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Guidelines for Adapting the Foundational Learning Module to Non-Multiple Indicator Cluster Household Surveys

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Overview

Although access to education has increased globally over the past decades, disparities remain and many children in school struggle to achieve basic literacy and numeracy skills. Recognizing this concern, the Sustainable Development Goals (SDGs) have called for a greater focus on inclusiveness, equity and quality in education. However, little comparative data currently exist that examine these areas, focusing instead on access. Demand for data that reflect quality is growing, particularly in terms of education in the early years of a child's life, when learning is an important building block to later academic success. To address this data gap, UNICEF developed the Foundational Learning module, a new data collection tool for inclusion in the Multiple Indicator Cluster Survey (MICS) programme. The module captures basic literacy and numeracy skills at grade 2 and 3 levels, targeting children aged 7 to 14, in order to monitor learning and quality of education.

What is the Foundational Learning module?

Using a standardized methodology that can be implemented in household surveys across countries with varied educational systems, the Foundational Learning module directly assesses reading and math skills. Specifically, the module provides data on SDG Indicator 4.1.1 (a), 'Proportion of children in grades 2/3 achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex'. When implementing MICS, a second module on parental involvement in education (the PR module) is implemented together with the Foundational Learning module to provide insight into parents' support for education, whether at home or as involvement at school. Parental participation in a child's education is a factor that may improve learning outcomes.

The module was developed as a response to lacking, inconsistent data in the area of educational quality. It aims to improve the availability of statistical information on learning outcomes to inform both internationally harmonized monitoring and evidence-based, country-level policymaking and programming. The module provides data that are comparable over time and across countries.

Work on the module began in 2014. UNICEF convened a technical advisory group of leading experts from various institutions,[1] which subsequently met for three rounds of consultations. The draft instruments then went through four rounds of testing between 2015 and 2016: a small-scale pretest in Ghana, a MICS6 field test in Belize, a field test in Kenya, and a global MICS6 pilot in Costa Rica. These tests informed progressive revisions of the module, interviewer training and instructions, and also led to improvements to implementation guidelines, indicators and tabulations.[2] The final version of the module has been adopted into MICS6 and by the end of 2018 had already been included in 20 MICS surveys globally.

Why include the module?

Acquiring basic literacy and numeracy skills in the early grades of primary is a crucial step for future success, and data are needed to inform policies, programming and advocacy. Although the ability to read and understand a simple text is one of the most fundamental skills a

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[1] ASER/Pratham, the Global Education Monitoring Report (GEM), Research Triangle Institute, Save the Children, Southern Methodist University, and UNESCO Institute for Statistics, UWEZO and the World Bank.

[2] Detailed information on the methodological development and testing can be found *here*.

child can learn, existing studies indicate that in many countries, students enrolled in school for as many as six years are unable to read and understand simple texts.[3]

Globally, measurement of learning achievement across countries has been limited. At the end of 2018, only about one third of countries had data available to report on SDG 4.1.1 (a) on reading and math; in addition, many of these sources are not comparable with one another. The Foundational Learning module addresses many of the limitations in existing data on learning outcomes.

First, unlike typical assessments that are administered within school systems, the module provides information on all children, whether or not in school. This captures a fuller picture of the learning outcomes of children, including the disadvantaged, which helps ministries of education target support for children not learning to their potential.

Second, the module is a resource for addressing equity gaps. It focuses on early stages of learning as opposed to the end of primary education, after substantial disparities may have already appeared or some children may have already dropped out due to a lack of foundational skills.

Third, because the module is implemented as part of a larger household survey, the data can be analysed together with other information about the child and/or household, yielding greater programmatic insight. This is consistent with the SDGs' focus on synergies across goals.

The Foundational Learning module is a tested instrument that can provide comparable data across countries and over time; as such, it can serve as a key resource for addressing the serious global data gap in SDG 4.1.1 (a). The Inter-agency and Expert Group on SDG Indicators[4] has endorsed the new module as an accepted tool for tracking country progress toward Indicator 4.1.1 (a).

Together, the Foundational Learning and Parental Involvement modules provide information on the acquisition of early reading and number skills among children aged 7 to 14 with related information on family support for the development of these skills. These data, particularly when they are disaggregated by various characteristics of the household and the child, such as household wealth, disability status and ethnicity, provide a powerful tool for policymakers and programme managers.

Is it possible to assess children as part of a national household survey?

The Foundational Learning module is part of the standard questionnaire in the sixth round of MICS surveys. The module can be adapted to surveys with a representative sample and a questionnaire implemented at the household level by trained interviewers, although the ease of incorporating it will depend on the underlying structure of the existing instrument. As detailed below, the methodology of the planned survey will need to accommodate certain requirements, such as selecting one child aged 7 to 14 from the household; this is an element that the existing household questionnaire structure either needs to support or that the questionnaire would need to be properly adapted to. Incorporating the Foundational Learning module will require additional attention to the special considerations of working directly with children, appropriate customization of the module to the country setting, and interviewer training on field protocols and assessment scoring.

Interviewing children in their own homes as part of a national household survey will be a new effort in many countries and may require some adjustments to typical protocols. The field tests demonstrated that it is possible to include a direct assessment of the foundational reading and number skills of young children as part of a household survey. Furthermore, field experience to date shows this can be done in a way that builds a comfortable rapport with the child, while also adhering to the highest ethical standards.[5]

Proper customization or adaptation of the module will require adequate time and appropriate expertise. Each country will need to develop different versions of the reading task in the country's main language(s).

This document provides both the guidance and basic tools needed to incorporate the module into any household survey, including the module itself, customization guidelines, interviewer instructions, SPSS syntax for data processing, and templates for data analysis and dissemination. These materials have been adapted from the MICS survey programme, which includes additional survey guidance and tools at <mics.unicef.org>.

Importantly, this guidance also addresses common concerns, including the ethics and challenges of working with children in field settings and proper adaptation of the reading passage.

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[3] As shown, for instance, by regional assessments such as the Latin American Laboratory for Assessment of the Quality of Education, Programme for the Analysis of Education Systems in Francophone West Africa, and Southern and Eastern Africa Consortium for Monitoring Educational Quality.

[4] The Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs) was created by the United Nations Statistical Commission on 6 March 2015 at its forty-sixth session and was tasked to develop and implement the global indicator framework for the goals and targets of the 2030 Agenda. More information on the IAEG-SDGs can be found *here*.

[5] Results of the 2016 Kenya validation study will be published in 2019.

Module integration guide

General requirements

The Foundational Learning module was developed for use in household surveys and is well suited to standardized instruments such as MICS and Demographic and Health Surveys that already focus on the well-being of children. The module can also be considered for inclusion into any household survey if the following overall requirements are met:

1. Representative sample of sufficient size

The power of the new module data lies in its ability to disaggregate and identify groups whose learning outcomes are lagging. A sampling expert will need to do a detailed calculation based on specific considerations, such as estimations for the average number of children per household, number of households with children aged 7 to 14 and the distribution of children by reporting domains[6] considering the planned sample. It should be noted that one eligible child aged 7 to 14 will be selected in each sample household. The MICS survey programme provides sampling tools on its website, including a MICS6 sample size calculation template, which allows one to see and calculate the expected numbers of children based on different sample size scenarios.[7]

2. Ability to identify all usual/de jure members of household

It is necessary to have a complete listing of household members, including age and sex. The mother[8] or primary caretaker of the child will also need to be specified. This information will permit the identification of eligible children, as well as the knowledgeable adult who can answer background questions on the child's education and provide consent for the interview. Many household surveys may already collect all or some of this information; for those that do not, an example may be found in the MICS Household Questionnaire.[9]

3. Involvement of national education authorities

National education authorities need to be involved in key steps of the process, including customizing literacy assessment and data analysis and dissemination. If national education authorities are not already involved in the survey, they will need to be consulted on all the steps pertaining to the Foundational Learning module. The education team involved may be different or broader than what is customary in household surveys, who are usually educational statisticians; the team for this process will require assessment, curriculum and/or reading experts. This will ensure the appropriate development of the module's specifications to local populations, as well as the active use of the data.

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[6] A domain is a segment of a population for which separate estimates are needed. For example, estimates for geographical areas such as major regions of a country may be desired in a national survey.

[7] Note that the MICS sampling tools refer specifically to children aged 5-17 as this is the entire eligible age range for a separate child's questionnaire, which includes not only the Foundational Learning and the Parental Involvement modules, but other modules such as Child Labour and Child Functioning that cover a broader age group. See further discussion on the target age range for the Foundational Learning module in the section on respondents below.

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[8] Note that in MICS, the mother is the preferred respondent for information about the child and only if she is not resident in the household is a primary caretaker identified instead.

[9] The MICS Household Questionnaire can be found *here*.
See the Listing of Household Members on page 2, specifically questions HL4-HL6, on sex and age, as well as questions HL11-HL20 on parent/caretaker identification.

The respondents

The target population is children aged 7 to 14. Of all eligible children in this age range in a sampled household, only one child will be selected and interviewed to ease time and cost constraints. This approach also avoids contamination of other potential respondents. However, to administer the module and collect the key background information, two different respondents will be needed:

- **The mother or primary caretaker** will answer any necessary background questions, such as confirmation of the selected child's age and educational status. Additionally, she/he will be the respondent for the Parental Involvement module, if included. Verbal permission from the mother/caretaker will be needed before administering the Foundational Learning module.
- **A child aged 7 to 14**, randomly selected from a household, will be the respondent for the module, after providing informed assent.

Note that both the eligible children and their mothers/caretakers must be identified in a listing of all usual household members. This includes children who are temporarily away from the household when the survey takes place (e.g., at boarding school or in an institution), but who may be reported by the respondent of the questionnaire as current, usual members of the interviewed household. These children should be noted as "not at home" and will not be able to undertake the assessment.

A common question is why the age range in the Foundational Learning module is so large, given its focus on learning outcomes in grades 2 and 3. The reason is that it is common to have overage children in classes. Older children may have started late, dropped out or been held back due to a lack of the necessary skills and knowledge to progress to the subsequent grade level. Older children who have dropped out of school or never attended may also lack foundational skills. In order to collect data across a large and diverse population, it is therefore important to have an instrument that includes a broad enough range of children. Note, however, that this age range exceeds the minimum required for reporting on SDG 4.1.1 (a), so it would be possible (although not advisable)[10] for a survey to consider implementing the module with a narrower age range. As a minimum requirement, children in the official grade 2 and 3 age range must be included.

The module's ultimate goal is to be representative of the entire population of children in the eligible age range, regardless of their attendance in school. Interviewers should make every effort to interview the selected child, including children with disabilities. However, if a child is incapacitated and not able to participate, that needs to be clearly noted when recording the result of the interview.

Ethical considerations

Beyond standard ethical procedures and guidelines, additional issues arise when including children as respondents in a household survey. Special consideration was given to these issues during the development of the module and these have been addressed in detail in the accompanying instructions for interviewers (see Annex D). Key components of the ethical considerations include:

Consent and assent: The assessment requires a two-step approach on consent. First, the interviewer must read the consent statement and obtain verbal permission from the mother or main caretaker to talk to the child (adult consent), thus allowing the interviewer to approach the child. Then, the interviewer reads a second statement to the child describing what the interview is about and requesting his/her participation ("assent"). Note that the script was specially developed, and refined through field testing, to be easily understood by children.

Protection: The interviewer's manual details issues concerning the protection of both interviewer and child, including how to choose a physical location for the assessment, ensure a responsible adult is in the vicinity, and address any specific needs or requests of the child during the interview.

A formal ethical review is required before any fieldwork can begin.[11] Survey protocols must be shared with the appropriate review board(s) and these materials will need to be adapted and finalized based on recommendations from the board. The final versions of the protocols will need to be resubmitted to the review board(s) and a final approval received before the survey can be implemented. This means learning about the appropriate ethical review board's mechanisms for submission and review well in advance of fieldwork.

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[10] Survey planners are strongly encouraged to contact the specialists listed in the Toolkit section below if they are considering a modification to the age range. A series of complications can arise as a result of this change.

[11] Note that this is a UNICEF/MICS requirement, as seen in the MICS6 Memorandum of Understanding - Appendix Technical Collaboration, which can be found *here*.

Module incorporation and adaptation to an existing household survey

Incorporating the module to an existing household survey

In order to successfully administer the Foundational Learning module (Annex B), two linked components must be included:

- **Background information on the child**, specifically the age and sex of the child and information on education (overall educational attainment and participation in current and past school years). It is recommended that this information is obtained directly from the mother/caretaker, who is considered the best-informed source. These questions may need to be repeated if they have already been answered previously in the household questionnaire by a different respondent.
- **Foundational Learning module**, which will be administered directly to the selected child.

Although optional, survey planners should consider including the Parental Involvement module, which can provide insight into the factors associated with high and low performance on the Foundational Learning module. If included, the Parental Involvement module should precede the Foundational Learning module and be answered by the mother/caretaker.

The Foundational Learning module requires speaking directly with children, which has implications in terms of the placement of the module. The MICS experience has indicated administering the assessment as a separate questionnaire is ideal, in which case there needs to be a cover sheet with information linking the child's questionnaire with the main household questionnaire.

Adaptation of the module

The Foundational Learning module measures reading and numbers skills expected of Grade 2-level children. As part of the reading task, children read a short story and answer comprehension questions. The results determine whether the interviewed children can read and understand Grade 2-level texts. Appropriate reading texts and associated comprehension questions will need to be developed in each country, possibly in more than one language, requiring extensive work and inputs from national education authorities. This is one of the most critical elements for collecting robust data – without the right test, learning outcomes cannot be measured and internationally comparable. Adequate time will need to be included in the schedule to ensure the materials are properly developed.

The attached customization manual (Annex C) provides detailed guidance on how to develop rigorous testing material that is both appropriate for the country setting as well as comparable across countries. Key decisions for country-specific customization include:

In which language(s) will the story be presented?
If more than one language is used in the country for learning to read, a story for each language will need to be developed. The same story can be used for both languages or a different story can be developed if there is a need to adapt to differing vocabulary. This decision should be aligned with national policy on language of instruction at school, although it may also be useful to consider the underlying distribution of languages spoken at home (and how this may influence how reading is taught at school). Protocols have been developed to permit the retesting of children in a second language, if necessary, for those countries where more than one language is an issue.

How will the story be developed?
The customization manual provides detailed instructions on the different methods that can be used to develop the story. They ensure the required level of standardization so that comparable data are collected and also allow data to be double-checked for consistency with the Grade 2 textbooks used in the country. There are two basic paths for developing the story: (1) adapting the standard story and questions provided in the sample module, or (2) producing a new story and questions from scratch. Survey planners should note that the process of adapting an existing story is much faster and simpler than developing a story from scratch, and thus it is recommended to start with the standard UNICEF-developed and -tested MICS story. Customization should focus on terminology and cultural appropriateness, such as changing a term appearing in the standard story (e.g., use "plum" instead of "banana" if a survey is implemented in a country where bananas do not grow). If a country chooses to develop a story from scratch, the team must: (a) carefully follow the development guidelines, which are rigorous and detailed; and (b) validate the newly developed tools through a careful field trial process, which takes time and resources. If more than one language is used, the stories may be translations of one another or they may be different stories, as deemed convenient.

Whereas the reading assessment will require careful review and adaptation for each survey, the numeracy assessment is not expected to change.

In addition to the Foundational Learning module, certain questions in the Parental Involvement module, particularly those reflecting school management structures, will also require customization before

any fieldwork. This can be done during the same consultation process as the development of materials for the reading assessments.

Beyond the Foundational Learning and Parental Involvement modules, other MICS modules pertaining to this same age group may be of interest. These include Child Labour and Child Functioning, which can be found in the Questionnaire for Children aged 5 to 17 *here*.

Together with the adaption of any modules, the interviewer's manual will need to be reviewed and adapted as necessary.

Special considerations for fieldwork

Field experience with the Foundational Learning module indicates that although the module may present a departure from previous survey experience, implementation is not an undue burden on fieldwork. That said, there are a series of special considerations that survey managers and field staff need to bear in mind when planning and implementing data collection.

Field staff

Data collection affects data quality, and so interviewer recruitment and selection is of critical importance to the success of the survey. It is important to recruit candidates who are comfortable interacting with children. Additionally, an important consideration is proficiency in anticipated languages of the survey.

Field staff will need additional training in order to effectively implement the module. Ample time must be scheduled to accommodate both in-class training that is sufficiently long as well as extensive field practice. The training will need to include:

- Special time devoted to ethical considerations, including informed consent and the safety of the child
- Selection of an appropriate location for the interview and consideration that a caretaker is close enough to see the child, yet far enough that s/he cannot interfere in the conversation between interviewer and child
- Interview techniques with children, including how to build rapport and interaction throughout the assessment
- Methods of scoring the assessment, for example, how interviewers can correctly match a child's response with the model response to a comprehension question

The attached instructions for interviewers (Annex D) is the primary source of detailed information on all these components and should serve as a key resource during the training. Additionally, a sample Microsoft PowerPoint presentation accompanies this guide (Annex E), although it will need to be revised to reflect the reading passages developed in the country for the module. To adequately cover all the information that interviewers should know, the training must devote ample time to classroom presentations and discussions, as well as field practice.

Field logistics

Some of the distinctive features of implementing the Foundational Learning module need to be considered when planning fieldwork.

Scheduling visits: Field experience thus far has highlighted the importance of appropriate scheduling to ensure that the survey is conducted in an efficient manner. Many assessments have ended up taking place in the early evening or during the weekend when children are not in school. In some cases, additional visits have been necessary due to the selected child being initially absent from the household.

Choosing a location for the interview: Although there may not always be a choice of space, interviewers need to be proactive in establishing an appropriate environment for the assessment. Ideally, this should be a convenient location away from any loud noise or other family members or neighbours so that the child is not distracted and can concentrate. Although there should be a reasonable degree of privacy, the interviewer and child should still be visible to others.

Selecting the language for the assessment: Depending on the country, the questionnaire overall and the reading passage in particular may be in different languages. It is expected that in most cases a child would be tested in only one language. However, protocols have been developed to permit the retesting of children in a second language, if necessary, for those countries with stories in more than one language. Additional information can be found in the attached tools.

Data processing and tabulation

To facilitate data processing preparation, these guidelines link to the MICS6 SPSS syntax file, which allows for the calculation of various tables and indicators using the SPSS statistical package. Note that this file should be used as a reference only and that, depending on both the adaptation of the module as well as the underlying structure of the existing household questionnaire, it may be necessary to make substantial adjustments to the syntax.

One important point about adaptation of the syntax regards age: Education indicators should be calculated according to children's school age, i.e., age when they started the current school year, rather than age when taking the survey. The most straightforward way to do this is to include the child's birth month and year, not only current age.[12]

Note that there will need to be a calculation of separate weights for this module. Given the selection of one eligible child per household, the child weight will involve multiplying the household weight by the number of eligible children in each sample household. The MICS6 tools page includes a weight calculation sheet in Microsoft Excel that may be a useful reference, which can be found at <mics.unicef.org/tools?round=mics6#survey-design>.

These guidelines also include a tabulation plan, with separate tables on reading skills and numeracy skills (Annex G). These tables provide the following key indicators (detailed in Annex F):

- SDG 4.1.1 (a): Percentage of children in Grade 2/3 that achieved at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex

- Percentage of children that successfully completed three foundational reading tasks, by:
» Age 7 to 14
» Age for Grade 2/3
» Attending Grade 2/3 (only this component is required for SDG calculation)

- Percentage of children that successfully completed four foundational number tasks, by:
» Age 7 to 14
» Age for Grade 2/3
» Attending Grade 2/3 (only this component is required for SDG calculation)

In addition to the foundational learning skills indicators above, the following contextual indicators can also be calculated from the module:
- Percentage of children aged 7 to 14 that read books or are read to at home
- Percentage of children aged 7 to 14 that attend school and whose home language is used at school

If the module has been properly adapted so that the sex of the child is identified, these indicators can be calculated for boys and girls separately, as well as for all children.

Note also that depending on the other data collected in the survey and the sample size, these indicators may also be broken down by a series of key background characteristics, including region and wealth quintile.

Analysis, dissemination and use

To ensure that the Foundational Learning module data are appropriately analysed and used, it is important to work closely with national education authorities and other relevant stakeholders throughout the analysis, reporting and dissemination process.

Foundational Learning module data analysis and reporting begins with the tabulations listed above and the key indicators they provide. Examples of the tables can be found in survey findings reports (see MICS6 tables 3.3, 4.1 and 4.2 in Annex G). Note that the household survey data, which includes information on key household and child characteristics, provide a powerful tool for examining disparities.

Beyond the standard tabulations, having an integrated data set that includes data from the household provides opportunities for further analysis. For example, depending on what other data are collected, it would be possible to examine relationships between learning outcomes and parental involvement, child labour, or characteristics of the mother.

Innovative data analysis techniques are focusing on the increased use of data for advocacy and programming at the country level. For example, the Foundational Learning data have been a key focus area within the MICS-Education Analysis for Global Learning and Equity initiative (MICS-EAGLE), which uses MICS6 data to support countries in policy discussion, planning and monitoring.[13]

A MICS template for a statistical snapshot[14] (a visual overview of these data) is also included in these guidelines. The snapshot has been designed to make the data easier to understand and interpret and can be used to disseminate key findings to both technical and non-technical audiences.

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[12] For surveys that do not collect both month and year of birth for children in the eligible age range, the standard age adjustment is age minus one for the whole sample if the survey was implemented six months or more after the start of the school year.

[13] An overview of MICS-EAGLE can be found *here*.
The full conceptual and implementation framework for 2018 can be found *here*.

[14] The template can be found *here*.

Toolkit

Essential elements checklist

Annex A: Checklist of essential elements for adapting the Foundational Learning module to non-MICS household surveys

Highlights a series of necessary elements and should be used only as an additional reference to the guidelines document

Data collection

Annex B: Foundational Learning module

Extracted from the MICS6 Questionnaire for Children Age 5-17 (see *here*)

Annex C: Guidelines for the Customization of the Foundational Learning module

Guidelines for the Customisation of MICS6 Questionnaires (see *here*)

Annex D: Instructions for interviewers

MICS6 Instructions for Interviewers, including important general information (see *here*)

Annex E: Example of presentation for interviewer training

Provided as a reference only; may be adapted for use but will need to be appropriately modified to reflect the particular reading comprehension developed for the survey

Sampling

MICS6 sampling tools are available as a reference (see *here*):
- MICS Sample Size Calculation template
- MICS Sample Weight Calculation template

Data processing

MICS6 data processing tools are available as a reference (see *here*); Available resources include:

- Standard MICS computer-assisted personal interviewing (CAPI) applications: Customizable tools for entering, editing and tabulating data

- Manual and data editing guidelines: Step-by-step explanations of how MICS data should be processed and edited

Data analysis and dissemination

Annex F: Foundational Learning module indicators and definitions

Contains the indicators that can be derived from the module together with their definitions; Adapted from the MICS6 Indicators List, which includes all MICS indicators (see *here*)

Annex G: Foundational Learning Module Tables

Extracted from the full MICS6 Tabulation Plan (see *here*)

Annex H: Foundational Learning Module Results

- **Template for reporting survey results**
Background text extracted from the full MICS6 Survey Findings Report template (see *here*)

MICS-EAGLE initiatives
Supports countries to better use MICS6 data in policy discussion, planning and monitoring; Full conceptual and implementation framework for 2018 can be found *here*.

MICS statistical snapshot on learning
Template designed to provide a visual overview of key indicators and to make the data easier to understand and interpret (see *here*)

Methodological information

'Collecting Data on Foundational Learning Skills & Parental Involvement in Education', MICS Methodological Papers, No. 5, 2017
Provides detailed information on the methodological development and testing of the module (see *here*)

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Annex A: Checklist of essential elements for adapting the Foundational Learning module to non-MICS household surveys

Line up appropriate expertise

National education authorities need to be involved in key steps of the process from the planning stage. Important areas of work include:

- Identification of specific data needs for policy discussion, planning, and monitoring
- Customization of literacy assessment
- Analysis and dissemination of data

Ensure the sample aligns with data needs

The sample, which should be designed by a sampling expert based on the household population, should have the following features:

- Representative of the country or region of interest
- Sufficient numbers of children per domain
- Consideration given to age range

(Note the age range according to the MICS standard is 7-14 years. It is strongly recommended that survey managers maintain this range so as to avoid complex modifications across the entire survey instrument. However, as this exceeds the minimum required ages for reporting on SDG 4.1.1 (a), a narrower age range could be considered. As a minimum requirement, children whose age is equivalent to the official age for Grades 2-3 must be included.)

Incorporate ethical protocols from the start

Special consideration must be given to the unique issues that arise when working with children.

- A formal ethical review is required before any fieldwork can begin.
- The two-step consent approach (i.e., obtaining consent from both mother and child) embedded in the Foundational Learning module is an absolute requirement.
- Interviewer training must thoroughly cover issues related to consent, confidentiality and protection as outlined in the instructions for interviewers.

Adaptation and incorporation of the Foundational Learning module

Consider the overall structure of the survey instrument

The questionnaire needs to accommodate specific requirements for the implementation of the module. These may already be inherent in the existing questionnaire(s) or may be incorporated using the MICS instrument as an example. Required background information includes:

- Identification of all usual (de jure) members of the household
- Age and sex of each household member
- Identification of the mother or caretaker of each child in the relevant age range
- Random selection of one child in the relevant age range
- Information on school attendance (overall educational attainment and participation in current school year)

Adapt the Foundational Learning module

Appropriate reading texts and associated reading comprehension questions will need to be developed in each country. Note that this is a lengthy process, particularly if new stories will be developed.

- At the outset, a decision needs to be made on the language or languages for the reading comprehension assessment. This will depend on the national policy on language of instruction in school, with additional consideration given to the underlying distribution of languages spoken at home (and how this may influence how reading is taught at school).
- Although different methods can be used to develop the story, survey planners are encouraged to use the standard stories developed and tested by UNICEF, with any customization focusing on terminology and cultural appropriateness. Regardless of the story used, it is necessary to:
  - » Ensure a required level of standardization so that comparable data are collected
  - » Thoroughly check for consistency with the Grade 2 reading texts used in the country
- In terms of the placement of the module, the MICS experience has indicated administering the assessment as a separate questionnaire is ideal. Although it is possible to incorporate the module into either the main household questionnaire or into an existing questionnaire for female respondents of reproductive age, there are disadvantages to these approaches and they should be carefully considered

Ensuring high-quality results

Focus on the interviewer

Interviewer recruitment, selection and training is of critical importance to the success of the survey.

- Ensure basic requirements during the selection process, including:
  - » Must be comfortable with children
  - » Good presentation of self
  - » Predetermined education requirements
  - » Knowledge of the required language(s)
- Recruit and train extra interviewers so that only the best can be selected for fieldwork
- Plan for additional trainings on ethics, building rapport how to implement the module, and scoring
- Schedule ample time to allow for detailed classroom instruction and lots of field practice

Implement the sample properly

Representative data rest not only on a good sample design but also on its exact implementation.

- Ensure the sampling frame covers all households that include the entire population of children, regardless of school attendance. The household listing in each sample cluster should cover all the households within the cluster boundaries.
- Use a complete roster of usual household residents for each sample household to identify all the children in the eligible age group. Randomly select one child in the specified age range from this listing of the household's children

Plan for data processing, analysis and use well in advance

- Make substantial adjustments to the data processing syntax as necessary
- Calculate sample weights for this module separately. Given the selection of one eligible child per household, the child weight will involve multiplying the household weight by the number of eligible children in each sample household.
- Include national education authorities and other relevant stakeholders throughout the analysis, reporting and dissemination process

Annex B: Foundational Learning module

Note to survey coordinators

- This module can be embedded in a household questionnaire, in a women's questionnaire, or even in a separate questionnaire for children, as in the MICS approach.
- Note that the module requires careful adaptation before implementation. Complete instructions can be found in the accompanying Guidelines for the Customization of the Foundational Learning module.
- It will be necessary to refer back to the MICS6 Questionnaire for Children Age 5-17 (see below) for proper adaptation of the module as certain questions in the module pertain to background characteristics collected in the beginning of the MICS questionnaire.

This module has been extracted from the MICS6 Questionnaire for Children Age 5-17 (4 June 2018), which includes more modules relevant to children in this larger age group. The questionnaire can be found *here*.

For more information about the MICS survey programme, please visit <mics.unicef.org>.

MICS

FOUNDATIONAL LEARNING SKILLS

FL0. Check CB3: Child's age?	AGE 5-6 YEARS ....1 AGE 7-14 YEARS 2	1»End

FL1. Now I would like to talk to (name). I will ask (him/her) a few questions about (himself/herself) and about reading, and then ask (him/her) to complete a few reading and number activities.

These are not school tests and the results will not be shared with anyone, including other parents or the school.

You will not benefit directly from participating and I am not trained to tell you how well (*name*) has performed.

The activities are to help us find out how well children in this country are learning to read and to use numbers so that improvements can be made.

This will take about 20 minutes. Again, all the information we obtain will remain strictly confidential and anonymous.

May I talk to (*name*)?	YES, PERMISSION IS GIVEN .... 1 NO, PERMISSION IS NOT GIVEN 2	2»FL28
FL2. Record the time.	HOURS AND MINUTES __ __ : __ __	

FL3. My name is (*your name*). I would like to tell you a bit about myself.

Could you tell me a little bit about yourself?

When the child is comfortable, continue with the verbal consent:

Let me tell you why I am here today. I am from the National Statistical Office. I am part of a team trying to find out how children are learning to read and to use numbers. We are also talking to some of the children about this and asking them to do some reading and number activities. (Your mother/Name of caretaker) has said that you can decide if you want to help us. If you wish to help us, I will ask you some questions and give you some activities to do. I will explain each activity, and you can ask me questions any time. You do not have to do anything that you do not want to do. After we begin, if you do not want to answer a question or you do not want to continue that is all right.

Are you ready to get started?	YES .... 1 NO / NOT ASKED 2	2»FL28
FL4. Before you start with the reading and number activities, tick each box to show that: • You are not alone with the child unless they are at least visible to an adult known to the child. • You have engaged the child in conversation and built rapport, e.g., used an icebreaker. The child is sitting comfortably, able to use the Reading & Numbers book without difficulty while you can see which page is open.		
FL5. Remember you can ask me a question at any time if there is something you do not understand. You can ask me to stop at any time.		

FL6. First, we are going to talk about reading. [A] Do you read books at home? [B] Does someone read to you at home?	YES NO READS BOOKS AT HOME ....1 2 READ TO AT HOME 1 2	
FL7. Which language do you speak most of the time at home? Probe if necessary and read the listed languages.	LANGUAGE 1.. 1 LANGUAGE 2 .... 2 LANGUAGE 3 .... 3 OTHER (specify) .... 6 DK 8	

FOUNDATIONAL LEARNING SKILLS

FL8. Check CB7: In the current school year, did the child attend school or any early childhood education programme? Check ED9 in the education module in the household questionnaire for child if CB7 was not asked.	YES, CB7/ED9=1 .... 1 NO, CB7/ED9=2 OR BLANK 2	1 » FL9A
FL8A. Check CB4: Did the child ever attend school or any early childhood education programmes? Check ED4 in the education module in the household questionnaire for child if CB4 was not asked.	YES, CB4/ED4=1 ....1 NO, CB4/ED4=2 OR BLANK 2	1 » FL9B
FL8B. Check FL7: Is Reading & Numbers book available in the language spoken at home?	YES, FL7=1, 2 OR 3 .... 1 NO, FL7=6 OR 8 2	1 » FL10B 2 » FL23
FL9A. What language do your teachers use most of the time when teaching in class? FL9B. When you were in school, what language did your teachers use most of the time when teaching in class? Probe if necessary and name the listed languages.	LANGUAGE 1 ....1 LANGUAGE 2 .... 2 LANGUAGE 3 .... 3 OTHER (specify) .... 6 DK 8	1» FL10A 2» FL10A 3» FL10A 6» FL23 8» FL23
FL10A. Now I am going to give you a short story to read in (Language recorded in FL9A/B). Would you like to start reading the story? **FL10B**. Now I am going to give you a short story to read in (Language recorded in FL7). Would you like to start reading the story?	YES .... 1 NO 2	2» FL23
FL11. Check CB3: Child's age?	AGE 7-9 YEARS .... 1 AGE 10-14 YEARS.................................. 2	1» FL13
FL12. Check CB7: In the current school year, did the child attend school or any early childhood education programme? CHECK ED9 IN THE EDUCATION MODULE IN THE HOUSEHOLD QUESTIONNAIRE FOR CHILD IF CB7 WAS NOT ASKED.	YES, CB7/ED9=1 .... 1 NO, CB7/ED9=2 OR BLANK 2	1» FL19

FL13. Give the child the Reading & Numbers book.

      Open the page showing the reading practice item and say:

      Now we are going to do some reading. Point to the sentence. I would like you to read this aloud. Then I may ask you a question.

      Sam is a cat. Tina is a dog. Sam is 5. Tina is 6.

FL14. Did the child read every word in the practice correctly?	YES .... 1 NO 2	2 » FL23
FL15. Once the reading is done, ask: How old is Sam?	SAM IS 5 YEARS OLD ....1 OTHER ANSWERS .... 2 NO ANSWER AFTER 5 SECONDS 3	1» FL17
FL16. Say: Sam is 5 years old. and go to FL23.		» FL23
FL17. Here is another question: Who is older: Sam or Tina?	TINA IS OLDER (THAN SAM)...............................1 OTHER ANSWERS .... 2 NO ANSWER AFTER 5 SECONDS 3	1» FL19
FL18. Say: Tina is older than Sam. Tina is 6 and Sam is 5. and go to FL23.		»FL23

FOUNDATIONAL LEARNING SKILLS

FL19. Turn the page to reveal the reading passage.

Thank you. Now I want you to try this.

Here is a story. I want you to read it aloud as carefully as you can.

You will start here (point to the first word on the first line) and you will read line by line (point to the direction for reading each line).

When you finish I will ask you some questions about what you have read.

If you come to a word you do not know, go onto the next word.

PUT YOUR FINGER ON THE FIRST WORD. READY? BEGIN.

Moses	is	in	class	two.	One	day,
1	2	3	4	5	6	7
Moses	was	going	home	from	school.	He
8	9	10	11	12	13	14
saw	more	red	flowers	on	the	way.
15	16	17	18	19	20	21
The	flowers	were	near	a	tomato	farm.
22	23	24	25	26	27	28
Moses	wanted	to	get	some	flowers	for
29	30	31	32	33	34	35
his	mother.	Moses	ran	fast	across	the
36	37	38	39	40	41	42
farm	to	get	the	flowers.	He	fell
43	44	45	46	47	48	49
down	near	a	banana	tree.	Moses	started
50	51	52	53	54	55	56
crying.	The	farmer	saw	him	and	came.
57	58	59	60	61	62	63
He	gave	Moses	many	flowers.	Moses	was
64	65	66	67	68	69	70
very	happy					
71	72					

FL20. Results of the child's reading.

LAST WORD ATTEMPTED...........NUMBER __ __
TOTAL NUMBER OF WORDS
INCORRECT OR MISSED...........NUMBER __ __

FL21. How well did the child read the story?

THE CHILD READ AT LEAST
ONE WORD CORRECTLY..1

THE CHILD DID NOT READ
ANY WORD CORRECTLY 2   2»FL23

THE CHILD DID NOT TRY
TO READ THE STORY 3   3» FL23

FL22. Now I am going to ask you a few questions about what you have read.

If the child does not provide a response after a few seconds, repeat the question. If the child seems unable to provide an answer after repeating the question, mark 'No response' and say: Thank you. That is ok. We will move on.

Make sure the child can still see the passage and ask:

[A] What class is Moses in?

CORRECT ((Moses is) in class two) 1
INCORRECT 2
NO RESPONSE / SAYS 'I DON'T KNOW' 3

[B] What did Moses see on the way home?

CORRECT (he saw some flowers) 1
INCORRECT 2
NO RESPONSE / SAYS 'I DON'T KNOW' 3

[C] Why did Moses start crying?

CORRECT (BECAUSE HE FELL) 1
INCORRECT 2
NO RESPONSE / SAYS 'I DON'T KNOW' 3

[D] Where did Moses fall (down)?

CORRECT ((moses fell down) near a banana tree).. 1
INCORRECT 2
NO RESPONSE / SAYS 'I DON'T KNOW' 3

[E] Why was Moses happy?

CORRECT (because the farmer gave him many
flowers / because he had flowers to give to his
mother)... 1
INCORRECT 2
NO RESPONSE / SAYS 'I DON'T KNOW' 3

FOUNDATIONAL LEARNING SKILLS

FL23. Turn the page in the Reading & Numbers book so the child is looking at the list of numbers. Make sure the child is looking at this page. Now here are some numbers. I want you to point to each number and tell me what the number is. Point to the first number and say: *Start here.* If the child stops on a number for a while, tell the child what the number is, mark the number as 'No Attempt', point to the next number and say: *What is this number?* *STOP RULE* If the child does not attempt to read 2 consecutive numbers, say: *Thank you. That is ok.*	**9** CORRECT .... 1 INCORRECT .... 2 NO ATTEMPT .... 3 **12** CORRECT ....1 INCORRECT .... 2 NO ATTEMPT .... 3 **30** CORRECT ....1 INCORRECT .... 2 NO ATTEMPT .... 3 **48** CORRECT ....1 INCORRECT .... 2 NO ATTEMPT .... 3 **74** CORRECT ....1 INCORRECT .... 2 NO ATTEMPT ....3 **731** CORRECT ....1 INCORRECT ....2 NO ATTEMPT 3	

FL23A. Check FL23: Did the child correctly identify two of the first three numbers (9, 12 and 30)?	YES, AT LEAST TWO CORRECT ....1 NO, AT LEAST 2 INCORRECT OR WITH NO	2 » FL28

FL24. Turn the page so the child is looking at the first pair of numbers. Make sure the child is looking at this page. Say: *Look at these numbers. Tell me which one is bigger.* Record the child's answer before turning the page in the book and repeating the question for the next pair of numbers. If the child does not provide a response after a few seconds, repeat the question. If the child seems unable to provide an answer after repeating the question, mark a 'Z' for the answer on the appropriate row on the questionnaire, turn the booklet page and show the child the next pair of numbers. If the child does not attempt 2 consecutive pairs, say: *Thank you. That is ok. We will go to the next activity.*	7 11 58 65 146	5 24 49 67 154	_____ _____ _____ _____ _____	

FL25. Give the child a pencil and paper. Turn the page so the child is looking at the first addition. Make sure the child is looking at this page. Say: *Look at this sum. How much is (number plus number)? Tell me the answer. You can use the pencil and paper if it helps you.* Record the child's answer before turning the page in the book and repeating the question for the next sum. If the child does not provide a response after a few seconds, repeat the question. If the child seems unable to provide an answer after repeating the question, mark a 'Z' for the answer on the appropriate row on the questionnaire, turn the booklet page and show the child the next addition. If the child does not attempt 2 consecutive pairs, say: *Thank you. That is ok. We will go to the next activity.*	$3 + 2 =$ _____ $8 + 6 =$ _____ $7 + 3 =$ _____ $13 + 6 =$ _____ $12 + 24 =$ _____	

FOUNDATIONAL LEARNING SKILLS

FL26. Turn the page to the practice sheet for missing numbers. Say:
Here are some numbers. 1, 2, and 4. What number goes here?

If the child answers **correctly** say:
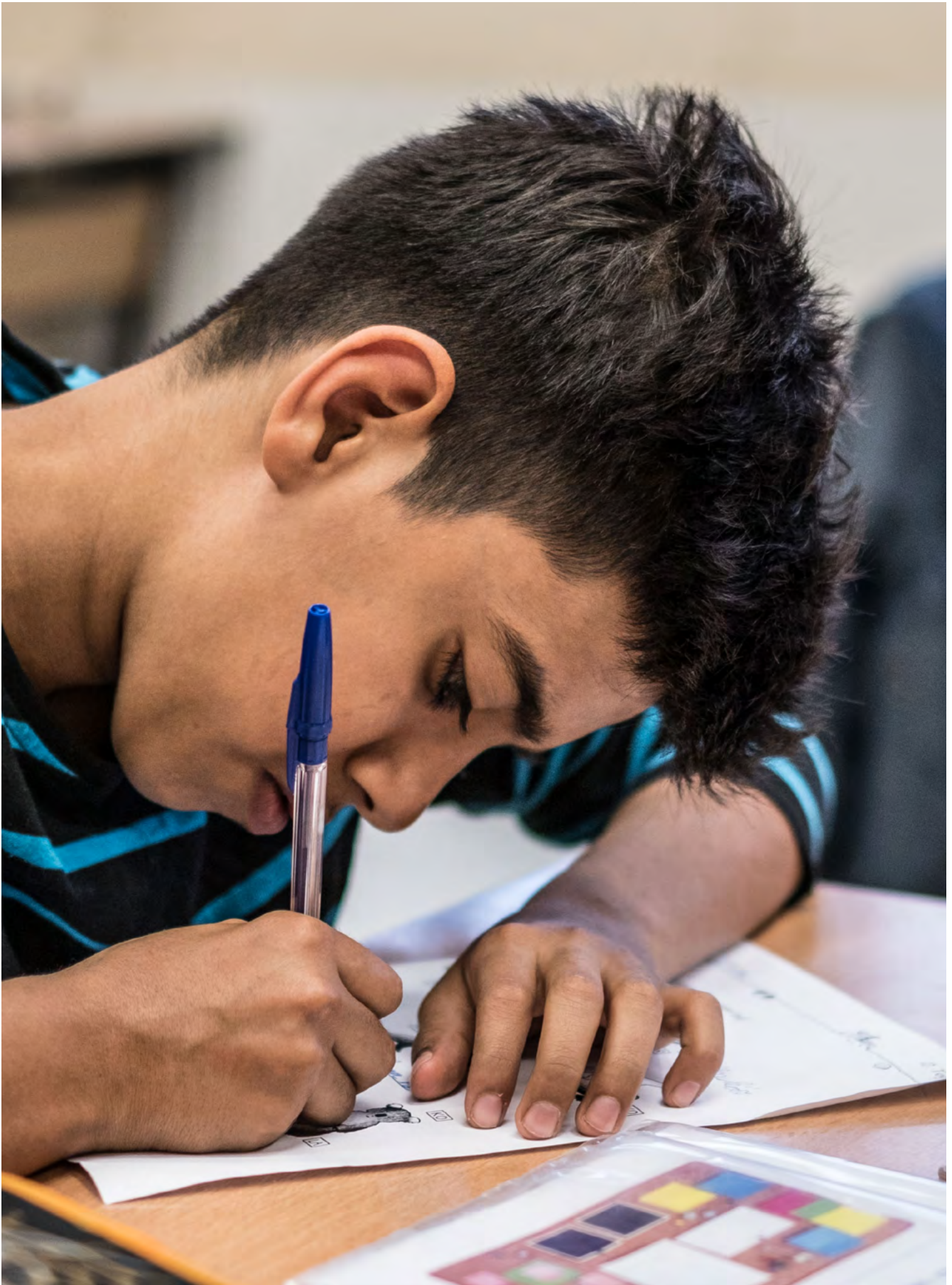*That's correct, 3. Let's do another one.*

If the child answers **incorrectly, do not explain how to get the correct answer**. Just say:
The number 3 goes here. Say the numbers with me. (Point to each number) 1, 2, 3, 4. 3 goes here. Let's do another one.

Now turn the page to the next practice sheet. Say:
Here are some more numbers. 5, 10, 15 and ___. What number goes here?

If the child answers **correctly** say:
That's correct, 20. Now I want you to try this on your own.

If the child answers **incorrectly** say:
The number 20 goes here. Say the numbers with me. (Point to each number) 5, 10, 15, 20. 20 goes here. Now I want you to try this on your own.

FL27. Now turn the page in the Reading & Numbers book with the first missing number activity. Say: *Here are some more numbers. Tell me what number goes here (pointing to the missing number).* Record the child's answer before turning the page in the book and repeating the question. If the child does not provide a response after a few seconds, repeat the question. If the child seems unable to provide an answer after repeating the question, mark a 'Z' for the answer on the appropriate row on the questionnaire. If the child does not attempt 2 consecutive activities, say: *Thank you. That is ok.*	5 6 7 ___ 14 15 ___ 17 20 ___ 40 50 2 4 6 ___ 5 8 11 ___		

FL28. Result of interview with child. Discuss any result not completed with Supervisor.	COMPLETED .... 01 NOT AT HOME .... 02 MOTHER/CARETAKER REFUSED .... 03 CHILD REFUSED .... 04 PARTLY COMPLETED .... 05 INCAPACITATED ....06 OTHER (specify) 96
FS11. Record the time.	HOURS AND MINUTES ___ ___ : ___ ___
FS12. Language of the questionnaire.	ENGLISH .... 1 LANGUAGE 2 .... 2 LANGUAGE 3 3
FS13. Language of the interview	ENGLISH .... 1 LANGUAGE 2 .... 2 LANGUAGE 3 .... 3 OTHER LANGUAGE (specify) 6
FS14. Native language of the Respondent.	ENGLISH .... 1 LANGUAGE 2 .... 2 LANGUAGE 3 .... 3 OTHER LANGUAGE (specify) 6
FS15. Was a translator used for any parts of this questionnaire?	YES, THE ENTIRE QUESTIONNAIRE .... 1 YES, PARTS OF THE QUESTIONNAIRE .... 2 NO, NOT USED 3

FS16. Thank the respondent and the child for her/his cooperation.

Proceed to complete the result in FS17 in the 5-17 CHILD INFORMATION PANEL and then go to the HOUSEHOLD QUESTIONNAIRE and complete HH56.

Make arrangements for the administration of the remaining questionnaire(s) in this household.

FL Module
Booklet

**Sam is a cat. Tina is a dog.
Sam is 5. Tina is 6.**

Moses is in class two. One day, Moses was going home from school. He saw some red flowers on the way. The flowers were near a tomato farm. Moses wanted to get some flowers for his mother. Moses ran fast across the farm to get the flowers. He fell down near a banana tree. Moses started crying. The farmer saw him and came. He gave Moses many flowers. Moses was very happy.

9

12

30

48

74

731

7 5

11   **24**

58   **49**

65   **67**

146   **154**

$$3 + 2 =$$

$$8 + 6 =$$

$$7 + 3 =$$

13 + 6 =

12 + 24 =

1 2 __ 4

5   10   15   __

5   6   7   __

14 15 __ 17

20 __ 40 50

2 4 6 __

5   8   11   __

Annex C: Guidelines for the customization of the Foundational Learning module

Note to survey coordinators

- This document is composed of two sections, both of which must be carefully worked through for proper customization of the module:
  » **Section 1:** Adapting the Foundational Learning module
  » **Section 2:** Developing the reading story and comprehension questions in the Foundation Learning module

- Complete instructions on how to customize MICS questionnaires are available online (see below). For those who are not already familiar with the structure and formatting of MICS questionnaires, it will be necessary to review the initial sections of the full

These guidelines were extracted from the complete set of Guidelines for the Customization of MICS6 Questionnaires (6 September 2018), which are available *here*.

For more information about the MICS survey programme, please visit <mics.unicef.org>.

MICS

Section 1: Adapting the Foundational Learning module

Note that all red text in the module must be modified according to the country context. Please customize as appropriate and then change font colour to black.

FL3
See customization guidance to HH12

FL7
Customize the response categories, typically by simply copying customization for HC1B

FL8B
Edit the red text to include only those languages (response categories) in FL7 for which a reading and numbers book is available

FL9
Customize the response categories in a similar way to FL7, though the list may include less languages, i.e., those commonly used by teachers

FL13 – FL18
Edit the red text to match the text and responses developed for the practice section of the FL module booklet

FL19
Insert the reading story developed to replace the standard in red. Additional or less cells may be required.

FL22
Replace the comprehension questions in sub-items [A]-[E] with those developed for the customized reading story

FL module booklet
Follow the instructions provided in the section below. The booklet should not be printed with questionnaires, but as a separate document. Do not make design changes to the cover page, as it is meant to not distract the child in any way.

Section 2: Developing the reading story and comprehension questions in the Foundational Learning Skills module

The MICS Foundational Learning Skills module measures reading and numbers skills at Grade 2-level. As part of the reading task, children will read a short story and answer comprehension questions. The results will determine whether the interviewed children can read and understand Grade 2-level texts.

Based on experience and the literature, a method to develop rigorous testing material has been formulated. Please closely follow the guidelines described below. If you encounter problems or have questions, contact the UNICEF experts listed in the accompanying guidelines. Several languages may be used to teach reading in Grade 2. The survey management must seek to form a group of experts who will develop reading material in languages in which they are fluent. This team will rely on their experience of the language and culture to write material that is relevant to the children.

There are three possible paths to produce the story and questions for the reading task:
A. Adapt the available MICS story and questions (in English, French, Spanish, Arabic and Russian)
B. Translate and adapt the available MICS story and questions (from English, French, Spanish, Arabic and Russian) into another language
C. Produce a new story and questions from scratch, in any language, based on the guidelines below
If a story is developed in more than one language, combinations of these paths may be used. For instance, in Kenya, Path A could be utilized for English, Path B for Kiswahili and Path C for Dholuo. Alternatively, Path C could be used to develop a new story in all three languages.

The first decision is: **In which language(s) will the story be presented?** If more than one language is used when children learn to read, present a story for each language. The stories in the different languages may be translations of one another, or they may be different stories, as deemed convenient. However, each child will answer the reading task in one language only: the language used by his/her teacher most of the time (or at home, if child is not in school).

Regardless of the path selected, the story and questions must be checked against the official, government-approved Grade 2 reading or language books[14] in that language.

If that is not feasible, use reading story books that are government approved for Grade 2.

1. Use all officially approved reading or language textbooks or supplementary books for Grade 2

2. Do not use books for other subjects like math or science

3. Include books used by students only; do not include teachers' books

4. Make sure that all the words in the story and questions appear in the official Grade 2 books (see figure on next page)
   a. If a word in the story or questions does not appear in the books, change it to one that does

b. The new word does not need to be a synonym or equivalent to the old word, but it must make sense in the story. For instance, in some cases you can change the word "banana" to "apple", or vice versa. Document these changes.

These procedures apply in every case, even for the available MICS story and questions in English, French, Spanish, Arabic and Russian.

The remaining guidelines apply only if using Path C.

Additional instructions for Path C

**C1. Select passages and analyse the textbook**
In each textbook, select all passages that students read, such as stories (including titles), sentences or words. Do not include instructions[15] intended for students or teachers, or any comprehension questions[16]. Focus on stories and text students are expected to read. Please see the below screenshots for examples of text to select within a book.

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[14] Check against Grade 2 government-approved language or reading books. If that is not feasible, use reading story books that are government approved for Grade 2.

[15] Instructions can deal with how the student will read the text or the goal of an exercise. Other instructions can be directed at the teacher or parent and explain what to tell/instruct students. Exclude all instructions.

[16] Some textbooks include texts/stories to read followed by comprehension questions and in some cases, their answer – exclude both comprehension questions and answers.

Examples of text to select: Select the text in red [ ]. Exclude the text with the blue ⊘
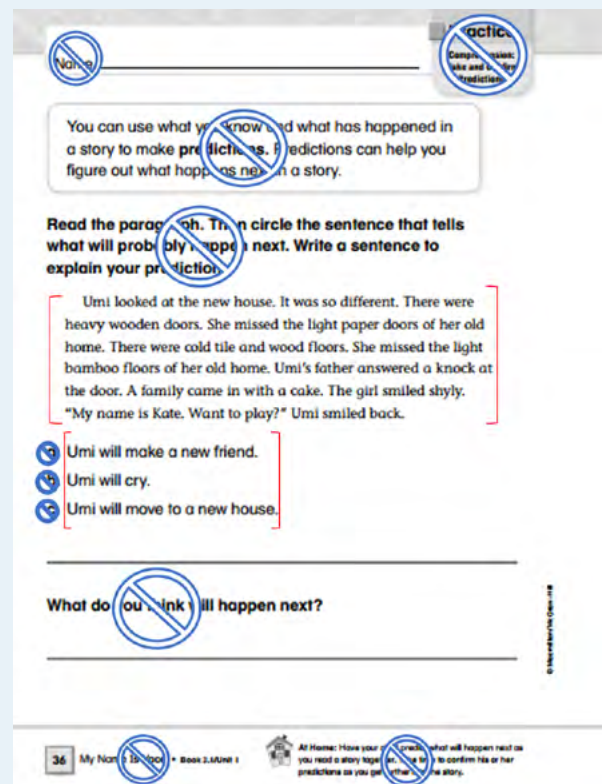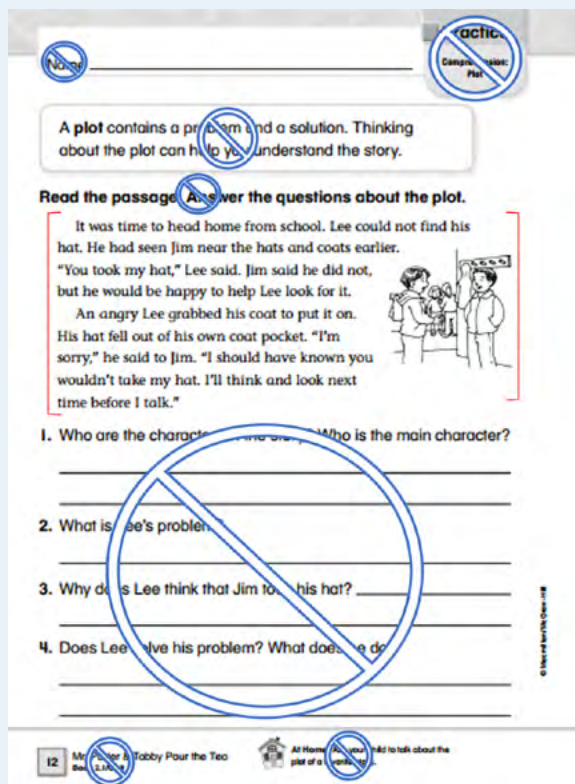
Once you select the appropriate text in the textbook(s), type all the selected content in Microsoft Word.

- If the textbook is already in Word, create a new document with the selected content.
- If the textbook must be typed into Word, use the simplest format possible. Avoid bullet points, formatting (bold, italic, underline), columns or tables. Even if the texts are presented in the textbook using fancy formatting, type each story/text line by line without formatting.
- Separate each story with a line break
- Reproduce words and sentences exactly as they appear in the book. Do not omit accents or syllables
- Delete all punctuation and quotation marks
- Double-check that spelling and word separation are identical in your file and the book
- Include all the selected content of all the books. The more stories/texts/words the better.
- Use the Tools – Word Count option in Word to make sure the copied, selected text is least 500 words long
  » Include Grade 1 textbook text if the selected text from the Grade 2 reading materials is short of 500 words

Example of typed text based on the two textbook pages above:

Umi looked at the new house it was so different there were heavy wooden doors she missed the light paper doors of her old home there were cold tile and wood floors she missed the light bamboo floors of her old home Umi's father answered a knock at the door a family came in with a cake the girl smiled shyly my name is Kate want to play Umi smiled back

It was time to head home from school Lee could not find his hat he had seen Jim near the hats and coats earlier you took my hat Lee said Jim said he did not but he would be happy to help Lee look for it an angry lee grabbed his coat to put it on his hat fell out of his own coat pocket I'm sorry he said to Jim I should have known you wouldn't take my hat I'll think and look next time before I talk

Analyse the textbook by listing all the words once by frequency:

- To determine how many of each word there are, use an online word frequency count tool.[17] Make sure that the tool supports the language of the text. Double-check that special characters and different scripts work with the tool you choose.

Two useful counting tools: <countwordsfree.com> or <www.textfixer.com/tools/online-word-counter.php>

Example using the text in the above sample:

Examine the words:

---

17 If you are unable to do so, note that it is possible to perform a manual word count using Microsoft Excel.

- Are there any noticeable issues in the frequency word list? Examples of issues could be:
  » A word that is very rare in the language appears as very frequent.
  » A word that does not exist in the language appears as very frequent or frequent.
  » A word with the wrong spelling in the language appears as very frequent.

If there is an issue with the word list, go back to the original typed textbooks and look at the stories that include the issue(s) identified. Perhaps they have been mistyped or some stories/words appear multiple times? Compare the typed text with the corresponding material in the textbook(s). Correct the possible error in the typed textbooks and run the analysis again with the issues corrected.

- Is there a topic covered in the textbook that introduces unusual words that appear frequently in the word list? Some textbooks include a series of stories about the same character or the same environment, which may not be typical words known to readers in the Grade-level.
  » For example, a Grade 2 textbook presents stories about an elephant that lives in the savannah. As a result, the frequency analysis might reveal that words such as 'elephant' and 'savannah' are very frequent. If the textbook is focused on a particular character or topic, make sure that you consider with caution the words that deal with that topic. They may be exceptionally frequent in this textbook as compared to other texts in the language.
- Are there proper nouns such as people's first names or names of countries, cities or villages in the list? Remove them from the list.

C2. Write a story to include in the assessment
Start by printing the list of words. Identify the most frequent articles, nouns, adjectives, verbs and adverbs. They will help write the story using words that are the most likely to be known by Grade 2 students.
The story will comprise the equivalent of 60 to 70 English words. This equivalence may represent either more words in languages like Vietnamese, where most words are monosyllabic, or fewer words in agglutinative languages such as Kiswahili (about 45 words) and other Bantu languages.

- In order to control for the number of words and make sure that the story is not too long, experience shows that it helps to draw six lines on a piece of paper. Start writing the story by aiming at writing about 10 words per line. Write the story freely and then revise it by removing and or adding words on each line.
- Use the frequent words from the word list. As the story is built, make sure that any other words are in the word list. This will help ensure that the story level is Grade 2.

» When a given word has more than one meaning, search for the word in the document including the typed texts. Check its meaning in the Grade 2 textbook. When using the word in the story, make sure that it aligns with the meaning intended in the textbook.

The story must be a narrative text. Narrative texts follow this structure:
- They have settings and characters that are generally introduced at the beginning.
- Then by the middle of the story, characters are faced with a problem, or something surprising happens to them.
- The story develops and, in the end, characters find a solution to the problem and the story concludes.

The following template can help with writing narrative texts that are not too long:

Line #	Approximate number of words	Story
1	10 to 15 words	
2	10 to 15 words	
3	10 to 15 words	
4	10 to 15 words	
5	10 to 15 words	
6	10 to 15 words	

Write about the story's settings and characters

Write about the problem or the surprising event

Write about how the problem is solved and how the story ends

The story must be fictional.

- No one will have heard about this story before. Create it entirely from scratch.
- The characters and settings must be new. Avoid naming characters or using settings that are identical to the textbook. Avoid naming characters or using settings that are similar to a well-known story in the country, or to an already existing tale or legend.
- Children will read better if the story is positive and does not generate stress or sadness. Think about a topic or problem/resolution that would not remind children of a traumatic or violent event. Narrative stories should deal with topics that children are familiar with and remind them of happy moments/ events in their life and in the life of the characters.
- Choose topics that are familiar to all children who are speakers of the language. They must be equally understood by all of them, whatever their gender (male/female), social status (poorer/richer), location (urban/rural), etc.

Other important criteria of the story's content:
- Includes one or two characters (three maximum). Stories with few characters are better understood.
- Located in one or two settings/places. Settings are more memorable if they are limited in number.
- Prioritize short words over long words. Grade 2 words are generally one to two syllables long, usually from one- to six-letter words, although this varies by

language. If longer words are necessary, do not use too many of them, do not repeat them too often, and make sure that these longer words are high frequency words in the language. However, some languages are made of long words. Finding words that are one- to two-syllables long in such cases can be difficult. Determine what a short word is in your language by analysing word length in the word list. Throughout the narrative story, try to avoid using words that are longer than the most frequent word length (+/- one or two letters).

- Remember that a sentence that a child can easily understand orally can be hard to understand in writing. Use short sentences and reduce sentence length where possible by dividing a long sentence into two short sentences. Use connecting words to make sure that the text can be read naturally. The use of simple grammatical structure and few complements also helps minimize the sentence length. A rule of thumb is to keep sentence length below five or six words. (But once again, this also varies by language; for instance, for languages like Kiswahili, with long words, the maximum number of words per sentence may have to be lower than that; on the other hand, in languages like Vietnamese, comprising mostly monosyllabic words, the maximum number of words per sentence may be higher.) When in doubt, follow the style found in the textbook.
- Review the language with educators. Ask teachers, academics and textbook developers. Check for typos. Also, make sure that the words are separated/spaced properly. Ensure that accents and punctuation marks are correct. Make sure that the writing conventions are those respected in the classroom. When there are conflicting instructions on how a word is spelled, always ensure follow best practice.

C3. Write comprehension questions based on the story

Create three literal questions and two inferential questions in relation to the text. The guidelines below will ensure that the questions are adequate.

Literal questions

Literal questions are questions that can be answered by using information directly available in the text.
- If the text is 60 words long, the first literal question should deal with the events that are located in the first 30 words (first half of the text).
- Literal questions should have one single answer in the text. For example:

Story:	Question	Single answer in the text
Ama is 7 years old. She lives in the city	How old is Ama?	(Ama is) 7 (years old)
	Where does Ama live?	(She lives) in the city

Note: Choose questions that will prompt answers that are either right or wrong in a clear-cut way. Avoid questions that will lead to incomplete answers. For instance, if in a different story, Toto's favourite shirt is green and red, then there are several possible answers. Avoid such questions. Change the story or the question to ensure that there is only one answer.

- Avoid two-alternative questions, such as "Yes / No" and "Either / or questions".
    o Avoid "Yes / No" questions like "Does Ama lives in the city?"
    o Avoid "either /or" questions like "Is Ama's shirt green or yellow?"
- Avoid questions that rely on prior knowledge. The answer must be in the text, but in addition ensure that the only way to find the answer is to look for it in the text.
- The story and the questions must refer to characters, places and objects in the same way. If the story talks about Ama, ask the question "How old is Ama?", not "How old is the girl?"

Inferential questions

Inferential questions ask the reader to make connections that are not explicit in the story. The reader will have to use information implied in the text to infer the connection. For example:

Story	Question	Response
Ama ate fish today. The fish smelled funny.	Why is Ama sick?	Because she ate bad fish.

- In order to answer the question, the reader must understand that the fish caused Ama's sickness. The text does not explicitly state this connection; therefore, the question is inferential.

The following question is not inferential because the connection, this time, is explicitly stated in the text:

Story	Question	Response
Ama was happy because she received a present for her birthday.	Why was Ama happy?	Because she received a present for her birthday.

- The connection between Ama's happiness and the present is explicitly stated in the text. The question is therefore not inferential.

The inferential questions must also:
- Refer to characters places and objects the same way they are referred to in the text.
- Have one single possible answer in the text.
- Have its answer located anywhere in the story.
- Rely on what is said in the story, not on a student's prior knowledge.

Annex D: Instructions for interviewers Foundational Learning Module

Note to survey coordinators:

- Give a copy of these instructions to every interviewer. Translate into the local language, if necessary. Ensure that the information is appropriate to your survey. All countries need to customize instructions as a result of customized questionnaires.

- It is recommended that a pdf copy of this document is prepared and copied to all the tablets interviewers and supervisors will use in the fieldwork.

- Note that these instructions require significant customization if the survey is not conducted using tablets/capi.

These instructions have been extracted from a complete set of MICS6 Instructions for Interviewers (15 November 2018), which are available *here*.

For more information about the MICS survey programme, please visit <mics.unicef.org>.

MICS

Foundational Learning Module

FL0. Check CB3: Child's age
This module only applies to children aged 7 to 14.

Interviewing Children

Ethics and consent
Data collection exercises, such as surveys, carried out by national statistical authorities will follow a set of ethical procedures and guidelines, reflecting international and national statistical standards. These may be enshrined in a national statistics act and/or a service charter and include, for example, the subject matter to be covered, the right to refuse participation, and guarantees of confidentiality, professionalism and integrity. However, additional ethical issues arise when children are the respondents. To administer the Foundational Learning module and talk to the child, verbal permission must first be obtained from the mother or main caretaker. Then the child's own verbal consent to participate in the interview must be obtained. In obtaining this consent, relevant details about the interview process, topics to be covered and what participation will entail are usually discussed. Some very young children may not fully understand this detailed information but at the very least they must understand that they can refuse to participate without any adverse consequences, that they do not have to give a reason for not answering specific questions, and that they can withdraw from the interview at any point.

As far as possible, child respondents should be given the same degree of protection regarding confidentiality, anonymity and data protection as adult participants. However, when it comes to matters of child protection you have a clear duty to ensure the safety of the child over any responsibility to guarantee confidentiality. If any information does arise that suggests that a child's safety or welfare is threatened, take appropriate action. For your protection, as well as that of the child, it is important that a parent or an adult known to the child is in the vicinity but not too close to where the interview is taking place – within view or calling distance, but not able to overhear what is being said. However, if a child wants their mother, father or caretaker to be present, agree to this.

You have a duty to avoid or minimize any distress that the interview process may cause to the child. This involves being mindful of possible effects on the child throughout the interview, for instance, if a child cries if

they struggle with the reading task. It is not expected that you will know how to deal with every situation; seek the assistance of other household members and team members. Always maintain professional boundaries and recognize the limits of your personal expertise.

If a child asks for a break or if he/she'd like to go to the toilet, asks for water or is hungry, interrupt the interview immediately and attend to the child's need before resuming the interview. Here as well, ask for the assistance of the child's caretaker or household member. Techniques to help manage the new experience of interviewing children are given below. If you begin to feel comfortable about the process at any time during training or the field test, contact a member of the field test team immediately.

Privacy and choosing a space
There may not be many choices about where to hold the interview. Most important is to think about what will put the child at ease. Try to choose a place that isn't too threatening – children may not feel relaxed in a public building such as a church or community centre. Smaller, friendlier rooms with a choice of seating can help. Sit outdoors if the weather allows.
Try to find a place that is private – it is very difficult for both the child and interviewer if other people are listening or walking past – but also ensure the child is visible to others. Avoid an isolated spot; if indoors, for instance, keep a door open. If outdoors, sitting under a tree away from other people but in their view is more appropriate than taking a child to a secluded spot. Remember the safety issues and the duty to protect children.

If possible, let the child choose, while ensuring your needs are being met. Explain to the child what is important from your point of view, e.g., lack of background noise.

Try to sit on the same level as the child to allow for eye-level contact. If the child is sitting on the floor or the ground, sit on the floor as well. Children will be more comfortable sitting and reading at a desk/table. Do not sit behind the desk or table; it is better to sit together with the child. Give the most comfortable seat to the child and don't take the biggest and best chair for yourself. Sit close to the child but not too close – do not enter the child's 'territory'. Think carefully about your body language, smile frequently and ask the child how he/she is feeling from time to time. This will help put him/her at

ease and also help you check on the child's well-being and comfort during the test. Make eye contact (unless that is not culturally acceptable).

Building rapport
In some cultures, children are expected to behave in particular ways with adults – often rather formally and to show respect. Be sensitive to these norms to avoid making the child feel uncomfortable (or offending his/her parents). However, interviews generally work better if children feel valued and equal and this can be difficult if they may not speak without permission or if they show apprehension towards the interviewer.

Greet the child by his/her name. Be open and friendly. Introduce yourself to the child. Explain clearly and simply who you are, tell them something fun about you, what you are doing and why.

Ask the child to introduce him/herself – it may help to boost the child's confidence if there is an early chance to say something personal. To help the child open up, ask about a favourite after-school game, for example. Being interviewed can be quite daunting for most children, so they will usually be nervous at first – you may want to reassure the child by telling him/her the whereabouts of his/her parents.

The best way to help children relax is to get to know them and to let them get to know you. You can gauge whether a child is comfortable if he/she talks to you and answers back to your questions. That is why a good icebreaker may involve playing a short game together or getting the child to draw a small picture and talk about it. If you feel unsure what to do or say, try to ask them an interesting question. Don't forget your own experience interacting with your own children or children in your family. Draw on this valuable experience to find topics and activities children will enjoy. Think about: What topics do children like to talk about? What song or games do they like? What's their favourite superhero? Rely on your own experience and intuition to make the child feel at ease and speak to you.

Interview techniques with children
It is important to let the child know what is happening. The consent form explains in simple words to the child how you want to work and what you want him/her to do. Answer the child's questions to ensure that there are no misunderstandings. Ask if there are any questions for you or if anything is unclear. Smile often and make eye contact while explaining. Sometimes children will ask something quite unexpected or which may seem irrelevant. Answer his/her questions sincerely even if it is not related to the topic of the interview.

Try to suit your language to the child. If you are not certain what is appropriate for a seven-year-old or a 14-year-old, listen carefully to the child's speech and language and adapt your language and vocabulary. Watch for signs that the child has understood you. If the child has misunderstood, try repeating the question. Another way of explaining what you want may be needed.

Children are asked questions all the time by adults – particularly teachers and parents. Adults are almost always looking for a correct answer, so children become used to finding the answer that adults want – the 'right' answer. At first, children may feel uncomfortable during the interview. They may be searching for the 'right' answer to the questions. Help them relax and realize that your questions are not to catch them out.

If a child does not respond to an ice breaker and/or if he/she does not answer any of the questions, this means that the child does not want to participate. Remember that children generally love to talk with people, particularly when they are nice and offering them to play a game. Therefore, take any sign that a child is reluctant to participate very seriously. If you have done your best to encourage a child to participate and the interview is not going well, gently interrupt the interview and thank the child for his/her help.

Remember to smile throughout, which will help control your reactions and tone. This is very important as children might become worried if they sense an evaluation of their performance. If the child or the mother/caretaker asks how well the child has done, praise the child for effort but do not comment on the test performance. Remind them that you are not trained to assess the children's performance and are here only to collect the data.

Do not help children answer test items or interview questions. Follow the test instructions closely.
If an issue with a child arises, consider asking whether the child is tired (take a short break), or whether he/she needs to go to the toilet/is hungry/thirsty, for example. Consider whether the child is discouraged and encourage the child by telling him/her that he/she is doing a good job and trying his/her best.

Discuss difficulties with colleagues and exchange tips. Ask each other for support and advice and feel free to exchange tips and games that were successful with children.

- Listen and answer children's questions.
- Treat children as equals.
- Have fun and be fun.
- Take your time.
- Explain fully and in child-friendly words what will happen during the interview.
- Explain that the child can stop the interview at any time.
- Smile a lot.
- Check on the child's well-being frequently.

- Patronize or lecture.
- Sit or stand at a higher level than the child.
- Put words in a child's mouth or let other adults do so.
- Interrupt.
- Talk too much about yourself (unless asked).
- Continue with the interview if a child gets upset (stop and take a break, ask if it's OK to start the interview When the child is available, go on).

The questions in this module are to be answered by the selected child. **However, under no circumstance should you start to interview the child without verbal permission from the child's mother/caretaker.**

Ask the mother/caretaker:

FL1. *Now I would like to talk to (name). I will ask (him/ her) a few questions about (himself/herself) and about reading, and then ask (him/her) to complete a few reading and number activities.*

These are not school tests and the results will not be shared with anyone, including other parents or the school.

You will not benefit directly from participating and I am not trained to tell you how well (name) has performed.

The activities are to help us find out how well children in this country are learning to read and to use numbers so that improvements can be made.
This will take about 20 minutes. Again, all the information we obtain will remain strictly confidential and anonymous.

If permission is given, record the answer and then make arrangements to interview the child. If the mother/ caretaker does not agree to the child being interviewed, go to FL28 and thank her/him. Discuss the refusal with a supervisor. Depending on the reasons for the refusal,

you or another person from the team may attempt to get permission from the mother/caretaker for a second time. However, remember that all participation in the survey must be on a voluntary basis and potential respondents must never be forced to participate.

If the selected child is not available for interview or not at home (e.g., at school), try to find out when he she will be available and return to the household later. If the selected child will not be available or will not be home at a time when it is feasible to come back, report this to a supervisor.

FL2. Record the time
The time of the day you start the interview will appear here.

First, find a convenient location away from any loud noise or other family members or neighbours so that the child is not distracted and can concentrate.

- Often family members and neighbours gather to watch how the child is performing. This can make the child nervous. Make sure this does not happen. For example, one team member could talk to the adults or interview adults using one of the other questionnaires, while another member interviews the child.
- You may find that you need to return to interview a number of children from neighbouring households after they return from school. While it may be convenient to arrange to return to interview these children at the same time, you must ensure that each interview is conducted privately and cannot be overheard by other children.
- Make sure that the child has a reasonable degree of privacy. If practical, sit with the child in a quiet place away from other family members, neighbours and other children, so that the child is not embarrassed while carrying out the tasks. This will also stop other children, who may be interviewed later, from overhearing the tasks and the answers.
- ***You should not be alone with a child unless they are at least visible to an adult known to the child.***

Second, it is very important to establish a relaxed atmosphere before beginning the interview as children will not be used to being interviewed at their home. Establish a relaxed environment by having a friendly conversation with the child before the interview begins.

Start by greeting the child and saying:

FL3. My name is (your name). I would like to tell you a bit about myself. [I am from _____/ number and ages of children/hobbies, etc.]

Could you tell me a little bit about yourself?
If you are unable to contact the child after repeat visits, record '2' for 'Not asked' and proceed to FL28 to fill the corresponding result code.

If the child is reluctant to speak, you may want to continue by using an icebreaker – respond to the child's answers by giving your own responses to create a conversation. Good icebreakers depend on a child's age.

Examples of suitable icebreakers by age (7-9 and 10-14)

Children aged 7 to 9:
- What is your favourite after-school game? Who is your favourite superhero?
- What are the names of your brothers and sisters? What games do you play with them?
- What are the names of your friends?
- Do you have any pets or other animals at home? Does it have a name?

Children aged 10 to 14:
- What is the meaning of your name?
- What is something you love to do every day?
- If you could have one wish granted, what would it be?
- What do you want to be when you grow up?
- If you could choose anything to learn, what would it be?

During the training, we will come up with original and fun questions to break the ice. Create icebreakers yourself and don't hesitate to share those that worked well with other interviewers.

If a child doesn't speak, try drawing something on a small piece of paper. Describe and show it to the child. Then ask the child to draw something for you next to it. If the child is unresponsive, ask him to draw something specific on the piece of paper. For example: "Could you draw the sun on my picture?" or, "My smiley face is missing a nose, could you help me and add a nose to my smiley face?" Compliment the child's effort and invite him/her to tell you something about the drawing.

It might be easier for a child if you start with yes/no questions. For example: "Do you think that the smiley face is a girl (or boy) like you?" The child might simply nod – this is good progress. Then say: "I would like to add some curly hair on this smiley face, watch me." Then ask the child: "Show me what you'd like to add." Once the child is finished drawing, ask: "Wonderful, could you tell me what this is?"

If you find it difficult to hear the child's responses you can, at this time, play another game. Ask the child to stand up and jump as he/she says his/her name very softly (so that no one can hear). Then ask the child to say

his/her name a little louder each time he/she jumps until they reach a level that can be heard comfortably. You can clap each time to encourage the child. You can also do the same while sitting (with or without clapping). This is an effective way to give the child an idea of how loudly he/she should speak, and younger children will find it fun.

When the child is comfortable continue with the verbal consent.

Begin the verbal consent by saying to the child:

Let me tell you why I am here today. I am from the National Statistical Office. I am part of a team trying to find out how children are learning to read and to use numbers. We are also talking to some of the children about this and asking them to do some reading and number activities. (Your mother/Name of caretaker) has said that you can decide if you want to help us. If you wish to help us, I will ask you some questions and give you some activities to do. I will explain each activity, and you can ask me questions any time. You do not have to do anything that you do not want to do. After we begin, if you do not want to answer a question or you do not want to continue, that is all right.

If consent is given, record the answer and begin to interview the child. If the child does not agree to being interviewed talk to the mother/caretaker to see if they can help. Remember that we will always interpret silence as a sign the child does not want to participate. If the child stays silent or does not agree to participate, complete FL28 accordingly (result of interview with selected child), thank the child and discuss the refusal with the field test team. Remember that the child's participation in the survey must be on a voluntary basis. Child respondents must never be forced to participate.

Now ensure that the child is sitting comfortably and able to use the Reading & Numbers book without difficulty while you can see which page is open. Remember that children will be more comfortable if they can read and complete the test at a desk or table, if available.

FL4. Before you start with the reading and number activities, tick each box to show that:

You are not alone with the child unless they are at least visible to an adult known to the child.

You have engaged the child in conversation and built rapport, e.g., using an icebreaker.

The child is sitting comfortably, able to use the Reading & Numbers book without difficulty while you can see which page is open.

When the child is ready say:

FL5. *Remember you can ask me a question at any time if there is something you don't understand. You can ask me to stop at any time.*

FL6. *First, we are going to talk about reading.*
[A] Do you read books at home?
[B] Does someone read to you at home?

FL7. *Which language do you speak most of the time at home?*
This question asks the child for the main language he/she uses when speaking to other members of the household. Select the most appropriate languages from the list and include these in the question to the child.

FL8. Check CB7: In the current school year, did the child attend school or any early childhood education programme? Check ED9 in the EDUCATION Module in the HOUSEHOLD QUESTIONNAIRE for child if CB7 was not asked.

FL8A. *Check CB4: Did the child ever attend school or any early childhood education programmes? Check ED4 in the EDUCATION Module in the HOUSEHOLD QUESTIONNAIRE for child if CB4 was not asked.*

FL8B. Check FL7: Is READING & NUMBERS book available in the language spoken at home?

FL9A. *What language do your teachers use most of the time when teaching you in class?*

FL9B. *When you were in school, what language did your teachers use most of the time when teaching you in class?*
The question asks the child for the main language his/her teacher(s) use (if child is enrolled in school) or the language used if the child did not attend school or an early childhood education programme in the current school year but attended earlier. Select the most appropriate languages from the list and include these in the question to the child.

Probe if necessary and name the listed languages.

FL10A. *Now I am going to give you a short story to read in (language recorded in FL9A/B). Would you like to start reading the story?*

FL10B. *Now I am going to give you a short story to read in (language recorded in FL7). Would you like to start reading the story?*
First, tell the child that you are going to ask him/her to read a short story. This question is about the language

the child would like to use for the reading activity. If the child responds 'No' do not give the child a short story to read, continue the interview with the number activities (go to FL23) and report the response to the field test team.

FL11. Check CB3: Child's age
If the selected child is aged 7 to 9, skip to FL13. Otherwise, continue with the next question.

FL12. Check CB7: In the current school year, did the child attend school or any early childhood education programme? Check ED9 in the EDUCATION Module in the HOUSEHOLD QUESTIONNAIRE for child if CB7 was not asked.
How you present the reading and number tasks to the child is very important. We are not testing or evaluating the child. Our objective is to find out what all children can do comfortably with reading and numbers, so that improvements can be made for all children.

If the child is aged 7 to 9 or if the child is out of school, you will need to go through the practice task with the child.

FL13. Give the child the Reading & Numbers book. Open the page showing the reading practice item and say: *"Now we are going to do some reading."* Point to the sentence. *"I would like you to read this aloud. Then I may ask you a question."*

Sam is a cat. Tina is a dog. Sam is 5. Tina is 6.

FL14. Did the child read every word in the practice correctly?
Record '1' if 'Yes' and continue to the next question. If 'No', record '2' and skip to FL23.

FL15. Once the reading is done, ask: *"How old is Sam?"* Record '1' if correct answer and skip to FL17. In case of other answers or no answer after 5 second, continue with FL16.

FL16. Say: *"Sam is 5 years old."* and go to FL23.
FL17. Here is another question: *"Who is older: Sam or Tina?"*
Record '1' if correct answer and skip to FL19. In case of other answers or no answer after 5 seconds, continue with FL18.

FL18. Say: *"Tina is older than Sam. Tina is 6 and Sam is 5."* and go to FL23.

FL19. Turn the page to reveal the reading passage. Say, *"Thank you. Now I want you to try this. Here is a story. I want you to read it aloud as carefully as you can.*

You will start here (point to the first word on the first line) *and you will read line by line* (point to the direction for reading each line). *When you finish, I will ask you some questions about what you have read. If you come to a word you do not know, go onto the next word. Put your finger on the first word. Ready? Begin."*

Listen as the child reads. Follow along with your pencil and clearly mark on the questionnaire any word that the child misses or misreads with a 'O' around the number underneath the word. If the child corrects a word you have already marked as incorrect, mark a '// 'over the number under the word.

Stay quiet, unless the child hesitates for three seconds, in which case provide the word, point to the next word and say, *"Please go on."* Mark the number under any word you provide to the child as incorrect.

Put a ']' just after the final word that the child attempts.

STOP RULE 1: If the child does not read any word correctly on the first line, say, *"Thank you that is ok. We will move on,"* and stop the task. Mark all the words in the first line as unread or misread and put a ']' after the number of the last word on this line.

STOP RULE 2: Stop the reading task after three minutes to avoid keeping the child under undue stress. Say, *"Thank you that is ok. We will move on,"* and mark a ']' after the number of the last word attempted.

FL20. Results of the child's reading.
Record the total number of words attempted (the number just before the ']').

FL21. How well did the child read the story?
Count and record the number of missed or incorrectly read words (count the number of 'O's' around the numbers underneath the words).

If the child did not read any word correctly or did not try to read the story, skip to FL23.

FL22. Say, *"Now I am going to ask you a few questions about what you have read."*
If the child does not provide a response after a few seconds, repeat the question. If the child seems unable to provide an answer after repeating the question, mark 'No response' and say: *"Thank you. That is ok. We will move on."*

Make sure the child can still see the passage and ask:
[A] *"What class is Moses in?"*
If the child answers, *"Moses is in class two,"* or *"In class two,"* record the answer as 'Correct'.

[B] *"What did Moses see on the way home?"*
If the child answers, *"He saw some flowers,"* record the answer as 'Correct'.

[C] *"Why did Moses start crying?"*
If the child answers, *"Because he fell ill,"* record the answer as 'Correct'.

[D] *"Where did Moses fall (down)?"*
If the child answers, *"Moses fell down near a banana tree,"* or *"Near a banana tree,"* record the answer as 'Correct'.

[E] *"Why was Moses happy?"*
If the child answers, "Because the farmer gave him many flowers," or "Because he had flowers to give to his mother," record the answer as 'Correct'.

For all the comprehension questions, if the child provides a different answer to those above, record the answer as 'Incorrect'. If the child does not provide a response after five seconds, repeat the question. If the child still does not respond within 10 seconds or says, *"I don't know,"* mark 'No response' and say, *"Thank you. That is ok. We will move on."*

FL23. Turn the page in the Reading & Numbers book so the child is looking at the list of numbers. Make sure the child is looking at this page. Say, *"Now here are some numbers. I want you to point to each number and tell me what the number is."* Point to the first number and say, *"Start here."* If a child stops on a number for a while, tell the child what the number is, mark the number as 'No attempt', point to the next number and say, *"What is this number?"*

Mark any incorrect or missed number with an 'O' around the same number on the questionnaire.
If the child correctly identifies a number you have already marked as incorrect, mark a '//' over it.
If the child stops on a number for more than 10 seconds, tell the child what the number is, mark the number as missed, point to the next number and say, *"What is this?"*

STOP RULE: If the child does not attempt to read two consecutive numbers, say, *"Thank you. That is ok."*

FL23A. Check FL23: Did the child correctly identify two of the first three numbers (9, 12 and 30)?
If the child correctly identified two of the first three numbers, record '1' and continue with the next question, otherwise skip to FL28.

FL24. Turn the page so the child is looking at the first pair of numbers. Make sure the child is looking at this

page. Say, *"Look at these numbers. Tell me which one is bigger."* Record the child's answer before turning the page in the book and repeating the question for the next pair of numbers. If the child does not provide a response after a few seconds, repeat the question. If the child seems unable to provide an answer after repeating the question, mark a 'Z' for the answer on the appropriate row on the questionnaire, turn the booklet page and show the child the next pair of numbers.

If the child does not attempt two consecutive pairs, say, *"Thank you. That is ok. We will go to the next activity."*

FL25. Give the child a pencil and paper. Turn the page so the child is looking at the first addition. Make sure the child is looking at this page. Say, *"Look at this sum. How much is (number plus number)? Tell me the answer. You can use the pencil and paper if it helps you."* Record the child's answer before turning the page in the book and repeating the question for the next sum.

If the child does not provide a response after a few seconds, repeat the question. If the child seems unable to provide an answer after repeating the question, mark a 'Z' for the answer on the appropriate row on the questionnaire, turn the booklet page and show the child the next addition.

If the child does not attempt two consecutive pairs, say, *"Thank you. That is ok. We will go to the next activity."*

FL26. Turn the page to the practice sheet for missing numbers. Say, *"Here are some numbers. 1, 2, and 4. What number goes here?"* If the child answers correctly, say, *"That's correct, 3. Let's do another one."* If the child answers incorrectly, do not explain how to get the correct answer. Just say, *"The number 3 goes here. Say the numbers with me.* (Point to each number) *1, 2, 3, 4. 3 goes here. Let's do another one."*

Now turn the page to the next practice sheet. Say, *"Here are some more numbers. 5, 10, 15 and ___. What number goes here?"* If the child answers correctly, say: *"That's correct, 20. Now I want you to try this on your own."* If the child answers incorrectly, say: *"The number 20 goes here. Say the numbers with me.* (Point to each number) *5, 10, 15, 20. 20 goes here. Now I want you to try this on your own."*

FL27. Now turn to the page in the Reading & Numbers book with the first missing number activity. Say, *"Here are some more numbers. Tell me what number goes here* (pointing to the missing number). *"* Record the child's answer before turning the page in the book and repeating the question. If the child does not provide a response after a few seconds, repeat the question.

If the child seems unable to provide an answer after repeating the question, mark a 'Z' for the answer on the appropriate row on the questionnaire. If the child does not attempt 2 consecutive activities, say, *"Thank you. That is ok."*

At this point, the main interview is completed.

FL28. Result of interview with child.
Complete this once you have concluded the interview with the child. Remember that the code refers to the child 5-17 (Foundational Learning Skills module). Record the code corresponding to the results of the interview.

- If the interview with the child is completed, record '01' for 'Completed'.
- If you have not been able to contact the child after repeated visits, record '02' for 'Not at home'.
- If the mother/primary caretaker refuses to be interviewed, record '03' for 'Refused'.
- If the child refuses to be interviewed, record '04' for 'Refused'.
- If you were able to only partly complete the questionnaire, record '05' for 'Partly completed'.
- If the child is incapacitated, record '06'.
- If you have not been able to complete this questionnaire for another reason, you should record '96' for 'Other' and specify the reason.

Annex E: Example of presentation of interviewer training (Kenya field test)

Training- Kisumu, Kenya
26 – 27 May 2016

Ethics and Consent I

All activities carried out by national statistical authorities follow ethical principles and procedures to establish confidentiality, professional integrity, right to refuse to participate, etc., set out in national statistics act and service charters.

Additional ethical issues when the respondents are children:
- Verbal permission required from both mother (caretaker) and the child.
- Children may not fully understand the interview process but must be told that they can refuse without consequences and withdraw at any time without giving a reason.

Ethics and Consent II

- While children should have the same guarantees of confidentiality as adults, there is a clear duty to report if a child's welfare or safety is threatened.
- For your own protection, when you interview the child a parent or adult known to the child should be visible to the child (though not able to overhear).
- We also have a duty to minimize any distress that the interview process may cause the child.

Privacy & Interview Environment

All about putting the child at ease
- Child can choose the location for the interview, but ensure it meets your requirements, e.g., lack of background noise.
- Location should be private but visible to others while not being overheard.
- Sit side by side at a table if you can, but not too close.
- Sit at same level as the child to allow eye-level contact
- Ensure the child is sitting comfortably.

Building Rapport

Still about putting the child at ease
- Greet the child by his/her name
- Explain clearly who you are; Be open, friendly, smile a lot
- Start a conversation (ask the child to tell you about him/herself), use an icebreaker, play a (drawing) game
- Draw on your own experience with children in your family circle

Icebreakers I

If the child is reluctant to speak, use an icebreaker. Respond to the child's answers by giving your own responses to create a conversation.

Good icebreakers for children aged 7 to 9 years:
- What is your favourite game after school? Who is your favourite superhero?
- What are the names of your brothers and sisters? What games do you play with them?
- What are the names of your friends?
- Do you have any pets or other animals at home? Does it have a name?

Icebreakers II

For children aged 10 to 14:
- What is the meaning of your name?
- What is the one favourite thing you do every day?
- If you wanted one wish to be granted, what would it be?
- What do you want to be when you grow up?
- If you could choose anything to learn what would it be?

Other Techniques I

For reluctant children, try:
- Drawing something and showing it to the child. Ask the child to draw something for you next to it.
- Asking the child to draw something specific, e.g. 'Could you draw the sun on my picture?' or, 'My smiley face has no nose, could you add a nose to my smiley face?'
- Asking the child to tell you something about the picture. Start with yes/no questions, e.g.,: 'Do you think that the smiley face is a girl (or boy) like you?'
- Or saying, 'I would like to add some curly hair on this smiley face, watch me,' and then ask the child, 'Show me what you'd like to add,' and when the child is finished ask, 'Wonderful, could you tell me what this is?'

Other Techniques II

If you find it difficult to hear the child's responses:
- Ask the child to stand up and jump as he/she says his/her name very softly (so that no one can hear).
- Then ask the child to say his/her name a little louder each time he/she jumps until they reach a level that can be heard comfortably.
- You can clap each time to encourage the child.
- You can also do the same while sitting (with or without clapping).

Interviewing Techniques with Children I
- Explain what is happening clearly, using language appropriate for the age of the child. Ask if there are any questions and answer every one even if it doesn't seem relevant.
- Smile a lot and maintain eye contact. Ask the child how he/she is feeling from time to time. Treat children as equals.
- Take your time. Have fun and be fun
- Discuss and exchange tips with your colleagues.

Interviewing Techniques with Children II
- Explain that the interview can be stopped at any time.
- Take any sign of reluctance very seriously (consider having a break).
- Stop immediately if the child shows any signs of distress or gets upset. Take a break and then ask if it's OK to continue.
- Don't expect to deal with every situation yourself; seek assistance from household members and your colleagues.

Checklist – before starting the Learning Activities
Before you start with the reading and number activities, you will be taken through a checklist on the Child Learning Questionnaire.

Tick each box to show that:
- You are not alone with the child unless he/she is at least visible to an adult known to the child.
- You have engaged the child in conversation and built rapport, e.g., used an icebreaker.
- The child is sitting comfortably and able to use the Reading & Numbers book without difficulty while you can see which page is open.

Annex F: Foundational Learning Module Indicators and Definitions

Indicator	Description	SDG indicator reference	MICS indicator reference
Children with foundational reading and number skills	Percentage of children who successfully completed three foundational reading tasks (a) Age 7-14 (b) Age for Grade 2/3 (c) Attending Grade 2/3 Percentage of children who successfully completed four foundational number tasks (d) Age 7-14 (e) Age for Grade 2/3 (f) Attending Grade 2/3	4.1.1	 LN.22a LN.22b LN.22c LN.22d LN.22e LN.22f
Reading habit at home	Percentage of children aged 7-14 who read books or are read to at home		LN.19
School and home languages	Percentage of children aged 7-14 attending school whose home language is used at school		LN.20

Source: MICS6 Indicator List (November 2018), available at <mics.unicef.org/tools?round=mics6#survey-design>.

Annex G: Foundational Learning module Tables

Table LN.4.1: Reading skills

Percentage of children aged 7-14 who demonstrate foundational reading skills by successfully completing three foundational reading tasks, by sex, survey name, year

	Male					Female					Total					
	Percentage who correctly read 90% of words in a story	Percentage who correctly answered comprehension questions		Percentage who demonstrated foundational reading skills	Number of children age 7-14 years	Percentage who correctly read 90% of words in a story	Percentage who correctly answered comprehension questions		Percentage who demonstrated foundational reading skills	Number of children age 7-14 years	Percentage who correctly read 90% of words in a story	Percentage who correctly answered comprehension questions		Percentage of children who demonstrate foundational reading skills[1,2,3]	Percentage of children for whom the reading book was not available in appropriate language	Number of children age 7-14 years
		Three literal	Two inferential				Three literal	Two inferential				Three literal	Two inferential			
Total[1]																
Area																
Urban																
Rural																
Region																
Region 1																
Region 2																
Region 3																
Region 4																
Region 5																
Age at beginning of school year																
6																
7-8[2]																
7																
8																
9																
10																
11																
12																
13																
14																
School attendance																
Early childhood education																
Primary																
Grade 1																
Grade 2-3[3]																
Grade 2																
Grade 3																
Grade 4																
Grade 5																
Grade 6																
Lower secondary																
Grade 1																
Grade 2																
Grade 3																
Upper secondary																
Out-of-school																
Mother's education																

Table LN.4.1: Reading skills

Percentage of children aged 7-14 who demonstrate foundational reading skills by successfully completing three foundational reading tasks, by sex, survey name, year

	Male					Female					Total						
	Percentage who correctly read 90% of words in a story	Percentage who correctly answered comprehension questions		Percentage who demonstrated foundational reading skills	Number of children age 7-14 years	Percentage who correctly read 90% of words in a story	Percentage who correctly answered comprehension questions		Percentage who demonstrated foundational reading skills	Number of children age 7-14 years	Percentage who correctly read 90% of words in a story	Percentage who correctly answered comprehension questions		Percentage of children who demonstrate foundational reading skills[1,2,3]	Percentage of children for whom the reading book was not available in appropriate language	Number of children age 7-14 years
		Three literal	Two inferential				Three literal	Two inferential				Three literal	Two inferential			
Pre-primary or none																
Primary																
Secondary+																
Child's functional difficulties																
Has functional difficulty																
Has no functional difficulty																
Mother's functional difficulties																
Has functional difficulty																
Has no functional difficulty																
No information																
Ethnicity of household head																
Group 1																
Group 2																
Group 3																
Wealth index quintile																
Poorest																
Second																
Middle																
Fourth																
Richest																

[1] MICS indicator LN.22a - Foundational reading and number skills (reading, age 7-14)

[2] MICS indicator LN.22b - Foundational reading and number skills (reading, age for grade 2/3)

[3] MICS indicator LN.22c - Foundational reading and number skills (reading, attending grade 2/3); SDG indicator 4.1.1

Percentage of children who:
- Read 90% of words in a story correctly: FL19>=90%
- Correctly answer three literal comprehension questions: FL22[A]=1 and FL22[B]=1 and FL22[D]=1
- Correctly answer two inferential comprehension questions: FL22[C]=1 and FL22[E]=1
- Demonstrate foundational reading skills: All of the above

Only the total pane includes the column "Percentage of children for whom the reading book was not available in appropriate language". The algorithm for this is: (CB7/ED9=1 and FL9>3) or (CB7/ED9=2 or blank and FL7>3). Note the categories accepted for FL9 and FL7 are those for which no reading book was available). This must be customised in syntax.

The denominator includes all children with a completed module (FL28=01).

The table presents three indicators, one of which may require customisation: MICS Indicator LN.22b is measured on children with age for primary grades 2 and 3. Following the standard used throughout the standard LN tables, the indicator is set age age 7 and 8, as children start school at age 6. For example, if primary grade 1 is set at age 7 in a country, this indicator should instead be measured on age group 8-9.

Table LN.4.2: Numeracy skills

Percentage of children aged 7-14 who demonstrate foundational numeracy skills by successfully completing three foundational numeracy tasks, by sex, survey name, year

	Male						Female						Total					
	Percentage of children who successfully completed tasks of:				Percentage of children who demonstrate foundational numeracy skills	Number of children age 7-14 years	Percentage of children who successfully completed tasks of:				Percentage of children who demonstrate foundational numeracy skills	Number of children age 7-14 years	Percentage of children who successfully completed tasks of:				Percentage of children who demonstrate foundational numeracy skills[1,2,3]	Number of children age 7-14 years
	Number reading	Number discrimination	Addition	Pattern recognition and completion			Number reading	Number discrimination	Addition	Pattern recognition and completion			Number reading	Number discrimination	Addition	Pattern recognition and completion		
Total[1]																		
Area																		
Urban																		
Rural																		
Region																		
Region 1																		
Region 2																		
Region 3																		
Region 4																		
Region 5																		
Age at beginning of school year																		
6																		
7-8[2]																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
School attendance																		
Early childhood education																		
Primary																		
Grade 1																		
Grade 2-3[3]																		
Grade 2																		
Grade 3																		
Grade 4																		
Grade 5																		
Grade 6																		
Lower secondary																		
Grade 1																		
Grade 2																		
Grade 3																		
Upper secondary																		
Out-of-school																		
Mother's education																		
Pre-primary or none																		
Primary																		
Child's functional difficulties																		
Has functional difficulty																		
Has no functional																		

Table LN.4.2: Numeracy skills

Percentage of children aged 7-14 who demonstrate foundational numeracy skills by successfully completing three foundational numeracy tasks, by sex, survey name, year

	Male						Female						Total					
	Percentage of children who successfully completed tasks of:				Percentage of children who demonstrate foundational numeracy skills	Number of children age 7-14 years	**Percentage of children who successfully completed tasks of:**				Percentage of children who demonstrate foundational numeracy skills	Number of children age 7-14 years	**Percentage of children who successfully completed tasks of:**				Percentage of children who demonstrate foundational numeracy skills[1,2,3]	Number of children age 7-14 years
	Number reading	Number discrimination	Addition	Pattern recognition and completion			Number reading	Number discrimination	Addition	Pattern recognition and completion			Number reading	Number discrimination	Addition	Pattern recognition and completion		
Mother's functional difficulties																		
Has functional difficulty																		
Has no functional difficulty																		
No informa-tion																		
Ethnicity of household head																		
Group 1																		
Group 2																		
Group 3																		
Wealth index quintile																		
Poorest																		
Second																		
Middle																		
Fourth																		
Richest																		

[1] MICS indicator LN.22d - Foundational reading and number skills (numeracy, age 7-14)

[2] MICS indicator LN.22e - Foundational reading and number skills (numeracy, age for Grade 2/3)

[3] MICS indicator LN.22f - Foundational reading and number skills (numeracy, attending Grade 2/3); SDG indicator 4.1.1

Percentage of children who successfully complete:
- A number reading task: All FL23=1
- A number discrimination task: All FL24=1
- An addition task: All FL25=1
- A pattern recognition and completion task: All FL27=1
- Demonstrate foundational numeracy skills: All of the above

The denominator includes all children with a completed module (FL28=01).

Please see Table LN.4.1 for additional information on customization.

Annex H: Foundational Learning Module Results

MICS

Foundational learning skills

The ability to read and understand a simple text is one of the most fundamental skills a child can learn. Yet in many countries, students enrolled in school for as many as six years are unable to read and understand simple texts, as shown for instance by regional assessments such as the Latin American Laboratory for Assessment of the Quality of Education, Programme for the Analysis of Education Systems in Francophone West Africa, and Southern and Eastern Africa Consortium for Monitoring Educational Quality.[18] Acquiring literacy in the early grades of primary is crucial because doing so becomes increasingly difficult in later grades for those who are lagging behind.[19]

A strong foundation in basic numeracy skills during the early grades is crucial for success in mathematics in the later years. Mathematics is a skill very much in demand and most competitive jobs require some level of mathematics.

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[18] CONFEMEN, 'PASEC 2014 Education System Performance in Francophone Sub-Saharan Africa: Competencies and learning factors in primary education', Dakar, 2015;

Makuwa, Demus K. and Jan Maarse, 'The Impact of Large-Scale International Assessments: A case study of how the Ministry of Education in Namibia used SACMEQ assessments to improve learning outcomes', *Research in Comparative and International Education*, vol. 8, no. 3, January 2013, pp. 349-58; Spaull, Nicholas, 'Poverty & Privilege: Primary school inequality in South Africa', *International Journal of Educational Development*, vol. 33, no. 5, September 2013, pp. 436-447.

[19] Stanovich, Keith E., 'Matthew Effects in Reading: Some consequences of individual differences in the acquisition of literacy', *Reading Research Quarterly*, vol. 21, no. 4, September 1986, pp. 360-407.

Early mathematical knowledge is a primary predictor of later academic achievement and future success in mathematics is related to an early and strong conceptual foundation.[20]

There are a number of existing tools for measuring learning outcomes[21] with each approach having their own strengths and limitations as well as varying levels of applicability to household surveys such as MICS.

For some international assessments, it may just be too late, as they collect data to relatively older children: "Even though international testing programs like the [Programme for International Student Assessment] and [Trends in International Mathematics and Sciences Study] are steadily increasing their coverage to also cover developing countries, (…) much of the divergence in test scores happens before the points in the educational trajectories of children where they are tested by international assessments," according to longitudinal surveys like Young Lives.[22]

National assessments such as the Early Grade Reading Assessment, which happens earlier and is more context specific, will however be less appropriate for cross-country analysis; however, it may be possible to compare children who do not complete an exercise (zero scores) set at a level that reflects each national target for children by a certain age or grade. Additionally, it is recognized that some assessments only capture children in school. However, given that many children do not attend school, further data on these out-of-school children is needed; these can be adequately captured in household surveys.

Tables LN.4.1 and LN.4.2 present percentages of children aged 7 to 14 that correctly answered foundational reading tasks and numeracy skills, respectively, by age, sex, location, region, wealth index quintile and other disaggregation. These MICS indicators are designed and developed for both national policy development and SDG reporting for SDG 4.1.1 (a): Proportion of children in Grade 2/3 achieving a minimum proficiency in (i) reading and (ii) mathematics by sex.

The assessment score of reading tasks is further disaggregated by results of the literal questions and inferential questions. The disaggregation of numeracy skills such as number reading, number discrimination, addition and pattern recognitions are also available.

Table LN.3.3 presents information regarding the home environment, which can be useful for interpreting the results of the foundational learning skills assessment, i.e., percentage of children who read at home or are read to, and percentage of children attending school whose teachers use the language also spoken at home.

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[20] Duncan, Greg J., et al., 'School Readiness and Later Achievement', *Developmental Psychology*, vol. 43, no. 6, 2007, pp. 1428-1446.

[21] Learning Metrics Task Force). 2013. Toward Universal Learning: Recommendations from the Learning Metrics Task Force. Montreal and Washington, D. C.: UNESCO Institute for Statistics and Center for Universal Education at the Brookings Institution;
Buckner, Elizabeth and Rachel Hatch, 'Literacy Data: More, but not always better', Education Policy and Data Center, Washington, 2014;
Wagner, Daniel A., 'Smaller, Quicker, Cheaper: Improving learning assessments for developing countries', International Institute for Educational Planning, Paris, 2011.

[22] Singh, Abhijeet, 'Emergence and Evolution of Learning Gaps Across Countries: Panel evidence from Ethiopia, India, Peru and Vietnam', *Young Lives*, 2014.

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