

MELQO

Measuring Early Learning Quality and Outcomes

Abbie Raikes, Technical Lead

Brookings Institution, UNICEF, UNESCO and World Bank

What is MELQO?

- Consortium to promote measurement of early childhood development and quality of learning environments
- Intended to produce feasible, open-source tools that countries can adapt to build into ongoing measurement systems
- Led by Brookings, UNICEF, UNESCO and World Bank with group of more than 50 experts participating

What are the goals of MELQO?

- Focus on national measurement:
 - Create two tools – one on **child development and learning outcomes** and one on **quality of settings**– that are conceptually linked
 - Build on existing tools, to create a common set of items that could be integrated into existing measures and help inform global monitoring, while promoting national-level measurement
 - Develop tools and processes for using them that are feasible, actionable and adaptable for use at the national level

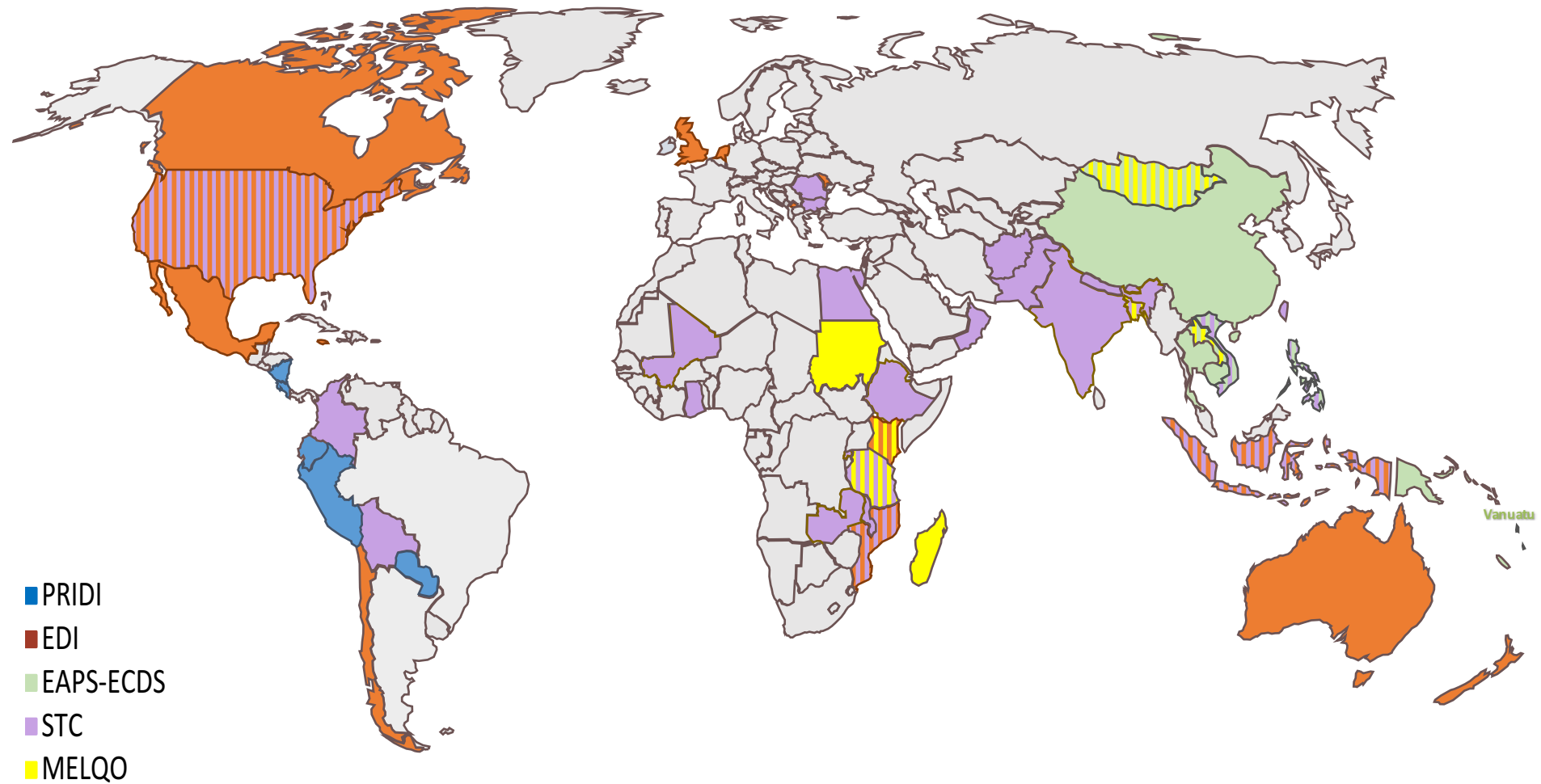
Why national measurement?

- National assessments can be longer, more frequent and adapted to local settings – *but don't contain the same set of items, so can't be considered globally comparable*
- Local data are important for policy and programmatic development
 - Design of curricula; connections with teacher training
 - Inform policies and funding decisions
 - More detailed information on inequities within countries
- May be possible to inform global tracking over time

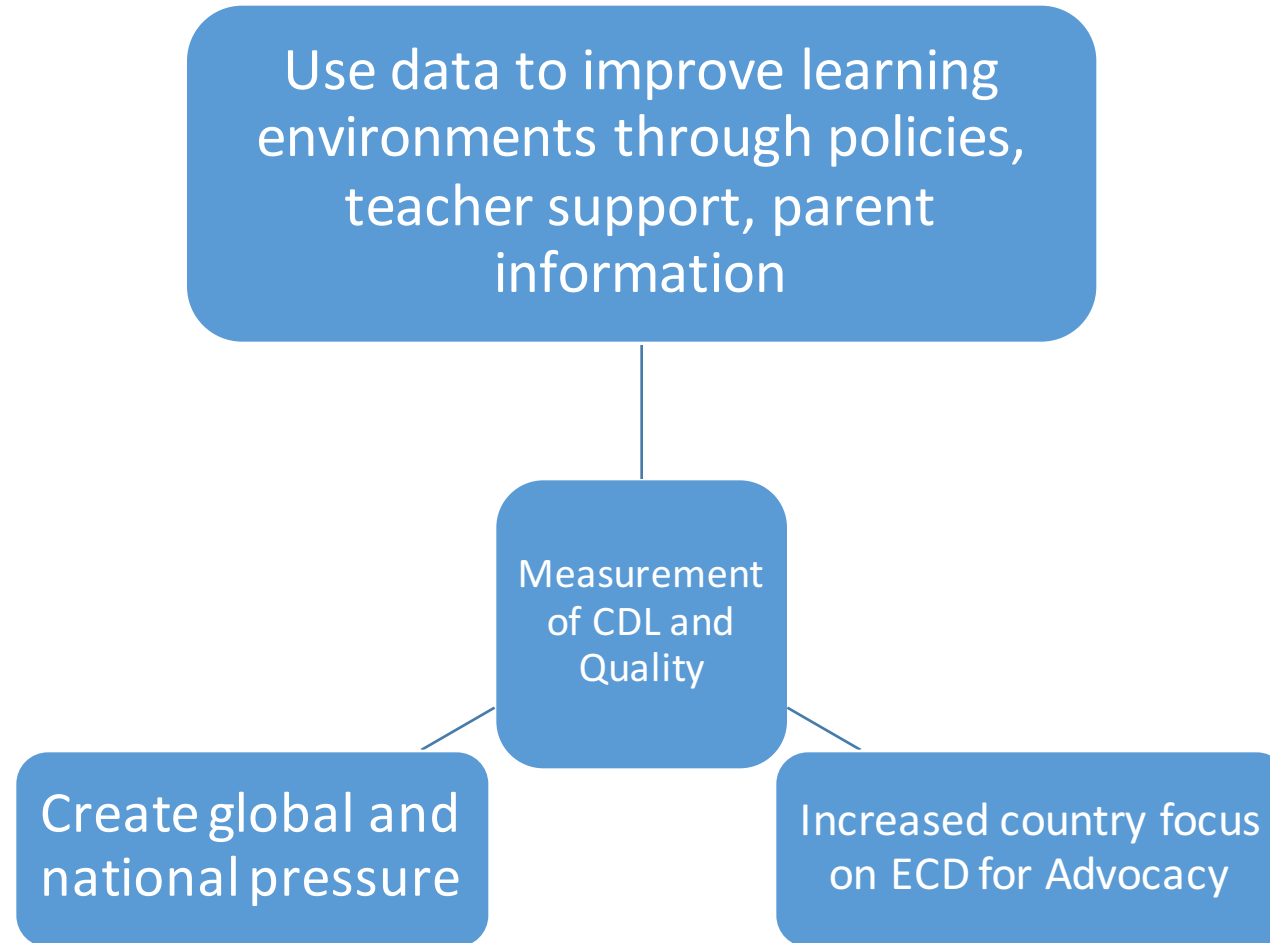
National Measurement is Critical

- Global monitoring is just one aspect of monitoring
- National measurement is very important
 - More sensitive to local goals and cultures
 - Useful for national decision-making on resources & policies
 - Possible to include broader range of indicators

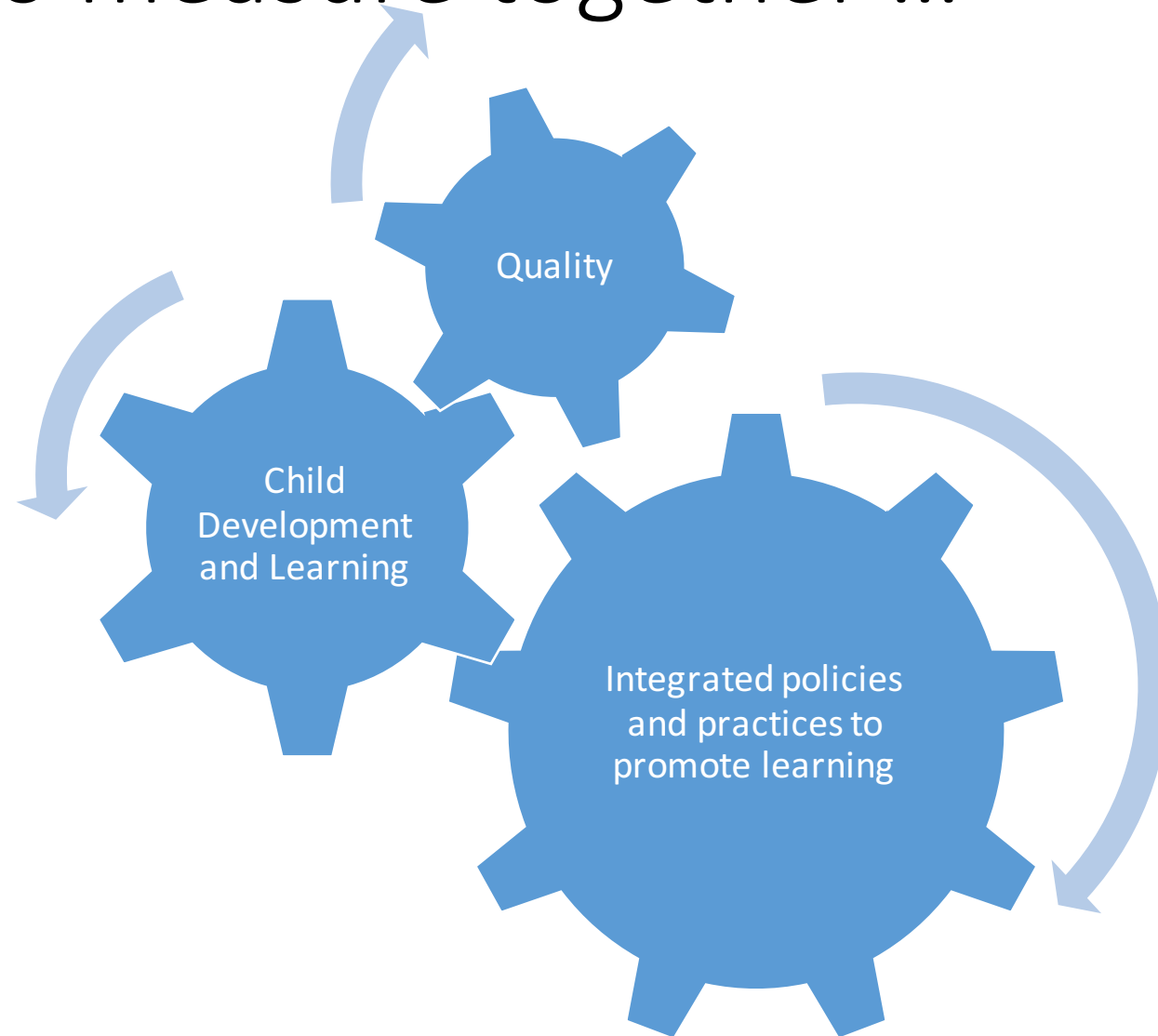
Measuring Children's Development At or Near the Start of School



Measuring Contributes to Improvement



Important to measure together ...



Goals of Child Development/Learning

- Make national measurement easier by identifying a common set of items that are used in many assessments now
- Examine the feasibility of adapting these items to national standards and cultural priorities for young children
- Test these items to determine the validity of the items and how well they work across countries

Two themes of MELQO

- Content: What's in it?
 - Constructs that are scientifically valid and relevant
 - Item reliable and accurate; technically sound
 - Emphasis on “teachable” and “actionable” items
- Usability: How will it be designed?
 - How the data will be collected
 - How the results will be shared and used to improve practice – risks like high-stakes!

In sum ...

- National efforts can complement work at global level
- Some indicators may be easier to develop first at the national level, which then can help inform global efforts
- Challenges around item comparability and ensuring proper use are important to recognize

MELQO Phase 1: Consensus to Country Action

- 1) Convene expert groups on quality and child development/learning
- 2) Use *existing measures* to gain consensus on common set of items
- 3) Conduct institutional assessment on scaling the assessment
- 4) Validation – first nationally-representative study underway

WISC

PRIDI

ECERS

IDELA

DDST

Child
Development

CLASS

eHDI

Quality of
PPE

TIPPS

EGRA

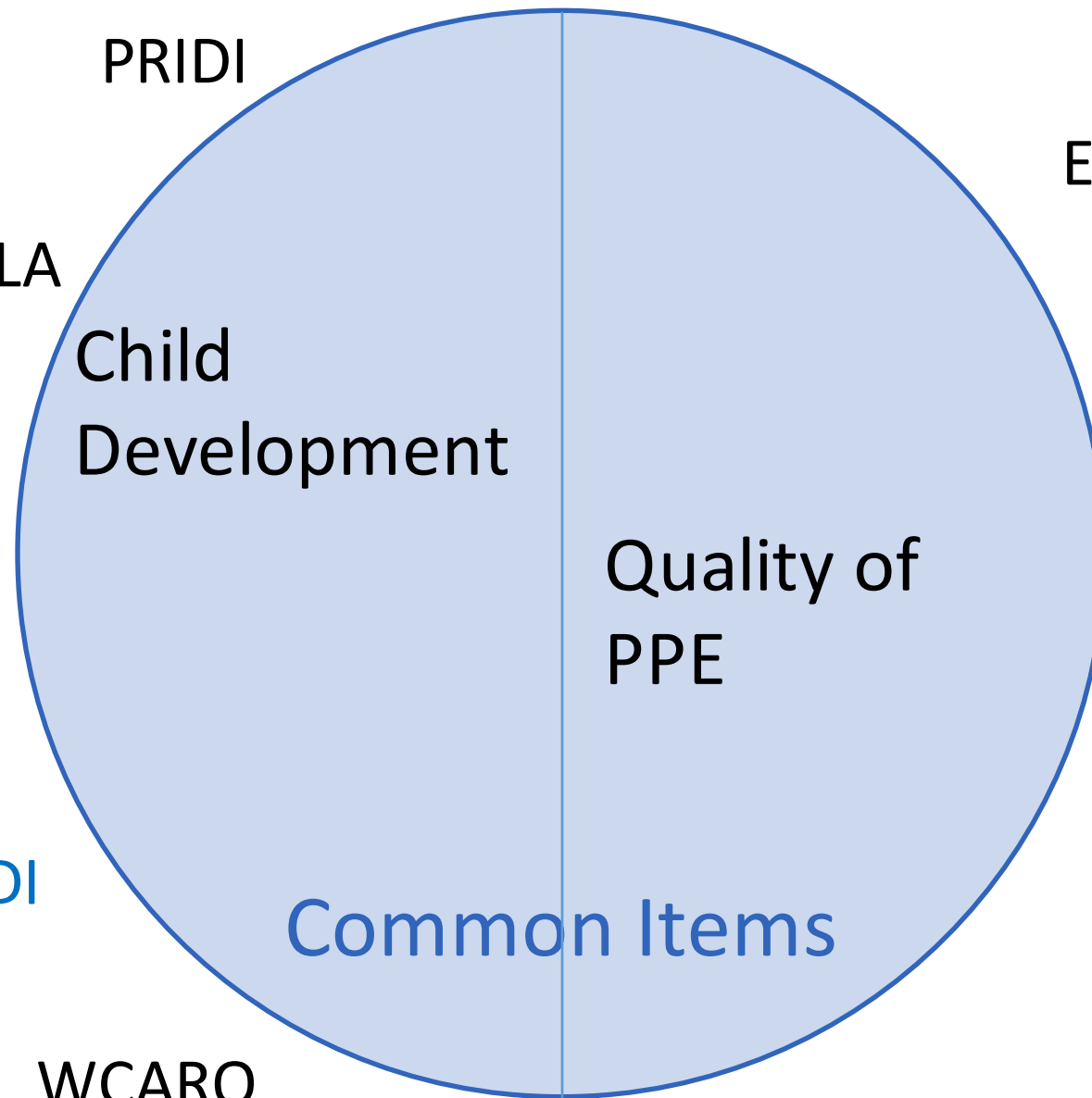
TEMA

EDI

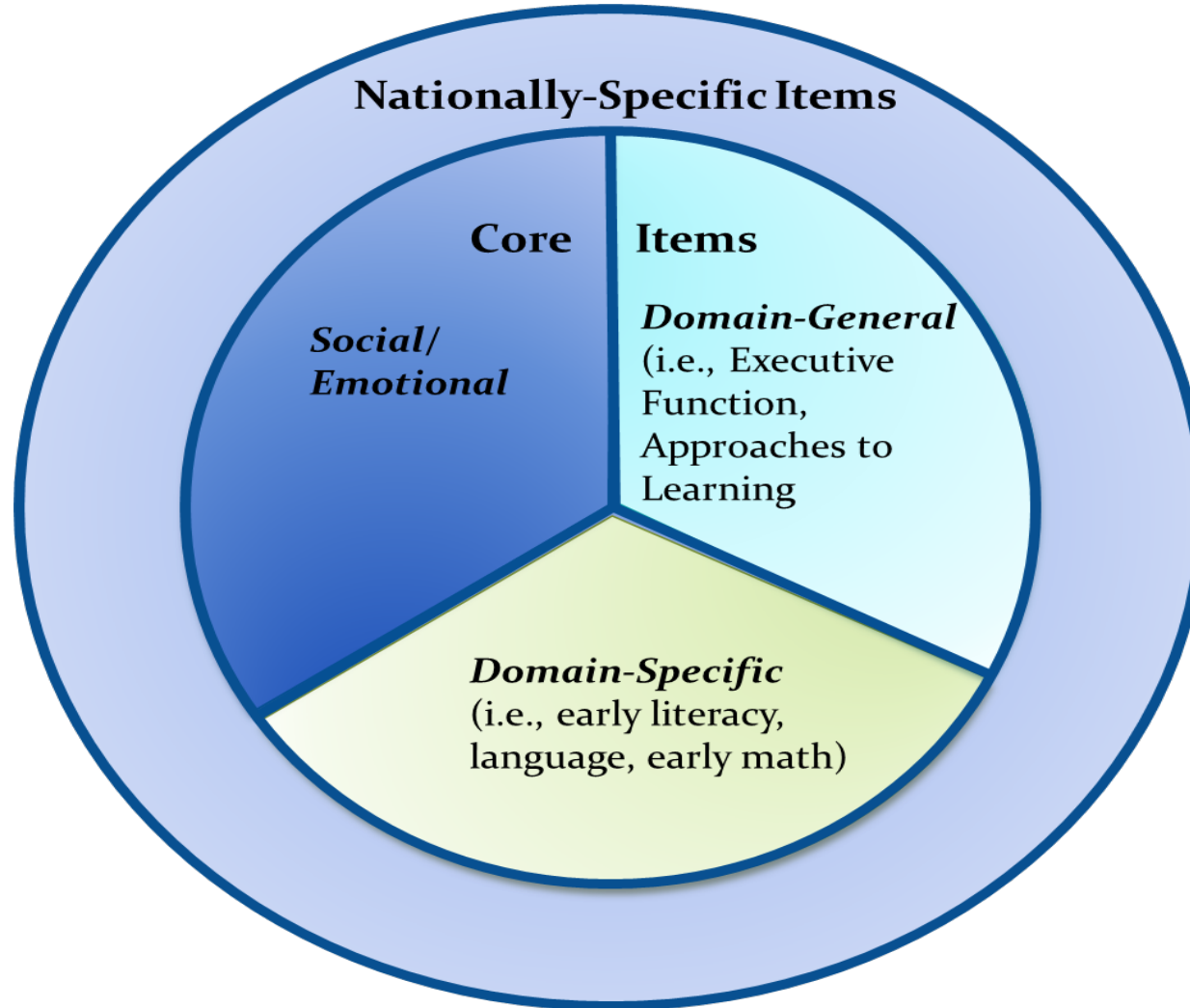
Common Items

NGO Efforts

WCARO



Framework for Child Development/Learning



What is included in the MELQO instruments?

CHILD DEVELOPMENT & LEARNING

Teacher Interview

Parent Interview

Direct Learner
Assessment

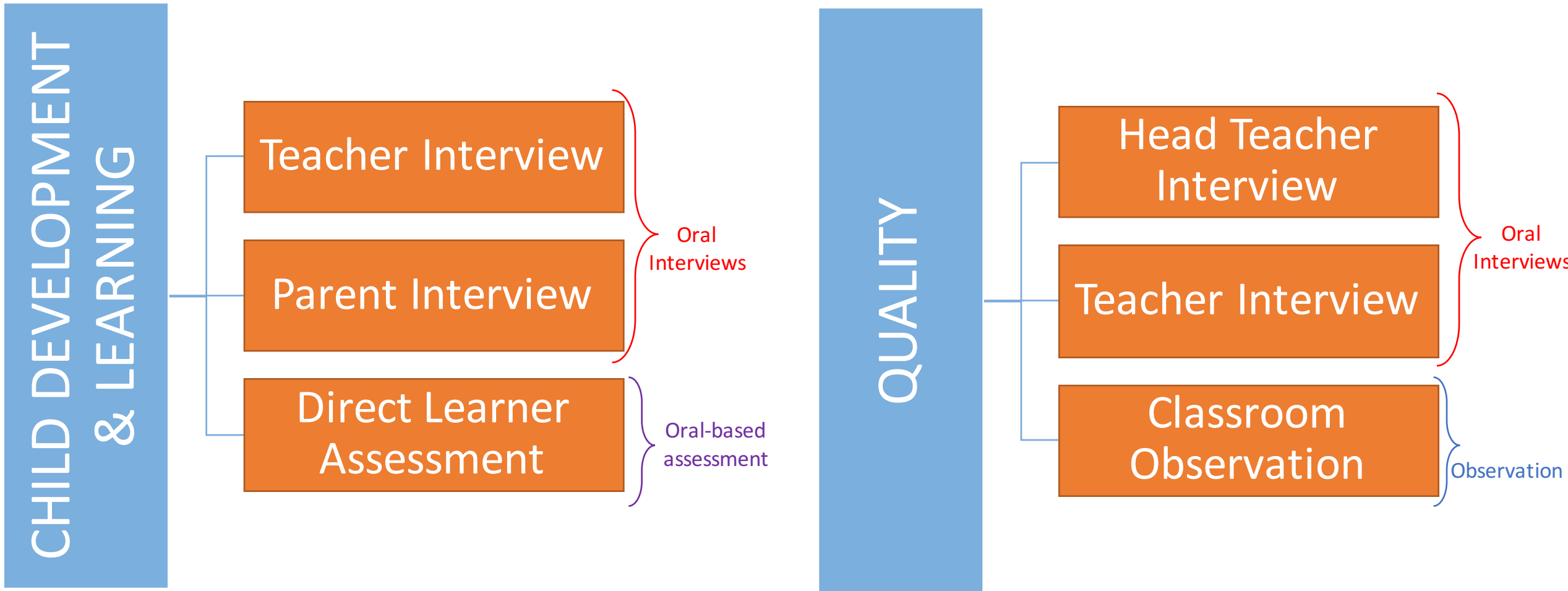
QUALITY

Head Teacher
Interview

Teacher Interview

Classroom
Observation

How is information gathered?



Construct Items: Mathematics

Domain	Construct	TCR-parent	TCR	DA
Mathematics	Number & Operations	How high can child count?	How high can child count?	Verbal Counting
		Count out Objects from Larger Set (3, 6, 14)	Count out Objects from Larger Set (3, 6, 14)	Producing A Set
		Number Identification	Number Identification	Number Identification
		Mental Addition	Mental Addition	Addition with Two Sets
		Quantitative Comparison of Two Sets	Quantitative Comparison of Two Sets	Quantitative Comparison of Two Sets
	Measurement	Measurement Vocabulary (largest, smallest, longest, shortest)	Measurement Vocabulary (largest, smallest, longest, shortest)	Measurement Vocabulary
		Mental size comparison (taller)	Mental size comparison (taller)	
		Mental weight comparison (heavier)	Mental weight comparison (heavier)	
		Time (Yesterday, Today, Tomorrow)	Time (Yesterday, Today, Tomorrow)	
	Spatial Sense	Spatial Vocabulary	Spatial Vocabulary	Spatial Vocabulary
		Spatial Visualization	Spatial Visualization	Spatial Visualization
		Shape Naming	Shape Naming	Shape Naming

Construct Items: Language/Literacy

Domain	Construct	TCR-parent	TCR	DA
Literacy	Motivation	Would you say (name) is interested in reading (inquisitive/curious about the meaning of printed material)?	Would you say (name) is interested in reading (inquisitive/curious about the meaning of printed material)?	
	Expressive Language	Can (name) communicate his/her own needs/what s/he wants in a way understandable to adults and peers?	Can (name) communicate his/her own needs/what s/he wants in a way understandable to adults and peers?	Name animals
				Names food or market items
	Phonological Awareness			Initial sound discrimination
				Initial sound identification
	Familiarity with Print Concepts			Child opens book right side up, to right page, points to part of text
	Alphabet Knowledge	Letter name identification	Letter name identification	Letter name identification
	Listening Comprehension	Can (name) understand on first try what is being said to him/her?	Can (name) understand on first try what is being said to him/her?	Responds to comprehension questions associated with story

Site	Sample Size	Purpose for Data Collection	Instrument/Version	Partners
Mongolia	533 (4, 5 6 year olds)	World Bank project on pre-primary education	Teacher report and DA	World Bank; Save the Children
Tanzania	209 (average age about 5.5 years) for Direct Assessment; 199 teacher and 72 parent	UNICEF partnership to measure at population-level to inform policy	Teacher report, parent report, and DA	RTI; UNICEF
Laos	200 (3, 4, 5, 6, 7 year olds)	World Bank project	Teacher report and DA	World Bank; Sally Brinkman
Bangladesh	463 (mostly 4, some 5 year olds)	Save the Children project	Parent report and DA	Save the Children
Kenya	300 (4, 5, 6, 7 year olds; most 5 or 6 years)	RTI project	DA only	RTI
Madagascar	200 (4 to 6 year olds)	World Bank project	Parent and teacher report only	World Bank
Sudan	166 (3 to 6; mostly 4/5)	World Bank project	DA only	World Bank; Tricia Kariger

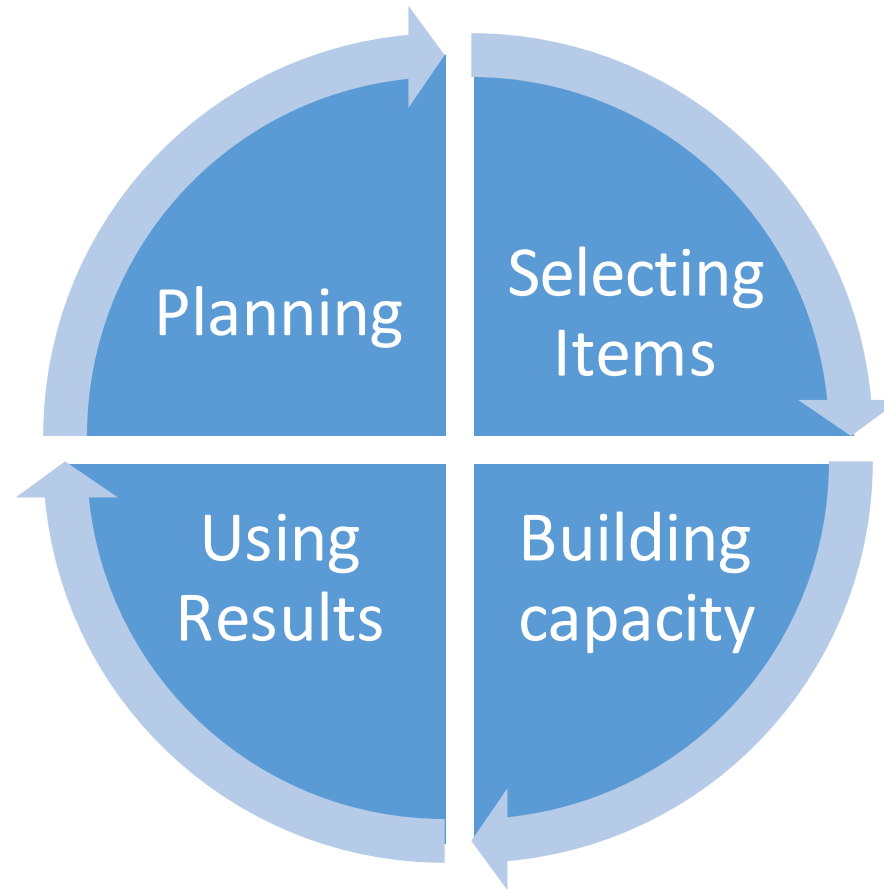
Summary of Results So Far ...

- Math, early literacy and executive function can be measured
- Teachers, parents and direct assessment of children are all valid ways to learn about children
 - But they do not always agree with one another
- Math and executive function may be easier to measure across countries

Adapting Items is Critical

- Some items are relevant across countries
 - For example: Asking children to count as high as they can (early math); and being able to remember things (early executive function)
- Others may vary based on country
 - For example: Is it appropriate for children to ask many questions in class, or is that not considered appropriate?

Four Main Questions



Themes and Questions

- What information on children's learning and development is most useful for informing policy choices?
- How can items be adapt to meet cultural expectations for children's development?
- What capacity is required to successfully carry out assessment, and how can we build on existing capacity?