

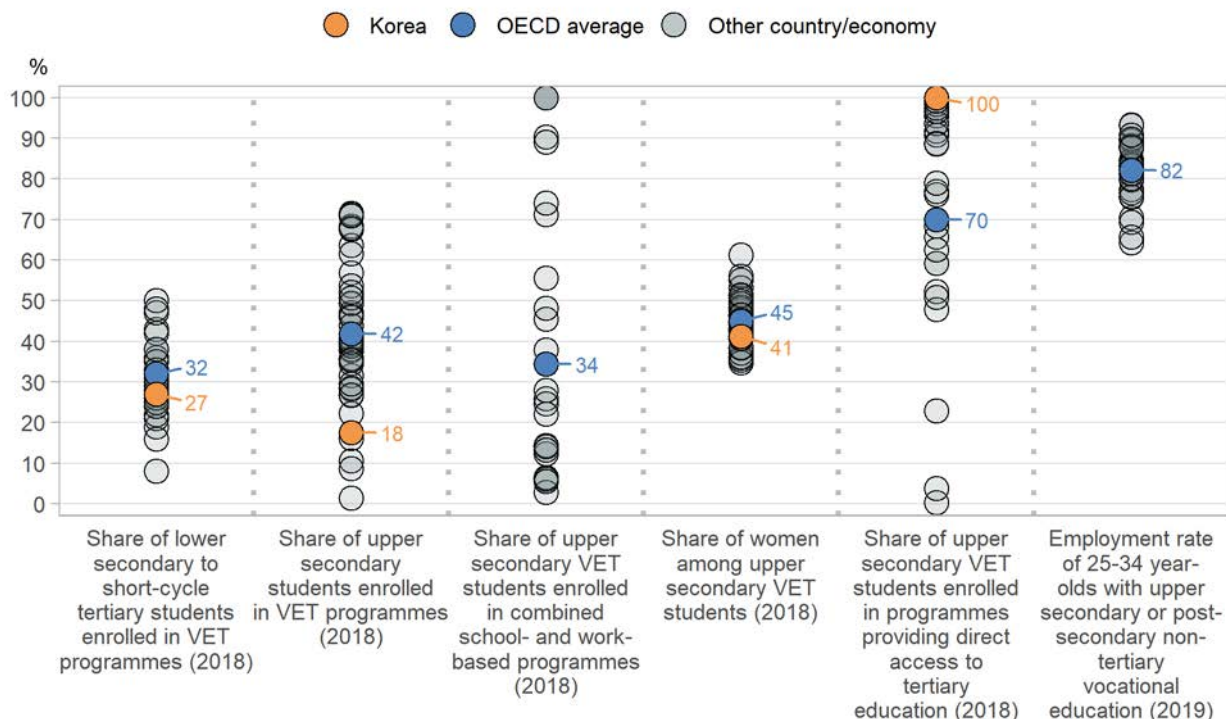
Education at a Glance: OECD Indicators is the authoritative source for information on the state of education around the world. It provides data on the structure, finances and performance of education systems in OECD and partner countries.

## Korea

### Participation and outcomes of vocational education and training

- Vocational education and training (VET) programmes attract a diverse range of students, including those seeking qualifications and technical skills to enter the labour market, adults wishing to increase their employability by developing their skills further, and students who may seek entry into higher education later on.
- About one in three students from lower secondary to short-cycle tertiary level are enrolled in a VET programme on average across OECD countries. However, there are wide variations across countries, ranging from less than 20% of students enrolled in vocational education to more than 45% in a few countries. In Korea, 27% of students are enrolled in vocational programmes, lower than the OECD average (32%), with the majority of lower secondary to short-cycle tertiary VET students (71%) found in short-cycle tertiary education (Figure 1).

Figure 1. Snapshot of vocational education



**Note:** Only countries and economies with available data are shown. The years shown in parentheses is the most common year of reference for OECD and partner countries. Refer to the source table for more details.

**Source:** OECD (2020), indicator A3 and B7. See Education at a Glance Database. <http://stats.oecd.org/> for more information and Annex 3 for notes (<https://doi.org/10.1787/69096873-en>).

- VET is an important part of upper secondary education in most OECD countries. On average, 18% of all upper secondary students opt for VET programmes in Korea, a lower proportion than the OECD average of 42% (Figure 1). Certain fields of study are more common than others at this level. In Korea, the most common broad field is engineering, manufacturing and construction with 44% of upper secondary vocational graduates earning a qualification in this field, compared to 33% on average across OECD countries.
- The organisation and delivery of upper secondary VET programmes varies considerably from country to country. In that context, the combination of learning in school and in the work environment through combined school- and work-based programmes offers numerous advantages. However, these programmes do not exist in Korea and all students in upper secondary vocational education are enrolled in school based programmes. In school-based programmes, at least 75% of the curriculum is taught within the school environment.
- To support upper secondary vocational students' transition to post-secondary education and improve their career prospects, many countries have created direct pathways from vocational programmes to higher levels of education. In Korea, all upper secondary vocational students are enrolled in programmes that offer the chance of direct access to tertiary education, higher than the OECD average of 70% (Figure 1).
- On average across OECD countries, adults with an upper secondary or post-secondary non-tertiary vocational education have similar earnings as their peers with a general education at this level. The difference is less than 5 percentage points in about one quarter of the countries with data, and it is of 3 percentage points in Korea.
- On average across OECD countries, the ratio of students to teaching staff is similar in both upper secondary vocational and general programmes. In Korea, there are 13 students for every teaching staff member in general programmes and 10 in vocational ones.

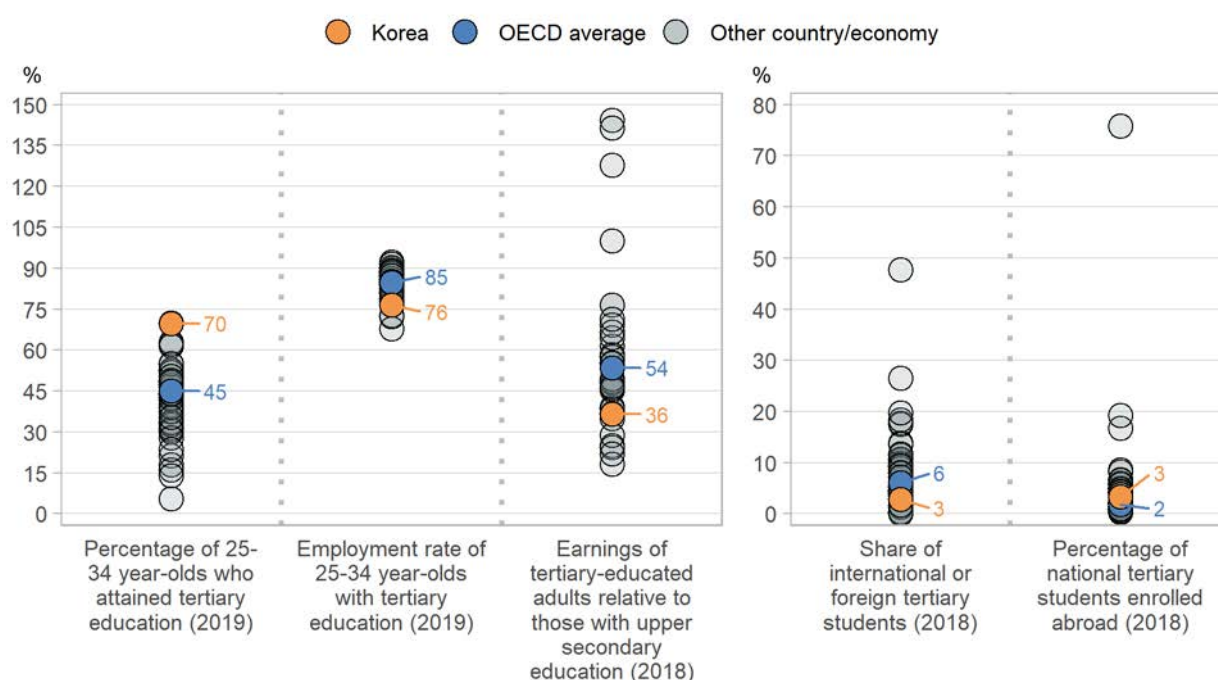
## The rising demand for tertiary education

- The expansion of tertiary education is a worldwide trend. Between 2009 and 2019, the share of 25-34 year-olds with a tertiary degree increased in all OECD and partner countries. In Korea, the share increased by 9 percentage points during this period, the same as the average increase across OECD countries (9 percentage points). In 2019, 70% of 25-34 year-olds had a tertiary degree in Korea compared to 45% on average across OECD countries (Figure 2).
- From the gender perspective, younger women are more likely than younger men to achieve tertiary education in all OECD countries. In Korea, 76% of 25-34 year-old women had a tertiary qualification compared to 64% of their male peers, while on average across OECD countries the shares are 51% of younger women and 39% of younger men.
- Short-cycle tertiary programmes are generally designed to be vocationally oriented and represent the second most common route of entry into tertiary education on average across OECD countries, after bachelor's programmes. If current entry patterns continue, 28% of adults are expected to enter short-cycle tertiary education before the age of 25 in Korea, compared to 10% on average across OECD countries. In Korea, women make up 40% of students in such programmes, compared to 52% on average across OECD countries.
- Young people can face barriers to labour market entry as they transition from school to work, but higher educational attainment increases their likelihood of being employed and is associated with higher incomes. On average across OECD countries, the employment rate in 2019 was 61% for 25-34 year-olds without upper secondary education, 78% for those with upper secondary or post-secondary non-tertiary education as their highest attainment and 85% for those with tertiary education. In Korea, the shares are 62% for below upper secondary, 66% for upper secondary or

post-secondary non-tertiary and 76% for tertiary attainment. Having a tertiary degree also carries a considerable earnings advantage in most OECD and partner countries. In Korea, in 2018, 25-64 year-olds with a tertiary degree with income from full-time, full-year employment earned 36% more than full-time, full-year workers with upper secondary education compared to 54% on average across OECD countries (Figure 2).

- International student mobility has been expanding quite consistently in the past twenty years. In 2018, 5.6 million tertiary students worldwide had crossed a border to study, more than twice the number in 2005. In Korea, the share of foreign or international students increased from 2% in 2014 to 3% in 2018. Meanwhile 3% of Korean tertiary students are enrolled abroad compared to 2% in total across OECD countries (Figure 2). English-speaking countries are the most attractive student destinations overall in the OECD area, with Australia, Canada, the United Kingdom and the United States receiving more than 40% of all internationally mobile students in OECD and partner countries. Among students leaving Korea to study, the most popular destination country is the United States.
- Beyond the economic and employment outcomes, higher educational attainment is related to greater social benefits. For example, those with a tertiary education are more likely to feel they have a say in what their government does. In 2016, on average across OECD countries participating in the International Social Survey Programme, 41% of tertiary-educated adults agreed with this sentiment compared to 28% of those with below upper secondary education. In Korea, 67% of tertiary-educated adults feel this way compared with 58% of those with below upper secondary education.

Figure 2. Snapshot of tertiary education



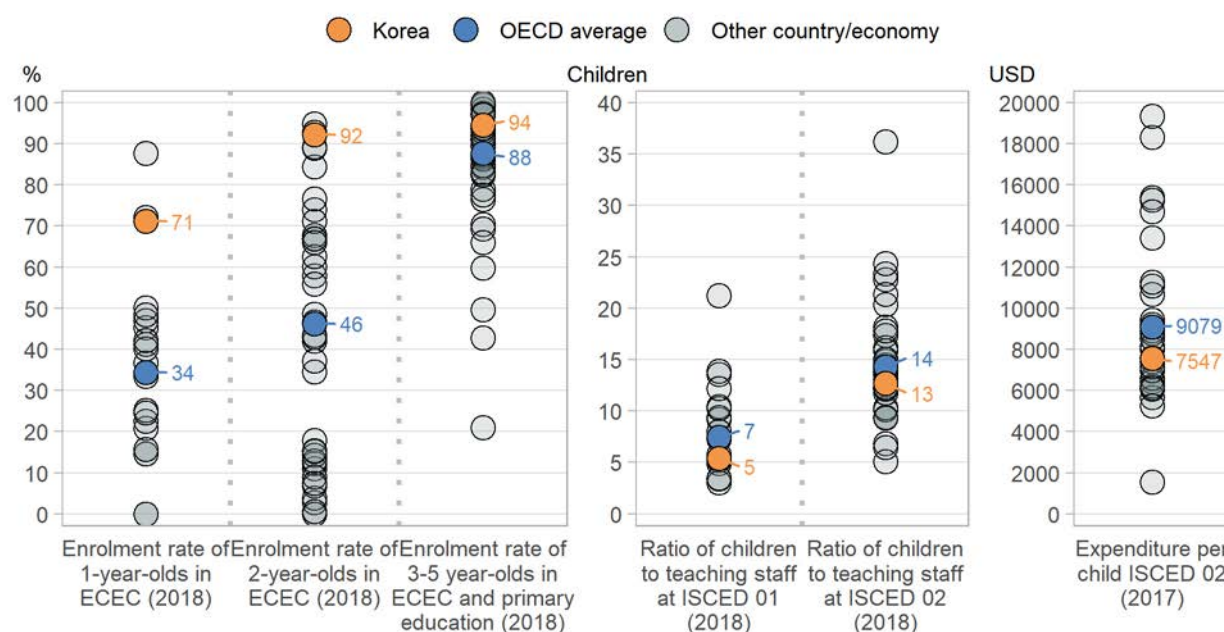
**Note:** Only countries and economies with available data are shown. The years shown in parentheses is the most common year of reference for OECD and partner countries. Refer to the source table for more details.

**Source:** OECD (2020), indicator A1, A3, A4 and B6. See Education at a Glance Database <http://stats.oecd.org/> for more information and Annex 3 for notes (<https://doi.org/10.1787/69096873-en>).

## Starting strong

- Early childhood education and care (ECEC) has experienced a surge of policy attention in OECD countries in recent decades, with a focus on children under the age of 3 in many countries. In Korea, 71% of 1-year-olds were enrolled in a formal ECEC programme (ISCED 0) in 2018, above the OECD average of 34%. Among 2-year-olds, the enrolment rate at ISCED 0 is 92% in Korea, 46 percentage points above the OECD average of 46% (Figure 3).
- In many OECD countries, ECEC begins for most children long before they turn 5 and there are universal legal entitlements to a place in ECEC services for at least one or two years before the start of compulsory schooling. While compulsory education begins at age 6 in Korea, 94% of 3-5 year-olds in 2018 are enrolled in ECEC programmes and primary education in Korea, compared to 88% on average across OECD countries (Figure 3).
- Public provision of early childhood education and care is an important factor in ensuring broad access to affordable ECEC. On average across OECD countries, more than one in two of the children in early childhood educational development services (ISCED 01) are enrolled in private institutions. In Korea, 89% of children enrolled in ISCED 01 programmes attend private ECEC institutions. Enrolment in private institutions is usually less common for 3-5 year-olds, who are usually enrolled in pre-primary education (ISCED 02), than for younger children. In Korea, 77% of children attending pre-primary education are enrolled in private institutions, compared to one in three children on average across OECD countries.
- The workforce is at the heart of high-quality early-childhood education and care: stimulating environments and high-quality pedagogy are fostered by better-qualified practitioners and high-quality interactions between children and staff facilitate better learning outcomes. In that context, lower child-staff ratios are found to be consistently supportive of staff-child relationships across different types of ECEC settings (NICHHD, 2002). In Korea, there are 5 children for every teacher working in early childhood educational development services (ISCED 01) compared to 7 on average across OECD countries. In Korea, the ratio of children for every full-time equivalent (FTE) teacher working in pre-primary education (ISCED 02) is 13 compared to 14 on average across OECD countries (Figure 3).
- Sustained public financial support is critical for the growth and quality of ECEC programmes. In 2017, annual total expenditure in pre-primary settings (ISCED 02) averaged USD 7 547 per child in Korea, lower than the average across OECD countries (USD 9 079) (Figure 3).

Figure 3. Snapshot of early childhood education and care



**Note:** Only countries and economies with available data are shown. Annual expenditure per child is shown in equivalent USD converted using PPPs. The years shown in parentheses is the most common year of reference for OECD and partner countries. Refer to the source table for more details.

**Source:** OECD (2020), indicator B2. See Education at a Glance Database <http://stats.oecd.org/> for more information and Annex 3 for notes (<https://doi.org/10.1787/69096873-en>).

## Investing in education

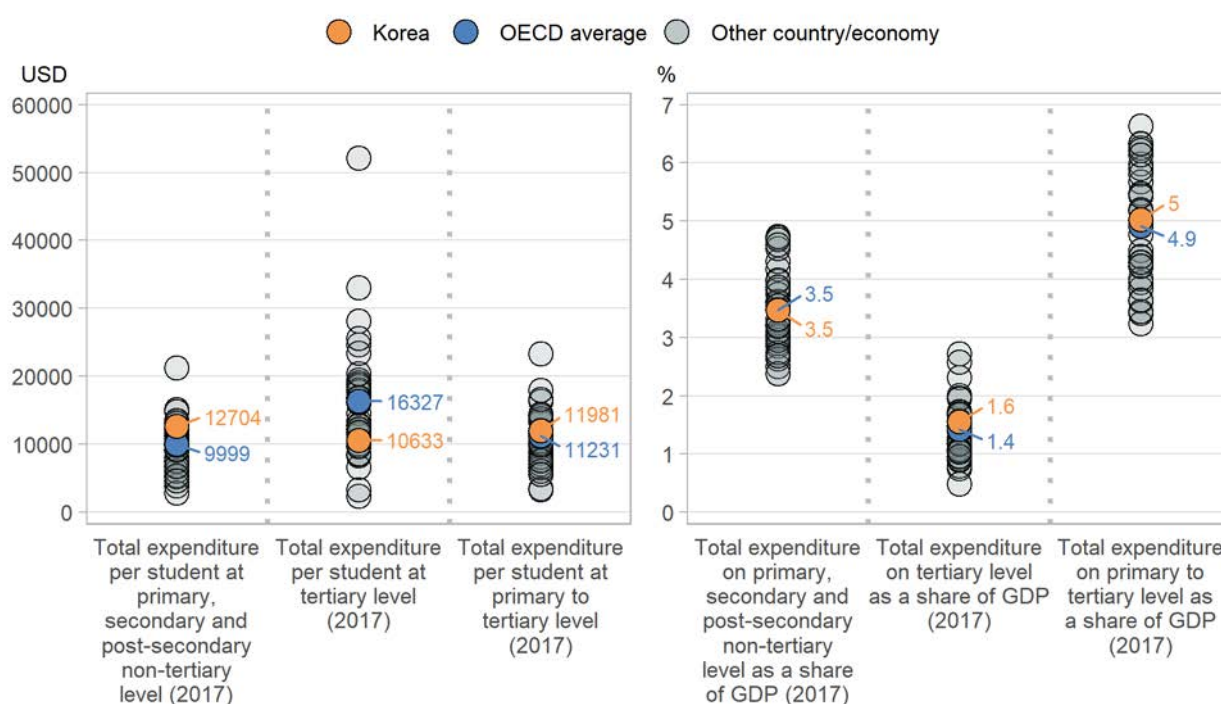
- Annual expenditure per student on educational institutions from primary to tertiary level provides an indication of the investment countries make in each student. In 2017, Korea spent more on primary to tertiary educational institutions per full-time student than the OECD average, investing a total of USD 11 981 per student compared to USD 11 231 on average across OECD countries (Figure 4).
- The way education is provided influences how resources are allocated between levels of education and between public and private institutions. In 2017, Korea spent USD 12 704 per student at non-tertiary level (primary, secondary and post-secondary non-tertiary education), USD 2 706 higher than the OECD average of USD 9 999. At tertiary level, Korea invested USD 10 633 per student, USD 5 694 less than the OECD average (Figure 4). Expenditure per student on private educational institutions is higher than on public institutions on average across OECD countries. However, this is not the case in Korea, where total expenditure on public institutions from primary to tertiary level amounts to USD 13 423 per student, compared to USD 9 750 on private ones.
- The share of national wealth devoted to educational institutions is higher in Korea than on average among OECD countries. In 2017, Korea spent 5% of gross domestic product (GDP) on primary to tertiary educational institutions, which is 0.1 percentage points higher than the OECD average. Across levels of education, Korea devoted the same share of GDP as the OECD average at non-tertiary levels and a slightly above average share at tertiary level (Figure 4).
- Tuition fees for bachelor's programmes at public institutions in Korea are the 7th highest among countries with available data. National students are charged USD 4 785 per year for a bachelor's degree. Public transfers to the private sector play an important role in the financing of tertiary



education in Korea and in providing financial support to students. They account for 16% of the total funds devoted to tertiary educational institutions, the fourth highest share across OECD countries.

- Capital costs represent a higher than average share of expenditure on primary to tertiary institutions in Korea. At primary, secondary and post-secondary non-tertiary level, capital costs account for 15% of total spending on educational institutions, 7 percentage points above the OECD average. At the tertiary level, capital costs represent 10%, the same as the average across OECD countries.
- Compensation of teachers and other staff employed in educational institutions represents the largest share of current expenditure from primary to tertiary education. In 2017, Korea allocated 71% 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 Korea, staff compensation represents 61% of current expenditure on tertiary institutions compared to 76% at non-tertiary levels. On average across OECD countries, the share is 67% at tertiary level and 77% at non-tertiary level.

**Figure 4. Snapshot of the financial resources invested in educational institutions**



**Note:** Only countries and economies with available data are shown. Expenditure in national currencies is converted into equivalent USD by dividing the national currency figure by the purchasing power parity (PPP) index for GDP. The years shown in parentheses is the most common year of reference for OECD and partner countries. Refer to the source table for more details.

**Source:** OECD (2020), indicator C1 and C2. See Education at a Glance Database <http://stats.oecd.org/> for more information and Annex 3 for notes (<https://doi.org/10.1787/69096873-en>).

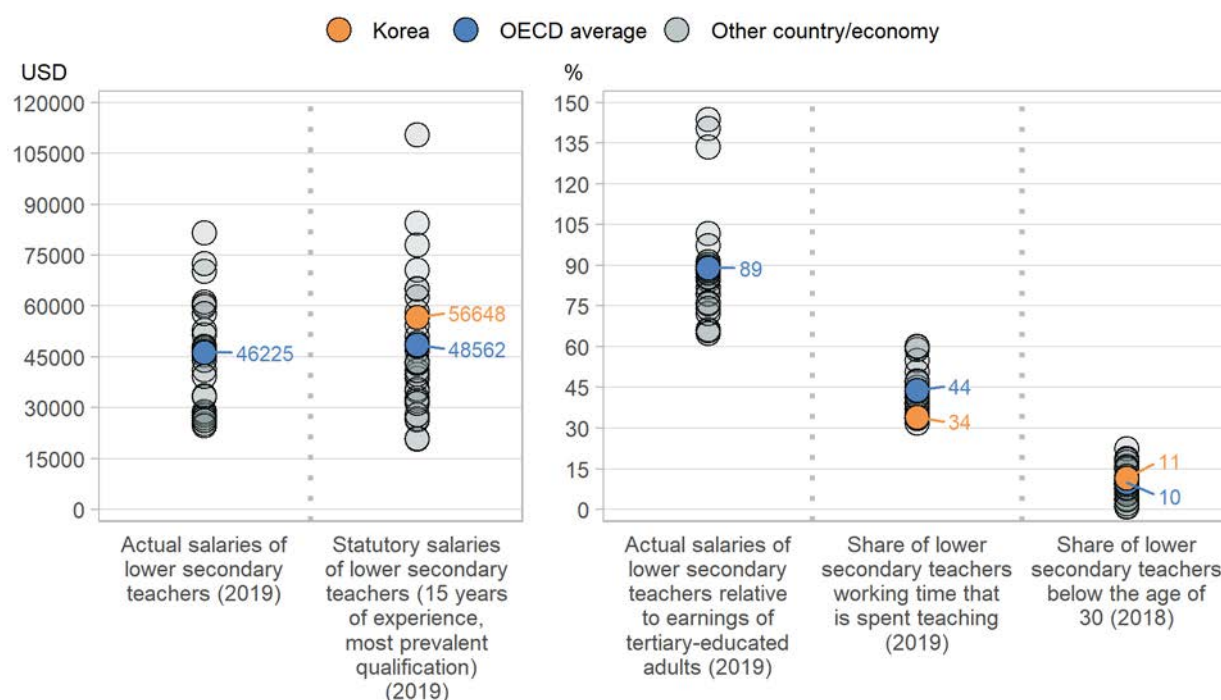
## Working conditions of school teachers

- 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 a direct 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. In most OECD countries and economies, they also increase with experience. On average, statutory salaries of teachers with maximum qualifications at the top of their salary scales are 78-80% higher than those of teachers with the minimum qualifications at the start of their career at pre-primary (ISCED 02), primary and general lower and upper secondary levels. In Korea, maximum salaries are 180% to 192% higher than minimum salaries at each level of education.

- Between 2005 and 2019, the statutory salaries of teachers with 15 years of experience and the most prevalent qualifications increased between 5-7% at primary and general lower and upper secondary levels, on average across OECD countries, despite a decrease of salaries following the 2008 financial crisis. In Korea, teachers' salaries at these levels increased by 7%-9%.
- 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, from 993 hours at pre-primary level (ISCED 02), to 778 hours at primary level, 712 hours at lower secondary level (general programmes) and 680 hours at upper secondary level (general programmes). In Korea, teachers are required to teach 782 hours per year at pre-primary level, 676 hours per year at primary level, 517 hours at lower secondary level (general programmes) and 545 hours at upper secondary level (general programmes).
- During their working time, 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 lower secondary level, teachers in Korea spend 34% of their statutory working time on teaching, compared to 44% on average among OECD countries (Figure 5).
- Large proportions of teachers in many OECD countries will 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 Korea, 18% of primary teachers are considered young teachers (under the age of 30), which is higher than the OECD average of 12%. On average across OECD countries, the proportion of young teachers decreases at other levels of education, to 10% in lower secondary education and 8% in upper secondary education. In Korea, the proportion of young teachers decreases to 11% at lower secondary level and to 10% at upper secondary level (Figure 5). Between 2005 and 2018, the proportion of young teachers at upper secondary level decreased by 5 percentage points in Korea, whereas it fell by 4 percentage points on average across OECD countries during this period.

Figure 5. Snapshot of teachers' working conditions



**Note:** Only countries and economies with available data are shown. Teachers' salaries are shown in equivalent USD converted using PPPs. The years shown in parentheses is the most common year of reference for OECD and partner countries. Refer to the source table for more details.

**Source:** OECD (2020), indicator D3, D4 and D5. See Education at a Glance Database <http://stats.oecd.org/> for more information and Annex 3 for notes (<https://doi.org/10.1787/69096873-en>).

## The impact of COVID-19 on education

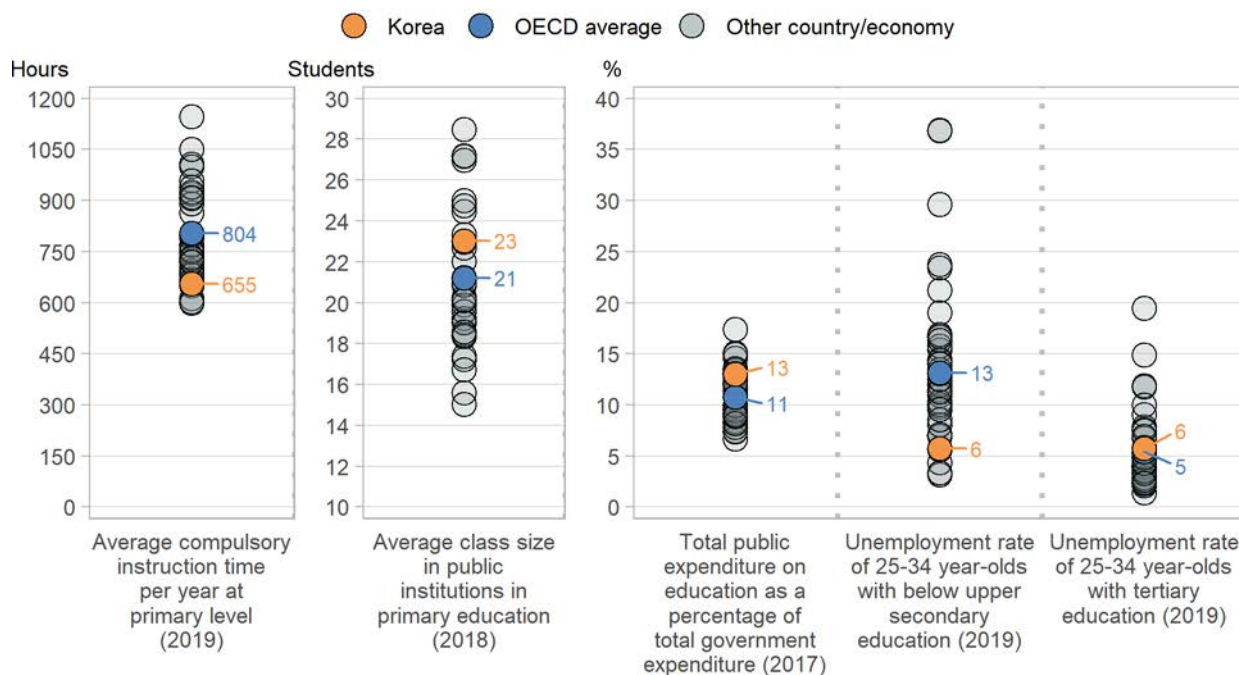
- The global 2020 COVID-19 pandemic has sent shockwaves around the world. In a first effort to contain the virus, many countries have imposed a lockdown and schools and/or universities have closed for several months across all OECD and partner countries. In Korea, the closures were nationwide from 2 March 2020 and schools started progressively reopening on 20 May 2020. By 8 June 2020, schools had fully reopened. By the end of June, Korea had experienced 14 weeks of effective school closures in some form, a similar length as the average across OECD countries (UNESCO, 2020). However, the actual impact in some countries may have been less severe as some of these periods included scheduled school breaks.
- Excluding the non-compulsory part of the curriculum, students in public institutions in Korea attended classes for 655 hours per year on average at primary level and 842 hours at lower secondary level in 2019. Each week of school closure therefore represents about 17 hours of compulsory instruction time at the primary level and 22 hours of compulsory instruction time at lower secondary level during which students have physically not attended school (Figure 6). During this time, many OECD and partner countries have turned to distance learning to ensure the continuity of education.
- School reopening in the context of the pandemic is contingent on the capacity to maintain a safe distance of 1-2 metres between pupils and staff. Countries with smaller class sizes may find it easier to comply with new restrictions on social distancing. In Korea, the average class size at primary level is 23 students in public institutions, which is larger than the OECD average of 21. In



public lower secondary institutions, there are 27 students per class in Korea, compared to 23 students per class on average across OECD countries. However, the need to reduce class size may depend on other factors such as physical space, the availability of rooms and staff, and personal decisions by students and staff on whether to return to school (Figure 6).

- While there is uncertainty about the likely overall impact of the COVID-19 pandemic on education expenditure, governments will face difficult decisions on the allocation of resources, as government funds are injected into the economy and the health sector. In 2017, public spending on primary to tertiary education as a share of government expenditure in Korea was 13%, higher than the OECD average of 11% (Figure 6).
- As unemployment rises, private funding of education may also be at risk. The impact may be most severe in those countries and levels of education that rely most heavily on household expenditure, in particular early childhood education and care and tertiary education. In pre-primary education (ISCED 02), private sources accounted for 18% of total expenditure in Korea in 2017, slightly higher than the OECD average of 17%. At tertiary level, 62% of total expenditure comes from private sources, compared to 29% on average across OECD countries.
- The crisis may have a severe impact on the internationalisation of higher education as the delivery of online course material and travel restrictions may raise questions among international students' perception on the value of obtaining their degree from an institution abroad. Korea, with a lower share of foreign students than in total across the OECD, may be less strongly affected than other countries.
- A decrease in the share of international students may have repercussions on the funding model of some higher education institutions, as foreign students may pay higher tuition fees than domestic ones. This is not the case in Korea: international and foreign students pay about the same for a bachelor's programme in a public institution than national students (USD 4 785).
- Unemployment may increase, as the economy struggles to cope with the reduced activity that resulted from the lockdown. Those with lower educational attainment are the most vulnerable, as they are the most unlikely to benefit from remote working. In 2019, before the pandemic hit, 6% of young adults with below upper secondary education in Korea were unemployed compared to 6% of tertiary-educated 25-34 year-olds (Figure 6). In the aftermath of the 2008 financial crisis, the unemployment of young adults without an upper secondary education increased by 0.1 percentage points between 2008 and 2009 in Korea compared to 0.9 percentage points among those with tertiary education.

Figure 6. Snapshot of indicators relevant to the impact of COVID-19 on education



**Note:** Only countries and economies with available data are shown. The years shown in parentheses is the most common year of reference for OECD and partner countries. Refer to the source table for more details.

**Source:** OECD (2020), indicator A3, D1, D2, and C4. See Education at a Glance Database <http://stats.oecd.org/> for more information and Annex 3 for notes (<https://doi.org/10.1787/69096873-en>).

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## More information

**For more information on Education at a Glance 2020 and to access the full set of Indicators, visit [www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)**

For more information on to the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, visit Annex 3 of the publication (<https://doi.org/10.1787/69096873-en>).

For general information on 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.

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The calculation on the number of weeks of school closures due to the COVID-19 pandemic is based on data from UNESCO (UNESCO, 2020). For general information on the methodology considered for the data, please refer to the [methodological note](#).

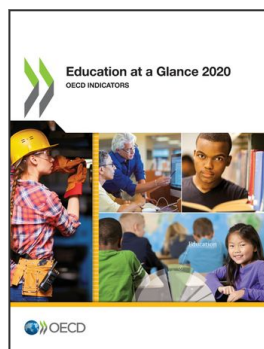
Questions can be directed to:	Country note authors:
Marie-Helene Doumet Directorate for Education and Skills <a href="mailto:marie-helene.doumet@oecd.org">marie-helene.doumet@oecd.org</a>	Etienne Albiser, Eric Charbonnier, Manon Costinot, Corinne Heckmann, Bruce Golding, Yanjun Guo, Simon Normandeau, Daniel Sanchez Serra, Markus Schwabe and Giovanni Maria Semeraro

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On 15 May 2020, the OECD Council invited Costa Rica to become a Member. While Costa Rica is included in the OECD averages reported in this note, at the time of its preparation, Costa Rica was in the process of completing its domestic procedures for ratification and the deposit of the instrument of accession to the OECD Convention was pending.

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