

# **The the challenges of monitoring Learning Outcomes in the SDG Early Grades Reading**

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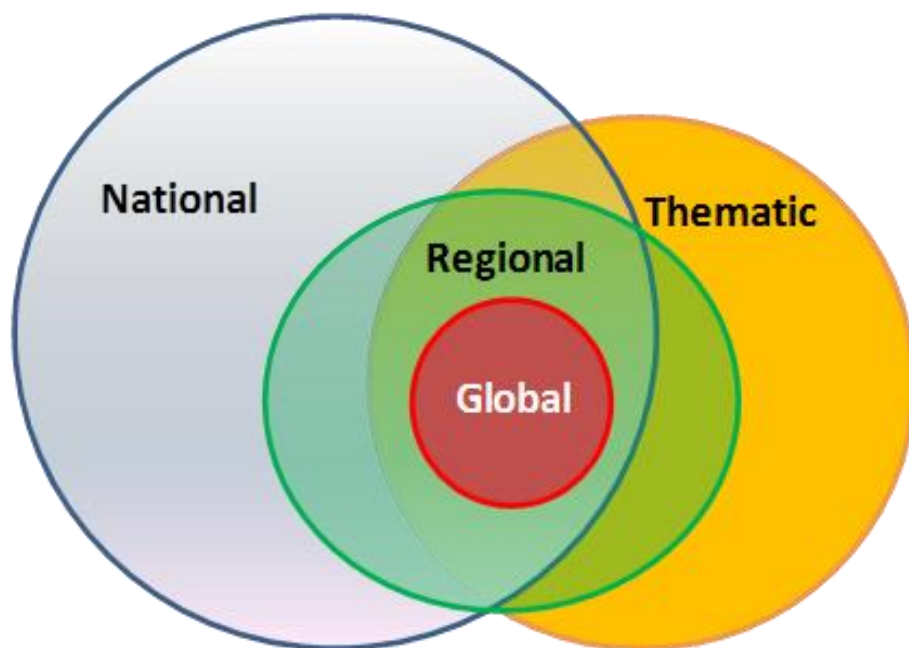
# 1. The new global education agenda at a glance



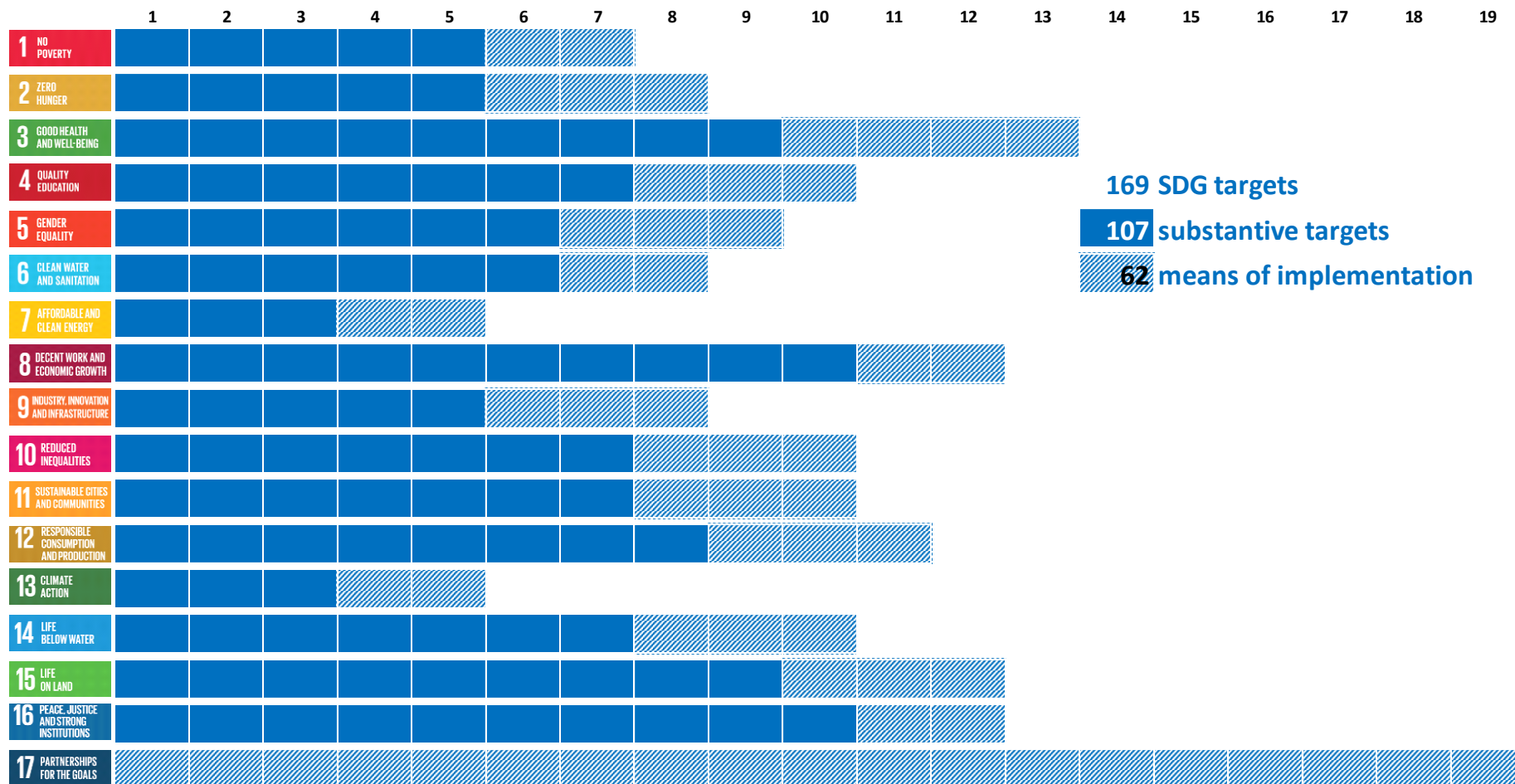
# Different levels of SDG monitoring

But also different dimensions:

- Subnational
- Tier system
- Official vs non-official
- Institutional and contextual quality



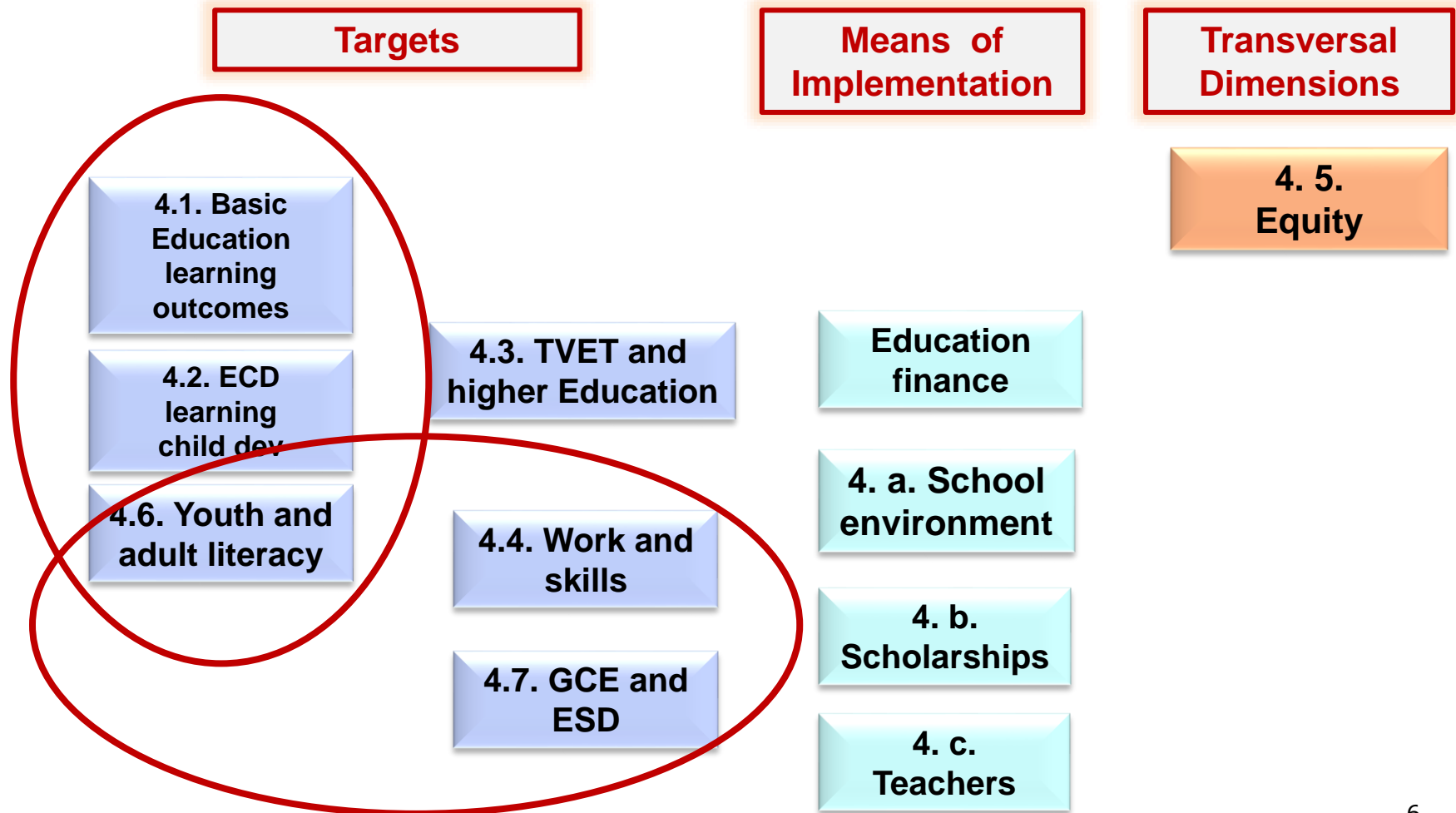
# 17 goals, 169 targets ...



# Education global priorities from MDGs to SDGs

Education	MDG (Goals 2,3)	SDGs (Goal 4)
Duration	2000-2015	2015-2030
Who defined targets/indicators	International organisations	Member states
Scope	Universal primary completion and gender parity	Learning through life-course focus on outcomes and equity
No. of targets	2	10
No. of indicators	4+ disaggregation	11+ disaggregation
Thematic Indicators	18	43

# Complexity of the SDG4: 11 Indicators for a Life Cycle Approach to Education and Skills



# Early Grade: first target, first indicator

## TARGET

**4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes**

Learning	1. Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex	<b>Global indicator (4.1.1)</b>
	2. Administration of a nationally-representative learning assessment; (i) in primary education, (ii) at the end of primary and (iii) at the end of lower secondary	

## 2. How is data been collected to date?





# Reporting progress on Learning Outcomes: What does it take?

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- Measurement, data, on outcomes
- Focus on a well-defined outcome
- Repeated measurement
- Harmonize different metrics and methods but
- Reported on a global comparable scale
- Used for baseline and importantly for feedback

# What is been measured by countries?

Data required to monitor SDG indicators by grade (%)

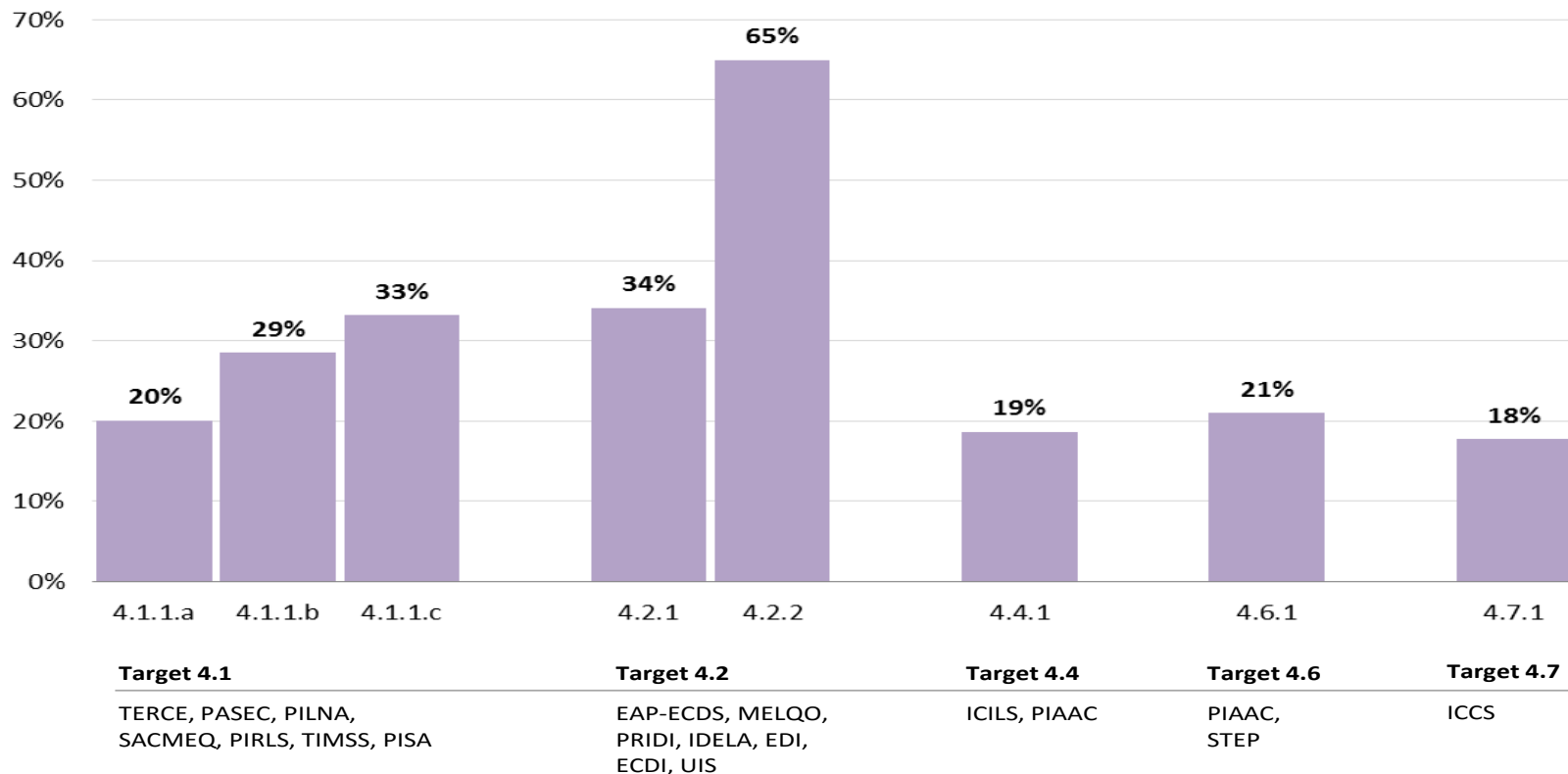
<b>Reading</b>	Grade 2 or 3	End of primary education	End of lower secondary education
Asia and the Pacific	47	50	42
Arab States	47	65	65
Latin America and the Caribbean	81	69	62
Sub-Saharan Africa	80	68	33
<b>All regions</b>	<b>65</b>	<b>62</b>	<b>46</b>
<b>Mathematics</b>	Grade 2 or 3	End of primary education	End of lower secondary education
Asia and the Pacific	42	58	47
Arab States	41	71	65
Latin America and the Caribbean	77	81	62
Sub-Saharan Africa	65	68	43
<b>All regions</b>	<b>57</b>	<b>68</b>	<b>51</b>

Source: UIS Global Educational Digest

<http://www.uis.unesco.org/Education/Pages/uis-sustainable-development-data-digest.aspx>

# Sound but still insufficient coverage of cross national assessments

Share of countries with a cross-national assessment administered in the last 5 years



# Learning from all (why we need diversity in metrics?)

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- Lessons drawn from the Oral Reading Assessment
- More than 30 organizations and 50 contributors worldwide
  - Provides insights on how to reach consensus while serving own interests
  - Focus on providing insights between cultural specificities and global comparability
  - Parsimony

Source: UIS What works in Oral Reading assessments?

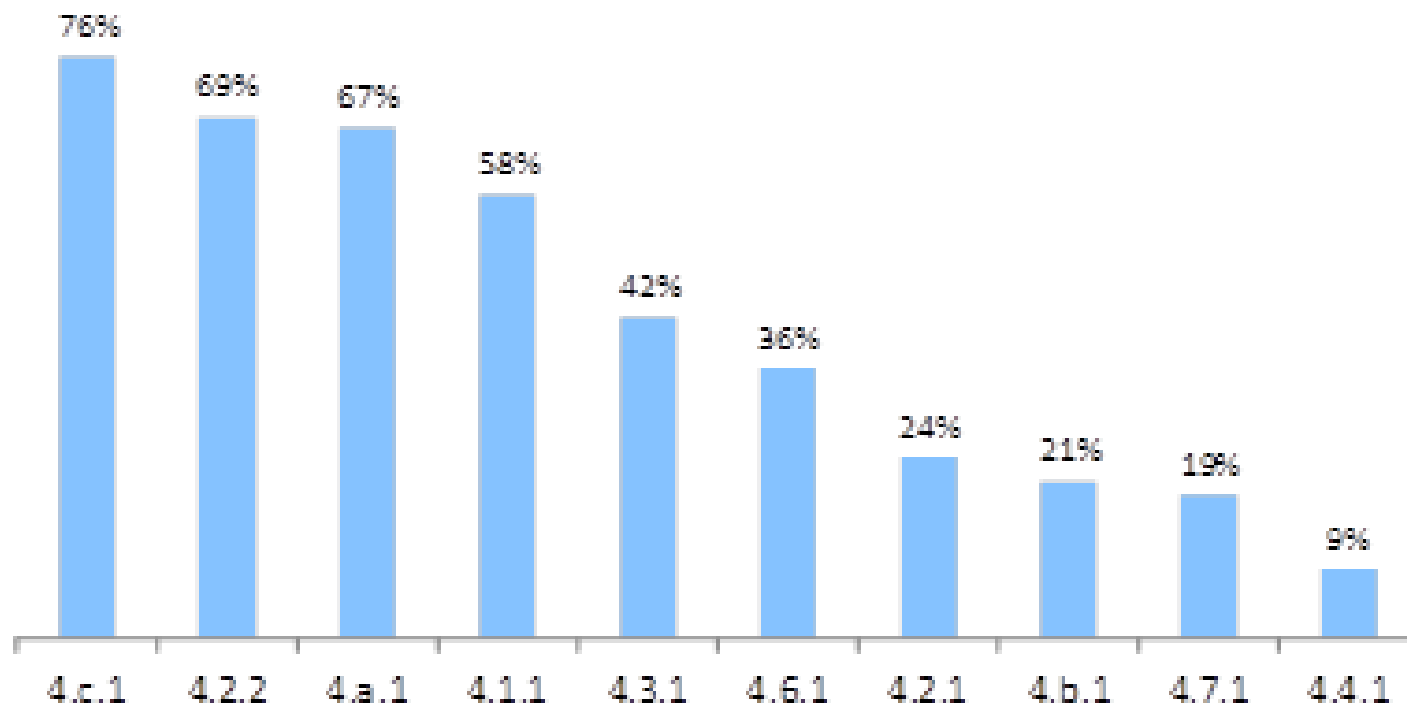
<http://www.uis.unesco.org/Education/Documents/what-works-oral-reading-assessments<sup>1,2</sup>.pdf>

# Comparability and why is important

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- Drive policy reform and help allocate resources to improve learning across all population groups
- An effective approach towards benchmarking the performance of education systems
- Respond to demands of national development goals e.g., learning, disaggregated data on disadvantaged populations

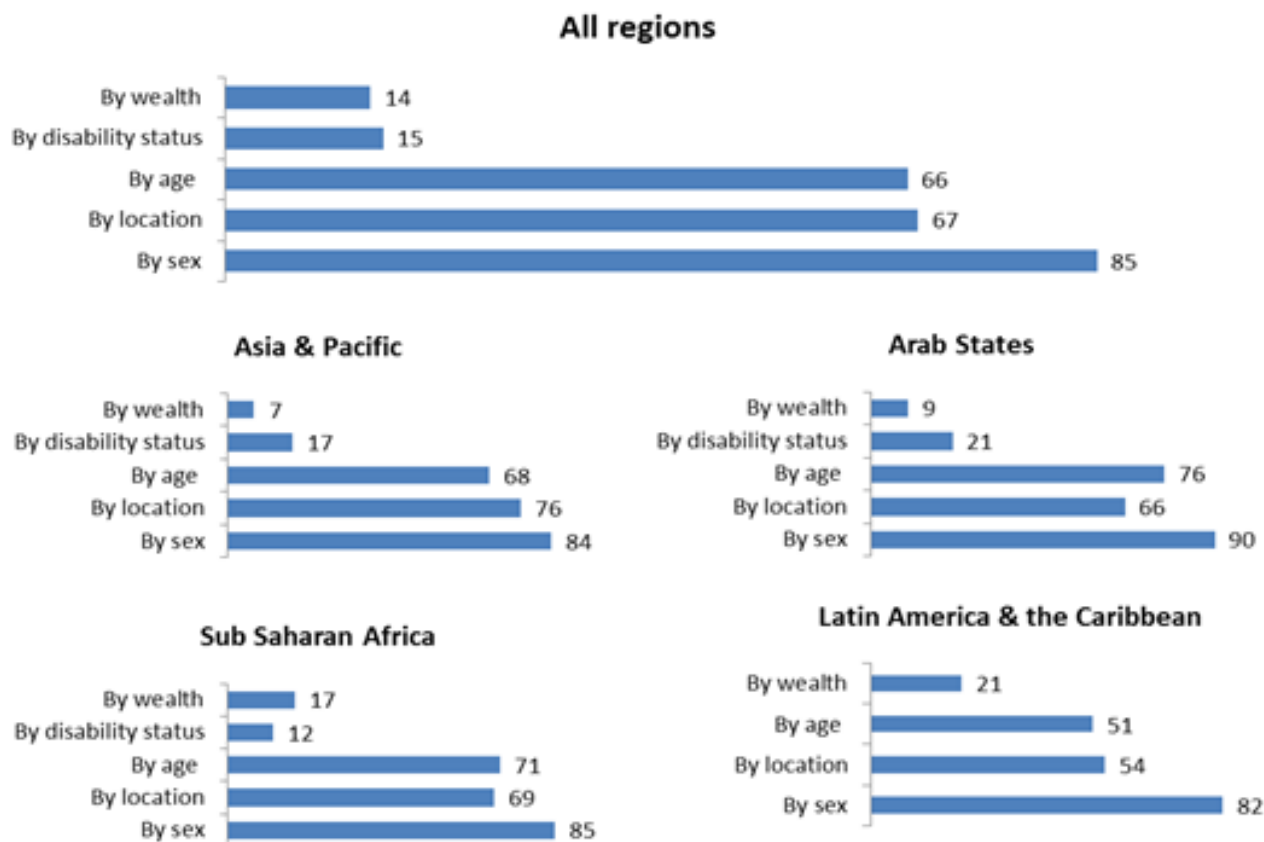
# Mapping Different Capacities



Source: UIS Global Educational Digest

<http://www.uis.unesco.org/Education/Pages/uis-sustainable-development-data-digest.aspx>

# To report on disaggregated data

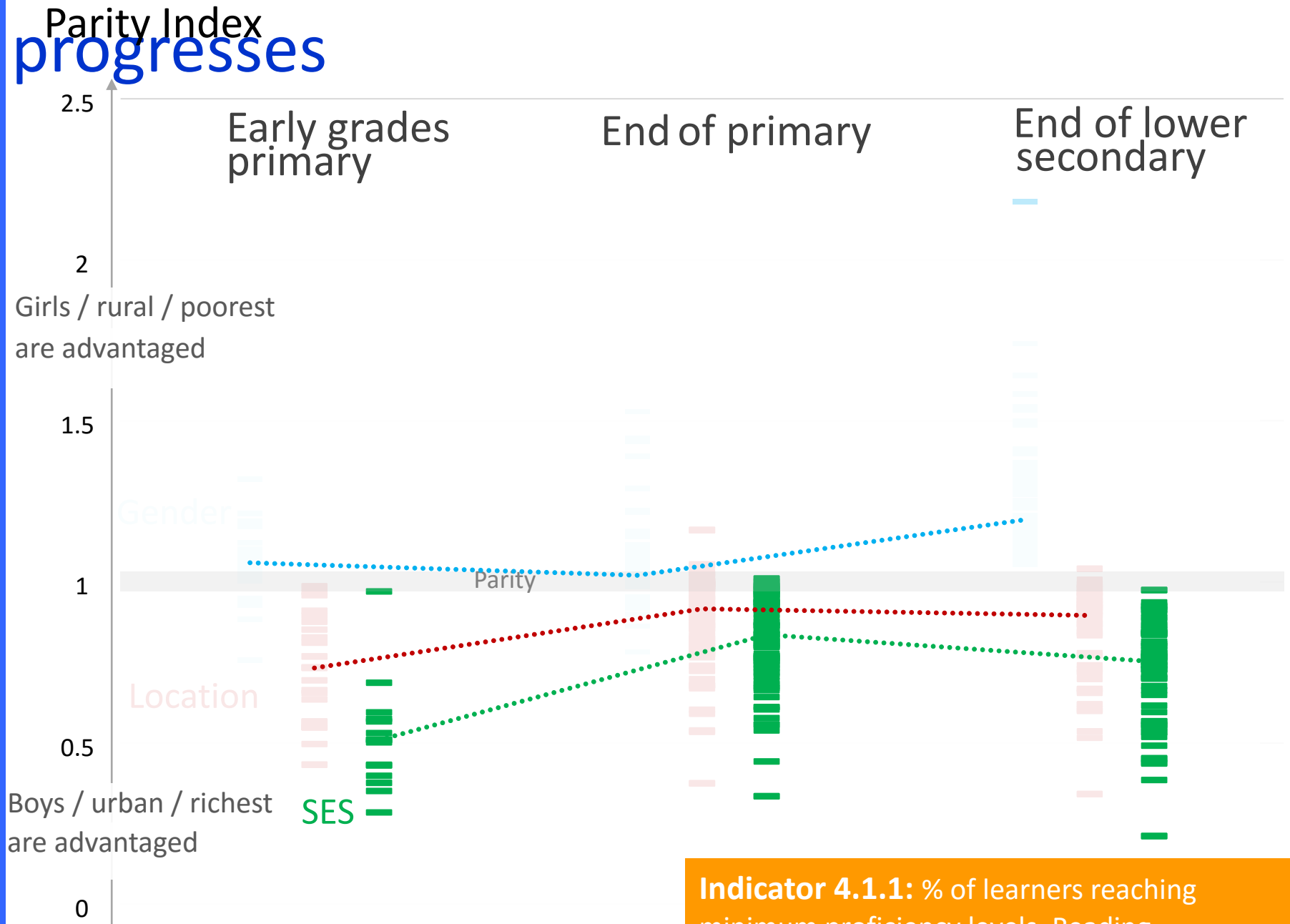


Source: UIS Global Educational Digest

<http://www.uis.unesco.org/Education/Pages/uis-sustainable-development-data-digest.aspx>

# Why to care? LO disparities as cycle progresses

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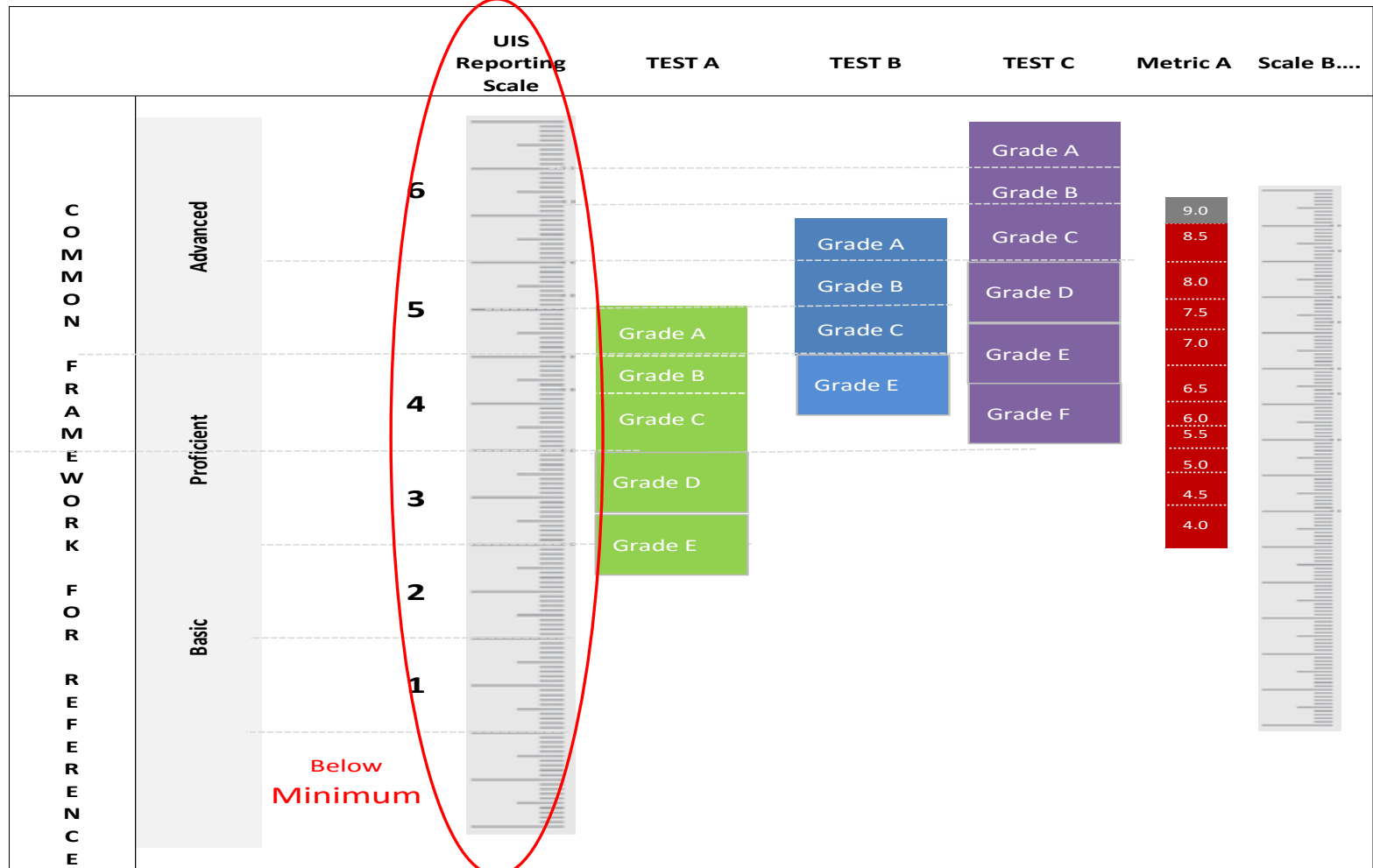




### 3. The challenges of reporting on learning progress



# Is the challenge to report in one scale?



# Looks like a more complicated problem to address

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<b>Content framework</b>	<ul style="list-style-type: none"><li>• Assessments vary in terms of content coverage for the assessed grade</li><li>• Definition of domains differ</li></ul>
<b>Type of items and assessment format</b>	<ul style="list-style-type: none"><li>• Assessment format differ across national assessments</li></ul>
<b>Target population</b>	<ul style="list-style-type: none"><li>• Assessments can be conducted at different grades. some countries assess</li><li>• The duration of schooling may vary by country</li></ul>
<b>Data modelling and reporting</b>	<ul style="list-style-type: none"><li>• Some countries use sophisticated statistical models, like the item response theory to scale and report scores</li><li>• Others use simple descriptive statistics, like proportion correct scores</li></ul>
<b>Contextual Information</b>	<ul style="list-style-type: none"><li>• Contextual information is usually collected during national or cross-national assessments through in-school assessments or household surveys</li><li>• The information collected varies</li></ul>

Source: UIS Global Educational Digest

<http://www.uis.unesco.org/Education/Pages/uis-sustainable-development-data-digest.aspx>

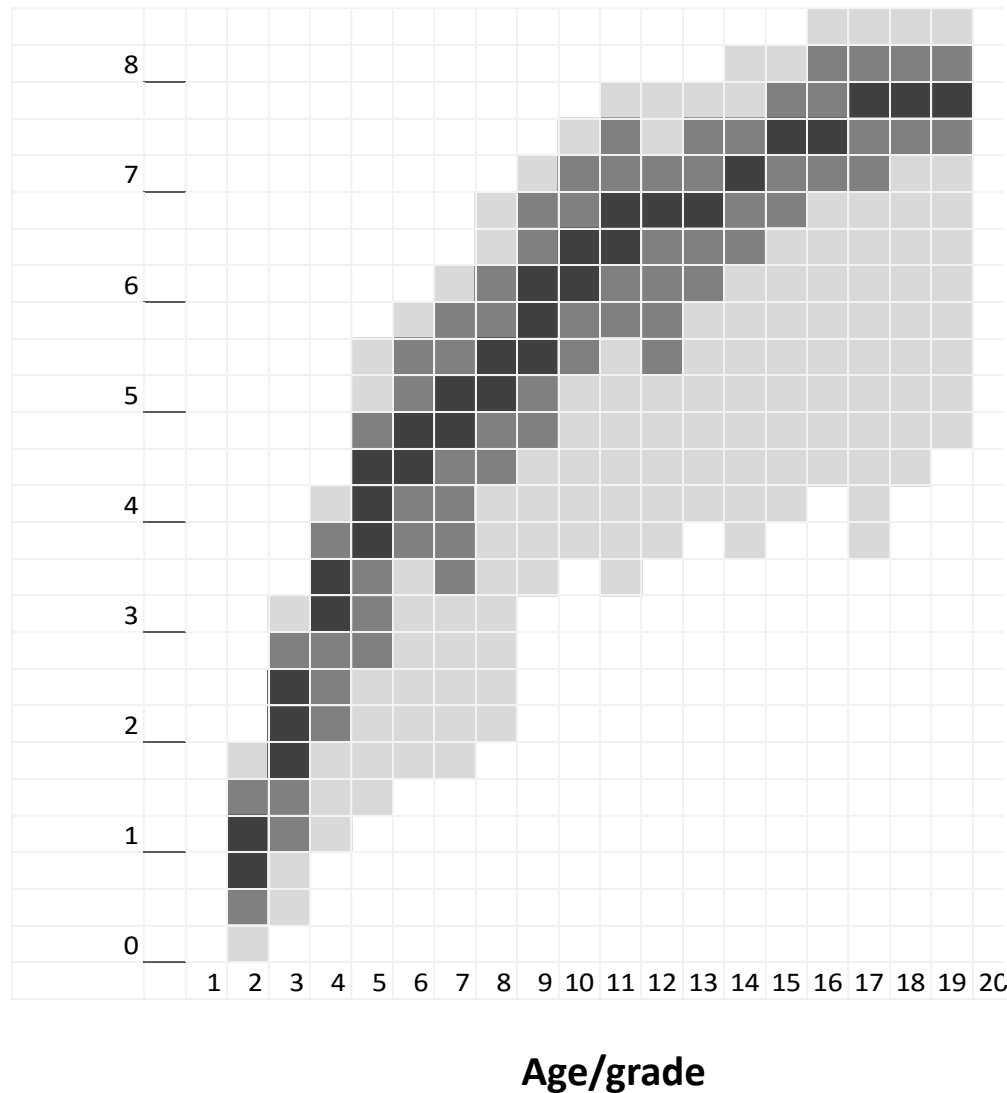
# Advantages and steps towards a Learning Curve

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- Value Added
  - All exams report on the same scale
  - Making it easy to understand how performance on one exam relates to performance on another
- Empirically find a global learning scale
  - Take per grade the frameworks and map the contents and abilities evaluated
  - Build a continuum with the abilities/skills/contents evaluated at each

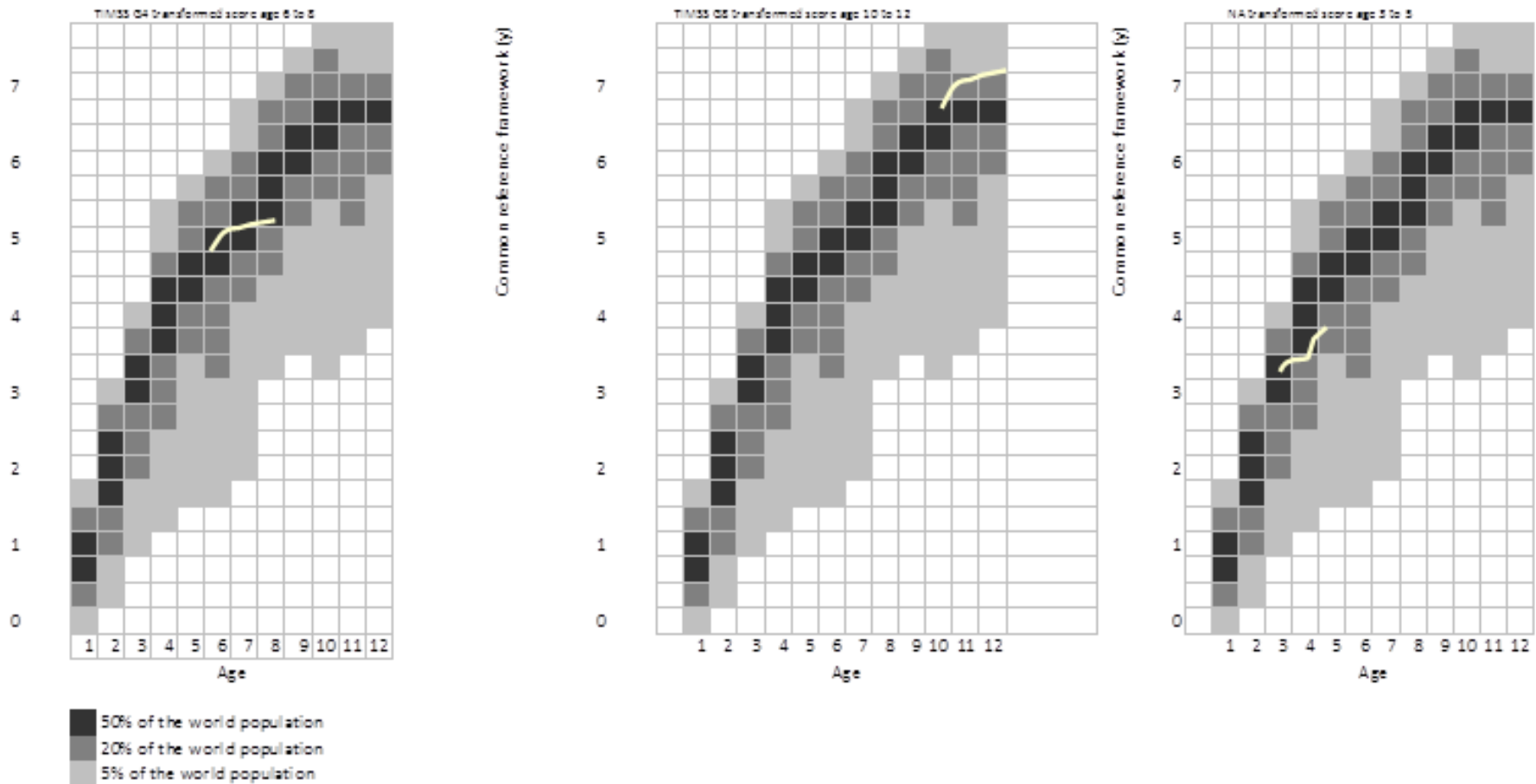
# Or to agree on a Learning Curve and allow diversity?

Skills  
Contents



SDG  
reporting  
scale

# Fitting into a learning scale



# How to solve old and new problems?: the provision of a global public good

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1. With professional standards: aligned with statistical principles and processes
2. With clear output or indicators with their needed metrics have already been set at the global and thematic level
3. But still have to respond to specific data needs established by countries and the international community
4. Coordinated and within the work from an institutional setting that has the mandate: goodwill is and acceptance is not enough

# Building bridge between measuring, reporting and policy making..

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- ▣ Mapping the policy and data landscape
  - Map policy priorities and the tools needed to monitor them
  - Assess quality of all data sources using existing frameworks
- ▣ Developing the right tools
  - ▣ Document common standards and definitions for indicators
- ▣ Need to work on demand that comes from need for informed decisions:
  - Data literacy
  - Data for management
- ▣ Capacity for action - mobilising partners and stakeholders
  - Advocate for improved data
  - Share good practices in measurement and use
- ▣ Ensuring impact on policy – data that make a difference



# Thank You



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# Indicators of the thematic framework

## 4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes

Learning	1. Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex	1 is global indicator (4.1.1)
	2. Administration of a nationally-representative learning assessment (i) in primary education, (ii) at the end of primary and (iii) at the end of lower secondary	
Completion	3. Gross intake ratio to the last grade (primary, lower secondary)	
	4. Completion rate (primary, lower secondary, upper secondary)	
Participation	5. Out-of-school rate (primary, lower secondary, upper secondary)	
	6. Percentage of children over-age for grade (primary, lower secondary)	
Provision	7. Number of years of (i) free and (ii) compulsory primary and secondary education guaranteed in legal frameworks	

## 4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education

Readiness	8. Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex	<b>8 is global indicator (4.2.1)</b>
	9. Percentage of children under 5 years of age experiencing positive and stimulating home learning environment	
Participation	10. Participation rate in organized learning (one year before the official primary entry age), by sex	<b>10 is global indicator (4.2.2)</b>
	11. Gross pre-primary enrolment ratio	
Provision	12. Number of years of (i) free and (ii) compulsory pre-primary education guaranteed in legal frameworks	

### 4.3. By 2030, ensure equal access for all women and men to affordable quality, technical, vocational and tertiary education, including university

Participation	13. Gross enrolment ratio for tertiary education	
	14. Participation rate in technical-vocational education programmes (15- to 24-year-olds)	
	15. Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex	<b>15 is global indicator (4.3.3)</b>

#### 4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

Skills	16.1. Percentage of youth/adults who have achieved at least a minimum level of proficiency in digital literacy skills	
	16.2. Proportion of youth and adults with ICT skills by type of skill	<b>16.2 is global indicator (4.4.1)</b>
	17. Adult educational attainment rates by age-groups and levels of education	

## 4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations

<b>Equity cross targets</b>	Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict affected as data become available)	<b>Global indicators (4.5.1)</b>
<b>Policy</b>	18. Percentage of students in primary education whose first or home language is the language of instruction	
	19. Existence of explicit formula-based policies which aim to reallocate education resources to disadvantaged populations	
	20. Education expenditure per student by level of education and source	
	21. Percentage of total aid to education allocated to low-income countries	

## 4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy

Skills	22. Percentage of the population of a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex	<b>22 is global indicator (4.6.1)</b>
	23. Youth / adult literacy rate	
Provision	24. Participation rate of youth/adults in literacy programmes	



## 4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development

Provision	25. Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment	<b>25 is global indicator (4.7.1 and 12.8.1)</b>
Knowledge	26. Percentage of students of a given age group (or education level) showing adequate understanding of issues relating to global citizenship and sustainability	
	27. Percentage of 15-year-old students showing proficiency in knowledge of environmental science and geoscience	
	28. Percentage of schools that provide life skills-based HIV and sexuality education	
	29. Extent to which the framework on the World Programme on Human Rights Education is implemented nationally (as per UNGA resolution 59/113)	

## 4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all

Resources	30. Proportion of schools with access to (i) basic drinking water; (ii) single-sex basic sanitation facilities; and (iii) basic handwashing facilities (as per the Water, Sanitation and Hygiene for All (WASH) indicator definitions	<b>30, 31 and 32 are global indicator (4.a.1)</b>
	31. Percentage of schools with access to (i) electricity (ii) Internet access for pedagogical purposes and (iii) computers for pedagogical purposes	
	32. Percentage of schools with adapted infrastructure and materials for students with disabilities	
Environment	33. Percentage of students experiencing bullying, corporal punishment, harassment, violence, sexual discrimination and abuse	
	34. Number of attacks on students, personnel and institutions	

**4.b By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries**

Resources	35. Number of higher education scholarships awarded by beneficiary country	
	36. Volume of official development assistance (ODA) flows for higher education scholarships by sector and type of study	<b>36 is global indicator (4.b.1)</b>

#### 4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States

Qualified	37. Percentage of teachers qualified according to national standards by education level and type of institution	
	38. Pupil-qualified teacher ratio by education level	
Trained	39. Proportion of teachers in: (a) pre-primary; (b) primary; (c) lower secondary; and (d) upper secondary education who have received at least the minimum organized teacher training (e.g. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country	<b>39 is global indicator (4.c.1)</b>
	40. Pupil-trained teacher ratio by education level	
Motivated	41. Average teacher salary relative to other professions requiring a comparable level of education qualification	
	42. Teacher attrition rate by education level	
Supported	43. Percentage of teachers who received in-service training in the last 12 months by type of training	