



## Continental Overview

# Bridging SDG 4 and Education Monitoring Frameworks in Europe, North America and the Caucasus

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# Bridging SDG 4 and Education Monitoring Frameworks in Europe, North America and Caucasus

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## Executive Summary

This report highlights the countries in Europe, North America and the Caucasus have incorporated SDG 4 goals and targets in their education strategic frameworks. In particular, it focuses on the integration of the SDG goals and targets in the European Union education policies. It aims to promote an understanding of the relationship between this regional body and global education objectives, while providing a way for it to measure progress. In 2019, the Technical Cooperation Group (TCG) on the Indicators for SDG 4 agreed to specifically monitor seven SDG 4 indicators and to set intermediary objectives – benchmarks – with the aim of keeping countries on track to achieve global education targets. Some of these benchmark indicators were approved by the EU, together with additional regionally relevant indicators, for the purpose of benchmarking.

This Continental Overview provides an account of the progress of countries in Europe, North America and the Caucasus to achieve SDG 4 using these approved SDG 4 benchmark indicators. Whenever possible, a link was created with the EU framework. It helps provide insight on specific issues and challenges for EU member countries.

The following takeaways can be formulated:

- Proficiency levels in reading are mostly achieved for EU members and non-member countries. Mathematics is still a challenge for many countries. More learning data, specially for primary in grades 2 to 3, would help policymakers in the Caucasus to elaborate programs to meet the expected targets.
- Completion rates in the primary and secondary are high in most countries in the regions. Rates fall a little in the secondary. This target has to be monitored using administrative data for most EU and non-EU countries.
- Most children are enrolled in schools in European and Northern American countries. Caucasus countries have still room for progress in primary and secondary.
- More data on early childhood development would help to track SDG Target 4.2. Only a few countries outside the EU and the Caucasus can monitor early childhood.
- Participation in some kind of training is high in most countries, as well as enrollment in vocational education that reaches around 18% for EU and non-EU member-countries. The average enrolment ratio in the tertiary education is above 70% in Europe.
- ICT skills have a good coverage in European countries; in the Caucasus, in some countries could improve data collection systems on this dimension. Programming language skills are still below the other ICT skills in most countries.
- Gender parity is virtually achieved in all countries in early schooling ages. In general, proficiency in reading favors girls, while in mathematics the situation is more balanced.
- More data is required to track literacy and numeracy (SDG 4.6) and global sustainability and citizenship issues (SDG 4.7) in the region.
- Computers and internet for pedagogical purposes are available in most schools in the region.
- Aid for scholarships is raising for non-EU members and Caucasus countries, increasing the mobility in the regions.
- Available data shows that ratio of pupils to trained teachers ranges from 10 to 20 reflecting some disparities between countries in these regions.
- Regarding finance, only a few countries spend the minimum threshold of 15% of the total government expenditure on education. In terms of GDP, the picture is brighter, with almost EU and non-EU countries on target in 2019. Caucasus countries, like Azerbaijan and Armenia, have to increase spending on education as a share of GDP by 1.5 percentage points to reach the minimum threshold.



### **Challenges in monitoring Education 2030 in the countries include:**

The Covid-19 pandemic has imposed serious challenges on education systems worldwide and slowed down the progress towards achieving SDG 4 targets. European, North American and Caucasus countries have not been spared and were negatively impacted in varying degrees. The disruptions in education have resulted in learning losses and increased inequalities, while deteriorating the well-being of students and teachers. More than ever before, it is important to have data to assess the real impact of the pandemic on education systems and the progress towards SDG 4. This will help in identifying, developing, and implementing the appropriate remedial measures and reforms.

Education systems in EU countries showed resilience in dealing with the crisis, adopting unprecedented initiatives to address the challenges they were facing<sup>1</sup>. The 'NextGenerationEU'<sup>2</sup> fund is a crisis-recovery plan that supports EU countries in dealing with the adverse consequences of the pandemic, allocating significant funds to education and training through the Recovery and Resilience Facility<sup>3</sup>, and contributing to the transition towards a healthier, stronger, greener and more digital Europe.

EU countries are mainly concerned with the negative effect of the pandemic on students' well-being, learning losses, inequalities in access to education, and the share of early leavers from the education system. The crisis has also put forward the importance of reducing underachievement in both basic and advanced digital skills. In addition to these challenges mostly imparted by the crisis, EU countries face other challenges, such as meeting the target of having less than 15% underachievers in basic skills and increasing the share of adults learning.

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<sup>1</sup> <https://education.ec.europa.eu/about/education-and-training-monitor>

<sup>2</sup> [https://europa.eu/next-generation-eu/index\\_en](https://europa.eu/next-generation-eu/index_en)

<sup>3</sup> [https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility\\_en](https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en)

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# Foreword

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Achieving Sustainable Development Goal 4 (SDG 4) for education requires a concerted effort by countries, regions and global organizations to track current progress and address challenges in collecting and producing high-quality data. The stakes are high as children and young people around the world will be left with fewer opportunities if they are denied a quality education and an opportunity to learn. Our current research suggests that the COVID-19 pandemic has reversed much of the progress achieved to date, with many more children now falling behind in learning even basic skills. To get back on track, it is essential that we have the data needed to measure learning so that policymakers can focus efforts on reaching the most vulnerable children.

This report by the UNESCO Institute for Statistics (UIS) is part of a series of regional reports on Africa, Asia and the Pacific, Latin America and the Caribbean and the Arab states. The series is intended to bring a regional focus to SDG 4 monitoring by highlighting work being done in the regions while comparing SDG 4 targets with those established by regional and subregional bodies. Even before the adoption of the Education 2030 Agenda in 2015, some countries in Europe, North America and the Caucasus region had adopted their own set of education objectives and targets. To ensure the most efficient and impactful use of resources, it is important to mitigate duplication and concentrate effort in overall outcomes.

This report, *Bridging SDG 4 and Education Monitoring Frameworks in Europe, North America and Caucasus*, looks at progress made so far, compares regional and SDG 4 targets, and provides an overview of their similarities. The report highlights some challenges these countries have experienced in collecting high-quality data that are comparable across countries. The recommended solutions are intended to strengthen education monitoring systems so countries and subregional bodies can align objectives with SDG 4 and identify data gaps.

In addition to this report series, many data resources can be found on the UIS Technical Cooperation Group website, where readers can find a Data Book highlighting how each region performs across SDG 4 indicators as well as a section devoted to benchmarking with regional and country dashboards for each of the seven SDG 4 indicators identified for this purpose.

Finally, this report is the result of a collective effort by a team under my supervision. Tiago Vier has helped to consolidate and assemble the report, which incorporates contributions and inputs from the Foresight and Innovation team (Kim Deslandes, Adolfo Imhof and Lina Ktaili) and takes advantage of the benchmark process that is globally led by the UIS and the Global Education Monitoring Report.

Silvia Montoya

Director, UNESCO Institute for Statistics

# Abbreviations and Acronyms

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<b>AU</b>	African Union
<b>CARICOM</b>	Caribbean Community
<b>CESA</b>	Continental Education Strategy for Africa
<b>ECCE</b>	Early Childhood Care and Education
<b>EEA</b>	European Education Area
<b>ELET</b>	Early leavers from education and training
<b>ET</b>	Education and Training
<b>EU</b>	European Union
<b>GER</b>	Gross Enrolment Ratio
<b>GIRLG</b>	Gross intake ratio to the last grade of primary education
<b>GPIA</b>	Adjusted Gender Parity Index
<b>ICT</b>	Information and Communication Technology
<b>NFE</b>	Non-Formal Education
<b>ODA</b>	Official Development Assistance
<b>OEI</b>	Organization of Ibero-American States
<b>PacREF</b>	Pacific Regional Education Framework
<b>PISA</b>	Programme for International Student Assessment
<b>SAARC</b>	South Asian Association for Regional Cooperation
<b>SDG 4</b>	Sustainable Development Goal 4 for education
<b>SDGs</b>	Sustainable Development Goals
<b>SEAMEO</b>	Southeast Asia Ministers of Education Organization
<b>SFFA</b>	SAARC Framework for Action for Education 2030
<b>SIDS</b>	Small Island Developing States
<b>SPC</b>	The Pacific Community
<b>TE</b>	Tertiary Education
<b>TVET</b>	Technical and Vocational Education and Training
<b>UIS</b>	UNESCO Institute for Statistics
<b>USLA</b>	Upper secondary level attainment

# Introduction

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In this publication, the UNESCO Institute for Statistics (UIS) provides an overview of the current progress of European, North American and a few Caucasus countries in relation to the Sustainable Development Goal 4 for Education (SDG 4) and education strategies in the region. SDG 4 is one of the 17 goals of the 2030 Agenda for Sustainable Development, that is to 'ensure inclusive and equitable quality education and promote lifelong learning opportunities for all'.

This is part of a broader initiative from the UIS to connect and combine efforts at the national, regional and global levels towards the monitoring of the Agenda 2030.<sup>4</sup> A first regional report on Africa considered the regional priorities in that region in the context of SDG 4 global targets. Other regional reports published on the same initiative considered the regional frameworks in the Asia-Pacific and Latin America and the Caribbean regions.

This publication focuses on the regional monitoring framework implemented by the European Union (EU). The EU policy in the fields of education and training is designed to support action at the level of Member States – who remain responsible for these competence areas – and to help address common challenges, such as ageing societies, skills deficits, technological developments and competition at the global level.

The previous EU framework for cooperation in the fields of education and training, known as Education and Training 2020 (ET 2020), which in turn followed its predecessor, ET 2010, pursued the following four common EU objectives:

- Make lifelong learning and mobility a reality
- Improve the quality and efficiency of education and training
- Promote equity, social cohesion and active citizenship
- Enhance creativity and innovation, including entrepreneurship, at all levels of education and training.

The ET 2020 expired at the end of December 2020. At the end of February 2021, the EU Member States agreed on a new common framework for European educational cooperation for 2021<sup>5</sup>

This framework is closely aligned with the goals for creating a “European Education Area” by 2025. The European Education Area (EEA) is built upon the international collaboration on higher education, known as the Bologna Process. The EEA covers different levels and sectors of education to support lifelong learning. The European Commission's vision for the EEA is guided by six dimensions (quality, inclusion and gender equality, green and digital transitions, teachers and trainers, higher education, geopolitical), and the following five strategic priorities characterize the new strategic framework:

- Improving quality, equity, inclusion and success in favour of fair and equal access to the education system for all
- Achieving lifelong learning and mobility for all
- Improving the competencies and motivation of teachers in education professions
- Strengthening European higher education
- Supporting the green and digital transformation in and through (education and) training.

In the area of higher education, the focus is on the full implementation of the European Higher Education Initiative as well as on close coordination with developments within the Bologna Process, such as the European Research Area, in order to avoid duplication of structures and instruments. Reference is also made to the transformation agenda for universities planned by the European Commission.

In the implementation of the new strategic framework, the proven instruments of the ET 2020 strategy will be used (working groups, meetings of the directors general, peer learning). An interim evaluation is planned for 2025.

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<sup>4</sup> UNESCO 2016.

<sup>5</sup> EU 2021.

The EU produces reports and other communication materials on education, namely through the Education and Training Monitor. The report has been produced annually since 2010, gathering a wide range of evidence to indicate the evolution of national education and training systems across the EU.

## Regional Benchmarking

As part of the efforts to create the European Education Area, Member States have agreed on seven EU-level targets as reference levels of European average performance in education and training. Three of the seven indicators (1, 3 and 4) of the EU monitoring framework for which reference levels have been set for 2030 overlap considerably with the seven indicators of the SDG 4 benchmarking process.

The indicators from the EU framework with correspondence with SDG benchmarked indicators are the following:

### **1. Low achieving 15-year-olds in basic skills (PISA underachievers)**

*The share of low-achieving 15-year-olds in reading, mathematics and science should be less than 15%, by 2030, which is equivalent to SDG Indicator 4.1.1c (expressed as one minus this share).*

### **3. Participation in early childhood education and care**

*At least 96% of children between 3 years old and the starting age for compulsory primary education should participate in early childhood education and care, by 2030, which is similar to SDG Indicator 4.2.2.*

### **4. Early leavers from education and training**

*The share of population aged 18-24 with only lower secondary education or less and no longer in education or training should be less than 9%, by 2030, which is equivalent with SDG Indicator 4.1.2.*

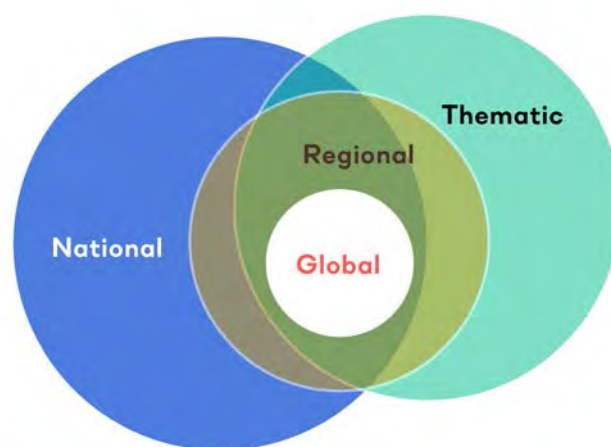
This report begins by discussing some of the regional frameworks that have been implemented to measure and monitor progress toward SDG 4 goals and regional education strategies. The EU's education monitoring framework, which is one such regional initiative, is examined in depth in the analysis that follows, which parallels are drawn between EU strategic priorities and SDG 4 global targets to compare progress in the regions examined in the report.



# Regional Monitoring Frameworks

SDG 4 monitoring is based on universal principles and emphasizes a participatory framework in which all stakeholders (including civil society, business, academia and government) recognize their shared responsibility in achieving the SDGs. As a multi-tiered, multi-purpose framework, SDG 4 monitoring is composed of four levels – global, thematic, regional and national.

**Figure 1: Regional indicators and the four levels of the SDG4 monitoring**



At the regional level of monitoring, different sets of indicators have been developed (or are in process of development) to consider the priorities and issues of common interest that are shared by countries in a particular region, as outlined in regional planning documents or frameworks. Different regions and subregions reached agreements on certain goals and targets even before the approval of the SDGs. A crucial step to promote efficiency and to avoid the duplication of efforts is to map the global and regional strategies.

Worldwide, there are several regional or subregional organizations that generate information and promote consensus among countries in the field of education based on common goals. These institutions differ in their organizational structure and level of engagement with education monitoring. In some agencies, member countries are represented by ministries of education. Others include representatives of civil society or officials appointed by member countries or governments. These entities can also be part of a supranational organization. In general, the member countries of these organizations are linked by common features, such as geographic territory, as in the case of the African Union (AU), the EU, the Southeast Asia Ministers of Education Organization (SEAMEO) and the Caribbean Community; language (*Conférence des ministres de l'Éducation des États et gouvernements de la Francophonie*); or a cultural or historical characteristic (Organization of Ibero-American States). These organizations have reached agreements on common educational targets in the medium and long term. Their transnational commitments require national and regional coordination and monitoring mechanisms to identify progress and obstacles. At the same time, they have articulated or begun to articulate their regional objectives with the SDG 4 targets and the Education 2030 Agenda.

The following sections briefly describe the SDG 4-related work of a selection of these organizations, listed by SDG region. Some share countries located across multiple SDG regions. In these cases, the organizations are described in the region with the highest number of member countries.

## Central and Southern Asia

### South Asian Association for Regional Cooperation (SAARC)

The eight countries of South Asia, which are members of the South Asian Association of Regional Cooperation (SAARC), have jointly formulated the SAARC Framework for Action for Education 2030 (SFFA) affirming their commitment to work together in advancing SDG 4 in the region.

The SFFA provides a roadmap for strengthening regional collaboration in education in order to achieve SDG 4 and Education 2030 targets and constitutes a comprehensive education agenda. It identifies key priorities in each sub-sector of education and training covering all ten targets of SDG 4, including a number of cross-cutting themes. It is accompanied by a more detailed Action Plan that consists of 13 key thematic areas prioritized for regional collaboration. The SFFA underscores the importance of a regional monitoring mechanism for joint review, monitoring and the evaluation of progress. The draft monitoring framework was developed in consultation with several stakeholders and includes relevant indicators for the region to ensure effective monitoring of progress on SDG 4 in the region.

## Eastern and South-Eastern Asia

### Southeast Asia Ministers of Education Organization (SEAMEO)

SEAMEO promotes regional cooperation in education, science and culture. The SEAMEO Council is composed of 11 ministers of education who oversee the organization's mandate to explore the maximum potential of the people of the region through the promotion of quality and equity in education, preventive health, culture and the preservation of tradition, training, research, information and ICT. Its seven priorities for the 2015–30 Action Agenda presented at the 48th SEAMEO Council Conference are: (i) achieving universal early childhood care and education; (ii) addressing barriers to inclusion; (iii) promoting resiliency in the face of emergencies; (iv) promoting technical and vocational education and training (TVET); (v) revitalizing teacher education; (vi) harmonization in higher education and research; and (vii) adopting a twenty-first-century curriculum.

## Africa

### Continental Education Strategy for Africa (CESA 16-25)

In 2016, the African Union adopted the 2016–25 Continental Education Strategy for Africa (CESA 16-25) as the framework for transforming education systems in Africa. CESA 16-25 is designed to involve the broadest coalition possible for education and training in Africa.

The CESA 16-25 consists of 12 strategic objectives that find correspondence with several SDG 4 targets, and both frameworks require similar data points to track countries' progress on their achievements. At the subregional level, countries are grouped within development communities that meet regularly, but their education-related objectives are in alignment with the CESA 16-25.

## Latin America and the Caribbean

### Economic Commission for Latin America and the Caribbean (ECLAC)

ECLAC presents a proposal that contributes to stimulating and sustaining intergovernmental dialogue, with the contribution of specialized bodies, to reach a consensus among Member States on the regional framework of indicators for monitoring the SDGs in Latin America and the Caribbean. In 2018, a regional monitoring framework<sup>6</sup> and a prioritized set of indicators for monitoring the 2030 Agenda for Sustainable Development from a regional perspective was established and adopted by the Statistical Conference of the Americas.<sup>7</sup>

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<sup>6</sup> <https://agenda2030lac.org/estadisticas/institutional-architecture-regional-statistical-follow-up-sdg.html>

<sup>7</sup> <https://www.cepal.org/sites/default/files/events/files/sca-executive-committee-17.3-report-prioritization-indicators-regional-statistical-follow-up-tosdg-lac.pdf>

### **Organización de los Estados Iberoamericanos (OEI)**

The 2021 educational goals of the OEI were adopted by Ibero-American countries in 2008. This framework is linked to several SDG 4 targets, but the OEI is in the process of aligning its goals with the education 2030 Agenda.

### **Caribbean Community (CARICOM)**

The CARICOM 2030 Human Resources Development (HRD) Strategy is a regional framework developed to ensure the successful participation of the Caribbean community in the economy and society of the 21st century. The CARICOM 2030 HRD Strategy is articulated in the CARICOM Strategic Plan (2015–2019). Following the global assessment of the Millennium Development Goals and the post-2015 development agenda, the strategy focuses on the SDGs.

### **Sistema de la Integración Centroamericana**

The Política Educativa Centroamericana (PEC) is a set of guidelines to provide the eight Member States of the Sistema de la Integración Centroamericana with a general framework of action based on regional education priorities. This framework was adapted and aligned with the SDG 4-Education 2030 Agenda. Currently PEC 2030 establishes the way forward on education development for Central America and a specific indicator framework was also developed to monitor that implementation.

## **Oceania**

### **Pacific Community (SPC)**

The SPC is an international development organization owned and governed by its 26 country and territory members. The 2016–20 Pacific Community Strategic Plan proposed goals and priorities. The SPC recognizes that national programmes and services must adapt to the new development landscape at the national, regional and global levels. These programmes should reflect the strategic direction established in the Framework for Pacific Regionalism, the regional priorities identified in the Small Island Developing States Accelerated Modalities of Action Pathway and the commitments of the SDGs.

### **Pacific Regional Education Framework (PacREF)**

The PacREF promotes a human rights approach to education and seeks to empower the people of the Pacific Islands. The PacREF is based on six targets: regionalism and mutually beneficial partnerships; the application of tests to policy and practice; efficiency in the use of resources; equity in access and opportunity; relevant and high-quality contributions; and high-quality and sustainable results. The PacREF has a programme of strategies and activities in four policy areas: (i) quality and relevance; (ii) learning pathways; (iii) student welfare and outcomes; and (iv) the teaching profession.

# Bridging the European monitoring framework and SDG 4

In addition to the regional frameworks described in the previous chapter, the EU has established a comprehensive education agenda and monitoring framework. Therefore, this analysis examines the strategic priorities of the EU monitoring framework alongside the SDG 4 global targets and indicators, comparing measures across regions to develop a picture of how countries are progressing toward SDG 4.

After the expiry of ET 2020, the EU Member States agreed on a new common framework for European educational cooperation from 2021 to 2030. This new common framework is aligned with the European Commission's vision for a European Education Area guided by six dimensions (quality, inclusion and gender equality, green and digital transitions, teachers and trainers, higher education, geopolitical) and five strategic priorities, which are outlined in **Table 1**.

**Table 1: EU-level targets and correspondence with SDG 4 Targets**

Strategic priorities	Indicator	SDG Targets
Strategic Priority 1: Improving quality, equity, inclusion and success for all in education and training	Indicators 1, 2, 3 and 4	4.1, 4.2, 4.3, 4.4, 4.5, 4.a
Strategic Priority 2: Making lifelong learning and mobility a reality for all	Indicators 6 and 7	4.4
Strategic Priority 3: Enhancing competences and motivation in the education profession		4.c
Strategic Priority 4: Reinforcing European higher education	Indicator 5	4.3, 4.b
Strategic Priority 5: Supporting the green and digital transitions in and through education and training	Indicator 6	4.3, 4.4, 4.6, 4.7

The set of indicators used to monitor progress towards the SDG 4 in an EU context was revised to ensure coherence with European Education Area targets for 2030 (European Commission, 2021). The table below shows the indicators and targets, as well as the correspondence between the EU framework with the SDG 4 benchmarked indicators<sup>8</sup>

In addition to these indicators, the target on education finance (4–6% of their gross domestic product (GDP) and/or 15–20% of total public expenditure to education) is endorsed globally by the 160 signatory countries of the Incheon Declaration and Framework for Action for the implementation of SDG 4. As displayed in **Table 2**, three of the seven indicators for which reference levels have been set for 2030 overlap with three of the seven indicators of the SDG 4 benchmarking process.

<sup>8</sup> EU 2021.

**Table 2: EU-level targets and correspondence with SDG benchmarked indicators**

	Indicator name	Unit	Target (2025-2030)	SDG Benchmarked Indicator
1	Low achieving 15-year-olds in basic skills (PISA underachievers)	% of 15-year-old students i. reading ii. mathematics iii. science	The share of low-achieving 15-year-olds in reading, mathematics and science should be less than 15%, by 2030.	SDG Indicator 4.1.1
2	Low achieving eighth-graders in digital skills (ICILS underachievers)		The share of low-achieving eighth-graders in computer and information literacy should be less than 15%, by 2030.	
3	Participation in early childhood education and care (ECEC) <sup>1</sup>	% of children between 3 years old and the starting age of compulsory education i. total ii. males iii. females	At least 96% of children between 3 years old and the starting age for compulsory primary education should participate in early childhood education and care by 2030.	SDG Indicator 4.2.2
4	Early leavers from education and training (ELET)	Share of the population aged 18-24 with only lower secondary education or less and no longer in education or training <sup>2</sup>	The share of early leavers from education and training should be less than 9%, by 2030 /	
	Accompanying indicator: Share of people aged 20–24 with at least an upper secondary qualification (USLA)	Share of people aged 20-24 with at least an upper secondary qualification through data made available by Eurostat	Share of people aged 20–24 with at least an upper secondary qualification should be over 90%, by 2030.	SDG Indicator 4.1.2
5	Tertiary-level attainment (TEA)	% of population aged 25–34 i. total ii. males iii. females	The share of 25-to-34-year-olds with tertiary educational attainment should be at least 45%, by 2030.	
6	Exposure of VET graduates to work-based learning	% of persons aged 20–34 having left education and training 1-3 years ago	The share of recent graduates from VET benefiting from exposure to work-based learning during their vocational education and training should be at least 60%, by 2025.	
7	Participation of adults in learning (AL)	% of population aged 25–64 i. total ii. males iii. females	At least 47% of adults aged 25–64 should have participated in learning during the last 12 months, by 2025.	

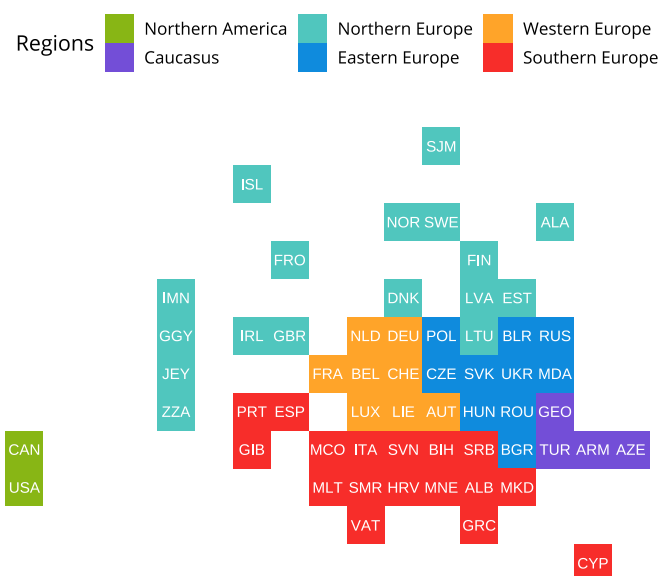
<sup>1</sup> Updated definition for Indicator 04\_30, “Participation in early childhood education”, measures the percentage of children between 3 years old (instead of 4) and the starting age of compulsory education.

<sup>2</sup> Age bracket has not changed for ELET, but only for USLA.



**Figure 2** displays the countries covered in this report, by region<sup>9</sup>. The other countries covered in this report – including non-EU European countries, the United States of America and Canada and countries in the Caucasus – do not belong to any specific regional monitoring framework.

**Figure 2: Colour-coded map of Europe, North America and Caucasus States**



<sup>9</sup> Maps and figures in this report were inspired by Lambrechts (2017) and Scherer (2019)

### **Box 1: European Union resources**

#### **NextGenerationEU**

The NextGenerationEU is a crisis-recovery plan that supports EU countries in recovering from the adverse consequences of the Covid-19 pandemic, allocating significant funds to education and training through the [Recovery and Resilience Facility](#) so that EU countries emerge stronger, with transformed and more sustainable and resilient economies and societies and better prepared for the green and digital transitions.

#### **Education and Training 2020 (ET 2020)**

The Education and Training 2020 is the previous EU strategic framework for EU countries cooperation in education and training. It builds on the [Education and Training 2010](#) work programme and includes four strategic objectives and seven benchmarks. It was followed by the European Education Area.

#### **European Education Area**

The European Education Area (EEA) supports EU countries in building more resilient and inclusive education and training systems. The [strategic framework](#) of the EEA structures the collaboration between EU countries and key stakeholders and defines five strategic priorities and seven EU-level targets to be attained to fully realize the EEA, out of which three correspond to three SDG 4 benchmarks.

#### **European Education Summit**

The European Education Summit is the annual flagship event of the European Education Area. The fourth Summit took place in December 2021 and discussed issues including inclusiveness and fairness of education, well-being, smart investment in education and green and digital transformation of education and training systems.

#### **Education and Training Monitor**

The Education and Training Monitor is an annual report that highlights the evolution of national education and training systems across the EU. It measures the progress of EU countries towards the education targets set and analyzes key education challenges and policy developments, while highlighting policy measures that may help EU countries respond to emerging needs. The latest report, Education and Training Monitor 2021, was released in December 2021. It focuses on well-being in education and provides an overview of the role of the Recovery and Resilience Facility.

**Box 2: UIS data resources****Technical Cooperation Group (TCG) Data Resources page**

The TCG data resources page provides access to all SDG 4 data and benchmarks data available for download and consultation through the [SDG 4 Data Explorer](#), the [Global Education Observatory](#), and other data repositories. It also includes the list of SDG 4 indicators, SDG 4 global and country data tables, data tree specifications for the extraction of data from the Bulk Data Services, and links to the UIS global education database and bulk data download service.

**Technical Cooperation Group (TCG) SDG 4 Benchmarks page**

The TCG SDG 4 benchmarks page includes several sections, among which:

1. The Background section contains background information, benchmark indicators, a description of the technical process, and the global and regional roadmaps. Also contains links to the resources (publications, data, and blogs) and meetings.
2. A section describing the process of setting regional benchmarks and the outcomes in selected regions, namely [Africa](#), [Arab States](#), and [Asia and the Pacific](#).
3. The [Regional Frameworks](#) section includes all the reports produced by the UIS bridging regional education monitoring frameworks with the global SDG 4 framework. The document [Spotlight on Bridging Regional and Global Education Monitoring Frameworks](#) summarizes findings of this bridging exercise, presents the number of benchmarks in each region and includes a more in-depth section on the Continental Education Strategy for Africa (CESA 2016-2025).

**Global Education Observatory (GEO)**

GEO is a gateway to education-related data aimed to meet the needs of national, regional and global stakeholders, offering them easy access to information for better decision-making. It compiles existing and new education data from a variety of sources and includes a section on [benchmarks](#) and a section on the impact of [Covid-19](#).

**SDG 4 Data Digest 2021 'National SDG 4 benchmarks: fulfilling our neglected commitment'**

The 2021 edition of the SDG 4 Data Digest by the UIS and the Global Education Monitoring Report (GEMR) provides an overview of the benchmark setting process and the steps taken to fulfil the major commitment that countries made in 2015 - the establishment of appropriate intermediate benchmarks ... to serve as quantitative goalposts for review of global progress vis-à-vis the longer-term goals (Education 2030 Framework for Action, 28). The report highlights the need for robust education planning that includes measurable and time-bound targets; aligning national, regional and global education monitoring frameworks; and filling data gaps.

Source: UNESCO Institute for Statistics (UIS).

# SDG Target 4.1 - Primary and secondary education

*“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”*

**Table 3: EU strategic priority related to SDG 4.1 Target**

Strategic priorities	Indicator	SDG Targets
Strategic Priority 1: Improving quality, equity, inclusion and success for all in education and training	Indicators 1, 2 and 3	4.1, 4.2, 4.5

SDG Target 4.1 relates to EU Strategic Priority 1, which underpins quality, equity, inclusion and success in all levels of education. The two global indicators associated with SDG 4.1 are those measuring proficiency in reading and mathematics at three steps in the educational ladder (4.1.1) and the completion rate in primary and secondary education (4.1.2). These two indicators overlap with the EU-level targets, as follows:

- The low achieving 15-year-olds in basic skills (PISA underachievers) is equivalent to SDG Indicator 4.1.1 (c) at the end of lower secondary.
- The Early leavers from education and training (ELET), or more clearly the accompanying indicator, the upper secondary level attainment (USLA) can find a parallel in the completion rate in the same level (4.1.2).

Indicator 1, on low achieving 15-year-olds is benchmarked.

UIS data that can be used for reporting this indicator comes from different sources. Completion rates comes from UIS and were completed using data compiled in the World Inequality Database on Education (WIDE) but show very little variation, except for the upper secondary level. Gross intake is calculated based on administrative data. PISA is the source for skills assessments. For some countries, data comes from national reports and Demographic and Health Surveys (DHS) Program. The assessments are conducted independently and do not always cover the same grades or education levels and are homogenized by UIS. A [note produced by UIS](#) is available summarizing the work done so far for reporting on indicator 4.1.1..<sup>10</sup>

<sup>10</sup> UIS and GAML 2021.

## Learning

As concerns learning (**Table 4**), data are mostly unavailable for the period of 2015–20 in Grade 2/3; only five countries are represented. For primary and lower secondary, data have been collected for about 30 countries in two surveys in 2011 and 2016 for primary, and three survey waves in 2012, 2015 and 2018 for secondary.

**Table 4: Data availability of the SDG Global Indicator 4.1.1, by country, 2015–2020**

Minimum proficiency level in...	(a) Grade 2 or 3	(b) End of primary	(c) End of lower secondary
(i) reading			
(ii) mathematics			

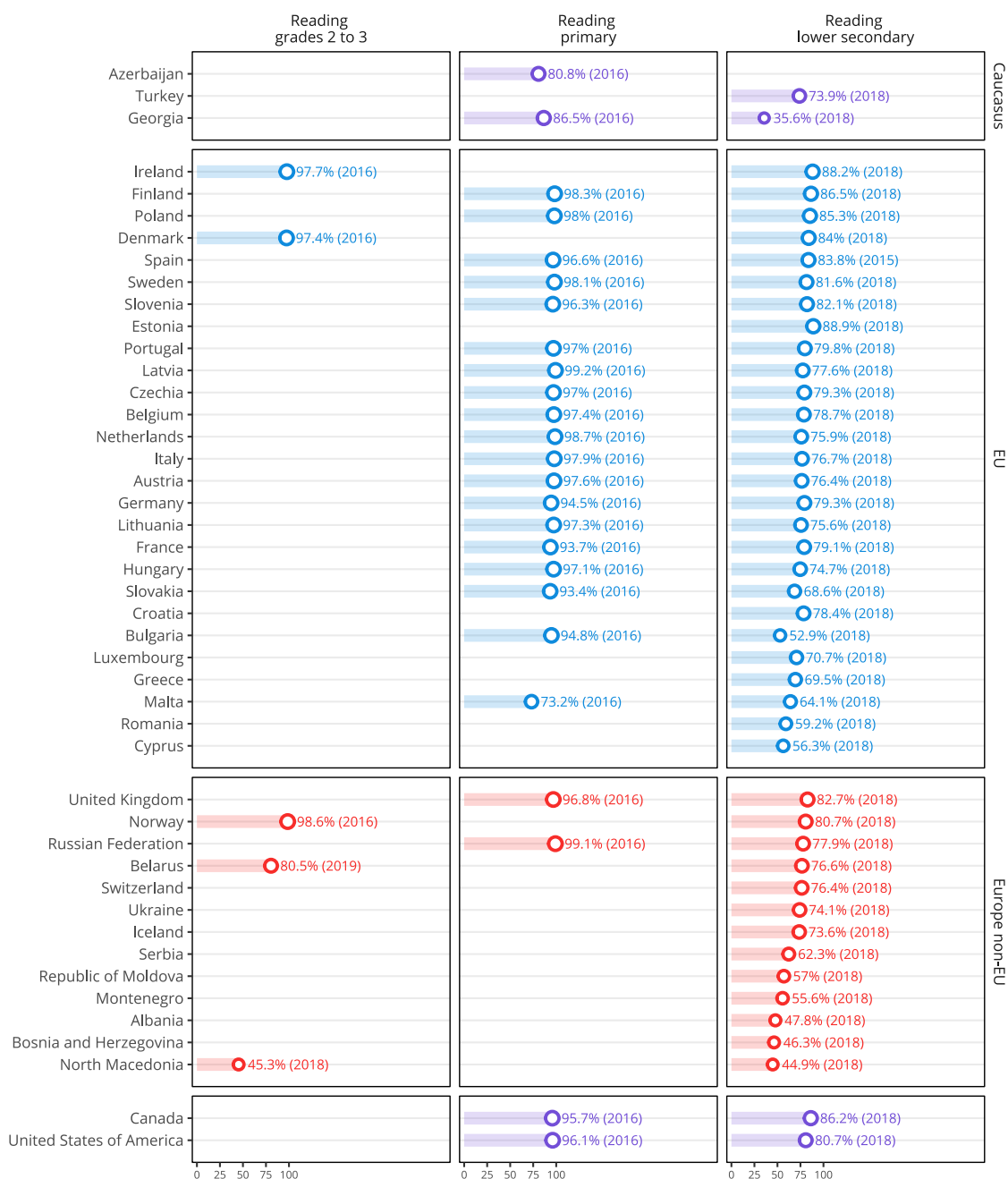
Regions

- Northern America
- Northern Europe
- Western Europe
- Eastern Europe
- Southern Europe
- Caucasus

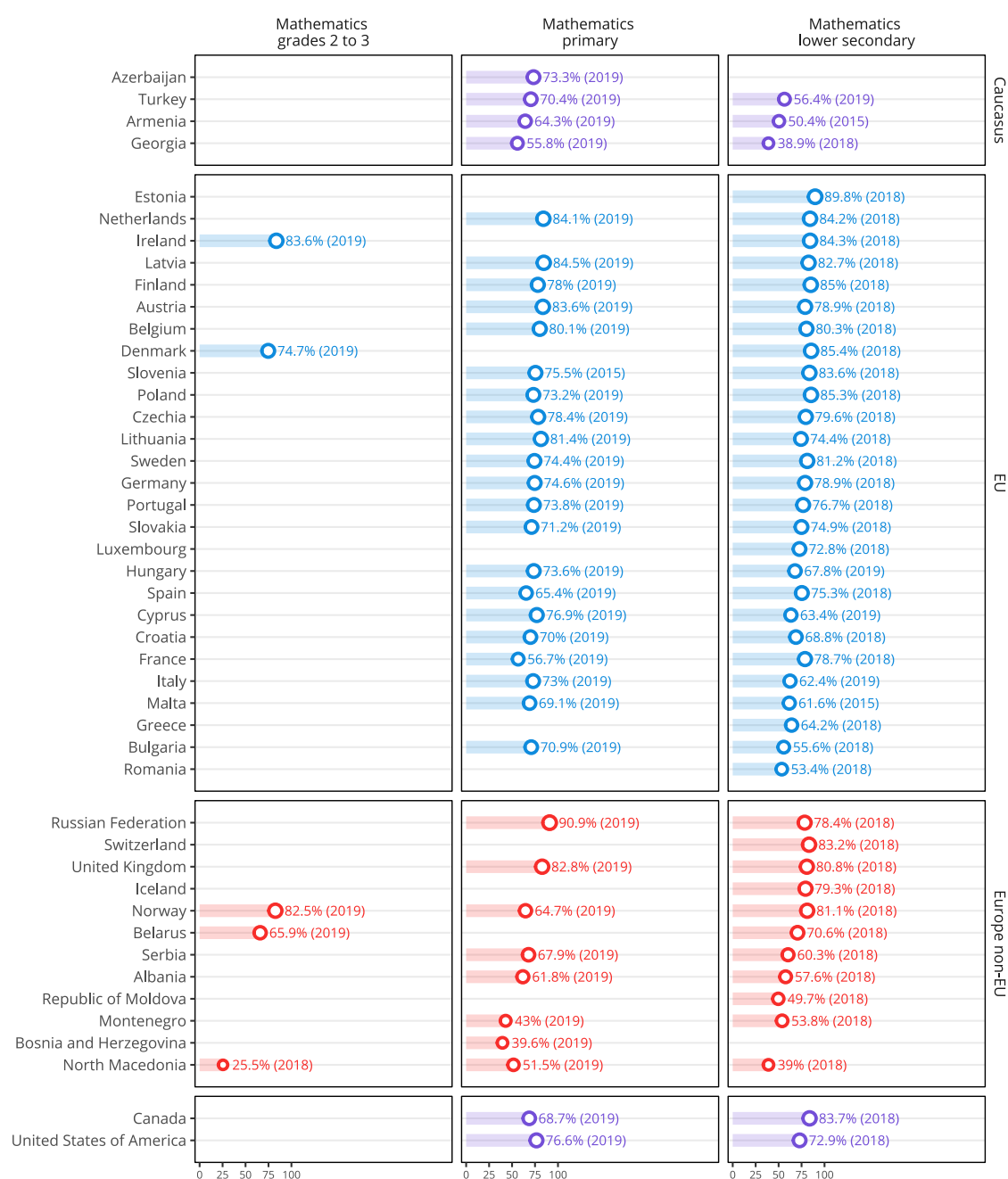
Figures 3 and 4 show the latest measured values in reading and mathematics. In reading at the end of the primary, the lowest reported value among EU members was in Malta in 2016 (73%). Most of the other countries reported proficiency levels above 95%. The only two data points for non-EU countries in Europe, the United Kingdom and Russia, are also above 95%. Both Canada and the USA reported proficiency levels of 96% in 2016. In Caucasus countries, proficiency levels are above 80%.



**Figure 3: Proportion of children and young people achieving at least a minimum proficiency level in reading, by country, latest year available**



In mathematics at the primary level, the reported proficiency level is lower. In 2019, all countries except Spain, Malta and France reported proficiency levels above 70%. In France, only 57% of children passed the proficiency threshold. Outside the EU in the same year, the UK and Russia reported the highest proficiency levels – 83% and 91%, respectively. Montenegro and Bosnia and Herzegovina had the lowest levels, of around 40% in 2019.

**Figure 4: Proportion of children and young people achieving at least a minimum proficiency level in mathematics, by country, latest year available**

In lower secondary, the mean proportion in reading is 76% among EU members. In 2018, only Estonia, Ireland, Finland and Poland reported proportions of low achievers below 15%. Bulgaria, Romania and Cyprus are among those countries with the lowest proportion of achievers, with proportions of proficient students below 60%. Outside the EU, around 80% of students are proficient in reading in the UK and Norway. The countries with the lowest achievement rates (below 50%) are North Macedonia, Bosnia and Herzegovina and Albania. Canada and the United States reported proportions of 86% and 81%, respectively, in 2018. Among Caucasus countries, Georgia has the lowest figures, with only 36% of students at this level achieving proficiency.

In mathematics at the end of secondary, Estonia is also at the top, followed by Denmark, Poland and Finland. All

four are within the threshold defined in the EU-level targets. The countries with the lowest proportions are Romania and Bulgaria. Among non-EU members, Switzerland reported the highest proportion of achievers in mathematics (83%), followed by Norway and the UK (81%). North Macedonia and Moldova lag behind with proportions below 50%. Canada and the United States reported proportions of 84% and 73%, respectively.

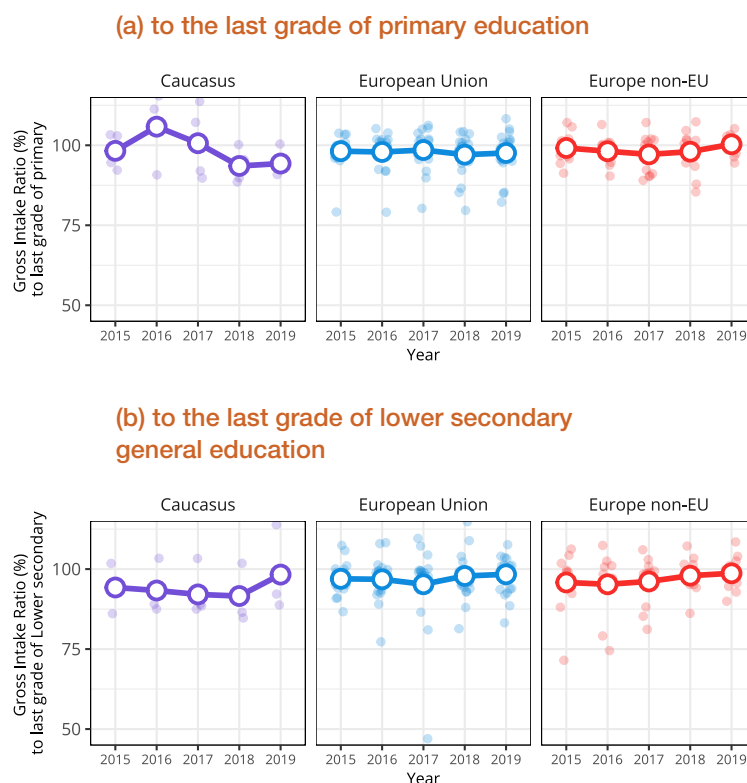
## Access and Completion Rates

Data is available for completion rates in primary, lower secondary and upper secondary education for most countries covered in the report. In all countries, the situation is similar, with completion rates at almost 100% in primary and lower secondary and slightly above 90% in upper secondary for most countries. The only countries that reported completion rates below 75% in the upper secondary are Armenia (65.2% in 2018) and Moldova (71.4% in 2020). Data available for the upper secondary is displayed in (Table 7).<sup>11</sup>

The gross intake ratio at the end of primary and lower secondary levels also provides information on the impact of policies and programmes on access to school. The gross intake ratio to the last grade (GIRLG) of primary education accounts for the “total number of new entrants to the last grade of primary education, regardless of age, expressed as a percentage of the population at the official school entrance age for that grade”. As such, it measures how many children enter each grade and can be considered a proxy for the completion rate. Since it also includes over-age students and those who have repeated years, analysing the completion rate using this proxy takes into consideration the ratio of students who actually reached the last grade of the level at the official age for that level of education.

Figure 5 shows that in both in EU and non-EU countries, the GIRLG for primary and lower secondary is close to 100% and fairly stable. Nonetheless, some countries, like Luxembourg, show intake as low as 80% in primary, indicating that the education system has idle capacity at that level. Romania and Bulgaria also report levels of 80%, possibly for different reasons. In secondary, only Slovakia and Romania reported ratios below 90% in 2018.

Figure 5: Gross intake ratio to the last grade, both sexes (%), 2015–20



<sup>11</sup> Completion rates data points from the World Inequality Database on Education (WIDE) were included in Table 7. Know more at: <https://www.education-inequalities.org/about>

Among non-EU countries, Moldova and Bosnia and Herzegovina also reported intake ratios below 90% in 2018 in primary. All other countries are close to or above 100%. Moldova also reported a ratio of 85% in lower secondary, just below North Macedonia, the only other country showing a ratio below 90% among non-EU countries. In most cases outside the EU, the ratio increased from 2015 to 2020, and differences between the countries have narrowed.

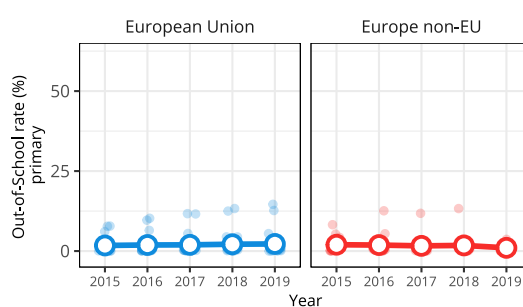
The United States reported a GIRLG close to 100% in both 2017 and 2018. In the Caucasus region, the lowest value was reported in Turkey (88% in 2018).

The rate of children out of school, shown in **Figure 6**, is close to 0% in primary school in most cases among EU member countries (mean was 1.2% in 2018), except for Romania and Bulgaria, which reported rates above 10% in 2018. Outside the EU, the mean was 0.82% in 2018. Moldova has the highest rate, of 10.2% in 2019, two percentage points higher than in 2015.

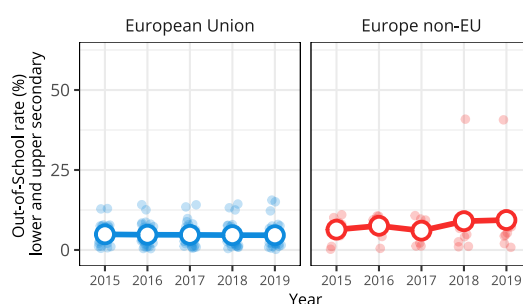
The out-of-school rate is slightly higher for adolescents and youth of lower and upper secondary school age than for children in primary education. The average in the EU was 3.5% in 2018, while among non-EU countries it was 7.5%. San Marino had a rate of 33.8% in 2019 in secondary. Moldova reported a rate of 21% in 2019, one percentage point below 2015.<sup>12</sup>

**Figure 6: Out-of-school rate for children of primary and secondary school age, both sexes (%), 2015–20**

**(a) Primary education**



**(b) Lower and Upper secondary**



<sup>12</sup> Figure 6 includes five datapoints collected from the WIDE database

**Table 5: Proportion of children and young people at the end of lower secondary achieving at least a minimum proficiency level in reading, by sex****Caucasus**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Georgia						48.3			35.6			
Turkey			78.4			60			73.9			

**Europe non-EU**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Albania			47.7						47.8			
Belarus									76.6			
Bosnia and Herzegovina									46.3			
Iceland			79			77.9			73.6			
Montenegro			56.7			58.1			55.6			
North Macedonia						29.3			44.9			
Norway			83.8			85.1			80.7			
Republic of Moldova						54.2			57			
Russian Federation			77.7			83.8			77.9			
Serbia			66.9						62.3			
Switzerland			86.3			80			76.4			
Ukraine									74.1			
United Kingdom			83.4			82.1			82.7			

**European Union**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cyprus									56.3			
Austria			80.5			77.5			76.4			
Belgium			83.9			80.5			78.7			
Bulgaria			60.6			58.5			52.9			
Croatia			81.3			80.1			78.4			
Czechia			83.1			78			79.3			
Denmark			85.4			85			84			
Estonia			90.9			89.4			88.9			
Finland			88.7			88.9			86.5			
France			81.1			78.5			79.1			
Germany			85.5			83.8			79.3			
Greece			77.4			72.7			69.5			
Hungary			80.3			72.5			74.7			
Ireland			90.4			89.8			88.2			

Italy	80.5	79	76.7
Latvia	83	82.3	77.6
Lithuania	78.8	74.9	75.6
Luxembourg	77.8	74.4	70.7
Malta		64.4	64.1
Netherlands	86	81.9	75.9
Poland	89.4	85.6	85.3
Portugal	81.2	82.8	79.8
Romania	62.7	61.3	59.2
Slovakia	71.8	67.9	68.6
Slovenia	78.9	84.9	82.1
Sweden	77.3	81.6	81.6

#### Northern America

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Canada			89.1			89.3			86.2			
United States of America			83.4			81			80.7			

**Table 6: Proportion of children and young people at the end of lower secondary achieving at least a minimum proficiency level in mathematics, by sex****Caucasus**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Georgia						42.9			38.9			
Turkey		40.4				42.4				56.4		

**Europe non-EU**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Albania			39.3			46.7			57.6			
Belarus									70.6			
Iceland			78.5			76.4			79.3			
Montenegro			43.4			48.1			53.8			
North Macedonia						29.8			39			
Norway			77.7			82.9			81.1			
Republic of Moldova						49.7			49.7			
Russian Federation			76			81.1			78.4			
Serbia			61.1						60.3			
Switzerland			87.6			84.2			83.2			
United Kingdom			78.2			78.1			80.8			

**European Union**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cyprus										63.4		
Austria			81.3			78.2			78.9			
Belgium			81			79.9			80.3			
Bulgaria			56.2			57.9			55.6			
Croatia			70.1			68			68.8			
Czechia			79			78.3			79.6			
Denmark			83.2			86.4			85.4			
Estonia			89.5			88.8			89.8			
Finland			87.7			86.4			85			
France			77.6			76.5			78.7			
Germany			82.3			82.8			78.9			
Greece			64.3			64.2			64.2			
Hungary		65.4				66.9				67.8		
Ireland			83.1			85			84.3			
Italy		63.8				62.4				62.4		
Latvia			80.1			78.6			82.7			

Lithuania	74	74.6	74.4
Luxembourg	75.7	74.2	72.8
Netherlands	85.2	83.3	84.2
Poland	85.6	82.8	85.3
Portugal	75.1	76.2	76.7
Romania	59.2	60.1	53.4
Slovakia	72.5	72.3	74.9
Slovenia	79.9	83.9	83.6
Spain	76.4	77.8	75.3
Sweden	72.9	79.2	81.2

#### Northern America

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Canada			86.2			85.6			83.7			
United States of America			74.2			70.6			72.9			



**Table 7: Completion Rates in upper secondary, both sexes****Caucasus**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Armenia		93					64.7		65.2			
Azerbaijan	81.5	82.6	83.6	84.5	85.4	86.2	87	87.9	88.7	89.5	90.2	
Georgia				96			95		77.3			

**Europe non-EU**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Albania								80.3				
Belarus	86.4	86.4	90	86.7	87.1	87.5	88	88.4	88.8	89.4	89.9	
Montenegro				84					86.2			
North Macedonia		74.4							84.8	83		
Republic of Moldova	62.7	64.1	64.6	66.6	67.5	68.3	68.9	69.5	70.1	70.7	71.4	
Russian Federation				87.1					93.1			
Serbia	65.7	68.7		89.5	75.8					83.4		
Ukraine	92.1	92.4	92.7	95.3	93.3	93.7	94	94.4	94.7	95	95.3	

**Northern America**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
United States of America	90.1			91.6		93	93.7	94.3				

## SDG Target 4.2 - Early childhood

*“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”*

**Table 8: EU strategic priority related to SDG 4.2 Target**

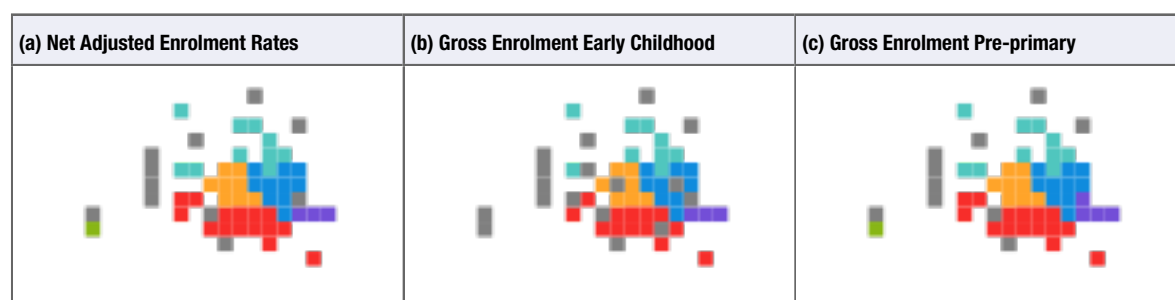
Strategic priorities	Indicator	SDG Targets
Strategic Priority 1: Improving quality, equity, inclusion and success for all in education and training	Indicators 1, 2 and 3	4.1, 4.2, 4.3, 4.5

SDG Target 4.2 also relates to EU Strategic Priority 1. The global indicators of the target – 4.2.1 and 4.2.2 – aim at measuring the proportion of children in early childhood who are developmentally on-track before entering in school and their participation in organized learning. The second global target overlaps with the Indicator 3 identified in the EU-level targets to monitor the progress of member countries. It is expected that at least 96% of children between 3 years old and the starting age for compulsory primary education should participate in early childhood education.

Indicator 3, on early childhood participation is benchmarked.

For Global Indicator 4.2.1, only two countries, or 4%, have available data. Participation rates, measured in terms of enrolment and attendance, have more data points available, especially for enrolment. For thematic indicators, data on gross enrolment for early childhood and pre-primary are available for most countries. **Table 9** illustrates the data availability for the region with respect to three of the indicators.

**Table 9: Data availability of the SDG Global Indicator 4.2.1, by country, 2015–2020**



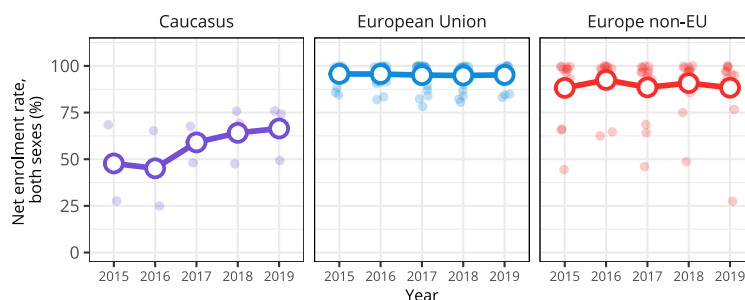
Regions

- Northern America
- Northern Europe
- Western Europe
- Caucasus
- Eastern Europe
- Southern Europe

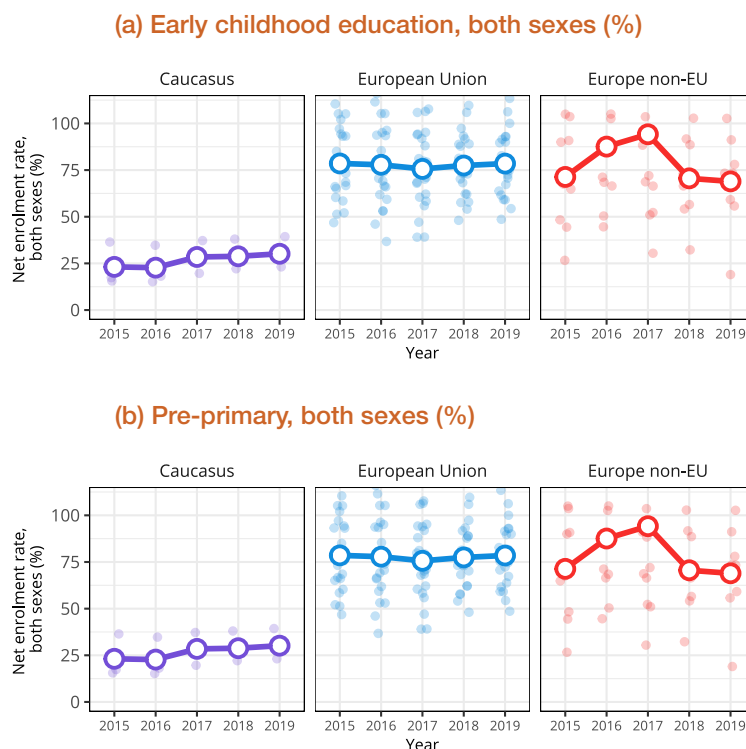
As can be seen in **Figure 7**, adjusted net enrolment rates one year before the official primary entry age in EU member countries have been fairly stable and above 80% since 2015. The lowest rates are below 85% in Bulgaria, Romania and Slovakia.

Outside the EU, only Bosnia and Herzegovina lag with enrolment rate below 50% (27.% in 2019). Montenegro reported a rate of 76%, while all the others had above 90% enrolment rate in 2019.

In the Caucasus, the mean increased in the decade. In 2019, Armenia was the only to reported a rate just below 50%, and Turkey and Azerbaijan reported rates close to 75%.

**Figure 7: Adjusted net enrolment rate, one year before the official primary entry age, both sexes (%)**

In terms of gross enrolment in early childhood education (**Figure 8**), the EU average was 78% in 2018. In this year, the capacity of the education system to enrol children of early childhood education age was above 100% in some countries, like Czechia and France, but as low as 50% in Romania and Ireland. This indicates a great disparity in the region in terms of capacity. Among non-EU members, the same is true. Switzerland had a gross enrolment ratio above 100% while North Macedonia reported a ratio of only 32% in 2018. The average among non-EU members is slightly lower at 73%. In both groups, the average has not changed significantly since 2015. In the Caucasus, Turkey reported a rate of 22%, Azerbaijan 26% and Armenia the highest at 38%.

**Figure 8: Gross enrolment ratio, early childhood education and pre-primary, by framework, both sexes (%)**

In pre-primary, the means are higher in 2018. Among EU members, the mean of the reported values was 93.7%, while for non-EU countries the mean was 86.4%. Belgium and Czechia have the highest rates, both above 110%, indicating that these countries can accommodate all of their pre-primary-age population. Croatia has the lowest levels, with an enrolment rate of 69.2% in 2018. Outside the EU, the UK and Switzerland have reported rates above 100%, while Bosnia and Herzegovina reported the lowest rate of 25.9% in 2018. The United States reported a

rate of 72% in 2018. Georgia is also close to accommodating its entire pre-primary-age population (94%) in 2018, while Azerbaijan, Turkey and Armenia reported rates below 40% in the same year.

**Table 10: Adjusted net enrolment rate, one year before the official primary entry age, both sexes (%)****Caucasus**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Armenia						47.2	45.1	48.1	47.5	49.3	62.9	
Azerbaijan	30.4	32	32.6	32.3	27	27.6	24.9	61.3	69.1	74.2	83.2	
Turkey	56	64.2	67.1	72.9	69.7	68.4	65.3	67.6	75.7	75.9		

**Europe non-EU**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Albania	74.2	78.9	84.9	86.7	90.8	88.1	95.7	97.2	97.1			
Belarus	93.1	93.4	96.7	99	98.7	98.2	98.5	96.4	98.1			
Bosnia and Herzegovina										27.5	29.3	
Gibraltar							99.5			97	93.1	
Holy See	0	0	0	0	0	0	0	0	0	0	0	0
Iceland	97.2	95.7	97.2	94.4	97.7	99.8	98.8	94.2	96.6	95		
Liechtenstein	96.3	98.9	98.2		99.6	98.1	100	99.7	98.9	97.1		
Montenegro						65.7	62.5	68.6	75	76.7	83.8	
North Macedonia	33		36.1	38.2	39.9	44.4		46.1	48.7			
Norway	99.3	98.9	99.7	98.7	99.4	99.7	97.8	96.2	97	95.6		
Republic of Moldova					100	99.3	97.8	98.8	99.4	99.4	99.7	
Russian Federation		88.7	82.6	83.8	87.9	93.2	94.1	92.9	90.3	93		
San Marino									85.6	88.2	92	
Serbia	87	96.5	98.9	99.7	98.5	96.3	93.4	96.8	93.7	90.6	92.7	
Switzerland	99.4	98.9	99.8	99.9	99.7	99.5	99.7	99.4	99.9	99.6		
Ukraine		72.7	75.9	75.3	76.5	66.1	64.7	64.2				
United Kingdom	99.1	99.6	100	97.5	97	98.1	99.9	99.9	100	100		

**European Union**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cyprus	97.9	97.3	95.2	97.2	92.3	94.6	93.7	95.6	98.3	98.4		
Austria	96.9	98.1	97.6	96	97.3	97.1	99	100	99.8	98.5		
Belgium	99.8	99.9	99.7	99.9	99.7	99.2	99.7	98.4	97.7	96.2		
Bulgaria	93.2	93.3	91.1	89.5	89.1	88.3	90.6	84	80.5	83.2		
Croatia	89.7	93.9	99.1	96.5	96.5	97.6	97.4	99.1	94.9	95.9		
Czechia	92.3	92.2	91.5	94.6	95.4	93.7	91.9	89.4	90	92.6		
Denmark	99.1	99.4	99.7	99.2	97.6	96.1	97.8	93.7	98	96.5		
Estonia	91.4	91.6	92.1	91.7	94	93.2	91.2	93.2				
Finland	99.8	99.4	99.4	99.6	98	97.6	98.6	99.1	97.4	98.8		
France	99.8	99.8	99.7	99.7	99.6	99.7	99.9	99.9	99.8	99.9		

Germany	96.8	96.1	95.5	98.7	99.6	98	99.7	98.8	98.8	97
Greece	94.4	97.1	98.2	95.6	98.1	100	94.9	92.7	94.7	96.7
Hungary	94.2	92.6	95.2	96	92.8	93.8	91.5	87.1	86.9	93.2
Ireland		99.8	97.8	98.4	97.5	96.5	97.9	99.9	99	99.9
Italy	99.6	98.9	98.8	98.1	98.2	97.1	96.2	93.9	93.4	91.5
Latvia	96.7	97.2	97.4	97	97.1	96.8	97.1	98.1	97.7	97.8
Lithuania	100	99.5	99.7	96.1	97	98.2	99.2	99.9	97.2	96.2
Luxembourg	95.1	95.2	98.4	98.1	99.2	99	99.5	98.2	99.2	99.8
Malta		99.4	98.7	99.8	98.9	98.8	99.3	99.8	98.7	97.5
Netherlands		93.5	94.1			99.5	99.2	99.7	99.3	97.5
Poland	93.7	95.7	97.9	89.2	99			99.1	95.4	98.8
Portugal	95.3	98.8	97.7	95.7	98	96.4	99.8	99.3	94.2	92.8
Romania	99.7	99.5	99.4	88.3	86.2	85.8	83.4	78.3	82.2	84.5
Slovakia	84.7	85.2	82.5	81	82.5	84.4	81.9	82.3	84	84.9
Slovenia	92.3	91.8	94.8	93.4	96.7	94.5	95.6	94.1	94.3	91.6
Spain				99.6	99.8	94	92.7	93.2	94.9	94.9
Sweden	99.8	98.5	97.6	98.3	98	98.1	98.6	99.9	99.7	99.9

### Northern America

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
United States of America				90	90.3	91	91.2	90.5	90	89.8		

# SDG Target 4.3 - TVET and Higher Education

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

**Table 11: EU strategic priority related to SDG 4.3 Target**

Strategic priorities	Indicator	SDG Targets
Strategic Priority 1: Improving quality, equity, inclusion and success for all in education and training	Indicators 1, 2, 3 and 4	4.1, 4.2, 4.3, 4.5
Strategic Priority 4: Reinforcing European higher education	Indicator 5	4.3
Strategic Priority 5: Supporting the green and digital transitions in and through education and training	Indicator 6	4.3, 4.6, 4.7

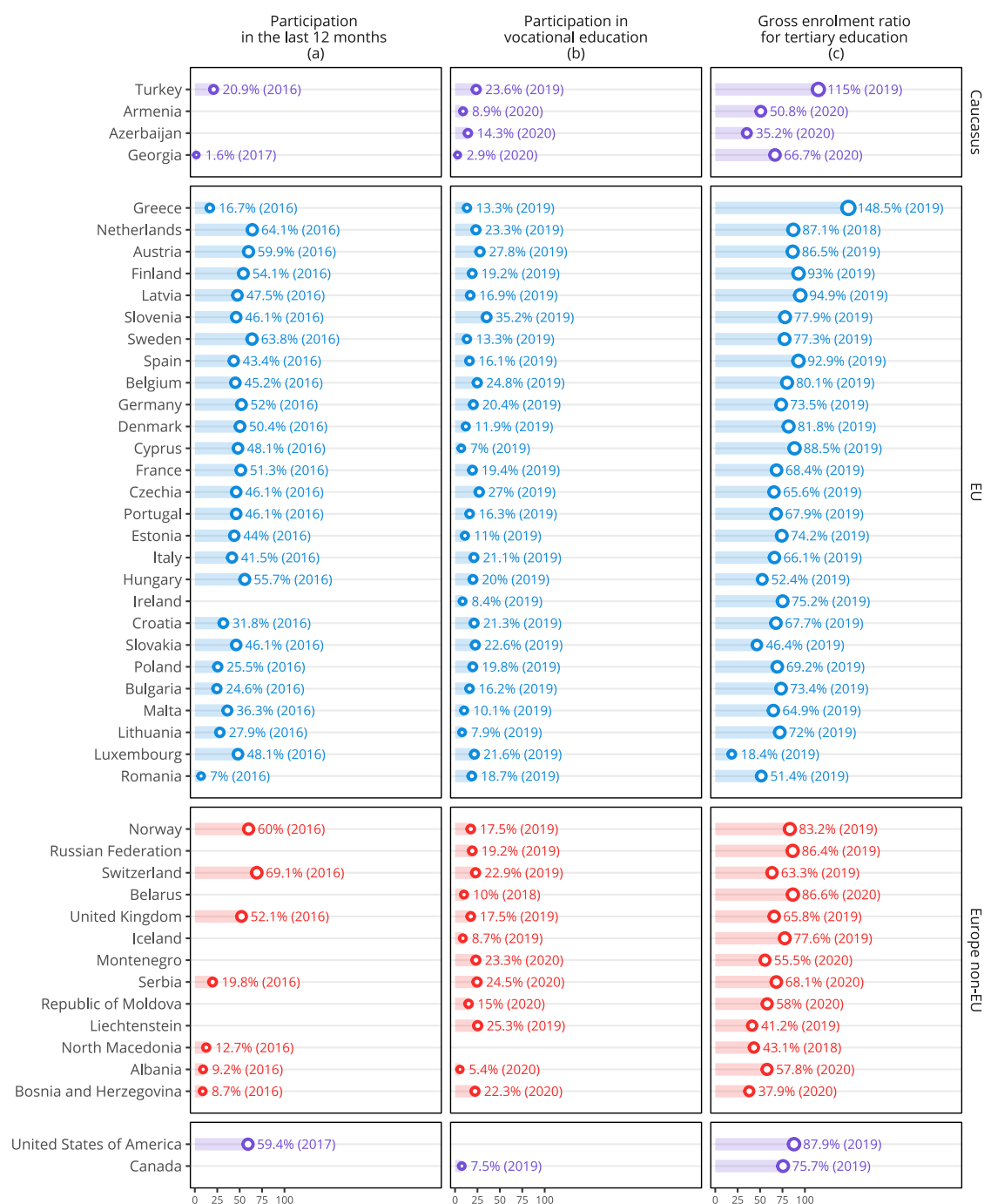
SDG Target 4.3 relates to EU Strategic Priority 4, on reinforcing European higher education in its access dimension. Although not directly, it also relates to Strategic Priority 1, in which access to training is contemplated. The global indicator for the target is the participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex. The thematic indicators are the gross enrolment ratio for tertiary education and the participation rate in technical and vocational programmes. The EU-level targets defined tertiary education attainment rates (Indicator 5), with at least a 45% attainment rate expected for the population aged 25 to 34, by 2030; and exposure to work-based learning (Indicator 6), foreseeing at least 60% by 2025.

For the global target, 60% of the countries are represented with at least one data point. Gross enrolment ratio for tertiary education and the proportion of 15-to-24-year-olds enrolled in vocational education are available for 75% of the countries, or 38 countries.

**Figure 9** shows the latest values available for the three main indicators. It can be noted that, overall, the levels of participation in formal and non-formal education and training are above 30% for most countries in the EU. The exceptions are Poland, Bulgaria and Lithuania, which are above 25%, as well as Greece with 17% and Romania with only 7%. Outside the EU, Serbia and North Macedonia respectively reported 20% and 13%. The lowest participation rates are in Bosnia and Herzegovina and Albania (9%).

The average participation in vocational education in the EU in 2018 was 18.6%. Significantly above the mean, Slovenia has the highest participation rate among EU members (35%). Austria, Czechia and Belgium also have participation rates above 25%. Participation rates between 10% and 15% were reported for Greece, Sweden, Denmark, Estonia and Malta. The lowest figures were reported in Ireland and Lithuania (around 8.5%). All other EU member countries are situated between 15% and 25%. Among non-EU members, the average is slightly lower (17%): Eight countries reached this level (Norway, Russia, the UK, Switzerland, Montenegro, Serbia, Liechtenstein and Bosnia and Herzegovina). Belarus, Iceland and Moldova reported participation rates of around 10%. The lowest participation rates are reported in Albania.<sup>13</sup>

<sup>13</sup> The Vatican, Gibraltar and San Marino are also very low, but are not considered

**Figure 9: Global and thematic indicators for TVET and tertiary education (latest value available)**


a) Participation rate of youth and adults in formal and non-formal education and training in the last 12 months, both sexes (%)

b) Proportion of 15-to-24-year-olds enrolled in vocational education, both sexes (%)

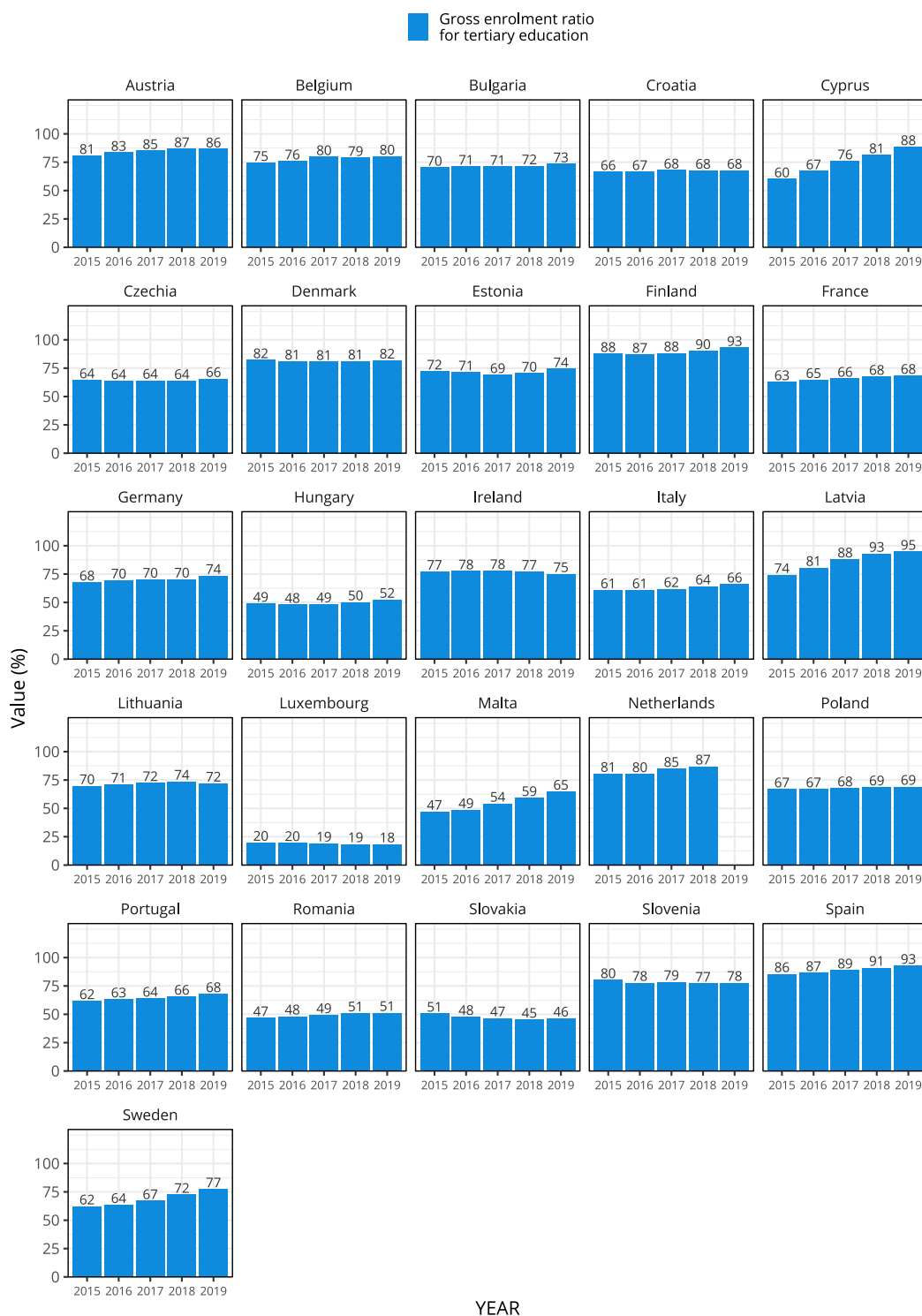
c) Gross enrolment ratio for tertiary education (%)

In terms of gross enrolment ratio for tertiary education, the average in the EU is 72.8%. Greece has the highest rate, indicating that enrolment goes beyond the official entrance age group. Luxembourg has the lowest rate at 19%, which is also quite low compared to the mean. In 2018, Latvia, Spain, the Netherlands and Finland reported a gross enrolment ratio above 90%, significantly above the mean. At the other end of the ranking, the enrolment rate in Romania, Hungary and Slovakia was around 50% in 2018. **Figure 10** shows the evolution in the



gross enrolment ratios in the EU countries. Since 2015, enrolment ratios increased in many EU countries, such as Austria, Latvia, Malta, the Netherlands, Spain and Sweden. In Slovakia and Slovenia, they decreased by a few percentage points.

**Figure 10: Gross enrolment ratio for tertiary education in EU countries (%), 2015–20**

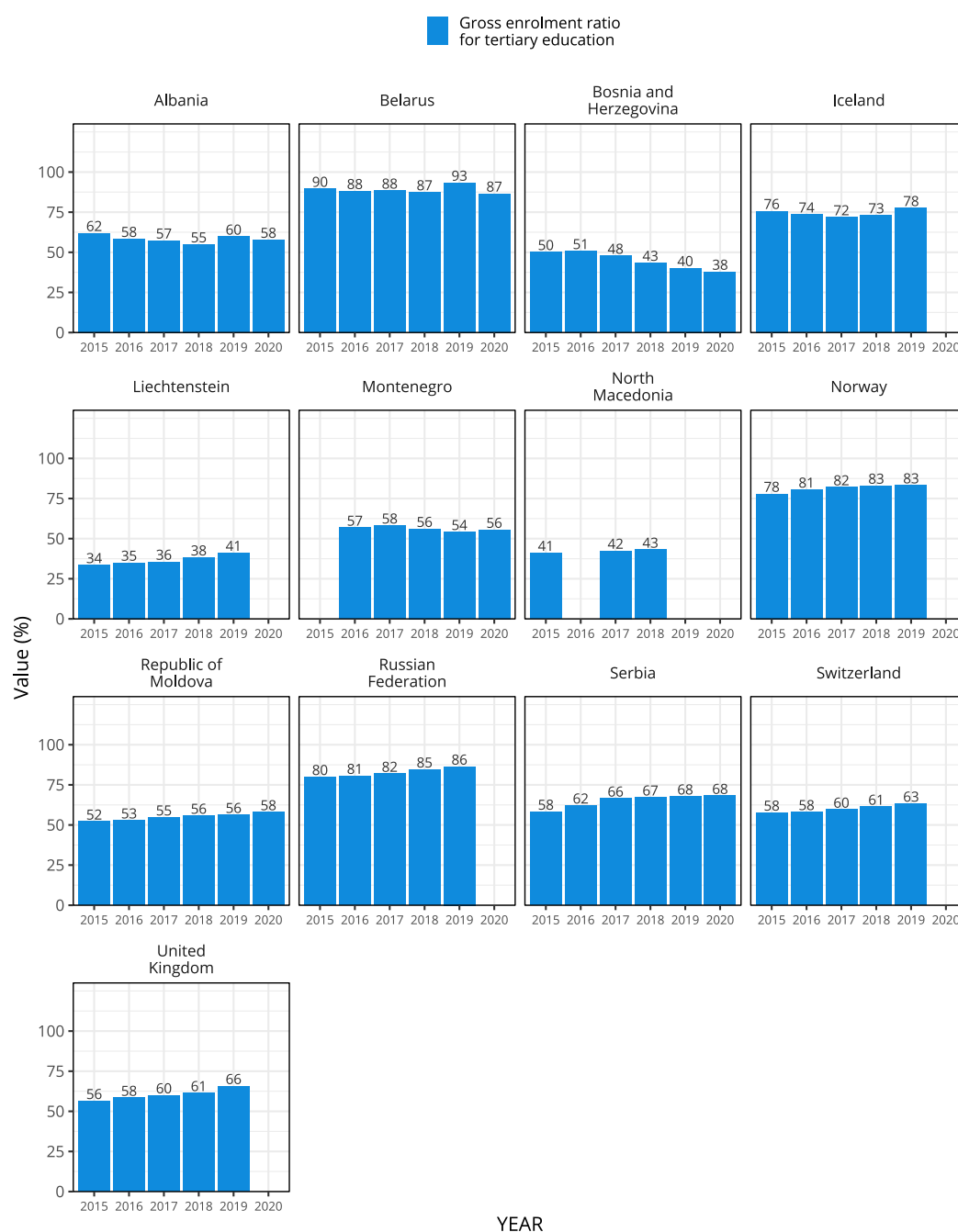


Outside the EU, Belarus, Russia and Norway have the highest gross enrolment ratios, all between 80% and 90%.

Iceland reported a ratio of 73% in 2018, while Switzerland, the UK, Serbia and Albania reported figures around 60%. The lowest rates are in Liechtenstein, North Macedonia, Moldova and Bosnia and Herzegovina, with around 40% gross enrolment in tertiary. Enrolment rates increased in non-EU countries such as Norway, Russia, Serbia, Switzerland and the UK but decreased in Bosnia and Herzegovina, as can be seen in **Figure 11**.<sup>14</sup>

**Table 12** display all available data. It shows also that Armenia with stable figures, while Azerbaijan and Georgia are seeing ratios increase over the years.

**Figure 11: Gross enrolment ratio for tertiary education in non-EU countries (%), 2015–20**



<sup>14</sup> Greece was excluded from the figure; the values exceed 100% in 2016 (131%), 2017 (136%) and 2018 (142%).

**Table 12: Gross enrolment ratio for tertiary education, both sexes (%)****Caucasus**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Armenia	53	53.3	46.2	45.7	47.1	46.5	51.1	52.3	54.6	51.5	50.8	
Azerbaijan	19.3	19.6	20.4	21.4	23.2	25.5	25.9	27.1	27.7	31.5	35.2	
Georgia	32.6	34.8	32.2	37.9	42.3	46.5	51.8	56.8	60.3	63.9	66.7	
Turkey									113.2	115		

**Europe non-EU**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Albania	44.5	49.9	59.3	64.6	65.8	62	58.4	57.4	55	59.8	57.8	
Belarus	79.6	86.1	92.1	93.5	91.5	89.6	88.2	88.5	87.4	93.4	86.6	
Bosnia and Herzegovina		42	44.6	46.3	49.2	50.2	50.8	47.8	43.5	40.2	37.9	
Iceland	78.8	81.5	82	80.3	81.4	75.8	73.6	71.8	73.1	77.6		
Liechtenstein	36	43.7	42.5		37.5	33.5	35	35.6	38.3	41.2		
Montenegro	52.2						56.8	58.2	56.1	54.2	55.5	
North Macedonia	37.5		39	37.8	38.3	41.1		42.5	43.1			
Norway	73.5	73.7	73.6	76.5	77.5	78	80.5	82	83	83.2		
Republic of Moldova					52.2	52.1	52.9	54.7	55.8	56.3	58	
Russian Federation		76.2	75.9	77.9	78.5	79.9	80.6	81.9	84.6	86.4		
San Marino									43.5	49.7	53.8	
Serbia	49.1	51.6	53.5	56.4	58.1	58.3	62.1	66.5	67.2	67.8	68.1	
Switzerland	52.9	54.5	55.5	56.3	57.2	57.7	58	59.6	61.4	63.3		
United Kingdom	58.9	59.1	59.4	57	56.6	56.5	58.4	60	61.4	65.8		

**European Union**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cyprus	48.3	46.5	45.9	47.5	53.1	60.1	67.2	75.9	81.3	88.5		
Austria	75.6	78.5	78.9	79.7	79.2	80.7	83.5	85.1	86.7	86.5		
Belgium	67.8	69.8	71.2	72.1	73	74.6	75.9	79.7	78.9	80.1		
Bulgaria	57.8	59	61.4	64.2	67.6	70.3	71.2	71	71.5	73.4		
Croatia	54	57.2	60.6	65.5	67.5	66.5	66.5	67.9	67.7	67.7		
Czechia	63.9	65.6	65.7	65.1	65.6	64.5	63.7	64.1	63.8	65.6		
Denmark	73.6	76.8	79.1	80.9	81	82.1	81.1	80.6	81.2	81.8		
Estonia	68.2	70.4	72.4	73.9	73.3	72.2	71.4	69	70.4	74.2		
Finland	93.4	94.9	92.9	91	88.9	87.7	87	88.2	90.3	93		
France	54.9	55.6	57.9	59.8	61.5	62.8	64.7	65.8	67.5	68.4		
Germany				61.4	65.5	67.7	69.6	70.2	70.3	73.5		
Greece	103.8	109.2	113.7	116.4	122.4		131.5	136.6	142.9	148.5		

Hungary	63.7	62.6	61.5	57.1	52	49	48	48.5	50.3	52.4
Ireland	63.1	67.8	68.2	71.7	73.8	77.2	77.6	77.8	77.3	75.2
Italy	65.8	65.6	64.1	62.3	61.7	60.9	60.9	61.9	64.3	66.1
Latvia	69.1	68	66.6	69.1	70.9	74.3	80.6	88.1	93	94.9
Lithuania	86.6	84.1	79.8	73.5	70.4	69.7	71.1	72.4	73.7	72
Luxembourg	18.3		19.4			19.8	19.6	19.2	18.6	18.4
Malta	37.4	40	42.5	43.9	44.3	47.1	48.6	54.3	59.3	64.9
Netherlands	63.7	75.9	76.6			80.6	80.4	85	87.1	
Poland	74.8	74.7	74	71.9	68.4	66.9	67	67.8	68.6	69.2
Portugal	65.6	68.4	68.5	66.1	65.5	61.8	63.3	63.9	65.7	67.9
Romania	64	58.2	49.7	46.8	47.1	46.7	48.2	49.4	51	51.4
Slovakia	57.1	56.2	56.1	54.4	52.7	50.7	47.8	46.6	45.4	46.4
Slovenia	89.2	86	87	85.3	82.2	80.3	77.8	78.6	77.1	77.9
Spain	75.9	80	82.3	83.7	85.4	85.6	86.5	88.9	91.1	92.9
Sweden	73.7	72.8	68.8	63.2	62.2	62.3	63.5	67	72.5	77.3

#### Northern America

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Canada	61.7	63.5	64	65.3	65.6	64.8	66.4	68.9	70.1	75.7		
United States of America				88.7	88.6	88.9	88.8	88.2	88.3	87.9		

# SDG Target 4.4 - Skills for Work

*“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”*

**Table 13: EU strategic priority related to SDG 4.4 Target**

Strategic priorities	Indicator	SDG Targets
Strategic Priority 1: Improving quality, equity, inclusion and success for all in education and training	Indicator 2	4.1, 4.2, 4.3, 4.4, 4.5
Strategic Priority 2: Making lifelong learning and mobility a reality for all	Indicators 6 and 7	4.4
Strategic Priority 5: Supporting the green and digital transitions in and through education and training	Indicator 6	4.3, 4.4, 4.6, 4.7

SDG Target 4.4 focuses on numeracy and ICT capabilities as enablers for decent jobs and entrepreneurship. It relates most directly to the EU Education Area Strategic Priority 2, which is directed towards the promotion of lifelong learning and mobility. To a lesser extent, it may also be connected to Strategic Priority 5, which concerns the digital transition, and Strategic Priority 1 in its Indicator 2, which deals specifically with digital skills.

At least two indicators included in the EU monitoring framework can be related to the data used to monitor SDG 4 globally. Indicator 2 looks at low-achieving eighth-graders in digital skills, and Indicator 6 looks at basic digital skills in the adult population. The latter is monitored within the European Skills Agenda and is closer to the global indicator used to monitor SDG Target 4.4.1: “Proportion of youth and adults with information and communications technology (ICT), by type of skill”.

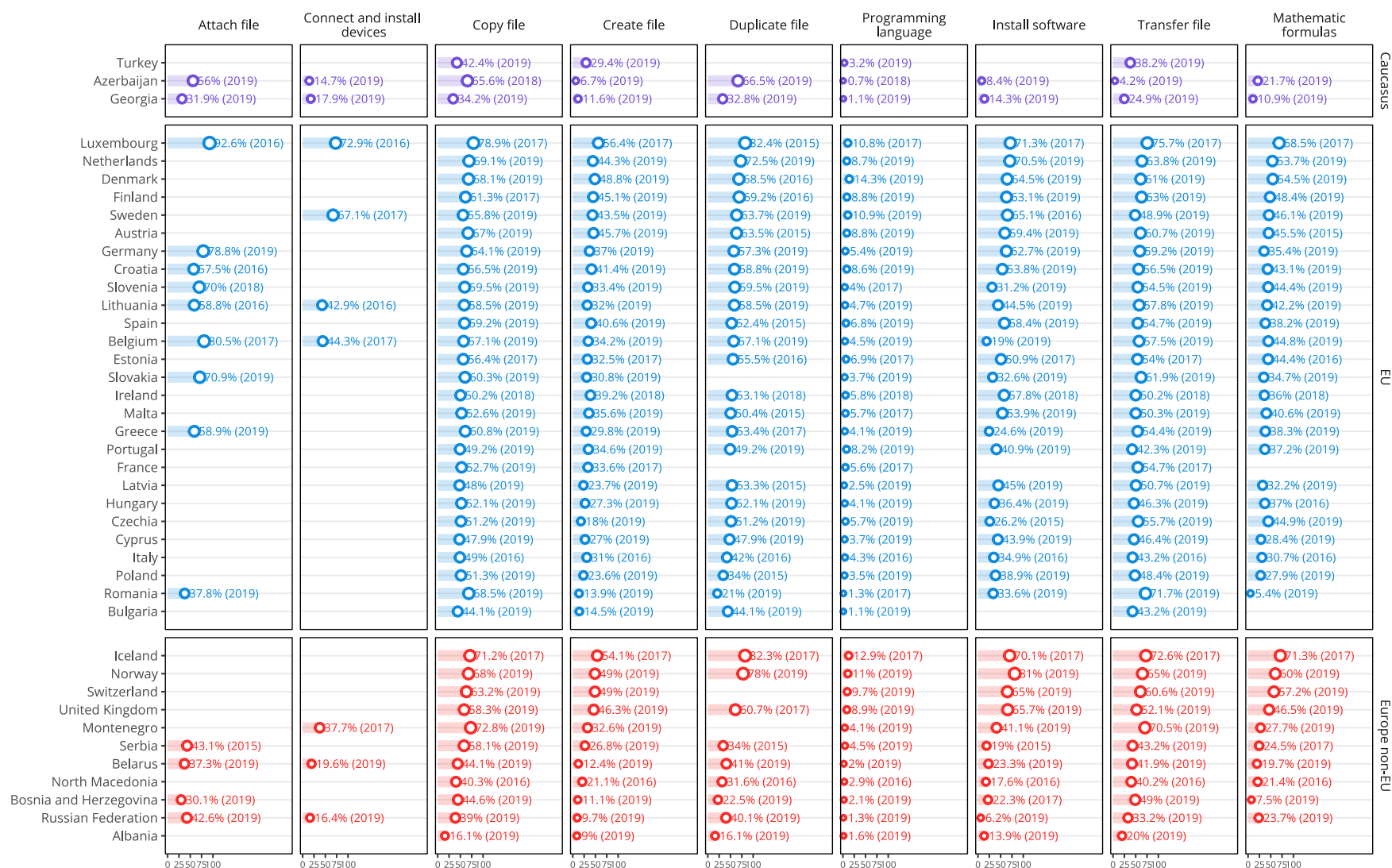
A basic digital skills indicator is defined by the EU’s Eurostat as a composite indicator based on activities in four specific areas (information, communication, problem solving and software skills for content manipulation). The SDG dataset is broader, ranging from understanding the basic notions of computer manipulation to programming skills; there are also two thematic indicators, one that measures digital literacy skills and another that looks at educational attainment rates, that measure human capital of individuals and countries. The measurement of digital literacy skills is done through the International Computer and Information Literacy Study, aligned to the European Commission’s Digital Competence Framework for Citizens (DigComp 2.0/2.11)<sup>15</sup>.

Data on ICT skills are available for around 40 countries of the region (**Figure 12**). Educational attainment is available for 40% of the countries. For most indicators, the average of the latest available values is higher within the EU. Basic skills like attaching, duplicating, copying and transferring files have higher averages. In EU member countries, on average, more than 50% of youth and adults have these skills. Outside the EU, the two Northern European countries (Iceland and Norway), the UK and Switzerland have means closer to the EU.

Advanced skills like programming have the lower values in most countries. The highest proportions of programming-skilled youth and adults are in Denmark, Sweden and Luxembourg within the EU, and Iceland, Norway and Switzerland among non-EU members. Skills in mathematic formulas are generally above 30% in all EU countries. Luxembourg has particularly high scores, while Romania lags behind. Iceland is at the same level as Luxembourg among non-EU countries, and Bosnia and Herzegovina and Albania reported less than 10% skilled youth and adults in this domain. Combining all ICT indicators, Luxembourg, Iceland, Norway, the Netherlands, Denmark, Finland, Sweden, Switzerland, Austria and Germany report an average above 50%. Albania has the lowest mean for the combination of all indicators (11%).

<sup>15</sup> DigComp 2.0 resulted in five competence areas: information and data literacy, communication and collaboration, digital content creation, safety and problem solving; DigComp 2.1 described eight proficiency levels (European Commission. Joint Research Centre. 2016; Commission) et al. 2017)

Figure 12: ICT skills, both sexes, latest available value (%), 2015–20



## SDG Target 4.5 - Equity

*“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”*

**Table 14: EU strategic priority related to SDG 4.5 Target**

Strategic priorities	Indicator	SDG Targets
Strategic priority 1: Improving quality, equity, inclusion and success for all in education and training	Indicators 1, 2 and 3	4.1, 4.2, 4.5

Equity is included in Strategic Priority 1 of the EU Education Area. The global indicators used to monitor Target 4.5 are the various parity indices calculated for education indicators, which can be disaggregated in the following ways: female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict affected.

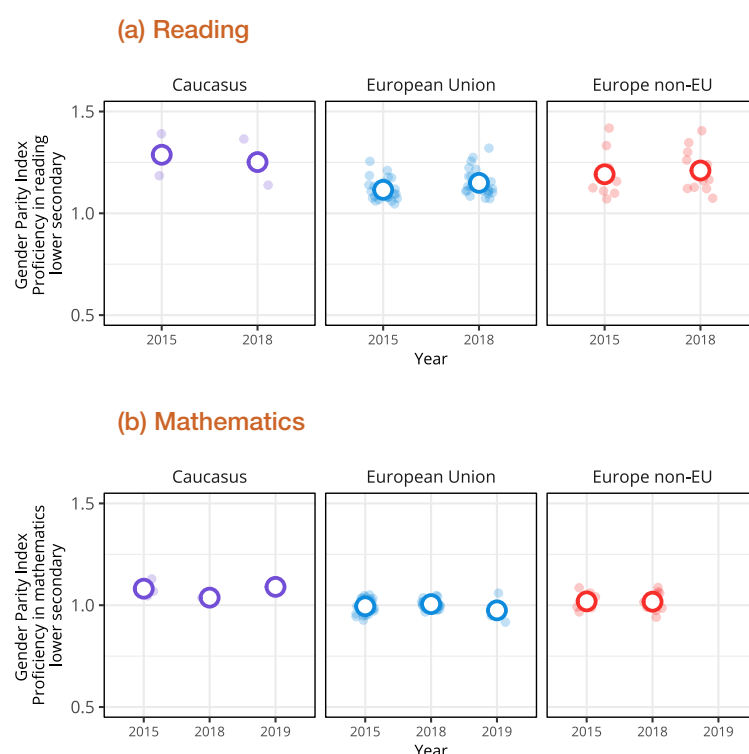
Indicators on achievement and participation in the EU SDG 4 monitoring framework are disaggregated by gender but are not calculated in the form of an index as they are in the SDG framework. To illustrate the degree of gender parity in the EU, the parity on proficiency in reading and mathematics in lower secondary (related to Indicator 1), the adjusted enrolment rate one year before start of primary (related to Indicator 3) and educational attainment rate in tertiary or higher education (related to Indicator 5) were chosen. At least one data point for these indicators is available for no less than 70% of the countries.

On average, gender parity<sup>16</sup> in terms of proficiency in reading is achieved in EU and non-EU countries. In 2018, Bulgaria, Malta and Greece had the highest adjusted gender parity index (GPIA), while the lowest calculated GPIA values were for Estonia and Ireland, which were close to perfect parity. Among non-EU members, the situation is similar, with most countries reporting better results for women. The UK had the most balanced results in 2018, while North Macedonia displayed the highest difference between girls and boys (GPIA 1.4).

In mathematics, the situation is more balanced in both groups. Parity is achieved virtually in all EU countries, but in some countries, the measures still slightly favour men. Belgium has the lowest GPIA with 0.96 and Lithuania and Finland have the highest GPIA, with 1.04 in 2018. **Figure 13** shows that there was some improvement between 2015 and 2018. Outside the EU, Montenegro has the lowest GPIA (0.94) and North Macedonia the highest (1.08).

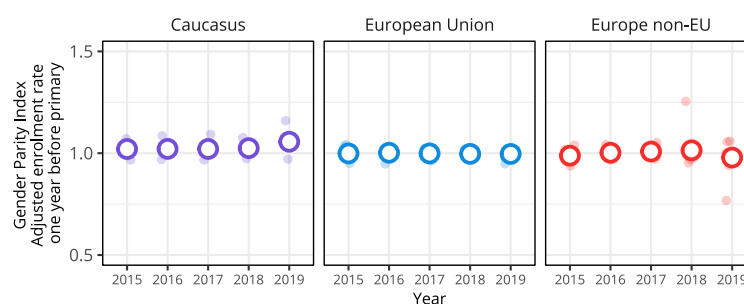
<sup>16</sup> Parity indices require data for the specific groups of interest. They represent the ratio of the indicator value for one group to that of the other. Typically, the likely more disadvantaged group is the numerator. A value of exactly 1 indicates parity between the two groups. See UIS (2018)

**Figure 13: Proportion of students at the end of lower secondary achieving at least a minimum proficiency level (GPIA)**



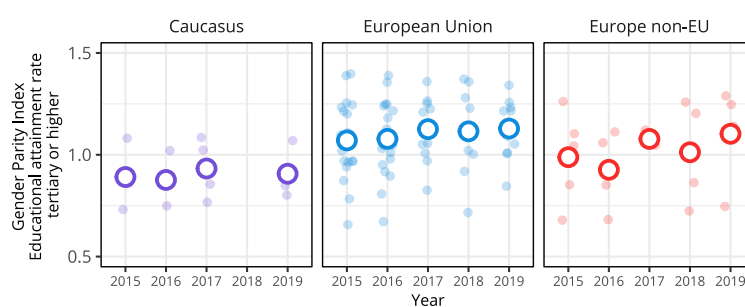
Parity in early childhood (**Figure 14**) is also achieved in virtually all EU countries, but only half of the countries reached perfect parity. Ireland (1.02), Greece and Belgium (1.01) had the highest parity indexes in 2018, while in Malta and Bulgaria early childhood enrolment favours boys (0.97). Outside the EU, enrolment in early childhood is also virtually achieved, although Belarus and Montenegro have more boys than girls enrolled at this level.

**Figure 14: Adjusted net enrolment rate, one year before official primary entry age (GPIA)**



Parity in terms of attainment rates in tertiary education is more heterogeneous in both groups (**Figure 15**). EU countries have a mean gender parity index above 1, while among non-EU countries the mean is closer to 1. In 2018, attainment rates were more in favour of women in Estonia, Latvia, Portugal and Denmark (GPIA above 1.2), while in Germany (0.71) and the Netherlands (0.86), attainment favours men. Outside the EU, Switzerland has a GPIA for attainment in tertiary education of 0.72, while for Moldova the calculated index is 1.25, indicating that the rate at which women attain tertiary education is higher than the rate for men.



**Figure 15: Educational attainment rate, completed short-cycle tertiary education or higher, population 25+ years (GPIA)****Table 15: Gross enrolment ratio for tertiary education, GPIA****Caucasus**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Armenia	1.2	1.2	1.2	1.1	1.1	1.2	1.2	1.2	1.2	1.3	1.3	
Azerbaijan	1	1	1	1.1	1.1	1.1	1.2	1.1	1.1	1.1	1.2	
Georgia	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1	
Turkey									0.9	0.9		

**Europe non-EU**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Albania	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	
Belarus	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2		1.1	
Bosnia and Herzegovina										1.3	1.3	
Iceland	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5		
Liechtenstein	0.6	0.5	0.6		0.5	0.5	0.5	0.6	0.6	0.6		
Montenegro	1.2						1.2	1.2	1.3	1.3	1.3	
North Macedonia	1.1		1.2	1.2	1.2	1.2		1.2	1.2			
Norway	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3		
Republic of Moldova					1.2	1.2	1.2	1.2	1.2	1.3	1.3	
Russian Federation		1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1		
San Marino									0.8	0.8	0.8	
Serbia	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3	
Switzerland	1	1	1	1	1	1	1	1	1	1		
United Kingdom	1.3	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3		

**European Union**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cyprus	0.9	1	1.2	1.2	1.3	1.3	1.2	1.2	1.1	1.1		

Austria				1.2	1.2	1.2	1.2	1.2	1.2	1.2
Belgium	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3
Bulgaria	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Croatia	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Czechia	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Denmark	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Estonia	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Finland	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
France	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Germany				0.9	1	1	1	1	1	1
Greece	1.1	1.1	1.1	1	1		1	1	1	1
Hungary	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Ireland	1.1	1.1	1.1	1	1.1	1.1	1.1	1.1	1.1	1.1
Italy	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Latvia	1.4	1.4	1.4	1.3	1.3	1.4	1.3	1.3	1.3	1.3
Lithuania	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Luxembourg	1.1		1.1			1.1	1.1	1.1	1.1	1.1
Malta	1.3	1.3	1.3	1.3	1.2	1.3	1.3	1.3	1.3	1.3
Netherlands	1.1	1.1	1.1			1.1	1.1	1.1	1.1	
Poland	1.3	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3
Portugal	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Romania	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Slovakia	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.3
Slovenia	1.3	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Spain	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Sweden	1.3	1.3	1.4	1.4	1.3	1.3	1.4	1.4	1.4	1.4

### Northern America

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Canada	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2		
United States of America				1.3	1.3	1.3	1.3	1.3	1.3	1.3		

## SDG Target 4.6 - Literacy and Numeracy

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

**Table 16: EU strategic priority related to SDG 4.6 Target**

Strategic priorities	Indicator	SDG Targets
Strategic Priority 5: Supporting the green and digital transitions in and through education and training	Indicator 6	4.6, 4.7

SDG Target 4.6 can be linked to the EU Education Area Strategic Priority 5 in terms of digital transition. Green transition related more closely to Target 4.7. It also relates to Indicator 6, but here the focus is on functional skill levels in both literacy and numeracy.

The global indicator of the target on literacy and numeracy is the “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”. The thematic indicators are literacy rates and participation of illiterate youth and adults in literacy programmes.

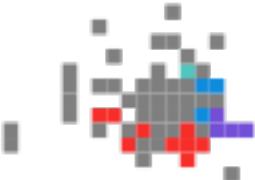
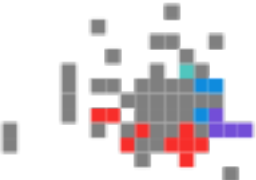
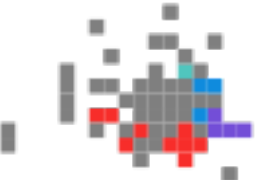
Data on the global indicator are mostly absent. Only four data points are available, for Greece, Hungary, Lithuania and Slovenia, measured in 2015 and 2017 for Hungary (**Table 17**).

**Table 17: Proportion of population achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex**

Country	Proficiency in functional (a) literacy skills - %	Proficiency in functional (b) numeracy skills - %
Greece (2015)	73.22	71.16
Hungary (2017)	81.35	82.20
Lithuania (2015)	84.24	81.77
Slovenia (2015)	74.94	74.08

Data on literacy rates are also available for only a few countries. Figures in **Table 18** shows the availability of data on youth, adult and elderly literacy rates. Most available data are not informative because literacy rates are close to 100% in all cases. There is no data point on participation of the illiterate in dedicated programmes.

**Table 18: Data availability on youth and adult literacy rates**

(a) Youth	(b) Adult	(c) Elderly
		

# SDG Target 4.7 - Sustainable Development and Global Citizenship

*“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 nonviolence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development”*

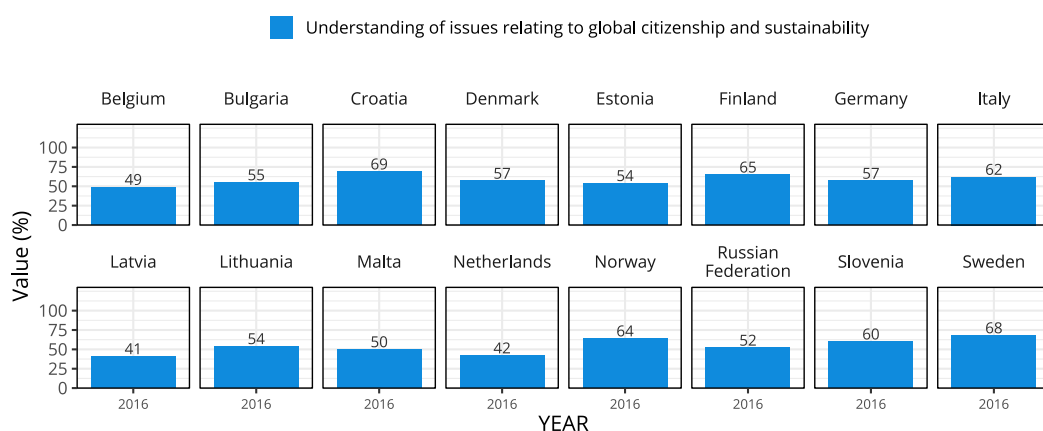
**Table 19: EU strategic priority related to SDG 4.7 Target**

Strategic priorities	Indicator	SDG Targets
Strategic Priority 5: Supporting the green and digital transitions in - and through education and training		4.6, 4.7

SDG Target 4.7 focuses on broad knowledge and skills needed to promote sustainable development. It can be linked to EU Education Area Strategic Priority 5 in its green transition dimension. The global indicator for this target measures the 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. Among the thematic indicators are the extent to which schools provide HIV and sexuality education and the percentage of students in lower secondary education showing adequate understanding of issues relating to global citizenship and sustainability and showing proficiency in knowledge of environmental science and geoscience.

Data on HIV and sexuality education are available for only a few countries (Albania, Andorra, Finland, Gibraltar, Monaco, Republic of Moldova and San Marino) and show that all schools in these countries include these disciplines in their curricula.

**Figure 16: Percentage of students in lower secondary education showing adequate understanding of issues relating to global citizenship and sustainability, both sexes (%)**



In terms of global citizenship and sustainability, some data points from 2016 are available for some countries (Figure 16). The highest percentages of students in lower secondary who understand these issues were found

in Croatia and Sweden (69% and 68%, respectively). Most other countries have proportions above 50%, except Belgium (49%), the Netherlands (42%) and Latvia (41%).

Data on proficiency in knowledge of environmental science and geoscience are scarce and only four countries measured the percentage in 2015 and 2019 (**Table 20**). In all four, proficiency decreased a few percentages points, and all show very similar results of around 25% proficient students.

**Table 20: Percentage of students in lower secondary education showing proficiency in knowledge of environmental science and geoscience, both sexes (%)**

Country	2015 (%)	2019 (%)
Ireland	29	24
Italy	25	24
Norway	30	24
United Kingdom	27	21

## SDG Target 4.a - School Environment

*“Build and upgrade education facilities that are child disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all”*

**Table 21: EU strategic priority related to SDG 4.a Target**

Strategic priorities	Indicator	SDG Targets
Strategic Priority 1: Improving quality, equity, inclusion and success for all in education and training	Indicators 1, 2 and 3	4.1, 4.2, 4.3, 4.4, 4.5, 4.a

SDG Target 4.a aims at achieving good quality education through good school infrastructure and a safe and non-violent learning environment. The EU Education Area addresses this issue in its Strategic Priority 1, which encompasses the quality dimension of the education system.

The global indicator for the target measures the proportion of schools with access to basic services like electricity, internet, water and sanitation. The thematic indicators are related to bullying and attacks on students, personnel and institutions.

Around 2,000 data points are available between 2015 and 2020 for the global indicators. In 85% of cases, these services were fully offered in schools (100%). Data points are more common for the proportion of schools equipped with computers and internet. The latest available values are displayed in **Figure 17**.

In primary education, half of the EU member countries already provide 100% of schools with computers. Portugal, Croatia and Bulgaria have some of the lowest proportions of equipped schools. In secondary, most schools are equipped with computers. Portugal Cyprus and Italy have the lowest figures, below 50% in 2019. Internet is available in mostly all primary schools, except in Italy, which reported 70% of schools with internet in 2016. In secondary, most countries already provide internet to all schools.

Among non-EU members, secondary schools are mostly equipped with internet and computers. The lowest proportions of schools with computers are in Albania and Russia (above 80%). In primary, a few countries still report a low proportion of schools equipped with computers. In Montenegro, Serbia and Bosnia and Herzegovina, more than half of primary schools are unequipped. Internet is available in half of Albanian primary schools.

In 2019, Georgia and Armenia reported that 100% of schools in primary and secondary were equipped with computers and internet. Azerbaijan figures from 2019 indicate that around 95% of primary and secondary schools are equipped with computers, but internet is available for only 60% of them.

**Figure 17: Proportion of primary and secondary schools with access to computers for pedagogical purposes and internet (%)**





## SDG Target 4.b - Scholarships

*“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”*

**Table 22: EU strategic priority related to SDG 4.b Target**

Strategic priorities	Indicator	SDG Targets
Strategic Priority 4: Reinforcing European higher education	Indicator 5	4.3, 4.b

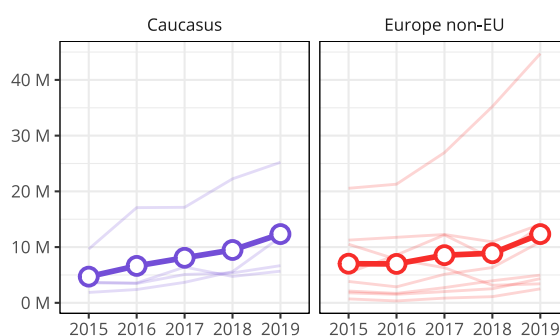
Scholarships are addressed in the indicators that focus on higher education and bridging the inequalities between rich and poor countries.

European countries, especially the EU members, are mostly donors. However, a few non-EU members – Albania, Bosnia, Montenegro, Moldova, Serbia and Ukraine – are recipients and have reported data on official development assistance (ODA). Turkey, Armenia, Azerbaijan and Georgia are also recipients of aid (**Figure 18**).

On average, the volume of ODA flows has been increasing since 2015 in all countries. Among European countries that are not members of the EU, Moldova has seen aid for scholarships increase at a significant pace since 2015. Most of the other countries outside the EU have seen increases in contributions to scholarships, including Montenegro, where ODA doubled from 2018 to 2019 (Figure 19).

Aid for scholarships increased six times in Azerbaijan from 2015 to 2020. Georgia saw aid double in the same period, while aid to Armenia has been declining since 2017. In Turkey, the biggest recipient in absolute terms, aid nearly tripled from 2016 to 2019.

**Figure 18: Volume of ODA flows for scholarships, by framework and subregion (constant US\$)**



**Table 23: SDG Indicator 4.b.1 Volume of official development assistance flows for scholarships by sector and type of study (constant US\$)****Caucasus**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Armenia	1.6	1.4	1.6	5.1	4.6	3.7	3.6	6.4	4.7	5.7		
Azerbaijan	1.6	1.8	1.4	2.4	1.9	1.9	2.4	3.7	5.6	11.8		
Georgia	2	2.7	2.3	5.6	4	3.6	3.5	5.1	5.4	6.7		
Turkey	5.1	5.8	6.9	8.7	9	9.6	17.1	17.1	22.2	25.2		

**Europe non-EU**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Albania	1.9	2.4	2.1	3.2	2.7	3.8	2.9	5.1	6.3	10.9		
Belarus	2	2.3	4.2	8	6.8	10.5	7.8	6.3	3.2	3.4		
Bosnia and Herzegovina	1.2	1.4	1.6	2	1.9	2.1	1.7	2.7	4	5		
Montenegro	0.4	0.4	0.6	0.7	0.5	0.7	0.3	0.8	1.1	2.5		
North Macedonia	1.4	1.4	1.6	3.4	2	1.8	1.5	2	2.5	4.3		
Republic of Moldova	1.2	1.9	1.7	2.8	18.7	20.6	21.3	27	35.2	44.7		
Serbia	3	2.8	3	6.1	6.8	5.4	8.6	12.2	8	13.7		
Ukraine	5.1	5.4	6.3	9.2	11.8	11.2	11.8	12.3	10.9	14.1		

# SDG Target 4.c - Teachers

*“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”*

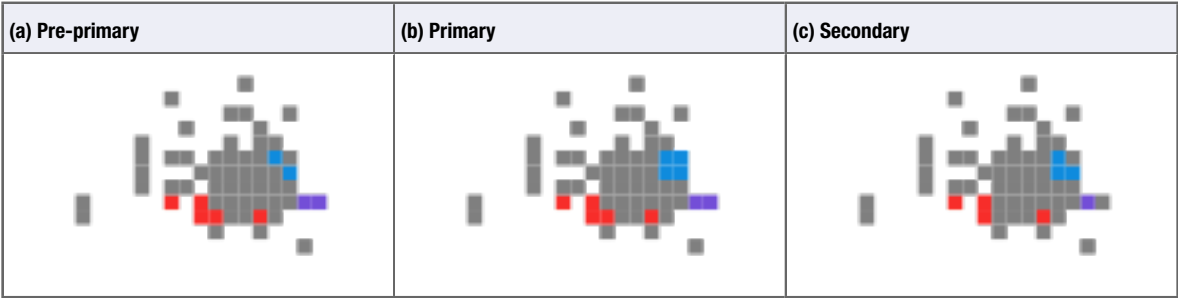
**Table 24: EU strategic priority related to SDG 4.c Target**

Strategic priorities	Indicator	SDG Targets
Strategic Priority 3: Enhancing competences and motivation in the education profession	-	4.c

SDG 4.c is a quality-related target in which the concern is to provide children with sufficiently trained teachers. The EU Education Area framework has one specific strategic priority dealing with the education profession, Strategic Priority 3, which aims to enhance competences and motivations in this professional segment. There is no specific indicator for this priority in EU SDG 4 monitoring.

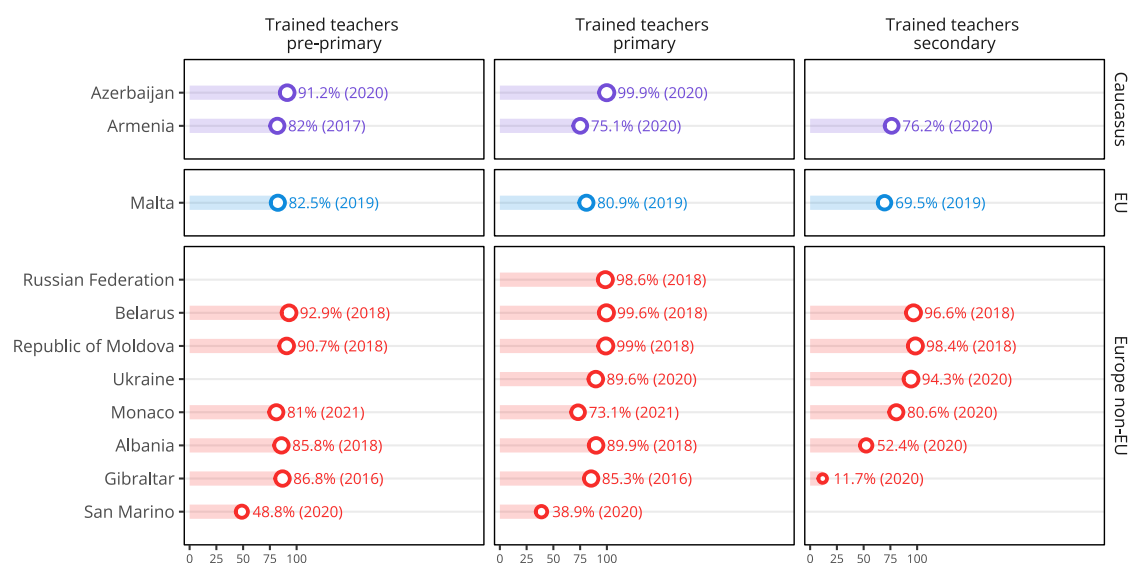
The global indicator of the target is the proportion of teachers with the minimum required qualifications at each level of education. The thematic indicators are the percentage of qualified teachers at each level, the pupil-to-qualified-teacher ratio and the pupil-to-trained-teacher ratio. Data on attrition rates are scarcer for the region and are available for less than 20% of countries, mostly outside the EU (Figure 25).

**Table 25: Data availability on proportion of teachers with the minimum required qualifications**



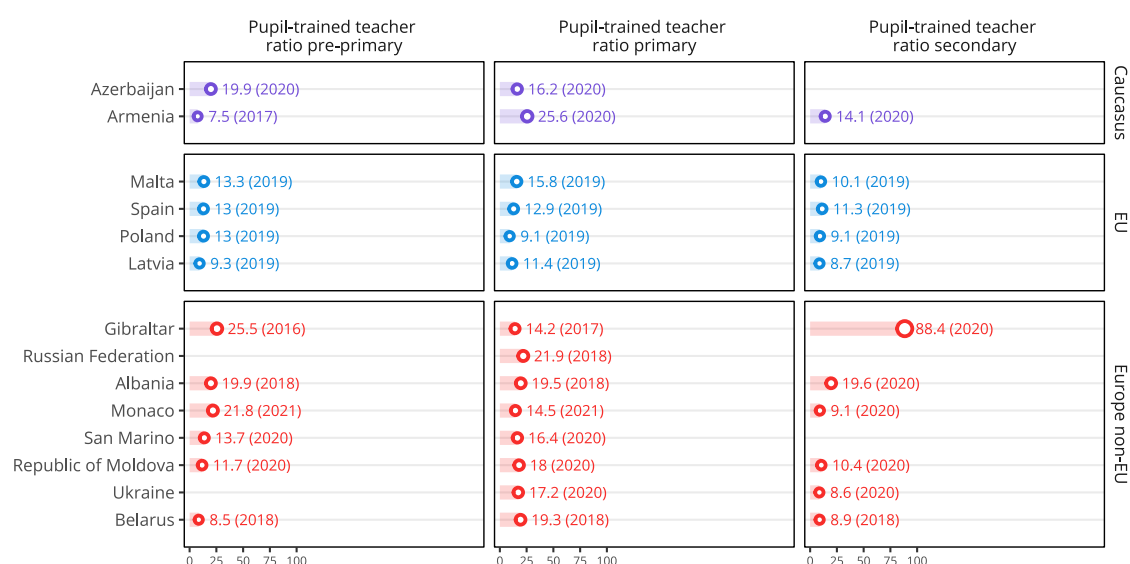
The proportion of teachers with the minimum required qualifications is around 80% Malta, the only EU country members represented in the sample, for pre-primary and primary levels. Outside the EU, a few countries like Russia, Belarus and Moldova have reported proportions close to 100% in primary and secondary. San Marino reported the lowest proportions in the primary (38.9%) and Gibraltar the lowest in the secondary (11.7%). In the Caucasus, Armenia has proportions between 75% and 82% in all three levels (Figure 19)

**Figure 19: Proportion of teachers with the minimum required qualifications, by education level**



Pupil-to-trained-teacher ratios (**Figure 20**) in the four EU country member states, Malta, Spain, Poland and Latvia, are around to 10, indicating relatively high access of pupils to trained teachers in these two countries. The highest ratio was reported in Malta for the primary (15.8 in 2019). Outside the EU, Gibraltar has the highest ratio for pre-primary and secondary, while Russia, Belarus and Albania have the highest ratios for the primary.

**Figure 20: Pupil-to-trained-teacher ratio by education level**



**Table 26: Percentage of qualified teachers according to national standards, secondary level****Caucasus**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Armenia										29.1	25.6	
Azerbaijan	11	11.2	11.9	12.2	12.7	13.6		15.8	15.5	15.8	16.2	

**Europe non-EU**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Albania									19.5			
Belarus	15	15	15	15.4	16.6	17.7	18.4	18.9	19.3			
Gibraltar							16.1	14.2				
Holy See	0	0	0	0	0	0	0	0	0	0	0	0
Monaco										18.4	14.9	14.5
Republic of Moldova					17.9	17.5	17.6	17.8	18.1	18	18	
Russian Federation			19.8	20	20	20.4	20.8	21.6	21.9			
San Marino									7.7	7.5	16.4	
Ukraine	15.7	15.9	16.1				14.8	15	14.9	17.9	17.2	

**European Union**

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Latvia	11.9	11.4	11	11.2	11.1	11.1	11.3	11.5	11.5	11.4		
Malta					15.5	15.9	16.3	15.7	15.8	15.8		
Poland									8	9.1		
Spain	12.4	12.4	12.6	13.3	13.1	13.2	13	13.1	13	12.9		

## SDG 4 - Finance

*“Governments must allocate 4-6% of their gross domestic product and/or 15-20% of total public expenditure to education, ensuring efficient spending and prioritizing the most marginalized groups”*

The target on education finance is endorsed globally by the 160 signatory countries of the Incheon Declaration and Framework for Action for the implementation of SDG 4. As such, these targets do not need to be included explicitly in the regional monitoring frameworks.

Two indicators are used to monitor financing in education. The first is Indicator 1.a.2, “Proportion of total government spending on essential services”, which is a global indicator for SDG 1 and SDG 4 when education services are concerned. The second is the education expenditure as a share of GDP. Both finance indicators are included in the set of seven benchmark indicators that are used to monitor progress of SDG 4 at the regional and country level. A total of 160 data points can be used to analyse the regional trends in the period.

### Expenditure as a part of Total Government Expenditure (Global Indicator 1.a.2)

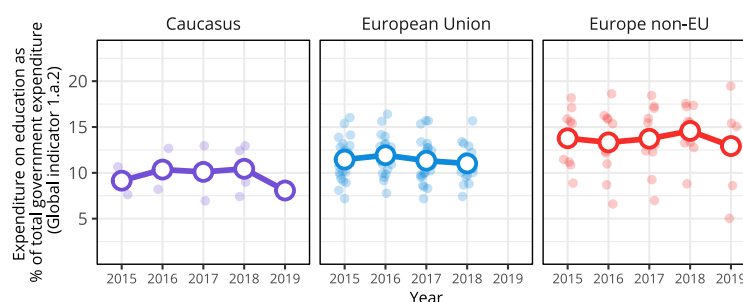
Indicator 1.a.2 is expressed as the expenditure on education as a percentage of total government expenditure.

**Figure 21** shows that the mean expenditure in education as a share of total government expenditure is mostly stable above 10% in the EU. Sweden reached the target of 15% in 2018. From 2018 onwards, data is not available for EU countries. Outside the EU, the mean expenditure was a little higher and almost at the target until 2018. In this year, Ukraine and Serbia are the only countries below 13%, the latter reporting 8% expenditure.

In both groups, some countries spend only half of what is expected by the target. Some examples are Greece and Italy among EU member countries and Monaco and Serbia outside the framework.

Turkey and Georgia reported values above 10% in 2019. Azerbaijan and Armenia reported values close to 9%.

**Figure 21: Expenditure on education as a percentage of total government expenditure, 2015–20 (Global Indicator 1.a.2)**



### Government expenditure on education as a percentage of GDP

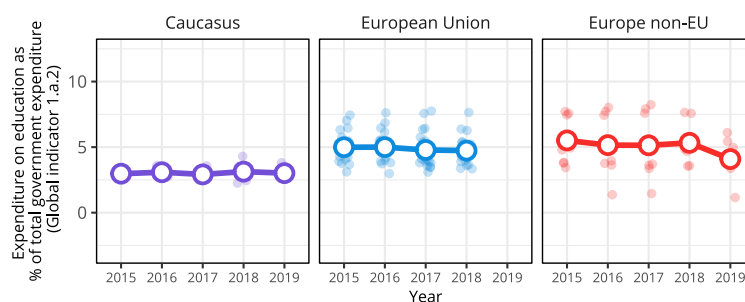
The second indicator on finance corresponds to the expenditure on education as a share of GDP, expressed as a percentage.

As can be seen in **Figure 22**, the mean government expenditure on education as a share of GDP was on target overall in 2019 in EU and non-EU countries (mean above 4% in all years). The mean expenditure on education is below the target for some countries and the mean for the Caucasus reached 3% in 2019.

Among EU member countries, Romania, Ireland, Greece, Luxembourg and Lithuania were below the target in 2018. The highest expenditure shares are recorded in Sweden (7.6%) and Belgium (6.37%). Outside the EU, Monaco, San Marino, Serbia and Albania were below the minimum target of 4% in 2019. The highest shares are found in Moldova (6.1%) and Ukraine (5.4%).

Turkey reported spending more than 6% of its GDP on education in 2018. In 2019, Georgia reported almost 4% and Azerbaijan and Armenia reported 2.6% and 2.5%, respectively. All countries have been increasing their expenditure since 2015.

**Figure 22: Expenditure on education as a share of GDP, 2015–20 (%)**



# Appendix

## Appendix 1 – Official List of SDG 4 Indicators

Table 27: SDG 4 Indicators

FFA	Education 2030 Framework for Action
<b>1.a.gdp</b>	Government expenditure on education as a percentage of GDP (%)
<b>Target 1.a</b>	<b>By 2030, ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions</b>
<b>1.a.2</b>	Proportion of total government spending on essential services (education)
<b>Target 4.1</b>	<b>By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes</b>
<b>4.1.0</b>	Proportion of children/young people prepared for the future, by sex
<b>4.1.1</b>	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
<b>4.1.2</b>	Completion rate (primary education, lower secondary education, upper secondary education)
<b>4.1.3</b>	Gross intake ratio to the last grade (primary education, lower secondary education)
<b>4.1.4</b>	Out-of-school rate (1 year before primary, primary education, lower secondary education, upper secondary education)
<b>4.1.5</b>	Percentage of children over-age for grade (primary education, lower secondary education)
<b>4.1.6</b>	Administration of a nationally representative learning assessment (a) in Grade 2 or 3; (b) at the end of primary education; and (c) at the end of lower secondary education
<b>4.1.7</b>	Number of years of (a) free and (b) compulsory primary and secondary education guaranteed in legal frameworks
<b>Target 4.2</b>	<b>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</b>
<b>4.2.1</b>	Proportion of children aged 24-59 months who are developmentally on track in health, learning and psychosocial well-being, by sex
<b>4.2.2</b>	Participation rate in organized learning (one year before the official primary entry age), by Sex
<b>4.2.3</b>	Percentage of children under 5 years experiencing positive and stimulating home learning environments
<b>4.2.4</b>	Gross early childhood education enrolment ratio in (a) pre-primary education and (b) early childhood educational development
<b>4.2.5</b>	Number of years of (a) free and (b) compulsory pre-primary education guaranteed in legal frameworks
<b>Target 4.3</b>	<b>By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university</b>
<b>4.3.1</b>	Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex
<b>4.3.2</b>	Gross enrolment ratio for tertiary education by sex



4.3.3	Participation rate in technical-vocational programmes (15- to 24-year-olds) by sex
<b>Target 4.4</b>	<b>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</b>
4.4.1	Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill
4.4.2	Percentage of youth/adults who have achieved at least a minimum level of proficiency in digital literacy skills
4.4.3	Youth/adult educational attainment rates by age group and level of education
<b>Target 4.5</b>	<b>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</b>
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
4.5.2	Percentage of students in a) early grades, b) at the end of primary, and c) at the end of lower secondary education who have their first or home language as language of instruction
4.5.3	Existence of funding mechanisms to reallocate education resources to disadvantage populations
4.5.4	Education expenditure per student by level of education and source of funding
4.5.5	Percentage of total aid to education allocated to least developed countries
<b>Target 4.6</b>	<b>By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy</b>
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
4.6.2	Youth/adult literacy rate
4.6.3	Participation rate of illiterate youth/adults in literacy programmes
<b>Target 4.7</b>	<b>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 nonviolence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development</b>
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
4.7.2	Percentage of schools that provide life skills-based HIV and sexuality education
4.7.3	Extent to which the framework on the World Programme on Human Rights Education is implemented nationally (as per the UNGA Resolution 59/113)
4.7.4	Percentage of students in lower secondary education showing adequate understanding of issues relating to global citizenship and sustainability
4.7.5	Percentage of students in lower secondary showing proficiency in knowledge of environmental science and geoscience
4.7.6	Extent to which national education policies and education sector plans recognize a breadth of skills that needs to be enhanced in national education systems
<b>Target 4.a</b>	<b>Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all</b>
4.a.1	Proportion of schools offering basic services, by type of service
4.a.2	Percentage of students experiencing bullying in the last 12 months in a) primary, and b) lower secondary education
4.a.3	Number of attacks on students, personnel and institutions

<b>Target 4.b</b>	<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</b>
<b>4.b.1</b>	Volume of official development assistance flows for scholarships by sector and type of study
<b>Target 4.c</b>	<b>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</b>
<b>4.c.1</b>	Proportion of teachers with the minimum required qualifications, by education level
<b>4.c.2</b>	Pupil-trained teacher ratio by education level
<b>4.c.3</b>	Percentage of teachers qualified according to national standards by education level and type of institution
<b>4.c.4</b>	Pupil-qualified teacher ratio by education level
<b>4.c.5</b>	Average teacher salary relative to other professions requiring a comparable level of qualification
<b>4.c.6</b>	Teacher attrition rate by education level
<b>4.c.7</b>	Percentage of teachers who received in-service training in the last 12 months by type of training

Updated September 2021

Source: [https://tcg.uis.unesco.org/wp-content/uploads/sites/4/2020/09/SDG4\\_indicator\\_list.pdf](https://tcg.uis.unesco.org/wp-content/uploads/sites/4/2020/09/SDG4_indicator_list.pdf)

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