



**REGIONAL PREPARATORY  
MEETING FOR THE FIRST SESSION  
OF THE 'UNESCO CONFERENCE ON  
EDUCATION DATA AND  
STATISTICS'**

SUMMARY

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2023

**2024** CONFERENCE ON  
**EDUCATION DATA  
AND STATISTICS**

The preparatory meetings for the first session of the ‘UNESCO Conference on Education Data and Statistics’ provided the platform to discuss issues and priorities for different regions. The papers presented at each meeting depended on the region in question. Considering all regions, the presentations covered the following topics:

1. Implementation of the International Standard Classification of Education (ISCED): Challenges and solutions
2. Administrative education data: What are the challenges going forward?
3. Teacher data: What are the challenges going forward?
4. Education expenditure data: What are the challenges going forward?
5. Use of household survey data for reporting on SDG 4
6. Learning Outcome data: What are the challenges going forward?
7. Setting and monitoring national SDG 4 benchmarks: What are the challenges going forward?

For each topic, the UIS presented the background, key issues, and challenges for countries regarding data collection, compilation and reporting at the international level, and participating countries were invited to provide their feedback, seek clarifications, express concerns, and offer any additional insights that each paper should address. Finally, the UIS suggested an agenda forward to work with Member States to improve the data collection, compilation, and reporting at the national and international levels.

## **IMPLEMENTATION OF THE INTERNATIONAL STANDARD CLASSIFICATION OF EDUCATION (ISCED): CHALLENGES AND SOLUTIONS FORWARD**

- The meeting agreed on the role of ISCED in standardizing and compiling internationally comparable data in education and expressed thanks to UIS for its support in mapping national education programmes into ISCED.
- The meeting noted countries’ specific concerns, expectations, and challenges in implementing ISCED classification for reporting data at the international level.
- The meeting appreciated the proposed way forward and trusts that it would help to resolve the existing challenges. The creation of the ISCED Committee marked an important step in

addressing these challenges and is expected to lead to recommendations in the coming months.

### Arab States

- Countries raised concerns regarding the classification of ISCED 4 and inquired about methods and additional guides on classifying vocational and short-term courses in ISCED levels.
- It was sought clarification regarding the removal of the adult education data sheet from the education annual survey and countries would like to understand how they can provide data on adult education.

### Asia

- Countries expressed concerns about mapping non-formal education, and the decentralization of school administration to the provincial level was also discussed.
- Countries expressed the need for increased attention to the transition in ISCED levels 0-2.
- It was aimed to integrate ISCED into its education masterplan and countries expressed the need of coordination among different education providers to have better mapping of the ISCED.
- It was questioned the inclusion of non-formal education in ISCED mapping.
- Participating countries also emphasized the adjustment or revision of ISCED-F to reflect the new development and demands of various field of studies in Tertiary education.

### Africa

- No region-specific interventions on challenges or solutions.

### Pacific

- In the Pacific, Universities are not in all countries as they are working under the University of South Pacific (USP) in terms of a regional university approach. The ISCED classification for the countries at the tertiary level should be discussed in such cases to help countries classify easily.

- It was discussed that some of the short term TVET programmes are difficult to map in the ISCED. In some cases, it is not that easy to decide the orientation of the programmes in the ISCED.

#### Latin America and the Caribbean

- Not treated.

#### OECD

- OECD shared some thoughts about the review of ISCED 2011 and ISCED-F 2023 and provided suggestions about the classifications issues of professional and general higher education and issues that pertain to distinguishing between formal and informal early childhood education programmes.
- Countries informed that during the recent Education and Training Statistics (ETS) meeting of Eurostat, Denmark and Germany presented findings from their national case studies on early childhood educational development programmes and non ISCED programmes, which could help refine the definition of programmes to be classified at ISCED level 01. OECD mentioned that this topic could be raised at the next INES informal working group on early childhood education (planned for January 2024).
- Some countries indicated that a general revision of ISCED is not necessary and that there is more a need for country's support on how to use ISCED, and that only updates and improvement of certain aspects are needed.
- It was suggested to add a column to ISCED questionnaires to collect information on the date at which reported programmes were developed and implemented in the national education system, and to add additional variables to help determine the link between ISCED requirements and data collection at the national level.
- Several OECD countries mentioned the need for UIS products to reflect the central importance of ISCED and suggested that ISCED mappings presented on UIS website be up to date. It was also mentioned the importance of having a dynamic collection and reporting of ISCED mappings as national education systems and programmes change continuously.
- It was also suggested to consider how ISCED could account for special needs education.

## ADMINISTRATIVE EDUCATION DATA: WHAT ARE THE CHALLENGES GOING FORWARD?

- The meeting acknowledged administrative data as the most important and useful data sources for education planning, policy development, and monitoring.
- However, there are various challenges in ensuring the accuracy and maintaining the quality of the data in terms of data quality, reporting consistency, and data bias. It was acknowledged that a healthy and sustained communication between countries and UIS could help minimize such challenges.
- The meeting fully agreed on the importance of the data to be compiled and reported to the international level on time and more regular basis.
- The meeting also endorsed the agenda proposed by the UIS and believes that with this agenda, it will be able to reduce the data and reporting gaps at national regional and global levels.
- The meeting acknowledged the pre-meeting as a valuable opportunity for knowledge-sharing and collaboration on addressing the challenges associated with teacher data.
- The meeting emphasized the importance of accurate and consistent teacher data to evaluate educational progress and challenges.
- Countries shared their specific difficulties in implementing administrative data reporting, underscoring the need for guidance and solutions in areas such as education expenditure, home schooling, and teacher training data.

### Arab States

- It was discussed that in the coming years, more generative AI and big data could help improve the education data system.
- It was requested the development of more user-friendly tools and guides to help countries compile data on higher education.

### Asia

- Countries showed concerns in getting data by ISCED levels particularly disaggregated, such as education expenditure.

- The incorporation of home-schooling data was discussed, and the need for a collective discussion on this matter was emphasized.
- It was reported that developing integrated EMIS system helps to report on the indicators, and that it has been improved a lot particularly for the school education. However, compiling data for Tertiary Education is still challenging as all the tertiary education data are compiled in the system.
- It was suggested to advocate for the more agile and flexible data system which is resilient to future shocks.

#### Africa

- Countries shared their specific difficulties in implementing administrative data reporting, underscoring the need for guidance and solutions in areas such as education expenditure, home schooling, and teacher training data.
- Countries emphasized the need of providing trainings, notably on ISCED, and the regular implementation of workshops. Ms. Montoya mentioned that not all the data needed to calculate the indicators are actually being collected at the country level.
- It was mentioned that the questionnaire is too long and changes from year to year therefore it was proposed to have a unified questionnaire from year to year and across the region.
- Countries highlighted the importance of international standards and some raised the issue of the lag in data production resulting in lack in information and that of public/private and redundancy.
- Morocco inquired about data that are no longer published and the director of the UIS clarified that this is due to the focus on the SDG framework and said that the UIS will increase communication to inform countries of such changes in the future.

#### Pacific

- Countries pointed out that data need to be useful at the school level, and then relevant to the national level and the international level. It was mentioned that country capacity needs to develop in terms of data collection, compilation and use of standards.

- Not having clear data definition and low coverage of EMIS (only covering private schools) are the key issues in using administrative data in reporting. It was emphasized the need for capacity development, aligning EMIS with national development with clear indicators.
- It was highlighted the need for collaboration between various departments and Ministries to compile data.
- It was suggested having an advocacy tool for countries to understand the importance of data at the school level, district, and national levels.

#### **Latin America and the Caribbean**

- The difficulty in comparing data between different educational systems highlighted the importance of standardizing methodologies.
- There was a concern about the ability to share and cross-reference data between different educational institutions due to restrictions imposed by data protection laws.
- Participants indicated that the administrative workload to feed EMIS systems is excessive, especially in educational centers with limited resources.
- It was highlighted the need to develop specific instruments for collecting data on students with special educational needs, suggesting that current data systems may not be sufficiently inclusive or detailed.

#### **OECD**

- The region-specific interventions referred only to teacher data, available in the following section.

### **TEACHER DATA: WHAT ARE THE CHALLENGES GOING FORWARD?**

- The meeting emphasized the importance of accurate and consistent teacher data to evaluate educational progress and challenges. Challenges related to teacher data definition on qualified and trained were recognized, with specific issues related to teacher qualifications.
- The meeting highlighted the need for collaboration and data standardization among member states to ensure international comparisons. The importance of developing clear

criteria for teacher qualification was underlined, although it was acknowledged that global-level definitions might not be practical due to country-specific needs.

### Arab States

- Countries raised issues of qualified and trained teachers and highlighted the need for international definitions and clearer guidance in collecting, compiling, and reporting data on qualified and trained teachers.
- Countries shared their specific difficulties in implementing administrative data reporting, underscoring the need for guidance and solutions in areas such as education expenditure, home schooling, and teacher training data.

### Asia

- Challenges related to collecting and reporting data on teacher training in the uniform manner were highlighted.
- It was highlighted that the same teachers teach across multiple levels and therefore disaggregating the teachers by level is a challenge. Countries also brought the issue of teachers teaching in different levels and the need of clarity in counting them in correct manner, avoiding double counting particularly for higher education institutions.
- Producing data for Pupil trained teacher ratio provides better representation of quality of teacher than just presenting Pupil teacher ratio. However, it was queried whether pupil trained teacher ratio should be produced by subjects.
- It was discussed the need of international definition of minimum qualification and minimum training to measure the qualified and trained teacher in a more comparable manner. It was also enquired the global process of defining the minimum qualification and trained teacher and countries showed their interest in contributing to the process.

### Africa

- Countries raised issues of qualified and trained teachers and highlighted the need for international definitions and clearer guidance in collecting, compiling, and reporting data.
- Countries mentioned that classification of teachers is not always straight-forward as there are different types of teachers and different types of trainings provided.
- It was highlighted the importance of taking into consideration the budget.

- Some countries may have a unique situation with more teachers produced than teachers employed. It was suggested to properly define the student to qualified or trained teacher ratios.

#### **Pacific**

- Low coverage of teacher data in the region has been recognized.
- Countries supported the need to align the definition of trained teachers, qualifications and salaries and expressed that ISCED-T could be able to solve the issues by bringing more internationally comparable definitions rather than using a national definition which is not comparable. It was suggested the need for more guidelines and clarity in compiling data on trained and qualified teacher data.
- It was commented that it is difficult to get teacher salary data, particularly private teacher data, and that it is also difficult to disaggregate teacher data by levels of education, particularly in lower and upper secondary levels.
- Countries expressed the need for harmonization across different systems.

#### **Latin America and the Caribbean**

- Countries expressed that the collection of information on the continuous training of teachers presented significant challenges due to the decentralization of responsibility to territorial entities.
- There was an emphasis on the need to improve calculation and collection methodologies to align with international standards and ensure that the information is comparative between countries.

#### **OECD**

- OECD countries were presented with ISCED-T that will be used to help with the definition of trained/qualified teachers to enable collect data on SDG 4.c.1 for global monitoring.
- OECD informed about the creation of a new group in the INES working party on attractiveness of the teaching profession and teacher shortages. OECD carried out a survey to estimate data availability to measure teachers' shortage and to determine indicators where they are confident about data availability, for a launch of data collection in 2024.

- Countries are investigating different methodologies for calculating teacher attrition to reflect teachers leaving the profession, and teachers moving across professions. OECD has worked on the issue of attrition since 2017 and has considered several methods. An attempt was made to develop an improved methodology, but only a small number of countries reported the necessary data. No comparison was made on a significant number of countries between the improved methodology and the SDG 4 methodology.

## EDUCATION EXPENDITURE DATA: WHAT ARE THE CHALLENGES GOING FORWARD?

- The meeting emphasized the significance of education expenditure indicators in promoting educational equity and resource allocation and mobilization.
- Challenges related to data source conflicts, private expenditure on education, data consolidation, and coverage were acknowledged leading to low coverage of the data reporting at international level.
- The meeting acknowledged the complexities involved in measuring private expenditure on education and the need for a standardized approach.
- The meeting endorsed the proposed agenda forward and expressed that the proposed actions will be crucial to improving the quality and accuracy of education expenditure data.

### Arab States

- Not treated.

### Asia

- Difficulties in data disaggregation for education expenditure by levels were faced. Challenges also include data from multiple ministries.
- Countries faced challenges in collecting education expenditure data from household surveys.
- Synchronization of data from different agencies was a concern. There is a problematic in obtaining data for SDG4 expenditure at the national level due to the variance in data reporting by local governments and private sources.

- It was suggested to develop appropriate methodologies and guidelines for disaggregating the data by levels, recording the education expenditure in more harmonized manners, using household survey to produce private expenditures.

#### **Africa**

- Not treated.

#### **Pacific**

- Countries expressed that collecting detailed expenditure data is very difficult and mostly they are not publicly available.
- It was suggested strengthening EMIS to include the data on education expenditure.
- It was raised the need to have a linkage between the education sector plan and the education budget.

#### **Latin America and the Caribbean**

- Not treated.

#### **OECD**

- Not treated.

## **USE OF HOUSEHOLD SURVEY DATA FOR REPORTING ON SDG 4**

The emerging topics reflect a consensus on the need to improve the quality and coherence of educational information in household surveys.

- The meeting acknowledged the strengths and benefits of household surveys in monitoring SDG4 but noted their under-utilization in policy discussions and monitoring due to a lack of capacity, awareness among policy makers, and coordination between MOE and NSO.
- It underscored the challenges of using household surveys for monitoring SDG4. These challenges included non-standardized context questionnaires among various surveys,

inconsistency in recording age, not using ISCED classification in line with administrative data, etc.

- The meeting endorsed the agenda presented during the session to address the issues and challenges of using household surveys in monitoring SDG4. Proposed solutions included improving coverage, harmonizing contextual questionnaires, using international standards, and establishing collaborative partnerships to enhance the quality and reliability of data derived from household surveys.

### **Arab States**

- Countries raised the issue of expenses of the HHS and its periodicity, pointing out the difficulty in monitoring using HHS, and suggested harmonization between HHS and administrative data. They also inquired about how participants for the Conference will be informed and selected.
- It was expressed that it is often difficult to contribute to HHS as they are mostly conducted with the support of international agencies like the World Bank or ILO, etc.
- It was also discussed and acknowledged that despite various challenges in using HHS, it is a useful and important data source for monitoring SDG4. However, Arab States pointed out the need for raising awareness among different stakeholders and establishing coordination between NSO and MOE for its meaningful use.

### **Asia**

- Countries highlighted the challenges of including respondents' birth months in surveys, a key issue in harmonizing data between household surveys and administrative records.
- Difficulties were also expressed in obtaining SDG4-related indicators through household surveys, advocating for partnerships to acquire data for UIS to generate international indicators.
- Concerns were raised about the extended time required for household survey data, about addressing annual reporting with periodic household data collection, and therefore about potential discrepancies when integrating it with other sources.
- Countries shared challenges in data collection in remote rural areas, particularly during the rainy season, and expressed concerns about the sensitivity of the questions and their impact on data quality, calling, therefore, for third-party validation to ensure data quality.

### Africa

- Countries raised the need of standardizing the timing of HHS.
- It was inquired on whether HHS data will be used for all countries or only for countries with no administrative data and whether there will be comparison of data derived from administrative sources and household surveys.

### Pacific

- Countries emphasized the need for clear definitions regarding various population groups, such as youths, across different household surveys to ensure uniformity. They also pointed out that the MOE should provide more detailed comments and inputs regarding data requirements for monitoring SDG4.
- It was recognized the NSO role in guiding data generation processes within countries and in harmonizing statistical systems within the country.

### Latin America and the Caribbean

- Countries focused on the harmonization of concepts and methodologies to ensure comparability and coherence of data at the regional and international level. These countries pointed out that including sets of questions that could be adopted in different national contexts is essential to have common criteria.
- A preference emerged for reinforcing administrative records rather than relying on household surveys to collect data on education, due to the perception that administrative records can offer greater accuracy and more faithfully reflect the educational reality of the country. Countries highlighted the importance of using complementarity tools and technologies for data collection.
- Challenges in measuring non-formal education were also identified.

### OECD

- Not treated.

## LEARNING OUTCOME DATA: WHAT ARE THE CHALLENGES GOING FORWARD?

- The meeting acknowledged the importance of learning outcomes data in SDG4 monitoring and noted that there are significant data gaps in monitoring learning at various levels and among different groups.
- Issues such as comparability of grades and education levels, procedural quality, financial costs, and low coverage of cross-national assessments were highlighted.
- The meeting agreed on the agenda forward for potential solutions, particularly on implementing the Assessment of Minimum Proficiency Level (AMPL) assessment programmes to measure minimum proficiency levels for reporting SDG4.1.1a, b, and c to ensure comparability.
- It was emphasized that efforts to harmonize data, align assessments, and establish a common understanding of proficiency levels are essential for robust data reporting and international comparisons.

#### **Arab States**

- Countries highlighted the issues of non-comparability between various assessments and urged the UIS to take the lead in discussions and harmonizing of tools, methodologies, and processes.
- It was also emphasized that many countries undertook LAMP (later mini-LAMP) studies to measure adult literacy skills and suggested that the UIS build assessments on LAMP to continue collecting data using those tools to fill the data gaps.

#### **Asia**

- Countries pointed out the challenges related to digital access and capacity for its population, suggesting the retention of pen and paper assessments (LaNA).
- Nepal's multilingual context posed a challenge in assessing minimum proficiency among different linguistic groups as the assessments are mainly done in the official language.
- It was expressed a desire for increased UIS support for capacity building and future learning assessments programmes.
- Countries proposed to establish a validation body (of experts) to validate country specific local assessments of measuring learning outcomes that are in alignment to a specific set of standards.

- They also raised concerns about the lack of indicators related to gender equality, highlighting the need to address issues such as early teenage pregnancy. They also emphasized the importance of collecting more data on STEM education for women and girls in Southeast Asia.

### **Africa**

- Some interventions to discuss more in detail the various aspects and associated issues.

### **Pacific**

- It was discussed the need to integrate learning outcome assessment in the sector plans with a clear budget and results to guarantee that the country undertakes those assessments.
- It was expressed that international agencies like UIS support countries to harmonize their national assessment with international standards probably using global competency frameworks.
- Having orientation/training on understanding the minimum Proficiency in Learning (MPL) and Global Competency Framework (GCF) and use them in monitoring learning at national, regional and global levels, was also suggested.
- Solomon Island expressed that countries focus only on 4.1.1., but need to have clear strategies to produce learning data for other targets.

### **Latin America and the Caribbean**

- Countries raised the need to harmonize local and regional assessments with international standards.
- Challenges were identified in assessing and monitoring learning in tertiary education and migrations, and also in calibrating and validating assessment data.
- The dialogue extended to the role of assessments in public policy formulation and their contribution to the SDGs.
- The implementation of tools and structures for standardized assessments was a key point.

### **OECD**

- Not treated.

## SETTING AND MONITORING NATIONAL SDG 4 BENCHMARKS: WHAT ARE THE CHALLENGES GOING FORWARD?

- The meeting congratulated the UIS and GEMR for its leadership in establishing national benchmarks for SDG4 indicators. It was also acknowledged the contribution in establishing linkage between policies, plans and monitoring at national, regional, and global levels.
- It emphasized the challenges faced in setting and monitoring national SDG 4 benchmarks, with particular emphasis on the need for broader participation and quality of benchmark values.
- The meeting recognized the agenda forward presented, e.g., raising awareness among political levels as well as other stakeholders, providing more support to the countries in setting their national benchmarks and seeking national participation in reporting on benchmarking indicators linking with policy levels.
- It also acknowledged the significance of climate change and the interconnected nature of SDG 4 with other sustainable development goals.
- The meeting fully agreed on the importance of the data to be compiled and reported to the international level on time and more regular basis.
- It was also endorsed the agenda proposed by the UIS and believes that with this agenda, it will be able to reduce the data and reporting gaps at national regional and global levels.

### Arab States

- It was enquired the reason for using baseline values around 2015 and not using the latest data available.
- Countries requested to share the projection model that can be used for estimating benchmark values for the countries.
- It was recommended to add yearly updated figures (apart from the baseline which is old, and the targets which are far forward) in the table of Indicators Benchmarks.
- It was also clarified that countries have been invited to update their benchmark values should they wish to make changes.

### Asia

- Countries highlighted the issues of possible learning loss due to pandemic and suggested to consider such impacts while updating their national benchmark values.
- It was emphasized the interconnected nature of SDG 4 benchmark indicators with other SDG targets and need carefully investigate other related goals to have reliable benchmark values.

### Africa

- No region-specific interventions on challenges or solutions.

### Pacific

- Not treated.

### Latin America and the Caribbean

- Not treated.

### OECD

- Spain highlighted difficulties for countries (or regions) to give the same importance to benchmark indicators set at the global level, as country (or region) level priority may differ. It was suggested that in addition to country level target, regional level targets may be considered.

## ANNEX

**Table 1: Summary of issues by region**

Region	ISCED	Administrative data	Teachers	Expenditure	HHS	Learning outcomes	Benchmarks
<b>Arab States</b>	<ul style="list-style-type: none"> <li>-Guidance on classifying vocational and short-term courses in ISCED levels.</li> <li>-Mechanism to provide adult education data.</li> </ul>	<ul style="list-style-type: none"> <li>-Use of AI and Big data.</li> <li>-User-friendly tools and guides for higher education.</li> <li>-Financial support for upgrading/updating the system.</li> </ul>	<ul style="list-style-type: none"> <li>-International definitions and clearer guidance.</li> </ul>	<ul style="list-style-type: none"> <li>-Not treated.</li> </ul>	<ul style="list-style-type: none"> <li>-Harmonize HHS and administrative data.</li> <li>-Coordination between NSO and MOE.</li> </ul>	<ul style="list-style-type: none"> <li>-Harmonize tools, methodologies and processes.</li> <li>-Build assessments upon LAMP.</li> </ul>	<ul style="list-style-type: none"> <li>-Reason for not using the latest data available.</li> <li>-Projection model used for estimating benchmark values.</li> <li>-Add yearly updated figures.</li> </ul>
<b>Asia</b>	<ul style="list-style-type: none"> <li>-Questions about the inclusion of non-formal education.</li> <li>-Address home schooling.</li> <li>-Increase attention to the transition in ISCED levels 0-2.</li> <li>-Rotation-based ISCED committee membership.</li> <li>-Coordination among different education providers.</li> <li>-Revision of ISCED-F.</li> </ul>	<ul style="list-style-type: none"> <li>-Difficulty in getting expenditure data by ISCED disaggregated levels.</li> <li>-Address home schooling.</li> <li>-Compiling data for Tertiary Education is challenging.</li> <li>-Collect data using national ID for EMIS and HHS.</li> </ul>	<ul style="list-style-type: none"> <li>-Guidelines on counting teachers who are teaching in different levels.</li> <li>-International definition of minimum qualification and training.</li> <li>-Produce data for Pupil trained teacher ratio.</li> </ul>	<ul style="list-style-type: none"> <li>-Difficulties in getting data disaggregation by levels and ministries/departments.</li> <li>-Challenges in collecting data from HHS.</li> <li>-Improved data recording systems for quality data.</li> <li>-Develop methodologies and guidelines for disaggregation of data by levels.</li> </ul>	<ul style="list-style-type: none"> <li>-Challenges in including the birth month of respondents.</li> <li>-Challenges in collecting data in rural areas.</li> <li>-Extended time required to obtain data from HHS.</li> <li>-How to address annual reporting.</li> <li>-Third-party validation to ensure data quality.</li> </ul>	<ul style="list-style-type: none"> <li>-Retention of pen and paper assessments (LaNA).</li> <li>-Challenges in comparability due to differences in grade levels.</li> <li>-Multilingual context posed a challenge.</li> <li>-Increased UIS support for capacity building.</li> <li>-Establish a validation body (of experts) to validate</li> </ul>	<ul style="list-style-type: none"> <li>-Consider pandemic impacts while updating benchmarks.</li> <li>-Introduction of 'UN ESCAP method'.</li> </ul>

				-Harmonize education expenditure recording.		country specific local assessments. -Expansion of indicators related to gender equality. -Address issues such as early teenage pregnancy. -Collect more data on STEM education for women and girls.	
<b>Africa</b>	-	-Training and workshops.	-International definitions and clearer guidance. -Properly definition of student to qualified or trained teacher ratios. -Unified questionnaire from year to year and across region.	Not treated.	-Coordination between NSO and MOE. -Standardize the timing.	-	-
<b>Pacific</b>	-Review ISCED on tertiary level as Universities are not in all countries. -Difficulty in mapping short term TVET programmes. -How to address programmes with both TVET and academic components.	-Capacity development, aligning EMIS with national development. -Collaboration between departments and Ministries. -Advocacy tool for	-Internationally comparable definitions, using ISCED-T. -Harmonize different systems. -Difficulty in getting teacher salary data.	-Strengthen EMIS to include education expenditure data. -Linkage between education sector plan and education budget/	-Uniform definitions on population groups. -MOE should provide detailed inputs for monitoring SDG4.	-Clear strategies to produce learning data for targets 4.6.1. 4.7.4 etc. -Integrate learning outcome assessment in sector plans with a	Not treated.

		countries to understand the importance of data.	-Difficulty in disaggregating data by education level. -Guidelines and clarity in compiling data.	expenditure. -Collaboration with the Ministry of Planning/Finance. -Difficulty in getting private spending.	-Collaboration between MOE and NSO.	clear budget and results. -Harmonize national assessments with international standards. -Training on MPL and Global Competency Framework (GCF).	
<b>Latin America and the Caribbean</b>	Not treated.	-Standardization of methodologies. -Balance between legal protection and detailed data for effective policy making. -International support for innovation in data capture and strengthening of information systems. -Efficiency and security in data management. -Sophisticated and adaptive EMIS systems to address diverse populations and educational costs.	-Improve calculation and collection methodologies to align with international standards.	Not treated.	-Harmonization of concepts and methodologies, especially on school attendance. -Use of question models and decision trees. -Conceptually distinguish between enrollment and actual attendance. -Collaboration between NSO and educational institutions. -Review the	-Integration of local and regional assessments with international standards. -System to monitor learning in tertiary education. -Standardize instruments to collect data on migrants. -Calibration and validation of assessment data. -Inclusion of socio-emotional skills and curricular parameters. -Mapping the	Not treated.

					length of questionnaires and budgetary constraints. -Standards for classifying and measuring non-formal education. -Use of emerging technologies and tools.	Caribbean's regional assessments.	
<b>OECD</b>	<ul style="list-style-type: none"> <li>-Suggestions on how to classify professional and general higher education.</li> <li>-Challenges in distinguishing between formal and informal early childhood education programmes.</li> <li>-ISCED mappings on UIS website up to date.</li> <li>-A dynamic collection and reporting of ISCED mappings.</li> <li>-Additional variables to determine the link between ISCED requirements and data collection at the national level.</li> <li>-How ISCED could account for special needs education.</li> <li>-Additional column to collect information on the date at which reported programmes were developed and implemented in the national education system.</li> </ul>	-	<ul style="list-style-type: none"> <li>-OECD carried out a survey to estimate data availability to measure teachers' shortage.</li> <li>-Investigate different methodologies for calculating teacher attrition.</li> </ul>	Not treated.	Not treated.	Not treated.	-Consider regional level targets.

Table 2: Summary of issues by area

Area	ISCED	Administrative data	Teachers	Expenditure	HHS	Learning outcomes	Benchmarks
<b>Harmonization</b>	<ul style="list-style-type: none"> <li>-Standardizing and compiling internationally comparable data.</li> <li>-Classification of professional and general higher education.</li> <li>-Issues distinguishing formal and informal ECE programmes.</li> <li>-Guidance on classifying vocational and short-term courses in ISCED levels.</li> <li>-How to address programmes with both TVET and academic components.</li> </ul>	<ul style="list-style-type: none"> <li>-Collaboration and data standardization.</li> <li>-Capacity development, aligning EMIS with national development.</li> </ul>	<ul style="list-style-type: none"> <li>-International definition of minimum qualification and training.</li> <li>-Global-level definitions might not be practical.</li> <li>-Calculation and collection methodologies aligned with international standards.</li> <li>-Different types of teachers and types of trainings.</li> <li>-Properly define the student to qualified or trained teacher ratios.</li> </ul>	<ul style="list-style-type: none"> <li>-Harmonize the education expenditure recording.</li> </ul>	<ul style="list-style-type: none"> <li>-Non-standardized context questionnaires among various surveys.</li> <li>-Inconsistency in recording age.</li> <li>-Not using ISCED classification.</li> <li>-Use of question models and decision trees.</li> <li>-Challenge of including birth month of respondents.</li> <li>-Harmonize HHS and administrative data.</li> <li>-Uniform definitions on population groups.</li> <li>-Standards for classifying and measuring non-formal education.</li> </ul>	<ul style="list-style-type: none"> <li>-Harmonize tools, methodologies and processes.</li> <li>-Issues like comparability of grades and education levels.</li> <li>-Implementing AMPL assessment programmes.</li> <li>-Challenges in comparability due to grade levels.</li> <li>-Standardize instruments to collect data on migrants.</li> </ul>	<ul style="list-style-type: none"> <li>-The 'UN ESCAP method' was introduced.</li> <li>-Reasons for not using the latest data available.</li> <li>-Projection model used for estimating benchmark values.</li> </ul>

<p><b>Quality</b></p>	<ul style="list-style-type: none"> <li>-Additional variables to determine the link between ISCED requirements and national data collection.</li> <li>-More attention to the transition in ISCED levels 0-2.</li> <li>-Revision of ISCED-F.</li> </ul>	<ul style="list-style-type: none"> <li>-Sustained communication between countries and UIS.</li> <li>-Regular implementation of workshops.</li> </ul>	<ul style="list-style-type: none"> <li>-Guidelines on counting teachers who are teaching in different levels.</li> </ul>	<ul style="list-style-type: none"> <li>-Improved data recording systems for quality data.</li> <li>-Develop appropriate methodologies and guidelines for disaggregating data by levels.</li> </ul>	<ul style="list-style-type: none"> <li>-Collaborative partnerships to enhance quality and reliability of data.</li> <li>-Third-party validation.</li> <li>-Conceptually distinguish between enrollment and actual attendance.</li> </ul>	<ul style="list-style-type: none"> <li>-Procedural quality.</li> <li>-Establish a validation body (of experts) to validate country specific local assessments.</li> <li>-Calibration and validation of assessment data.</li> <li>-Multilingual context posed a challenge.</li> <li>-Training on MPL and Global Competency Framework (GCF).</li> </ul>	<ul style="list-style-type: none"> <li>-Quality of benchmark values.</li> </ul>
<p><b>Coverage</b></p>	<ul style="list-style-type: none"> <li>-Issues of decentralization of school administration to the provincial level.</li> <li>-Complexity of mapping the programmes run by different Ministries/departments.</li> <li>-Issue of not addressing home schooling in ISCED.</li> </ul>	<ul style="list-style-type: none"> <li>-Difficulty in getting expenditure data by ISCED disaggregated levels.</li> <li>-Home-schooling data.</li> <li>-Compiling data for Tertiary Education is challenging.</li> <li>-Collect data using national ID for EMIS and HHS.</li> <li>-Use AI and Big data.</li> </ul>	<ul style="list-style-type: none"> <li>-Survey to estimate data availability to measure teachers' shortage.</li> <li>-Investigate different methodologies for calculating teacher attrition.</li> <li>-Produce data for Pupil trained teacher ratio.</li> <li>-Difficulty in getting teacher salary data.</li> <li>-Difficulty disaggregating data by education level.</li> </ul>	<ul style="list-style-type: none"> <li>-Difficulties in getting data disaggregation by levels and ministries/departments.</li> <li>-Difficulty in getting private spending.</li> <li>-Strengthen EMIS to include education expenditure data.</li> <li>-Collaboration with the Ministry of Planning/Finance.</li> </ul>	<ul style="list-style-type: none"> <li>-The indicators that may be derived are numerous.</li> <li>-Challenges of collecting data in rural areas.</li> </ul>	<ul style="list-style-type: none"> <li>-Data gaps in monitoring learning at various levels and groups.</li> <li>-Low coverage of cross-national assessments.</li> <li>-Retention of pen and paper assessments (LaNA).</li> <li>-Expansion of indicators related to gender equality.</li> <li>-Address issues such as early teenage pregnancy.</li> <li>-Collect more data on STEM education for women and girls.</li> <li>-Clear strategies to produce learning data for targets 4.6.1. 4.7.4 etc.</li> </ul>	<ul style="list-style-type: none"> <li>-Consideration of regional level targets.</li> </ul>

<b>Reporting and monitoring</b>	<ul style="list-style-type: none"> <li>-ISCED mappings on UIS website up to date.</li> <li>-Concerns about mapping non-formal education.</li> <li>-Mechanism to provide adult education data.</li> <li>-Dynamic collection and reporting of ISCED mappings.</li> </ul>	<ul style="list-style-type: none"> <li>-Difficulties in implementing administrative data reporting.</li> <li>-Balance between legal protection and detailed data for effective policy making.</li> </ul>	-Clearer guidance.		<ul style="list-style-type: none"> <li>-Under-utilization in policy discussions and monitoring.</li> <li>-MOE should provide inputs for monitoring SDG4.</li> </ul>	-System to monitor learning in tertiary education.	-Consider pandemic impacts while updating benchmarks.
<b>Frequency</b>	<ul style="list-style-type: none"> <li>-Additional column to collect information on the date at which reported programmes were developed and implemented in the national education system.</li> </ul>	<ul style="list-style-type: none"> <li>-Questionnaire changes from year to year.</li> <li>-Lag in data production.</li> <li>-Sophisticated and adaptive EMIS systems.</li> </ul>			<ul style="list-style-type: none"> <li>-Issue of standardizing the timing of HHS.</li> <li>-Extended time required to obtain data from HHS.</li> <li>-How to address annual reporting.</li> </ul>		-Add yearly updated figures.
<b>Financial cost</b>		<ul style="list-style-type: none"> <li>-Financial support for upgrading/ updating the system.</li> <li>-International support for innovation in data capture and strengthening of information systems.</li> </ul>	-Importance of always taking into consideration the budget.		-Review length of questionnaires and budgetary constraints.	-Financial cost.	