

Children left behind in learning – measuring foundational learning skills in Multiple Indicator Cluster Surveys (MICS)



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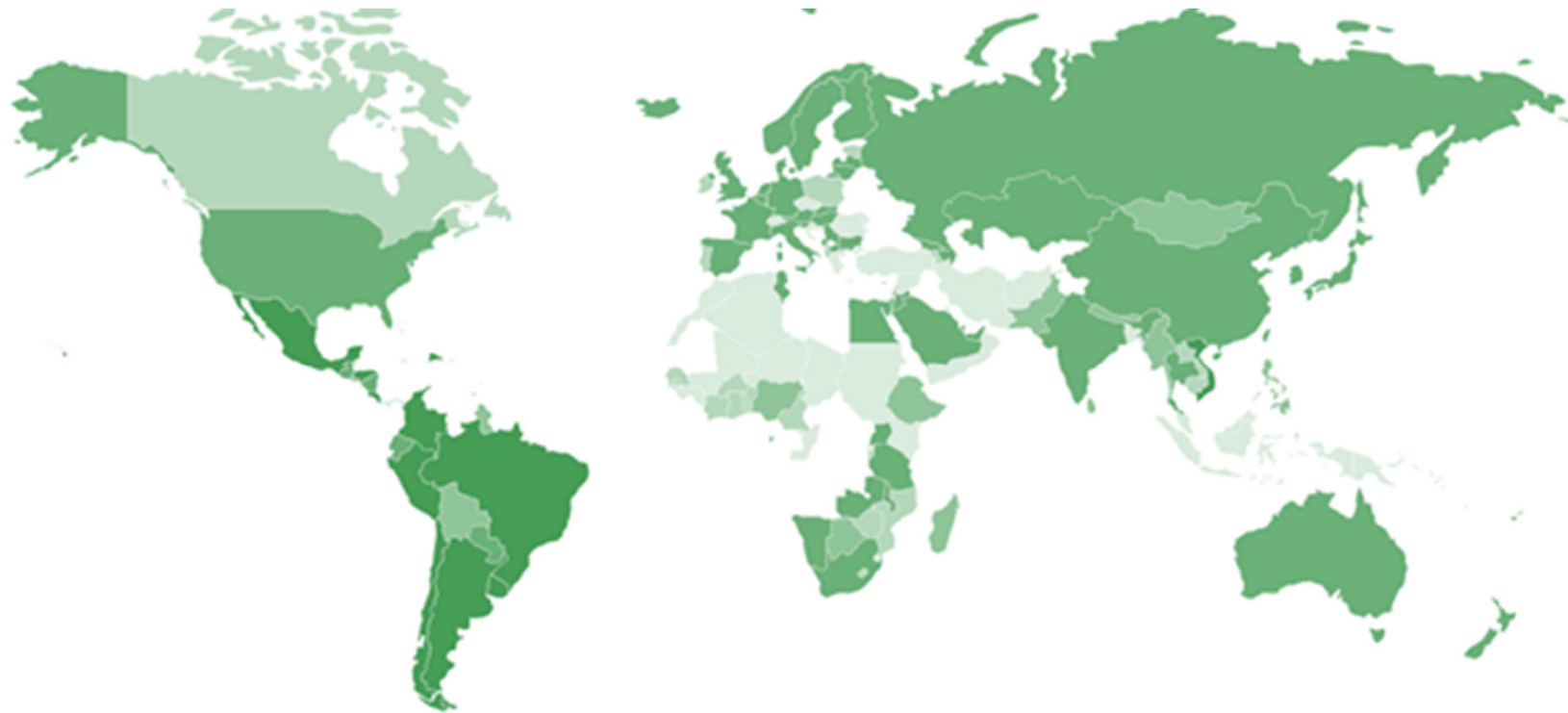
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Questions

1. Why a Foundational Learning Skills (FLS) module for household surveys?
2. What does it assess? How? What indicators does it yield?
3. How can its data reveal equity and education policy issues?
4. How UNICEF support National Statistics Offices to collect learning data in MICS and non-MICS surveys?

Do we know how *all* children are learning?

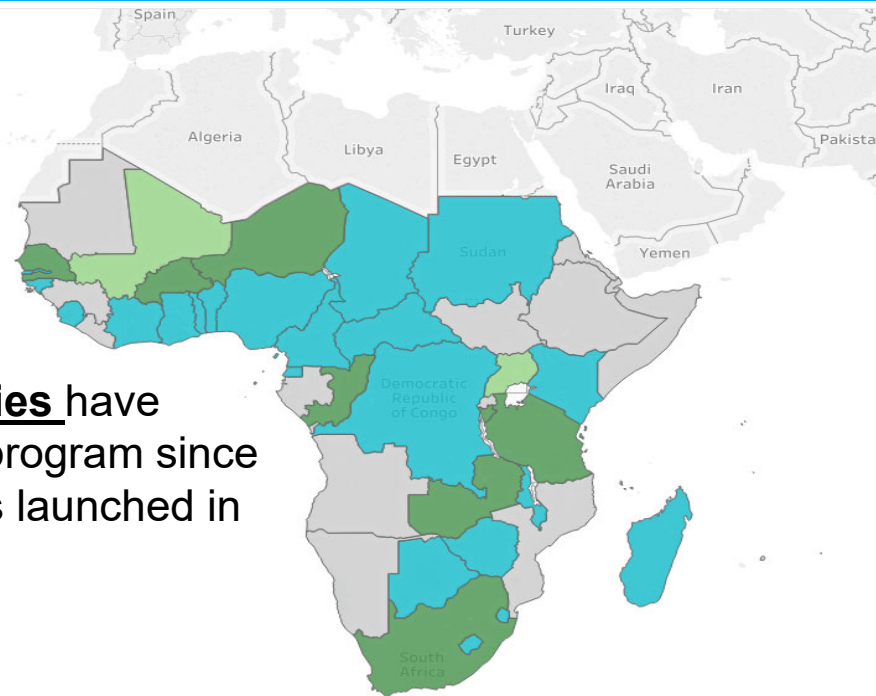
Learning Assessment Capacity Index (LACI): diversification of large-scale assessments 2010-2015



Source: UNESCO Institute for Statistics.
<http://uis.unesco.org/apps/visualisations/laci/>



MICS and FLS in sub-Saharan Africa



MICS Countries SSA

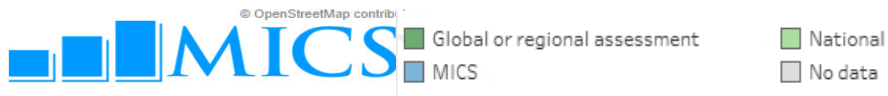
Central African Republic
Democratic Republic of the Congo
Eswatini
Gambia
Ghana
Guinea-Bissau
Lesotho
Madagascar
Malawi
Sao Tome and Principe
Sierra Leone
Zimbabwe
Chad
Togo

Benin
Nigeria

Yet to decide to include FLS module

- So far, **16 countries** have joined the MICS program since the 6th round was launched in 2017

<https://mics.unicef.org/>



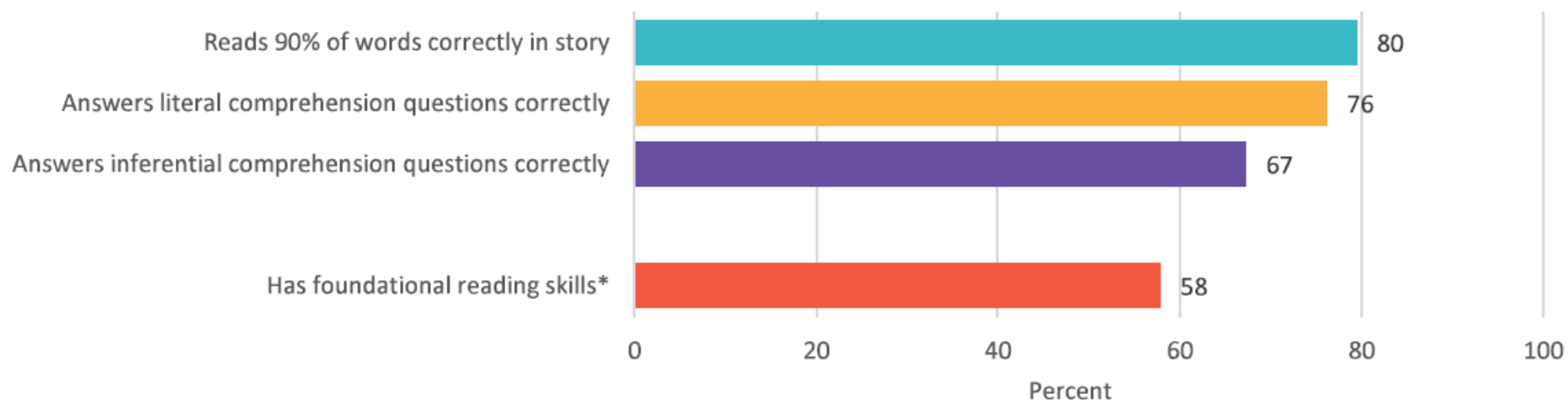
Foundational Learning Skills module: Structure and Indicators

- 1) Parental Participation (in child's learning) – Mothers or caregivers
- 2) Foundational Learning skills – Children aged 7-14 (one per household)
 - Unscripted rapport-building exercise
 - Learning environment – reading habits, languages at home and in school
 - **Foundational reading skills** (3 indicators + 1 overall indicator)
 1. % who read 90%+ of words in **story** (70 words, 2nd grade vocabulary)
 2. % who answer 3 out of 3 literal comprehension **questions**
 3. % who answer 2 out of 2 inferential comprehension **questions**
 - Foundational number skills (4 indicators + 1 overall indicator)

Total interviewer-child interaction: 15 minutes (on average)

Foundational Reading Skills, Kyrgyzstan

Foundational Reading Skills: SDG 4.1.1.(a) (i: reading)



*Percentage of children age 7-14 who can 1) read 90% of words in a story correctly, 2) Answer three literal comprehension questions, 3) Answer two inferential comprehension questions

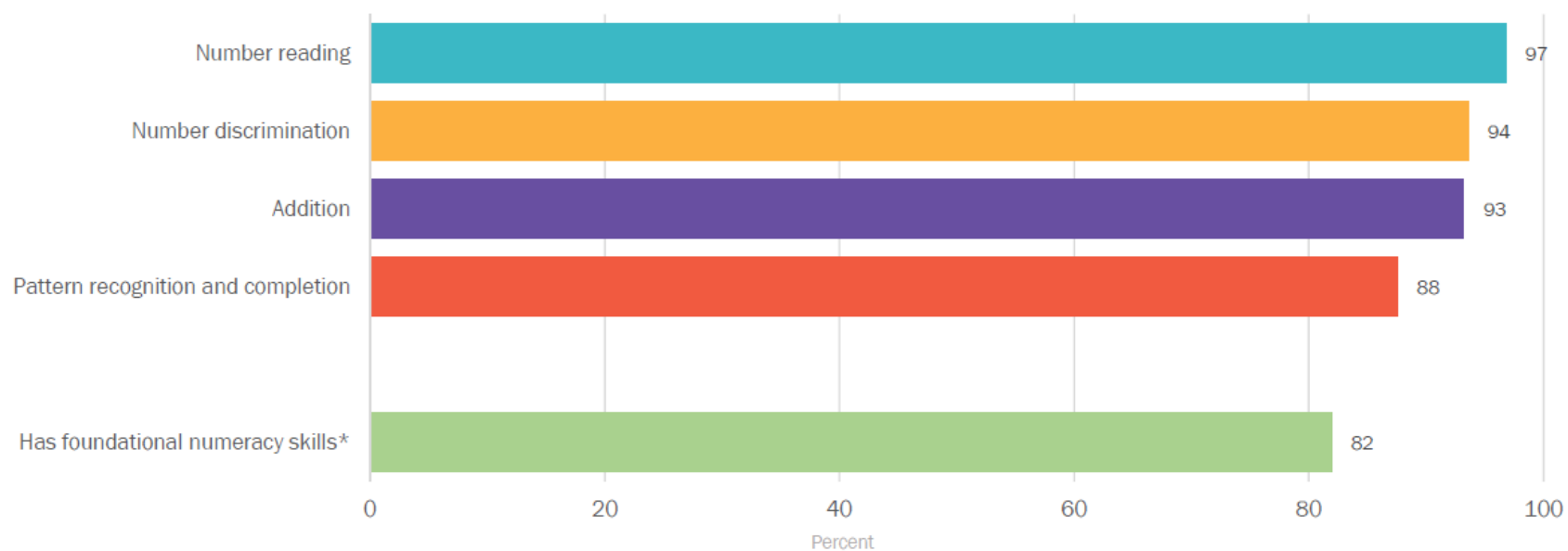
Numeracy Tasks, Foundational Learning Skills module

Task	Number of items	Last item
Number reading	6	731
Number discrimination	5	146 154
Addition	5	12 + 24 =
Pattern recognition and completion (missing number)	5	5 8 11 _

Out of the five classical domains in mathematics, the module currently focuses on one, namely Numbers. The domains of Measurement, Statistics and Algebra may be too advanced for the early grades. The possibility of adding Geometry items should be explored.

Foundational Numeracy Skills, DPRK

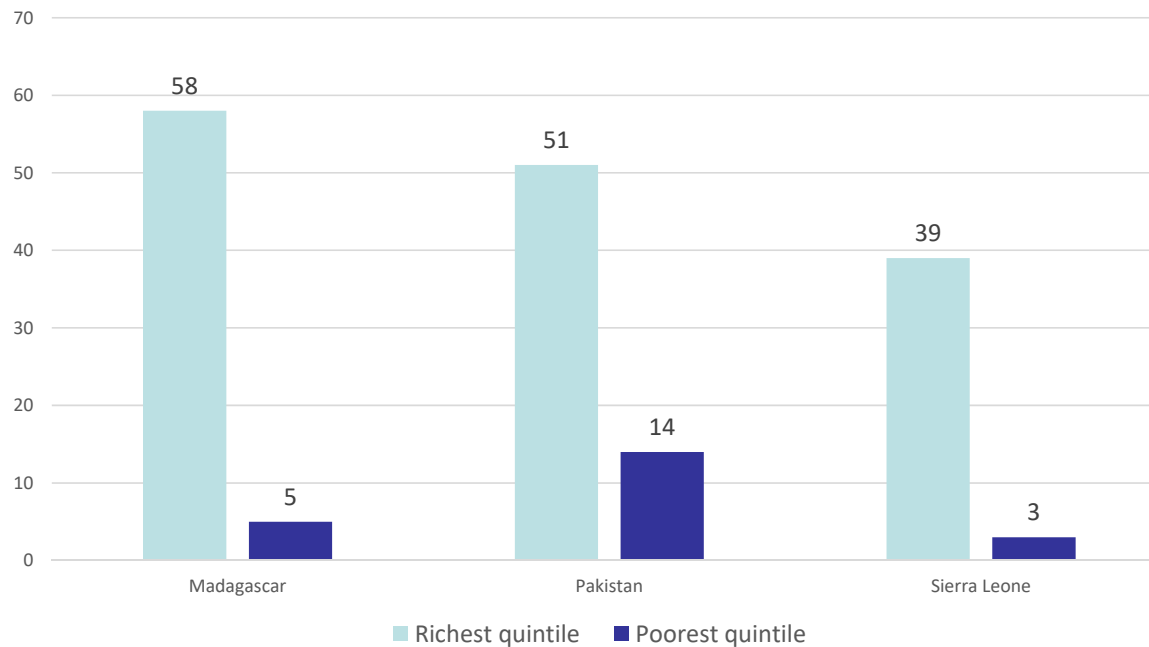
Foundational Numeracy Skills: SDG 4.1.1.(a) (ii: numeracy)



*Percentage of children age 7-14 who can successfully perform 1) a number reading task, 2) a number discrimination task, 3) an addition task and 4) a pattern recognition and completion task

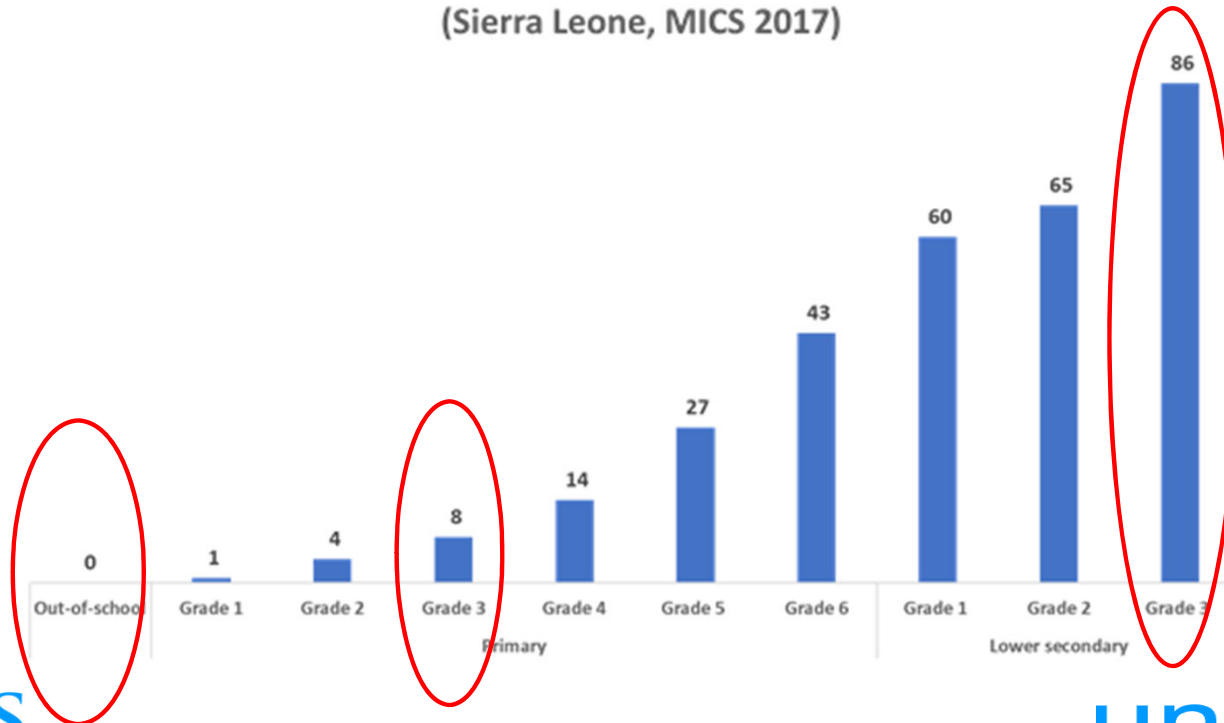
Wealth and learning poverty

Percentage of children ages 7-14 who could read a short, simple story (grade 2/3 level) and answer 5 questions about it, by wealth quintile (MICS 6)



Teach every learner at their level

Percentage of children ages 7-14 who could read a short, simple story (grade 2/3 level) and answer 5 questions about it (Sierra Leone, MICS 2017)

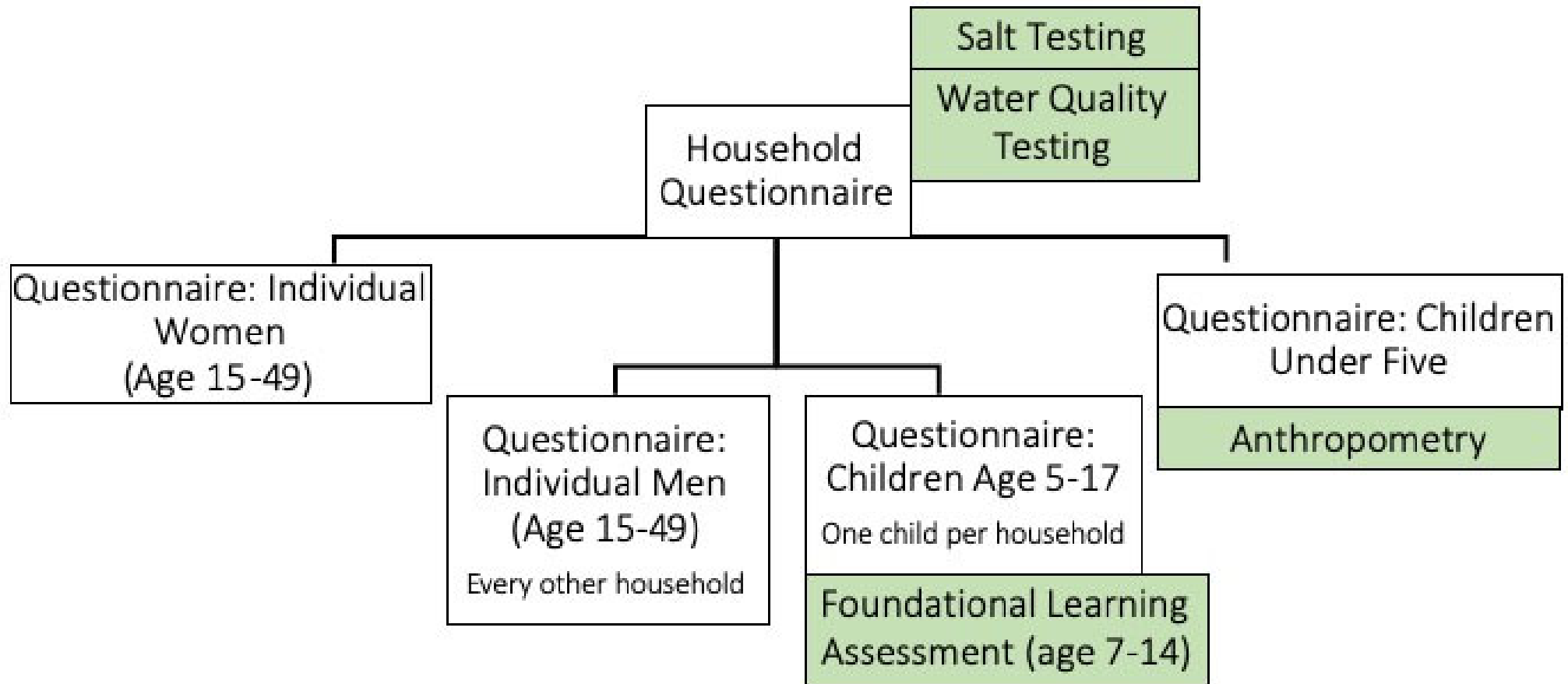


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for every child

Implementing the Foundational Learning Skills module in MICS

 MICS

MICS questionnaires



Quality assurance based on:

- Close collaboration with national survey team / MoE specialists
- Review of 2nd grade textbooks
- Comparison of standard and customized stories
- Translation and backtranslation checks

Ventinasa 2 Ny sekoly



ny filaharana

velona ny kiririoka. mijanona ny horakoraka. tony ny kotaba.

- hoy ramose : samia maka ny filaharany ! eto ny taona voalohany. ato ny taona faharoa.
- hoy i mira mitomany : mora a! mora a! hanaraka anao aho. hody aho.
- hoy i mora : aza miala amin'ny filaharana ianao! aza mitomany!

nitony ihany i mira. niroso aloha ny taona faharoa. nanaraka avy eo ny garabola.

Ny fahavalon'ny zavaboary



Sendra tafaresaka, hono, indray andro, ity gidro dia sy ity gidro nompian'olona.

- Sambatra ialahy fa afaka mandehandeha eran'ny ala, hoy ity gidro nompiana.
- Izaho ve ho sambatra noho ialahy ! Zahao kely ange ! Toloran-kanina fotsiny ialahy fa tsy mba sahirana mitady sakafo, hoy ilay gidro dia.

Nisento ity namany ary nanohy ny teniny :

- Mafy anie lehitsy izany migadra ao anaty fefy !
- Aza maika handao fonenana ialahy. Tsy tahaka ny taloha intsony ny any an'ala. Kapain'ny olona ny hazo. Dorany ny ala. Hazainy izahay, hataony sakafo, hoy ilay gidro dia.
- Hay ny olona no tena fahavalontsika ! hoy izy ireo niara-niteny.



LOCALIZED STORY (Malagasy): 5 words not appear in the learner's book

Jao	dia	ao	amin'	ny	kilasy	Faharoa.
Indray	andro	Jao	avy	any	an-	tsekoly
hody	any	an-	trano	dia	nahita	paiso
mena	teny	an-	dalana.	Ny	paiso	dia
akaiky	fambolena	tsaramaso.	Jao	dia	tia	haka
paiso	kely	mba	omena	ny	reniny.	Nihazakaza
						ka
mafy	Jao	tao	anaty	fambolena	tsaramaso	mba
haka	paiso.	Nianjera	tamin'	ny	tany	teo
akaiky	akondro	maniry	nefa	izy.	Nitomany	Jao
Hitan'	ilay	mpamboly	tsaramaso	nefa	izany	ka
nanatona	azy.	Nomeny	paiso	Marobe	i	Jao
Tena	faly	be	i	Jao	tamin'	izany

Word count

84

Replacement words	Frequency Count	Found in the book ?	
Jao	7	No	this replaces "Madani"
Paiso	5	yes	this replaces "Voninkazo"
Tsaramaso	3	Yes	this replaces "Voatabia"

Word	Frequency Count	Found in the book ?
akaiky	2	No
akondro	1	yes
amin'	1	yes
an-	3	yes
anaty	1	yes
andro	1	yes
nefa	1	yes
any	2	yes
ao	1	yes
avy	1	yes
azy.	1	yes
be	1	yes
dalana	1	No

Selecting language(s) of reading test

- Standard reading tests available in English, Spanish and French.
- Countries use available language(s) and/or translate into local language(s) as needed, with limited localization.
- What if several languages are used as medium of instruction in early grades?
- Goal is to measure overall reading skills of target population, regardless of language in which children are able to read.
- Limiting reading assessment to one single language may result in underestimation of reading skills.
- Possible to conduct test in all instructional languages if these are few
e.g. Lesotho (Sotho/English), Madagascar (Malagasy/French), Eswatini (Swati/English)
- In countries with multiple language of instruction, need to find a balance between coverage and feasibility. e.g. Zimbabwe (Shona/Ndebele/English)
- It's a complex discussion that needs to involve relevant experts, especially in contexts with fragmented/reversed language-in-education policies, inconsistency between policy and practice, or political sensitivities

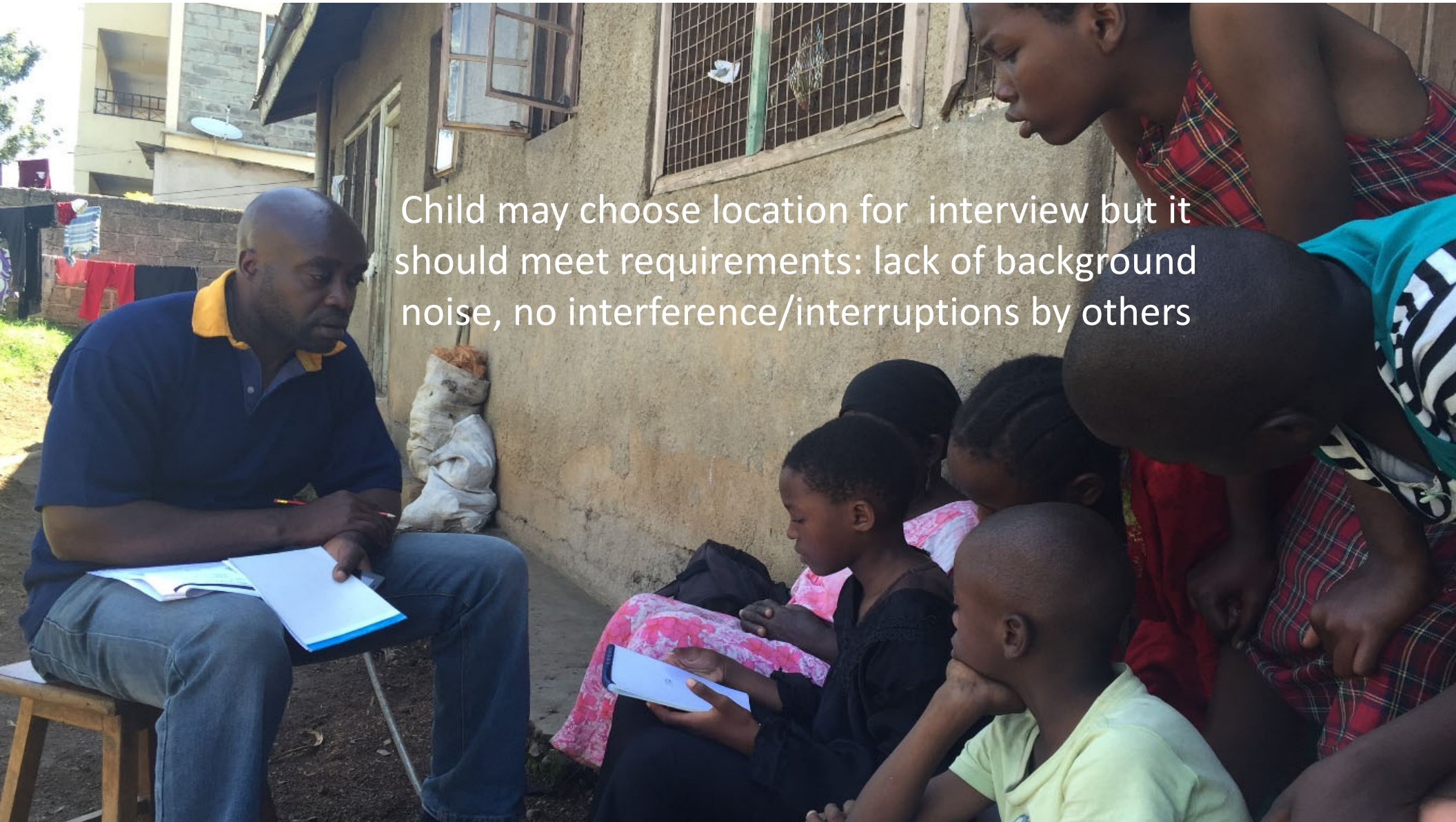
Special considerations when interviewing children



- Verbal consent from mother/caretaker to talk to the child.
- Verbal assent from child to participate in interview.
- Children must be told (in terms they can understand) that they can refuse to answer and withdraw at any time.
- If signs of distress: Interview is paused or ends.



Privacy and Protection:
Parent or adult known to the child should be visible to
the child but not be able to overhear.



Child may choose location for interview but it should meet requirements: lack of background noise, no interference/interruptions by others

Demonstration - MICS6 Pilot, Costa Rica

How long does it take to collect data
about reading and number skills?

Interviewing children requires specialized skills and training

- Child may feel shy / intimidated or unable to express feelings about interview.
- Emphasis on **building rapport**, putting the child at ease.
- Typical interviewer lacks experience and skills to interview children.
- Fieldwork logistics might not allow for dedicated child interviewers.
- **Specialized training, close fieldwork supervision and coaching of enumerators** are critical.
- Invest in technical support system.

Training methodology

DAY 1: Preparation and recording of interviews with children for demonstration purposes (children identified and logistics arranged prior to training).

DAY 2: Full day training session with interviewers (introduction to module, ethical considerations, obtaining consent, interviewing techniques, questionnaire structure and practice, administration protocol, how to record answers, neutrality, what is an error/what is not an error, demonstration by expert facilitator, discussion of recorded interviews)

DAY 3: Field practice.

DAY 4: Debriefing, clarification of key issues, review of protocols.

Adopting the Foundational Learning Skills module in other national household surveys

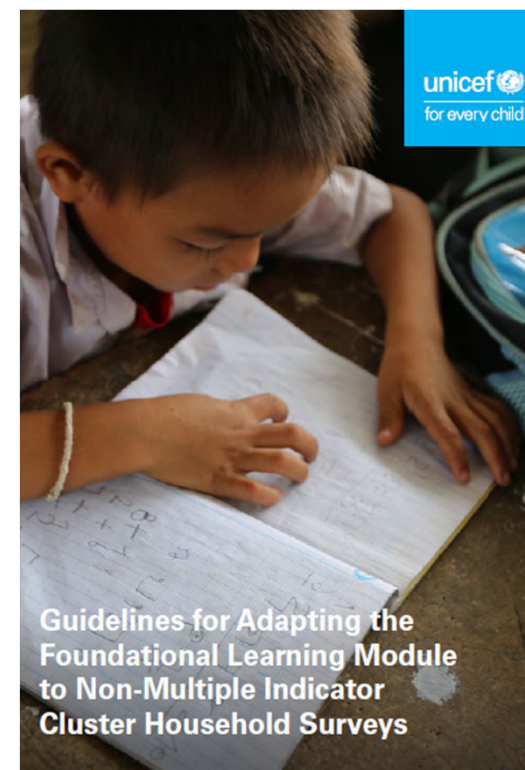


Adaptation of the FLS module to Non-MICS Surveys

The [guideline](#) takes readers through the adaptation processes including:

- General requirement (e.g., sample size)
- Identification of respondent (e.g., age group)
- Ethical considerations (e.g., consent and assent)
- Module incorporation and adaptation (e.g. customization of the reading story)
- Special consideration for field work (e.g., training)
- Data processing and tabulation (e.g., SPSS codes)
- Analysis (e.g., generic tabulation plans)

It also provide links to **Toolkit** needed for design, data collection, sampling, data processing, data analysis and dissemination.



Pilot Project in Indonesia to Integrate FL module to SUSENAS

- In 2019 the Indonesian Central Bureau of Statistics (BPS) with support from UNICEF initiated pilot testing of the Foundational Learning Survey (FLS) for primary school-age group children (7-12).
- The FLS would be included in the annual national socio-economic household survey (SUSENAS) which is carried out regularly in March (district level) and September (province level) every year.
- The pilot aims to give recommendations on appropriate survey methodologies in measuring learning outcomes (reading and mathematics).



Thank You

Timeline

April
to May

June

July to
Aug

Sept

Oct to
Nov

Dec

Preparation

- Instrument & guideline development (adjusting the MICS6 module with Indonesia conditions).
- Technical support from experts from UNICEF HQ and MICS Coordinator in EAPRO to consult specific issues.

Pre-pilot test

- Testing the instrument to children aged 7-12.
- Conducted in 4 sub-districts of Sukabumi District with 60 respondents.

Training

- Training of trainers
- Training for the enumerators.

Enumeration

- The Implementation of FLS pilot in the field.
- Supervision in the field.
- Preparation for data processing.

Data processing

- Data processing training.
- Receiving & batching documents.
- Data entry and validation process.

Finalization

- Cleaning data.
- Developing final report, syntax, and tabulation plan.