

10 datapoints on large scale assessment and equity

Manuel Cardoso

mcardoso@unicef.org

Large scale assessments (LSAs) and equity

Every child has the right to learn. How can assessments contribute to the realization of this right?

- **Advantage:** *Who learns?* Large scale assessments (LSAs) cover a wide range of classrooms and locations; so, they reveal *systemic inequities and gaps*.
- **Disadvantage:** They are cross-sectional (as opposed to longitudinal) and observational (as opposed to experimental); so, they are not the best way to examine the *causes* (the *why?*) of those inequities.

Large scale assessments (LSAs) and equity

Challenges

- Coverage: e.g. school-based LSAs exclude out of school children.
- Inclusion: LSAs may not provide accommodations and modifications for children with disabilities.
- Fairness: some LSA items may show DIF (Differential Item Functioning) between groups (gender, location, etc.) due to bias.

#1: We don't know what *all* children know

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

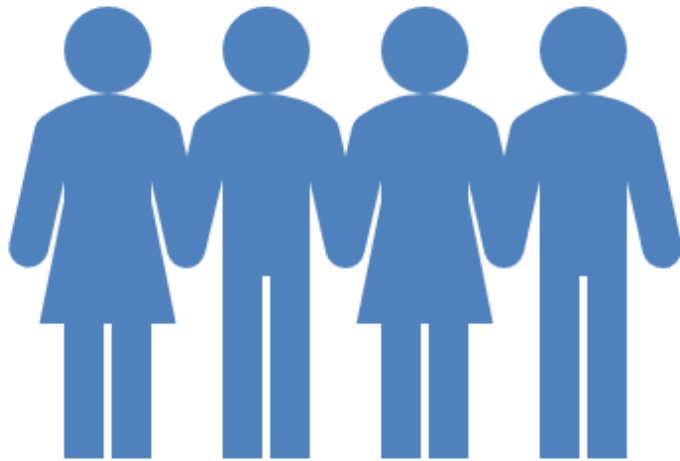


Source: UNESCO Institute for Statistics. <http://uis.unesco.org/apps/visualisations/laci/>

***#2: Within each country,
some children remain out of reach***

School-based assessments fail to reach **OOSC**. Children with **disabilities**, in **emergency situations**, or attending **non-formal** education programs are often also excluded. For instance, **refugee settlements In Ethiopia are not included in national assessment systems.**

**But just like “what is not tested is not taught” we must also remember:
Who is not tested is not taught!**



Where is MICS (Multiple Indicators Cluster Survey) implemented?

22

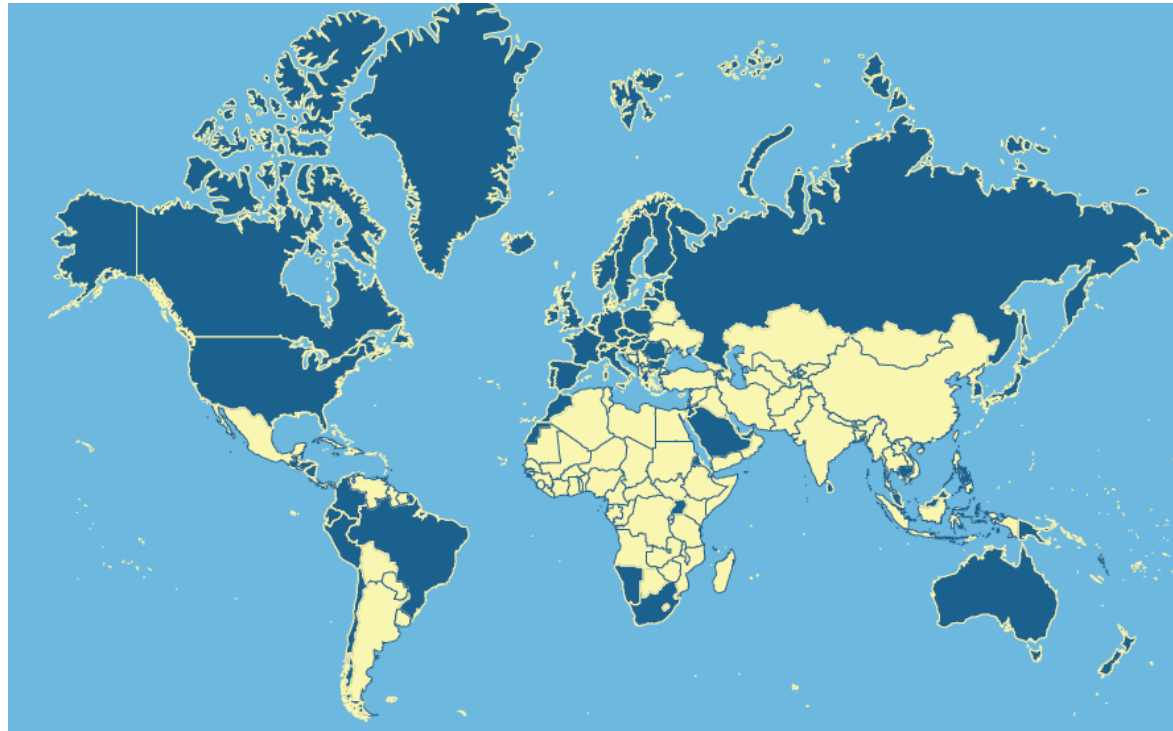
years

113

countries

307

surveys



Notes: Countries with at least one MICS survey
Including sub-national surveys

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

Presence of MICS in sub-Saharan Africa



- **22** countries out of 49 in SSA will be covered by MICS in the next three years
- **9** emergency countries will have comparable learning data

■ Global or regional assessment ■ National
■ MICS ■ No data

MICS Countries SSA

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

- Eswatini
- Botswana
- Kenya*
- Equatorial Guinea
- Benin
- Sudan
- Cameroon*
- Cote d'Ivoire
- Nigeria *

Countries which has not decided to include Foundation al Learning module

MICS 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

- Learning environment – reading habits, languages at home and in school

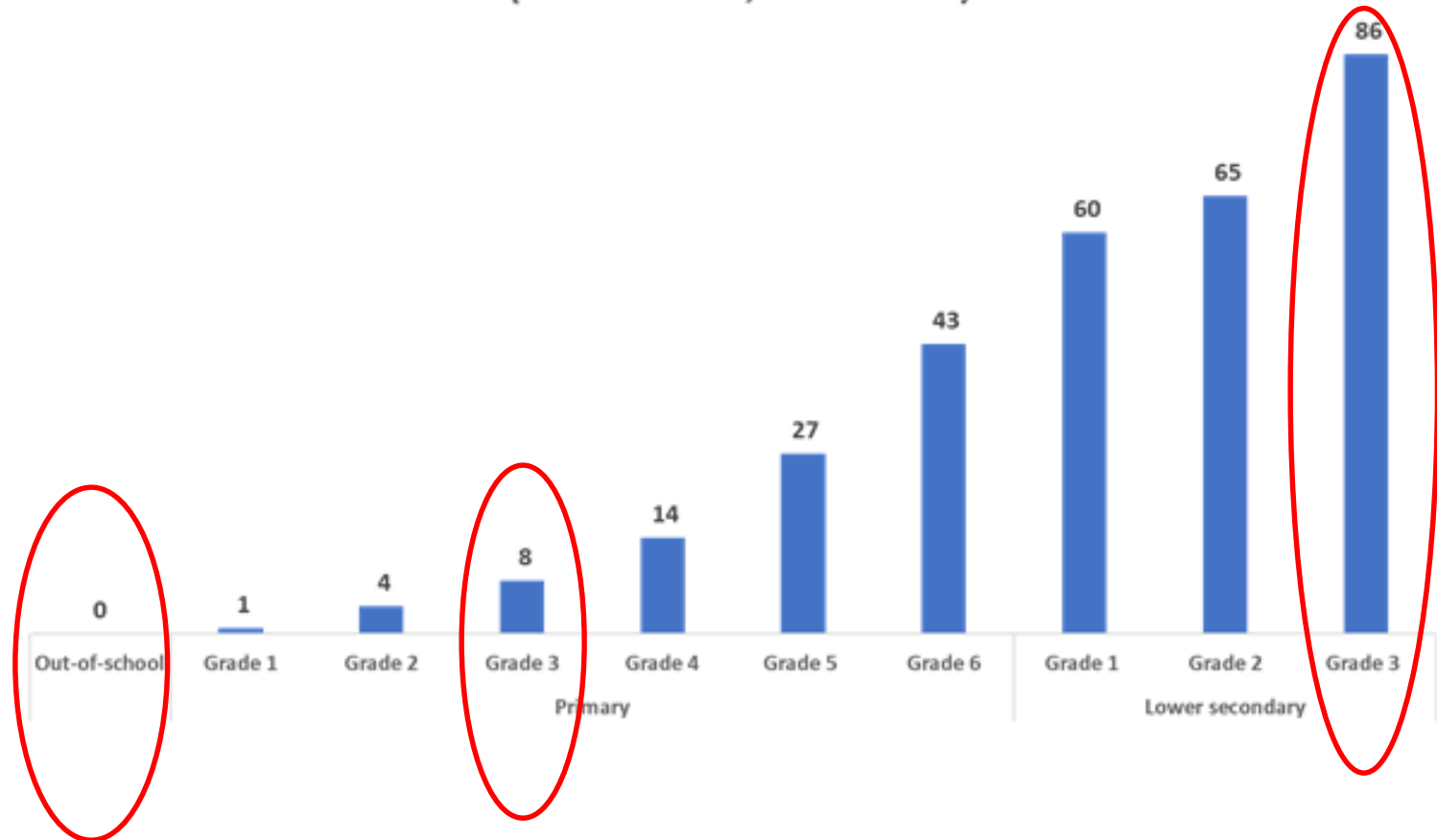
- **Foundational reading skills** (3 indicators + 1 overall indicator)
 1. % who read 90%+ of words in **story** (70 words, 2nd grade vocabulary)
 2. % who answer 3 out of 3 literal comprehension **questions**
 3. % who answer 2 out of 2 inferential comprehension **questions**

- Foundational number skills (4 indicators + 1 overall indicator)

Collaboration funded by the Hewlett Foundation, with input from ASER/Uwezo, RTI, Save the Children, GEMR, GPE, UIS, WB

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)

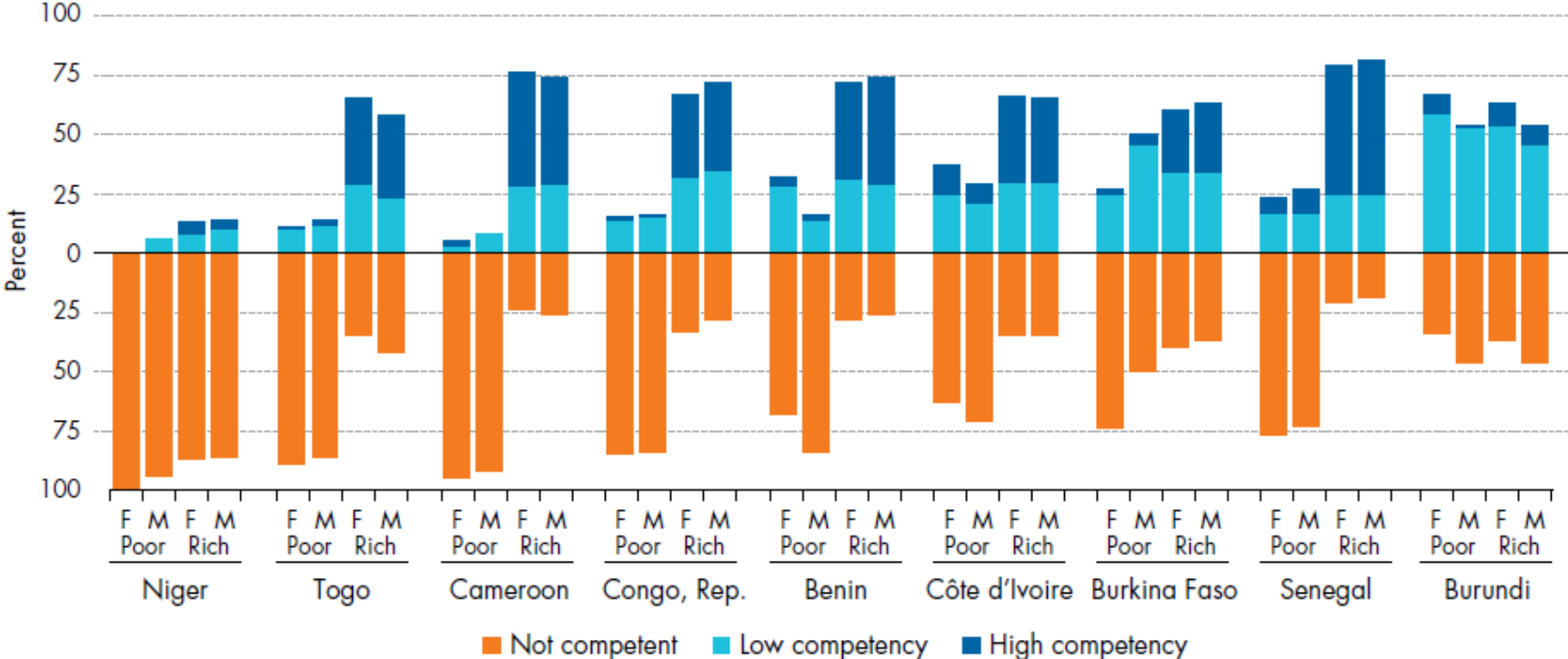
#3: In some countries, overall learning levels are low



#4: Even in school, the poor show lower learning levels

Figure O.3 Children from poor households in Africa typically learn much less

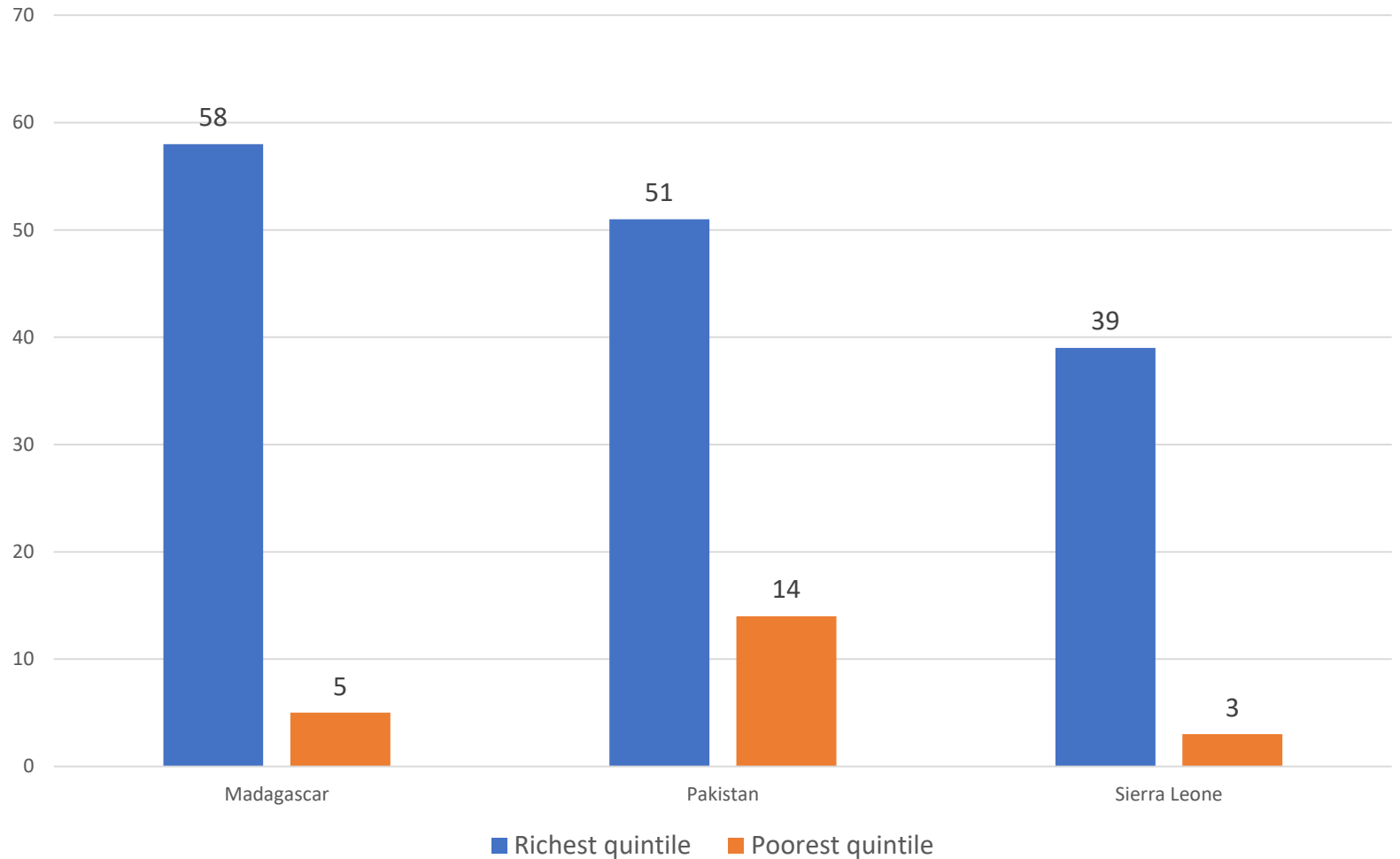
Percentage of grade 6 PASEC test takers in 2014 who scored above (blue) and below (orange) the sufficiency level on reading achievement: poorest and richest quintiles by gender, selected countries



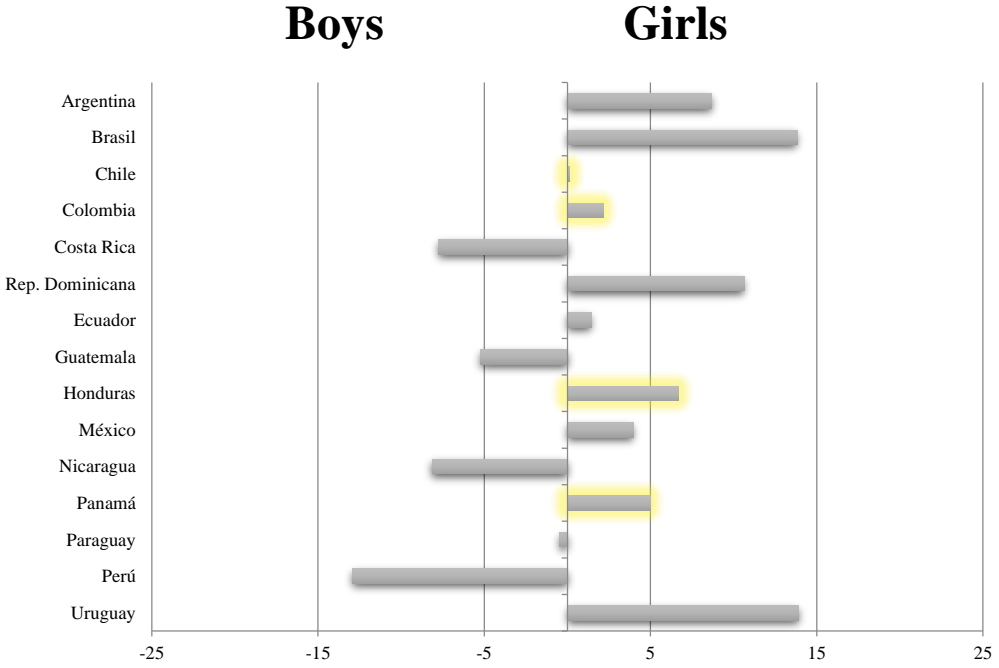
Source: WDR 2018 team, using data from World Bank (2016b). Data at http://bit.do/WDR2018-Fig_0-3.
 Note: Socioeconomic quintiles are defined nationally. "Not competent" refers to levels 0-2 in the original coding and is considered below the sufficiency level for school continuation; "low competency" refers to level 3; and "high competency" refers to level 4. F = female; M = male; PASEC = Programme d'Analyse des Systèmes Éducatifs de la Confemem.

#5: The poor face a double disadvantage of lower access and lower quality

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)

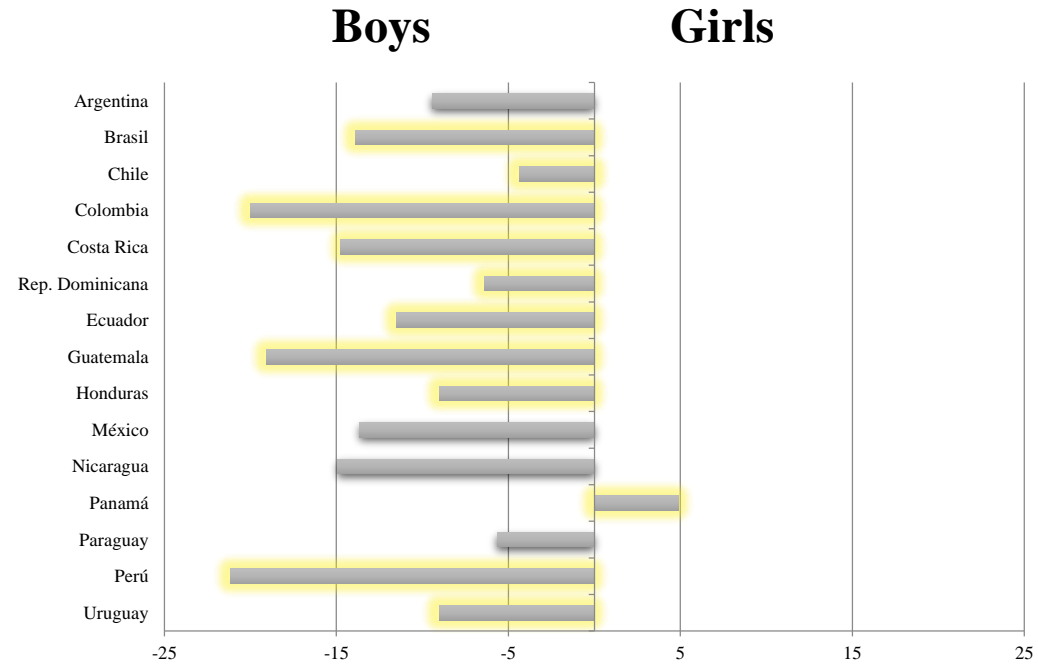


#6: Gender norms shape girls' and boys' learning



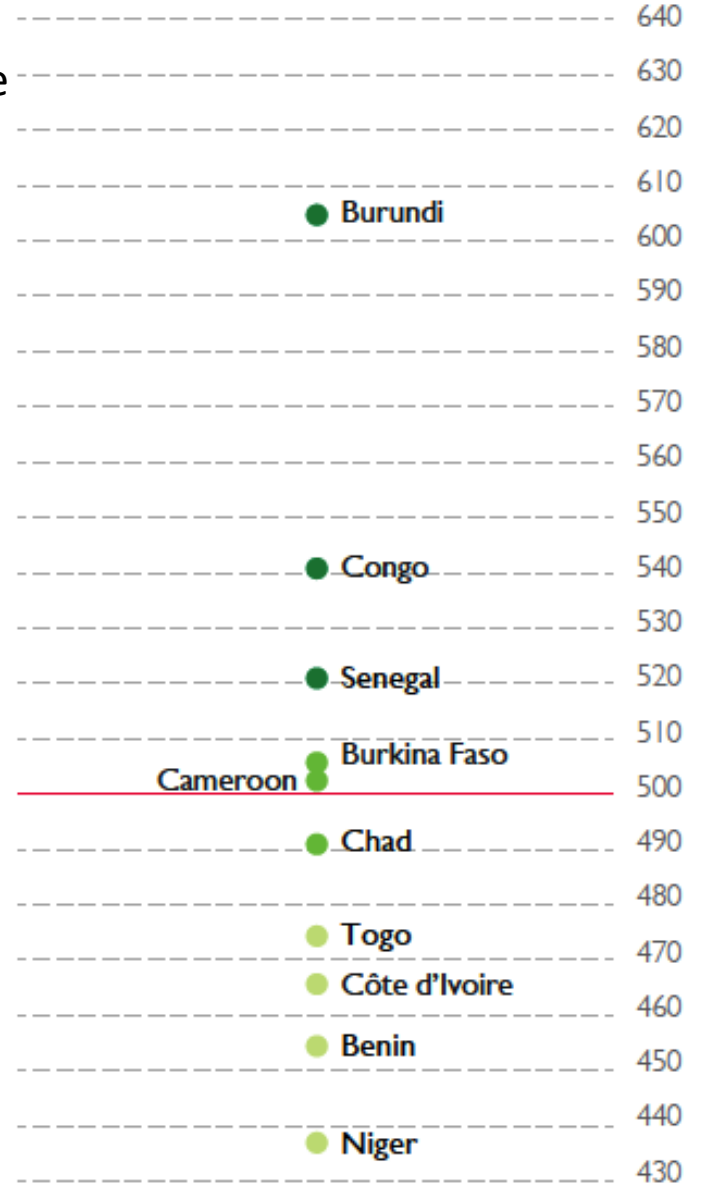
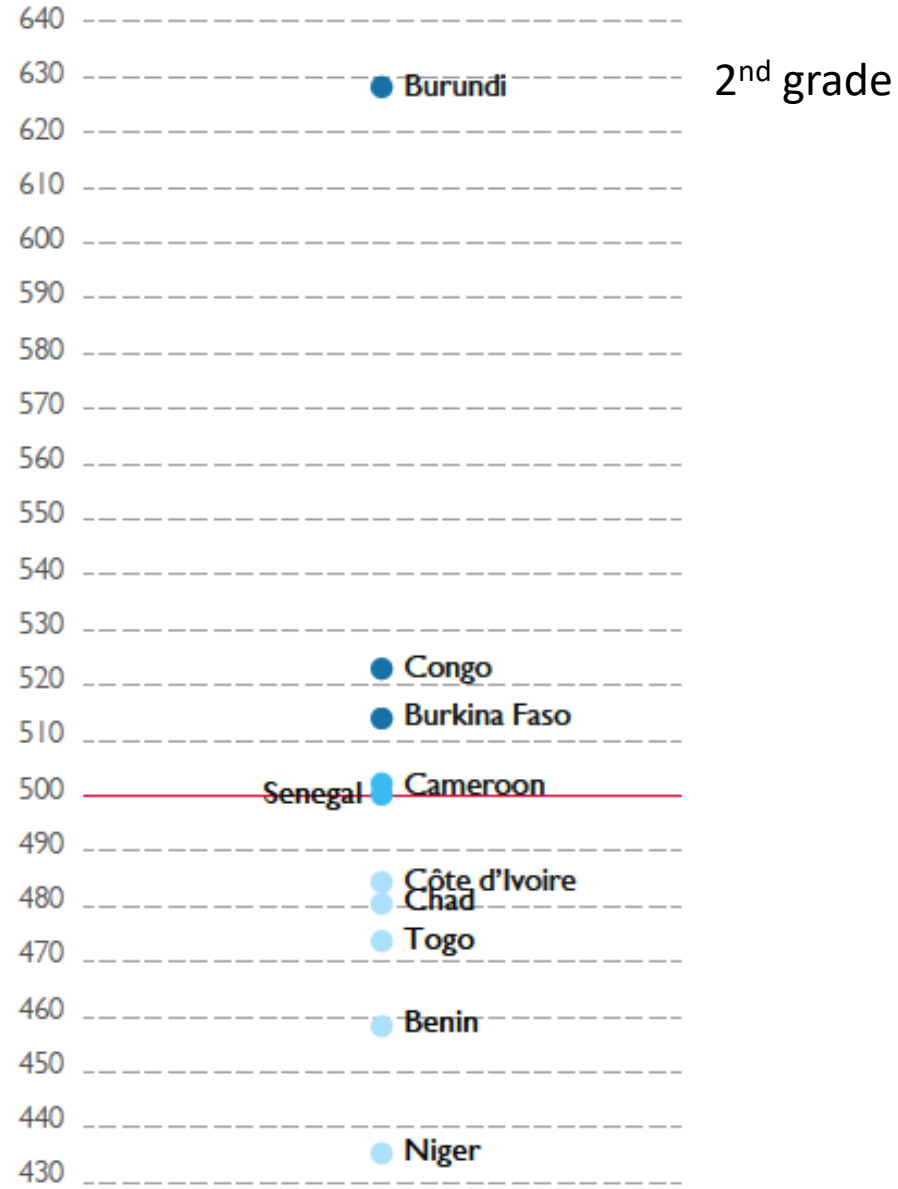
3rd grade mathematics

(TERCE, 2013)



6th grade mathematics

#7: Children learn better in languages they can understand



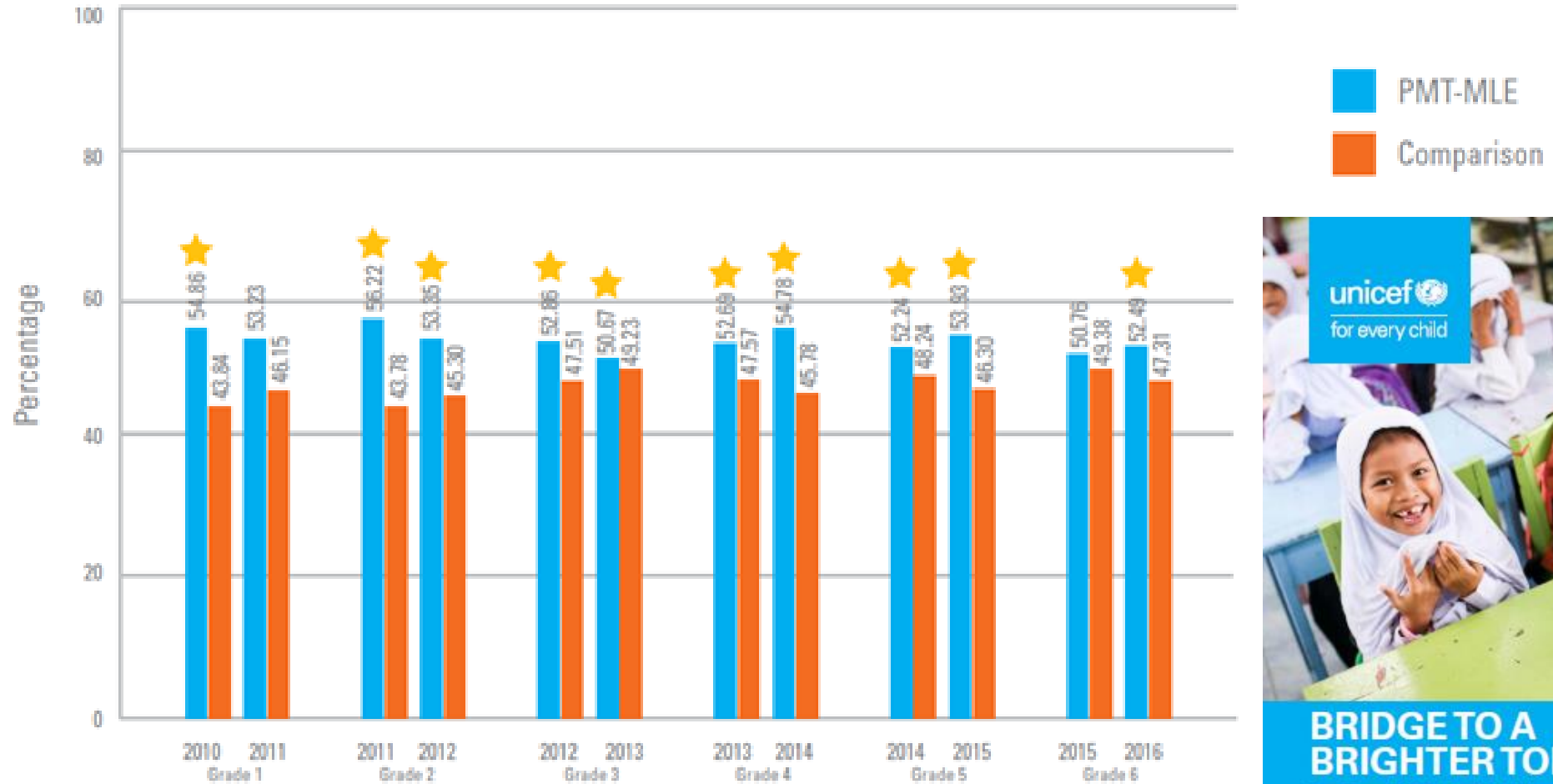
Average national language score statistically
 ● higher ● close ● lower than the PASEC2014 average

— PASEC2014 average

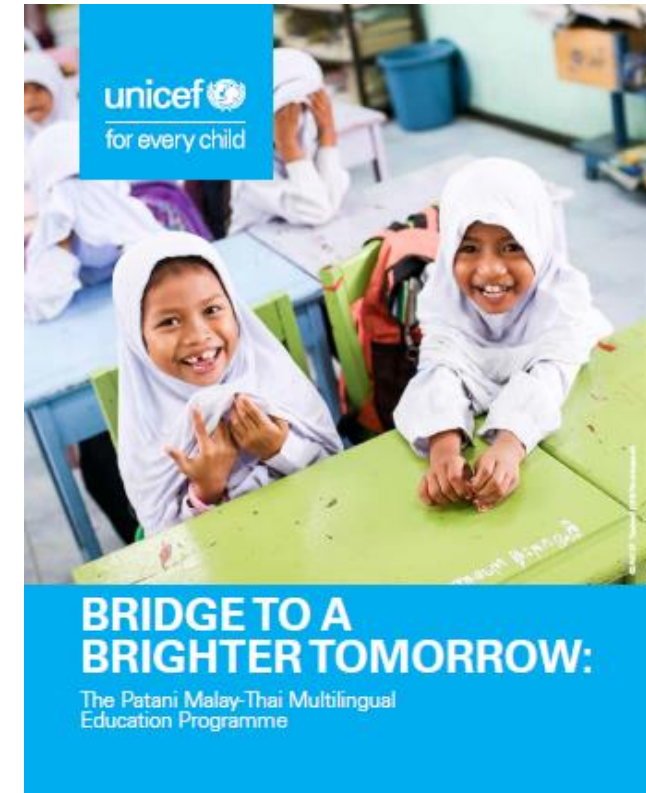
Average national mathematics score statistically
 ● higher ● close ● lower than the PASEC2014 average

Transformative approaches: language(s) in the classroom

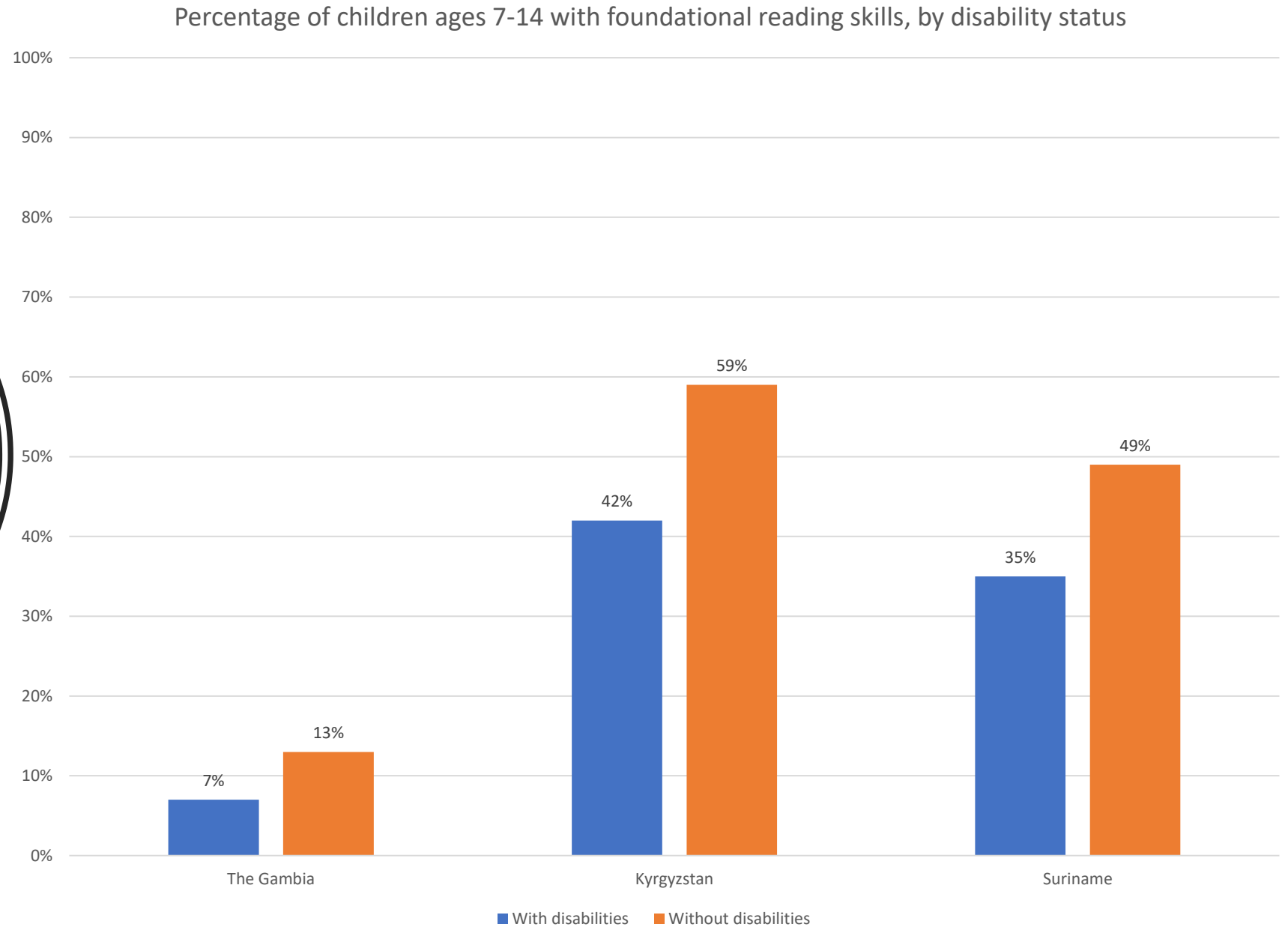
“Language is not everything in education, but without language, everything is nothing in education” Ekkehard Wolff



<https://www.unicef.org/thailand/reports/bridge-brighter-tomorrow>



#8: Children with disabilities face barriers to be schooled and taught

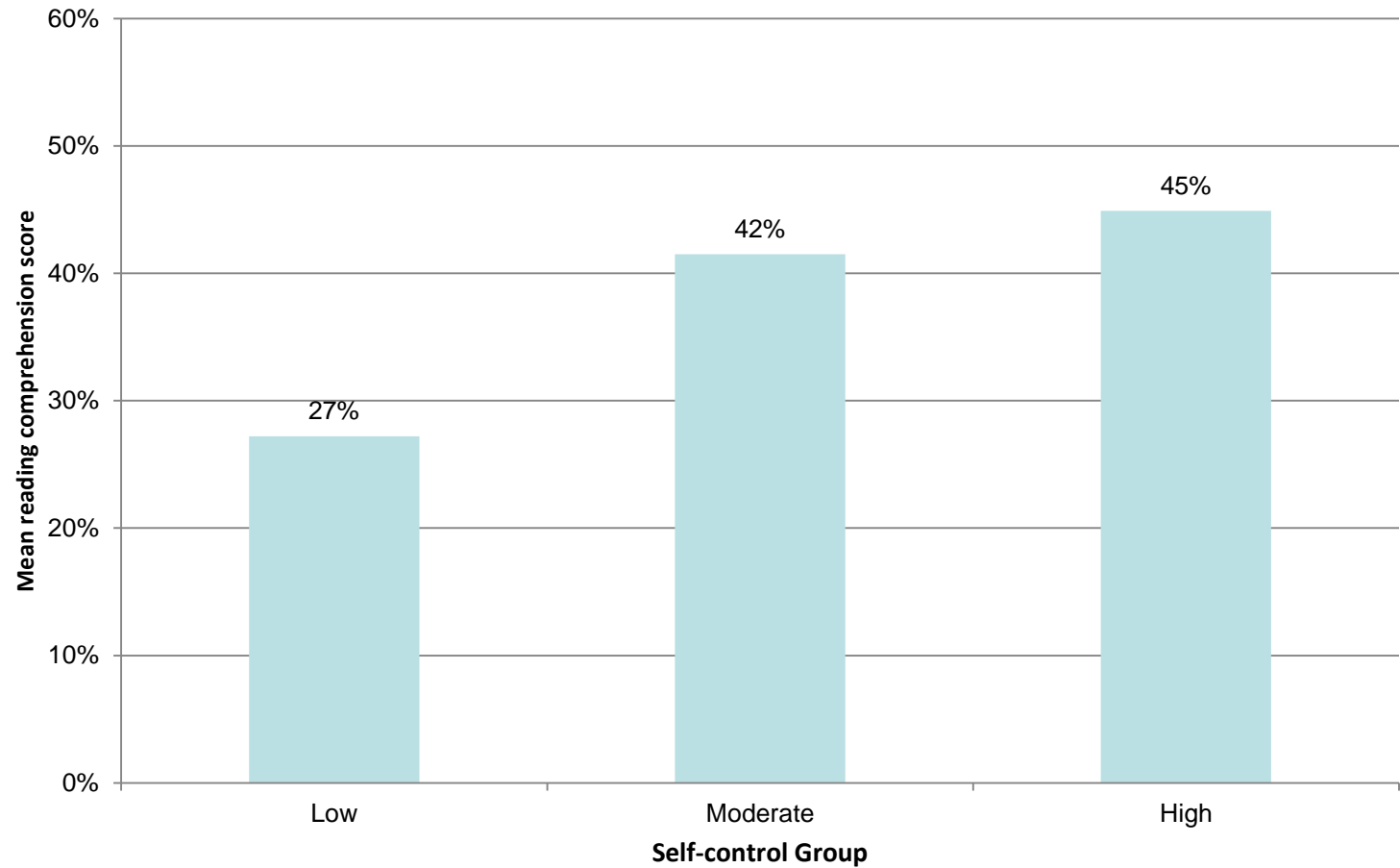


An incremental approach towards inclusive assessment of children with disabilities

1. We must not summarily exclude children with disabilities from assessments.
2. Reach children with disabilities wherever they may be: half of them are not in school.
3. In sample-based assessments, make sure sample sizes are large enough to allow for disaggregation by disability status (Y/N).
4. Provide accommodations for learners with sensory disabilities such as visual or hearing impairments.
5. Provide modifications for learners with intellectual impairments or learning disabilities.

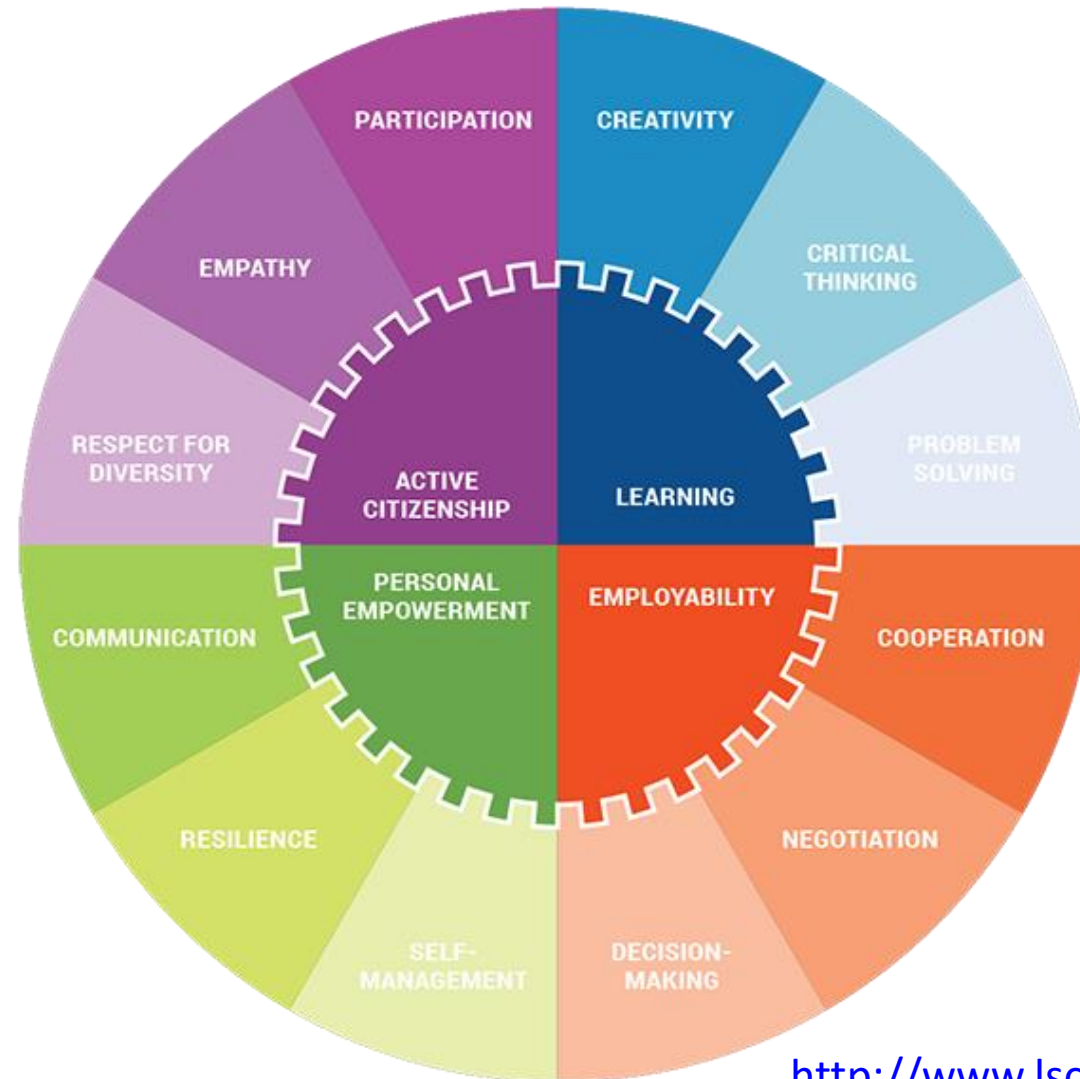
#9: Data on non-academic outcomes are even more scarce

Self-control and Reading Performance Tanzania, 2016, EGRA



Some non-academic outcomes are correlated with academic outcomes...

#9: Data on non-academic outcomes are even more scarce

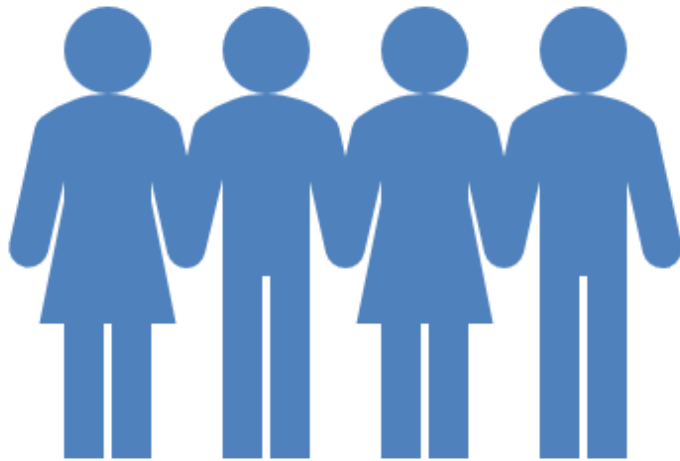


<http://www.lsce-mena.org/>

***...but non-academic outcomes matter in their own right.
And what is not tested is not taught!***

#10: Children in emergencies face enormous disadvantages

While we often lack actual learning data for children in emergencies, other evidence points to huge disadvantages. In Ethiopia, “**Primary refugee education completion rates stand at only 22.0% (M 30.3%; F 11.9%) – as compared to the 57.7% national average.**”



Relevant for policy and instruction: information for action in India



NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING
NATIONAL ACHIEVEMENT SURVEY - NAS
(Survey of Learning Outcomes)





District Report Card : 2017	
State: Assam	District: Morigaon
Class: 3	Subject: EVS
Schools: 61	Students: 1144


Participation/Coverage


Students

GENDER 	Boys		Girls	
	Number	%	Number	%
	579	50.61	565	49.39

AREA 	Rural		Urban	
	Number	%	Number	%
	1115	97.47	29	2.53

CATEGORY 	SC		ST		OBC		GEN	
	Number	%	Number	%	Number	%	Number	%
	108	9.44	97	8.48	57	4.98	882	77.10

CWSN 	LD	VI	HI	S6LD	ID	Oth
	3	3	2	2	0	1

Management 	Government		Government-aided	
	Number	%	Number	%
	1096	95.80	48	4.20

Average Performance of Students in EVS (%)

Overall	Gender		Area		Management		Social Group			
	Male	Female	Rural	Urban	Govt.	Aided	SC	ST	OBC	GEN
74.72	73.99	75.47	74.73	74.48	75.54	56.11	85.74	77.59	65.96	73.62

Conclusions

- The quality of education and the achievement of learning outcomes are equity issues
- Large-scale assessments reveal the inequities, thus allowing us to advocate for better allocation of resources and the development of strategies to cater to those most in need
- In order to fulfill this role, large-scale assessments must be as universal, inclusive and fair as possible

Assessing learning in emergencies

- Just like in development situations, decisions about assessment in humanitarian situations must take the whole system into account.
- In that sense, assessment is one piece of the puzzle that must fit with the rest.
- But in emergencies this is further complicated by the volatility of the situation, and the uncertainty about the future.

Assessing learning in emergencies: challenges

- Assessment design must be aligned with decisions about curriculum and language of instruction. But these may be difficult to make, or uncertain, for instance in refugee settlements when it is unclear whether refugees will:
 - a) return to their country of origin,
 - b) remain in the host country, or
 - c) relocate to a third country.
- In addition, the qualifications of teachers/educators and test administrators may be uneven, and turnover tends to be high. Under these circumstances, it is important to keep assessment instruments simple and quick, or automate them to the extent possible.
- At the same time, especially with refugees or internally displaced persons, imperfect knowledge of a learner's previous educational trajectory increases the need for placement tests.

Different solutions for different emergencies

- The type of emergency, e.g. acute versus protracted, is particularly relevant. While in acute emergencies rigorous assessment may be difficult or impossible, in protracted situations it eventually becomes a necessity.
- In protracted situations where there are cultural and linguistic similarities between the displaced and host communities, and where the displaced learners are likely to remain, alignment with the host country's curriculum is desirable.
- On the other hand, in situations of high uncertainty, learners should receive a curriculum that prepares them for a wide array of possible destinations.

Whole of Syria

The Whole of Syria initiative is a UNICEF-supported classroom assessment for settings where many students have been internally displaced. These tools, developed in 2018, focus on reading, mathematics and socio-emotional skills at the early grades level. It was a collaboration with Save the Children and New York University's Global TIES for Children.

The process to develop this assessment involved:

- 1) Compiling all the existing instruments applied in Syria to relevant populations in humanitarian and development situations, in the three assessment domains
- 2) Reanalyzing the datasets in order to identify the most valid, reliable, and efficient tasks
- 3) Collecting inputs from regional experts who appraised feasibility and cultural appropriateness
- 4) Developing new tasks to fill any gaps
- 5) Reassembling the instrument
- 6) Making it available to teachers for their use in classrooms

NYU has also recently released a regional library of assessment instruments for the MENA region:

<https://inee.org/measurement-library>

Learning Passport

- In 2018, UNICEF launched a partnership with Microsoft and the University of Cambridge to develop a ‘learning passport’ – a digital platform that will facilitate learning opportunities for children and young people within and across borders.
- It will be tested and piloted in countries hosting refugees, migrants and internally displaced persons.
- Currently, education systems in host countries struggle to acknowledge and recognize what refugee and migrant children and young people have already learned in school, making it impossible to provide them with the right level of education and, in the long term, limiting their employment prospects.

<https://www.unicef.org/press-releases/unicef-announces-new-partnership-microsoft-address-education-crisis-affecting>

https://www.unicef.org/corporate_partners/index_103292.html