SDG 4 MID-TERM PROGRESS REVIEW

# Progress since 2015 has been far too slow

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Cover photo: Ismael Martínez Sánchez/ProFuturo

The 2023 Global Education Monitoring (GEM) Report shows the progress made since 2015 against all SDG 4 targets based largely on the data of the UNESCO Institute for Statistics (UIS), which is the custodian agency for 10 of the 12 global indicators.

It finds that between 2015 and 2021:

- **Early childhood**: The percentage of children one year younger than the official primary entry age who are in organized learning programmes has remained constant at 75%.
- **Out-of-school**: The out-of-school population fell by just 9 million, while it increased in sub-Saharan Africa by 12 million. And new UIS and GEM Report data for 2022 show that the out-of-school population increased in 2022 to 250 million, largely due to the exclusion of girls and the resulting education crisis in Afghanistan.
- **Completion**: The completion rate increased from 85% to 87% in primary education (2.1 percentage points), 74% to 77% in lower secondary education (2.8 percentage points) and 54% to 59% in upper secondary education (4.9 percentage points).
- Learning: The average progress observed in reading at the end of primary education was just 0.4 percentage points per year, although 52% of children live in countries where there are not enough data points to estimate learning trends.
- **Higher education**: The tertiary education gross enrolment ratio increased from 37% to 41%, with women (44%) having a six percentage point gap over men (38%).
- Adult education: Among 57 mainly high-income countries, the participation rate of adults in formal or non-formal education and training fell by 10%, mostly as a result of COVID-19.
- **Digital skills**: Among 32 mainly high-income countries, 24 showed an improvement of at least five percentage points in the percentage of adults who can configure software.
- **Gender parity**: The number of young women completing secondary school for every 100 young men increased from 102 to 105 globally, and from 84 to 88 in sub-Saharan Africa, which remains the region where young women face the largest disadvantage.







- Literacy: The adult literacy rate increased by 1 percentage point globally (87%) but by 4 percentage points in Central and Southern Asia (73%) and in sub-Saharan Africa (64%); still in sub-Saharan Africa, the number of illiterate adults climbed by 9 million.
- School infrastructure: The share of schools with electricity increased from 66% to 76% in primary education and from 88% to 90% in upper secondary education.
- Teachers: The percentage of trained teachers in primary education has remained almost stagnant at 86%. In sub-Saharan Africa, the percentage of trained pre-primary teachers increased from 53% to 60%.
- **Finance**: Public education expenditure has remained constant at about 4.2% of GDP but the proportion of lower-income countries either in or at high risk of debt distress rose from 27% to 58%. Aid to education increased from \$13.7 billion to \$17.8 billion but decreased by 7% from 2020 to 2021, while the share of aid allocated to education in aid budgets reached its lowest point since 2015, with only 9.8% dedicated to the sector in 2021.

If countries were on track to meet their national 2030 targets:

- 6 million more children would be in early childhood education
- 58 million more children, adolescents and youth would be in school
- 1.7 million more primary school teachers would have been trained

To get back on track:

- 1.4 million need to be enrolled in early childhood education every year
- A new child needs to be enrolled in school every 2 seconds until 2030
- Annual progress in primary completion rates needs to almost triple

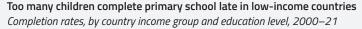
# TARGET 4.1. PRIMARY AND SECONDARY EDUCATION

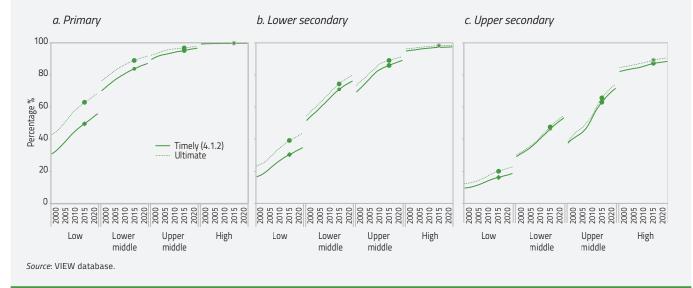
Global indicator **4.1.2**, the completion rate, increased between 2015 and 2021 from 85% to 87% in primary education (2.1 percentage points), from 74% to 77% in lower secondary education (2.8 percentage points) and from 54% to 59% in upper secondary education (4.9 percentage points). Sub-Saharan Africa remains well below the global average by more than 20 percentage points in primary education (64%) and by more than 30 points in lower secondary (45%) and in upper secondary education (27%). Progress in completion rates has been faster than in out-of-school rates. It suggests that there has been progress in enrolling children to grade 1 on time and in reducing repetition. Both factors enable more students to reach the end of each cycle.

The completion rate is defined among those three to five years above graduation age to capture those children and young people who reach the end of each cycle late. But even so, it misses those who complete even later. This is particularly the case in poorer countries. For instance, in low-income countries, the timely completion rate was 56% in 2021 but the 'ultimate' completion was 69%, i.e. 13 percentage points higher (Figure 1). Globally, this gap between timely and ultimate primary completion has fallen from 5.1 to 4.6 percentage points since 2015.

The gap between timely and ultimate completion declines in lower secondary (4.4 percentage points) and upper secondary education (3.3 percentage points) as adolescents and youth are drawn into the labour market or, in the case of girls, pushed into marriage and childbearing. But overall, it means that, globally, 92% ultimately complete primary, 81% lower secondary and 62% upper secondary education.

#### FIGURE 1:





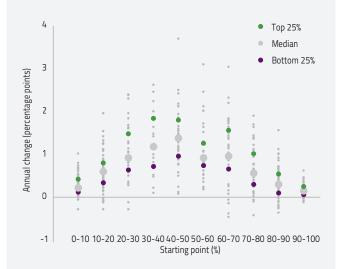
Such historical data help forecast the speed at which countries will progress in the coming years under a 'business as usual' scenario. Progress tends to be faster among countries whose completion rate is around 50% and slower among those starting from a lower or higher level. For instance, in the case of the upper secondary completion rate, among countries that start with a completion rate value between 60% and 70%, the average country in 2000–15 had an annual increase of just under one percentage point. But the slowest 25% of countries improved by less than 0.7 percentage points per year, while the fastest 25% of countries improved by almost 1.6 percentage points per year (Figure 2). As of 2023, the upper secondary completion rate is projected to have reached 60% globally. If progress is at average past rates, then it will reach 66% by 2030; if it is at the level of the historically 25% fastest country, then it will exceed 70%.

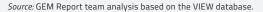
Analysis of progress in global indicator **4.1.1**, the percentage of students in grades 2/3, at the end of primary and at the end of lower secondary education achieving at least a minimum proficiency level in reading; and mathematics, is challenged by two factors. First, data on learning outcomes are scarce. For instance, four in five countries do not have any data for learning in grades 2/3; roughly one in two countries do not have any data for learning at the end of primary and lower secondary education. Trend data are even more scarce: at most 13 of the 82 low- and lower-middle-income countries have two observations for reading at the end of primary education since 2013, while other combinations of level and subject have even fewer trend data points. Second, even when trend data exist, the quality is insufficient to allow robust assessments of change over time, despite significant efforts by the UNSCO Institute for Statistics (UIS) to align multiple assessments for comparable measures of minimum proficiency.

#### FIGURE 2:

Countries' progress rates increase as they move closer to a 50% starting point and gradually decrease from that point onwards

Annual percentage point change in the upper secondary completion rate, by starting point and quartile, 2000–15





Low- and middle-income countries are far from reaching universal minimum proficiency. Of the 31 low- and lower-middle-income countries for which there are data since 2019, only Viet Nam has a majority of children achieving minimum proficiency in both reading and mathematics at the end of primary school. By contrast, in 18 of these countries, fewer than 10% of children are reaching minimum proficiency in reading and/or in mathematics (**Figure 3**).

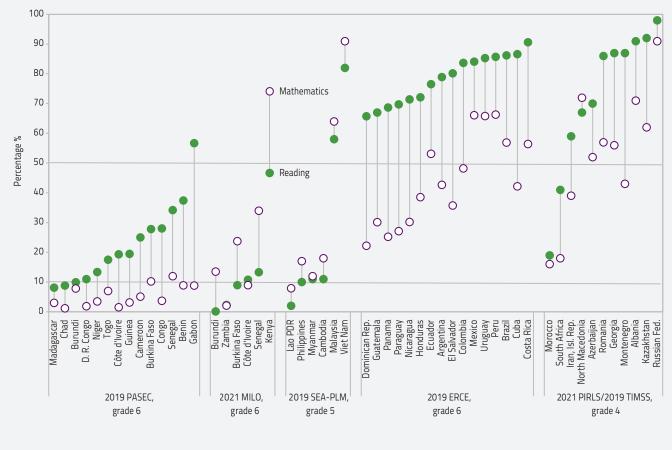
For every child to achieve minimum learning proficiency by 2030, average annual progress must be at least 2.7 percentage points. Piecing together the sparse trend data, the average progress observed in reading at the end of primary education in 2000–19 was just 0.4 percentage points, according to the UIS. Low- and lower-middle-income countries have improved (by 0.71 percentage points per year), while upper-middle- and high-income countries have deteriorated (by 0.06 percentage points per year).

Estimates of slow growth in learning outcomes do not even take into account COVID-19, which dealt a heavy blow to education systems. Major questions remain about the impact of COVID-19 on learning outcomes, not only its size and unequal distribution but also whether it is short-term, one-off or prolonged and will affect student learning trajectories for years to come.

The first robust evidence to emerge on the impact of COVID-19 is the 2021 Progress in International Reading Literacy Study (PIRLS) on grade 4 students from 57 mostly upper-middle- and high-income countries. Out of 32 of countries, where progress could be assessed relative to the last PIRLS round in 2016, 21 countries performed worse in 2021, 8 retained the same levels, and 3 improved. But in 10 of the 21 countries whose achievement scores fell between 2016 and 2021, the score had also decreased between 2011 and 2016. Moreover, in absolute terms, the average decline was about one fifth of what children learn in a school year, a small impact given the magnitude of the disruption. Yet, these were wealthier countries with many opportunities to maintain learning continuity for most of their students.

#### FIGURE 3:

**Most low- and middle-income countries are far from reaching universal minimum proficiency** *Percentage of students at or above minimum proficiency level at the end of primary school, reading and mathematics, selected low- and middle-income countries, 2019–21* 



Note: Results for the 2019 ERCE are adjusted by the results of the Rosetta Stone project that equated its results with those of PIRLS and TIMMS (UIS, 2022b). Source: UIS database.

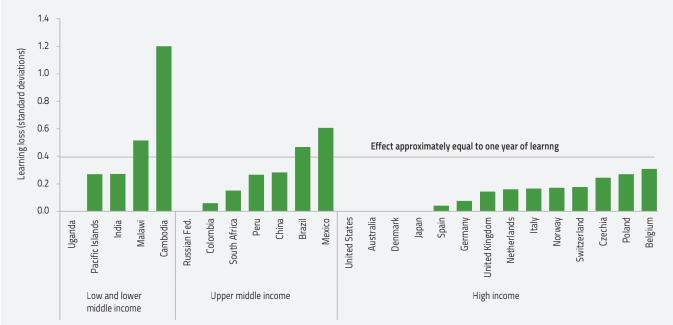
Several country-specific studies have been published in the last two years but these are not anchored to the SDG 4 global proficiency level and have been carried out at different times, levels and subjects, which hampers their comparability. Nonetheless, these studies suggest that COVID-19 took a toll on education systems, particularly in poorer countries, where schools were closed for longer periods, and distance learning solutions were few and less effective than in richer countries. In Brazil and Mexico, losses exceeded the equivalent of one year of education, and were even higher impact in Cambodia and Malawi (Figure 4). However, the more robust Monitoring Impacts on Learning Outcomes study in six sub-Saharan African countries did not suggest any major impact, although caution is needed in the interpretation: if learning levels in sub-Saharan Africa were growing prior to the pandemic, then lack of progress is also a negative development.

#### **TARGET 4.2. EARLY CHILDHOOD EDUCATION**

The importance of children's overall development is reflected in global indicator **4.2.1**, i.e. the proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being. UNICEF has developed the new Early Childhood Development Index 2030 (ECDI2030), which assesses learning, psychosocial well-being and health domains. Results are only available for a few countries and, even for these, it will only be possible to assess progress shortly before 2030.

Global indicator **4.2.2**, the percentage of children one year younger than the official primary entry age who participate in organized learning programmes, has remained stable at about 75% between 2015 and 2020. The largest increases, of about four percentage points each, have taken place in sub-Saharan Africa and Northern Africa and Western Asia, the two regions with the lowest baseline values. In sub-Saharan Africa, the average annual participation rate in 2020–25 must grow four times faster, from 0.7 to 2.8 percentage points pr year, if the countries in the region are to reach their 2025 national targets – or even faster if COVID-19 is found to have had a long-term impact (**Figure 5**).

#### FIGURE 4:



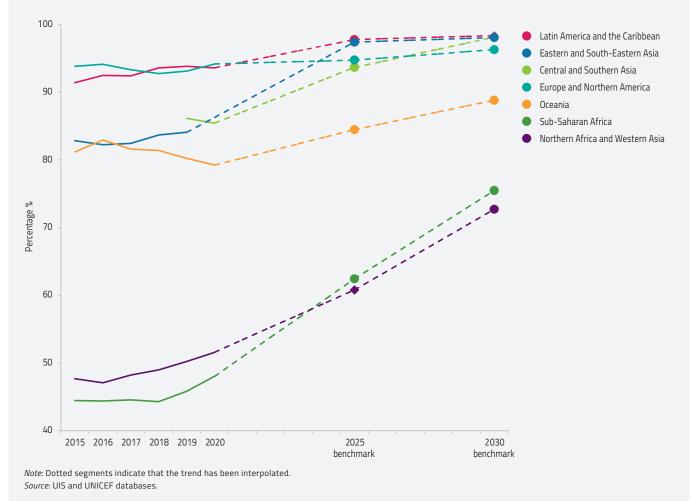
Learning loss due to COVID-19 appeared stronger in poorer countries Standardized measure of learning loss, selected countries, before and after COVID-19

*Note:* The standardized measure on the vertical axis represents the loss in learning outcomes due to school closures divided by the standard deviation of the corresponding outcome. The measures of learning loss and its standard deviation are extracted from 31 studies containing post-COVID data, i.e. studies with achievement data obtained after students returned to school. Simulation studies were discarded. The methods (e.g. differences-in-differences), education levels (e.g. primary, secondary), subject areas, and target populations (e.g. regions from the same country) varied between and within countries across the studies. In cases where multiple estimates were available per country, the average was computed. Data from the Pacific Islands are aggregate, reported for reading and mathematics in the Pacific Islands Literacy and Numeracy Assessment study.

Source: GEM Report team learning loss estimates based on country studies.

#### FIGURE 5:

**Regions must progress faster in order to reach their pre-primary participation targets for 2025 and 2030** *Participation rate in organized learning (one year before the official primary entry age) and regional benchmark values for 2025 and 2030* 

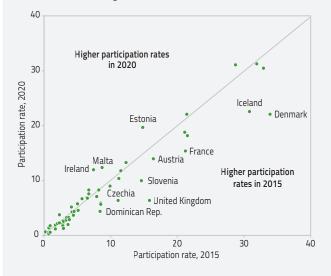


## TARGET 4.3. TECHNICAL, VOCATIONAL, TERTIARY AND ADULT EDUCATION

Global indicator **4.3.1** focuses on the participation rate of youth and adults in formal and non-formal education and training in the previous 12 months. For adults aged 25–54, the median participation rate in formal and non-formal education and training across 115 countries with recent data is 3%, ranging from 2% in low- and lower-middle-income countries to 3% in upper-middle-income countries and 7% in high-income countries. There are 57, mostly high-income, countries for which there are data in both 2015 and either 2020 or 2021. Overall, the median participation rate declined from 6.4% to 5.8% or by 10% in this five-year period (**Figure 6**). The sharpest fall is observed in 2019–20 as a result of COVID-19. In just one year, the rate fell from 23% to 15% in France and from 15% to 6% in the United Kingdom.

#### FIGURE 6:

Adult education participation rates fell between 2015 and 2020 Change in rate of adult participation in formal and non-formal education and training, 2015–20



Source: UIS database.

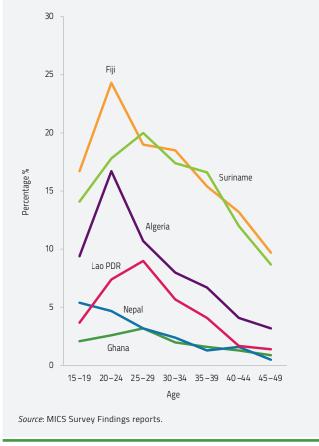
#### **TARGET 4.4. SKILLS FOR WORK**

The coverage of global indicator **4.4.1**, the percentage of youth/ adults with information and communications technology (ICT) skills, is increasingly growing. For instance, among 32, mostly high-income, countries with available data on one of the nine self-reported ICT skills monitored, the ability of adults to manage software, 24 show an improvement of at least five percentage points between 2015 and 2019.

Another way to understand progress is by looking at differences in ICT skill levels of various population groups. In a sample of 36 low- and middle-income countries, 20- to 24-year-old women are twice as likely to be able to use a basic arithmetic formula in a spreadsheet than their 40- to 44-year-old peers. There are also differences in the peak age of skill prevalence, which is observed among 25- to 29-year-olds in Suriname, 20- to 24-year-olds in Algeria and 15- to 19-year-olds in Nepal (**Figure 6**).

#### FIGURE 6:

Younger people acquire ICT skills in far greater numbers Women who reported using a basic arithmetic formula in a spreadsheet, selected low- and middle-income countries, by age group, 2017–21



#### **TARGET 4.5. EQUITY**

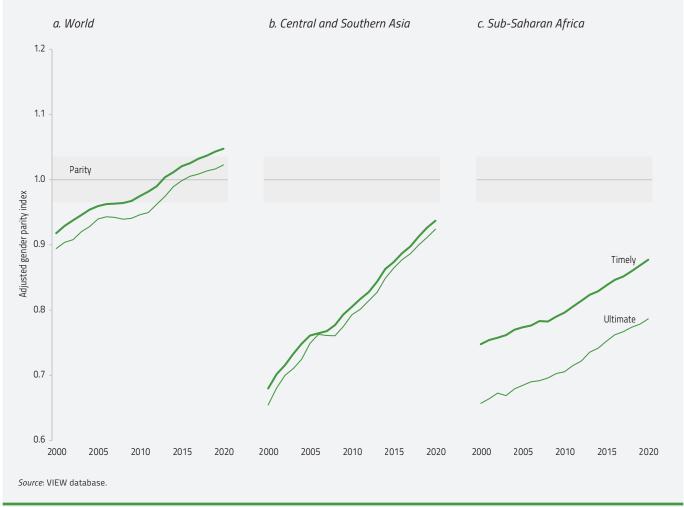
Global indicator **4.5.1** compares the education status of two groups, one disadvantaged and one privileged for global education indicators (e.g. completion or learning), at various education levels (e.g. primary or secondary), and for various individual characteristics (e.g. wealth or location). The potential combinations are so numerous that it is very difficult to talk of one trend. Progress towards gender parity in upper secondary completion is one of the most interesting trends to follow, given the variety of contexts around the world – and is also the SDG 4 benchmark indicator on equity. Globally, gender parity was achieved in 2010 but by 2017 there was reverse disparity, with 95 young men completing upper secondary school for every 100 young women.

There are only two SDG regions where there is still disparity at the expense of young women but their trajectories have been very different. In Central and Southern Asia, for every 100 young men who completed upper secondary school there were 68 young women in 2000 but 94 in 2020. Sub-Saharan Africa started from a less unequal position (75 young women completing for every 100 young men in 2000) but progressed at half the rate (88 young women for every 100 young men in 2020). On the positive side, the rate of progress was twice as fast in 2008–20 than in 2000–08 (**Figure 7**).

However, it is necessary to not only look at disparity in the official 'timely' completion rate but also at the 'ultimate' completion rate, i.e. the percentage of those who complete upper secondary school even later than three to five years after the official graduation age. In sub-Saharan Africa, while 88 young women complete upper secondary school on time for every 100 young men, ultimately only 79 young women do. Young women who do not finish upper secondary school on time are more likely to leave school early, under pressure to marry and have children, while young men can afford to persevere with their education. There has been no progress at all in closing this gap in the past 20 years. By contrast, this problem is not present at all in Central and Southern Asia.

#### FIGURE 7:

Central and Southern Asia has overtaken sub-Saharan Africa in the race to ensure gender parity in upper secondary completion *Adjusted gender parity index of the upper secondary timely and ultimate completion rate, 2000–20* 



#### **TARGET 4.6. YOUTH AND ADULT LITERACY**

Indicator **4.6.2** monitors literacy rates. The youth literacy rate increased from 87% in 2000 to 91% in 2015 but has only increased by 0.8 percentage points since then. Of the two regions that were well below the global average in 2000, Central and Southern Asia has improved at an annual rate three times as fast as the global rate of progress, almost converging with the global average rate: its youth literacy rate increased from 74% in 2000 to 88% in 2015 and 90% in 2020. By contrast, sub-Saharan Africa's rate has converged more slowly, the youth literacy rate increasing from 66% in 2000 to 75% in 2015 and 77.5% in 2020 (**Figure 8**). The number of illiterate youth fell from 107 million in 2015 to 99 million in 2020, of which 36 million were in Central and Southern Asia and 49 million were in sub- Saharan Africa. Women are 56% of all illiterate youth.

The adult literacy rate, for people aged 15 to 64 years, has increased from 81% in 2000 to 86% in 2015 and 87% in 2020, an increase of just 1.2 percentage points in five years. Sub-Saharan Africa has improved at a rate twice as fast as the global average since 2000 but its adult literacy rate was just 64% in 2020, compared to 73% in Central and Southern Asia. The number of illiterate adults dropped from 783 million in 2015 to 763 million in 2020, of which 367 million were in Central and Southern Asia and 205 million were in sub-Saharan Africa, where the number increased by 9 million.

#### FIGURE 8:

Almost one in four youth in sub-Saharan Africa are illiterate Literacy rate, by age group, 2000–20



#### TARGET 4.7. SUSTAINABLE DEVELOPMENT AND GLOBAL CITIZENSHIP

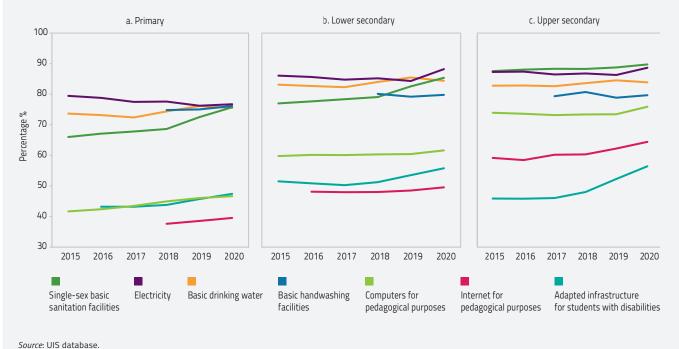
Global indicator **4.7.1** monitors the extent to which global citizenship education and education for sustainable development are mainstreamed in national education policies, curricula, teacher education and student assessment. The indicator's four components are each scored on a scale of 0 to 1, based on whether eight themes have been mainstreamed: cultural diversity and tolerance, gender equality, human rights, peace and non-violence, climate change, environmental sustainability, human survival and well-being, and sustainable consumption and production.

According to the last consultation, which covers the period 2017–20 and whose results were published in 2021, almost all reporting governments claim that their education systems cover most of the themes to a substantial extent. For each of the four components, most countries scored above 0.8, which means at least six of the eight themes are mainstreamed into their curricula, policies, teacher education and assessment. Almost no countries scored below 0.5, i.e. reported that only a minority of the themes were mainstreamed.



#### FIGURE 9:

School infrastructure conditions have been improving very slowly Share of schools with access to selected infrastructure features, by level, 2015–20



# TARGET 4.A. EDUCATION FACILITIES AND LEARNING ENVIRONMENTS

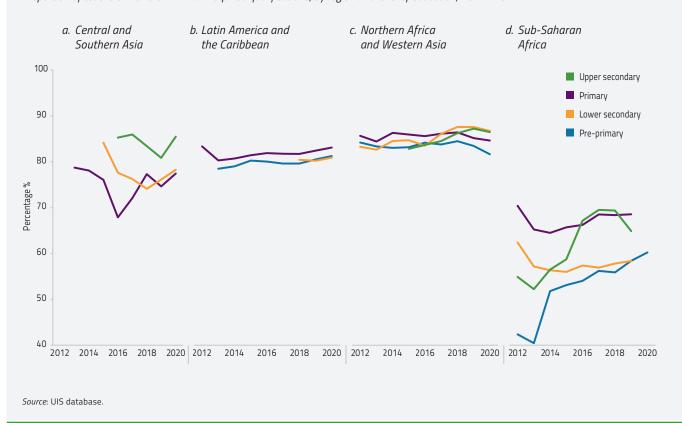
Global indicator **4.a.1** measures the proportion of schools with access to seven different infrastructure and resource dimensions: electricity, internet, computers, drinking water, handwashing facilities, single-sex bathrooms, and adapted infrastructure and materials for students with disabilities. Most of these have either remained stable or only slowly improved between 2015 and 2020. However, there are some exceptions. The share of schools with adapted infrastructure and materials for students with disabilities increased at all levels of education, and most significantly in upper secondary from 46% in 2015 to 56% in 2020. Electricity has also been on the rise, from 66% to 76% in primary and from 77% to 86% in lower secondary education (**Figure 9**).

#### **TARGET 4.B. SCHOLARSHIPS**

According to global indicator 4.b.1 over USD 4.4 billion was disbursed as official development assistance in scholarships and imputed student costs in 2020, an increase of USD 1.3 billion, or 42%, since 2015. By contrast, scholarships and imputed student costs had remained relatively stable between 2010 and 2015. However, funds declined in 2020 and 2021 as a result of a 24% drop in scholarships, from USD 1.7 billion in 2019 to USD 1.3 billion in 2021. This drop is likely attributable to the global impact of COVID-19: money for scholarships may have been available but not disbursed due to restrictions on student movement. Imputed student costs continued to grow, although they tapered off in 2021. Only some countries choose to report such disbursements under their ODA budget.

#### FIGURE 10:

**Progress since 2015 in trained teachers has been limited across regions and education levels** *Proportion of teachers with the minimum required qualifications, by region and level of education, 2012–20* 



#### **TARGET 4.C. TEACHERS**

Progress on increasing the proportion of teachers with the minimum required qualifications – or, more specifically, who have received at least the minimum organized pedagogical teacher training pre-service and in-service – has been uneven and limited across regions and education levels (**Figure 10**). The greatest increases since 2015 have occurred in sub-Saharan Africa, although the region still lags behind all others at all levels of education. At the pre-primary level, which had the lowest starting point, the share increased from 53% in 2015 to 60% in 2020. In upper secondary education, the share increased from 59% to 65%.







#### The World Inequality Database on Education (WIDE)

analyses data from over 160 countries to allow you to compare education outcomes on 3 levels, according to factors that are associated with inequality, including gender, location, wealth, and ethnicity.

www.education-inequalities.org

# SCOPE

**Scoping Progress in Education (SCOPE)** summarizes the key facts and trends in education around the world through five themes: Access, equity, learning, quality and finance.

www.education-progress.org



## VIEW

**Visualizing Indicators of Education for the World (VIEW)** provides estimates of two flagship indicators: out-of-school and completion rates.

www.education-estimates.org

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