



United Nations  
Educational, Scientific and  
Cultural Organization



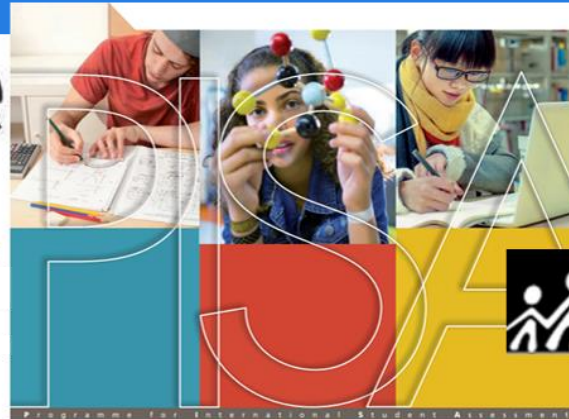
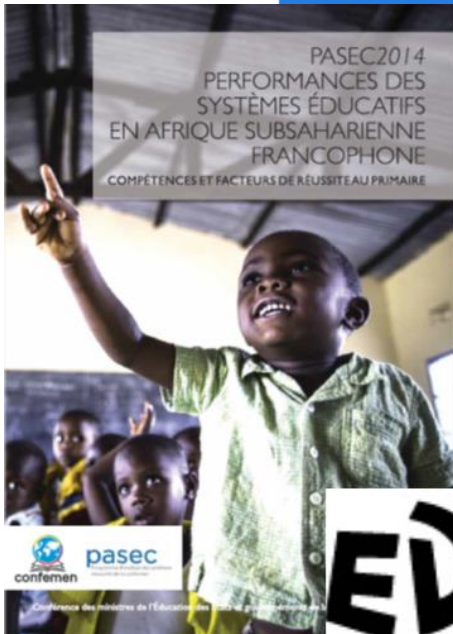
UNESCO  
INSTITUTE  
FOR  
STATISTICS



SUSTAINABLE  
DEVELOPMENT  
GOALS

# Mapping Large Scale Assessments to SDG4 indicators

June 2018



# Background information

- **Demand of agenda**
  - SDG 4 emphasis on learning and equity
  - As part of initiative of GAML - to inventory content of LA contextual instruments to inform SDG 4 monitoring
- **Existing learning assessments**
  - Type of learning assessments: School-based, Household-based
  - Instruments of learning assessment
    - Cognitive test/assessment test
    - Background/Contextual questionnaires
      - ✓ School-based: *principal(school head, teacher head), school, teacher, ICT coordinator, student, home, curriculum, national context survey*
      - ✓ Household-based: *household, parent(caregiver), school, teacher, individual(children, adult), community*
- **Characteristic of learning assessment:**
  - Large information regarding the student, family, teacher and school in BQ
  - Data is often disaggregated by sex, age, rural/urban, socioeconomic status, language spoken at home, ethnic group, immigration status, disability, etc.

# Current work

## ○ Purpose:

- Review contextual questionnaires of existing learning assessments to explore possible data sources for the monitoring of SDG 4 indicators
- Assess the suitability and comparability of these possible data sources

## ○ Scope:

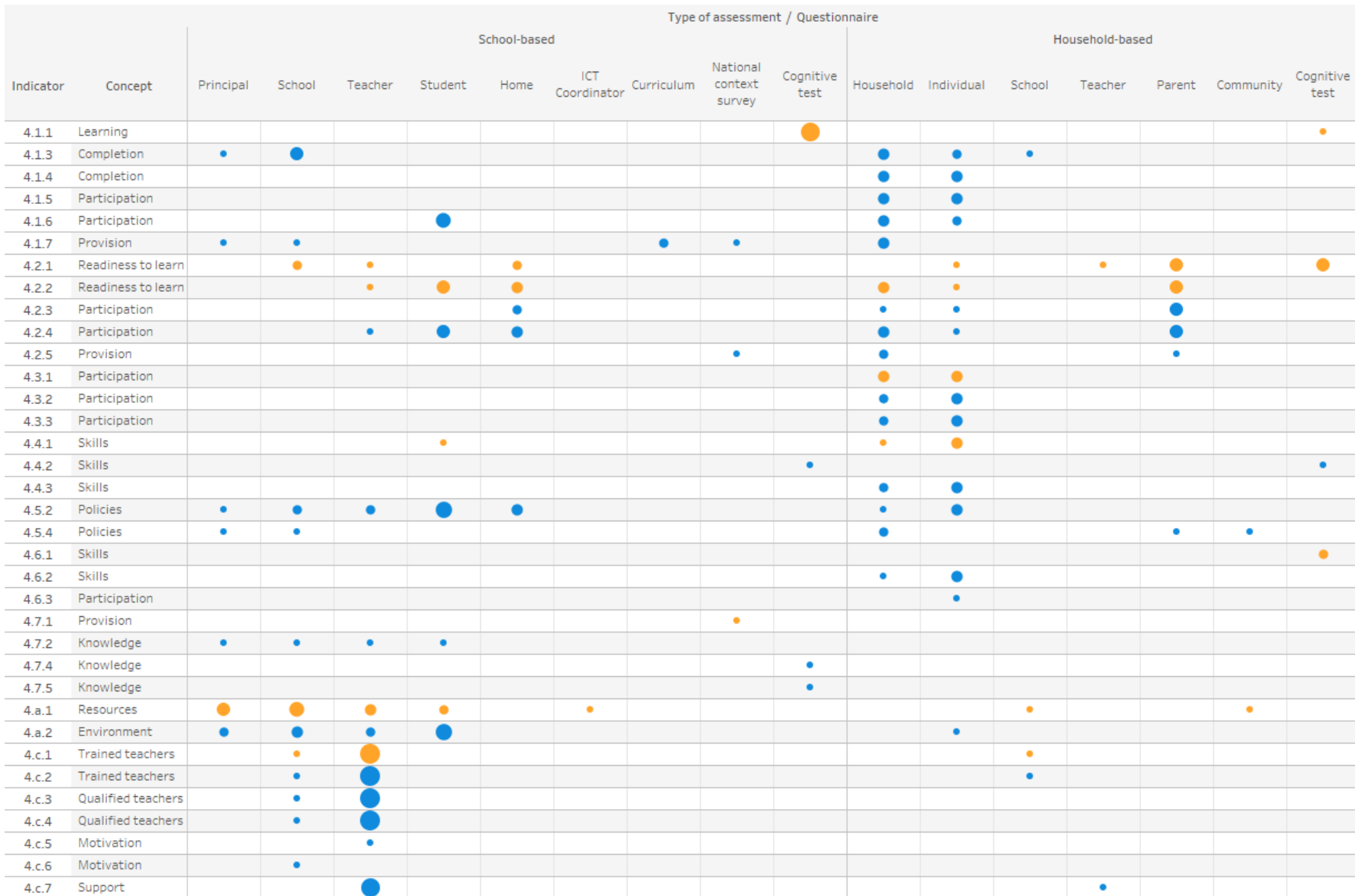
Questionnaires are reviewed from the following 22 surveys:

- 11 school-based learning assessments: EGRA/EGMA, LLECE, PASEC, SACMEQ, PILNA, PIRLS, TIMSS, PISA, ICILS, ICCS, EDI.
- 11 household-based learning assessments: IDELA, MELQO, PRIDI, EAP ECD Scales, EHCI, MICS, Young lives, PAL Network, ITU, PIAAC, STEP.



# What is currently available to measure in LA?

\* The size of circle indicates the number of existing assessments that measure the indicator

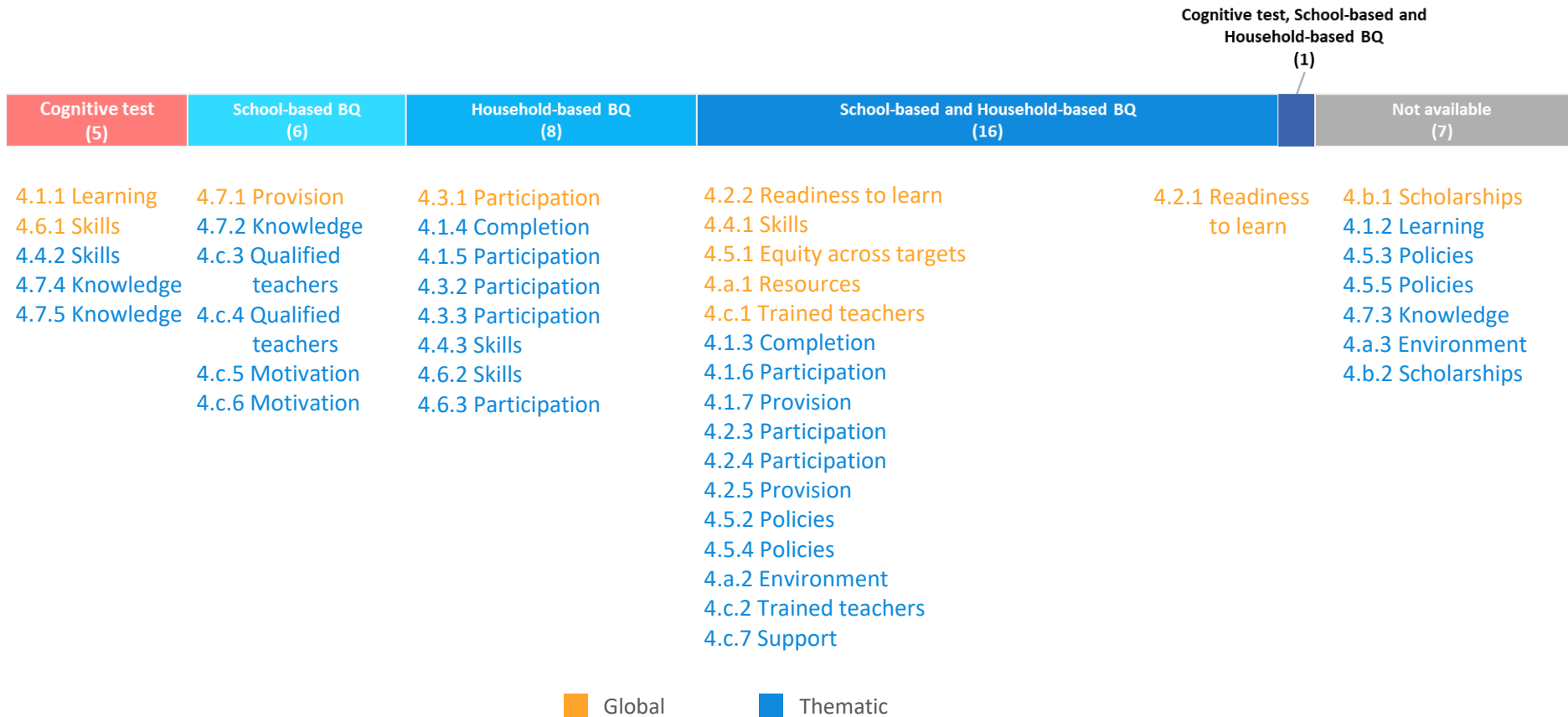


● Global

● Thematic

# Current availability summary by type of assessment

In total, 36 out of 43 SDG 4 indicators could find relevant data/information from the existing assessments.



# Current availability summary by assessment

*Young lives, MICS, TIMSS source data and information for the largest number of SDG 4 indicators*

**List of SDG 4 indicators that can be sourced from each assessment:**

Type of assessment	Assessment	
School-based	TIMSS	4.1.1 4.2.1 4.2.2 4.a.1 4.c.1 4.1.3 4.1.6 4.1.7 4.2.3 4.2.4 4.5.2 4.a.2 4.c.2 4.c.3 4.c.4 4.c.7
	PASEC	4.1.1 4.2.2 4.a.1 4.c.1 4.1.6 4.1.7 4.2.4 4.5.2 4.5.4 4.a.2 4.c.2 4.c.3 4.c.4 4.c.5 4.c.7
	PIRLS	4.1.1 4.2.1 4.2.2 4.a.1 4.c.1 4.1.3 4.1.7 4.2.3 4.2.4 4.5.2 4.a.2 4.c.2 4.c.3 4.c.4 4.c.7
	SACMEQ	4.1.1 4.2.2 4.a.1 4.c.1 4.1.3 4.1.6 4.2.4 4.5.2 4.7.2 4.a.2 4.c.2 4.c.3 4.c.4 4.c.6 4.c.7
	PISA	4.1.1 4.2.2 4.a.1 4.c.1 4.1.6 4.1.7 4.2.4 4.5.4 4.7.5 4.a.2 4.c.2 4.c.3 4.c.4 4.c.7
	TERCE	4.1.1 4.2.2 4.a.1 4.c.1 4.1.6 4.2.4 4.5.2 4.a.2 4.c.2 4.c.3 4.c.4 4.c.7
	ICCS	4.7.1 4.a.1 4.c.1 4.1.3 4.1.7 4.2.5 4.7.4 4.a.2 4.c.2 4.c.3 4.c.4
	EGMA/EGRA	4.1.1 4.2.2 4.a.1 4.c.1 4.2.4 4.5.2 4.c.2 4.c.3 4.c.4 4.c.7
	ICILS	4.4.1 4.a.1 4.c.1 4.1.3 4.4.2 4.c.2 4.c.3 4.c.4 4.c.7
	EDI	4.2.1 4.2.2 4.2.4
Household-based	Young lives	4.2.1 4.2.2 4.3.1 4.a.1 4.1.3 4.1.4 4.1.5 4.1.6 4.1.7 4.2.3 4.2.4 4.2.5 4.3.2 4.3.3 4.4.3 4.5.2 4.5.4 4.a.2 4.c.7
	MICS	4.2.1 4.2.2 4.3.1 4.4.1 4.1.3 4.1.4 4.1.5 4.1.6 4.1.7 4.2.3 4.2.4 4.2.5 4.3.2 4.3.3 4.4.3 4.5.2 4.6.2
	PAL Network	4.1.1 4.2.2 4.3.1 4.a.1 4.c.1 4.1.3 4.1.4 4.1.5 4.1.6 4.1.7 4.2.4 4.5.2 4.5.4 4.6.2 4.c.2
	STEP	4.2.2 4.3.1 4.4.1 4.6.1 4.1.3 4.1.4 4.1.5 4.1.6 4.2.4 4.3.2 4.3.3 4.4.3 4.5.2 4.6.2 4.6.3
	PIAAC	4.3.1 4.4.1 4.6.1 4.1.4 4.1.5 4.3.2 4.3.3 4.4.3 4.6.2
	EAP ECD Scales	4.2.1 4.2.2 4.2.3 4.2.4 4.2.5 4.5.4
	EHCI	4.2.1 4.2.2 4.2.3 4.2.4
	IDELA	4.2.1 4.2.2 4.2.3 4.2.4
	MELQO	4.2.1 4.2.2 4.2.3 4.2.4
	ITU	4.4.1 4.4.2

■ Global

■ Thematic

# Current availability summary by questionnaire

- Household survey and complementary questionnaire on child and adult are the main source to inform SDG 4
- School and teachers surveys in school-based learning assessment also host large amount of information related to SDG 4 monitoring

## List of SDG 4 indicators that can be sourced from each questionnaire:

Type of assessment	Questionnaire	Indicators
School-based	School	4.2.1 4.a.1 4.c.1 4.1.3 4.1.7 4.5.2 4.5.4 4.7.2 4.a.2 4.c.2 4.c.3 4.c.4 4.c.6
	Teacher	4.2.1 4.2.2 4.a.1 4.c.1 4.2.4 4.5.2 4.7.2 4.a.2 4.c.2 4.c.3 4.c.4 4.c.5 4.c.7
	Student	4.2.2 4.4.1 4.a.1 4.1.6 4.2.4 4.5.2 4.7.2 4.a.2
	Principal	4.a.1 4.1.3 4.1.7 4.5.2 4.5.4 4.7.2 4.a.2
	Home	4.2.1 4.2.2 4.2.3 4.2.4 4.5.2
	National context survey	4.7.1 4.1.7 4.2.5
	Curriculum	4.1.7
	ICT Coordinator	4.a.1
Household-based	Cognitive test	4.1.1 4.4.2 4.7.4 4.7.5
	Household	4.2.2 4.3.1 4.4.1 4.1.3 4.1.4 4.1.5 4.1.6 4.1.7 4.2.3 4.2.4 4.2.5 4.3.2 4.3.3 4.4.3 4.5.2 4.5.4 4.6.2
	Individual	4.2.1 4.2.2 4.3.1 4.4.1 4.1.3 4.1.4 4.1.5 4.1.6 4.2.3 4.2.4 4.3.2 4.3.3 4.4.3 4.5.2 4.6.2 4.6.3 4.a.2
	Parent	4.2.1 4.2.2 4.2.3 4.2.4 4.2.5 4.5.4
	School	4.a.1 4.c.1 4.1.3 4.c.2
	Teacher	4.2.1 4.c.7
	Community	4.a.1 4.5.4
	Cognitive test	4.1.1 4.2.1 4.6.1 4.4.2

■ Global

■ Thematic



# Comparability of questions asked – How similar are they?

## ○ Standard core question for completion rate and out-of-school

Concept	Indicator	Indicator name	Type of assessment	Assessment	Questionnaire	
Completion	4.1.4	Completion rate (primary education, lower secondary education, upper secondary)	Household-based	MICS	Household	What is the highest level and grade or year of school (name) has ever attended?
				Young lives	Household	What was the highest grade that this person completed (excluding pre-primary)?
					Individual	What is the highest complete qualification/certificate you have attained (including school leaving certificates/transcripts/report)
				PAL Network	Household	Schooling status (Completed which std.)
				PIAAC	Individual	Which of the qualifications on this card is the highest you have obtained?
STEP	Individual	What is the highest grade/year of formal education that you have completed?				

Concept	Indicator	Indicator name	Type of assessment	Assessment	Questionnaire	
Participation	4.1.5	Out-of-school rate (primary education, lower secondary education, upper secondary education)	Household-based	MICS	Household	At any time during the current school year did (name) attend school or any Early Childhood Education programme?
				Young lives	Household	Is this person currently in full time/Regular education?
					Individual	Are you currently enrolled in school/full-time education?
				PAL Network	Household	If currently not enrolled in school, never enrolled or drop out?
				PIAAC	Individual	Are you currently studying for any kind of formal qualification?
STEP	Individual	What grade/year are you currently attending?				

# Comparability of questions asked – How do they differ?

## Example 1: 4.5.2 - home language, varying question and response options by set of assessments

Type of assessment	Assessment	Questionnaire	
School-based	EGMA/EGRA	Principal	What percentage of actual instruction in Grade1-4 is in mother tongue?
		Student	1. Do you speak the same language at home as you speak at school? 2. What language do you speak at home?
	TERCE	Home	En la casa, ¿en qué idioma hablan con el niño la mayor parte del tiempo?
		Student	En tu casa, ¿qué idioma hablan la mayor parte del tiempo?
		Teacher	¿qué idioma aprendio a hablar primero el estudiante?
	PASEC	Student	Quelle langue parles-tu chez toi?
		Teacher	Utilisez-vous la langue maternelle parlée par la majorité des enfants pour vous fairecomprendre pendant les cours?
	SACMEQ	Student	Do you speak English outside school?
	PIRLS	Home	1. What language did your child speak before he/she began school? 2. How often does your child speak <language of test> at home?
		School	Approximately what percentage of students in your school have English as their native language?
		Student	How often do you speak English at home? (Always, Almost always, Sometimes, Never)
	TIMSS	Home	1. What language did your child speak before he/she began school? 2. When talking at home with your child, what language does the child’s father (or stepfather or male guardian) use? What languag..
		School	Approximately what percentage of students in your school have English as their native language?
		Student	How often do you speak English at home? (Always, Almost always, Sometimes, Never)
Household-based	MICS	Individual	1. Which language do you speak most of the time at home? 2. What language do your teachers use most of the time when teaching you in class?
	Young lives	Individual	1. What was the first language that NAME learned at home? 2. What was the language of instruction at NAME’s school during primary?
	PAL Network	Household	1. In which language is the child taught in school? (medium of instruction) 2. Main language spoken at home
	STEP	Individual	What language do you speak most often at home?

## Comparability of questions asked – How do they differ?

### *Example 2: 4.2.3 - home learning environments, varying items and response options by set of assessments*

Type of assessment	Assessment	Questionnaire	
School-based	PIRLS	Home	Before your child began primary/elementary school, how often did you or someone else in your home do the following activities with him or her? (e.g. read book, tell storie, play toys and games, sing songs, talk things, write letters, count things, write numbers)
	TIMSS	Home	Before your child began primary/elementary school, how often did you or someone else in your home do the following activities with him or her? (e.g. read book, tell storie, play toys and games, sing songs, talk things, write letters, count things, write numbers)
Household-based	EAP ECD Scales	Parent	In the past 3 days, did you or any family member(s) over 15 years of age engage in these activities with your child? (e.g. read books, told stories, sang song, took outside, played, named, counted or drew things)
	EHCI	Parent	In the past 3 days, did you or any household member over 15 years of age engage in any of the following activities with your child? (e.g. read books, told stories, sang song, took outside, played, named, counted or drew things)
	MICS	Individual	In the past 3 days, did you or any household member age 15 or over engage in any of the following activities with (name) (e.g. read books, told stories, sang song, took outside, played, named, counted or drew things)
	IDELA	Parent	In the past week, did you or any other family member older than 15 years engage in these activities with <<insert child's name>>? (e.g. read books; tell stories to the child; sing songs; play games, show teach something; spank/hit your child for misbehaving, etc.)
	MELQO	Parent	1. If there are children's books in the home...In the last 7 days, how many days has someone in the home read to (name)? 2. I am interested in learning about the things that (name) plays with when he/she is at home. Does he/she play with: homemade toys (such as dolls, cars, or other toys made at home)?
	Young lives	Household	Typically how many hours did each child in the household (aged between 5 and 17yrs) spend on the following activities during a typical day(from Monday to Friday) in the last week? (e.g. sleeping, caring for others, domestic tasks, at school, studying, play, etc.)

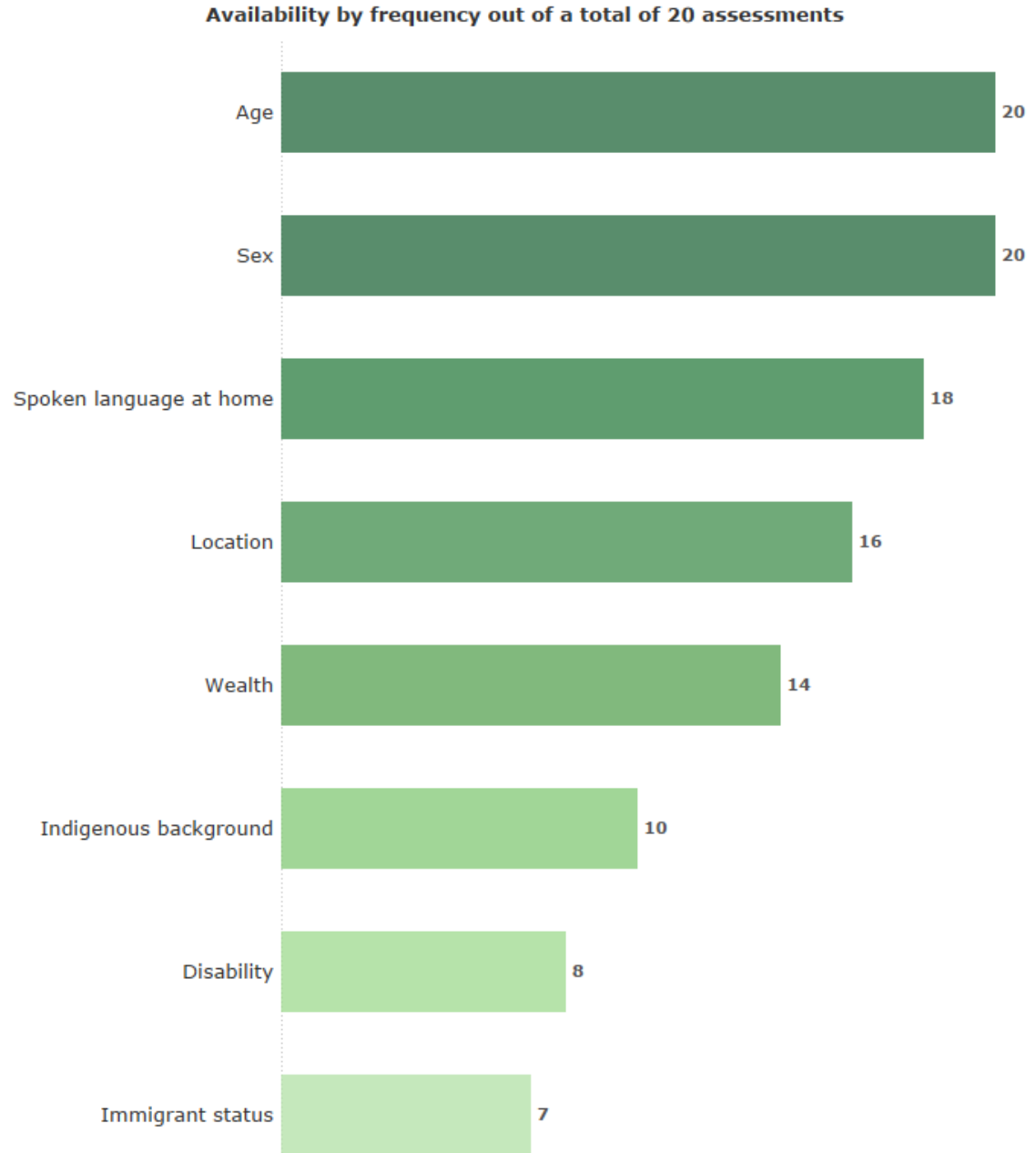
# Comparability of questions asked – How do they differ?

## Example 3: 4.c.1 – trained teachers, varying standards by country/region

Type of assessment	Assessment	Questionnaire	
School-based	EGMA/EGRA	Teacher	Are you a Trained Teacher?
	TERCE	Teacher	¿Cuánto duraron las prácticas profesionales (en escuelas) incluidas en sus estudios de educación?
	PASEC	Teacher	Quelle a été la durée de votre formation professionnelle initiale d'enseignant, incluant la théorie et la pratique?
	SACMEQ	School	How many of the teachers in your school have completed the following teacher training? (No teacher training, training by duration less than one year to more than three years)
		Teacher	How many years of teacher training have you received together?
	PIRLS	Teacher	As part of your formal education and/or training, to what extent did you study the following areas (English, Literature, etc.)? (Not at all, Overview or introduction to topic, It was an area of emphasis)
	TIMSS	Teacher	In the past two years, have you participated in professional development in any of the following? In the past two years, how many hours in total have you spent in formal in-service/professional development (e.g., workshops, seminars) for mathematics?
	PISA	Teacher	Did you complete a teacher education or training program?
	ICCS	Teacher	Have you attended any teacher training courses addressing the following topics and skills? (a) Human rights; b) Voting and elections; c) The global community and international organizations; etc.)
	ICILS	Teacher	Did your initial teacher education include the following elements? a) Learning how to use ICT; b) Learning how to use ICT in teaching
Household-based	PAL Network	School	Primary school teachers by training status (number of teachers trained)

# What is currently available disaggregation in LA?

- Disaggregation by age, sex, home language, location, socioeconomic status, indigenous background, immigrant status and disability are found in the existing learning assessments
- Age and sex are available in all the 20 assessments examined
- Ethnic background, immigrant status and disability are found the least available from current learning assessments



# How comparable are the disaggregation questions?

## What are the questions asked?

Age	<ol style="list-style-type: none"> <li>1. What is your date of birth?</li> <li>2. How old is [Name]?</li> </ol>	
Sex	<ol style="list-style-type: none"> <li>1. Are you a girl or a boy?</li> <li>2. Is [NAME] male or female?</li> </ol>	
Spoken language at home	<ol style="list-style-type: none"> <li>1. What language do you speak at home?</li> <li>2. What language did your child speak before he/she began school?</li> <li>3. When talking at home with your child, what language does the child's father/mother use?</li> </ol>	<ol style="list-style-type: none"> <li>4. Do you speak the same language at home as you speak at school?</li> <li>5. Do you speak English outside school?</li> <li>6. How often do you speak English at home?</li> </ol>
Location	<ol style="list-style-type: none"> <li>1. Is this considered an urban or rural school?</li> <li>2. Which of the following best describe the location of your school?</li> <li>3. Is the community where (name) lives: Remote, Rural, Urban, Inner city</li> </ol>	<ol style="list-style-type: none"> <li>4. How many people live in the city, town or area where your school is located? ((More than 500,000 people; 100,001 to 500,000; 50,001 to 100,000; 30,001 to 50,000; 15,001 to 30,000; 3,001 to 15,000; 3,000 people or fewer)</li> <li>5. Your school is located in a locality of: (2,000 inhabitants or less, 2,001 to 5,000 inhabitants, 5,001 to 10,000 inhabitants, 10,001 to 100,000 inhabitants, more than 100,000 inhabitants)</li> </ol>
Wealth	<ol style="list-style-type: none"> <li>1. At your home, do you have [assessment specific objects]?</li> <li>2. What is the material of floor, roof, walls at your home?</li> <li>3. What is the source of drinking water, energy? What kind of toilet facility?</li> </ol>	<ol style="list-style-type: none"> <li>4. Does any member of household own any agriculture land? Does the household own any livestock, herds, other farm animals or poultry?</li> <li>5. Does any member of household have a bank account?</li> </ol>
Indigenous background	Which of the following [assessment specified ethnic groups] best describes you?	
Disability	<ol style="list-style-type: none"> <li>1. Does the child have any known disability?</li> <li>2. Is disability the reason that you never attended school?</li> <li>3. Would you say that (name) has: [no difficulty, some difficulty, a lot of difficulty, that (he/she) cannot at all] seeing, hearing, walking, self-care, communicating, remembering or concentrating?</li> </ol>	<ol style="list-style-type: none"> <li>4. Does the child have identified special needs?</li> <li>5. Does the student have a problem that influences his/her ability to participate in a regular classroom?</li> <li>6. Does 'NAME' have any other long term health problem?</li> </ol>
Immigrant status	<ol style="list-style-type: none"> <li>1. In what country were you and your parents born?</li> <li>2. How old were you when you arrived in the [country]?</li> </ol>	

# Summary

- **Challenges of using learning assessment data:**
  - Geographic coverage: national, regional, cross-national but not globally collected
  - Availability: not collected regularly
  - Comparability:
    - Question collected from multi-instruments in the same assessment (e.g. school head, teacher, student, family)
    - Question can vary over time in the same instrument
    - Question varies across different assessments
    - Question varies between instruments used at country level (e.g. PAL Network ASER and UWEZO ask different questions on school services availability)
- **Lack of information to inform some concepts. E.g.:**
  - Currently no existing school-based assessment assess and survey learners at upper secondary education level (age 15-17)
  - Household questionnaire has not collected information on illiterate population
  - Very limited information found to inform global citizenship education in school (only found in ICCS national context survey)

## Recommendation

- **Harmonize questions asked in different assessments and questionnaires**
- **Set standards and benchmark**
- **Addition of missing concepts into questionnaires**





United Nations  
Educational, Scientific and  
Cultural Organization



UNESCO  
INSTITUTE  
FOR  
STATISTICS



SUSTAINABLE  
DEVELOPMENT  
GOALS

## Annex - Mapping existing learning assessments to SDG 4 indicators

Learn more <http://uis.unesco.org/>



@UNESCOstat