

# The Sustainable Development Goals Extended Report 2024

Inputs and information provided as of 30 April 2024

## 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 2024. 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.

## Contents

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 .....	2
Indicator 4.1.2 Completion rate (primary education, lower secondary education, upper secondary education).....	2
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 .....	3
Indicator 4.2.2 Participation rate in organized learning (one year before the official primary entry age), by sex.....	3
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 .....	4
Indicator 4.4.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill.....	5
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 .....	6
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.....	7
Indicator 4.7.1 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.....	7
Indicator 4.a.1 Proportion of schools offering basic services, by type of service .....	8
Indicator 4.b.1 Volume of official development assistance flows for scholarships by sector and type of study .....	9
Indicator 4.c.1 Proportion of teachers with the minimum required qualifications, by education level.....	9

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

### Globally, 58% of students achieved at least the [minimum proficiency level](#) in reading at the end of primary in 2019

In 2022, as countries were still dealing with the lingering impacts of the COVID-19 pandemic, nearly 700 000 students from 81 OECD Member and partner economies, representing 29 million across the world, took the Programme for International Student Assessment (PISA) test. According to [PISA 2022 results](#), between 2018 and 2022, mean performance in mathematics across OECD countries fell by a record 15 points while in reading fell 10 points, twice the previous record. On average, reading trajectories had been falling for a decade, though math had remained stable between 2003-2018. The unprecedented drops in mathematics and reading point to the shock effect of COVID-19 on most countries.

SDG indicator 4.1.1 is being reported using various cross-national studies that are international ([PISA](#), [PIRLS](#), [TIMSS](#)) or regional ([PILNA](#), [SEA-PLM](#), [PASEC](#), [LECE](#), [SACMEQ](#)) and share a single tool for participating countries. These tools have not been designed for SDG reporting but, in 2018, the Global Alliance to Monitor Learning ([GAML](#)) and the Technical Cooperation Group on SDG 4 indicators ([TCG](#)) agreed that these assessments could be used to report learning based on their proficiency levels that “mapped” best to the global MPL.

The production of comparable learning outcomes is not progressing fast and equally enough. Regardless of the coverage criterion (number of countries or population), coverage is much higher at the end of primary and end of lower secondary than for grades 2 or 3. Moreover, coverage of the learning indicator 4.1.1 by income groups is directly related to the level of income.

The UIS has focused on defining (i) the minimum proficiency level, aligning it to a competency concept that is independent of a particular assessment framework, specific items or tests, to allow reporting and (ii) a set of linking strategies to the proficiency framework.

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

- UIS data browser: <http://sdg4-data.uis.unesco.org/>
- SDG 4 scorecard progress report on national benchmarks: focus on teachers: <https://unesdoc.unesco.org/ark:/48223/pf0000388411>
- Resources: <https://gaml.uis.unesco.org/4-1-1/>

Storyline author(s)/contributor(s): Silvia Montoya, UNESCO Institute for Statistics

Custodian agency(ies): UNESCO-UIS

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

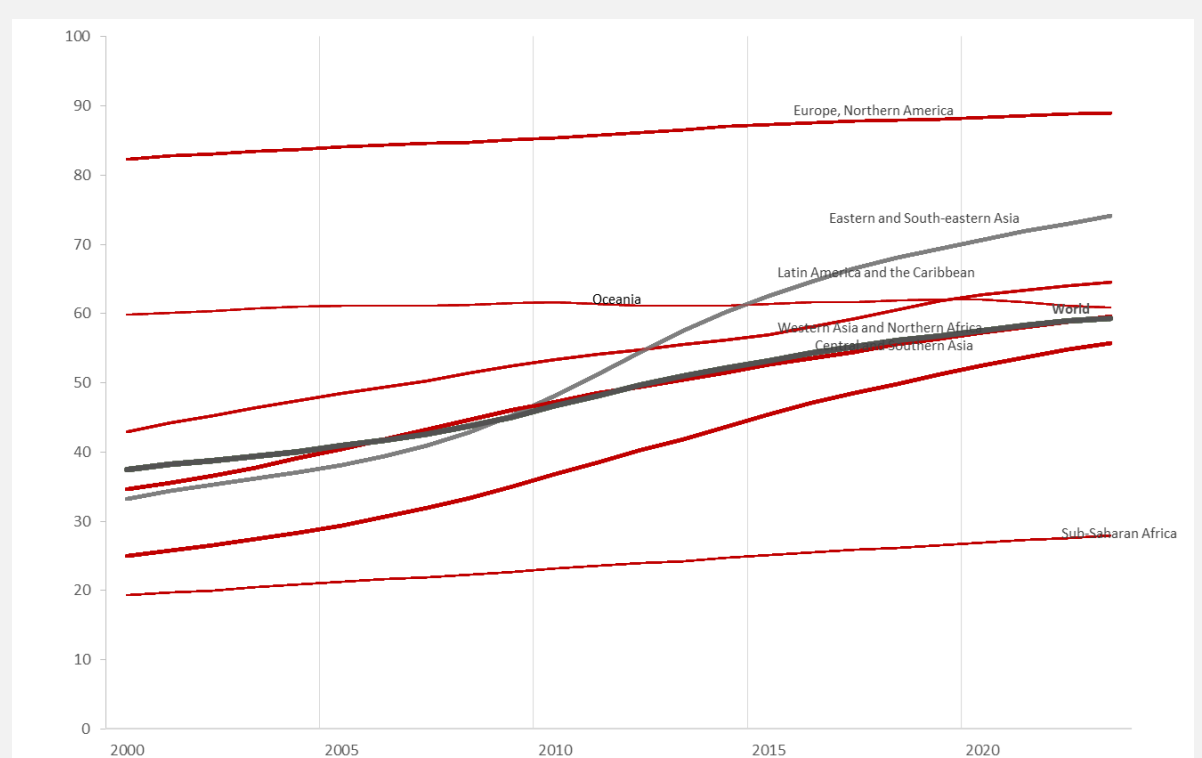
### The percentage of young people completing upper secondary school increased from 53% in 2015 to 59% in 2023, slowing down relative to its progress in the preceding eight-year period

Globally, the completion rate reached 88% in primary, 78% in lower secondary and 59% in upper secondary education in 2023. These estimates are based on children, adolescents and youth aged 3 to 5 years above the official graduation age. In sub-Saharan Africa, barely two in three children complete primary school in time.

Progress has slowed down in upper secondary completion since 2015 from 1.3 percentage points per years between 2010-2015 to 0.9 percentage points per years between 2015–2023, including 0.8 percentage points for years between 2020-2023 that might be attributed to the COVID-19. Negative growth was seen in Oceania (reaching 61% in 2023). It slowed down in Central and Southern Asia and, especially, in Eastern and South-eastern Asia, although the latter was still the fastest growing region, as the upper secondary completion rate increased from 63% in 2015 to 74% in 2023, or almost twice as fast as the global rate. Upper secondary completion rates accelerated in the last eight years in Latin America and the Caribbean (reaching 65% in 2023). Besides Oceania, growth was slowest in the regions closest (e.g. Northern America and Europe) and furthest (e.g. sub-Saharan Africa) from the target of universal completion.

Globally, girls’ completion rates exceed boys’ by 2 percentage points in primary and lower secondary education and by 3 percentage points in upper secondary education. Female completion rates first equalled or surpassed male completion rates in 2012 in primary and lower secondary education and in 2014 in upper secondary education. At upper secondary level, the gender gap at the expense of boys is 14 percentage points in Eastern and South-Eastern Asia, 8 percentage points in Latin America and the Caribbean, 5 percentage points in Northern Africa and Western Asia, and 4 percentage points in Europe and Northern America and Oceania. It remains at the expense of girls by 2 and 3 percentage points in Central and Southern Asia and sub-Saharan Africa, respectively.

Secondary school completion rate, 2000–2023 (percentage)



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

- <https://education-estimates.org/completion/>

Storyline author(s)/contributor(s): Global Education Monitoring Report, UNESCO

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

Custodian agency(ies): UNICEF

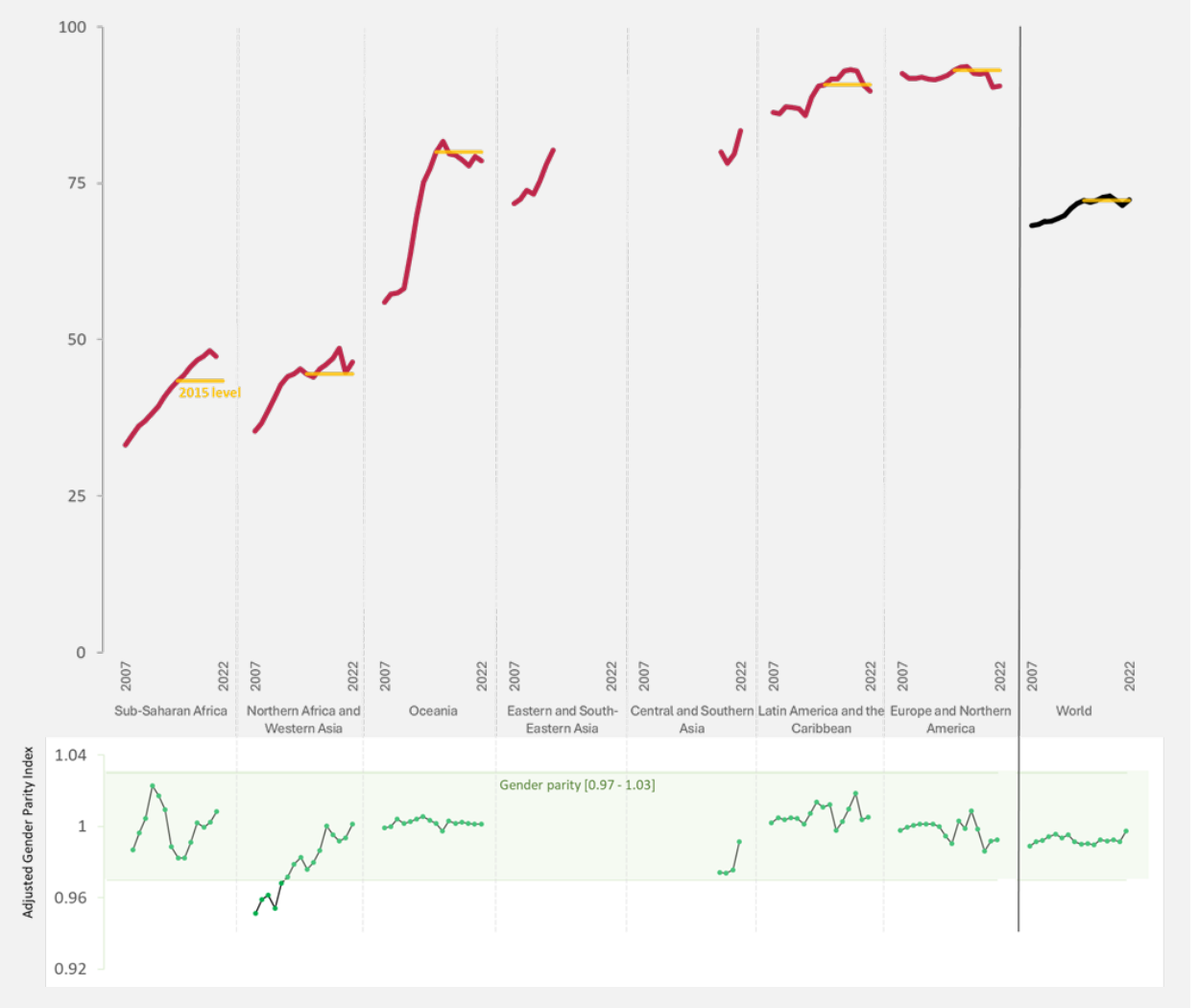
Indicator 4.2.2 Participation rate in organized learning (one year before the official primary entry age), by sex

### Early childhood education must be enshrined in national legal frameworks

Participation in organized learning prior to entering primary school has not progressed globally since the Sustainable Development Goals have been endorsed almost ten years ago. In 2022, 7 out of 10 children globally attended organized learning one year before they reached the official primary entry age, the same level observed in 2015. However, in sub-Saharan Africa and Northern Africa and Western Asia less than half of children attend pre-primary school one year before reaching the primary school entrance age. And this despite the two regions having some of the fastest rates of progress prior to the COVID-19 crisis. Schools closures and social distancing measures have hampered the growth in pre-primary participation that had been observed in the first years of the SDG agenda. For the poorest children this is a critical setback as pre-primary education is a powerful instrument for offsetting cognitive and non-cognitive disadvantages accumulated while growing up in an underprivileged home environment. Higher levels of participation in pre-primary education are associated with conducive legal frameworks that guarantee all children equal opportunities of attending organized learning prior to entering primary school. Yet, only a quarter of countries include at least one year of compulsory pre-primary education and half of countries globally have legal provisions that guarantee a minimum of one year of free pre-primary education.

Legal guarantee for free and compulsory pre-primary education can be considered formal safety nets that ensure a child's school readiness and equalize the chances of going through an appropriate cognitive and educational development in later stages. In many countries where there is no legal guarantee, pre-primary education can be difficult to afford for parents from the poorest households especially in regions where private provision of primary education is the most prevalent. In Europe and North America, only around 20% of enrolled children are in the private sector at the pre-primary level, but in sub-Saharan Africa, where only 5 in every 10 children are enrolled in pre-primary, 40% of these are in the private sector. On average in developing countries, children from richest households are twice as likely to attend preschool in comparison to those of the least affluent households.

Participation rate in organized learning (one year before the official primary entry age) and adjusted gender parity index, by region, 2007-2022



Storyline authors(s)/contributor(s): Patrick Montjourides, UNESCO Institute for Statistics

Custodian agency(ies): UNESCO-UIS

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

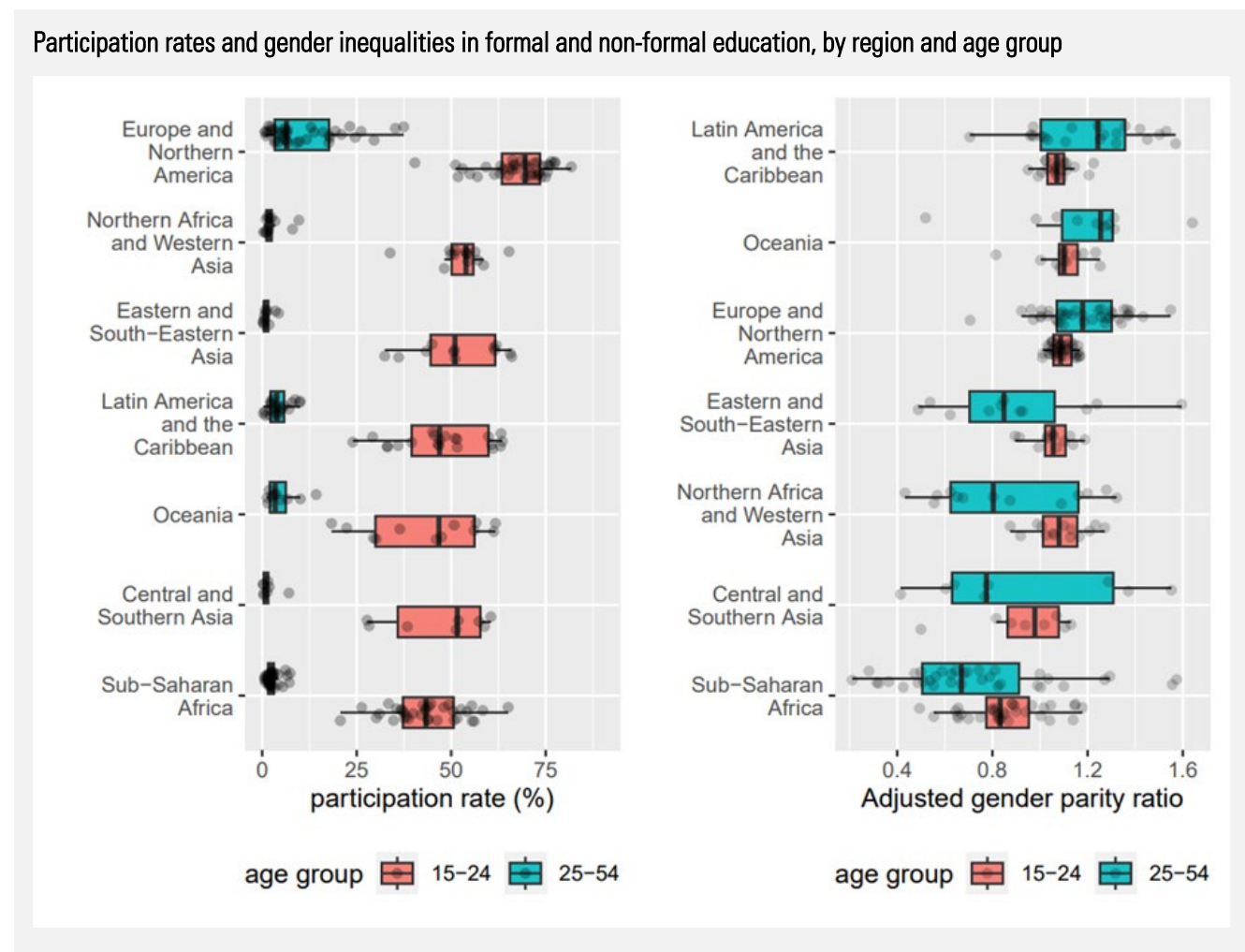
**Indicator 4.3.1** Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex

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

Among 131 countries with recent data, the average rate of participation in formal or non-formal education and training of youth and adults aged 15-64 is approximately 15%. This figure shows relatively little variation between regions, with the median rate ranging from 11% in Eastern and South-Eastern Asia to 16% in Sub-Saharan Africa.

A substantially higher of youth aged participate in education and training compared to older counterparts. Among youth aged 15-24, the median rate of those recently participated in education approaches 50% in all regions, reaching 70% in Europe and Northern America. In contrast participation rates for adults aged 25-54 was less than 3% for all regions, with with exception of Latin America and the Caribbean (4%), and Europe and North America (6.5%). There is, however, significant variance between countries within each region, particularly for youth: the interquartile range between the 75th and 25th percentile meets or exceeds 20 percentage points for several regions.

Patterns in gender inequalities vary by region and age group. In the majority of countries in sub-Saharan Africa and Central and Southern Asia, participation rates are substantially lower among females, and particularly so for adults aged 25-55. In Eastern and South Eastern Asia, and North Africa and Western Asia, gender disparities differ between youth and adult age groups. For countries in these regions, participation rates exhibit bias against females aged 25-55, whereas for youth, females have higher participation rates in the majority of countries. In Europe and North America, Latin America and the Caribbean, in contrast, participation rates are higher among females for both age groups.



Storyline authors(s)/contributor(s): Authors  
 Custodian agency(ies): UNESCO-UIS

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

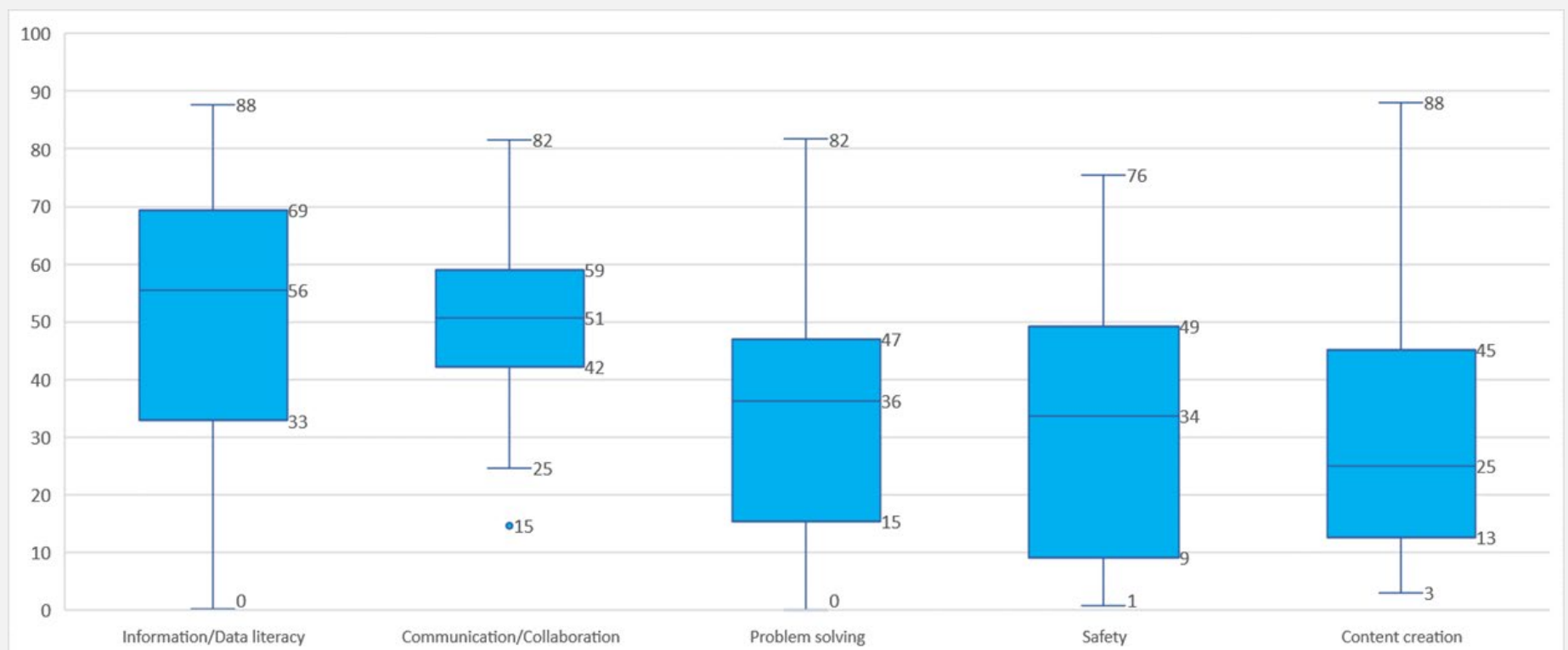
Self-reporting of ICT skills is subjective. However, ICT skills are measured based on whether an individual has recently performed certain activities that require different types of skill. The assumption is that performing these activities implies that one has a certain level of the required skills.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

Despite the importance of digital skills in leveraging ICTs for economic prosperity and social well-being, data remain very scant. Only 83 countries submit data, and rarely for all skill areas. Based on this limited dataset, skills linked to information/data literacy are the most prevalent, with a median of 56 per cent and an average that lies between 33 and 69 per cent for most countries. Communication/collaboration is the second most prevalent (median of 51). Problem solving (36), safety (34), and content creation (25) follow with much lower medians.

Another way to analyse these data is through the scope of skills reported in different countries. Among the 70 countries that provided data in at least three skills areas, 58 reported averages of at least 25 per cent in multiple areas, 32 reported averages of over 50 per cent in multiple areas and only two reported averages of over 75 per cent in multiple areas.

The relatively low level of skills in countries providing data contrasts with their high median share of overall Internet use, 87 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, based on most recent data in 2019-2022 period



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

- ITU (2023), Measuring digital development: Facts and Figures 2023, <https://www.itu.int/itu-d/reports/statistics/facts-figures-2023/>

Storyline author(s)/contributor(s): Martin Schaaper, ITU

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

### Education inequalities remain pervasive

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 2022, meaning 100 girls were attending organized learning for every 100 boys. However, among the 155 countries with recent data, forty percent had not reached gender parity. Among these countries, approximately a third had disparities to the disadvantage of girls.

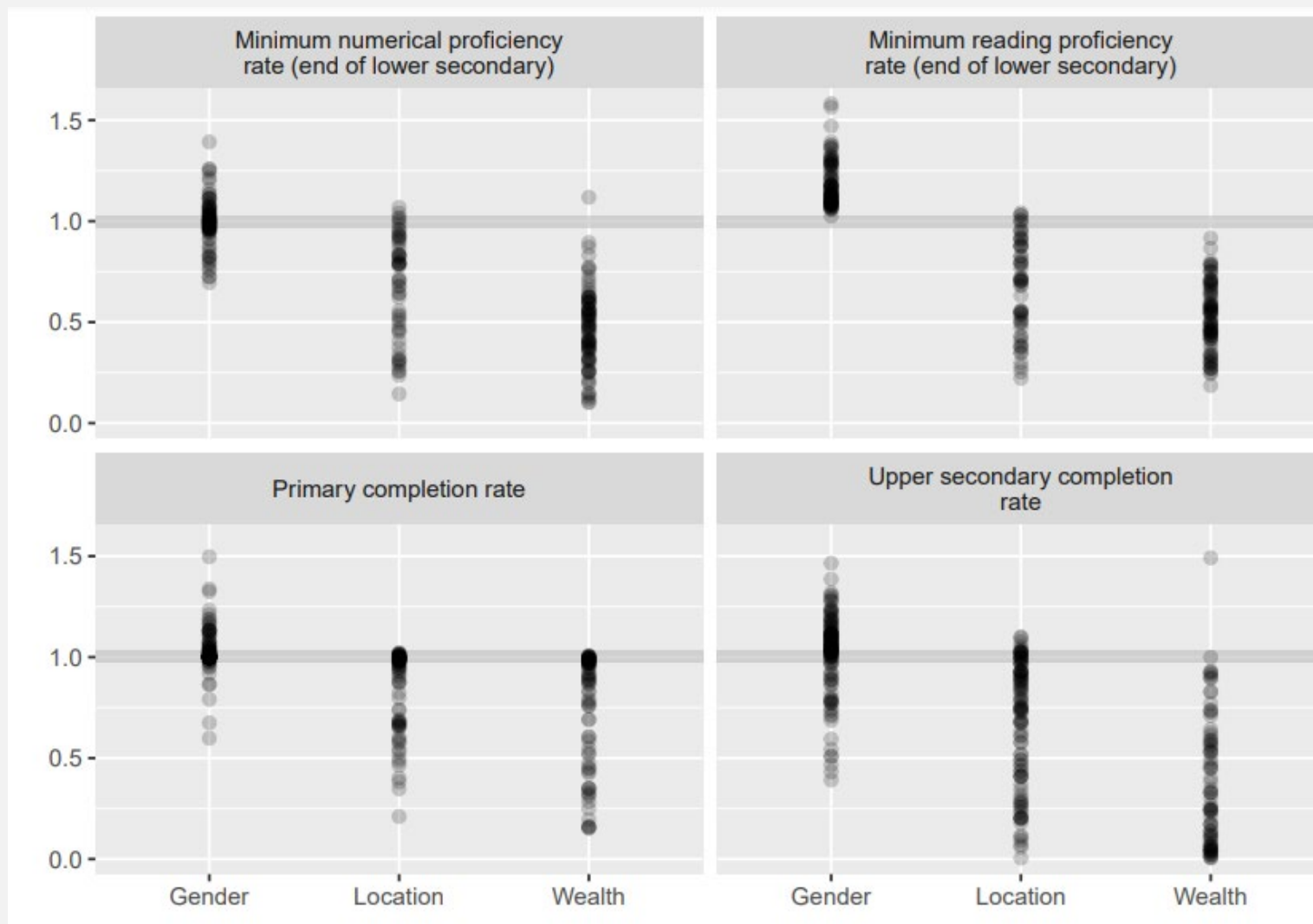
Gender disparities are evident in many other indicators. For primary completion rates (indicator 4.1.2), a third of countries did not meet gender parity, and for upper secondary completion, less than a sixth achieve parity. For both levels of education, fewer boys complete schooling compared to girls. Among countries that did not achieve parity, almost 80% had inequalities to the disadvantage of boys at the primary level, and 70% at the upper secondary level. In Central and Southern Asia and sub-Saharan Africa, however, gender disparities where present tend to be to the disadvantage of females at the upper secondary level, and also at the primary level in the former.

For learning outcomes in mathematics and reading, gender disparities vary by subject. Only a third of countries with recent data achieve gender parity in the proportion of students reaching minimum levels of mathematics proficiency at the end of primary and lower secondary. Boys tend to have lower proficiency levels than girls in almost 60% of countries with disparity at the end of primary, and half at the end of lower secondary . However,

gender disparities are much greater for reading proficiency. For example at the lower secondary level almost no countries with recent data meet gender parity, and in all these countries boys have lower proficiency levels than girls.

Disparities typically increase when considering individual and household characteristics such as urban/rural location and household wealth. For example, among countries with recent data on minimum reading proficiency levels at the end of lower secondary education, only 9% of 57 countries achieved urban/rural parity, while no countries achieved wealth parity. Moreover, parity ratios tend to widen at higher levels of education. As noted, the proportion of countries meeting gender parity in completion rates decreases substantially from the primary to upper secondary level. This is also the case for wealth disparities between children from the richest and poorest households, where only a single country out of 75 with recent data achieved parity at the upper secondary level, compared to a third for the primary age group.

Adjusted gender, location and wealth parity indices for selected SDG 4 indicators



Storyline authors(s)/contributor(s): Alasdair McWilliam

Custodian agency(ies): UNESCO-UIS

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** 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

### **There is an urgent need to improve the quality of climate change education**

A study in 2023 of more than 530 grade 9 science and social science subject curricula found that 69 per cent contained no references to climate change and 66 per cent made no mention of sustainability. Even where teachers report that these issues are covered in subject curricula, 50 per cent say they do not teach these topics. The good news is that, when asked [in 2023], three-quarters of countries reported they have plans to revise their curricula in the next three years in order to focus more on climate change and sustainability. But revising curricula will not be sufficient if teachers do not feel confident to teach these topics. Although 93 per cent of countries report teacher training – both pre-service and in-service – is available, it appears not to be sufficient for all teachers.

**Storyline authors(s)/contributor(s):** Alison Kennedy, UNESCO; Jun Morohashi, UNESCO

**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

Too many schools remain unequipped to provide equal educational experience to all children

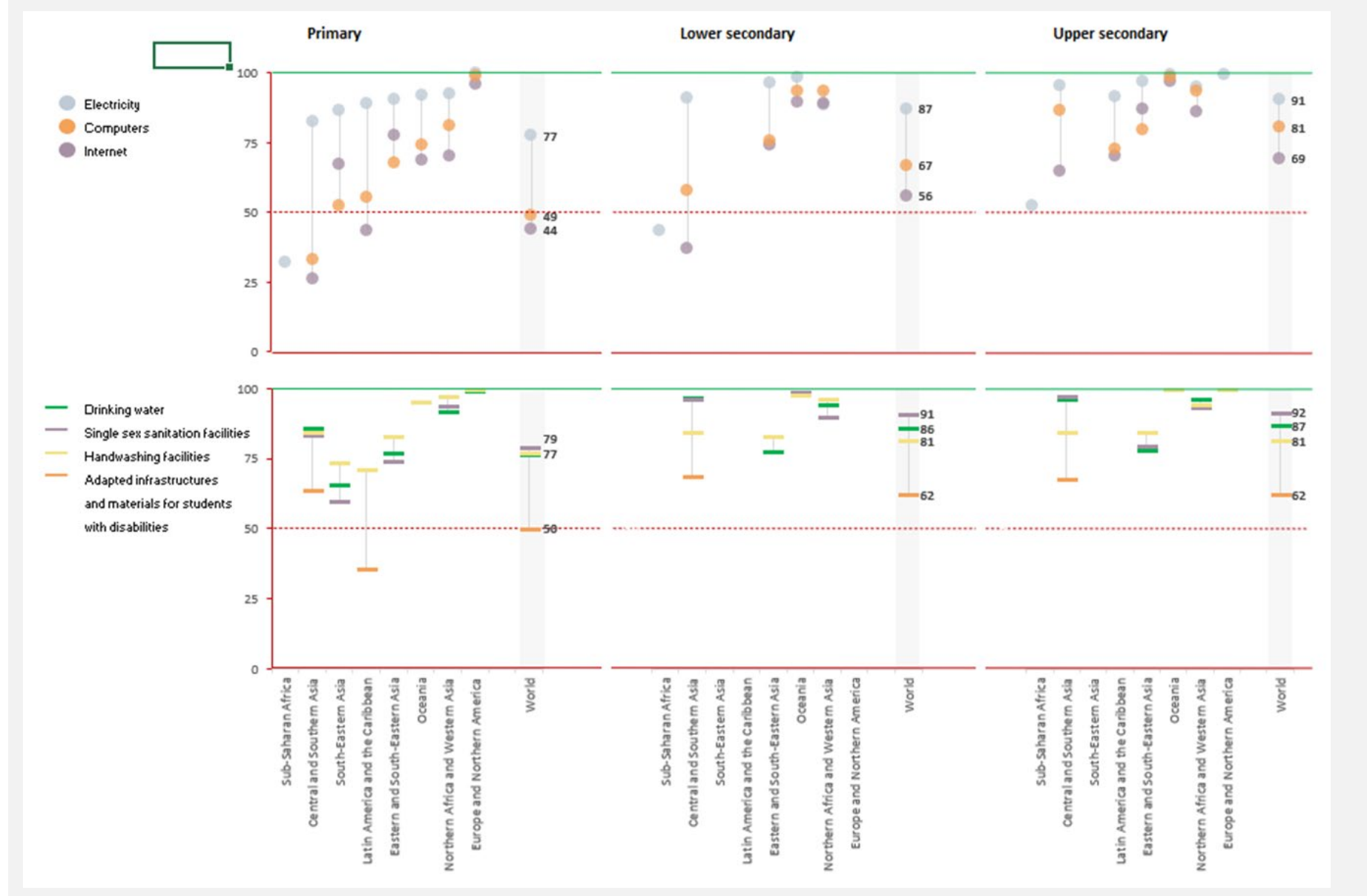
Equipping all schools with basic services such as water and sanitation, infrastructure for students with disability and basic connectivity services constitutes a minimum condition for equal opportunities to learn. Access to safe and healthy schools and adapted learning spaces has a positive effect on pupils attendance, retention and learning, especially in most deprived settings. Globally, progress towards SDG target 4.a.1 has been insufficient, with the proportion of schools equipped with basic services progressing too slowly throughout the SDG agenda for most services. Students with disabilities and girls stand to be the most affected by such lack of progress as too many schools are still not able to accommodate their needs. Only half of all primary schools have basic infrastructures and materials to provide an adequate schooling experience to pupils with disabilities. And four out of ten schools at the secondary level have yet to be equipped with adapted infrastructures and materials. In Latin America and the Caribbean, just above a third of primary schools can accommodate students with disabilities.

The lack of progress in equipping schools with basic services also affects the quality of girls schooling experience. In 2022, more than 20% of primary schools did not have single sex sanitation facilities, and this proportion was slightly lower at the secondary level at around 14%.

Furthermore, at all education levels, two in every ten schools worldwide do not have handwashing facilities, jeopardizing education systems' readiness in case of a new pandemic. And while nine out of ten schools globally have access to drinking water at the secondary education level, some regions are still lagging behind. In Eastern and South-Eastern Asia a quarter of schools did not provide their pupils with drinking water in 2022.

The COVID-19 pandemic has nevertheless pushed governments to increase their efforts in improving schools' access to electricity, computers and internet. On average, 44% of primary schools, 56% of lower secondary schools and 69% of upper secondary schools had access to internet in 2022. Globally, the rate of progress had at least doubled between 2021 and 2022 in comparison to the average rate for the previous two years. In Central and Southern Asia, this rate of progress has been multiplied by three at the primary level and by five at the secondary level. Nevertheless, some regions continue to lag behind as access to electricity remains far from being universal. While eight out of ten primary schools have access to electricity on average in 2022, a 15% increase since the onset of the SDG agenda, this proportion falls to less than a third of schools in sub-Saharan Africa. At the secondary level the gap is equally larger, nine out of ten schools had access to electricity in 2022 at the secondary level but only five or less out of ten schools had access in sub-Saharan Africa.

Proportion of schools with access to basic services (%), by type of service, by education level, by region, 2022 or most recent year



Storyline authors(s)/contributor(s): Patrick Montjouridès, UNESCO-UIS

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 on the rise again

Official development assistance for scholarships amounted to USD 1.7 billion in 2022. This represents an increase of 32% from 2021, most likely due to return to normality after continued disruptions in 2020 and 2021 due to travel restrictions and school closures induced by the COVID-19. The volume in 2022 has still not quite reached the level it was in 2019 (it is still 1.8% lower) which was a peak year, after continued increases in ODA for scholarships since 2006. Between 2015 and 2019 the volume of aid for scholarships increased by 23%.

In 2022, France, Hungary, Japan, the United Kingdom and Turkey accounted for 55% of total ODA for scholarships. The largest recipient regions were Asia and Africa and largest beneficiary countries were Moldova, Morocco, Syria and Pakistan.

Storyline authors(s)/contributor(s): OECD

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 substantial number of teachers are not trained according to minimum standards in their country

Any policy to improve pupils' levels of learning must work with and through teachers to be effective, and teachers have been shown to be the single most important school-based factor affecting children's educational progress. Despite this critical role, too little attention has been paid to improve the proportion of teachers who meet minimum national standards to master basic pedagogical skills. The proportion has remained the same since the Sustainable Development Agenda started, with, on average, 15% of teachers not meeting the minimum required qualifications in their country. The same average proportion is observed for all levels but there are notable differences between regions. At the pre-primary level, only 6 out of 10 teachers meet minimum required qualifications in sub-Saharan Africa while 9 out of 10 do so in Europe and Northern America and Central and Southern Asia. The gap is slightly lower at the primary level where 7 out of 10 teachers in sub-Saharan Africa met the minimum required qualifications in 2022 in comparison to 9 out of 10 in all other regions, at the exception of Latin America and the Caribbean where 8 out of 10 teachers are pedagogically trained according to minimum standards.

This lack of progress is compounded by difficulties for some regions to hire enough teachers to keep pace with the surges in enrolment fuelled by sustained demographic pressure. In sub-Saharan Africa many countries have a larger number of pupils per trained teacher when compared to 1990. And national systems struggle to provide all their teachers with an adequate level of pedagogical training. Data from regional and international learning assessments show that teachers infrequently get in-service

pedagogical support or coaching and do not always have the opportunity to participate in continuous professional development.

But the main issue lies with the lack of comparability of national standards for trained teachers. There is a lack of association between the proportion of teachers trained according to national standards and internationally standardized levels of pupils' learning. Solving issues with cross-nationally comparability of trained teachers has been highlighted as a priority by the international education community. To this end, an international classification of teacher training programmes, ISCED-T, has been endorsed to improve policy dialogue on the definition of a global minimum standard for trained teachers.

Proportion of teacher with the minimum required qualifications, by level, by region, 2015 and 2022



Storyline authors(s)/contributor(s): Patrick Montjouridès, UNESCO-UIS

Custodian agency(ies): UNESCO-UIS