SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Despite expanding enrolment and increased investment, education is falling short of its transformative potential in the Arab region. The main challenges are weak quality, outdated teaching and learning methods, and inequitable access and infrastructure. Without re-envisioning education as a societal project to produce critical and innovative thinkers and citizens, the region will not be able to harness education’s lifelong potential as articulated in SDG 4. This new vision is crucial to achieve sustainable development; spread values of equality, justice and peace; and enhance the employability of youth.

Key facts

> 16 million children

More than 16 million children in the region are out of school, including 10 per cent of primary school-aged children and 32 per cent of upper secondary-aged children.¹

< 40% finish upper secondary school

Around 84 per cent of students complete primary school but less than 40 per cent finish upper secondary school.²

By 2018, 489 schools in Libya and around 2,000 schools in Yemen had been damaged or destroyed by conflict, or were sheltering displaced persons or being used for military purposes. In Mosul in 2017, 74,000 out of 141,000 school-age children could not access any form of education. By 2018, the Syrian Arab Republic had lost more than one third of personnel in its education system, an estimated 140,000 people, including teachers.³

IRLS

The International Reading Literacy Study (IRLS), which assesses the proficiency of students in grade 4, shows some countries improving, such as Morocco, Oman, Qatar and the United Arab Emirates. Others lag behind. There are also differences within countries between public and private educational institutions.⁴

50%

The proportion of students completing lower secondary school with a minimum proficiency in mathematics is below 50 per cent, far from the global SDG target and less than the world average.⁵

18% NEET

More than 18 per cent of Arab youth are not in employment, education or training (NEET). The rate is 10 per cent for men and 27 per cent for women.⁶

The youth literacy rate is estimated at 90 per cent in the region, yet around a fifth of adults remain illiterate. The literacy rate of young women stands at 88 per cent.⁷

Only 47 per cent of children in the region are enrolled in one-year pre-primary education. The rate drops significantly for the least developed countries, with Djibouti and Yemen at less than 10 per cent.⁸

The share of young children at risk of poor development varies from 78 per cent in Djibouti to 55 per cent in Yemen, 23 per cent in Egypt and 15 per cent in Morocco.⁹
The quality of technical and vocational education and training remains low. Only a third of graduates are equipped for the labour market.\textsuperscript{10}

An additional year of schooling adds around 5.4 per cent to earnings in Arab countries, compared to the world average of 7 per cent.\textsuperscript{11}

Corporal punishment in schools is not prohibited in nine countries.\textsuperscript{12} More than 1 in 4 adolescents (aged 13 to 15) report being bullied in school.\textsuperscript{13}

In Bahrain and Qatar, 100 per cent of primary schools have access to the Internet for pedagogical purposes, compared to less than 40 per cent in the State of Palestine. No data exist for the least developed countries. The gap is slightly narrower for secondary schools.\textsuperscript{14}

Literacy rates are lower for persons with disabilities across the region. In Oman, for example, 87 per cent of persons without disabilities are literate compared to only 31.2 per cent of persons with disabilities.\textsuperscript{15}

Measuring SDG 4 in the Arab region according to the global SDG indicator framework

Data are available for 6 out of 11 indicators, covering 6 out of 10 targets under SDG 4.

The challenges in measuring SDG 4 in the region are mainly due to limited data collection as well as the nature of the indicators. Many indicators are new conceptually, still under study and/or have a wide scope and multiple disaggregation variables.

While many indicators are disaggregated by sex, some are disaggregated according to other variables such as disability, household income and location. The current lack of disaggregated data in the Arab region limits the ability to assess different dimensions of inclusiveness, however. More countries need to report on all indicator components to generate representative regional averages.

In addition, the global indicators adopted for SDG 4 do not reflect its transformative potential as articulated in the goal and in target 4.7. Indicators do not capture the affordability of education as indicated in target 4.1. This is critical in the Arab region where there are large disparities between public and private schooling, and where most families spend substantially on education. Indicators also fall short of measuring the quality of education and the extent to which education contributes to building inclusive and equitable societies (target 4.7). These limitations in the global framework are amplified by the region’s lack of data and data disaggregation.

**Target 4.a** aims to “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) aims to measure the “Proportion of schools with access to (a) electricity; (b) the Internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities (as per the WASH indicator definitions).”

The indicator does not address the ways in which teaching and learning could enhance gender equality and the inclusion of students from different social groups. Further, in the Arab region, the element most commonly reported on is access to electricity, which does not address elements articulated in the target relating to inclusion and safe, non-violent spaces.
The salaries of teachers in Egypt’s public schools, where the vast majority of students are enrolled, are the lowest among public sector jobs, even as demand for public education has been increasing given a growing population. Ineffective and disengaged teaching in the classroom in most public and private schools has led to the rise of private tutoring. The phenomenon allows parents to supplement their children’s education and teachers to supplement their income after school hours. This form of privatization of education has been estimated to cost up to 50 per cent of household budgets. The wealthiest quintile of the population spends 10 times more on private tutoring than the poorest.


A quality education is necessary not only for social and economic well-being, but also for participation in sustainable development and transformative change at the local, national, regional and global levels. SDG 4 relates to a number of other SDGs. It emphasizes lifelong learning, inclusion and equality (SDGs 5 and 10). It advances a vision of education that produces individuals equipped for continued learning and productivity, which is linked to employment and income generation prospects (SDGs 1 and 8). It stipulates enhancing the ability of individuals and societies to understand current development challenges, access needed information and contribute to innovative solutions to challenges like water scarcity, energy efficiency and climate change (SDGs 6, 7 and 13), and unsustainable patterns of consumption and production (SDG 12), among others.

Early childhood, primary and secondary education cannot be separated from post-secondary education and the contribution of research and development (SDG 9) to better social, economic and environmental conditions. Fundamentally, inclusive and equitable quality education fosters social cohesion and encourages students and graduates to work for the common good, leading to more peaceful and just societies (SDGs 5 and 16).

Education in the Arab region is falling short of its potential. Weak quality, extreme inequality in access within and between countries and inadequate reforms are curbing the potential of generations to create better lives for themselves and lead a much-needed development transformation.

THE FOLLOWING ARE THE KEY BARRIERS TO ACHIEVING SDG 4 IN THE ARAB REGION

Weak quality

Educational reform and investment in the region have been focused on quantifiable and material infrastructural changes. Notwithstanding the importance of such actions, the content that education systems deliver remains far from being transformative as envisioned under SDG 4. Curricula are limited and rarely innovative; the teaching profession is undervalued and underpaid; the humanities and social sciences are not prioritized; and learning continues to be mostly by rote at least in public schools. The emphasis on end-of-year testing devalues problem-solving and analytical skills and emphasizes the ability to reproduce information as delivered by teachers.

Thus, the system does not encourage active engagement with knowledge, nor does it prioritize quick adaptability to continuous developments in technology and industry.

While government spending on education in the region remains lower that the world average, some governments have significantly increased spending. This has not substantially transformed teaching and learning, however. The region has not yet
witnessed a broader social movement involving parents, students, educators and policymakers advocating for teaching skills that emphasize engaging with and producing knowledge, rather than simply acquiring it.18

Education in primary and secondary schools does not prepare students to transition to university, employment and innovative industries, leaving the region with high unemployment among youth, especially those who are educated. The SDG 4 vision of promoting human rights, gender equality and sustainability has not been well-integrated in curricula. Few or no resources are allocated for the continuous professional development of teachers or the adaptation of new methodologies that link learning inside the classroom to social, economic, political and environmental challenges in society at large.

A two-tier system exacerbates inequality and hinders inclusive education

The turn away from public schooling in the region, often as a result of lower quality education in public schools and decreasing investment in them, is detrimental to the role education should play in society as whole. The privatization and commodification of education, though a solution for some, are increasing inequality. Segregation in education produces a negative impact on social cohesion (SDG 16) and exacerbates poverty and exclusion (SDGs 1 and 10).

For example, in Mauritania, the growth rate of students in private education was double the rate in the public sector between 2011–2012 and 2016–2017. Public schools are closing, and their land is being sold as the Government is short on funding. In Morocco, there has been a threefold increase in the number of students in private schools in the last 15 years, with most private schools located in urban centres.17 The influence of inequalities in education can reverberate throughout a lifetime, in upper-income countries, such as those in the GCC, as well as lower-middle-income countries, such as Egypt.

The weakness of economies limits education payoff

In tandem with weak quality of education, the structure of economies across the region has slowed rather than promoted a transformation of educational systems. Rentier economies and concentrations of low-productivity industries do not create enough jobs to absorb problem solvers and critical thinkers, or encourage innovative education and lifelong learning.

Even as youth graduate from schools across the region, they are often unable to transition to well-paying productive jobs because those are in short supply. They end up with jobs that require lower qualifications than their level of educational attainment and that pay less. At the same time, markets and production structures do not reflect any increase in productivity that translates into higher wages. Consequently, education does not pay off and contributes less than its desired impact in terms of SDG 8.

Conflict and displacement

Amid widespread conflict and crises in the region, children in Arab countries continue to be at risk of restricted educational access, low quality, early dropouts and unsafe educational environments. The impact cuts across all dimensions of development. It will stall the achievement of other SDGs, including SDG 1, as lack of education is linked to increased poverty, and SDG 5, where uneducated and poorly educated women and girls are more likely to marry and give birth earlier.

At risk of being left behind

The number of students out of school has significantly increased as a result of conflict. A generation of refugee and internally displaced children cannot access education for reasons ranging from discrimination, lack of status and official documentation, and difficulty in adapting to unfamiliar curricula and languages.19 Where access is possible, financial burdens and education-related expenses such as transport prove to be major hurdles. Many refugee and internally displaced children also stay out of school in order to work and help support their families.

In some countries of the region, the poorest children are more likely not to attend school and they are at least four times more likely not to complete primary school compared to children in higher income groups.19 Households headed by people with no education are eight times more likely to be poor than those headed by people with the highest level of education the country has to offer.20

The poor everywhere depend almost exclusively on public schools in areas where private ones may offer better quality or better options. They typically lack means to supplement formal schooling with private tutoring.

Despite increased national investment in education, many rural communities lack the infrastructure, physical or educational, to extend quality, inclusive and equitable education. The shortfall goes beyond the economic ability to attend private or better quality schools, which are often not available. Rural–urban differences become particularly pronounced when it comes to the probability of reaching secondary education.

In Morocco, for example, where the rural population has less access to and lower quality of education services and institutions, 26 per cent of children drop out in the last grade of primary (grade 6), compared to 1 per cent in urban areas.21
Persons with disabilities are particularly excluded from all education cycles, and especially post-primary education. For example, only 1.8 per cent of girls and young women with disabilities aged 15 to 24 in rural areas of Yemen attend school. Students with disabilities often face discriminatory social norms, poor transport and road infrastructure and inaccessible educational facilities. Teachers tend to lack training on how to accommodate diverse needs, particularly of children with cognitive disabilities.

Young people who are not in employment, education or training (NEET) are a disquieting phenomenon in many countries, accounting for around 45 per cent of young people in Yemen, 32 per cent in the State of Palestine and 28 per cent in Egypt. They drop out of school for different reasons and are particularly vulnerable to multiple risks. Each case should be addressed uniquely given multiple and variable drivers, but the net result is often a rise in young people’s frustration, idleness and inability to integrate into formal, sustained and productive employment. NEET females also contend with gender biases that keep women out of education and the labour market.

At the regional level, the least developed countries remain the most disadvantaged and report the lowest performance indicators on universal access to education as well as literacy, gender parity and equality, and the quality of education. These countries lack the funds to develop education systems, and their economies are stuck in primary sector activities, creating few jobs and limiting demand for skilled employment.

What the region can do to accelerate progress on SDG 4

1. **Rethink the role and value of education to drive transformative change:**

- Reconsider the goals of educational systems beyond just building individual capabilities so they can support a collective endeavour for social change.

- Reform the entirety of educational systems, and reallocate resources to empower students, teachers and parents and engage them in continuous reforms.

- Guarantee and protect freedom of thought and expression to unleash the potential of research and development.

- Ensure access to lifelong learning opportunities for all, across age groups.

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### Overall, girls are more likely to be out of school than boys, especially as the level of education rises—the share is 18 per cent of girls versus 12 per cent of boys at the lower secondary age. Once they make it to secondary school, however, girls are more likely to continue as boys tend to drop out to work.

While the probability of reaching secondary school is quite high for the most advantaged girls and boys in most countries; the rate for the least advantaged girls falls to 28 per cent in Yemen, 20 per cent in the Syrian Arab Republic and 12 per cent in Iraq. Intersecting inequalities place some at more disadvantages than others. For example, rural women with disabilities have a literacy rate of 6.7 per cent in Yemen and 28.4 per cent in the State of Palestine.

Source: UNICEF, 2019, p. 44; ESCWA, 2018; Assaad and others, 2019.

### Disparities are stark when it comes to youth and adults who have relevant skills for employment, decent jobs and entrepreneurship. The proportion of youth and adults with basic ICT skills* is higher in Bahrain, Jordan and the United Arab Emirates (60 per cent to 90 per cent) than in Egypt and Morocco (20 per cent to 50 per cent). The proportion becomes much lower in Djibouti and the Sudan (less than 20 per cent).

* Examples of basic ICT skills are using copy/paste functionalities and sending emails.


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### Less than one quarter of 3- and 4-year-old children in the region are attending early childhood education. Inequalities have to do with the features of national education systems, gender and cultural norms (25 per cent of boys attend versus 21 per cent of girls) as well as household wealth (35 per cent of children in the richest quintile of households attend versus 13 per cent of the poorest quintile).

Source: Calculated by UNICEF Middle East and North Africa Regional Office based on UNICEF, 2017b.
2. Invest in and continuously reform and upgrade educational systems across the region:
   - Reform curricula to integrate innovative methodologies of learning and teaching that encourage critical thinking and problem-solving, and allow learners to apply knowledge throughout their lives as participants, citizens and lifelong learners.
   - Reform assessment methods to focus on measuring the development of abilities rather than acquisition of information.
   - Strengthen all disciplines, encourage interdisciplinarity and prioritize linkages across social sciences, humanities, sciences and more technical subjects.
   - Integrate principles of sustainable development, human rights, democratic and engaged citizenship and gender equality into curricula at all levels.
   - Improve teacher training and access to technology and innovative methodologies.
   - Integrate early childhood education into educational strategies.

3. Guarantee the right to equitable and quality education:
   - Ensure equitable spending on education to supplement gaps in rural and marginalized areas.
   - Ensure schools are equipped (with physical and human resources) to address the needs of girls and boys alike and persons with disabilities, both physical and non-physical.
   - Link educational strategies to social protection schemes to ensure children remain in school.

4. Improve the collection of data:
   - Enhance the capacity to collect disaggregated data by sex, location, disability, income level and other markers.
   - Enhance the capacity to measure the quality of education.
   - Deploy modern data science for more timely feedback and relevant evidence.

Reform curricula to integrate innovative methodologies of learning and teaching that encourage critical thinking and problem-solving, and allow learners to apply knowledge throughout their lives as participants, citizens and lifelong learners.

SDG 4 targets and indicators in the Arab region

<table>
<thead>
<tr>
<th>Target</th>
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<tr>
<td>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</td>
<td>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</td>
<td><img src="image.png" alt="Figure 1" /> Proportion of children at the end of lower secondary education achieving at least a minimum proficiency level in mathematics (percentage)</td>
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<tr>
<td>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</td>
<td>4.2.1 Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex</td>
<td>Adopted criteria to obtain a regional average are not met for this indicator.</td>
</tr>
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</table>
4.2.2 Participation rate in organized learning (one year before the official primary entry age), by sex

Figure 2 Participation rate in organized learning (one year before the official primary entry age) (percentage)

Note: All means are weighted by the total school-age population one year before the official primary entry age (i.e., the denominator) for 2016 (UNESCO Institute for Statistics, 2018b). The calculated Arab regional aggregate includes the data values of the following countries and years: Algeria (2010), Syrian Arab Republic, United Arab Emirates, Yemen (2013), Comoros (2014), State of Palestine (2015), Bahrain, Egypt, Kuwait, Lebanon, Morocco, Oman, Qatar, Saudi Arabia (2016), Djibouti (2017).

According to the United Nations Statistics Division (2019b), this indicator is defined as “the percentage of children in the given age range who participate in one or more organized learning programme, including programmes which offer a combination of education and care. Participation in early childhood and in primary education are both included. The age range will vary by country depending on the official age for entry to primary education”.

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

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

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

Adopted criteria to obtain a regional average are not met for this indicator.

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

Adopted criteria to obtain a regional average are not met for this indicator.
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.

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.

Note: Series 1: Gender parity index for participation rate in organized learning one year before the official primary entry age.

Series 2: Rural-to-urban parity index for achievement in mathematics at the end of lower secondary.

Series 3: Low to high socioeconomic parity status index for achievement in mathematics at the end of lower secondary.

Series 4: Language test parity index for achievement in mathematics at the end of lower secondary.

Series 5: Gender parity index for achievement in mathematics at the end of lower secondary.

Arab regional aggregates include the data values of the following countries and years:


All means of series 2-5 are weighted by total enrolment in lower secondary education (i.e., the denominator) in 2014 from the UNESCO database. All means series 1 are weighted by total school-age population one year before the official primary entry age (i.e., the denominator) for 2016 from UNESCO Institute for Statistics 2018b.

*According to the United Nations Statistics Division (2019b), “Parity indices represent the ratio of the indicator value for one group to that of the other. Typically, the likely more disadvantaged group is placed in the numerator. A value of exactly 1 indicates parity between the two groups. The further from 1 the parity index lies, the greater the disparity between the two groups of interest.”
4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy

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

Adopted criteria to obtain a regional average are not met for this indicator.

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

4.7.1 Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment

Adopted criteria to obtain a regional average are not met for this indicator.
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.

4.a.1
Proportion of schools with access to (a) electricity; (b) the Internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities (as per the WASH indicator definitions).

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.

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

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.

4.c.1
Proportion of teachers in: (a) pre-primary; (b) primary; (c) lower secondary; and (d) upper secondary education who have received at least the minimum organized teacher training (e.g. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country.

Note: All means are weighted by total GDP (current United States dollars, the denominator) for 2016, taken from the World Development Indicators (World Bank, 2019). The calculated Arab regional aggregate includes the data values of the following countries and years: Jordan and Oman (2011), Sudan (2015), Bahrain, Egypt, Mauritania, Morocco, Qatar, State of Palestine and Yemen (2016), Djibouti (2017).

Note: This indicator only covers recipient countries and excludes the 33 donor countries from different regions that are listed by OECD. Aggregates are the total sum of country values. The calculated Arab regional aggregate includes the data values of the following countries and years: Oman (2010), Algeria, Comoros, Djibouti, Egypt, Iraq, Jordan, Lebanon, Libya, Mauritania, Morocco, Somalia, State of Palestine, Sudan, Syrian Arab Republic, Tunisia, Yemen (2017).
4.1, 4.2 and 4.c

4.1.1 Proportion of children at the end of lower secondary achieving at least a minimum proficiency level in mathematics

4.2.2 Participation rate in organized learning, one year before the official primary entry age

4.c.1 - (a) Proportion of teachers in pre-primary education who have received at least the minimum organized teacher training (e.g. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country

4.c.1 - (b) Proportion of teachers in primary education who have received at least the minimum organized teacher training (e.g. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country

4.c.1 - (d) Proportion of teachers in upper secondary education who have received at least the minimum organized teacher training (e.g. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country

Note: Data availability was slightly negatively affected by weighting. All means are weighted by the same weighting variables used for their corresponding series (UNESCO Institute of Statistics 2018b): 4.1.1 is weighted by the total enrolment in lower secondary education (i.e., the denominator) for 2014; 4.2.2 is weighted by total school-age population one year before the official primary entry age (i.e., the denominator) for 2016; 4.c.1-(a) is weighted by the total number of teachers in pre-primary education in 2016; 4.c.1-(b) is weighted by the total number of teachers in primary education in 2016; 4.c.1-(d) is weighted by the total number of teachers in secondary general education in 2016.
ENDNOTES

2. Ibid.
5. Calculated by ESCWA, see figure 1.
7. UNESCO Institute for Statistics, 2017. This key fact refers to UNESCO’s regional country groupings, as per the reference.
8. Calculated by ESCWA, see figure 2. For information at the country level, please refer to the annex complementing this report.
12. Global Initiative to End All Corporal Punishment of Children, 2018. According to the reference, these countries are: Comoros, Egypt, Iraq, Lebanon, Mauritania, Morocco, Qatar, Saudi Arabia and Syrian Arab Republic.
15. ESCWA, 2018, p. 34.
20. ESCWA and others, 2017.
22. ESCWA, 2018, p. 37.

REFERENCES


