



POLICY BRIEF
**G20 COLLABORATIVE STRATEGY
FOR SDG 4 TARGET 4.7:
MONITORING PROGRESS IN
EDUCATION FOR SUSTAINABLE
DEVELOPMENT AND GLOBAL
CITIZENSHIP EDUCATION**



Task Force 7
**G20 SUPPORT FOR SDGS AND DEVELOPMENT
COOPERATION**

Authors

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HUAN NI**

موجز السياسة
الاستراتيجية التعاونية لمجموعة
العشرين فيما يخص الهدف 4.7 من
النقطة رقم 4 من أهداف التنمية
المستدامة: مراقبة التقدم نحو التعليم
في مجال التنمية المستدامة والمواطنة
العالمية

فريق العمل السابع
دعم مجموعة العشرين لأهداف التنمية المستدامة
والتعاون الإنمائي



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ABSTRACT

The COVID-19 pandemic serves as an important reminder for the need for global solutions and solidarity among nations to address global challenges. This includes the challenges articulated within the 17 sustainable development goals (SDGs) under the 2030 Agenda for Sustainable Development. This policy brief seeks to harness the expertise and experience of the Group of 20 (G20) partnership to accelerate the quality monitoring of Target 4.7 under SDG 4. It proposes the establishment of structures that enable more holistic tracking of the integration of education for sustainable development and global citizenship within policies, teacher education, curricula, and learner assessment at all levels of education.

ان جائحة كوفيد-19 تلعب دورا مهما في التذكير بأن هناك حاجة إلى إيجاد حلول عالمية وتضامنية بين الأمم لمعالجة التحديات العالمية. ومن ضمن تلك التحديات المفصلية ضمن أهداف التنمية المستدامة السبعة عشر (17) وفقاً لأجندة 2030 للتنمية المستدامة. ويهدف ملخص السياسة هذا إلى استغلال خبرات وتجارب شراكة مجموعة العشرين من أجل تسريع المراقبة عالية الجودة للهدف 4.7 من النقطة رقم 4 من أهداف التنمية المستدامة. ويقترح إنشاء هياكل تنظيمية تسمح بالمزيد من التتبع الشامل لدمج التعليم التنموي المستدام والمواطنة العالمية ضمن السياسات وتعليم المعلمين والمناهج الدراسية وتقييم المتعلمين بجميع المستويات التعليمية.



CHALLENGE

This policy taskforce prioritizes making improvements in the G20's capacity to monitor progress on the 2030 Agenda for Sustainable Development (United Nations General Assembly 2015). Given the limited time remaining to address the challenges within Agenda 2030, this policy brief proposes actions that can accelerate the monitoring of progress made by G20 countries toward achieving Target 4.7¹ under SDG 4. Target 4.7 is concerned with the implementation of Education for Sustainable Development (ESD) and Global Citizenship Education (GCED) within policies, teacher education, curricula, and assessment at all levels of education.

ESD² and GCED³ are both understood within this policy brief as educational processes that empower learners to make critically informed decisions and take actions that ensure economic, environmental, societal, and cultural sustainability for present and future generations (UNESCO 2014, 2015, 2019d). GCED is understood as fostering peaceable futures by engendering “a sense of belonging [among learners] to a broader community and common humanity” (UNESCO 2015, 14). There are different understandings and applications of ESD and GCED within and across countries (Pashby 2015; Dower and Williams 2016; Akkari and Maleq 2019). Some argue that these educational processes can promote capitalist dominated agendas and (Western) worldviews driving neoliberalism and individualism (Sharma 2018, 2020; Dill 2012, 2013). Thus, they re-enforce unequal power relations (Jickling and Wals 2008; Hellberg and Knutsson 2016; Holfelder 2019; Sjögren 2019) and practices that can be “dissociated from local needs and realities” (UNESCO 2018a, 2).¹

Progress toward achieving Target 4.7, specifically the implementation of ESD-GCED at the national level, must be assessed. Therefore, ESD-GCED evaluation frameworks that are culturally responsive, scalable, and adjustable, and that examine cognitive, social and emotional, and behavioral dimensions of sustainability and global citizenship must be developed (UNESCO 2019d). The varying, multi-layered, and evolving

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1. SDG 4: Target 4.7: “By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development” (United Nations General Assembly 2015, 17).
 2. ESD “empowers learners to take informed decisions and responsible actions for environmental integrity, economic viability and a just society, for present and future generations, while respecting cultural diversity” (UNESCO 2014, 12).
 3. GCED aims to “empower learners of all ages to assume active roles, both locally and globally, in building more peaceful, tolerant, inclusive and secure societies” (UNESCO 2019d, 10), and “emphasizes political, economic, social and cultural interdependence and interconnectedness between the local, the national and the global” (UNESCO 2015, 14).

nature of ESD and GCED must also be considered. In 2018, the SDG-Education 2030 Steering Committee recommended that governments should establish holistic national evaluation and learning assessment systems and conduct cross-national assessments in education to assess progress in reaching targets outlined under SDG 4 (Paul 2018; UNESCO 2018c). A significant challenge in establishing these more holistic national evaluation processes vis-à-vis Target 4.7 is the dearth of models (operationalized at a country level) that integrate qualitative forms of assessment while monitoring ESD-GCED integration. There have been criticismsⁱⁱ of the conflicting motivations in and competitive nature of certain large-scale assessments in education exercises (Morris 2016; Engel, Rutkowski, and Thompson 2019; Goren et al. 2020). There have been concerns about their democratic deficits (Sousa, Grey, and Oxley 2019), lack of cultural responsiveness, and ineffectiveness in using these instruments to examine the ESD-GCED integration and outcomes. There are claims that large-scale international assessments mainly assess Western notions of global competence with little or no recognition of the assessment of (local) knowledge, skills, values, or actions (Auld and Morris 2019a, 2019b). Finally, as this policy brief will illustrate, there is considerable variation in the participation of G20 countries in large-scale international education assessment exercises. This presents challenges for any proposed national or cross-national analysis of their contributions to Target 4.7.

This policy brief calls for the establishment of a collaborative strategy among G20 partner countries to develop holistic assessment frameworks that can be deployed to monitor progress in implementing ESD-GCED at the national level. These frameworks will enable the capture and interpretation of relevant assessment data from both large-scale international assessments in education and qualitative case studies on ESD-GCED integration that are grounded locally.



PROPOSAL

This policy brief proposes the formation of a collaborative strategy to monitor progress on the implementation of ESD and GCED across the G20 countries. The G20 Collaborative Strategy will focus the efforts of the G20 partnership on accelerating monitoring through the design and implementation of holistic frameworks for mapping progress on ESD-GCED at the local and national levels. The creation and enactment of this collaborative strategy on ESD-GCED by the G20 partnership will demonstrate the seriousness of its commitment to track progress in achieving Target 4.7 under SDG 4. It will provide evidence of ESD-GCED integration and accompanying outcomes. To ascertain the progress made toward achieving Target 4.7 within the G20 partnership, it will be necessary to articulate qualitative and quantitative means for assessing the ESD-GCED integration, learners' performance, and translational actions of learners for sustainability. By collating both qualitative and quantitative data, the G20 partner countries can track the extent to which ESD-GCED is visible in policies, teacher education programs, and curricula more holistically. They can assess its effectiveness in fostering sustainability-minded and action-oriented learners. This section begins with an overview of the performance indicators for Target 4.7, as articulated under Agenda 2030. It proceeds to highlight assessment instruments that can provide data on these indicators. The final section summarizes the key recommendations for the development and implementation of a G20 Collaborative Strategy.

Indicators for Target 4.7: Measurement of success

Target 4.7 under SDG 4 aims to enhance sustainability knowledge and skills and to re-orient dispositions of learners toward living more sustainably through ESD and GCED. It has one global and four thematic indicators that are used to benchmark its progress (Figure 1).

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

Thematic Indicator 4.7.2: Percentage of schools that provide life skills-based HIV and sexuality education

Thematic Indicator 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).

Thematic Indicator 4.7.4: Percentage of students by age group (or education level) showing adequate understanding of issues relating to global citizenship and sustainability.

Thematic Indicator 4.7.5: Percentage of 15-year-old students showing proficiency in knowledge of environmental science and geoscience.

Figure 1: Indicators for Target 4.7 (UIS 2018a, 42)

Global indicator 4.7.1 is a country-level measure of progress on mainstreaming ESD-GCED within educational policies and related systems (specifically within curricula, teacher training, and student assessments). The four thematic indicators are quantitative measures of progress toward the integration of life skills-based HIV and sexuality education (4.7.2) and human rights education (4.7.3), as well as outcomes measures relating to learners' levels of understanding of global citizenship and sustainability (4.7.4), and attainment in related environmental and geoscience domains (4.7.5) in curricula. This policy brief focuses on addressing the current gap in monitoring and assessing progress vis-à-vis implementing education for sustainability and global citizenship in G20 countries. It focuses on indicators 4.7.1, 4.7.3, 4.7.4, and 4.7.5 under Target 4.7. It does not include any further discussions on the assessment of indicator 4.7.2, as a separate policy brief is warranted to fully examine structures to monitor progress on the integration of life skills-based HIV and sexuality education.

Monitoring Target 4.7: Assessment in Education instruments

The United Nations Educational, Scientific, and Cultural Organisation (UNESCO) is the lead agency for monitoring SDG 4. Its Institute for Statistics (UIS) works with partners to develop indicators and assess progress made toward achieving the international education targets outlined in Agenda 2030. Several studies or surveys of education can be used to monitor aspects of the implementation of ESD-GCED and the performance of learners in mainstream contexts (Figure 2). The merits and demerits of particular large-scale assessments vis-à-vis ESD-GCED are explained substantively in this section. However, this policy brief does not recommend the sole use of a large-scale international assessment through education instruments to monitor Target 4.7. Instead, as detailed in the recommendations at the end, this proposal advocates the integration of national ESD-GCED assessment frameworks, where data is drawn from a combination of large-scale assessment instruments, case studies, and other research exploring the implementation and evaluation of sustainability and GCED at local levels.

Primary/Post-Primary Education

- 1974 Recommendation*
- International Civic and Citizenship Study (ICCS)
- Teaching and Learning International Survey (TALIS)
- Trends in International Mathematics and Science Study (TIMSS)
- Programme for International Student Assessment (PISA)
- World Programme on Human Rights Education (WPHRE)

Higher/Tertiary Education

- 1974 Recommendation
- UIS Survey of Formal Education
- World Programme on Human Rights Education
- Sustainability Literacy Test (Sulitest)

Figure 2: Assessment in Education studies/surveys with potential for monitoring progress made toward achieving Target 4.7⁴

4. The instruments in Figure 2 are mainly large-scale international assessment exercises that gather data typically at the national level, with the exception of the Sulitest, which facilitates local data collection by individual higher education institutions (HEIs).

The data for monitoring progress in relation to global indicator 4.7.1⁵ have been drawn solely from UNESCO's quadrennial "Consultation on the Implementation of the 1974 Recommendation Concerning Education for International Understanding, Cooperation and Peace relating to Human Rights and Fundamental Freedoms" ("1974 Recommendation") since 2016. The 1974 Recommendation consultation process involves governments self-reporting on their progress vis-à-vis human rights related policy and practice at the national level and providing supporting evidence on the infrastructure in place (UIS and GAML 2017). The self-reporting nature of this consultation exercise has raised concerns around validity, such as the risks of misunderstanding and social desirability bias (UIS 2018c). However, as Benavot (2019) argued, the information submitted is made available publicly and is thus open to being challenged if found incorrect by observers on the ground. An additional concern is the focus on assessing the type of structures in-situ for integrating ESD-GCED (including national education policies, teacher education, curricula, and assessment frameworks) rather than actual practices and outcomes within schools and learning contexts. As noted by Sandoval-Hernández, Isac, and Miranda (2019), each country's performance with respect to global indicator 4.7.1 is primarily measured in terms of the intended ESD-GCED curriculum rather than the attained or implemented curriculum. Despite this, the United Nations Inter-Agency and Expert Group on SDG indicators has foregrounded the 1974 Recommendation consultation process within the approved method for measuring progress made on indicator 4.7.1 (UNESCO 2019b). Therefore, it would appear prudent for the G20 to consider the integration of data from the 1974 Recommendation consultation within any proposed framework for monitoring progress made toward achieving Target 4.7. Alternatively, if some partner countries are opposed to engaging in the 1974 Recommendation consultation process, there will be a need for G20 countries to seek or develop other survey instruments and processes that can help monitor performance relating to global indicator 4.7.1.

Progress on indicator 4.7.3 has been monitored to date through the implementation of a framework known as the World Programme on Human Rights Education (WPHRE).⁶ The WPHRE examines the provision of human rights education in educational institutions through data provided by governments and national human rights organizations from individual countries.⁷

The UNESCO Institute of Statistics conducted a review of four large-scale assessments that had the potential for monitoring progress on thematic indicators 4.7.4 and 4.7.5 and global indicator 4.7.1, in 2019 (Sandoval-Hernández, Isac, and Miranda 2019). The chosen instruments were the International Civic and Citizenship Study (ICCS), the Trends in International Mathematics and Science Study (TIMSS), the Teaching and Learning International Survey (TALIS), and the Programme for International Student Assessment (PISA).⁸ Within this review, the UIS concluded that data sourced from two of these exercises, namely the ICCS and TIMSS, were particularly useful in identifying progress made regarding indicators 4.7.1, 4.7.4, and 4.7.5.

To elaborate, the ICCS provides information on the dispositions, beliefs, knowledge, understanding, and behaviors with respect to civics and citizenship of learners typically in Grade 8 (aged 13.5 years or above). The ICCS study also gathers data from a national context survey that is provided by national research coordinators in participating countries. This national context survey provides rich contextual information (qualitative data) on progress made with respect to global indicator 4.7.1. This includes “curriculum, teacher qualifications and experiences, teaching practices, school environment and climate, and home and community support” (International Association for the Evaluation of Educational Achievement, IEA n.d.). Sandoval-Hernández, Isac, and Miranda (2019) suggested that the TALIS, an OECD instrument that collects data on teachers, school leaders, and the learning environment in schools (OECD 2018a, 2018b), can also provide information on some aspects of ESD-GCED integration within teacher education. However, it is doubtful that this limited dataset on teacher education would warrant its wider deployment across G20 countries.

5. The United Nations Inter-Agency and Expert Group on SDG indicators formally approved the methodology for measuring progress on indicator 4.7.1, which foregrounds the 1974 Recommendation consultative process (UNESCO 2019b).

6. UN General Assembly resolution 59/113 A.

7. To date, data from ten G20 countries have been gathered across the second and third World Programme on Human Rights Education surveys through the Office of the United Nations High Commissioner for Human Rights. The data sources for:

- Second WPHRE - <https://www.ohchr.org/EN/Issues/Education/Training/WPHRE/SecondPhase/Pages/Secondphaseindex.aspx>

- Third WPHRE - <https://www.ohchr.org/EN/Issues/Education/Training/WPHRE/ThirdPhase/Pages/ProgressReport3rdPhase.aspx>

8. The ICCS and TIMSS surveys are deployed by the International Association for the Evaluation of Educational Achievement (IEA), and the TALIS and PISA surveys are deployed by the Organisation for Economic Co-operation and Development (OECD).

The UIS review further identified the “ICCS 2016 study as the most comprehensive source of information for the global [sic] indicator SDG 4.7.4” (Sandoval-Hernández, Isac, and Miranda 2019, 11). It noted that information on five of the six key categories could be gleaned from the ICCS dataset for thematic indicator 4.7.4 (namely interconnectedness and global citizenship, gender equality, peace, human rights, and sustainable development). This UIS review process also demonstrated that the PISA 2018 report contained information on the remaining category of “Health and well-being.” The OECD also integrated the assessment of “global competence” within PISA 2018. This included assessing the capacity of 15-year-olds to appreciate differing worldviews, intercultural communication, global mindfulness, engagement in global competence activities, and self-efficacy with respect to global issues (OECD 2018c). The OECD’s framing and motivations for assessment of global competence have faced criticism (Auld and Morris 2019a, 2019b; Engel, Rutkowski, and Thompson 2019). However, the UIS review of PISA 2018 demonstrated that it could contribute data toward monitoring progress made with respect to indicator 4.7.4 across several categories⁹ (Sandoval-Hernández, Isac, and Miranda 2019). Therefore, the PISA cannot be discounted as a potential source of data to monitor progress made with respect to indicator 4.7.4. It can provide data relating to the orientation of learners’ mindsets and their perceived competence in relation to certain aspects of global citizenship and sustainability

For thematic indicator 4.7.5, the UIS proposed that data relating to ESD-GCED outcomes can be gathered from either the PISA or TIMSS (Sandoval-Hernández, Isac, and Miranda 2019). PISA reports provide information on the ability of 15-year-olds in reading, mathematics, and science, and their ability to apply the knowledge gathered to real-life challenges (OECD 2020). Outcomes relating to the environmental science/sustainability aspect of 4.7.5 are more fully examined in the extended version of science that is implemented in every third cycle; that is, once every nine years (Sandoval-Hernández, Isac, and Miranda 2019). The TIMSS reports provide data in four-year cycles on the mathematics and science achievement of children in Grades 4 and 8 (IEA 2020)—the latter population of mean age 13.5 years being closest to the proposed target learner group of 15-year-olds identified within indicator 4.7.5. The UIS review suggested that TIMSS “offers better conditions for long-term monitoring” than PISA as it gathers similar data on knowledge of environmental science but is deployed at

9. The UIS review demonstrates that PISA 2018 could contribute data for thematic indicator 4.7.4 on three thematic areas: interconnectedness and global citizenship, health and well-being, and sustainable development, but not in the thematic areas of peace, non-violence and human security, gender equality, and human rights (Sandoval-Hernández, Isac, and Miranda 2019).

more regular four-year intervals as opposed to the nine-year intervals that PISA (extended science) follows (Sandoval-Hernández, Isac, and Miranda 2019, 17).

Therefore, there is a range of international assessment mechanisms in educational exercises that can be used to monitor progress made with respect to global indicator 4.7.1, and thematic indicators 4.7.4 and 4.7.5. However, research suggests that the 1974 Recommendation, ICCS, and TIMSS are particularly beneficial in this regard (UIS and GAML 2017; Sandoval-Hernández, Isac, and Miranda 2019; UNESCO 2019a). The challenge for G20 countries is that participation rates across all the aforementioned international assessment exercises vary considerably within the G20 partnership. The low G20 participation rate of just nine countries within the consultation for the 1974 Recommendation (Figure 3a) is concerning given that it has been foregrounded within the approved methodology for assessing global indicator 4.7.1 (UNESCO 2019b). The low participation rate of just seven G20 countries with the ICCS (Figure 3b) will impact additional contextual data collection for thematic indicator 4.7.1 and assessing student attainment for thematic indicator 4.7.4. However, the participation rate of 15 G20 countries in the TIMSS (Figure 3c) is at a reasonable level, which suggests that this instrument can be used within the proposed framework/s for monitoring progress made with respect to thematic indicator 4.7.5.¹⁰ Finally, it is important to note that the timing of these surveys (see Figure A3 in the Appendix) will also affect the monitoring and reporting on progress vis-à-vis Target 4.7 and must be considered while developing frameworks.

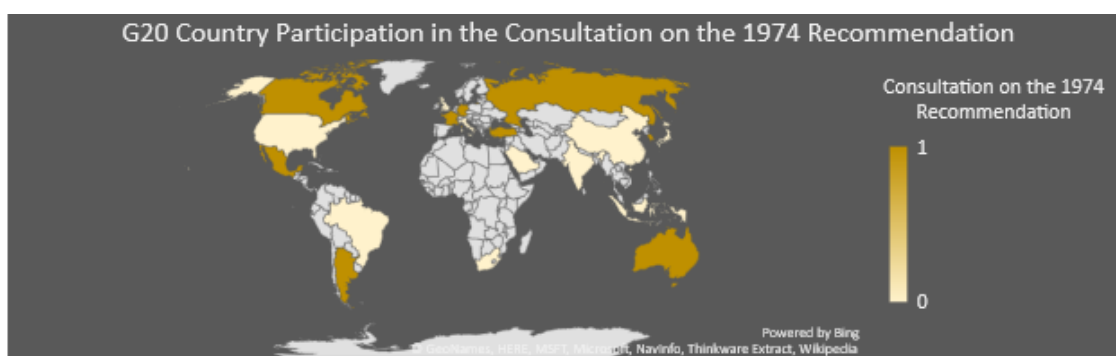


Figure 3a: G20 country participation in the consultation for the 1974 Recommendation. Data sourced from UNESCO (2016).

10. Charts relating to G20 country participation in PISA (Figure A1) and TALIS (Figure A2) have been included in the Appendix.



Figure 3b: G20 country participation in the ICCS. Data sourced from IEA ICCS (Country Participation) homepage.



Figure 3c: G20 country participation in the Trends in the International Mathematics and Science Study. Data sourced from IEA TIMSS (2020).

Some information on the infrastructure for ESD-GCED integration in tertiary contexts can be gleaned from the consultation on the 1974 Recommendation (UNESCO 2016, 2018b), and the UIS Survey of Formal Education¹¹ (UIS 2016, 2018b, 2020). However, neither instrument gathers information on the proficiency or actions of tertiary students vis-à-vis sustainability or global citizenship. Therefore, there are no internationally validated instruments or reliable sources of qualitative data that are centrally available at the national level to monitor progress vis-à-vis fostering ESD-GCED competencies and actions taken by tertiary students toward sustainability.

A possible partial solution to this is the Sustainability Literacy Test (Sulitest).¹² The Sulitest is an online training and assessment platform (available in eight languages) that can be used by higher education institutions (HEIs) and organizations to support and assess the sustainability literacy of their students. The Sulitest includes modules that raise awareness on key sustainability issues and covers thematic areas related

to the SDGs under Agenda 2030 (Decamps 2017). The Sulitest platform can enable learning about sustainability, the discovery of areas of specialization under the ambit of sustainability, and the examination of sustainability knowledge (Decamps 2017). The Sulitest could potentially be used within institutions to monitor progress in ESD-GCED integration for global indicator 4.7.1, by benchmarking students' performance on entry, during, and after exiting the programs of study (Teigen 2018). It also could be used to measure student achievement in terms of their level of sustainability literacy for thematic indicator 4.7.4. While the emphasis in the baseline Sulitest survey is on examining knowledge vis-à-vis sustainability, the customization option can enable HEIs to include additional measures to evaluate student action for sustainability. HEIs in 18 G20 countries currently participate in the Sulitest program (with a median participation level of 10 HEIs, and participation ranging from 1 to over 200 HEIs across the participating countries; Figure 4).

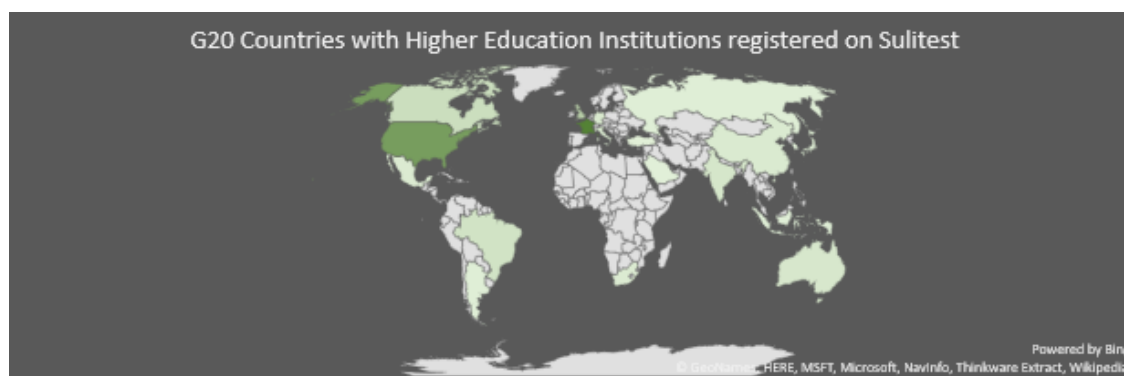


Figure 4: G20 Countries with HEIs registered on Sulitest. Data sourced from the Sulitest list of registered universities (<https://www.sulitest.org/en/list-university.html>)

11. The UNESCO Institute for Statistics (UIS) Survey of Formal Education has been extended to collect data that can be used to “monitor and report on international development goals related to education, including the education goal of the 2030 Agenda for Sustainable Development” (UIS 2016, 4).

12. The Sulitest emerged from the Higher Education Sustainability Initiative (HESI) in 2012 and has the support of a broad range of bodies within and beyond the United Nations. The Sulitest can be used by HEIs to assess sustainability literacy levels. The Sulitest Organisation is a non-profit. It has received financial support from a range of sources, including corporate organizations.

Using the Sulitest platform for monitoring progress in relation to Target 4.7 is not without limitations and challenges. Within the Sulitest, there is an emphasis on examining the knowledge dimension of sustainability in the core module. Merely having an awareness of sustainability, does not guarantee a change in behavior or even a willingness to engage in sustainability-oriented action (Decamps 2017). Therefore, there is a need to include behavioral items as “indicators for possible future sustainability engagement” within the Sulitest’s bank of questions (Mason 2019). A secondary challenge is that sustainability specialists are necessary for the customization and localization of the Sulitest bank of questions in particular disciplinary areas or to address local contexts (Teigen 2018). While access to some elements of the Sulitest is free for HEIs, an annual subscription fee is charged if, for example, question items are customized to examine students’ actions, or for access to other premium services. Finally, according to Mason (2019), the length of the Sulitest can be a matter of concern, particularly if customized module question items are added to the standard question items.

This policy brief began with a recognition of the need to develop holistic frameworks for mapping progress in ESD-GCED implementation at all levels of education. Within the aforementioned large-scale international surveys (that are mainly applicable in primary or post-primary education contexts), the assessment of learners’ values, attitudes, dispositions, and actions toward sustainability and global citizenship is limited. Furthermore, there is limited information on qualitative processes that can be integrated to monitor ESD-GCED progress on Target 4.7 effectively. This calls for an exploration of appropriate quantitative and qualitative assessment processes by G20 partners, which can contribute toward the quality monitoring of progress vis-à-vis ESD-GCED. The following recommendations propose structures that can bring together relevant experts and stakeholders to discuss and arrive at a consensus on appropriate qualitative and quantitative measures. These will further inform assessment frameworks that can be used to map progress in terms of ESD-GCED integration and implementation within G20 countries holistically.

Policy Recommendations

This policy brief recommends the implementation of the following G20 Collaborative Strategy in order to accelerate the monitoring of progress made toward achieving Target 4.7 of SDG 4 in the G20 countries. This collaborative strategy will seek to increase the capacity of the G20 countries to holistically assess progress made in the implementation of ESD-GCED across all levels of formal education.

Recommendation 1: Formulation of a G20 Collaborative Strategy

The first recommendation is to formulate the G20 Collaborative Strategy (Figure 5), and the first dimension of this strategy involves the establishment of a Taskforce to examine and advise on ways to improve progress in monitoring ESD-GCED implementation across all levels of education, specifically in relation to indicators 4.7.1, 4.7.3, 4.7.4, and 4.7.5 under Target 4.7. The Taskforce is responsible for implementing two bodies of work. First, the development of an Action Plan for mapping and monitoring progress on ESD-GCED. Second, the creation of structures that enable the hosting of regular forums for sharing good practices and case studies vis-à-vis assessing the mainstreaming of ESD-GCED and learners’ competencies in sustainability and global citizenship, both within and across G20 countries.

G20 Collaborative Strategy for Target 4.7 (SDG 4): Monitoring Progress in Education for Sustainable Development and Global Citizenship Education		
Taskforce on accelerating progress in monitoring Target 4.7	Action Plan for mapping and monitoring progress in relation to ESD-GCED integration and outcomes	Forums for sharing locally relevant practices and case studies of monitoring and assessment in ESD-GCED

Figure 5: G20 Collaborative Strategy for monitoring progress made toward achieving Target 4.7

Recommendation 2: Taskforce on accelerating progress in monitoring Target 4.7

The second recommendation is a Taskforce to accelerate progress in monitoring Target 4.7 of SDG 4. The main function of the Taskforce will be to set in place structures that enable the development and implementation of holistic monitoring and evaluation framework/s for ESD-GCED implementation in G20 countries. Specifically, the Taskforce will consider measures that advance monitoring of global indicator 4.7.1, and thematic indicators 4.7.3, 4.7.4, and 4.7.5. The Taskforce will ultimately produce a report for the G20 leadership detailing assessment measures that are suitable for monitoring progress in ESD-GCED implementation in national education policies, curricula, assessments, teacher education programs, and related learning outcomes and actions.

The Taskforce will be steered by a group of experts and policymakers in education and related areas from across the G20 partnership.¹³ The scope of the Taskforce includes the implementation of two core activities of the G20 Collaborative Strategy, namely the aforementioned Action Plan and Forums for monitoring ESD-GCED. The Taskforce will oversee a network of processes to facilitate sharing of experiences, including successes, challenges, and lessons learned from evaluation and assessment strategies used to track progress relating to Target 4.7. Kunda Marron and Naughton (2019, 7) noted that assessment is “a political phenomenon that reflects the agendas, tensions, and nature of power relations between political actors.” It is therefore critical that the proposed G20 Collaborative Strategy has the support of governments across the G20 partnership, as well as a broad range of stakeholders. The Taskforce will seek to enhance the quality of decision making and guidance on monitoring and assessment of ESD-GCED through consultations across a range of sectors and agencies. These include the government, the education and training sector, policymakers, practitioners, public broadcasting media (e.g., television and radio), commerce, industry, telecommunications, civil society, non-governmental organizations, parents, and representatives for marginalized and vulnerable groups. The Taskforce will, through participative and consultative exercises with this broad range of stakeholders, also implement an Action Plan for mapping and monitoring ongoing ESD-GCED integration and learning outcomes at all levels of education in the G20 countries. The Taskforce will put structures in place to host a series of forums where policymakers, leaders, researchers, and practitioners can share and discuss case studies of good practices vis-à-vis the assessment and monitoring of ESD-GCED processes, practices, and outcomes. Finally, the Taskforce will advise on and allocate financial and other support necessary for implementing the aforementioned activities.

13. This policy brief builds on the recommendation of the T20 policy brief submitted by David Istance, Anthony Mackay, and Rebecca Winthrop (2019), on “Measuring Transformational pedagogies across G20 countries to achieve breakthrough learning: The case for collaboration.” They recommended that the G20 establish a Taskforce comprising leading thinkers from the G20 and around the globe to develop these shared measures.

Recommendation 3: Action Plan for mapping and monitoring progress in relation to ESD-GCED integration and outcomes

The third recommendation is the design and implementation of an Action Plan for mapping and monitoring ESD-GCED integration and outcomes. This will result in the identification of quality assessment processes that can be used to scale up the monitoring of progress on Target 4.7, specifically in relation to global indicator 4.7.1 and thematic indicators 4.7.3, 4.7.4, and 4.7.5 under Target 4.7. The Taskforce will implement the following activities within the Action Plan:

- Conduct a preliminary mapping exercise to build sample national profiles vis-à-vis performance in ESD-GCED integration and outcomes (aligned with indicators under Target 4.7). Data extracted from international assessments in education and qualitative data gleaned from a review of academic literature and reports will be used in this process.

- Commission a review of academic literature and reports across G20 countries to identify qualitative and quantitative measures being used to assess the translation of ESD-GCED policy into practice and local innovations in assessing ESD-GCED integration across education and community contexts in partner countries.
- Conduct a review of the nature and quality of data¹⁴ that can be extracted from these measures with respect to the integration of sustainability and global citizenship within national education policies, curricula, teacher education, learning assessments, and performance outcomes relating to the indicators mentioned above for Target 4.7. The review will also ensure the examination of any gender-related impacts.

14. A systematic methodological approach and specialized tools will be needed for analysis of these large datasets, such as those used by Goren, Yemini, Maxwell, and Blumenfeld-Lieberthal (2020).

- Examine the suitability and feasibility of scaling-up engagements by G20 countries in future international large-scale and local assessments in education exercises. Commission case studies of local ESD-GCED assessment innovations that have the potential to contribute to the monitoring of progress on indicators 4.7.1, 4.7.3, 4.7.4, and 4.7.5.
 - Conduct a review of the resourcing required and the willingness of G20 countries to engage in assessments that have the potential to provide data relating to Target 4.7. For example, the consultation on the 1974 Recommendation, WPHRE, ICCS, TIMSS, PISA, and Sulitest discussed in this policy brief, or other unexplored assessments, such as the World Values Survey.¹⁵
 - Collate and commission case studies in target G20 countries to explore innovative means of identifying and collating data on the translation of the ESD-GCED policy into practice, learner performance outcomes, and learners' actions for ESD-GCED within and beyond educational institutions. Case studies can be gathered through existing ESD-GCED networks, such as the Global Regional Centres of Expertise on ESD (RCE) network¹⁶ or the UN Principles of Responsible Management Education network.¹⁷

Recommendation 4: Forums for sharing locally relevant practices and case studies of monitoring and assessment in ESD-GCED

The fourth recommendation is the establishment of online and face-to-face forums for sharing locally relevant practices and case studies of monitoring and assessment within ESD-GCED. A key function of the Taskforce will be to create an enabling environment for sharing assessment practices and case studies of successful ESD-GCED integration across the G20 partnership. These actions will allow for collective reflection and decision-making on quantitative and qualitative measures that work best for monitoring ESD-GCED in individual countries within the G20 partnership. They will inform frameworks for monitoring progress made toward achieving Target 4.7. The Taskforce will put in place structures that bring together representatives from high-level and grassroots agencies, as follows:

- Establishment of a high-level G20 Education Forum to be attended by policymakers, leaders, and practitioners in education and related areas to share innovative means of monitoring national progress in ESD-GCED integration and outcomes. A good example is the annual forum to monitor the progress of the Irish National Strategy on ESD (Figure 6).



Figure 6: **Case study of using national forums to monitor progress in ESD**

15. The World Values Survey seeks to help scientists and policymakers understand changes in the beliefs, values, and motivations of people worldwide, and can potentially contribute toward monitoring progress on the global citizenship dimension of indicator 4.7.4. <http://www.worldvaluessurvey.org/WVSContents.jsp>

16. The Global RCE network has over 170 Regional Centres of Expertise involved in ESD at various levels of education. <https://www.rcenetwork.org/portal>

17. The Principles for Responsible Management Education (PRME) is a UN-supported initiative founded in 2007 to raise the profile of sustainability in higher education. <https://www.unprme.org>

- Host a series of online forums where educators and other stakeholders share knowledge, successful practices, and case studies that can inform innovative performance measures. These include those that capture learning-in-action from successful ESD-GCED practices within and beyond educational institutions, such as the case study of ESD in a community (Figure 7).



School children visit the home of Huan Ni; Solar panels visible on extruding balcony roof. [Image Source: Huan Ni].

Huan Ni is the first civil user in mainland China of the Copper Indium Gallium Selenide (CIGS) thin film distributed solar plant. Her green home has been refurbished to host this solar plant, an EV car charging station, a vertical farm using compost made from her kitchen waste, and an aquaponics system. She develops and delivers public educational programs on sustainable ways of living and has received over 15,000 visitors, mostly teenagers and children, at her home since August 2014.

Figure 7: **Case study of ESD in a community**

- Create an Online Commons through which resources and sample practices for assessing and monitoring progress on the ESD-GCED integration and outcomes for Target 4.7 can be shared and reviewed by policymakers and practitioners. This platform will provide important information on local assessment practices. Through values-based approaches to indicator development, this can be used to generate locally valid indicators of progress on Target 4.7 (Kunda Marron and Naughton 2019). Benavot (2019) suggested that organizations such as the UNESCO may have an important role to play in mediating the review process of such repositories. The quantification and systematic assessment of ESD-GCED integration fall within their scope. The case study of Portugal below describes an innovative way in which online platforms and forums have been activated for the assessment of inclusion in action at the national level.

“The government created a national coordination structure, not to monitor learning outcomes directly but to assess how schools internalized their increased autonomy in curricular development, teaching strategies and allocation of time to subjects, and how schools dealt with the inclusion of all children, especially those with disabilities. As part of the two-year process of curricular development, dissemination activities included an online platform with education resources and curricular guidelines. School visits and invitations for model (or ‘lighthouse’) schools to present their practices to other schools also promoted reflection.”

(Extract from the UNESCO Global Education Monitoring Report, 2019c, 32–33)

Recommendation 5: Policy brief on life skills-based HIV, and sexuality education

As mentioned in the opening section, a discussion on thematic indicator 4.7.2, which is a measure of progress in relation to the integration of life skills-based HIV and sexuality education, has not been included in this brief. The UIS collects data from governments and heads of educational institutions on the integration of life skills-based HIV and sexuality education within the Survey of Formal Education.¹⁸ Very few G20 countries are participating in the 2020 Survey of Formal Education,¹⁹ which means that progress concerning this indicator will be monitored to a limited extent in the G20 partnership. This motivated the fifth recommendation: The development of a separate policy brief to investigate structures that can enable the monitoring of the integration of life skills-based HIV and sexuality education within school systems across the G20 partnership.

Recommendation 6: Guidance on advancing ESD-GCED infusion at all education levels

It is beyond the scope of this brief to engage in a discussion or analysis of ESD-GCED pedagogical practices and integration processes. Therefore, the sixth and final recommendation is the development of an additional policy brief that makes recommendations on what is necessary to enhance the inclusive nature of ESD-GCED at all levels of education in G20 countries. It should also respond to any issues in implementing ESD-GCED, as identified within the mapping and monitoring processes addressed in this brief.

18. The UIS initially piloted questions and collected information on the integration of sexual and reproductive health education in formal curricula in their annual Survey of Formal Education in 2017. It re-framed this subsection to include generic life skills and HIV prevention in 2018, which since then has been titled “Life skills-based HIV and sexuality education” (UIS 2018d).

19. Data on country participation in the 2020 Survey of Formal Education was sourced from <http://uis.unesco.org/uis-questionnaires>.

Disclaimer

This policy brief was developed and written by the authors and has undergone a peer review process. The views and opinions expressed in this policy brief are those of the authors and do not necessarily reflect the official policy or position of the authors' organizations or the T20 Secretariat.



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APPENDIX

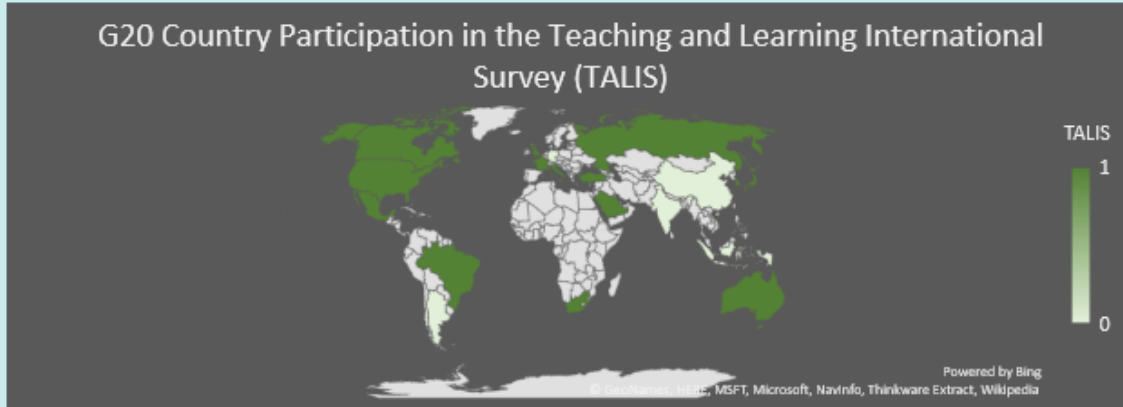


Figure A1: G20 Country Participation in the Teaching and Learning International Survey (TALIS). Data sourced from OECD (2018a).

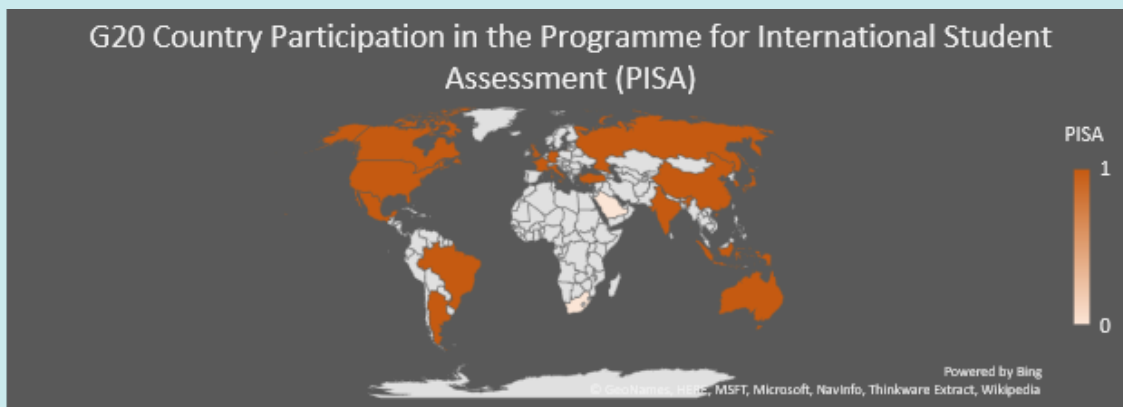


Figure A2: G20 Country Participation in the Programme for International Student Assessment (PISA). Data sourced from OECD (2020).

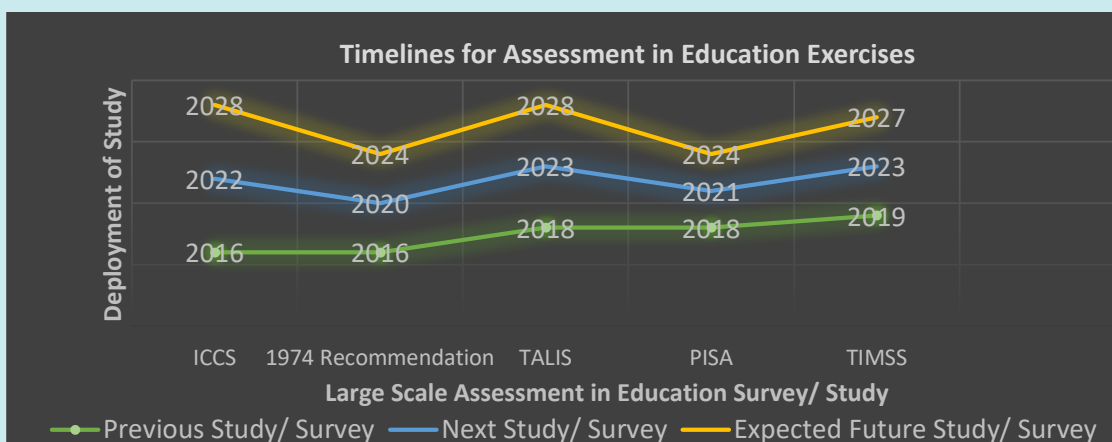


Figure A3: Timelines for Assessment in Education Exercises



EXTENDED NOTES

ⁱ In her summation of these tensions vis-à-vis ESD, Sjögren (2019) noted that the practice of ESD had been criticized in terms of its role in re-enforcing unequal power relations (Jickling and Wals 2008; Hellberg and Knutsson 2016; Holfelder 2019). The lack of criticality within ESD practices contributes to differing outcomes for those within different educational and geopolitical contexts. ESD can, therefore, result in unequal life trajectories for learners (Hellberg and Knutsson 2016). Sjögren (2019), in her study of ESD within teacher formation, pointed to issues in conformance to expectations of what constitutes ESD readiness that challenges the openness required for preparation of teachers to embrace future forms of thinking: “An ideal of sameness through education is used at the expense of imagining education as a site of possibility” (Sjögren 2019, 1631). There are criticisms of aspects of ESD that seek to re-orient individual behavior by placing too much responsibility on the consumer to make more sustainable choices instead of critically challenging capitalist systems (Jickling and Wals 2008; Huckle and Wals 2015; Hellberg and Knutsson 2016). In the context of the global discourse on GCED, criticisms include the fragility of the concept of global citizenship and challenges in its application at the national and local levels (Akkari and Maleq 2019; Dower and Williams 2016; Pashby 2015). The association at a conceptual level of “global citizenship” with concepts of “global” and “globalization” is a cause for concern for some, with arguments that GCED has an underpinning philosophy of westernization, with “capitalist” dominated agendas and worldviews promoting neoliberal agendas and individualism (Sharma 2018, 2020; Dill 2012, 2013), which results in practices that are often “dissociated from local needs and realities” (UNESCO 2018a, 2). UNESCO (2018a, 11) argued that in implementing GCED, we need to consider the “‘interconnectedness between the local and the global’ when possible, rather than the idea of ‘global.’” Sharma (2020, 91) called for a values-creating paradigm centered on “nurturing individuals who can lead contributive lives through education for global citizenship.” Within this, intercultural, non-dualistic perspectives, particularly non-Western views, would be prioritized to “bring forth diverse and creative solutions to global issues such as environmental degradation and climate change” (Sharma 2020, 90).

ⁱⁱ Within the literature, there is much debate on the role of large-scale international assessment in education exercises and the inherent tensions therein. These include whether the measurement is necessary, issues in what is being measured (Engel, Rutkowski and Thompson 2019; Goren, Yemini, Maxwell and Blumenfeld-Lieberthal 2020), the tools used for measurement, the competitive nature of reporting outcomes at the country level, the conflicting motivations of these forms of measuring performance (Morris 2016), and whether engagement in large-scale assessment results in raising performance (Morris 2016). Morris (2016) pointed to the dangers in assessment exercises such as PISA. He argues its focus is on particular educational aims and a narrow set of competencies, which reduces the focus on learners as “human beings with complex needs” to treating “them solely as sources of human capital” (Morris 2016, 27). In terms of motivations underpinning large-scale assessment exercises, Morris (2016), critiqued the OECD PISA for Development (PISA-D) program, a six-year pilot project initiated in 2014 implemented within developing countries. He raised the issue of the “West exporting its vision of schooling... through the auspices of cross-national tests” (Morris 2016, 2) and the specter of funding for aid and development being tied to performance in large-scale assessment exercises. Morris (2016) also noted that large-scale international assessments like PISA may highlight correlations but cannot explain causality and discounted their claims regarding the identification of best practices as “conjectures, hypotheses, and speculations derived from correlations, designed to further a policy agenda” (Morris 2016, 5). Finally, there is a paradox in using international assessments that have led to democratic deficits, as highlighted by Sousa, Grey, and Oxley (2019), to monitor forms of education such as ESD-GCED that typically advocate democratic practices.



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