The Sustainable Development Goals Report 2021

Extended Report

-Goal 4-

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Note: The UN Statistics Division (UNSD) prepares the annual The Sustainable Development Goals Report, also known as the glossy report, based on storyline inputs submitted by UN international agencies in their capacity as mandated custodian agencies for the SDG indicators. However, due to space constraints, not all information received from custodian agencies is able to be included in the final glossy report. Therefore, in order to provide the general public with all information regarding the indicators, this 'Extended Report' has been prepared by UNSD. It includes all storyline contents for each indicator as provided by the custodian agencies and is unedited. For instances where the custodian agency has not submitted a storyline for an indicator, please see the custodian agency focal point information linked for further information.
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 ................................................................. 3

Indicator 4.1.2: Completion rate (primary education, lower secondary education, upper secondary education) ................................................................. 4

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 ................................................................................................................................. 5

Indicator 4.2.2: Participation rate in organized learning (one year before the official primary entry age), by sex ............................................................. 6

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 ................................................................. 7

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 ................................................................................................................................. 8

Indicator 4.4.1: Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill ................................................................................................................................. 8

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 ................................................................................................................................. 9

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 ................................................................................................................................. 10

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 ................................................................................................................................. 11

Indicator 4.a.1: Proportion of schools offering basic services, by type of service ................................................................................................................................. 12

Indicator 4.b.1: Volume of official development assistance flows for scholarships by sector and type of study ................................................................................................................................. 13

Indicator 4.c.1: Proportion of teachers with the minimum required qualifications, by education level ................................................................................................................................. 14
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

The United Nations Secretary-General, António Guterres, echoed the concerns of people and organisations around the world when he referred to the impact of the COVID-19 pandemic on schooling as a ‘generational catastrophe’. Children and youths are falling behind in their learning, and this is expected to have an impact lasting decades, especially if longer term effects on economic development and future earnings are taken into account.

In 2019, around 59% of the world’s approximately 132 million children who should be in grade 3 were proficient in reading as measured by Sustainable Development Goal (SDG) indicator 4.1.1. Thus, 54 million children in 2019 were not reading as they should. The 54 million includes roughly 12 million children who were not attending any form of schooling in 2019. The figures for proficiency in numeracy would be similar. It is estimated that the learning losses associated with the pandemic would reduce the percentage of proficient children at the grade 3 level to 49%. This means the number of non-proficient children at this age would increase from 54 million to 68 million – the pandemic would push 14 million children at just the grade 3 level below the proficiency threshold.

Projections from the three levels analysed – grades 3, 6 and 8 – permit an estimation of how many of the 1.06 billion children across eight age cohorts, corresponding to grades 3 to 8, would move below the proficiency threshold as a result of the pandemic. The number of children of these ages falling below the threshold would increase from 483 million to 581 million in 2020. The pandemic would push just under 100 million children below the proficiency threshold. This number excludes children who would carry learning losses with them into grade 1 as a result of disruptions to pre-schooling, and adolescents in schools and post-school institutions above grade 8 who would suffer the educational effects of the pandemic.

There are key challenges that might make figures worse. One is that education budgets are expected to decline as a result of the economic effects of the pandemic. This will compound the problems, especially if teachers feel they are bearing more than their fair share of the budget cuts, and if spending on teachers puts pressure on spending directed towards educational materials. Reductions in spending on school meal programmes could have very serious negative consequences for the physical and cognitive development of children from poor households.

Of 100 million children across eight age cohorts who would move below the proficiency threshold, 34 million would be children in Central and Southern Asia, while 29 million would be in Eastern and South-eastern Asia. These would be the two worst affected regions in absolute terms. In terms of percentage point changes in the percentage of proficient children, the largest decline is seen in Latin America and the Caribbean – from 70% to 51% in grade 3, for example. Sub-Saharan Africa sees rather small declines. Much of the learning losses occurring in this region would occur among children already below the level of proficiency. Put differently, the SDG indicators on learning proficiency provide a rather limited picture of the impacts of the pandemic on learning in Sub-Saharan Africa.

Learning losses from the pandemic per region for grades 1 to 8

![Learning losses from the pandemic per region for grades 1 to 8](chart)

Values in red are millions of children moving below the proficiency threshold. Values in black represent percentage point losses.


Additional resources, press releases, etc. with links:

- [https://www.globalpartnership.org/blog/impact-school-closures-learning-can-be-curbed-adequate-catch-strategies](https://www.globalpartnership.org/blog/impact-school-closures-learning-can-be-curbed-adequate-catch-strategies)

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UNESCO-UIS
As the pandemic struck, just over half of young people were completing secondary school globally, but only a quarter in sub-Saharan Africa. It is estimated that 85 per cent of children completed primary school and 53 per cent of youth completed secondary school in 2019. Achieving universal secondary completion is a challenge even for Europe and North America, where the rate has increased from 82 per cent to just 88 per cent in two decades. Four world regions cluster around the global average. And in sub-Saharan Africa, while primary completion has continued to improve slowly but steadily, from 46 per cent in 2000 to 62 per cent in 2019, even as out-of-school rates have stagnated, the secondary completion rate has only increased from 22 per cent to 29 per cent in this period, which means that it has fallen further behind.

It is too early to estimate what the effect of COVID-19 might be on completion rates, as such effects tend be spread over several years. The pandemic has also taken a toll on information systems. However, what is certain is that the longer schooling is disrupted, the greater the risk that children and youth will not return to complete their education even when schools reopen. Appropriate interventions should ensure that students do complete, even if with a delay. In the coming years, the indicator of timely completion should therefore be complemented with monitoring of ultimate completion. For instance, even without the delays in graduation caused by COVID-19, ultimate primary school completion, up to 8 years after official graduation age, is already 11 points higher than timely completion in sub-Saharan Africa.

**Completion rate upper secondary education, 2000-2019 (percentage)**


Progress analysis: See progress chart

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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

The disruptions brought by the COVID-19 pandemic to everyday life mean that many young children are at home unable to attend early childhood education and care and are therefore now entirely reliant on their caregivers for nurturing care and to meet all of their developmental needs (physical, emotional, social and cognitive). This added burden on families to balance childcare and work responsibilities, compounded by economic instability and social isolation in many cases, is fertile ground for home environments characterized by toxic stress. We know that optimal brain development requires a stimulating and enriching environment, adequate nutrition, learning opportunities and social interaction with attentive caregivers. Under the current pandemic context, access to these opportunities will likely be severely restricted, compromising the healthy developmental trajectory of many children. Unsafe conditions, negative interactions and lack of educational opportunities during the early years can lead to irreversible outcomes, which can affect a child’s potential for the remainder of his or her life.

Pre-COVID data from 76 (mostly low- and middle-income) countries for the period 2012-2020, 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.

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Over the past years, participation in pre-primary education has progressed in several regions, but the COVID-19 pandemic may halt this progress. Early schooling is recognised to stimulate children’s readiness for school and foster their future learning experience, yet participation in organised learning (one year before the official primary entry age) remains far from being universal. In 2019, three out of every four children (73%) globally participated in such learning, but participation is uneven across regions. The enrolment rate was 96% in Latin America and the Caribbean, and 93% in Europe and Northern America. On the other hand, about one-half or fewer of all children participated in this type of learning programme in sub-Saharan Africa (43%), Northern Africa and Western Asia (52%), Landlocked Developing Countries (40%), and Least Developed Countries (50%).

This progress is threatened since 2020, as children were among the hardest hit by the COVID-19 pandemic, with early education facilities and primary schools closed in most countries, preventing or limiting access to education, especially for children from low- and middle-income countries, where alternatives to physical schooling – such as virtual or remote learning – are not available or affordable. The longer-term impacts of COVID-19 on children’s learning and on equity are expected to be considerable but still largely unknown.

Participation rate in organised learning (one year before the official primary entry age), by region (%), 2019


Notes: Data for Southern Asia are missing. This indicator refers to participation in the year before entering primary education. For example, it measures participation in early childhood or primary education for children aged 5 years in countries with primary entry at age 6.

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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

Participation rates in formal and non-formal education and training vary widely across countries

Among the 73 countries with available data between 2015 and 2018, the average participation rate of youth and adults in formal and non-formal education was 25%. However, rates vary widely around this statistic. In approximately 15% of these countries, participation rates for youth and adults are less than 1%. In other countries participation rates are considerably higher, with values over 50% in approximately a fifth of countries. Countries with high rates are typically located in Northern America or Western Europe.

Only a minority of countries (less than one fifth) demonstrate gender parity in participation rates. Where present, gender inequalities do not display a strong pattern, and can be to the disadvantage of either males or females. Even within the same region, the extent and pattern of gender inequality can vary widely. However, among countries with low overall participation rates, fewer females appear to participate in education compared to males.

Due to lack of data, it is not possible to monitor participation rates at the global or regional level. Although over half of countries in Europe and Northern America had available data, coverage in other regions is typically below 25%. Due to differences in the definition of non-formal education between surveys, as well as differences in the reference period (which is not always the preceding 12 months), care should be taken when comparing rates across countries. Data sources include Labour Force Surveys, the European Union’s Adult Education Survey, and the OECD’s Programme for the International Assessment of Adult Competencies.

Although data do not allow an analysis of the impact of the COVID-19 pandemic on participation rates in formal and non-formal education and training, there is cause to expect significant negative effects. Following the greatest disruption to education provision in living memory, countries have reported lowered enrolment in formal schooling and higher education and increased drop-out rates. Similar disruption can be expected to effect non-formal adult education programmes. Business closures and reduced income are also likely to have an impact upon the provision of on-the-job training – an important component of non-formal education.

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


Additional resources, press releases, etc. with links:


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Custodian agency(ies):
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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 ICT skills remain a barrier to meaningful participation in a digital society

Insufficient skills are often mentioned as an impediment to effective ICT use. Because self-reporting of individuals’ ICT skills may be subjective, ICT skills are measured based on whether an individual has recently performed a particular activity that requires a certain level of skills. In 40 per cent of the countries for which data are available, less than 40 per cent of individuals reported having carried out one of the activities that compose basic skills in the last three months, e.g. sending an e-mail with an attachment. In 70 per cent of the countries, less than 40 per cent of individuals had done one of the standard skills components, such as creating an electronic presentation with presentation software. In only 15 per cent of the countries had more than 10 per cent of individuals written a computer program using a specialized programming language in the last three months.

The available data indicates that there are large differences in skill levels between different age groups, and between occupations, but relatively smaller differences between men and women, especially at younger ages.

Additional resources, press releases, etc. with links:


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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

Although participation in education has increased over time, disparities in access to education remain persistent

Education disparities for target 4.5 are measured by the parity indices: the ratio between indicator values for population subgroups, adjusted to be symmetrical around 1 (equality). Since parity ratios can vary above or below 1, averaging them can give a misleading indication of parity. For example, the global parity index for the participation rate in organised learning (one year before the primary entrance age) was 1.00 in 2019 – meaning 100 girls were attending organised learning for every 100 boys. However, among 163 countries with recent data, only 64% had reached gender parity, with a parity index between 0.97 and 1.03.

The extent and form of disparity varies by indicator and the subgroup examined. Gender parity indices across countries tend to be more closely and symmetrically dispersed around 1 at lower levels of education, but widen at higher levels of education. For example, although most countries are at gender parity for the participation rate in organized learning (one year before the primary entrance age), only 3% of the 150 countries with data are at gender parity for the tertiary gross enrolment ratio. Moreover, relative to lower levels of education, males are generally less likely to be enrolled in tertiary education than females (signified by the share of countries with parity ratios above 1).

In addition to gender, disparities in access to education are linked to a variety of personal and household characteristics. Disparities by location and wealth are often significant. For example, among countries with recent data, only a third reached parity between rural and urban areas for primary completion, and just one sixth of countries reached parity between the poorest and richest households. Disparities by urban/rural location and wealth are even more extreme for participation in tertiary education. Among countries with data, none reached equality, with parity indices for location typically below 0.5 and those for wealth mostly below 0.25.

In addition to reversing progress across SDG 4 goals, the COVID-19 pandemic is expected to have a distributional impact, with those from the most vulnerable communities bearing the brunt. With the closure of schools and the shift to remote learning, those from the poorest backgrounds are less equipped to participate and more likely to drop out permanently or for extended periods. Emerging evidence also suggests that in some contexts, females are likely to be disproportionately affected - for example through increased childcare and housework responsibilities or through higher adolescent pregnancy - potentially rolling back recent gains in girls' education.

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


Additional resources, press releases, etc. with links:
- Keeping girls in the picture during and after the COVID-19 crisis. Paris. UNESCO. Link: https://unesdoc.unesco.org/ark:/48223/pf0000375707

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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 4.7.1/12.8.1/13.3.1: 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 UIS
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, particularly in the least developed countries (LDCs)

Adequate school infrastructure is essential for enabling children both to safely attend school and to learn while they are there. Yet even basic levels of water and sanitation facilities are far from universal, especially within primary schools, which are comparatively more likely to serve remote or economically disadvantaged populations than secondary schools. Globally more than a fifth of primary schools do not have access to basic drinking water and more than a third do not have basic handwashing facilities. Availability of computers for pedagogical purposes and access to the internet is even lower, with less than half of primary and lower secondary schools having access to the former.

Least developed countries (LDCs) are often far below the global average across various components of school infrastructure. For example, almost half of primary schools among LDCs do not have single-sex toilet facilities - important factors in girls’ educational participation - compared to one fifth at the global level. Gaps are even higher concerning the provision of electricity in primary schools, with less than a third of LDCs estimated to have access, compared to the global average of over two thirds. In some regions - namely Central and Southern Asia and sub-Saharan Africa - access to infrastructure does not exceed the LDC average.

The COVID-19 pandemic underlines the importance of adequate sanitation facilities in keeping children safe at school, as well as the need for ICT infrastructure to support remote learning. The pandemic also highlights additional infrastructure considerations, which may have not been previously entirely appreciated, such as the importance of classroom space, air circulation and filtration in school buildings, as well as access to the internet and ICTs in the home environment. However, the economic fallout of the COVID-19 pandemic on education budgets and capital spending is likely to have an impact on the ability of countries to make progress towards these ends, especially the poorest countries.

Proportion of schools with access to: electricity; Internet for pedagogical purposes; computers for pedagogical purposes; basic drinking water; single-sex basic sanitation facilities; and basic handwashing facilities

Source: UNESCO Institute for Statistics database, February 2021. Note: Due to the lack of comprehensive national data, regional estimates are not available for adapted infrastructure and materials for students with disabilities.

Additional resources, press releases, etc. with links:


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Custodian agency(ies):
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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
Official development assistance for scholarships amounted to USD 1.7 billion in 2019. France, Japan, EU Institutions, Saudi Arabia and Turkey accounted for 55% of this total. The largest recipient regions were Asia and Africa and largest beneficiary countries were Indonesia, Syria, Moldova and China.

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

Too many teachers lack the minimum required qualifications (training), and the COVID-19 pandemic may worsen the situation.

One crucial step toward the goal of quality education for all is getting enough trained teachers into classrooms. Based on the latest data available, sub-Saharan Africa faces the biggest challenge, with the lowest percentages of trained teachers in pre-primary (45%), primary (65%) and secondary education (53%) among all regions. The highest proportions of trained teachers among the respective regional teaching workforce are found in Northern Africa and Western Asia for pre-primary education (84%), and in Central Asia with 98% in primary and 97% in secondary education (no regionally representative data are available for Europe and Northern America).

In every region with available data, pre-primary education has the lowest percentage of trained teachers, compared to primary and secondary education. Since national teacher education programmes differ widely in terms of content, duration and qualification levels, national minimum teacher qualifications and training standards also vary. Comparative data on minimum required qualifications of teachers should therefore be interpreted with caution.

With the unprecedented lockdown due to the COVID-19 pandemic, leading to total or partial school closures in most countries, the teaching workforce was severely affected. Maintaining access to education in a context of national school closures relied, among other measures, on a shift to new modalities of teaching, such as remote learning, for which many teachers were not properly prepared. The full extent of the impact of COVID-19 on the teaching workforce, teacher education, and on the proportion of teachers with the minimum required qualifications is yet to be known.

Proportion of teachers with the minimum required qualifications, by region, in pre-primary, primary and secondary education (%), 2019 or latest year available.

Source: UNESCO Institute for Statistics database, February 2021. Note: Regional estimates are not available for Eastern and South-Eastern Asia, Oceania, and Europe and Northern America. Regional estimates for pre-primary education are not available for Southern Asia and the world.

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