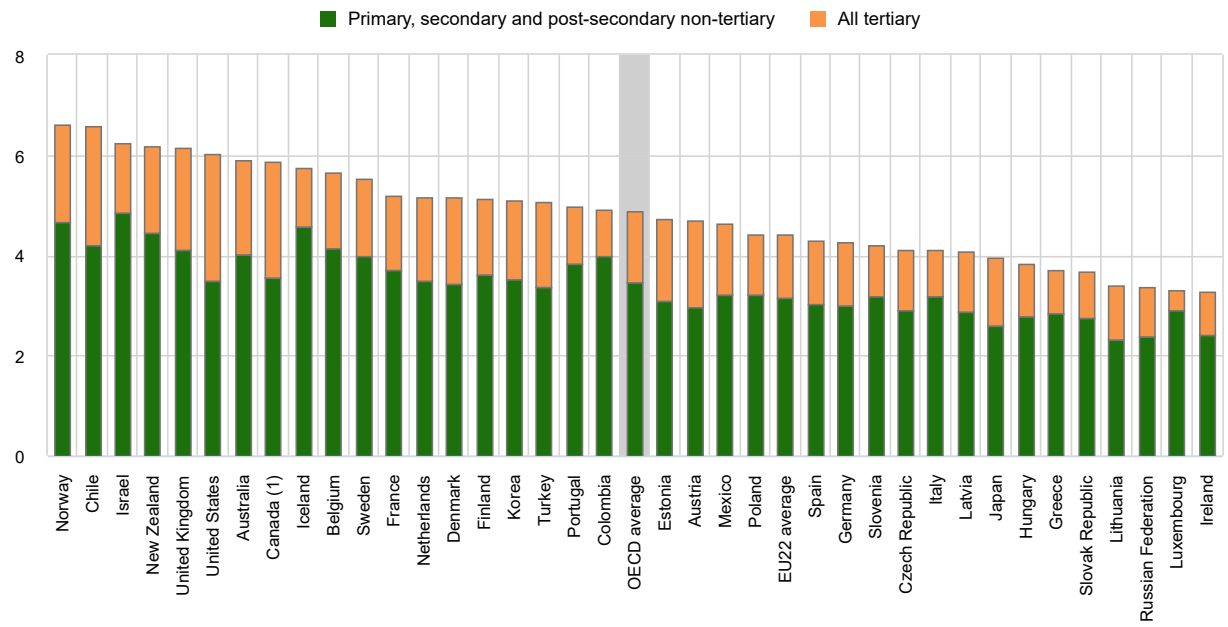
- Annual expenditure per student on educational institutions provides an indication of the investment countries make on each student. After accounting for public-to-private transfers, public expenditure on primary to tertiary educational institutions per full-time student in the Czech Republic was USD 9 228 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, 85% of institutions' expenditure per student is devoted to core educational services in the Czech Republic (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 the Czech Republic where 65% 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, the Czech Republic spent USD 9 206 per student at primary, secondary and post-secondary non-tertiary education, USD 1 248 lower than the OECD average of USD 10 454. At tertiary level, the Czech Republic invested USD 16 148 per student, USD 917 less 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 the Czech Republic, where total expenditure on primary to tertiary public institutions amounts to USD 10 867 per student, compared to USD 6 395 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 the Czech Republic, expenditure on educational institutions grew at an average annual rate of 2.8%, while the number of students fell on average by 0.1% per year over this period. This resulted in an average annual growth rate of 3% in expenditure per student over this period.
- The share of national wealth devoted to educational institutions is lower in the Czech Republic than on average among OECD countries. In 2018, the Czech Republic spent 4.1% of its GDP on primary to tertiary educational institutions, which is 0.8 percentage points lower than the OECD average. Across levels of education, the Czech Republic devoted a lower share of GDP than the OECD average at both non-tertiary and tertiary levels (Figure 3).

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).

Working conditions of school teachers

- The salaries of school staff, and in particular teachers and school heads, represent the largest single expenditure in formal education. Their salary levels also have an impact on the attractiveness of the teaching profession. In most OECD countries and economies, statutory

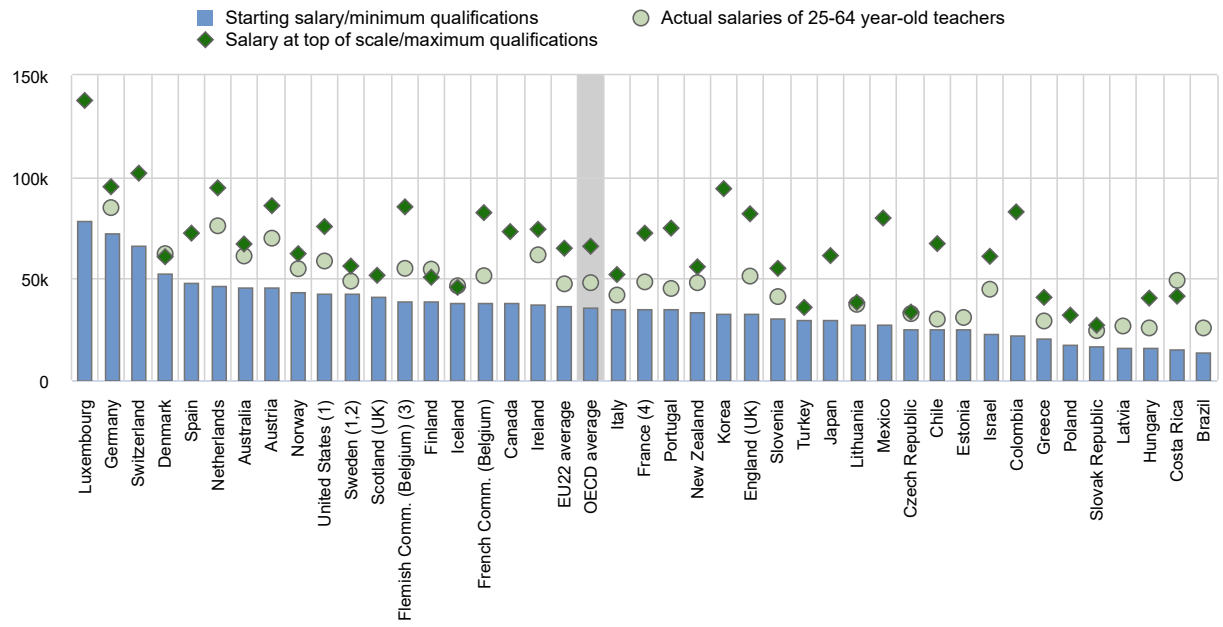
salaries of teachers (and school heads) in public educational institutions increase with the level of education they teach, and also with experience. On average, statutory salaries of teachers with maximum qualifications at the top of their salary scales (maximum salaries) were between 86% and 91% higher than those of teachers with the minimum qualifications at the start of their career (minimum salaries) at pre-primary (ISCED 02), primary and general lower and upper secondary levels in 2020. In the Czech Republic, maximum salaries were 18% to 32% higher than minimum salaries at each level of education (Figure 4). However, most teachers were paid between these minimum and maximum salaries.

- 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 the Czech Republic, teachers' average actual salaries (after conversion to USD using PPPs for private consumption) amount to USD 27 336 at the pre-primary level (ISCED 02), USD 32 928 at the primary level, USD 32 715 at the general lower secondary level and USD 33 915 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), 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 the Czech Republic, the proportion ranged from 61% to 76% at pre-primary, primary and general secondary levels of education.
- However, there are significant differences between men and women in relative salaries of teachers due to the gender gap in earnings across the labour market (statutory salaries are equal for male and female teachers in public educational institutions). When average actual salaries of teachers are compared to salaries of tertiary educated workers, these relative salaries are usually higher for women, and lower for men. In the Czech Republic, the proportion ranges from 89% to 92% for women (98% to 110% on average across OECD countries and economies), and from 65% to 67% for men (76% to 85% on average across OECD countries and economies) in primary and general secondary 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 the Czech Republic, teachers teach 1 308 hours per year at pre-primary level, 637 hours per year at primary level, 637 hours at lower secondary level (general programmes) and 608 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 the Czech Republic spend 38% 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, 43% of primary teachers in the Czech Republic 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 the Czech Republic, this proportion varies from 37% at lower secondary level to 53% 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).

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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).

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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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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