

What do OECD data on teachers' salaries tell us?





- Teachers' salaries account for almost two-thirds of current expenditure in primary and secondary schools on average in OECD countries. And yet, in almost all countries and at almost all levels of education, average actual teachers' salaries are lower than those of tertiary-educated workers.
- Salary levels differ widely not just between countries and between regions in some countries but also between levels of education within each country, even though the qualifications required to teach at primary and secondary level are often the same.
- Countries take very different approaches to teachers' pay progression, with mid-career primary teachers in eight countries earning over 60% more than their colleagues starting out, while in ten countries the difference is below 20%.
- Salary levels for teachers are just one of several determinants of the attractiveness
 of the teaching profession. Decision makers also need to offer more opportunities
 for professional development, to ensure that the profession remains intellectually
 stimulating throughout teachers' careers.

Whether teachers are considered adequately paid or not may depend on how the question is framed

The quality of an education system never exceeds the quality of its teachers (Schleicher, $2016_{[1]}$), and pay is one of the factors attracting qualified students to teaching. But there are many other factors that impact the career choices an individual makes, and the relationship between all factors must be interpreted with caution. Indeed, international data from the OECD, for example, do not show clear relationship between salary levels and teachers' social status or job satisfaction (OECD, $2020_{[2]}$).

Teachers' salaries are widely discussed at the start of each school year, with different views expressed on the topic. OECD data are often used as a benchmark when considering these questions.

For instance, when the debate is focused around the level of education expenditure in a country, it is often pointed out that teachers' salaries represent the largest item in the education budget, and that increasing them will have an impact on it which will be proportionate to the salary increase. This helps to explain why pay rises have sometimes been modest or even non-existent over recent decades. In 2019, teachers' pay accounted for almost two-thirds of the current expenditure of primary and secondary schools on average in OECD countries. The share reached or even exceeded 75% in Colombia, Greece and Luxembourg (Indicator C6 of OECD (2022_{3})). To take a concrete example of what this means: in Poland, if policy makers wanted to increase the gross monthly salary of the 267 000 teachers working in public primary and lower secondary schools by USD 500 (i.e. an increase of about 15% of their actual salaries), this would cost at least USD 1.6 billion per year.

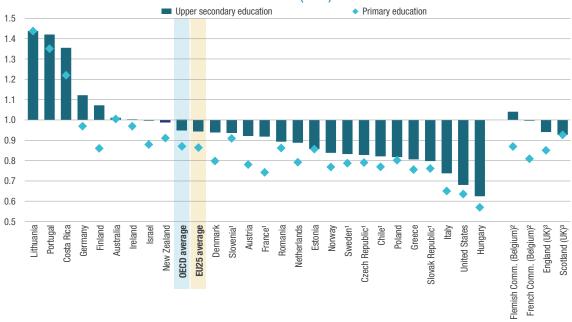
Comparing teachers' salaries with those of other workers with equivalent qualifications offers a very different perspective. Teachers often have a master's degree or at least a tertiary qualification and in almost all countries, and at almost all levels of education, teachers' actual salaries are lower than those of tertiary-educated workers. In primary education, average salaries are 13% lower than those of other tertiary graduates, while at upper secondary level the gap is still 5% (Figure 1). However, it is worth noting that in a few countries teachers earn more than adults with tertiary qualifications, either at all levels of education (Australia, Costa Rica, Lithuania and Portugal) or only at certain levels (at upper secondary level in Finland and the Flemish Community of Belgium, and at secondary level in Germany).

A third approach often used in this debate is to analyse teachers' salaries in the light of the time they spend teaching students. According to OECD data, teachers spend an average of 21 hours a week in front of their students at primary level, compared with 19 hours at lower secondary level and 18 hours at upper secondary level (Table D4.1 of OECD (2022_[3])). This type of comparison has its limitations, however, because it ignores the amount of working time devoted to tasks other than teaching, such as assessing pupils, preparing lessons, marking papers, in-service training and teaching meetings. These figures are more difficult to estimate. According to OECD estimates upper secondary teachers spent an average of 57% of their time on these other tasks in 2021. This percentage reached 66% or more in the Czech Republic, Japan, Norway, Poland and the Republic of Türkiye, but less than 50% in Israel, Latvia, Lithuania, Luxembourg and Scotland (United Kingdom). The significant proportion of time devoted to tasks other than teaching must also be taken into account in discussions about teachers' salaries.





Figure 1. Actual salaries of teachers relative to earnings of tertiary-educated workers by levels of education (2022)



- 1. Year of reference for salaries of teachers differs from 2022.
- 2. Data on earnings for full-time, full-year workers with tertiary education refer to Belgium.
- 3. Data on earnings for full-time, full-year workers with tertiary education refer to the United Kingdom.

Countries and other participants are ranked in descending order of the ratio of teachers' salaries to earnings for tertiary-educated workers. **Source**: OECD (2023₍₄₎), Education at a Glance 2023, Table D3.3. https://doi.org/10.1787/e13bef63-en.

Salaries and career progression vary considerably between levels of education and between countries

Statutory salary

The statutory salary is the salary set out in the official national salary scales, plus any bonuses received by all teachers. For example, if in a given year all teachers receive a bonus for computer equipment, this bonus is counted. On the other hand, if only some of the teachers receive it, it is not included. Statutory salaries are presented at different points in a teacher's career: starting salaries, and salaries after 10 and 15 years of service, and at the top of the pay scale. They can be seen as a guaranteed minimum pay for teachers at different stages of their careers, but with one qualifier: statutory salaries for teachers at the end of their careers correspond to the maximum salaries that education systems offer, a point that not all teachers reach. Box 1 gives additional details on the methodology used.

Box 1. Methodology

Each year, Education at a Glance publishes data on the gross annual salaries of teachers working in public schools in general education. The figures are expressed in US dollars for all OECD countries. The OECD uses purchasing power parity of private consumption (PPP) as a conversion factor. This enables the purchasing power of different currencies to be expressed in a common unit. Non-permanent teachers, permanent part-time teachers and teachers working in private schools are not included in this indicator.

Three results stand out when analysing teachers' statutory salaries.

The first is that there are huge differences in salaries between countries, even though they mostly require teachers to have similar levels of education, such as a master's degree to teach in secondary education. For instance, the salaries of upper secondary teachers (in general programmes) with 15 years

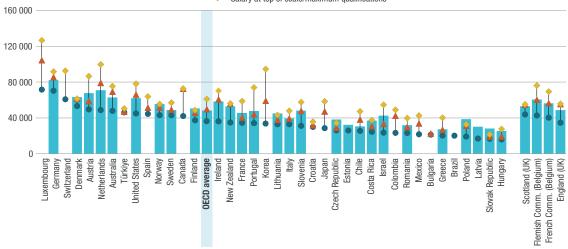
of experience and the most prevalent qualifications – a proxy for mid-career salaries – range from less than USD 20 000 in the Slovak Republic to more than USD 70 000 in Canada, the Flemish and French Communities of Belgium, Germany, and the Netherlands, and they exceed USD 100 000 in Luxembourg. These large differences remain even after overall differences in income levels across countries are taken into account.

Second, countries also choose very different strategies for teachers' salary progression, with no clear trend emerging from the figures. Although salaries increase everywhere with seniority, the scale of the increase varies greatly from one country to another. For instance, although primary teachers' statutory salaries are 37% higher on average after 15 years' experience than at the start of their career, there are ten countries where the increase is less than 20%, while in eight others it exceeds 60%. Canada, Colombia, England (United Kingdom), Japan, Korea and New Zealand have chosen to start young teachers on relatively low salaries compared to their more experienced colleagues, but their pay progresses very rapidly in the first half of their careers. Others have taken the opposite route: in Austria teachers' salaries after 15 years are only 19% higher than when they started and in France they are only 18% higher (see all countries in Figure 2).

Figure 2. Primary teachers' average actual salaries compared to the statutory minimum and maximum salaries (2022)

Annual salaries of teachers in public institutions, in equivalent USD converted using PPPs for private consumption

- Actual salaries of 25-64 year-old teachers
- Starting salary/minimum qualifications
- Salary after 15 years with most prevalent qualification
- Salary at top of scale/maximum qualifications

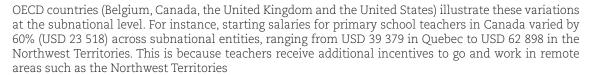


Note: Actual salaries include bonuses and allowances.

Source: OECD (2023 $_{[4]}$), Education at a Glance 2023, Tables D3.1 and D3.4.

The third finding is that teachers' salaries increase significantly with the level of education taught in more than half the countries with data, often because teachers in secondary education have more opportunities to earn bonuses. This can create inequalities if teachers have the same level of qualification and status. On average across OECD countries, using teachers with 15 years of experience and the most prevalent qualifications as the benchmark, salaries range from USD 45 981 at the pre-primary level to USD 49 968 at the primary level, USD 51 613 at the lower secondary level and USD 53 456 at the upper secondary level. In Denmark and the Flemish and French Communities of Belgium, upper secondary teachers earn about 25-30% more than pre-primary teachers with the same experience, while they earn around 48% more in Finland and over 80% more in Mexico. In Denmark and Finland, the difference is mainly driven by lower salaries for pre-primary teachers. In the Flemish and French Communities of Belgium and in Mexico, teachers' salaries at upper secondary level are significantly higher than at other levels of education.

Salaries also vary significantly regionally in some countries, especially in federal countries where salaries may be defined at the subnational level. These differences in statutory salaries can result, at least partly, from differences in the cost of living between subnational entities. Data provided by four

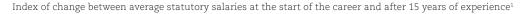


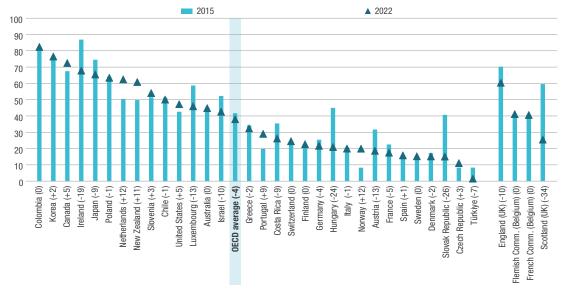
Actual salary

Actual salary is the second measure used in OECD statistics. It is the average salary calculated from what is on each teacher's payslip (statutory salaries plus payments related to additional tasks and responsibilities or the teacher's characteristics). It takes into account all the bonuses received by each teacher and gives a true indication of the teaching wage bill. The actual salaries of 25-64 year-old teachers are often close to the mid-career salary (i.e. after 15 years of service). However, actual annual salaries are at least 10% higher than statutory salaries for teachers with 15 years of experience and the most prevalent qualifications in 8 countries with data at pre-primary level and in 12 countries at upper secondary level.

Three factors explain the differences between actual salaries and statutory mid-career salaries: the age distribution of teachers, their level of qualifications and the bonuses they receive. In countries where teachers are older, such as Greece, Italy, Lithuania, Latvia and Portugal (i.e. more than 50% of lower secondary teachers are over 50), most of them are in the second half of their careers, which inflates the wage bill. The average actual salary is also higher in countries where several qualifications coexist. For instance, in France, around two-thirds of upper secondary teachers have a Capes (the most prevalent qualification) and around one-third have another qualification called the Aggregation and are better paid. Finally, the bonuses received by some (but not all) teachers also inflate wage bills and teachers' average actual salaries. For instance, two-fifths of countries with available information paid extra compensation to lower secondary teachers who participate in school management activities in addition to their teaching duties.

Figure 3. Change in primary teachers' statutory salaries at different stages of their careers between 2015 and 2022





How to read this figure: In Scotland (UK), teachers' statutory salaries were 59% higher after 15 years' experience than at the start of their career in 2015. In 2022, the difference had narrowed to 26%. The difference between early and mid-career salaries has therefore fallen by 34 percentage points over the period 2015-2022 (see figure in parentheses next to country names).

1. Index of change in teachers' statutory salaries is based on the difference between the salaries for teachers with the most prevalent qualifications at the start and after 15 years of experience, converted to constant prices using deflators for private consumption

Countries and other participants are ranked in descending order of the difference in 2022. **Source:** OECD Education at a Glance Database on OECD.stat (https://stats.oecd.org/).



Teachers' salaries have not risen substantially over the past decade in most countries and have even fallen in almost half of them at upper secondary level of education

Between 2015 and 2022, teachers' pay rose in more than half of all countries with available data, but often the increases were relatively modest. On average across the countries with data for both 2015 and 2022, statutory salaries (for teachers with 15 years of experience and the most prevalent qualifications) have risen by around 1% a year in real terms since 2015. Only in Chile, the Czech Republic, Lithuania and the Slovak Republic (at pre-primary level) did they grow by more than 20% over that period, all countries where salary levels were well below the OECD average. Indeed, in almost half of the OECD countries for which data are available, statutory salaries at the upper secondary level have fallen in real terms over the period 2015 to 2022. The largest decreases were seen in Costa Rica where salaries fell by 19% at pre-primary and primary levels and nearly 40% at secondary level. This situation is likely to worsen in many countries once the inflation of the last 12 months has been taken into account..

Changes in teachers' salaries are not always uniform, but may depend on how long they have been in the profession. In just under half of the countries with data, the pay difference between primary teachers at the start of their career and those with 15 years of experience remained stable between 2015 and 2022 (varying by less than 3 percentage points). However, in just over one-third of countries (13 out of 35 countries with data), the differences have benefited novice teachers (or at least they suffered smaller pay cuts than their more experienced peers), with the gap between new and experienced teachers narrowing by 4 percentage points or more over this period. In other words, the situation of teachers at the start of the career has improved in these countries compared to older teachers.

In six countries – Canada, Norway, the Netherlands, New Zealand, Portugal and the United States – the opposite has been the case: the gap between the salaries of novice teachers and those with 15 years experience has widened by at least 4 percentage points between 2015 and 2022 (Figure 3).

Salaries are just one factor behind the attractiveness of the teaching profession

The lower the level of statutory teaching salaries in a country (in PPP), the higher the proportion of teachers in the country who consider teachers' salaries a high priority. The TALIS 2018 survey found that the share of teachers who rate salary increases as highly important is negatively correlated with the level of statutory starting salaries in their country (the linear correlation coefficient amounts to 0.75). The same relationship holds when looking at levels of salaries after 15 years of experience and teachers' satisfaction with their salaries. Across education systems, satisfaction over salaries is strongly associated with the statutory salary earned by teachers in public institutions (OECD (2020_[2]), Figures II.3.10 and II.3.17).

This is why policy makers need to ensure better teachers' salaries if they are to consistently attract high quality teaching staff. However, salary is not the only lever that needs to be used to ensure that the profession is attractive. Germany, to name just one country among many, is going through an unprecedented crisis in teacher recruitment, even though teachers' salaries are among the highest in the OECD area and also nearly at par with workers with similar level of education.

To attract high-quality teaching staff, in addition to raising their salaries, countries should also offer more opportunities for professional development and mobility, reduce their administrative workload, and improve the image of teachers in the eyes of the public. It is by activating all these levers that the profession will regain its credibility and become more attractive.

The bottom line

Teachers' salaries are widely debated around the world, with divergent views among the actors of education. Salaries have risen very little over the last decade and have even fallen in real terms in almost half of OECD countries between 2015 and 2022. However, salary levels are just one of the many factors contributing to the attractiveness of the profession. In addition to raising salaries, decision makers should also take steps to raise the status of the profession in society, and offer teachers more opportunities for professional development and mobility to ensure that the profession remains intellectually stimulating throughout their careers.



- [4] OECD (2023), Education at a Glance 2023: OECD Indicators, OECD Publishing, Paris, https://doi.org/10.1787/e13bef63-en.
- [3] OECD (2022), Education at a Glance 2022: OECD Indicators, OECD Publishing, Paris, https://doi.org/10.1W787/3197152b-en.
- [2] OECD (2020), TALIS 2018 Results (Volume II): Teachers and School Leaders as Valued Professionals, TALIS, OECD Publishing, Paris, https://doi.org/10.1787/19cf08df-en.
- [3] OECD (2021), Education at a Glance Database Educational personnel by institution, http://stats.oecd.org/Index.aspx?datasetcode=EDU_PERS_INST (accessed on 18 February 2022).
- [1] Schleicher, A. (2016), Teaching Excellence through Professional Learning and Policy Reform: Lessons from around the World, International Summit on the Teaching Profession, OECD Publishing, Paris, https://doi.org/10.1787/9789264252059-en.

VISIT

www.oecd-ilibrary.org/education/education-indicators-in-focus 22267077
Education Indicators in Focus (previous issues)
PISA in Focus
Teaching in Focus



CONTACT:

Eric CHARBONNIER (Eric.Charbonnier@oecd.org)

EDIFs provide data-driven snapshots of important issues in education policy. They show key OECD education indicators and discuss policy implications derived from the data.

Photo credit: © Christopher Futcher / iStock; © Marc Romanelli / Gettyimages; © michaeljung / Shutterstock; © Pressmaster / Shutterstock

This Education Indicators in Focus has been authorised by Andreas Schleicher, Director of the Directorate for Education and Skills, OECD.

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

This document, as well as any data and any map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

The statistical data for Israel are supplied by and are under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.