





X

## Indicators The Need and Challenges of

Tracking Implementation of SDG Target 4.7

X

Written by Johanna Helin



The Bridge 47 Network brings people of various backgrounds together to learn from each other and collaborate for advancing transformative learning and SDG Target 4.7. Bridge 47 – Building Global Citizenship Education is a project cocreated by 14 European and global partner organisations, co-funded by the European Union. The project mobilises civil society to take action for global justice through Global Citizenship Education.

This publication is part of a series of publications commissioned to support advocacy for more space for Target 4.7 and Agenda 2030 in European and global policies. The publications are created to encourage discussion and represent the author's view on the topic.

#### Indicators - The Need and Challenges of Tracking Implementation of Target 4.7

© Bridge 47 2021

Writer: Johanna Helin



This document has been produced with the financial assistance of the European Union. The contents of this document are the sole responsibility of the 14 project partners and can in no way be taken to reflect the views of the European Union.

### Contents

List of acronyms				
2.	Context - The Agenda 2030	7		
3.	The Special nature of SDG Target 4.7			
4.	The global monitoring framework for the SDGs	10		
	4.1 Requirements for global indicators	11		
	4.2 Data collection for the global indicator			
	4.3 Tier 2 indicators for Target 4.7			
5.	Indicators at a regional level			
	5.1 Developments in the Asia-Pacific region			
	5.2 Developments in Europe			
6	A joint effort in gathering relevant data			
7	Conclusions			
Foo	Footnotes			
Ref	erences	23		

### List of acronyms

APCEIU 2020	Asia-Pacific Centre of Education for International Understanding
ASEAN	Association of Southeast Asian Nations
CSOs	Civil Society Organisations
EC	European Commission
ESD	Education for Sustainable Development
EI	Education International
EU	European Union
GAML	Global Alliance for Monitoring Learning
GCED	Global Citizenship Education
GEMR	Global Education Monitoring Report
GENE	Global Education Network in Europe
IAEG-SDGs	Inter-Agency and Expert Group on SDG Indicators
IBE	International Bureau of Education
ICCS	International Civic and Citizenship Education Study
IEA	International Association for the Evaluation of Educational Achievement
ILSA	International Large-Scale Assessment
INEE	Inter-agency Network for Education in Emergencies
LMTF	Learning Metrics Task Force
MGIEP	Mahatma Gandhi Institute of Education for Peace and Sustainable
	Development
OECD	Organisation Economic Cooperation and Development
PISA	Programme for International Student Assessment
RFCDC	Reference Framework for Competencies for Democratic Culture
SDGs	Sustainable Development Goals
SEAMEO	Southeast Asian Ministers of Education Organization
SEA-PLM	The Southeast Asia Primary Learning Metrics (SEA-PLM) regional
	programme to assess learning outcomes of Grade 5 students
TAG	Technical Advisory Group on Post-2015 Education Indicators
TCG	Technical Cooperation Group on Education 2030-SDG 4 Indicators
TALIS	Teaching and Learning International Study
TIMMS	Trends in International Mathematics and Science Study
UIL	UNESCO Institute of Lifelong Learning
UIS	UNESCO Institute for Statistics
UNESCO	United Nations Educational, Scientific and Cultural Organization
	Ventional Education and Training
VET	Vocational Education and Training

### Summary

ndicators are fundamental for measuring progress towards Target 4.7. Therefore, their development should not be left to statisticians but should involve various stakeholders and viewpoints. The way indicators are defined is fundamental to understand the nature of the transformation needed within the 2030 Agenda for Sustainable Development. They are also crucial for improving our performance in implementing the target.

Different contributions are needed to the discussion around indicators for 4.7 to create monitoring frameworks that are culturally responsive, scalable and adjustable, and that take into account the varying and evolving nature of GCED and ESD. Developing these types of frameworks presents an opportunity to reframe Agenda 2030. However, some critics see that it is antithetical to the critical nature of transformative education to impose consensus on it or to look for standardised performance indicators for Target 4.7.

Data gaps and a lack of monitoring systems make it difficult to define indicators at a global level. The current global indicator measures only take into account the formal education sector (national policies, curricula, teacher education, and student assessment). **New global indicators should be developed to address the lifelong essence of Target 4.7. At the same time, they should be framed in a way that data is easy to collect, calculate and interpret.** 

A number of initiatives are currently in place to map how well GCED and ESD are mainstreamed in education policy and practice in different geographical contexts. These studies and surveys provide valuable information and should not be one-off initiatives. **The voluntary country reporting to the UNESCO 1974 Recommendation should be improved to include responses from different stakeholders to a more nuanced set of questions.**  New outcome indicators and monitoring mechanisms, with the help of international large-scale assessments like PISA and ICCS, are also being developed. Although criticised for being Western-oriented and elitist, they can provide new insights and highlight the importance of GCED and ESD for national policymakers. **Their instruments and data analysis should be further developed to address the criticism.** 

The development of the regional and national assessment frameworks should be done in a participatory, multi-stakeholder process, taking into account different worldviews and contexts of learning (formal, non-formal, informal). Different platforms and networks for sharing information and good practices are also crucial for improving the implementation of Target 4.7.

Different actors in the Asia-Pacific region have been active in developing a culturally sensitive competency framework and monitoring mechanisms. **The European Union should also engage in developing a robust monitoring framework for Europe based on already existing initiatives and data sources.** A holistic European framework involving both environmental and social indicators would be useful in building a better understanding of what Target 4.7 entails and how to improve its implementation. It could also build synergies between different EU initiatives and contribute to a more holistic understanding and measurement of Target 4.7 in the European context.

Data on Target 4.7 should be gathered in multiple ways through contributions from researchers, practitioners, educators, the private sector, and public monitoring mechanisms. Different stakeholders should be given opportunities to develop their capacities to gather evidence in a meaningful way and should engage with monitoring and research on Target 4.7. The possible benefit of using digital tools for data collection should be investigated.



### Introduction

This paper was commissioned to support advocacy work for the inclusion of SDG Target 4.7 in European and global policies. It looks at the process of developing indicators and monitoring frameworks for Target 4.7. The SDG Target 4.7 reflects the critical role of education in achieving all 17 SDGs: *By 2030, "ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and culture's contribution to sustainable development.*"

A monitoring framework is required to see if we are on track to achieve this target. Within the SDG framework, indicators and statistical data are used mainly for policy and advocacy purposes: to monitor progress, inform policy and ensure accountability of stakeholders. A robust monitoring framework can also provide valuable insights for practitioners in the field to improve their work. Well-defined indicators give a better understanding of the concrete goal of our work and what types of evidence are required to assess whether we are meeting it. The way indicators are defined is fundamental in understanding the nature of the transformation needed within the 2030 Agenda for Sustainable Development. Thus, indicators also present an opportunity to reframe the Agenda in a new direction.

Through a desk review, this paper investigates the existing and proposed indicators and monitoring frameworks for 4.7. Examining efforts at national, regional, and global levels will identify the main challenges in measurement initiatives. The paper will start by looking at the context of SDGs and the special character of Target 4.7. Thereafter, it will discuss the process and limitations of defining the indicators at the global level. It will also review regional developments, tools, and ideas for national and local level assessment frameworks in Asia-Pacific and Europe. The paper ends with conclusions and policy recommendations. 2

### **Context - The Agenda 2030**

 $\odot$ 

 $\odot$ 

0

0

Sustainable Development Goals (SDGs) or Agenda 2030, adopted in 2015, represent far-reaching, time-bound, often quantified objectives for inclusive and sustainable social and economic development. It is based on the most comprehensive consultative process held so far involving all UN members, and the public, private and third sectors. Agenda 2030 defines sustainable development as a "world in which all nations enjoy economic prosperity, achieve social inclusion, and ensure environmental sustainability" (UN, 2015).

The 17 goals represent the collectively agreed intentions to achieve such a world. However, there are tensions within the SDGs. For example, concerns have been raised about their framing and whether they go far enough in 'transforming our world' (Telleria, 2018). SGDs represent a shift from free market-based, limitless economic growth to a model that emphasises green and inclusive growth. However, critics see a need to denounce the growthbased ideology that is at the root of the many problems SGDs are set to solve.

Despite the different views, the SDGs are the best political outcome of our time to combine the fight against poverty with social inclusion and environmental sustainability. To reach these goals, large-scale societal transformation is needed, and education is increasingly called upon to prepare for this transformation.

Indicators for SDG 4.7



## The special nature of SDG Target 4.7

The wording of the SDG 4.7 is a result of a long political process. Although it does not define the *knowledge and skills needed to promote sustainable development*, it lists a number of transformative forms of education that contribute to them. However, as mentioned above, there are different perceptions of what sustainability means. As a result, there is no clear view of the knowledge and skills that are needed.

UNESCO is the lead organisation for Target 4.7 and has operationalised the target to encompass Education for Sustainable Development (ESD) and Global Citizenship Education (GCED), which both have their supporters inside UNESCO<sup>1</sup>. In the context of SDG 4.7, ESD and GCED are seen as 'transformative' in the sense that they empower learners to become agents of change. UNESCO has developed learning objectives and guidelines and it promotes a complementary approach that includes both forms of transformative education in Target 4.7 (UNESCO 2012, 2015).

Reaching consensus on a definition of these concepts is particularly difficult since they have distinct histories within UNESCO and beyond. Additionally, they are considered as umbrella concepts that encompass a broad range of knowledge, skills, attitudes, values, identities, and behaviours. Nevertheless, the following working definitions are used for the monitoring framework:

#### Education for Sustainable Development (ESD)

ESD empowers learners to make informed decisions and responsible actions for environmental integrity, economic viability, and a just society, for present and future generations, while respecting cultural diversity. It is about lifelong learning and is an integral part of quality education.

#### Global Citizenship Education (GCED)

GCED nurtures respect for all, building a sense of belonging to a common humanity and helping learners become responsible and active global citizens. GCED aims to empower learners to assume active roles to face and resolve global challenges and to become proactive contributors to a more peaceful, tolerant, inclusive, and secure world. Within the academic community, there are different understandings of GCED, which can be categorised as 'softer' and more 'critical' versions<sup>2</sup>. Critics argue that simplistic 'softer' understandings can reinforce inequalities and unequal power relations instead of challenging them (Andreotti, 2006). Attempts to impose a consensus on what GCED is, or to measure it with standardised performance indicators, are deemed problematic as they can lead to replication of already predetermined content and can marginalise the nonmainstream, critical approaches of GCED (Suša, 2019).

Connolly et al. (2019) have mapped different approaches to GCED and monitoring in a recent ANGEL policy paper. According to their assessment, the more critical approaches - for instance, those based on decolonial thinking (critical GCED) - remain largely theoretical and do not offer a practical framework for measuring GCED. The neoliberal approach to education, for example, that frames the OECD and EU approaches, sees education as an investment that can be easily measured. Acquiring global competence is done first and foremost to enhance employability. The global consciousness approach of UNESCO institutions, which promotes liberal humanist values and sees GCED as morally imperative, can be categorised as a 'softer' version of GCED if it does not increase awareness of imbalances of power. In the categorisation by Connolly et al. (2019), measurements based on the neoliberal approach are considered to lack ethical and social dimensions. Measurements based on the global

consciousness approach may include an understanding of human rights and social justice, which are, however, difficult to apply across diverse contexts.

I would argue that the different viewpoints and approaches currently presented by international organisations are not as distinctive as those suggested by Connolly et al. (2019). There is a consensus that all approaches to education are needed to reach the SDGs and Target 4.7. The approach that education is needed to build collective and individual moral and ethical values, and the approach of developing competencies, agency, and participation, are both necessary (see GEMR, 2016). It is also important to include more critical and decolonial views when GCED and ESD are mainstreamed in education policies and lifelong education initiatives. Learning from good practices from other contexts is a good starting point for improved implementation of Target 4.7 but should not limit us from developing something different and better in the future.



### The global monitoring framework for the SDGs

The official SDG data plays a critical role in ensuring that the countries that have signed onto SDGs are held accountable and keep their promises. Therefore a credible and well-defined set of indicators is crucial for all the SDGs.

Monitoring the progress, or lack of it, towards the agreed 17 goals has meant operationalising the 169 subgoals or targets into measurable indicators<sup>3</sup> and developing systems of collecting data on them. The global indicator framework for SDGs was developed by the Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs) and was agreed upon by the United Nations Statistical Commission and the UN General assembly in 2017. It was agreed that the indicator framework would be refined annually. A comprehensive review by the Statistical Commission took place in March 2020 and is planned again in 2025 (UNSD, 2020).

The UNESCO Institute of Statistics (UIS), which is responsible for developing the indicators for the SDG 4 to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all," has ten targets. The indicators were developed initially by the Technical Advisory Group on Post-2015 Education Indicators (TAG), which was established and led by UNESCO in 2014-2015 and finalised by the Technical Cooperation Group on Education 2030-SDG 4 Indicators (TCG), established by the UNESCO Institute for Statistics (from 2016 onwards). It joins 27 UNESCO member states and civil society and international organisations (Sandoval-Hernández et al., 2019)<sup>4</sup>. The work of TAG was supported by the Learning Metrics Task Force (LMTF) – a multi-stakeholder collaboration, led by the UIS and the Center for Universal Education at Brookings. They aimed to find indicators that would measure not only access to education but also learning, to respond to the criticism that children are in school but do not learn. This change poses new challenges for data collection and reporting in all SDG 4 indicators (Holland et al., 2020).

Indicators for SDG Target 4.7 can similarly be divided into two categories: those that measure the educational inputs, e.g. the policies, training, or materials prepared, and those that measure outcomes, e.g. the knowledge and skills achieved (i.e. the 'global competencies' or 'sustainability competencies'). No indicators are defined for processes (pedagogical approaches), although there are views that these are crucial to reach Target 4.7. Academic literature on GCED has been suspicious that the concept of 'competencies' dominantly refers to the neoliberal understanding of education as an investment, emphasising assessment and accountability (see the policy paper on competencies for 4.7). Input indicators are also problematic as they tend to be geared towards formal education systems. Developing indicators for informal and non-formal education sectors has been more complicated (Sandoval-Hernández et al., 2019).

### 4.1 Requirements for global indicators

UIS has set clear requirements for any indicator to be included in the list of global SDG indicators. The process of defining them is organised into two tiers:

**TIER 1**: The indicator is conceptually clear, has an internationally established methodology, standards are available, and data are regularly produced by at least 50% of countries and populations in every region where the indicator is relevant.

**TIER 2:** The indicator is conceptually clear, has an internationally established methodology and standards are available, but data are not regularly produced by countries.

The requirement of a global monitoring framework with regular data collection puts limitations on defining indicators. In addition, the motto of the SDGs is "leave no one behind". This means that the data collected should have disaggregation to mainstream gender equality,



integrate geospatial and statistical information, and common standards and tools should be defined to ensure that everyone is counted (UNSD, 2020).

To date, UIS has been able to define one Tier 1 Global Indicator 4.7.1, which measures *the extent to which global citizenship education (GCED) and education for sustainable development (ESD) are mainstreamed in a) national policies, b) curricula, c) teacher education and d) student assessment.* This indicator measures inputs within the formal education sector but falls short of the intent of Target 4.7 to ensure that all learners, of different ages, *acquire knowledge and skills* for sustainable development (Sandoval-Hernández et al., 2019).

### 4.2 Data collection for the global indicator

Data collection for the global indicator is based on the voluntary country reporting on the Recommendation concerning Education for International Understanding, Co-operation and Peace and Education relating to Human Rights and Fundamental Freedoms adopted by UNESCO in 1974. Every four years, UNESCO invites its member states to report on their implementation of the recommendation. The latest survey questionnaire (the seventh consultation in 2020) sent to national governments (typically ministries of education) was specifically geared towards collecting information on Indicator 4.7.1. It defined the following themes under ESD and GCED: cultural diversity and tolerance, gender equality education, human rights education, peace and non-violence, climate change education, environmental sustainability, human survival and well-being, and sustainable consumption and production. To date, 75 countries have submitted their report to UNESCO and, out of those, more than 60 countries had at least one of the four components (policies, curricula, teacher education, and student assessment) available. The responses of the member states are published in the Global SDG Indicator Database and individual countries can use the UNESCO questionnaire as a basis to define their national monitoring of Indicator 4.7.1. UNESCO will repeat the survey in 2024 as the 1974 Recommendation stipulates that surveys are carried out every four years.

The monitoring process has faced various criticisms. First, the response rate was low during the previous consultation rounds (13% to 43%). It was developed in consultation with the member states with the hope that this would improve ownership and, consequently, response rates. Second, there are concerns about the validity of the responses as they are mainly given by ministry officials and can be subjective. Ministries are increasingly encouraged to consult with civil society and other stakeholders when filling in the questionnaire; as the report will be made public, this allows other groups to check and correct data if necessary (Benavot, 2018; Sandoval-Hernández et al., 2019). Third, though the aim should be lifelong learning of the whole population, the indicator has narrowed the target to formal education. Fourth, definitions used in the 2020 questionnaire for GCED and ESD were considered simplistic and not representative of the spirit of GCED. The themes that were listed under GCED and ESD were narrowly and apolitically defined and failed to mention inequalities in political structures and power relations. This raises the concern that countries are responding to 'soft' versions of GCED and ESD (Da Silva, 2020).

In addition to collecting data through country reporting, UNESCO has been engaged in other studies and mappings to collect baseline data for Indicator 4.7.1.

- The Global Education Monitoring Report (GEMR) and the International Bureau of Education (IBE) developed a coding scheme (global content framework) to evaluate 78 national curricula for evidence of GCED and ESD content. This analysis was presented in GEMR 2016. The GEMR has also launched online tools and databases to support the collection and use of data<sup>5</sup>.
- 2. NISSEM Global Briefs by the Inter-agency Network for Education in Emergencies (INEE) present a collection of peer-reviewed essays from over 60 contributors in the field of education. The articles analyse ways to embed SDG Target 4.7 themes and integrate social and emotional learning into policies, programmes, curricula, materials, and practice in low- and middleincome countries, particularly in fragile and postconflict settings.

- 3. In 2016, UNESCO MGIEP (Mahatma Gandhi Institute of Education for Peace and Sustainable Development), in partnership with UNESCO's Asia and Pacific Regional Bureau for Education and field offices, reviewed the extent to which concepts and competencies associated with SDG 4.7 are mainstreamed in education policies and curricula in 22 countries across the Asia-Pacific region (see MGIEP, 2017).
- UNESCO has conducted thematic studies such as "The Country Progress on Climate Change Education" (UNESCO, 2019a); "Educational content up close: Examining the learning dimensions of ESD and GCED" (UNESCO, 2019b), and "Learn for our planet - A global review of how environmental issues are integrated into education" (UNESCO, 2021).
- 5. A global survey of teachers' readiness to integrate ESD/GCED in their teaching has been conducted and results are forthcoming in November 2021.
- 6. There is also a new consortium formed to monitor and evaluate climate change education led by the University of Saskatchewan in Canada<sup>6</sup>. The Monitoring and Evaluation of Climate Change Education (MECCE) Project can serve as a good example of creating partnerships to develop global indicators and targets to gain a better understanding of effective climate change education globally.

All these different initiatives are brought together at UNESCO's Global Forum on Transformative Education, which is held every two years and brings together 400-500 ESD and GCED practitioners, governments, and experts7. In the 2021 forum, the results of both the seventh consultation on the implementation of the 1974 Recommendation and the global survey of teachers will be presented – together with work related to monitoring 4.7 from many other partners (Kennedy, 2021).



#### 4.3 Tier 2 indicators for Target 4.7

The process to define new and better indicators for Target 4.7 is on-going. The list of Tier 2 indicators for Target 4.7 is renewed annually.

The latest list of indicators was adopted in 2020 and includes the following indicators:

Thematic indicator, Tier 2	Definition	Measuring tools/approaches
4.7.2 Percentage of schools that provide life skills-based HIV and sex education	This indicator tracks the proportion of schools that provide life skills-based HIV and sex education within the formal curriculum or as part of extra- curricular activities. This indicator reflects curriculum delivery in support of national HIV prevention programmes.	Based on administrative data from schools and other providers of education and training. (UNESCO's Annual Survey of Formal 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)	There is a multi-stakeholder consultation process in framing the thematic focus of the World Programme on Human Rights Education.	Evaluation of reports submitted by countries describing how they are implementing the World Programme on Human Rights Education to the Office of the High Commissioner for Human Rights (OHCHR).
4.7.4 Percentage of students in lower secondary education showing an adequate understanding of issues relating to global citizenship and sustainability	International organisations (UNESCO, IEA, OECD) are working to include global competencies related to ESD and GCED into large-scale assessments of the formal sector.	2016 ICCS <sup>®</sup> and 2018 OECD Programme for International Student Assessment (PISA)
4.7.5 Percentage of students in lower secondary education showing proficiency in knowledge of environmental science and geoscience		Trends in International Mathematics and Science Study (TIMMS) <sup>9</sup>
<ul> <li>4.7.6 Extent to which national education policies and education sector plans recognise a range of skills that need to be enhanced in national education systems</li> <li>NOTE: This indicator was not included in the September 2020 data release because no data was available at the UIS.</li> </ul>	<ul> <li>The Breadth of Learning Opportunities (BOLO) initiative provides tools to document:</li> <li>1. whether opportunities are provided for learning across a diverse group of domains, and</li> <li>2. how the key dimensions of an education system (curriculum, assessments, teacher supports, monitoring, and school resources) align to support the delivery of broad learning opportunities</li> </ul>	Brookings Institution and Education International (EI) are working to develop tools to measure the breadth of learning opportunities to which children and youth are exposed in an education system. <sup>10</sup>

Parallel to finding ways to measure Indicator 4.7.1, work has been done to develop indicators on learning outcomes supported by the Global Alliance for Monitoring Learning (GAML) (see indicators 4.7.4 and 4.7.5). The discussion on indicators is happening within the Technical Cooperation Group (TCG). These two indicators are more in line with the general emphasis on educational outcomes within the SDGs, as well as the prevailing education paradigm of emphasising competencies. UNESCO has been working with the International Association for the Evaluation of Educational Achievements (IEA) to include ways of monitoring Target 4.7 in the International Civics and Citizenship Study (ICCS), which assesses the dispositions or competencies of Grade 8 students in civics. According to UNICEF, most themes/aspects of GCED and ESD overlap and are conceptualised under the umbrella term "civic and citizenship education", as measured by ICCS. According to UIS, other International Large-Scale Assessments (ILSAs) with the potential to monitor progress on 4.7.4 and 4.7.5 are the Trends in International Mathematics and Science Study (TIMMS), the Teaching and Learning International Study (TALIS), and the Programme for International Student Assessment (PISA) (Sandoval-Hernández et al., 2019). There have also been discussions to include global competence in future TALIS assessments.



#### The 2018 PISA included a new Global Competencies Framework and Assessment. This assessed the ability of 15-year-olds to:

- appreciate and examine issues of local, global and cultural significance;
- understand and appreciate the perspectives and worldviews of others;
- engage in open, appropriate, and effective interactions across cultures:
- take action for collective well-being and sustainable development.

The assessment also included a background questionnaire for students to report how familiar they are with global issues and what opportunities they have at school to develop global competence. The background questionnaire filled in by principals and teachers aimed at obtaining a comparative picture of how education systems are integrating global, international, and intercultural perspectives throughout the curriculum and in classroom activities (OECD, 2018). Sixty-six countries answered the background questionnaire, which also contributes to measuring Indicator 4.7.1.

There is strong opposition to competitiveness and 'neoliberal ideologies' of assessment and accountability behind ILSAs. The OECD PISA Global Competencies questionnaire has also been criticised as being neoliberal, Western-oriented and elitist and lacking the dimension of global social justice (Auld & Morris, 2019; Connolly et al., 2019). In the academic literature, there is scepticism towards OECD and PISA in particular, as the suc-

cess of this measuring tool has given OECD authority and legitimacy to guide global educational policy and practice. More and more countries are engaging voluntarily with PISA, and the results have led to policy changes. Many see that it has also led to the 'narrowing of the curricula' to only the subjects being tested (Finnemore and Sikkink, 1998). Despite criticism, the data collected by ILSAs can prove to be valuable for monitoring the target and for strengthening GCED and ESD. Both Indicators 4.7.1 and 4.7.4 can be useful advocacy tools to influence national governments to increase the scope and relevance of GCED and ESD at national and regional levels. For example, the results of the 2018 PISA Global Competencies Assessment show a positive correlation between the number of educational activities and the level of competencies (PISA, 2020). This provided a strong rationale for including more ESD and GCED in the curriculum. A stronger position in education policy also provides more room for the critical aspects of GCED and ESD.

Assessment platform	Research questions	Links with Target 4.7	Year
IEA - ICCS Civic and Citizenship Education	Determine the antecedents, processes and outcomes of student achievement and engagement in civic and citizenship education in participating member countries New ICCS 2022 in current development	<ul> <li>Civic Society and Systems;</li> <li>Civic Principles;</li> <li>Civic Participation and</li> <li>Civic Identities</li> </ul>	2016 2022
OECD - PISA Global Competence	Determine the knowledge, skills, attitudes, and dispositions towards global issues among 15-year-olds in participating countries, as well as aspects of the global employability and mobility of young people	<ul> <li>Culture and intercultural relations</li> <li>Socioeconomic development and interdependence</li> <li>Environmental sustainability</li> <li>Global institutions, conflicts and human rights</li> </ul>	2018
SEAMEO-UNICEF SEA-PLM <sup>11</sup> Global Citizenship	Determine children's and teachers' attitudes, values, and engagement in global citizenship- related topics in six member countries of SEAMEO	<ul> <li>Global citizenship systems, issues and dynamics</li> <li>Global citizenship identities and awareness</li> <li>Global citizenship engagement</li> </ul>	2019

#### Table: ILSAs measuring Target 4.7

Modified from APCIEU (2020)

The current Global Indicator 4.7.1 relates to the formal education sector. More emphasis on developing indicators for informal and non-formal education is needed to measure the transformative potential of lifelong learning. UNESCO UIL (Institute of Lifelong Learning) is preparing a Measurement of Adult Education and Learning that could offer a solution to this problem. The GRALE V report, with a thematic focus on citizenship education, is expected in 2022. The International Conference on Adult Education (CONFINTEA), due to take place in 2022 in Morocco, will also focus on the role of adult education in Agenda 2030 (see more discussion in the Bridge 47's publication "Unlocking the transformative potential of education: the alliance between Lifelong Learning and SDG Target 4.7"). However, similar to the criticism of the reporting on the UNESCO 1974 Recommendation, there are questions about the validity of GRALE reporting. 5

### Indicators at a regional level



Having a Tier 1 Global Indicator for Target 4.7 is a prerequisite for getting the target included in the regional, national and local monitoring frameworks<sup>12</sup>. Regional organisations and UN member states are given the task of including the global SDG indicator in their work at the regional and national levels (Benavot, 2019).

The requirement of representative data collection makes defining global indicators challenging at the global level. However, defining more substantial and context-dependent indicators is more feasible at regional and national levels, especially in areas where there are good existing statistics and methods for data collection. In this regard, we will now examine developments in two regions: the Asia-Pacific region and Europe.

### 5.1 Developments in the Asia-Pacific region

The Asia-Pacific region has been most active in developing a joint monitoring framework for 4.7. As mentioned above, work has already been done in the Asia-Pacific region to map the baseline for Target 4.7 through the study conducted by UNESCO MGIEP and UNESCO Bangkok. In addition, APCEIU (Asia-Pacific Centre of Education for International Understanding) is in the process of developing a monitoring framework and assessment tools for the region. In 2020-21, the centre has been conducting a feasibility study to develop a joint competency framework for Global Citizenship Competencies for the region, which will be developed in Phase II with a set of suggested assessment tools for its monitoring (APCEIU, 2020).

In addition, the Association of Southeast Asian Nations (ASEAN) Work Plan on Education 2016-2020 included the Southeast Asia Primary Learning Metrics (SEA-PLM) – an assessment tool to measure literacy, numeracy, and global citizenship in Grade 5 (see table 2). The first main SEA-PLM survey took place in 2018 in six countries<sup>13</sup>. It is set to take place every four years thereafter and the number of participating countries is expected to increase (UNICEF and SEAMEO, 2020).

Both the SEA-PLM and APCEIU's draft measurement framework recognise that culture plays a role in defining global citizenship and competencies related to it. The assessment frameworks developed by ASEAN link the concept of global citizenship within the ASEAN Charter as "moral global citizenship", and notions of "collectiveness", "relationship", "social harmony" and "self-cultivation" are reflected in the joint assessment framework (UNICEF and SEAMEO, 2020; APCEIU, 2021). At the same time, the framework places less emphasis on democratic values, human rights, and political citizenship. IEA's ICCS has also recognised the need for a contextual, regional framework of GCED. In 2009, it implemented a special regional survey in five Asian countries<sup>14</sup>. This study focused on Asian identity and issues such as students' perceptions of the role of government; status and authority; Asian identity; good citizenship; social harmony, and views on the preservation of traditional cultures (Ainley et al., 2012).

#### **5.2 Developments in Europe**

In Europe, the understanding of global citizenship has emphasised democracy, human and civil rights, and diversity. At the same time, the education systems within the European Union (EU) have become homogenised, with a competency-based model in which neoliberal policies of quality, efficiency, assessment, and accountability prevail. The EU, as an economic organisation, emphasises skills for employment as the objective for education and training. Traditionally, the EU's role in education policy has been limited, but this is changing. Policy cooperation, developing a unified qualifications framework, and funding instruments like the Erasmus+ and DEAR (Development Education and Awareness Raising) programmes have played an important role in the implementation of ESD and GCED in many EU countries.

There are various initiatives, like GENE (Global Education Network in Europe), that have already been mapping GCED in Europe. Opinion surveys (e.g. Eurobarometer) are also organised regularly. Eurydice monitors the European education systems within the Erasmus+ programme. Thus, various data sources could be used to monitor Target 4.7 within Europe. However, the European Commission has included neither Target 4.7 in its SDG Indicator Set nor the education indicators related to the EU Education and Training 2020 Strategic Framework.

The EU should work towards mainstreaming ESD and GCED in education and training policies and programmes and should develop an overarching assessment strategy to measure progress towards Target 4.7 that would support and create linkages between many of the existing and planned initiatives:

- The new European Education Area foresees the development by 2025 of new EU-level targets and indicators for education and provides an opportunity to include indicators related to 4.7. These will be monitored by the annual Education and Training Monitor, using the expertise of the Standing Ground on Indicators and Benchmarks (Council Resolution 2021/C 66/01).
- There is an on-going process to develop a Green Competencies Framework (GreenComp)15 linked to the Green Deal adopted in 2020. Similarly, the European Skills Agenda for Sustainable

Competitiveness, Social Fairness and Resilience (2020) emphasises the importance of upskilling and reskilling the competencies of EU citizens to support the 'green transition'. It aims to define new tools and indicators to monitor the development of 'green skills' linked to professions as well as to integrate environmental and climate considerations into school, higher education, and vocational education and training (EU, 2020b).

- There is also an emphasis on social, civic, and intercultural competencies within the EU. Democratic values and fundamental rights, social inclusion, nondiscrimination, and active citizenship are promoted. These are the key issues of the 'Declaration on promoting citizenship and the common values of freedom, tolerance, and non-discrimination through education', also known as the Paris Declaration, which the EU ministers of education in response to the terrorist attacks in Paris in 2015. This declaration also emphasises critical thinking, media literacy, and intercultural dialogue (Eurydice, 2016)..
- A recent evaluation of the DEAR programme called for an enhanced results framework. This could also assist in measuring Target 4.7. Currently, DEAR projects do not feed into the EU Results Framework (EU RF), which monitors how EU development cooperation efforts support the SDGs (DEAR Support TEAM, 2021).

Combining the ideas and information from these different areas could contribute to making stronger indicators for Target 4.7. In particular, the plan to develop a multidisciplinary competency framework for the Green Deal is a positive initiative as it will help in assessing the knowledge, skills, and attitudes of European citizens towards climate change and sustainable development. However, how this task is defined suggests16 that it will limit itself on 'green', i.e. environmental issues without a more holistic understanding of sustainability, which also includes issues of global justice.

Including indicators for Target 4.7 into the EU's SDG and education indicator sets could be part of a broader, more ambitious vision and strategy recognising the importance and contribution of lifelong education to sustainable and peaceful societies. Agreeing on a joint strategy and framework at the EU level would also be a crucial step in including the indicators for Target 4.7 in monitoring frameworks of EU member states in the future.



# A joint effort in gathering relevant data

Most of the SDG's targets are directly related to the responsibilities of local, regional, and national governments. Thus, monitoring frameworks at all these levels is a priority. State-sanctioned statistical systems have a central role in generating, disseminating and administering data but they can be supplemented by data and analysis from other partners. SDGs share a vision of a 'data revolution where universities, research centres, civil society, and the private sector can all contribute to the task of collecting and analysing data for the monitoring and achievement of the SDGs'. Many people talk also about the idea of 'citizen science', of encouraging all citizens to participate in observing, gathering, and processing data, based on a robust scientific methodology that ensures the quality of the data collected and a fair representation of all stakeholders involved (McFeely, 2018).

In 2018, the SDG-Education Steering Committee recommended that governments should establish holistic national evaluation and learning assessment systems and conduct cross-national assessments in education to monitor progress in targets under SGD 4 (McFeely, 2018; Holland et al., 2020). Similarly, the G20 Policy Brief recommends the integration of national ESD and GCED assessment frameworks into a collaborative strategy where data is drawn from a combination of large-scale assessment instruments, case studies, and other research (Holland et al., 2020). The MECCE initiative on climate change education is a good example of this collaborative approach. Researchers are increasingly contributing to the development of new assessment frameworks that for Target 4.7 mainly use the competencies for ESD (see, for example, Burford et al., 2016). As mentioned above, academics working in the field of GCED are more critical of the approach of pre-defined competencies and indicators. Raising the global status of ESD and GCED would, however, benefit from the contribution from multidisciplinary academic research that contributes to the quest of finding suitable indicators on which data is easy to collect, calculate and interpret. One aspect that has not received much attention is the 'process' of education, particularly teaching methodology - e.g., different innovative pedagogies that contribute positively to achieving Target 4.7 and measuring their application.

In the formal education sector, schools and teachers can take part in monitoring networks and initiatives that do not only monitor what the school does but also measure changes in the school environment<sup>17</sup>. For practitioners of GCED and ESD, there is also a need to become more engaged in monitoring and research, and to reflect on the purpose of educational interventions and ways of collecting evidence. Effective assessment frameworks are not an add-on measurement at the end of a project; they help to gain a deeper understanding of the purpose and practice of an intervention or activity and need to be embedded in the learning cycle of planning, implementation, and reflection (Giangrande et al., 2019). The increased emphasis on digital learning has increased the different and innovative ways that data can be collected and monitored. MGIEP has, for example, been supporting Digital Technology for Youth-led Monitoring of the SDGs. Their app "MEdAL – Monitoring Education and Learning" uses a crowd-sourced approach of monitoring issues at a local level, and then mapping the insights to compute the quantitative measures of learning, responsiveness, and competency of local communities (MGIEP, 2017). There is a plethora of similar digital initiatives that can offer solutions to some of the challenges in data gaps (see GEFI-YAG, 2017).

The need for more data as evidence of learning suggests the need for capacity-building at different levels. There is a need to support and resource countries and actors, especially in the Global South, to develop their assessment systems to monitor global indicators. Similarly, all actors need to build their capacities to gather evidence on learning outcomes. For this, collaboration among researchers, academics, policymakers, and practitioners should be encouraged to develop more strategic and cumulative research data that is useful both for monitoring and policymaking on Target 4.7. There should also be more research into whether new digital tools can prove to be useful for assessment and data collection on Target 4.7.



### Conclusions

Although the SDGs are not perfect, they form a starting point in the journey towards a more sustainable future. The challenges posed by the COVID-19 pandemic make it all the more important to see that we stay on track to achieve global goals. The pandemic can also be a catalyst to 'build back better'.

The different understandings and nature of GCED and ESD make Target 4.7 hard to measure. Notwithstanding, efficient and accurate systems to assess progress towards the SDG commitments are needed to monitor whether we are moving in the right direction and for strengthening implementation.

Effective indicators must be measurable, relevant, reliable, and comprehensible. The development of good global indicators for Target 4.7 is limited by the considerable lack of data and mechanisms to collect them regularly. Considerable work is being done within UNESCO and partnering organisations to address this gap. The Global Indicator 4.7.1 about educational inputs in the formal education sector has been established as the main indicator for Target 4.7, but there are attempts to complement it with other indicators that also cover education outcomes as well as informal and non-formal education.

The processes at local, national, and regional levels can define better indicators for local realities. Adaptive

frameworks that support local and contextual learning need to be developed. These measuring frameworks should reflect the different understandings of both the ESD and GCE.

The process of defining indicators for Target 4.7 can be a useful process of bringing together different actors in the various 'educations' within Target 4.7 (ESD, GCED, Human Rights Education, Intercultural Education, etc.). The complexity and breadth of perspectives seem to call for a large variety of measuring frameworks, tools, and approaches. These should be prepared in a joint process, also considering more critical notions of GCED and ESD.

### This desk research suggests the following policy recommendations:

- Indicators are fundamental for measuring progress towards Target 4.7. Their development should involve various stakeholders and viewpoints to create monitoring frameworks that are culturally responsive, scalable, and adjustable, and that consider the varying and evolving nature of GCED and ESD.
- New global indicators should be developed to address the lifelong perspective of Target 4.7
- The voluntary country reporting to UNESCO should be improved to include responses from different stakeholders to a more nuanced set of questions. The questionnaires should be developed in a way that encompasses different views and meanings and the reporting should be a joint task. It should be done in a participatory way involving different stakeholders (the government, private sector, and civil society). This would make reporting more participatory and trustworthy.
- The large-scale international assessments like the PISA Global Competence Assessment should be further developed to address the criticism of being Western-oriented and elitist and should invite more 'Southern' scholars or practitioners into the conversation and taking into account indigenous perspectives.

- The development of the regional and national assessment frameworks should be done in a participatory, multi-stakeholder process, taking into account different worldviews and contexts of learning (formal, non-formal, informal).
- The European Union has various activities that could be linked to developing more relevant Target 4.7 indicators but currently, they operate in separate bureaucratic silos. A joint monitoring framework for 4.7 that could include a more holistic notion of sustainability and global citizenship and link all aspects of lifelong learning is needed. The EU should play a major role in developing an assessment framework for Target 4.7, with indicators that help in gathering information from the existing EU initiatives linked to GCED and ESD. The EU-level framework should feed into similar processes in the member states. There should also be processes and mechanisms in place for sharing good practices and learning from each other. Adequate, long-term funding for ESD, GCED, and monitoring activities should also be part of the next EU Multiannual Financial Framework (2021-2027).
- Data on Target 4.7 should be gathered in multiple ways through contributions from researchers, practitioners, the private sector, and public monitoring mechanisms.

### Footnotes

- Japan has been the main supporter of ESD, which has been discussed within UNESCO since 1992. It led the UN Decade for ESD from 2005 to 2014, as well as its follow-up, the Global Action Programme (GAP), from 2015 to 2019. From 2020, there is a new agenda: #ESD for 2030. The UN Secretary-General, Mr Ban Ki-moon, was again a strong supporter of GCED and included fostering global citizenship, one of its three overarching priorities for education, in the Global Education First Initiative launched in 2012. Since then, Korea has been a strong supporter of GCED activities within UNESCO (Tibbitts, 2015).
- 2 Soft GCED is defined as promoting universally agreed values and ideas of the 'good' and 'right' way of living from a humanitarian perspective, with the aim of empowering people to 'act'. Critical GCED is based on the ideas of inequality and injustice, with the aim of empowering people to think critically about the legacies of their cultures and to imagine different futures (Andreotti, 2006).
- 3 The current number of unique global indicators is 231 and data on most of them can be found on the UN statistics webpage: https:// unstats.un.org/sdgs/indicators/database/
- 4 The TCG adopted the thematic indicator framework for the ten education targets in October 2016. It currently has 43 indicators, including six indicators for Target 4.7. Twelve of these are 'global indicators', i.e. included in the overall SDG database.
- 5 These include: the Worldwide Inequality Database on Education (WIDE); the online publishing and data-visualisation tool, Scoping Progress in Education (SCOPE); and the online platform, Profiles Enhancing Education Reviews (PEER) to describe countries' laws and policies on inclusion and education (GEMR webpage).
- 6 Established in 2020, MECCE unites over 80 leading scholars and agencies in a research-based partnership, which has a \$2.5 million partnership grant funded by the Social Sciences and Humanities Research Council in Canada and over \$2 million in partner contributions. MECCE aims to generate a new understanding of quality climate change education, training, and public awareness based on synthesised literature and case studies (some 100 case studies are planned); develop monitoring indicators and robust data collection processes, and increase the quantity and quality of effective climate change education policy and practice (https://sepn.ca/mecce/).
- 7 The next Global Forum will take place virtually from 29 November to 1 December 2021 and will be hosted by the Republic of Korea. The theme for the 2021 forum is measuring progress towards SDG Target 4.7
- 8 14 EU Member States and nine other countries participated in 2016 ICCS.
- 9 In the last TIMMS, there were 11 EU Member States and 31 other countries participating.
- 10 Tools developed by the National Foundation for Educational Research were piloted in Bhutan, Costa Rica, and The Gambia in September 2020. Aspects of the 'breath of learning' refer to teaching and learning, assessment and accountability, and an enabling environment (Anderson et al., 2018).
- 11 The Southeast Asia Primary Learning Metrics (SEA-PLM) is a regional programme to assess learning outcomes of Grade 5 students.

- 12 A quick look at some of the national SDG monitoring frameworks suggests that, so far, only a few countries have included indicator 4.7.1 into their national list of SDG indicators and report on it in their Voluntary National Reviews (VNR). Based on the data, more than 60 countries collected data for the UNESCO 1974 Recommendation in 2020, if it is feasible to include it. Moreover, developing new, improved indicators at the national level would be a beneficial effort to improve monitoring of Target 4.7.
- 13 The six countries that participated in 2018 and 2019 SEA-PLM were Cambodia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines and Viet Nam.
- 14 The five countries that participated in the study were Chinese Taipei, Hong Kong SAR, Indonesia, the Republic of Korea, and Thailand.
- 15 The Green Deal states that a competence framework is needed to help develop and assess knowledge, skills and attitudes on climate change and sustainable development. The EU has previously developed three European common reference frameworks: the Digital Competence Framework for Citizens (DigComp); the Entrepreneurship Competence Framework (EntreComp); and the Personal, Social, and Learning to Learn competence Framework (LifeComp) (Bianchi, 2020).
- 16 See, for example, the call for proposals: Building a low-carbon, climate resilient future: Research and innovation in support of the European Green Deal (H2020-LC-GD-2020)
- 17 There are good examples of this in environmental education, e.g. the Baltic Sea Network and Globe - schools that monitor environmental changes based on scientific indicators and monitoring instruments. A challenge could be to define something similar for social and global issues.

### References

Ainley, J., Fraillon, J., & Schulz W. (2012). ICCS 2009 Asian report: Civic knowledge, attitudes, and engagement among lower-secondary students in five Asian countries. https://research.acer.edu.au/civics/17

Andreotti, Vanessa (2006). Soft Versus Critical Global Citizenship Education. Policy and Practice, a Development Education Review. Issue 3, Autumn 2006. Centre for Global Education.

Anderson, K., Hegarty, S., Henry, M., Kim, H., Care, E. (2018). Breadth of Learning Opportunities - A fresh approach to evaluating education systems. The Brookings Institution www.brookings.edu/research/breadth-of-learning-opportunities

APCIEU (2020). Feasibility Study on Monitoring Global Citizenship Competences in the Asia-Pacific Region (Phase I). APCIEU Working Paper.

Auld, E., and Morris, P. (2019). "Science by Streetlight and the OECD's Measure of Global Competence: A New Yardstick for Internationalization?" Policy Futures in Education 17, no. 6: 677–98. https://doi.org/10.1177/1478210318819246.

Benavot, Aaron (2019). "The Past and Future of SDG 4.7." FreshEd #141: The FreshEd Podcast. https://soundcloud.com/freshed-podcast/freshed-141-the-past-and.

Bianchi, G. (2020). Sustainability Competences - A Systematic Literature Review. EC Joint Research Centre.

Bianchi, G., Sala, A., Cabrela Giraldez, M. (2021). Workshop on a European Competence Framework on Education for Sustainability. Working paper, European Commission, March 2021.

Burford, G., Tamás, P., Harder, M.K. (2016). Can We Improve Indicator Design for Complex Sustainable Development Goals? A Comparison of a Values-Based and Conventional Approach. *Sustainability* 2016, *8*, 861. https://doi.org/10.3390/su8090861

Conolly, J., Lehtomäki, E. & Scheunpflug, A (2019). Measuring Global Competencies: A Critical Assessment. ANGEL Briefing Paper.

Da Silva, A. (2020). Important dimensions of SDG Target 4.7 that are missing in UNESCO's monitoring framework. FN Sambandet. 18.11.2020. Accessed: https://www.fn.no/nyheter/important-dimensions-of-sdg-target-4.7-are-missing-in-unescos-monitoring-framework

DEAR Support TEAM (2021). DEAR Programme Monitoring, Evaluation and Learning

(MEL) GAP Analysis.

European Commission (2020). European Skills Agenda for Sustainable Competitiveness, Social Fairness, and Resilience.

European Commission (2019). The European Green Deal - COM(2019) 640 final. [Accessible at: https://eurlex. europa.eu/legal-content/EN/TXT/?qid=1588580774040&uri=CELEX:52019DC0640]

GAML (Global Alliance for Measurement on Learning) (2017). Measurement Strategy and Proposal for monitoring Target 4.7. Accessed via http://uis.unesco.org/sites/default/files/documents/gaml4-measurement-strategy-sdg-target4.7.pdf

GEFI-YAG (2017). Measuring Global Citizenship Education: A Collection of Practices and Tools.

GEMR (2016). Education for People and Planet: Creating Sustainable Futures for All. Paris: Unesco, 2016.

Giangrande, N., White, R. M., East, M., Jackson, R., Clarke, T., Saloff Coste, M. & Penha-Lopes, G. (2019). A competency framework to assess and activate education for sustainable development: Addressing the UN sustainable development goals 4.7 challenge. Sustainability, 11(10), 2832.

Holland, C., Bennett, D., Mughal, A., Ni, H. (2020). G20 collaborative strategy for SDG 4 Target 4.7: Monitoring progress in education for sustainable development and global citizenship education. G20 Insights. November 2020.

IBE (2016). *Global Monitoring of Target 4.7: Themes in National Curriculum Frameworks*. Paris: International Bureau of Education - UNESCO.

Kennedy, Alison (2021). Presentation at Bridge47 Global Policy Working Group Meeting on June 22, 2021

Marron, K. & Naughton, D. (2019). "Using Learning Assessment Data to Monitor Progress for SDG target 4.7." Bridge 47 – Building Global Citizenship. https://bridge47.org/sites/default/files/2019-10/using\_learning\_assessment\_data\_to\_monitor\_progress\_for\_sdg\_target\_4.7\_0.pdf.

McFeely, Steve (2018). *The 2030 Agenda - An Unprecedented Statistical Challenge*. Friedrich Ebert Stiftung. http://library.fes.de/pdf-files/iez/14796.pdf

MGIEP/ The UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development (2017). Rethinking Schooling: The State of Education for Peace, Sustainable Development and Global Citizenship in Asia

Sandoval-Hernández, A., Miranda, D., (2019). Measurement Strategy for SDG Global Indicator 4.7.1 and Thematic Indicators 4.7.4 and 4.7.5 using International LargeScale Assessments in Education Proposal

http://gaml.uis.unesco.org/wp-content/uploads/sites/2/2019/08/GAML6-REF-9-measurement-strategy-for-4.7.1-4.7.4-4.7.5.pdf

Schulz, W., Ainley, J., Fraillon, J., Losito, B., Agrusti, G. & Friedman, T. (2018). *Becoming citizens in a changing world: IEA International Civic and Citizenship Education Study 2016 international report*. Cham: Springer International Publishing.

Smart, A., Sinclair, M., Benavot, A., Bernard, J., Chabbott, C., Russell, G. and Williams, J. (Eds) (2019). Nissem Global Briefs.

Suša, R. (2019). Global Citizenship Education (GCE) for Unknown Futures: Mapping Past and Current Experiments and Debates. Bridge 47.

Telleria, J. (2018). Can we 'transform our world' without affecting international power relations? A political analysis of the United Nations development agenda, Globalizations, 15:5.

#### DOI:10.1080/14747731.2018.1467744

Tibbitts, F. (2015). Curriculum Development and Review for Democratic Citizenship and Human Rights Education Prepared for UNESCO, the Council of Europe, the OSCE Office for Democratic Institutions and Human Rights and the Organization of American States.

UN Sustainable Development Knowledge Platform: https://sustainabledevelopment.un.org/vnrs/

UNSD (2020): UN Statistical Department, Metadata on Target 4.7. Last updated September 2020.

Accessed 12 April 2021 at https://unstats.un.org/sdgs/metadata/files/Metadata-04-07-01.pdf.

UNESCO (2016). Global Monitoring of Target 4.7, Themes in National Curriculum Frameworks, Background paper prepared for the 2016 Global Education Monitoring Report. IBE-UNESCO.

UNESCO Executive Board, 209th, 2020 [488]

UIS (2017). Measurement strategy for SDG Target 4.7. Madrid: UNESCO Institute for Statistics.

UIS (2020). Technical Cooperation Group: Report For 2020. 7th TCG Meeting Report and Indicator Development for 2020.

UN (2015). Transforming our world: the 2030 Agenda for Sustainable Development

UNESCO (2012). Education for Sustainable Development Sourcebook. Paris: UNESCO.

UNESCO (2015). Global Citizenship Education, Topics and Learning Objectives. Paris: UNESCO.

UNESCO (2019a). Country progress on climate change education, training and public awareness: An analysis of country submissions under the United Nations Framework Convention on Climate Change. Paris: UNESCO

UNESCO (2019b). Educational Content up Close: Examining the Learning Dimensions of Education for Sustainable Development and Global Citizenship Education. Paris: UNESCO

UNESCO (2021). Learn for our planet - A global review of how environmental issues are integrated in education. Paris: UNESCO.

UNESCO Executive Board (2020), 209th,[488]

UNICEF & SEAMEO (2020). SEA-PLM 2019 Main Regional Report: Children's learning in Six Southeast Asian countries. Bangkok, Thailand: United Nations Children's Fund (UNICEF & Southeast Asian Ministers of Education Organization (SEAMEO) – SEA-PLM Secretariat.

UNSD (2020). United Nations Statistics Division. https://unstats.un.org/home/



#### Bridge 47– Building Global Citizenship

The lead partner for Bridge 47 is Fingo ry (Elimäenkatu 25–27, 00510 Helsinki, Finland).

contact@bridge47.org www.bridge47.org



This document has been produced with the financial assistance of the European Union. The contents of this document are the sole responsibility of the 14 project partners and can in no way be taken to reflect the views of the European Union.

