

# The Sustainable Development Goals Extended Report 2023

## 4 QUALITY EDUCATION



**Note:** This unedited 'Extended Report' includes all indicator storyline contents as provided by the SDG indicator custodian agencies as of 30 April 2023. For instances where the custodian agency has not submitted a storyline for an indicator, please see the custodian agency focal point information for further information. The 'Extended Report' aims to provide the public with additional information regarding the SDG indicators and is compiled by the Statistics Division (UNSD) of the United Nations Department of Economic and Social Affairs.

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## Target 4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes

Indicator 4.1.1 Proportion of children and young people (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex

Indicator 4.1.2 Completion rate (primary education, lower secondary education, upper secondary education)

### Learning since 2000: is it accurate to talk about a crisis?

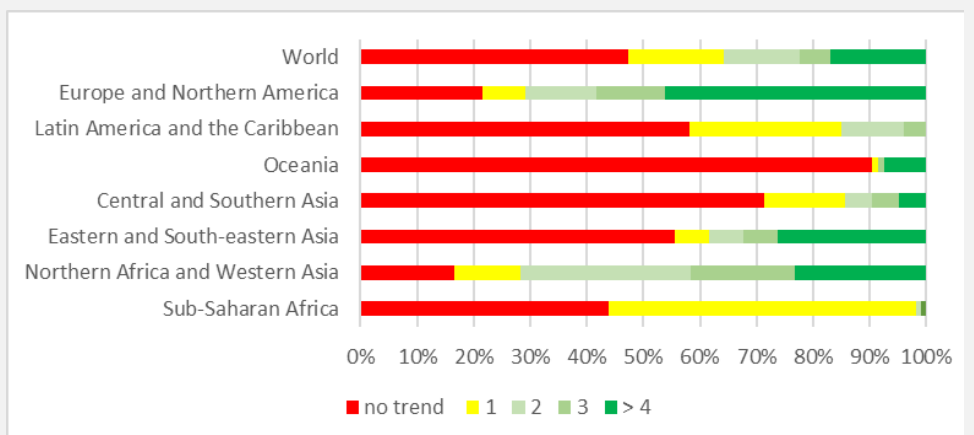
In 2015, when the global goal was set, around 60% were learning the minimum, if you average out across the three points measured in the SDG indicator 4.1.1. The goal calls for every child to achieve minimum learning proficiency by 2030, requiring an average annual progress of around 2.7 percentage points. A [new report and analysis by the UNESCO Institute for Statistics](#) confirms that this would be extremely difficult in the best of circumstances. Gains since 2000 – and up until the COVID-19 pandemic struck – do seem to have been *positive*, but very small, and far slower than the progress required. Can this be defined as a learning crisis? It depends.

### The challenge of estimating trends with scarce data

The new analysis represents the most comprehensive attempt to date to estimate regional and global trends in learning levels. It shows that availability of trend data has been rising. Trend data are important because they provide comparable measurements on progress in learning; single data points can only tell us about the level of learning, which does not give the full story.

While trend data are increasing slowly, they still remain insufficient. Trend data for early grade reading, for instance, are mostly absent for some regions, such as Central and Southern Asia. In sub-Saharan Africa, only 29% of children live in countries which report trend data at that level. While only 6% of children are in countries where there are no data on learning levels at all, 52% of children are in countries where there are no data on learning trends. China and India, where 31% of the world's children live. But another 104 countries also lack data.

Distribution of countries by availability of trend data points, by region, 2000–19



### Gains over time have been modest

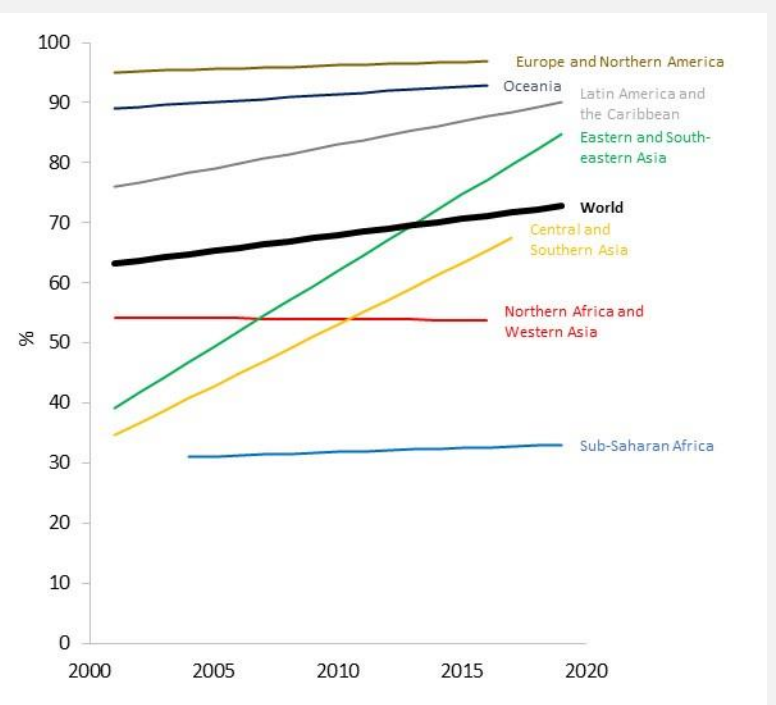
Looking closely at reading levels at the end of primary school, for which trend data cover 34% of the world's children, a greater proportion than for the other five SDG 4.1.1 indicators, the analysis shows that global learning levels improved slowly in 2000–19, changing by about 0.39 percentage points per year, which is less than one seventh of the necessary progress.

Looking across regions, subjects, points on the education trajectory, and time, a richer picture emerges. Globally, the learning growth rate appears to have been increasing, at least until the onset of COVID-19. This puts a question mark on whether global learning was in crisis.

Some world regions do appear to have been in crisis, in the sense that learning levels have been declining. But these are not the regions that usually come to mind. Sub-Saharan Africa appears to have experienced clear improvement in learning, and is also the only region which continues to witness improvement in primary completion rates, even if [one in three children](#) still do not do so. North Africa and Western Asia, Central and Southern Asia, as well as Latin America and the Caribbean have been improving. By contrast, Europe and North America, Eastern and South-eastern Asia, and Oceania are experiencing negative growth.

The figure weighed by population at the end of primary reading shows that the 0.53 annual gain is largely driven by very high annual gain statistics of over 2.0 in the two regions Central and Southern Asia and Eastern and South-eastern Asia. The statistics for these two regions must clearly be interpreted with much caution as they draw from just 12% and 16% of the regional child population respectively.

Minimum proficiency in reading at the end of primary, by region, 2000–19



### The need to look at completion and learning

It is generally speaking the case that children who do not complete a particular level of schooling have not learnt what they should have done at that level. But, even when this assumption does not hold, it does not mean that the need for children to complete their education is any less important.

The primary completion rate has improved twice as fast in this period, from 77% in 2000 to 86% in 2019, or by 0.47 percentage points per year. If we take primary completion rate improvement into account when examining learning levels, the 0.39 percentage points annual gain in reading proficiency increases to 0.53 percentage points. Improvements in primary school completion have helped improve learning levels. But this annual gain statistic is important for two reasons.

First, it suggests that a country achieving this rate of improvement is not failing; it is simply achieving what has *on average* been achieved in the past. Any improvement above this level would be *above average*, and arguably satisfactory, at least relative to past trends.

Second, the 0.53 average annual gain underscores that systems measuring proficiency need to be rigorous. Even small changes can be significant.

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Custodian agency(ies): UNESCO-UIS

## Target 4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education

### Indicator 4.2.1 Proportion of children aged 24–59 months who are developmentally on track in health, learning and psychosocial well-being, by sex

Data from 74 (mostly low- and middle-income) countries for the period 2014-2022, indicate that around 7 in 10 children aged 3 and 4 are developmentally on track, with no significant differences by child's sex. However, the proportion of children who are developmentally on track varies widely across countries.

#### Additional resources, press releases, etc. with links:

- <https://data.unicef.org/topic/early-childhood-development/development-status/>

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### Indicator 4.2.2 Participation rate in organized learning (one year before the official primary entry age), by sex

#### Several regions have progress in expanding educational access to young children, although progress has slowed at the global level since 2015

Early schooling is recognised to stimulate children's readiness for school and foster their future learning experience, yet participation in organised learning remains far from being universal. In 2020, three out of every four children globally were enrolled in organized learning at a pre-primary or early childhood education programme, or as an under-graduate student at the primary level. Progress at the global level has stagnated, however, following steady increases from 2010 to 2015.

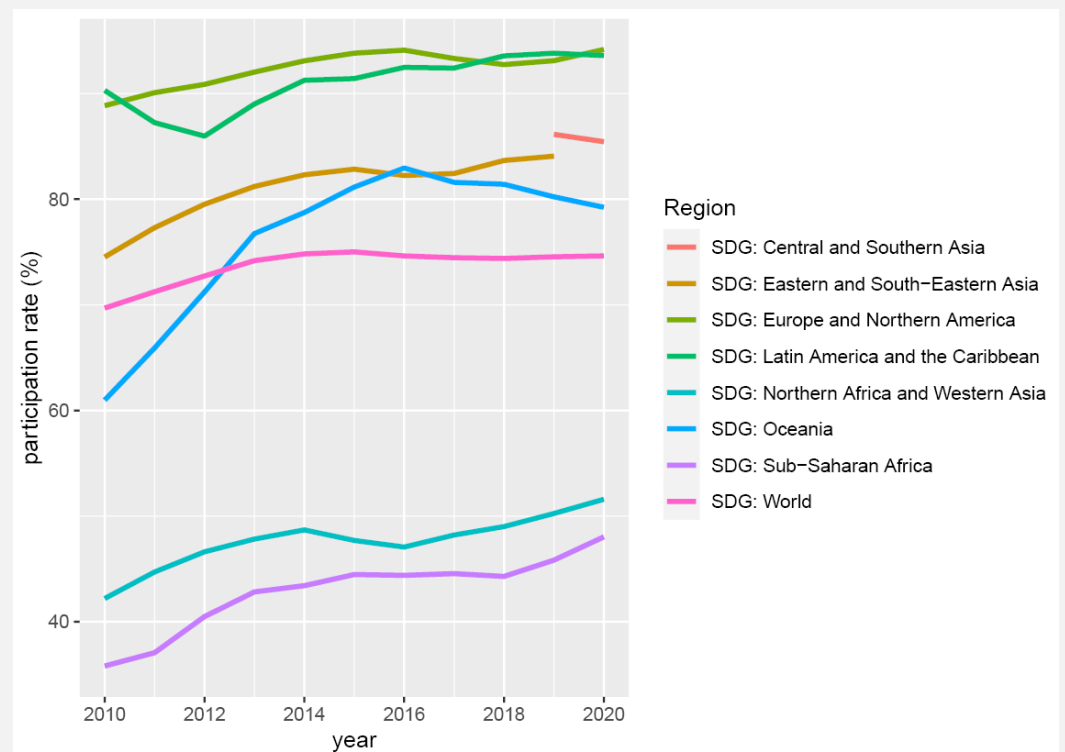
At the regional level, participation rates are highest in Europe and Northern America and in Latin America and the Caribbean, where almost 95% of children were enrolled in an educational programme. Countries in sub-Saharan Africa and Northern Africa and Western Asia have made consistent gains since 2010. Yet as of 2020, approximately half of children in these regions were not in education.

Free and or compulsory pre-primary education is an important component of facilitating participation in early schooling. Indeed, introduction free schooling at the pre-primary level is associated with large increases in participation within a short time period (UIS and GEMR, 2023). As of 2020, approximately half of 187 countries with data do not guarantee any years of free pre-primary in legal frameworks, and almost three quarters of 215 countries with data do not make pre-primary education compulsory. Since 2015 there has been slow and gradual progress, with the share of countries stipulating free and compulsory education increasing by approximately five percentage points, respectively. In failing to eliminate school fees, countries not only risk stagnating progress in participation among young children, but further entrenching inequalities as children from richer households disproportionately benefit from growing private sector provision.

Girls and boys have equal levels of participation in early schooling at the global level and across all regions. However, parity ratios at the aggregate level masks gender disparities within countries. Indeed, among countries with recent data, forty percent have not reached gender parity. In Eastern and South-Eastern Asia 50% of countries have not met gender parity, and in Oceania, and sub-Saharan Africa, the share is approximately two-thirds. Disparities can occur to the disadvantage of either gender, although participation rates are higher among girls relative to boys in the majority of countries not at parity.

As education provision recovers from the disruption of the COVID-19 pandemic, administrative and survey data is beginning to provide a better picture of its effects on educational participation, pointing marked, if temporary, declines in certain countries. Of the 52 countries with data for 2021 or after and the years closely preceding the pandemic, thirty countries saw declines in participation rates. Of these, half reported declines of five percentage points or more, and ten countries declines of ten percentage points or more. These drops are most likely directly attributable to the pandemic, and relative to primary and secondary schooling, may reflect factors such as lack of free and compulsory education, and reduced scope to provide remote learning alternatives at the pre-primary level.

Participation rate in organized learning (one year before the official primary entry age), by region



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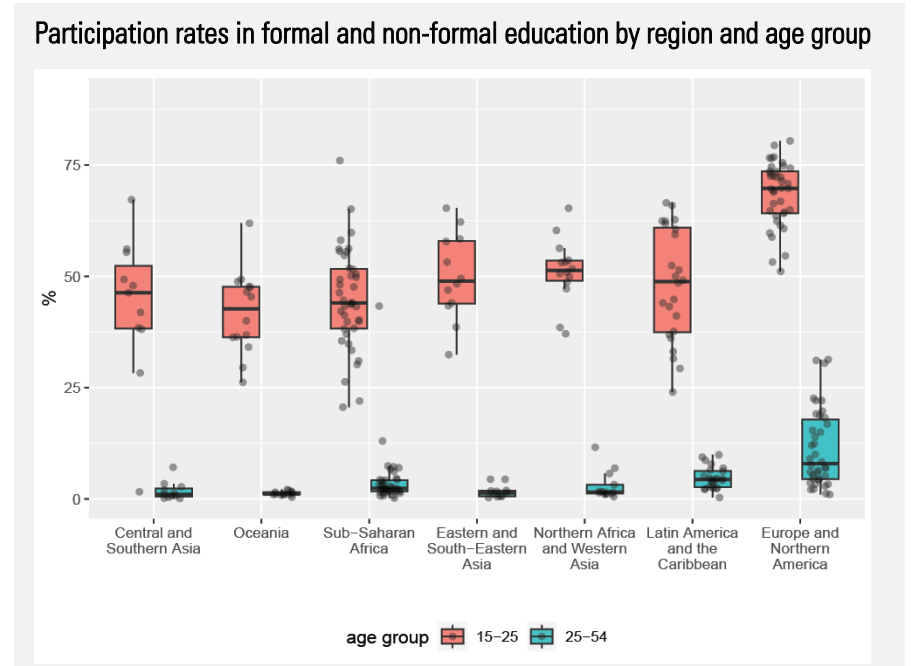
## Target 4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university

### Indicator 4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex

#### Few mature adults participate in formal or non-formal education and training across countries

Among 131 countries with recent data, on average approximately one in six youth and adults aged 15-64 recently participated in formal or non-formal education and training. There is relatively little variance around this figure between SDG regions, with the median rate ranging from around 11% in Oceania and East and South Eastern Asia to 17% in Europe and Northern America. Across all regions, a substantially higher of youth aged participate in education and training compared to older counterparts. On average less than 5% of adults aged 25-54 recently participated in education in all regions, with the exception of Europe and Northern America where the median rate is 11%. On the other hand, over 40% of youth aged 15-24 participate in all SDG regions, reaching 70% in Europe and Northern America. There is, however, significant variance between countries within each region, particularly among youth populations. In Latin America and the Caribbean, for instance, the (interquartile) range between the 75th and 25th percentile spans over 30 percentage points. In addition to differences in educational access between countries, such variances partly reflect variety in the measurement of non-formal education between surveys, as well as differing reference periods for the assessment of recent participation.

Among older adults, gender disparities are relatively limited, although higher shares of women participate in education in training compared to men in Europe and Northern America on average, as well as in the Latin America and the Caribbean. Among youth, gender disparities are magnified and present in all regions. In Central and Southern Asia and sub Saharan, there are substantial disparities against girls and young women. In all other regions, male youth and adults have a comparatively lower participation rates.



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**Target 4.4** By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

**Indicator 4.4.1** Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill

### Low levels of ICT skills hamper progress to universal and meaningful connectivity

A low level of ICT skills is one of the main barriers to achieving universal and meaningful connectivity.

Because self-reporting of individuals' ICT skills may be subjective, ICT skills are measured based on whether an individual has recently performed certain activities that require different types of skill. The assumption is that performing these activities implies that one has a certain level of the required skills. Activities are grouped into five categories of digital skills: communication/collaboration; problem solving; safety; content creation; and information/data literacy.

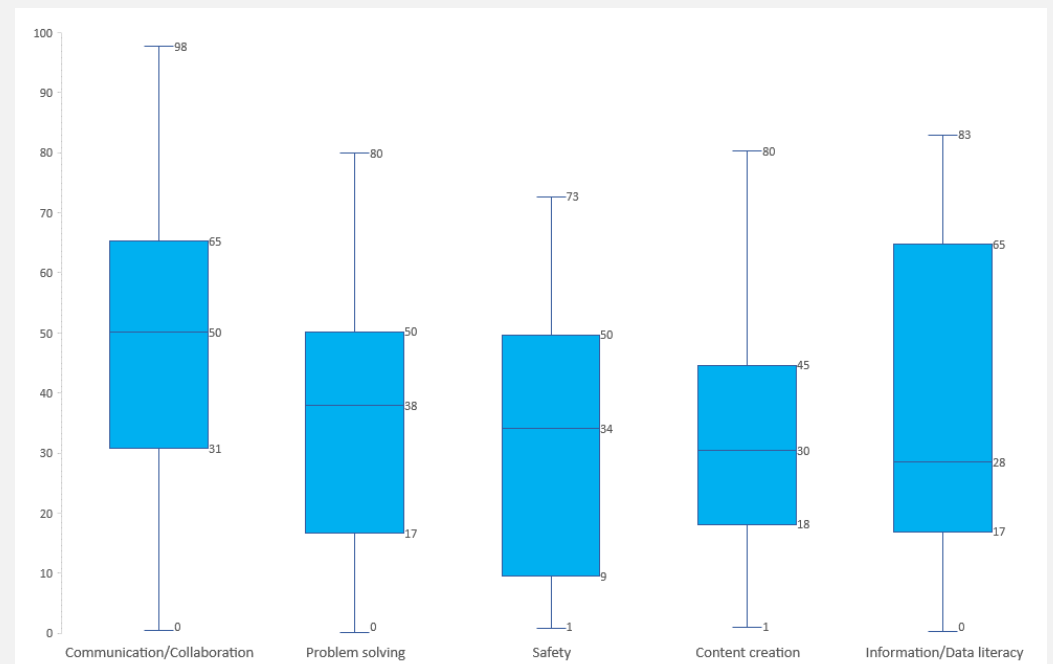
Digital skills are crucially important in leveraging ICTs to boost development. Yet data for such skills remain very scant. Only 78 countries submit data, and rarely for all five categories. Based on this limited dataset, communication/collaboration skills appear to be the most prevalent, with a median of 50 per cent and an average that lies between 31 and 65 per cent for most countries.

The category with the second highest median is problem solving, followed by safety and content creation. In the category with the lowest median, information/data literacy, there was considerable variation between countries.

Another way to explore these data is through the breadth of skills reported in the different countries. The 74 countries that provided data in at least three skill areas varied widely in this respect. Forty-seven countries reported averages of at least 25 per cent in multiple areas, 22 reported averages of over 50 per cent in multiple areas and only five reported averages of over 75 per cent in multiple areas.

The relatively low level of skills in countries providing data contrasts against their high share of overall Internet use – 86 per cent. This gap between individuals using the Internet and those with digital skills demonstrates that many may be using the Internet without being able to fully benefit from it or avoid its dangers.

**Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill**



#### Additional resources, press releases, etc. with links:

- ITU, Measuring digital development: Facts and Figures 2022, see <https://www.itu.int/itu-d/reports/statistics/facts-figures-2022/>
- ITU, Digital Development Dashboard, available at <https://www.itu.int/en/ITU-D/Statistics/Dashboards/Pages/Digital-Development.aspx>

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Custodian agency(ies): UNESCO-UIS, ITU



**Target 4.5** By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations

**Indicator 4.5.1** Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated

### Inequalities in educational participation and outcomes persist

Education disparities in indicator 4.5.1 are measured the ratio between population subgroups, adjusted to be symmetrical around 1.00, with a ratio between 0.97 and 1.03 indicating parity. Since parity ratios can vary above or below 1, their average can give a misleading indication of inequalities. For example, the global parity ratio for indicator 4.2.2 - the participation rate in organized learning (one year before the primary entrance age) was 1.00 in 2020 - meaning 100 girls were attending organized learning for every 100 boys. However, among the 164 countries with recent data, forty percent had not reached gender parity. Among these countries, approximately four in ten had disparities to the disadvantage of girls.

Gender disparities are evident in several other several other indicators. For primary completion rates (indicator 4.2.2) and among the third of countries that did not meet gender parity, completion rates were lower among boys in eight of ten countries, the majority of which are in the sub-Saharan African region. For learning outcomes indicators (4.1.1), the majority of countries with data have not reached gender parity, with girls generally outperforming boys in math and reading at the end of primary, although inequalities are more balanced between the genders in mathematics at the lower secondary level.

Disparities by other individual and household characteristics such as urban/rural location and household wealth are typically more extreme. For example, among countries with recent data, only a third reached parity between rural and urban areas for indicator 4.2.2, and one in six for parity between children from rich and poor households. For mathematical proficiency at the lower secondary level, only 5% of 63 countries with data achieved urban/rural parity, while no countries achieved wealth parity. Moreover, parity ratios tend to widen at higher levels of education. For example, the proportion of countries meeting gender parity in completion rates decreases from two thirds at the primary age group, to less than a fifth at upper secondary ages. For wealth disparities, only a single country out of 73 with recent data achieved parity at the upper secondary level, compared to a quarter at the primary age group.



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**Target 4.6** By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy

**Indicator 4.6.1** Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex

**Custodian agency(ies):** UNESCO-UIS

**Target 4.7** By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development

**Indicator 4.7.1/12.8.1/13.3.1** Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment

**Custodian agency(ies):** UNESCO

## Target 4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all

### Indicator 4.a.1 Proportion of schools offering basic services, by type of service

#### Basic school infrastructure is far from universal, with large disparities between countries, and across regions

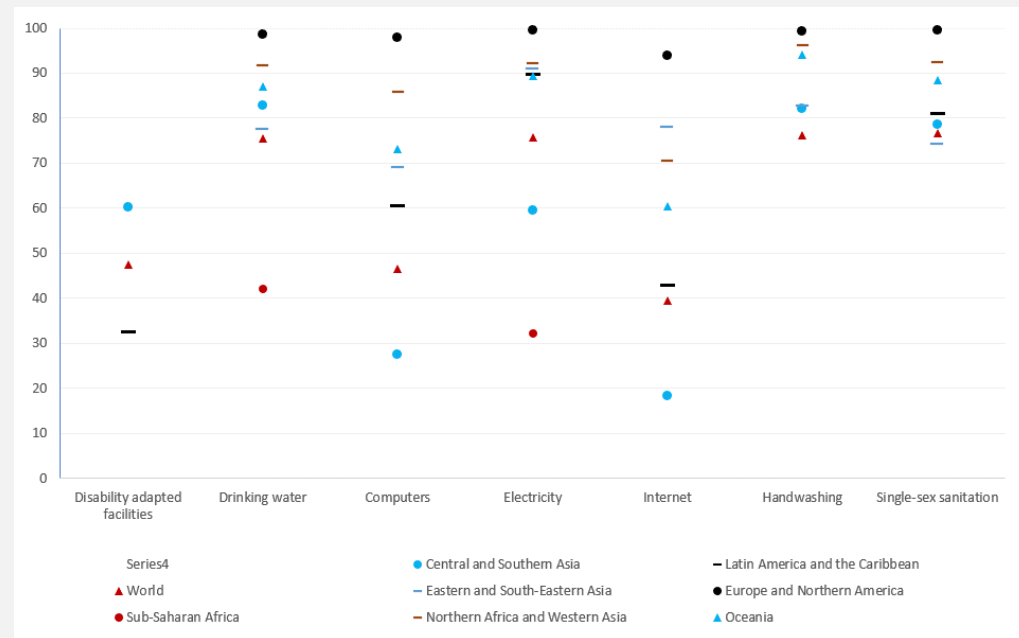
Adequate school infrastructure is essential for enabling children to safely attend school and to facilitate a conducive learning environment. However, universal access to basic facilities is far from a reality, with a acute gap in primary than in secondary education . Globally, one in every four primary schools do not have access to basic services such as electricity, drinking water, basic sanitation and handwashing facilities. Availability of computers for pedagogical purposes, access to the internet, and provision of disability adapted facilities are even lower, with less than one primary schools in every two having access on average. In lower-secondary and upper-secondary schools, access to basic services is higher than in primary schools, with a gap ranging between 8 percentage points (disability adapted facilities) and 25 percentage points (internet) at the global level.

Regions with lowest access to basic services include Central and Southern Asia, Sub-Saharan Africa, and Latin America and the Caribbean. This contrasts with Europe and Northern America, where access to basic facilities is nearly universal.

Yet remaining challenges in expanding access to basic services should not neglect progress made over time. Since 2012, for example electricity access among primary schools has increased by over 10 percentage points at the global level. Although provision of sanitation facilities has been stagnant since 2015, estimates suggest that access to computers and provision of disability adapted facilities – necessary for the participation of some of the most marginalised students – grew by almost 5 percentage points.

Adequate school infrastructure and facilities can be considered as key components to mitigate transmission of COVID-19 and its health impacts, and are crucial in overcoming the disruption of the pandemic to education, while keeping students and teaching staff safe. For example, handwashing facilities have a role to play in preventing surface transmission. As the threat of new variants of the virus over the medium and longer term still exists, combined with the risk of further entrenching associated inequalities within and between countries, investments in relevant facilities and infrastructure and the monitoring of infrastructure coverage should continue to be a policy priority.

Proportion of primary schools with access to: electricity; disability adapted facilities; internet for pedagogical purposes; computers for pedagogical purposes; basic drinking water; single-sex basic sanitation facilities; and basic handwashing facilities, by SDG regions



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Custodian agency(ies): UNESCO-UIS

## Target 4.b By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries

### Indicator 4.b.1 Volume of official development assistance flows for scholarships by sector and type of study

#### ODA for scholarships impacted by COVID-19 pandemic

Official development assistance for scholarships amounted to USD 1.4 billion in 2021. This represents a decline of 15.5% from 2020, due most likely to continued disruptions induced by the COVID-19 pandemic. France, Japan, Turkey, the United Kingdom and Hungary accounted for 55% of this total. The largest recipient regions were Asia and Africa and largest beneficiary countries were Moldova, Morocco, Syria and Pakistan. Since 2015, ODA for scholarships has dropped by 8.9%, from USD 1.5 billion (constant 2021 prices) to USD 1.4 billion in 2021.

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Custodian agency(ies): OECD



**Target 4.c** By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States

**Indicator 4.c.1** Proportion of teachers with the minimum required qualifications, by education level

**A considerable proportion of teachers still lack the minimum required qualifications (training) to teach**

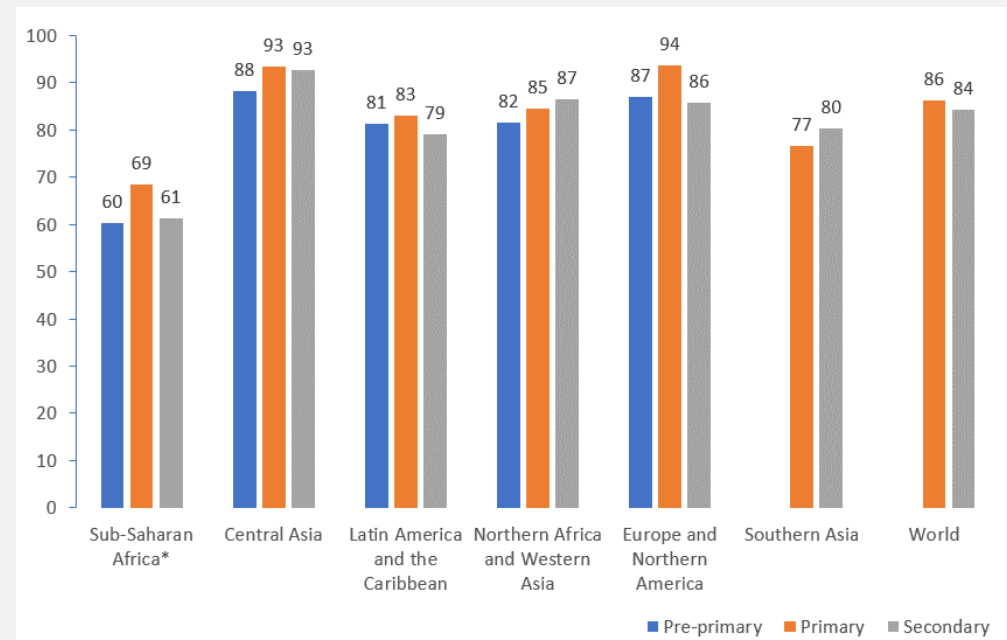
One crucial step toward the goal of quality education for all is ensuring that the teaching workforce gets the minimum required qualifications which prepare them for the teaching profession. Yet globally, over 14% of teachers are still not qualified according to national standards, with considerable disparities between countries and across regions. Sub-Saharan Africa faces the biggest challenge, with the lowest percentages of trained teachers in pre-primary (60%), primary (69%) and secondary education (61%) among all regions. The highest proportions of trained teachers among the respective regional teaching workforce are found in Central Asia for pre-primary education (88%) and secondary education (93%), and in Europe and Northern America for primary education (94%).

In every region with available data, pre-primary education has the lowest percentage of trained teachers, compared to primary and secondary education, except in Latin America and the Caribbean and in Europe and Northern America, where secondary education has the lowest proportion. Since national teacher education programmes differ widely in terms of content, duration and qualification levels, national minimum teacher qualifications and training standards also vary. Pending the development of an international global metrics, comparative data on minimum standard qualifications of teachers to teach a specific level of education should be interpreted with caution.

COVID-19 pandemic severely disrupted education and critically affected the teaching workforce in most countries of the World. Mitigating measures to maintain access to education and pursue learning during this unprecedented global crisis relied, among other measures, on adapting teachers to new pedagogical concepts and methods of teaching, for which most of them may not have been properly prepared.

While the full extent of the impact of this crisis on the teaching workforce, teacher education, and on the proportion of teachers with the minimum required qualifications is yet to be known, putting qualified teachers at the centre of education transformation should be considered among top policy priorities for enhancing the quality of learning for the years to come.

**Proportion of teachers with the minimum required qualifications, by region, in pre-primary, primary and secondary education (%), 2020 or latest year available**



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