Statistical Commission
Fifty-third session
1–4 March 2022
Item 3 (k) of the provisional agenda*
Items for discussion and decision: education statistics


Note by the Secretary-General

In accordance with Economic and Social Council decision 2021/224 and past practices, the Secretary-General has the honour to transmit the report of the Institute for Statistics of the United Nations Educational, Scientific and Cultural Organization (UNESCO) on education statistics, which is presented to the Commission for discussion. In the report, the Institute refers to the establishment of national benchmark values for selected Sustainable Development Goal indicators for 2025 and 2030. In particular, the report provides background information on and the main objective and steps taken by the Institute to encourage countries to submit targets that would represent their own contributions to the global effort to achieve Goal 4 by 2030. The Commission is invited: (a) to endorse the work conducted by the Institute and the Global Education Monitoring Report team of soliciting the submission of national benchmarks for selected Goal 4 indicators; (b) to note the potential of the benchmarking approach with regard to identifying data gaps and to encourage Member States to collect the relevant education statistics; (c) to note the potential of the benchmarking approach to promoting interregional and intraregional statistical cooperation in education; and (d) to support the update and revision mechanisms proposed by UNESCO for keeping the benchmarks relevant and to invite the Institute to report back to the Commission in this regard in 2024.

* E/CN.3/2022/1.

I. Introduction

1. The present report of the Institute for Statistics of the United Nations Educational, Scientific and Cultural Organization (UNESCO) addresses four areas: (a) standards and methodologies in education; (b) data production; (c) leadership and coordination in Sustainable Development Goal 4: global and thematic indicators for Goal 4; and (d) national benchmarks. The report details the progress in education statistics standards, methods and data collection and the actions proposed by the Institute to support more integrated, better-quality, cost-effective and timely statistical data for education at the national level.

II. Standards and methodologies in education


2. Following the adoption of the 2011 revision of the International Standard Classification of Education (ISCED) and the 2013 revision of the ISCED Fields of Education and Training (ISCED-F), the Institute and its education data-collection partners, Eurostat and the Organisation for Economic Co-operation and Development (OECD), adapted their education survey instruments to the new standards. The 2011 revision of levels of education and educational attainment was implemented in the 2014 round of surveys on education and educational attainment. The new classification for fields of education and training was introduced in the 2016 round of education surveys.

3. The Institute, Eurostat and OECD worked jointly on an operational manual for ISCED 2011, which was published in early 2015 in English, French and Spanish. Later that year, a document containing detailed field descriptions and correspondence tables between ISCED-F and previous classifications of fields of education was published online. Owing to the technical nature of the field descriptions, the document is currently available in English only.

4. In addition to the technical documents supporting the implementation of the revisions, the Institute and its education data-collection partners worked with countries to produce comparisons, or “mappings”, of national education programmes and qualifications to ISCED 2011 in order to assist data users in interpreting the new education indicators. As at the end of 2018, 170 mappings were published on the Institute’s website.

5. The vast majority of countries have made good progress in implementing ISCED 2011 in their international reporting of education and educational attainment data, with many reporting ISCED 2011-compliant data for the fifth time and ISCED-F-compliant data for the third time in 2018.
B. Development of the International Standard Classification of Teacher Training Programmes

6. In order to improve the availability and quality of teacher statistics, the Institute developed the International Standard Classification of Teacher Training Programmes (ISCED-T) after its endorsement at the fortieth session of the UNESCO General Conference, in 2019.

7. The development of ISCED-T by the Institute was guided by a global technical advisory panel and a series of formal consultations with UNESCO category 1 institutes, relevant category 2 centres and Member States coordinated by the Institute and the UNESCO Division for Policies and Lifelong Learning Systems (Education Sector).

8. ISCED-T is a framework for assembling, compiling and analysing cross-nationally comparable statistics on teacher training programmes and related teacher qualifications. It is based on ISCED, which serves to classify education programmes and related qualifications by education levels and fields.

9. ISCED-T is not a tool for measuring the quality of teacher training programmes, as it does not capture the underlying curriculum or content of such programmes. It covers pre-primary, primary, lower secondary and upper secondary education.

10. ISCED-T is an important step forward in addressing the limitations of the data currently used to monitor the global indicator for target 4.c of the Sustainable Development Goals, by offering the definition of agreed international categories for the understanding of teachers’ qualification and programmes, helping both the production of cross-nationally comparable statistics and reflection on teacher training policies.

11. The implementation of ISCED-T could start as early as 2022 if adopted at the forty-first session of the UNESCO General Conference, in November 2021. The next steps for the Institute are to finalize the text of the classification, incorporate revisions requested by the General Conference, translate the text into the official languages of the United Nations and develop a data-collection strategy and implementation plan for ISCED-T.

C. Global Proficiency Framework and policy linking

12. During the period 2020–2021, the Institute made considerable progress in the area of learning outcomes, which encompasses efforts to develop new methodologies to report on learning outcomes, tools to assess national learning assessment systems, and documents supporting the implementation of learning assessments as well as advocating for a common learning metric. The Institute has also moved ahead with respect to data collection on learning outcomes.

13. In 2019, the Global Proficiency Framework: Reading and Mathematics – Grades 2 to 6 was published. The document was developed by the Institute, the United States Agency for International Development (USAID), the Department for International Development of the United Kingdom of Great Britain and Northern Ireland, the Australian Council for Educational Research, the Bill and Melinda Gates Foundation and other partners representing many development organizations, as listed under the contributors section of the publication. Subsequently, the Framework document was revised to also cover grades 1 and 7 to 9.

14. The Institute and its partners have developed the policy linking methodology, which is used to link learning outcomes from existing assessments to the Global
Proficiency Framework and to set benchmarks (or cut scores) on learning assessments to align them across countries and contexts over time. The method allows countries to use their existing assessments to report against indicator 4.1.1 of the Goals, proportion of children and young people (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex. In 2021, policy linking workshops aimed at harmonizing learning assessments were conducted by the Institute with a technical partner, Cito (cito.com), in Cambodia, India, Lesotho and Nepal, with an assessment in Zambia planned for December. The policy linking toolkit is also being implemented in selected countries by USAID, the World Bank Group and the International Common Assessment of Numeracy/People’s Action for Learning Network.

D. Guidelines for data collection to measure indicators 4.7.4 and 4.7.5

15. In June 2021, the Technical Cooperation Group on the Indicators for Sustainable Development Goal 4 – Education 2030 held a webinar to launch the guidelines for data collection to measure indicator 4.7.4 (percentage of students in lower secondary education showing adequate understanding of issues relating to global citizenship and sustainability) and 4.7.5 (percentage of students in lower secondary showing proficiency in knowledge of environmental science and geoscience).

E. Global item bank

16. In order to improve the quality and availability of data for indicator 4.1.1, a proof of concept was elaborated for a comprehensive item bank platform designed to meet the varying needs of educators, administrators and policymakers related to the development, delivery, scoring and reporting of assessments in reading and mathematics. It is critical that Member States have reliable and valid assessments that will yield the scores and data needed by policymakers to understand and monitor student performance. To that end, in addition to the 500 items that the Institute had already compiled from Member States, the Australian Council for Educational Research donated 400 more and a memorandum of understanding was signed with the Direction de l’évaluation, de la prospective et de la performance, which is the statistical department of the Ministry of Education of France, with the aim of collaborating on the development, maintenance and promotion of the international item library. The partnership with the department promotes a joint vision on strategy and governance and will enable access to networks with countries and institutions that can contribute items, practices, expertise and funding to make the platform sustainable and effective.

F. Monitoring the impact on learning outcomes

17. In 2021, the Institute, with its technical partners the Australian Council for Educational Research and CONFEMEN and financial support from the Global Partnership for Education, launched the Monitoring Impacts on Learning Outcomes project aimed at measuring learning outcomes in six countries in Africa (Burkina Faso, Burundi, Côte d’Ivoire, Kenya, Senegal and Zambia) in order to analyse the long-term impact of the coronavirus disease (COVID-19) on learning and to evaluate the effectiveness of distance learning mechanisms used during school closures. In addition, the project will develop the capacity of countries to monitor learning after the crisis. The results are expected to be released in early 2022.
III. Data production

18. The Institute supported the Technical Cooperation Group in finalizing indicator methodologies for all Goal 4 targets, increasing the number of indicators reported, from 29 in 2017 to 37 in 2019 and 43 in 2021. The Institute presented the methodologies for the equity benchmark indicator; a hybrid approach to the use of national population data; and the methodological decisions on the calculation of regional averages for four of the pending global indicators.

19. The global education data release featured data for 44 indicators, including global indicator 4.7.1 and the new thematic indicator 4.1.0. Data were also published for the first time for indicators 4.4.2, 4.5.3, 4.7.6, 4.c.5 and 4.c.7. Additional disaggregation was introduced for six indicators, including by disability for indicators 4.1.2 and 4.1.4 and by education level for indicators 4.a.2 and 4.5.2 on bullying and home language, respectively. The full list of indicators is found on the website of the Technical Cooperation Group (http://tcg.uis.unesco.org/), as is the set of metadata that has been completed for all indicators.

20. Economic data were also updated for the September 2021 data release, based on the most recent data produced by the International Monetary Fund and the World Bank.

21. The Institute piloted and presented to the eighth meeting of the Technical Cooperation Group documentation on expanded data-collection tools and options which included a new approach to providing data for Goal 4 monitoring, whereby countries can work with user-friendly templates from the Institute to compile raw data and calculate indicators.

22. The Institute disseminated new visualizations on the microsite of the Technical Cooperation Group, including global, regional and country dashboards for benchmarks; ISCED mappings; COVID-19 regional and country dashboards on school closures; and Global Partnership for Education visualizations on the impact of the pandemic on education. Special tailored tools were used to develop the new visualizations.

23. The Institute launched two repositories of national sources to enable access to data on expenditure (education expenditure reports) and other data on education (education indicator reports) that can be used to calculate Goal 4 indicators.

IV. Leadership and coordination in Sustainable Development Goal 4: global and thematic indicators for Goal 4

24. To lead the development and implementation of thematic indicators for education, in May 2016 the Institute and the UNESCO Division for Education 2030 Support and Coordination convened the Technical Cooperation Group on the Indicators for Sustainable Development Goal 4 – Education 2030. The Technical Cooperation Group provides a platform for the discussion and development, in an inclusive and transparent manner, of the indicators used to monitor targets. It provides recommendations to the Institute on the actions needed to improve data availability and on the development of methodologies to produce thematic indicators for the follow-up and review of Goal 4. The Group includes experts from 22 Member States, 4 multilateral partner agencies (OECD, UNESCO, the United Nations Children’s Fund (UNICEF) and the World Bank) and 3 civil society organizations (Arab League Educational, Cultural and Scientific Organization, Education International and Collective Consultation of NGOs on Education for All) and the Co-Chair of the Sustainable Development Goal Education 2030 Steering Committee.
V. Benchmark setting for Sustainable Development Goal 4

25. In the Education 2030 Framework for Action, countries are called upon to establish “appropriate intermediate benchmarks (e.g. for 2020 and 2025)” for the Sustainable Development Goal indicators, which are seen as “indispensable for addressing the accountability deficit associated with longer-term targets” (para. 28). However, most countries have not translated the global targets into national ones to serve as references for reporting their progress regularly. To fill that gap, the Technical Cooperation Group agreed in 2019 on seven indicators to be benchmarked. The agreement was based on a review of proposals by Group members, during which they concluded that it would be possible to set benchmarks for 6 of the 43 Goal 4 indicators and the Framework for Action public expenditure indicators, based on past trends, country coverage, frequency of data and policy relevance. The selected Goal 4 benchmark indicators are as follows:

- Indicator 4.1.1. Proportion of children and young people (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex
- Indicator 4.1.2. Completion rate (primary education, lower secondary education, upper secondary education)
- Indicator 4.1.4. Out-of-school rate (1 year before primary, primary education, lower secondary education, upper secondary education)
- Indicator 4.2.2. Participation rate in organized learning (one year before the official primary entry age), by sex
- Indicator 4.c.1. Proportion of teachers with the minimum required qualifications, by education level
- Equity indicator (to be defined)
- Education expenditure as a share of gross domestic product/total public expenditure (Education 2030 Framework for Action, para. 105)

26. At the extraordinary session of the Global Education Meeting in October 2020, Member States and the international community were reminded of this pending commitment, and UNESCO and its partners, together with the Sustainable Development Goal Education 2030 Steering Committee, were called upon to propose relevant and realistic benchmarks of key Goal 4 indicators for subsequent monitoring.

27. The effectiveness of the process of setting, monitoring and acting on benchmarks rests on two factors:

- Political commitment: setting benchmarks as requested in the Education 2030 Framework for Action cannot be done at the global level, given the very large differences in starting points between countries. Benchmarks need to be realistic and based on national ownership. A global process may undermine these objectives, and it was therefore proposed to define benchmarks at the regional level as a starting point, as countries within each region tend to have more challenges in common and more opportunities to enter into policy dialogue and learn from each other.
- Technical challenges of measurement need to be overcome, and an approach to benchmarking Goal 4 indicators was therefore proposed to help and guide regional entities and national Governments in setting national benchmarks for the selected indicators. The approach is based on the principles of fairness, efficiency, relevance, simplicity and transparency.
28. The Institute and the Global Education Monitoring Report team proposed a two-step political and technical process, which was endorsed by the Technical Cooperation Group. The process consists of regional and national benchmarks, as follows:

(a) The regional benchmark level, with the definition of a common regional minimum reference, offers a balance when countries in a region share many of the same challenges. A regional approach in conjunction with a national benchmark enables engagement across countries and offers opportunities to countries to be inspired and to learn from each other;

(b) The national benchmark levels for the selected indicators shall reflect countries’ realities and be based on their starting points, contexts, plans and ambitions.

29. The aim of benchmarking Goal 4 indicators is to provide a framework for identifying and supporting national actions to fill data and policy gaps and for helping to address common challenges by prompting an exchange of best practices, mutual learning, and gathering and dissemination of information and evidence of what works, as well as advice on and support for policy reforms. The progress on Goal 4 and its targets depends on the contribution of each country for each policy area by defining a quantitative target and the set of actions and policies to support its achievement.

30. The benchmarking process also responds to the synthesis report of the Secretary-General on the post-2015 sustainable development agenda (A/69/700), in which it was recommended that four levels of monitoring should be considered: global, regional, thematic and national. This process aims to align those four indicator levels.

31. The Institute has produced a series of reports intended to bring a regional focus to Goal 4 monitoring by highlighting the work being done in the regions while comparing Goal 4 targets with those established by regional and subregional bodies. In addition to that series of reports, there are many data resources on the microsite of the Technical Cooperation Group, including a section devoted to benchmarking with regional and country dashboards for each of the seven Goal 4 indicators identified for benchmarking and a data book that highlights how each region performs across the Goal 4 indicators.

A. Consensus-building

32. The main aim is to give the assurance that this is a coherent and fully articulated process that aligns national (i.e. national plans), regional (e.g. African Union, Asia and the Pacific, Caribbean Community (CARICOM), European Union, etc.) and global (i.e. Goal 4) education agendas (see the figure below). Countries are expected to submit the targets or benchmarks that they have already developed. In case countries do not have such targets, they are expected to submit targets to which they would be willing to commit. In this process, all countries are reminded that they signed up to submit targets that represent their contributions to the global effort to achieve Goal 4 by 2030.
B. Compilation

33. Countries were invited to submit their national benchmark values for 2025 and 2030 for each of the seven global and thematic benchmark indicators. On 4 August 2021, the Assistant Director General for Education of UNESCO, Stefania Giannini, invited them to submit the values for the seven indicators for both years, as agreed at the Global Education Meeting on 13 July 2021. To facilitate the exercise, the Institute and the Global Education Monitoring Report team shared a template with projected benchmark values to serve as a basis for discussion and help in decision-making. It was possible for a country not to have targets set for the selected benchmark indicators in the template, either because there was no national plan or because the national information system had not yet generated the values for those indicators.

34. In parallel, the Institute and the Global Education Monitoring Report team started a data mining process to collect national targets from publicly available official documents (e.g. from voluntary national reviews, Planipolis, the Global Partnership for Education, national sector plans, etc.) to identify national benchmarks.

35. In June 2021, a communication from the European Commission confirmed that three of the seven indicators for which the targets had been set for 2030 corresponded to the seven monitoring areas of the Goal 4 benchmarking process and merited consideration as the European Union regional contribution.

36. As at 24 November 2021, 87 countries had submitted their national benchmark values. In addition, 18 European Union member countries went with the European Union benchmarks, and 15 CARICOM countries also went with the regional benchmarks. A completed template with national benchmarks is still expected to be submitted by at least 17 countries. The extensive data mining process covered 159 countries and found an average of 11 indicators per year per country.
C. Dissemination and monitoring

37. To enhance visibility and impact, a dashboard with national benchmarks and projected regional averages for all benchmark indicators will be widely disseminated in the Global Education Observatory.

38. A short report containing information on the progress and data gaps, based on collected data, will be drafted in order to ensure a transparent approach to reporting progress against the committed benchmarks and to share good practices and lessons learned from actions towards achieving the five priority areas.

39. The baseline and subsequent monitoring reports will be aimed at informing the regional organization and coordination bodies and the broader international community.

VI. Action to be taken by the Statistical Commission

40. The Commission is invited:

(a) To note the progress made in the standards, methods and data collection of education statistics by the UNESCO Institute for Statistics;

(b) To endorse the work conducted by the Institute and the Global Education Monitoring Report team, in which they invited countries to submit their national benchmarks for selected Goal 4 indicators;

(c) To note the potential of the benchmarking approach with regard to identifying data gaps and to encourage Member States to collect the relevant education statistics;

(d) To note the potential of the benchmarking approach to promoting interregional and intraregional statistical cooperation in education;

(e) To support the update and revision mechanisms proposed by UNESCO to keep the benchmarks relevant and to invite the Institute to report back to the Commission in this regard in 2024.