Introduction

Data is the fuel that powers progress across all the Sustainable Development Goals (SDGs). The 2030 Agenda for Sustainable Development has fostered actions to improve UN Member States’ capacities to produce and use data for monitoring the SDGs, taking into consideration the new realities. In the case of education (SDG 4), two important changes have shaken up the ways progress was measured and traced. First, new outcome-focused indicators were introduced, notably those related to learning. Second, multiple sources of data are now considered in the estimation of some of the more established indicators. These changes are creating opportunities, but they are also increasing demands on national statistical systems worldwide.

The data needs for SDG 4 have galvanized the establishment of an international community of education statisticians. The Technical Cooperation Group on SDG 4 Indicators (TCG) was established in 2016 to lead the development and implementation of the SDG 4 monitoring framework, prioritizing a balanced representation and active involvement of UNESCO Member States, while focusing discussions through five thematic working groups. Propelled by the decisions of the TCG, the national SDG 4 benchmarks were introduced, fulfilling a commitment UNESCO Member States had made in 2015. The TCG approved seven SDG 4 benchmark indicators in 2019 and three-quarters of Member States submitted national targets for at least some of those indicators in 2021/22, with the first progress report, the SDG 4 Scorecard, published in January 2023.

At the same time, several challenges remain. Just as many of the developments were unfolding, the COVID-19 pandemic disrupted the collection of education statistics. As of 2023, several global and thematic indicators still have low coverage rates. The SDG 4 benchmarking process has highlighted several issues where communication needs to be strengthened to ensure shared understanding of definitions and methodologies. Several concepts and processes still require input from a broad stakeholder group. Moreover, rapid technological development opens up a range of new opportunities for collecting and reporting data, just as it poses questions on managing big data.

Unlike its sister field of labour statistics, education statistics have not benefited from a regular, open forum where questions about the present and the future of internationally comparable data can be explored. It is therefore the appropriate moment for a wider debate on key issues to capitalize on recent progress, clarify current issues and set a future
agenda for education statistics. Following a decision of the TCG, the UNESCO Institute for Statistics (UIS) is therefore working on establishing the UNESCO Conference of Education Data and Statistics to fill this gap.

**Objectives**

The UNESCO Conference of Education Data and Statistics is envisioned as a regular dialogue and peer learning platform for the international community of practice among education statisticians. The first session of the Conference will have the following objectives:

- Establish the process for an international community of practice among education statisticians and the relationship of the Conference with the TCG.
- Communicate, discuss, and reach consensus on key issues regarding concepts, definitions, methodologies, and operational aspects of SDG 4 indicator measurement in the form of recommendations and guidelines for adoption as international standards to improve comparability.
- Debate the impact of technological developments on education statistics and ways in which the community of education statisticians can benefit from opportunities and address challenges.

**Where?**

The first session of the UNESCO Conference of Education Data and Statistics will be held as an in-person event at UNESCO Headquarters in **Paris, France**.

**When?**

The first session of the UNESCO Conference of Education Data and Statistics will take place from **7 to 9 February 2024**, comprising three full days of activities.

**For whom?**

Each UNESCO Member State has been invited to nominate three experts, including one representative from the education ministry, one from the national statistical office, and one from the national learning assessments unit. These nominated experts along with all active members of the TCG are participants of the conference.

Representatives from the following constituencies are also invited to the conference as observers: regional statistical agencies and organizations; United Nations specialized agencies, and other international organizations; aid agencies, foundations, and other private partners, non-governmental organizations, and the teaching profession.

The working languages of the conference are English, French, and Spanish.

**Key issues**

The following issues will be addressed in the first session of the UNESCO Conference of Education Data and Statistics. Each issue will be supported by a background paper. The first
drafts of the background papers will be shared with the delegates for feedback in the fall of 2023. Based on the received feedback they will be revised and finalized.

1) **Education data ecosystem**: The SDG 4 measurement and monitoring agenda is ambitious as, compared with its predecessor, it has an expanded scope in at least three respects: levels of education, learning outcomes, and inequality. The increased scope and the relatively large number of indicators, compared with the MDG education targets, posed a considerable challenge for Member States. At the halfway point, there is a need to assess coverage and efficiency of data collection efforts and how synergies could be established between different sources of information including modelling strategies that combine different type of sources (e.g. administrative and household surveys), different source for the same type (household surveys) to expand data coverage, improve data efficiency by making full use of the data ecosystem and developing capacity of Member States.

2) **International Standard Classification of Education (ISCED)**: ISCED is a framework that facilitates the transformation of national education data into internationally agreed categories making cross-national comparisons possible. As custodian of ISCED, the UIS is responsible for its development, maintenance, and provision of guidance on its use for data collection and analysis. In 2023, the UIS established an ISCED Committee to advise on the administration of ISCED 2011 and ISCED-F 2013, and ISCED-T to classify teacher training programmes. The first session of the UNESCO Conference of Education Data and Statistics will discuss the report presented to the review panel that described the main issues with the implementation of ISCED 2011; the mandate and recommendations of the ISCED Review Committee; and a progress summary of the implementation of ISCED-T.

3) **Priorities for administrative data and capacity development**: While the agenda focuses on a subset of SDG 4 indicators, it is necessary to improve long-established statistical processes to resolve issues for reporting SDG 4. A selection of those will be discussed at the first session of the UNESCO Conference of Education Data and Statistics: mapping missing data and developing strategies to fill them; use of national and international population estimates; calculation of regional and global aggregates; the UIS survey of formal education and new templates; capacity building requests and streamlining of external assistance support; and initial prioritization of issues for a future education monitoring agenda post-2030.

4) **Methodological development on teacher indicators**: Teacher indicators have been part of the standard set of comparable education statistics for more than 20 years and yet there remains a considerable degree of uncertainty over even the most basic definitions, including those related to core SDG 4 concepts such as qualified and trained teachers. Issues that will be discussed at the first session of the UNESCO Conference of Education Data and Statistics include: new global definitions of qualified and trained teachers; appropriate data collection methodologies to monitor the updated definitions; mapping of teacher policies and development of policy indicators; and development of metadata related to teacher qualifications and training programmes.
5) **Expenditure:** There are two indicators on expenditure in the framework for action. Current reporting uses alternative sources with each source ranked by order of priority on when to use them. The problem is that these multiple sources of data for government expenditure on education as a percent of total government expenditure and values for the same country and year differ depending on the source of data. These sources are official in the sense that they have been provided to data collectors through official government channels by official government respondents. Private expenditure on the other hand relies on the existence of surveys and other sources for the non-household component. Exploration of ways to combine different sources; how to obtain more regular private expenditure data and the per capita indicator are among the issues to discuss.

6) **Methodological development on household surveys and multiple data sources:** The emphasis of the SDG data agenda on equity has popularized the use of household surveys. Since 2020, household surveys have also been used in education to introduce an additional source of information to fill gaps and triangulate estimates that have traditionally been based on school censuses for core indicators, such as out-of-school and completion rates, but also for new indicators, such as those related to adult education participation or digital skills. However, there remain important issues that will be discussed at the first session of the UNESCO Conference of Education Data and Statistics: validation process of indicator estimates based on multiple sources; development of an inventory of household surveys and mapping of key variables; harmonization of key education-related questions in household surveys; and limited use of household surveys as a source of information for SDG 4 indicators.

7) **Methodological developments on learning outcome indicators:** The most important development in education monitoring relates to the introduction of learning outcome indicators, especially those with reference to minimum learning proficiency in reading and mathematics for primary and lower secondary school students. Major progress has been achieved in refining concepts, agreeing definitions, issuing guidelines, and designing options that Member States can use. However, there are still considerable challenges that will be discussed at the first session of the UNESCO Conference of Education Data and Statistics: low reporting on learning outcome indicators; lack of information on options for collecting and reporting data, including operational and cost issues; characteristics of a robust assessment; and limited use of learning assessments as a source of information for other SDG 4 indicators.

8) **Lessons and next steps on the SDG 4 benchmarking process:** The national SDG 4 benchmarking process has been at the heart of recent efforts to revise education monitoring by focusing on national targets. Extensive efforts have been made to present the process to Member States, respond to queries, communicate developments, introduce a mechanism to assess progress and report back to Member States. The process has also brought up issues that will be discussed at the first session of the UNESCO Conference of Education Data and Statistics: differences in definitions and data sources for selected benchmark indicators; familiarization of all Member States with the process and with the outstanding gaps; process of
registering queries and of updating national benchmarks; and alignment between national, regional, and global targets.

9) **Technology and data for the future**: The relentless pace of digital technology development; the rapid expansion of generated data; and the advent of artificial intelligence tools are changing the education monitoring landscape and have potential implications that are yet to be mapped or discussed at a global scale. A selection of future-oriented issues that affect the education statistics community will be discussed at the first session of the UNESCO Conference of Education Data and Statistics: big data and potential implications for SDG 4 and other comparable education monitoring; rules and protocols for the use of big data in education; and potential of artificial intelligence for the generation of policy-related indicators.

**Preparation process**

The following groups will be involved in the preparation process:

- TCG working group chairs
- TCG members

**Regional preparatory meetings**

As part of the preparation process, the UIS will hold regional meetings to:

- Complete the nominations for the delegates.
- Present the draft background documents.
- Define regional priorities for inclusion in the background documents.
- Update on the preparation process.
- Discuss the governance, workflow, and key issues for the conference.

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**Regional Meetings**

(Oct.-Nov. 2023)

- Update on the preparation process
- Consultation on position papers
- Definition of regional priorities

**TCG -10**

(6 Dec. 2023)

- Completion of position papers to reflect regional priorities
- Revision of indicator framework
- Final preparations for Conference

**Conference of Education Data and Statistics**

(7-9 Feb. 2024)

- Discussion of position paper and setting agenda
- Validation of standards and recommendations
- Adoption of outcome documents
Timeline

The following indicative timeline presents key milestones.

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<th>Event</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
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<td>Nomination/registration of the conference participants and observers</td>
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<td>Regional Preparatory Meeting - Pacific</td>
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<td>Regional Preparatory Meeting - Arab States</td>
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<td>Regional Preparatory Meeting - Africa</td>
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<td>Regional Preparatory Meeting - Europe and North America</td>
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<td>Global Alliance to Monitor Learning (GAML) meeting</td>
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<td>Technical Cooperation Group (TCG-10) meeting</td>
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Background documents

Each agenda item will be supported by a background document. The draft documents will reflect the decision points from the regional preparatory meetings and will be refined through a consultation process.

Side events

Side events highlighting the importance of data and promoting education statistics will be held at the margins of the Session. There will be a mechanism to propose such events to the Secretariat by all interested stakeholders. Guidance in this regard will be provided.

Information

Information about the UNESCO Conference of Education Data and Statistics, including registration and logistics for the first session will be provided via the website https://ces.uis.unesco.org/.

The Secretariat can be reached at: edstatcom.uis@unesco.org.