United Nations
Educational, Scientific and
Cultural Organization

UNESCO
INSTITUTE
FOR
STATISTICS

INSTRUCTION MANUAL

UIS Catalogue of Learning Assessments

Module 1: General information about learning assessments

CONTENTS

INTRODUCTION

The UNESCO Institute for Statistics (UIS) Catalogue of Learning Assessments (the CLA) compiles standardised and comparable information on various aspects of learning assessments in countries across the world. It consists of three modules, and each module serves different, but interrelated purposes. The information collected through the CLA is used to support the reporting of the UN Sustainable Development Goals (SDG).

The main objective of the first module of the CLA is to collect basic characteristics of the different assessments implemented in countries. The information about countries' assessment and examination activities could further be fed into the process for identifying capacity-building needs. This module can serve as a resource for countries interested in developing a national assessment, improving their overall system or joining a regional or international initiative.

The meta information collected through this module will be added to the UIS international data base, and will be disseminated widely to the user community. The information from this module will be combined with data already available in the UIS international database to produce an interactive country profile that portrays each country's efforts to measure and monitor student achievement.

Compared with recent efforts to map the learning assessment landscape, e.g. the Global Monitoring Report undertaken by UNESCO and the National Learning Assessment Mapping project by Education Policy and Data Center, this module provides wider coverage and yields more data.

CLA Module 1 does not collect detailed performance results. Descriptive analyses of assessment attributes reveal patterns of decisions that governments make to monitor learning outcomes, which will inform global patterns and trends in assessment.

This **Instruction Manual** has been prepared to assist data providers when completing the CLA. For additional information on how to complete and submit the Catalogue please contact: UIS.LO@unesco.org.

COVERAGE OF THE QUESTIONNAIRE

The Module 1 questionnaire focuses on system-level educational assessments, and covers all school-based large-scale learning assessments and household-based assessments. Under the school-based assessments it covers student assessments conducted by educational institutions and public examinations in general as well as technical/vocational education programs. Under the household-based assessments it covers citizen-led assessments and any other household surveys that include an assessment component as part of the data collection. **All types of learning assessments that have been conducted since 2010 should be included in this questionnaire regardless of geographic coverage, whether they are considered a national assessment or a cross-national assessment.**

By including household-based assessments, the CLA will collect data about the learning outcomes of children regardless of whether or not they are enrolled in formal education programmes. This will ensure that this survey better covers all the populations mentioned in the Sustainable Development Goal (SDG) 4 targets related to learning outcomes.

The survey collects information on assessments that are conducted on the following levels of education defined in the 2011 revision of the *International Standard Classification of Education (ISCED 2011)*.

- Early childhood (ISCED level 0)
- Primary school (ISCED level 1)
- Lower secondary school (ISCED level 2)
- Upper secondary school (ISCED level 3)

The household-based assessments conducted in the age levels that correspond to the above education levels should be included in this survey.

To allow for a complete dataset of all assessment activities within countries, this survey covers assessments implemented since 2010.

HOW TO COMPLETE THE QUESTIONNAIRE

Respondents are encouraged to carefully read the following instructions, definitions and illustrations to accurately complete the UIS Catalogue of Learning Assessments Module 1 questionnaire. This manual covers all the definitions of key variables used in the questionnaire and explains the kind of information requested in each question.

The questionnaire is comprised of following three sections: (1) contact information; (2) list of assessments; and (3) a standard set of general questions about each of the assessments listed.

Please do not leave any cell blank where a written response is expected. If any reference material, manual, publication or website may help explain your country assessment and data, the UIS encourages you to send those documents along with the completed questionnaire.

Refer to the **Glossary** at the end of this manual for definitions and explanations of the data to be reported in the questionnaire.

To increase the efficiency of CLA data collection and minimize the response burden, respondents are invited to answer the questionnaire by inputting their answers while connected to the Internet. The responses are automatically stored in a survey database, which provides simple handling of data and minimizes the possibility of data errors. This online survey provides respondents with direct access to some definitions of key variables and additional explanations in the questionnaire.

The flow of questions is tailored to each respondent as he or she proceeds. Note the following **specific features** in the online questionnaire:

- "<<" and ">>" arrow buttons at the end of the page:
  The "<<" arrow button allows respondents to return to previous pages to edit responses. When a page is completed, the ">>" arrow button is used to save the page and navigate to the next page.

- Hover-text feature displays a variable definition:
  The online survey provides easy access to definitions and explanations of key variables/terms in the questionnaire. These terms are in bold text. By hovering around these bold text words, respondents can read the definition and explanations in the pop-up window.

- Table of Contents:
  Respondents can open the Table of Contents by clicking on the " > "button at top left corner of the screen. The Table of Contents displays the three sections of the questionnaire. When Section 2 is filled and saved, all the listed assessments will appear under Section 3 in the Table of Contents, with a percentage indicating the work in progress. By selecting any of the links, respondent can navigate to that session to edit the response or continue the questions. To close the Table of Contents, click on the right arrow button " → ".

- Save your work by page:
  The system automatically saves your responses by page when you click on the ">>" arrow button, even if the some questions are not answered. You can always return to the page to complete the questions.

- Completion of the questionnaire:
  A "Questionnaire completed" button will appear on the last page of the questionnaire. Respondents are requested to click on the completion button only when all assessments have been listed and uploaded, and you are ready to close the questionnaire. Please note

that once the "Questionnaire completed" is clicked, you will not be able to re-access the questionnaire to update your responses.

SECTION 1: Contact information

Please select your country from the drop-down list. For a specific country, please fill the contact information of the main respondent who will be responsible for the completion of the questionnaire. Note that an email address is **required** for proceeding to the next section.

SECTION 2: List of learning assessments

Please list all the assessments that have been conducted in your country since 2010.

If there have been multiple implementations of a particular assessment, please add each of these implementations in a separate row.

For the purposes of the UIS Catalogue, **multiple implementations** is defined as the administration of a specific assessment at different system levels (i.e. national level versus sub-national level), or with different assessment purposes (e.g. certifying students for grade completion, examining school performance, evaluating effectiveness of an educational intervention, etc.). Hence, a country that implements an assessment at different levels or for different purposes should be listed separately as different implementations.

For example, if there have been two administrations of the same assessment for two different purposes, one with the purpose to monitor performance levels of Grade 2 at national level, and the other with the purpose to evaluate the effectiveness of an intervention for Grades 2 and 3 in selected provinces, then these would count as two implementations.

In contrast, if an assessment is implemented at the same system level and with the same purpose, but on multiple years or across more than one grade, then this is still considered a single implementation. For example, the Programme for International Student Assessment (PISA) was implemented in 2012 and 2015. This would be considered a single implementation. The Trend in International Mathematics and Science Studies (TIMSS) for Grade 4 and Grade 8 was implemented in 2011. This would also be considered a single implementation.

For each assessment, there is a specific section in this questionnaire for capturing information about multiple **target populations**. If a single assessment is administered to more than one grade, and each grade has a different content coverage, then this assessment has multiple target populations.

Further in the example of TIMSS, if a country participates in both TIMSS at Grades 4 and 8, the two grades will be considered as two target populations in one single implementation since they are given two different tests, a Grade 4 TIMSS test for Grade 4 and a Grade 8 TIMSS test for Grade 8.

For detailed information regarding target population, please see page 11 Section 3.12 in the instruction manual.

*Please refer to previous pages of this manual for the coverage of assessments to consider for the purpose of this survey, and to the Glossary for the definitions of **school-based** and **household-based assessments, national** and **cross-national assessments, citizen-led assessment, public examination, multiple implementations,** and **target population** before completing this section.*

2.1 National assessments that are not part of a regional or international assessment programme

Please insert the names of any national assessments undertaken since 2010. National assessments may include school-based national learning assessments, public examinations or household-based assessments such as citizen-led assessments, and household surveys thatinclude an assessment component. Please start with the first row. Write the name of the assessment in the text box in the column 'Name of assessment'. Click on the "Add Row" button to add the next assessment. If there have been multiple implementations of a particular assessment, please add each of these implementations in the list and distinguish the different implementation in the assessment name. For example, National Assessment Programme (NAP) 1 and NAP 2.

2.2 Cross-national learning assessments

Please select from the drop-down list the cross-national learning assessments that have been conducted in your country since 2010. Cross-national assessments usually involve more than one country whether or not comparisons are made among participants. Select one assessment per row. For an assessment with multiple implementations, please select the same assessment name for each of these implementations in a separate row. The name of assessment with implementation number will be populated in the third column, for example, EGMA 1, EGMA 2, and so on. Add any additional assessment under the 'Other' category if it is not included in the predefined list.

Please do not leave Section 2 blank unless no learning assessment at all has been conducted since 2010 in your country.

Once you add all the assessments, please click on the ">>" button. All identified assessments will be listed in the table of contents by the order as entered in Section 2. If you are ready to proceed to Section 3, please click on the ">>" button. Alternatively, you can select an assessment from the Table of Contents, which can be retrieved by clicking the arrow " ➢"button.

SECTION 3: General information about each learning assessment

In Section 3, you are asked to provide information that will help characterise each learning assessment listed in Section 2. You will begin completing a set of standard questions for the first selected assessment. The name of the assessment you have entered will be displayed at the top of the screen.

This section provides the information that will characterise each assessment. It includes information on: 1) the assessment name, 2) level of implementation, 3) organisation responsible, 4) purpose, 5) implementation year, 6) accommodation of special needs, 7) participation, 8) background information, 9) assessment administration, 10) data analysis, 11) dissemination, 12) target population, 13) sampling design, 14) sample size, 15) cognitive domains, and 16) reporting.

In some cases where it is required to specify a category not listed <other, please specify>, a text box next to or below indicates where to type that category, as well as all relevant information that should be considered to understand these data.

To complete this section, you may need to use or explore your latest official documentation and archives, such as the assessment frameworks, reports and databases.

3.1. Assessment name

Please insert the full name of the assessment or examination in English and in its national or official language if not English. This is especially important if it is different from the name of the assessment provided in Section 2.

3.2. Level of implementation

Please select the system-level at which the assessment was implemented, by country or by sub-national level (e.g., if only some states/provinces/regions undertook the assessment).

3.3. Organization responsible in your country

Please write the name of organization that mandated the assessment in Question 3.3.1, and the name of organization that carried out the assessment in Question 3.3.2. In Question 3.3.3, please select the funding source(s) that apply to this assessment. Select all that apply and in the text box, and add any additional funding sources not included in the predefined list.

📑ℹ️ *Please refer to the Glossary for the definitions of **public budget**, **private funds**, **non-governmental organization (NGO)**, and **official development assistance (ODA)**.*

3.4. Purpose

Please select the intended purpose(s) of the assessment. Select all that apply and in the text box, add any additional intended purpose(s) not included in the pre-defined list.

The words 'children' and 'young people' refer to those who are of primary and secondary school age.

3.5. Implementation year

Please select the year(s) in which the assessment(s) was/were implemented. Select all that apply and in the text box. Please specify the implementation frequency if selecting a year/years does not sufficiently characterise the regularity. Note that the year of implementation is **required** for proceeding to the next question.

3.6. Accommodation of special needs

If the assessment accommodates children/young people with special educational needs, please tick all the special educational needs categories that the assessment accommodates. Select all that apply, and in the text box, add any additional special needs category not included in the pre-defined list.

Note that if the answer to Question 3.6.1 is 'No', proceed directly to Question 3.7.

📑ℹ️ *Please refer to the Glossary for the definitions of **special educational needs**; **functional, physical disability**, **cognitive, behavioral or emotional disability**; and **insufficient assessment language experience**.*

3.7. Participation

Please indicate whether the assessment is school-based or household-based. In this questionnaire, school-based assessments refer to assessments undertaken at school in contrast to household-based assessments which are carried out in the household. If the assessment is school-based, please select the type of schools that participate in the assessment, as well as the requirement status for schools or students to participate (compulsory or not).

Note that if the assessment is administered in the household, proceed directly to Question 3.8.

📑ℹ️ *Please refer to the Glossary for the definitions of **school-based** and **household-based assessment, type of schools, public school, private school, government-dependent private schools**, and **independent private schools**.*

3.8. Background information

This question aims to capture as complete as possible range of background data collection instruments and units of analysis. Please select from the drop-down lists the kind of background information collected and the method(s) used to collect the information. Click on "Add Row" button to add more kinds of information. Also, please add rows if more than one method was used for each kind of information. If you are adding information in the 'Other' field, please specify the

information in the column 'Other information selected'. Similarly, please add any additional methods in the text box in the last column 'Other method used'.

3.9. Assessment administration

In Question 3.9.1, please select the delivery model(s) and the mode(s) of data collection that have been used to administer this assessment. Select all that apply and in the text box, add any additional mode(s) of data collection, not included in the pre-defined list.

In Question 3.9.2, please distinguish the assessment administration format between group administration and one-on-one administration.

*Please refer to the Glossary for the definitions of **computer-based**, **oral**, **portfolio**, and **observation**.*

3.10. Data analysis

Please select the data analysis approaches used for the assessment. Select all that apply and in the text box, add any additional approach for data analysis not included in the pre-defined list.

*Please refer to the Glossary for the definitions of **classical test theory**, **item response theory**, and **scale scores**.*

3.11. Dissemination

Please select the method(s) used to disseminate the assessment results. Select all that apply and in the text box, add any additional dissemination method(s) not included in the pre-defined list.

If 'databases' is selected, please indicate in Question 3.11.2.whether the databases are publicly available. If the assessment results are disseminated through 'reports', respondents will be asked the following questions:

> 1) Question 3.11.3: Please indicate whether the reports are publicly available;
>
> 2) Question 3.11.4: Please indicate whether separate reports are prepared for specific stakeholders. If not, respondents will proceed to the next section. If yes, please select the user groups that these separate reports were prepared for in Question 3.11.5. Select all that apply and in the text box, add any additional user groups not included in the pre-defined list.

*Please refer to the Glossary for the definition of **development assistance community**.*

In the following questions, you will be asked to provide information on each target population of the assessment. Please click on "Section 4" to start. Before proceeding to Question 3.12, please select from the drop-down list the number of target populations the assessment covers.

For each target population, please complete the following set of questions. The name of the assessment as well as the number of target populations will be displayed at the top of the screen. Note that this section can only be saved upon completion of all target populations.

3.12. Target population

Please select the criterion used to define the one specific target population for which you are answering the questions. Select all that apply, and in the text box, add any additional criterion (e.g. ethnicity, language, geographic location, etc.), not included in the pre-defined list. For example, if the assessment covers in total two target populations, such as Grades 3 and 6, select 'Grade' and 'ISCED 1, 3rd year' for the first target population; and select 'Grade' and 'ISCED 1, 6th year' for the second target population.

For the purpose of this survey, the **target population**(s) is (are) the group(s) of children/young people about which the assessment aims to draw conclusions. Each target population will be given its own specific assessment. Some examples of different numbers of target populations are:

- A national assessment program that assesses children in Grades 3, 5, 7 and 9 with grade appropriate assessments. Each assessment may have different content coverage and level of difficulty. Since each grade is given a different test, the national assessment program has four target populations;

- An assessment developed to determine the effectiveness of an intervention for a group of students from Grades 2 and 3 using the same instrument or assessment will be considered as one target population, even if the group includes students from multiple grades.

- A household-based survey, such as the Annual Status of Education Report (ASER), using the same instrument or assessment that assesses children aged 5 to 16 living in the sampled households, all target-aged children/young people are considered as one target population.

If 'Grade' is the criterion selected, please specify in Question 3.12.2 which grade is targeted in this population. If multiple populations are targeted, please answer regarding one population at a time. Another set of questions will be asked about the other target populations after you complete this section. The options of grade are predefined according to the ISCED structure of primary to secondary education system in your country. For more information about your country's ISCED mapping, please consult the following link: http://uis.unesco.org/en/isced-mappings.

In Question 3.12.3., if 'Age' is used to define the target population, please select the appropriate age range between 3 and 18 years old, which covers early childhood education to secondary school levels. If the assessment covers multiple populations, please refer to one population at a time. Another set of questions will be asked about the subsequent populations after you complete the first population.

If the target population is education programme-based, please select in Question 3.12.4 which education programme(s) is (are) targeted. Please answer each population one at a time. Another set of questions will be asked about subsequent populations after you complete this section. Note that the education programme should be disaggregated by the levels of education defined in the ISCED 2011, and might be different from your national education system. For example, primary education in some countries could span over ISCED levels 1 and 2. In this case, both ISCED levels 1 and 2 should be selected.

Please refer to the Glossary for the definition of **target population**, **grade** *and* **ISCED levels of education***.*

3.13. Sampling design

When national assessments do not cover the whole population of the targeted grade or age, a sample that is representative of the total target population may be assessed. A representative sample is constructed based on several characteristics or variables such as the number of schools and their distribution across urban/rural areas and major cities, the number of classrooms, the number of students per school/classroom, the age and the sex of candidates. This information is generally available in the technical report of the assessment, and is used later to validate, impute and adjust data before performing analysis.

Several sampling methods can be used to draw a representative sample of a target population. This however depends on, to name a few, the structure of the sampling frames, the budget, the desired levels of data disaggregation and reporting required for policymaking. Particularly in education, samples are drawn from different levels, including administrative divisions (e.g. state, province, district, school, etc.) and students.

This question aims to collect information about sampling designs of both school-based and household-based assessments. For each stage of the sampling process, please select a sampling unit and the applied sampling method. You will start from stage 1. Please select a sampling unit from the drop-down list or add any other unit in the 'Other sampling unit' column if not included in

the pre-defined list. Select all sampling methods applied and in the text box, add any additional sampling method not included in the pre-defined list. Click on the "Add row" button to add the next stage.

📖ℹ️ *Please refer to the Glossary for the definitions of **sampling method**, **sampling unit**, **census**, **simple random sampling**, **systematic sampling**, **sampling with probability proportional to size**, **stratified sampling**, **cluster sampling**, **multi-phase sampling**, **quota sampling**, **convenience sampling**, **volunteer sampling**, and **judgement sampling**.*

3.14. Sample size

The year of the most recent implementation of the assessment is populated from your answer in session 3.5 and is not editable.

In Questions 3.14.1 to 3.14.4, please insert **only integer values** respectively for the estimated size of the target population (3.14.1), the total number of children/young people who were sampled (3.14.2), the total number of exclusions and non-responses (3.14.3), and the total number of children/young people who participated (3.14.4). If the assessment was census-based, please do not enter any number in 3.14.2. Note that the following validation rules on these values should be met:

1) The estimated size of the target population (3.14.1) should be <u>greater than </u>the total number of children/young people who were sampled (3.14.2);

2) The total number of children/young people who were sampled (3.14.2) should be <u>greater than </u>the total number of exclusions and non-responses (3.14.3);

3) The estimated size of the target population (3.14.1) should be <u>equal to or greater than</u> the total number of children/young people who participated (3.14.4). The two values are equal when the assessment is a census.

3.15. Cognitive domains

Please write down the cognitive domains (or subjects) covered in the assessment, one subject per row in the text box in the column 'Domain'.

📖ℹ️ *Please refer to the Glossary for the definition of **cognitive domain**.*

3.16. Reporting

In Question **3.16.1**, please indicate whether the averages of student performance are reported at national or sub-national levels. In some countries with federal administrative structure, national averages may not be as relevant as state or province averages.

If **'Yes',** meaning the averages of student performance are reported, please provide the average for each cognitive domain in Question **3.16.2.**. The cognitive domains you have provided in Question 3.15 are listed in the drop-down list in the 'Cognitive domain' column. Select measure of central tendency (median or mean), or in the text box in the 'Other measure of central tendency' column add the other method to calculate the average of student performance. In the column 'Measure of central tendency value', provide the corresponding average values. Only the average values from the most recently available implementation of the assessment are requested. Please add rows if the sub-national average is available from more than one state/province/region.

If you answered **'No',** meaning no average student performance is reported, you will proceed directly to Question 3.16.3.

In Question **3.16.3**, you are asked to indicate whether student performance you have reported is against a national or sub-national standard defined as a minimum level of acceptable achievement.

In Question **3.16.4,** if a minimum standard exists, please select the type of standard in the 'Standard type' column. In the text box, add any additional minimum standard types not included in the pre-defined list. In the column 'Minimum standard threshold/value', please provide the

minimum score, result, or level that is required for a student to meet the national minimum standard.

> For example, if the **percentage of correct items** is used, students may be declared to have met the minimum national standard if they answer at least 50% of items correctly, provided that all the items have the same weight. In this case the minimum national standard is 50%.
>
> Generally, when the **average scale score** is used to report on students' performances, the minimum national standard is identified by a raw number. Assuming that the minimum requirement is 500, a student who scores 500 or above is considered to have met the national standard.
>
> Nowadays, usage of **proficiency levels** is becoming more common to reflect and categorise differences in performances of students. Categorising students into groups allows for a target-needs approach. It facilitates putting in place appropriate policies or developing instructional plans in support of groups with specific needs. Both alphabetical grades A, B, C, D, etc. and ranges of numbers are used. In any case, there is an established relationship between these two formats. Each letter or range describes the kinds of skills students master or/and lack. If applicable to this assessment, please ensure you provide the descriptions of the proficiency levels in the text box of the 'Standard type' column.
>
> Note that for international assessments, the minimum standard is defined by the testing institution, not chosen by the participating countries.

If there is no national or sub-national standard defined, you will proceed directly to Question 3.16.5.

To make data relevant for policymaking, monitoring and evaluation, analysis needs to be made at different administrative unit levels, and different population groups. For example, gender sensitive analysis is required to monitor the gender gap between male and female students. In Question **3.16.5**, please select all the forms of disaggregation at which the results of the assessment are reported. Select all that apply and in the text box, add any additional level of disaggregation not included in the pre-defined list.

By now, you have completed all the questions for the selected assessment. If some other assessments have been left blank or need to be updated, please navigate to these assessments by using the links in the Table of Contents. If these assessments will be completed at a later time, you may access your questionnaire at any time using the original link. Your data will be automatically saved.

If you have answered all assessments and are ready to close the questionnaire, click the "Questionnaire completed" button. Please note that once this button is clicked, you will not be able to access the questionnaire to update your responses.

Assessment of learning outcomes refers to a measure of individuals' achievement of learning objectives. They can focus on specific curriculum areas, use a variety of assessment methods (written, oral and practical tests/examinations, projects and portfolios), and be administered during or at the end of an educational programme.

Census: An official survey involving the whole population within a defined system. For example, a school census involves all the schools within the education system. For the purpose of UIS catalogue, the target population is either students of a given age or grade level, or enroled candidates who fulfill conditions to pass a given public examination, or to participate to an assessment.

Assessment types:

> **School-based assessment** refers to student assessment regularly organized and administered by each educational institution established in a country. Assessment tools are generally designed by the teachers' staff of the institution. The results are used to provide direct feedback to students and parents, to regulate classroom and improve the teaching-learning process. In some countries, scores to these assessments count (weight on the final total score) for the graduation or selection of students. In the UIS Catalogue of Learning Assessments, school-based assessments refer to assessments undertaken at school in contrast to household-based assessments.

> **Household-based assessment** refers to learning assessment administered in the household where the targeted population is randomly selected in the household using the household list.

> **National assessment**: For the purpose of the UIS Catalogue of Learning Assessments, a national assessment refers to an assessment of students learning outcomes at a particular age or grade level and provides feedback on a limited number of outcome measures considered significant in the context of the education system. A national assessment is generally administered to a sample of students, and collects background information (from students, teachers and parents) to inform policymaking at the national, subnational and local levels.

> **Cross-national assessment**: An assessment of learning outcomes for more than one national education system. A cross-national assessment uses its own assessment framework, standards and guidelines in administration and reporting. The data are usually collected and processed in a standardized way so the results can be comparable or can be used in comparative analyses. For the purpose of the UIS Catalogue of Learning Assessments, assessments such as EGRA, EGMA, Uwezo and ASER are classified as cross-national assessments because they are using cross-national tools for national evaluations. The data collected might not be comparable but they could be used for comparative studies.

> **Citizen-led assessment**: An assessment that is citizen driven and accountable to the public. It aims to improve competencies in literacy and numeracy among children using an innovative approach to social change. Like ASER and Uwezo, citizen-led assessments are household-based assessments and are conducted in representative sample of households

on a target population (e.g. children ages 5-16 who could be in school or out-of-school). These assessments are usually conducted within a country and could be adapted and used in another country but without comparability, although comparative analyses could be conducted. The cognitive data and household information collected are used for the monitoring of progress of target population overtimes in country and to held government accountable.

Public examinations: For the purposes of the UIS Catalogue of Learning Assessments, a public examination designates exit or end-point standardized exams that are generally set by a central federal/state examining board of a given country in order to promote, select or provide a certification to all candidates who qualify. Also eligible are those who have formally or informally learned and covered the curriculum of a formal education programme as part of the requirements for graduation. The public examination is generally administered each year, to everybody who registers and regardless of age. Unlike national assessments, extensive student background data is rarely collected during public examinations.

Examples of cross-national assessments:

ASER: The Annual Status of Education Report (ASER) is an annual, citizen-led nationwide survey of the ability of children (in school or out-of-school), aged 6 to 16 years-of-age, to read a simple text and do basic arithmetic. (http://www.asercentre.org/)

EGMA: The Early Grade Mathematics Assessment (EGMA), developed by RTI International and supported by USAID and World Bank, is used to assess the acquisition of basic numeracy among primary school children in low-income countries.

EGRA: The Early Grade Reading Assessment (EGRA), developed by RTI International and supported by USAID and World Bank, is used to assess the acquisition of reading among primary school children in low-income countries.

ICCS: The International Civic and Citizenship Study (ICCS) is an on-going, comparative research program of the Inter-national Association for the Evaluation of Educational Achievement (IEA). It investigates the ways in which young people are prepared to undertake their roles as citizens. ICCS reports on students' knowledge and understanding of concepts and issues related to civics and citizenship, as well as their value beliefs, at-titudes, and behaviors. (http://iccs.iea.nl/index.php?id=48)

ICILS: The International Computer and Information Literacy Survey (ICILS) were designed to respond to students' readiness and preparation for study, work, and life in the digital age. The study measures international differences in students' computer and information literacy (CIL). This type of literacy refers to students' ability to use computers to investigate, create, and communicate in order to participate effectively at home, at school, in the workplace, and in the community. (http://www.iea.nl/icils)

LLECE: The Latin American Laboratory for Assessment of the Quality of Education (LLECE) is a network of national education quality assessment directors from Latin America and the Caribbean established to produce information and knowledge that enrich education policymaking. LLECE conducts the SERCE and TERCE cross-national assessments of Grades 3 and 6 in reading, mathematics and science, and reports on the state of education quality in the region. (http://www.unesco.org/new/en/santiago/education/education-assessment-llece/)

PASEC: The Programme d'analyse des systèmes éducatifs de la CONFEMEN (PASEC), or Education Systems Analysis Programme, established by the Conférence des Ministres de l'Éducation des pays africains et malgache (CONFEMEN), supports the performance of education systems in Francophone Africa in order to assist in the elaboration and monitoring of educational policies. Since 2012, PASEC has been implementing international comparative assessment to better meet the needs of countries. PASEC cover Grades 2 and 5/6 in the assessment of language and mathematics. (http://www.pasec.confemen.org/)

PILNA: The Pacific Islands Literacy and Numeracy Assessment (PILNA) is the regional assessment for the Pacific Islands. In 2015 it was administered to Grades 4 and 6 in 13 Pacific Islands. The regional assessment was the collaboration of Pacific Ministers for Education and their ministries, with the support of the New Zealand Aid Programme. (http://www.eqap.org.fj/Assessment/Regional.aspx)

PIRLS: The Progress in International Reading Literacy Study (PIRLS) is one of the core cycles of studies for the International Association for the Evaluation of Educational Achievement (IEA). PIRLS assesses students at Grade 4. PIRLS enables participating countries to make evidence-based decisions for improving educational policy. (http://timssandpirls.bc.edu/index.html)

PISA: The Programme for International Student Assessment (PISA) is a triennial international survey which aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students. Students took the two-hour test and were assessed in science, mathematics, reading, collaborative problem solving and financial literacy. (https://www.oecd.org/pisa/aboutpisa/)

SACMEQ: The Southern and Eastern Africa Consortium for Monitoring Education Quality (SAMEQ undertakes integrated research and training activities that build the technical capacity of 16 Ministries of Education in the region in order to monitor and evaluate the conditions of schooling and the quality of their own education systems. SACMEQ assess students at grade 6 in reading. (http://www.sacmeq.org/)

TIMSS: The Trends in International Mathematics and Science Study (TIMSS) is the other core cycle of studies for IEA – the International Association for the Evaluation of Educational Achievement. TIMSS assesses students at grades 4 and 8. TIMSS enable participating countries to make evidence-based decisions for improving educational policy. (http://timssandpirls.bc.edu/index.html)

Uwezo: Uwezo is an annual, large scale citizen-led assessment that aims to improve competencies in literacy and numeracy among children aged 6 to16 years old in Kenya, Tanzania and Uganda. (http://www.uwezo.net/)

Census: An official survey involving the whole population within a defined system. For example, a school census involves all the schools within the education system. For the purpose of UIS catalogue, the target population is either students of a given age or grade level, or enroled candidates who fulfill conditions to pass a given public examination, or to participate to an assessment.

Classical Test Theory: Classical Test Theory (CTT): A measurement theory which consists of a set of assumptions about the relationships between actual or observed test scores and the factors that affect the scores. It is used for measuring and managing test and item performance data. In

contrast to item response theory, it comprises a set of more traditional psychometric methods. In CTT, the global level ability of a test taker depends on the overall test difficulty and vice-versa. There is no way to obtain parameters of each test item or the level ability of the test taker in each item on a scale performance continuum as in IRT and Rasch models.

Cluster sampling: The population is first divided into groups or clusters. A number of clusters are selected randomly to represent the total population, and then all units within selected clusters are included in the sample. No units from non-selected clusters are included in the sample—they are represented by those from selected clusters. This differs from stratified sampling, where some units are selected from each group.

Cognitive domain refers to knowledge that students acquire by remembering, comprehending, applying, analysing, synthesising and evaluating the subject matter. For the purpose of the UIS Catalogue of Learning Assessments, the cognitive domain refers to the subject matter or knowledge being assessed.

Computer-based: A digital version of a paper-pencil test, which aims to facilitate data processing and reduce the likelihood of human error when compiling a database. It also can record the way each respondent searches for, stores and retrieves information.

Convenience sampling: Convenience/ haphazard or accidental sampling: sample units are only selected if they can be accessed easily and conveniently.

Development assistance community: Development Assistance Community is a community of developed countries which pool together their contribution to promote the economic development and welfare of developing countries.

Grade is a specific stage of instruction in initial education usually covered during an academic year. Students in the same grade are usually of similar age. This is also referred to as a 'class', 'cohort' or 'year' ([UIS Glossary](#))

ISCED is a classification system that provides a framework for the comprehensive statistical description of national educational systems and a methodology that translates national educational programmes into internationally comparable levels of education. The basic unit of classification in ISCED is the educational programme. ISCED also classifies programmes by field of study, programme orientation and destination. Please click the link below for more information on the ISCED classification.

http://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-isced-2011-en.pdf

ISCED Levels of education are an ordered set grouping education programmes in relation to gradations of learning experiences, as well as the knowledge, skills and competencies which each programme is designed to impart. The ISCED level reflects the degree of complexity and specialisation of the content of an education programme, from foundational to complex.

> **Early childhood education (ISCED level 0)** provides learning and educational activities with a holistic approach to support children's early cognitive, physical, social and emotional development and introduce young children to organized instruction outside of the family context to develop some of the skills needed for academic readiness and to prepare them for entry into primary education.

Primary education (ISCED level 1) provides learning and educational activities typically designed to provide students with fundamental skills in reading, writing and mathematics (i.e. literacy and numeracy) and establish a solid foundation for learning and understanding core areas of knowledge and personal development, preparing for lower secondary education. It focuses on learning at a basic level of complexity with little, if any, specialisation.

Lower secondary education (ISCED level 2) is typically designed to build on the learning outcomes from ISCED level 1. Usually, the educational aim is to lay the foundation for lifelong learning and human development upon which education systems may then expand further educational opportunities. Programmes at this level are usually organized around a more subject-oriented curriculum, introducing theoretical concepts across a broad range of subjects.

Upper secondary education (ISCED level 3) is typically designed to complete secondary education in preparation for tertiary education or provide skills relevant to employment, or both. Programmes at this level offer students more varied, specialised and in-depth instruction than programmes at lower secondary education (ISCED level 2). They are more differentiated, with an increased range of options and streams available.

Item Response Theory (IRT): A group of mathematical models for relating and predicting the individual's performance on a test item to his level of performance on a scale of the ability or trait being measured, and the item's characteristic parameters: guessing, discrimination and difficulty parameters.

Judgement sampling: In judgement sampling, a sample is taken based on certain judgments about the overall population. The underlying assumption is that the investigator will select units that are characteristic of the population.

Multiple implementations: For the purposes of the UIS Catalogue, multiple implementations is defined as the administration of a specific assessment at different system levels (i.e. national level versus sub-national level), or with different assessment purposes (e.g. certifying students for grade completion, examining school performance, evaluating effectiveness of an educational intervention, etc.). Hence, a country that implements an assessment at different levels or with different purposes should be listed separately as different implementations.

Multi-phrase sampling: A multi-phase sample collects basic information from a large sample of units and then, for a subsample of these units, collects more detailed information. The most common form of multi-phase sampling is two-phase sampling (or double sampling), but three or more phases are also possible. Multi-phase sampling is quite different from multi-stage sampling, despite the similarities in name. Although multi-phase sampling also involves taking two or more samples, all samples are drawn from the same frame and at each phase the units are structurally the same. However, as with multi-stage sampling, the more phases used, the more complex the sample design and estimation will become.

Non-Governmental Organization (NGO): An NGO is a voluntary group of individuals or organizations, usually not affiliated with any government, which is formed to provide services or to advocate a public policy. Although some NGOs are for-profit corporations, the vast majority are non-profit organizations (Karns, 2016).

Observation is one of the assessment techniques, and it can be characterised as two types: incidental and planned. Incidental observation occurs during the ongoing (deliberate) activities of

teaching and learning and the interactions between teacher and students. Planned observation involves deliberate planning of an opportunity for the teacher to observe specific learning outcomes.

Official Development Assistance (ODA) is a term coined by the Development Assistance Committee (DAC) of the OECD to measure aid. It needs to contain three elements – (a) undertaken by the official sector (official agencies, including state and local governments, or by their executive agencies); (b) with promotion of economic development and welfare as the main objective; and (c) at concessional financial terms (OECD, n.d.). As a resource to finance assessments, ODA could include aid provided by multilateral aid institutions (e.g., United Nations agencies), multilateral lending institutions (e.g., the World Bank); and bilateral aid agencies (e.g., DfID).

Oral: Oral assessment includes any assessment of student learning that is conducted, wholly or in part, using spoken word.

Portfolio: A student portfolio is a compilation of academic work and other forms of educational evidence assembled for the purpose of (1) evaluating coursework quality, learning progress, and academic achievement; (2) determining whether students have met learning standards or other academic requirements for courses, grade-level promotion, and graduation; (3) helping students reflect on their academic goals and progress as learners; and (4) creating a lasting archive of academic work products, accomplishments, and other documentation.

Private fund refers to funds originating from sources other than the government.

Public budget refers to an amount of money that is provided by the government from taxes to be available for a particular purpose. Education programs are commonly funded by the ministry of education or the department of education of each country.

Quota sampling: Sampling is done until a specific number of units (quotas) for various sub-populations have been selected. Since there are no rules as to how these quotas are to be filled, quota sampling is really a means for satisfying sample size objectives for certain sub-populations.

Sampling method: Sampling is the process of selecting participants from the population. The target population is the total group of individuals from which the sample might be drawn. Sampling method is the method that is used to select participants from the population.

Sampling unit: A sampling unit is one of the units into which an aggregate is divided for the purpose of sampling, each unit being regarded as individual and indivisible when the selection is made.

Sampling with probability proportional to size: Probability sampling requires that each member of the survey population have a chance of being included in the sample, but it does not require that this chance be the same for everyone. If information is available about the size of each unit (e.g. number of students for each school or classroom) and if those units vary in size, this information can be used in the sampling selection in order to increase the efficiency. This is known as sampling with probability proportional to size (PPS). With this method, the bigger the size of the unit, the higher the chance it has of being included in the sample. For this method to bring increased efficiency, the measure of size needs to be accurate.

Scale scores are ability estimates from the Item Response Theory (IRT) models, based on students' response vectors. Scale scores are designed to provide a metric that is consistent for different versions of a test and consistent across time.

Simple random sampling: each member of a population has an equal chance of being included in the sample. For that to happen, all of the units in the survey population should be listed.

Special educational needs: For the purposes of the UIS Catalogue of Learning Assessments, special education needs refers to the needs of a child with a mild disability (either physical or emotional) that might require accommodation in a testing situation. While a number of definitions are available, there is no universal agreement as to how Special Education Needs (SEN) should be defined (Mitchell, 2010). The broad categories used in the questionnaire are:

> **Functional, physical disability**: Students with disabilities or impairments viewed in medical terms as organic disorders attributable to organic pathologies (e.g. in relation to sensory, motor or neurological defects).

> **Cognitive, behavioral or emotional disability**: Students with behavioral or emotional disorders, or specific difficulties in learning. The educational need is considered to arise primarily from problems in the interaction between the student and the educational context.

> **Insufficient assessment language experience**: Children who have been migrate to a new place or who does not speak the language of instruction thus does not have the basic language skills to understand the instruction at school will have insufficient language skills to participate in the assessment.

Stratified sampling: the population is divided into homogeneous, mutually exclusive groups called strata, and then independent samples are selected from each stratum. Any of the sampling methods can be used to sample within each stratum, and the sampling method can vary from one stratum to another. When simple random sampling is used to select the sample within each stratum, the sample design is called stratified simple random sampling. A population can be stratified by any variable that is available for all units on the sampling frame prior to sampling (e.g., student grades, sex, age, province/region/zone of residence, school ownership).

Sustainable Development Goals: The Sustainable Development Goals (SDGs), led and owned by Member States, define the goals, targets and framework to review Member States progress in the next 15 years. Please click on the link below for more information or topics on the SDG goal 4.

http://uis.unesco.org/en/topic/sustainable-development-goal-4

Systematic sampling: A type of probability sampling method in which sample members from a larger population are selected according to a random starting point and a fixed periodic interval. This interval, called the sampling interval, is calculated by dividing the population size by the desired sample size.

Target population: For the purpose of this survey, the target population(s) is (are) the group(s) of children/young people about which the assessment aims to draw conclusions. Each target population will be given its own specific assessment.

Type of schools: The OECD's classification for type of school has been followed in this definition (OECD, 2012a, 2012c). The classification between public and private is made according to whether a public agency or a private entity has the overall control of the institution and not according to which sector provides the majority of the funding. Overall control is decided with reference to who has the power to determine the general policies and activities of the institution including the appointment the staff and officers managing the school and, where relevant, the majority of members of the governing body. Overall control will usually also extend to the decision

to open or close the institution. As many institutions are under the operational control of a governing body, the constitution of that body will also have a bearing on the classification.

Public school: A school is classified as public if it is: (i) controlled and managed directly by a public education authority or agency of the country where it is located, or (ii) controlled and managed by a government agency directly or by a governing body (council, committee etc.), most of whose members are either appointed by a public authority of the country where it is located or elected by public franchise.

Private school: A school is classified as private, if: (i) it is controlled and managed by a non-governmental organization (e.g. a church, a trade union or a business enterprise, foreign or international agency), or (ii) its Governing Board consists mostly of members not selected by a public agency. Private schools can be either government-dependent or independent of the government.

Government-dependent private schools: A government-dependent private school is a school that receives more than 50 per cent of its core funding from government agencies or one whose teaching personnel are paid by a government agency. The term 'government dependent' refers only to the degree of a private school's dependence on funding from government sources; it does not refer to the degree of government direction or regulation.

Independent private schools: An independent private school is a school that receives less than 50 per cent of its core funding from government agencies and whose teaching personnel are not paid by a government agency. The term 'independent' refers only to the degree of a private school's dependence on funding from government sources; it does not refer to the degree of government direction or regulation

Volunteer sampling: This type of sampling occurs when people volunteer their services for the study.