

Monitoring Learning Outcomes

Challenges and Opportunities in the 2030 Agenda

Silvia Montoya, PhD

6th IEA International Research Conference

Cape Town, South Africa

June 25th , 2015

Outline

- The political landscape: SDGs and the post-2015 agenda
- What do we know about national assessments?
- What do we know about the political economy of assessments?
- Monitoring learning outcomes in the SDGs
- The next steps

The UIS and the monitoring of international commitments

- Important role in the monitoring of the Education for All and the Millennium Development Goals
- The challenge of the new development agenda post-2015: the sustainable development goals
 - Equity, poverty
 - Includes more goals, targets and indicators
 - Areas not included before

The post-2015 agenda: the Sustainable Development Goals

- The post-2015 agenda explicitly recognizes poverty, inequality, food security, environmental sustainability and the realization of human rights as universal
- Sustainable development requires sustainable data
- More data is needed at a local level to help strategic planning, investing, follow-up, accountability
- **Paradigm shift:** national statistics on development must be based on disaggregated sub-national data

The post-2015 agenda: Complexities of the big data era

Inconsistent,
ineffective and
uninterpreted
data to serve
policy

Risk of
infobesity: too
much, dispersed
and bad quality
information

Measuring
complex
competencies in
a standardised
and helpful way

Policy makers do
not use data

The post-2015 agenda: Challenges

- ▣ Problems are diverse:
 - Lack of use of data to design, implement and assess policies
 - Misunderstanding of data and their use
 - Lack of infrastructures and skills of technical staff that difficult for sustainable statistical units

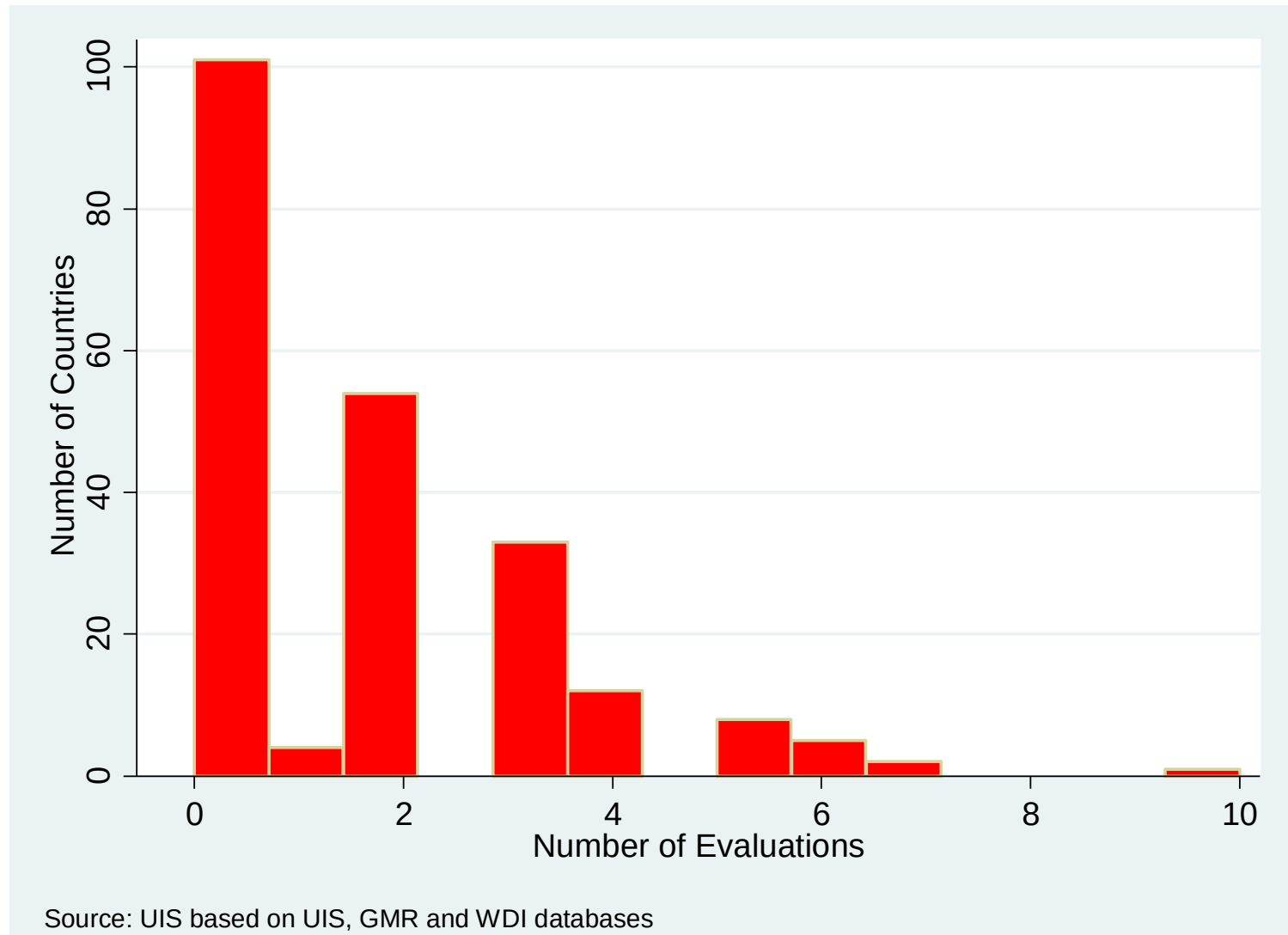
Context – learning levels

- Growing concerns about low levels of learning (despite improved access)
- Heterogeneity in the use of assessment as planning and monitoring tools
- Skepticism about the technical rigor of some assessment approaches or claims that
 - Countries have their own measures of learning
 - Other measures different from cognitive skill could be important

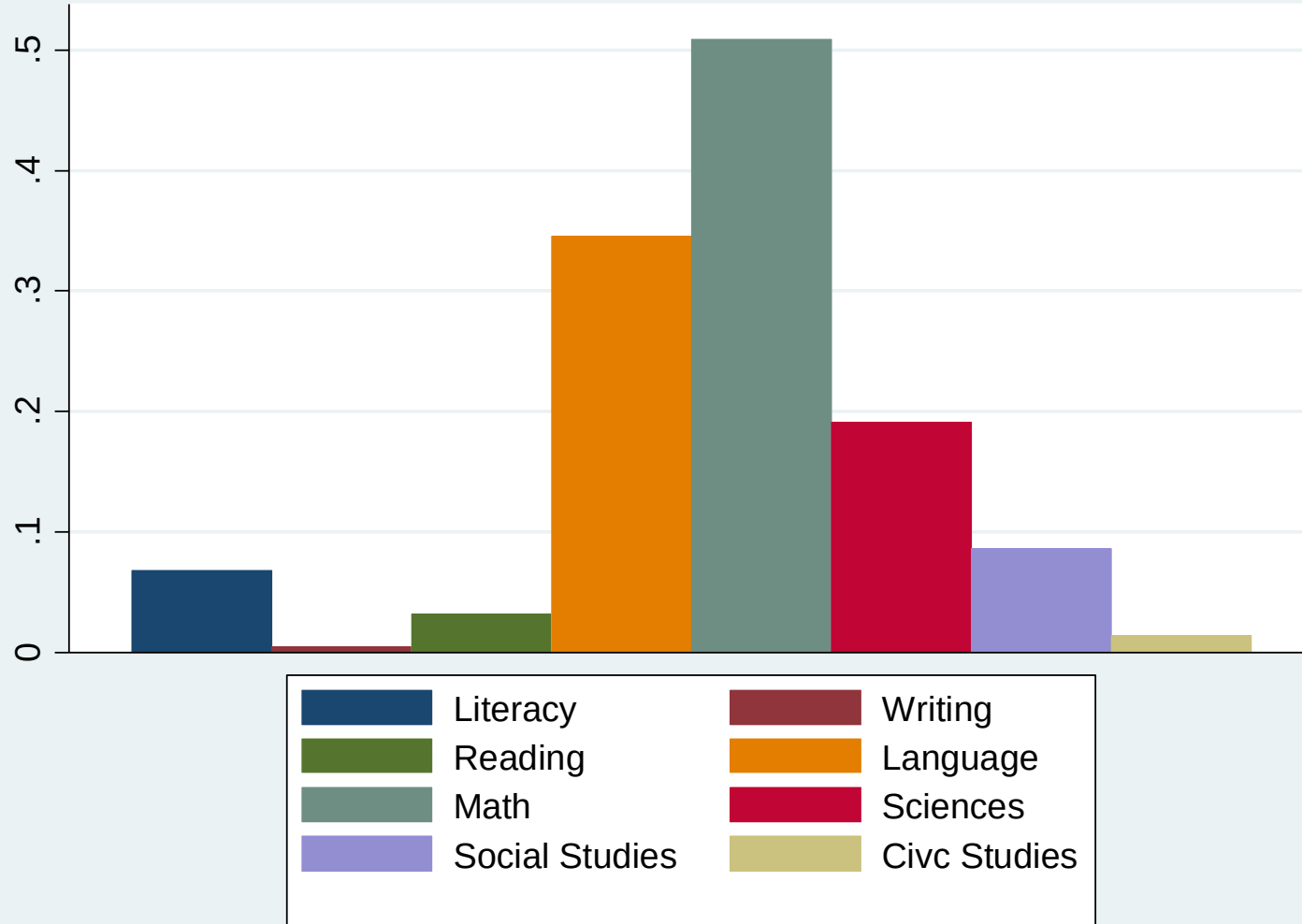
Outline

- The political landscape: SDGs and the post-2015 agenda
- What do we know about national assessments?
- What do we know about the political economy of assessments?
- Monitoring learning outcomes in the SDGs
- The next steps

Some countries do not have any national assessment

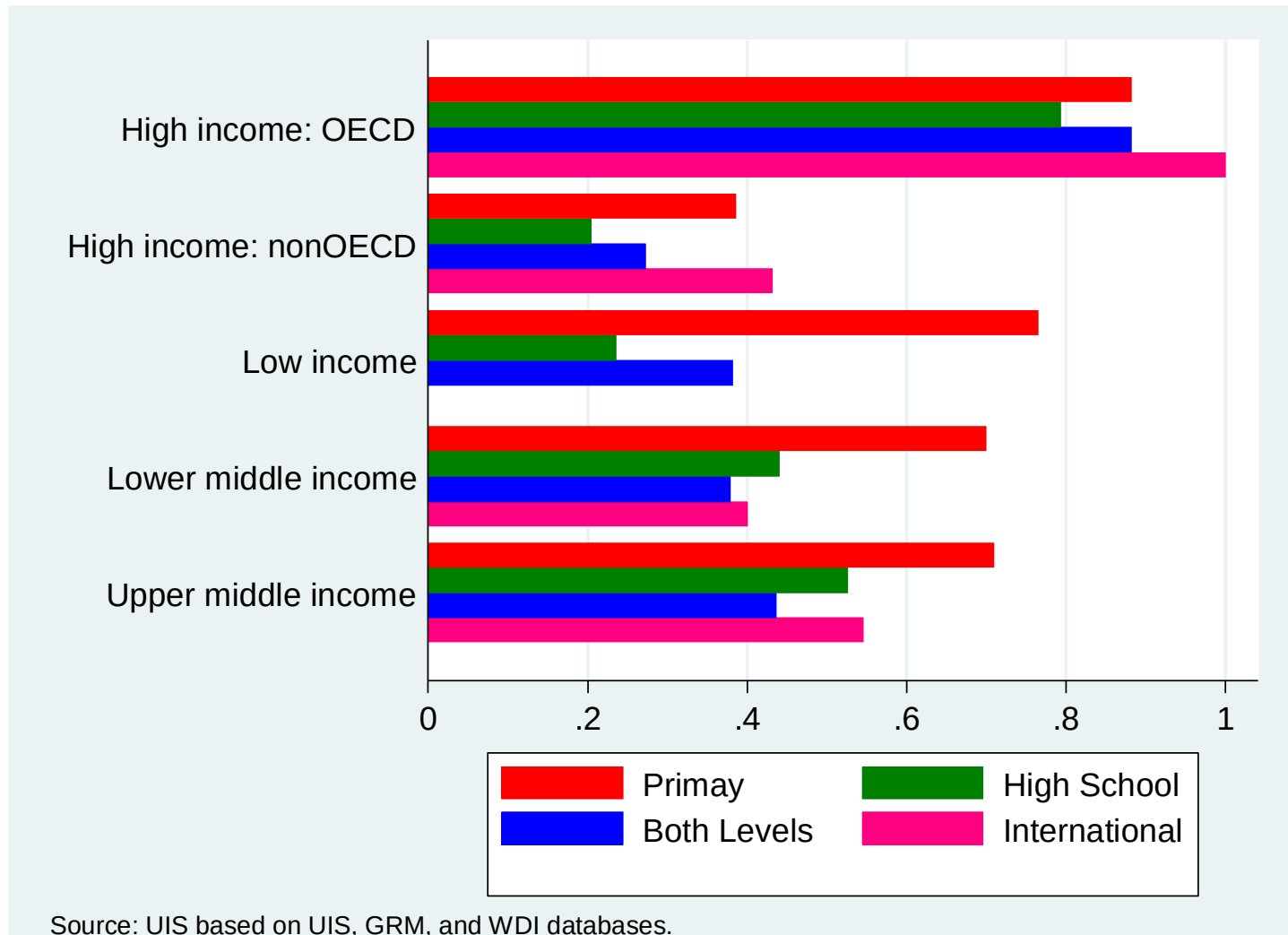


And there are some areas that are more assessed than others

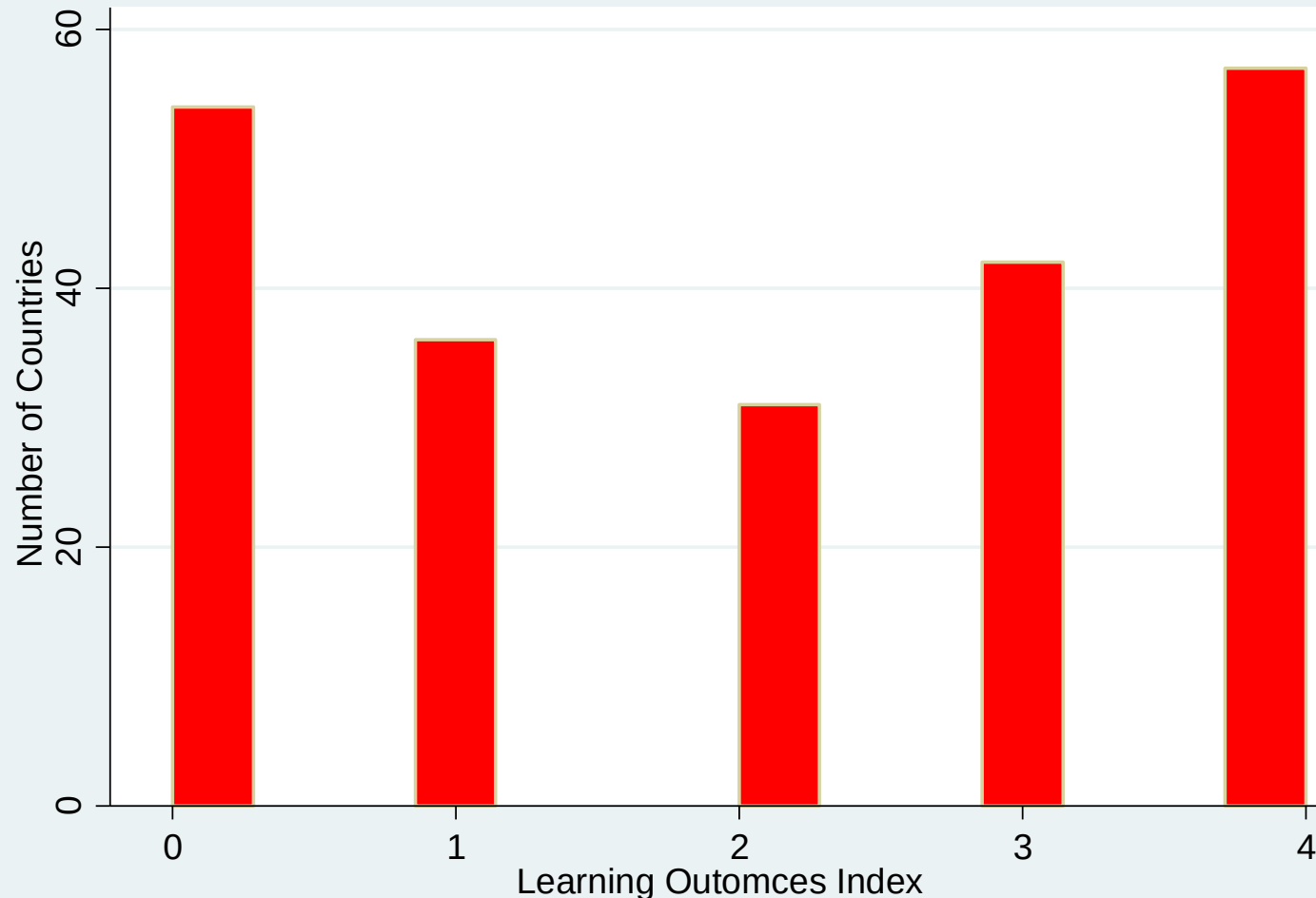


Source: UIS based on UIS, GMR and WDR databases.

There are evaluation as economy group increases

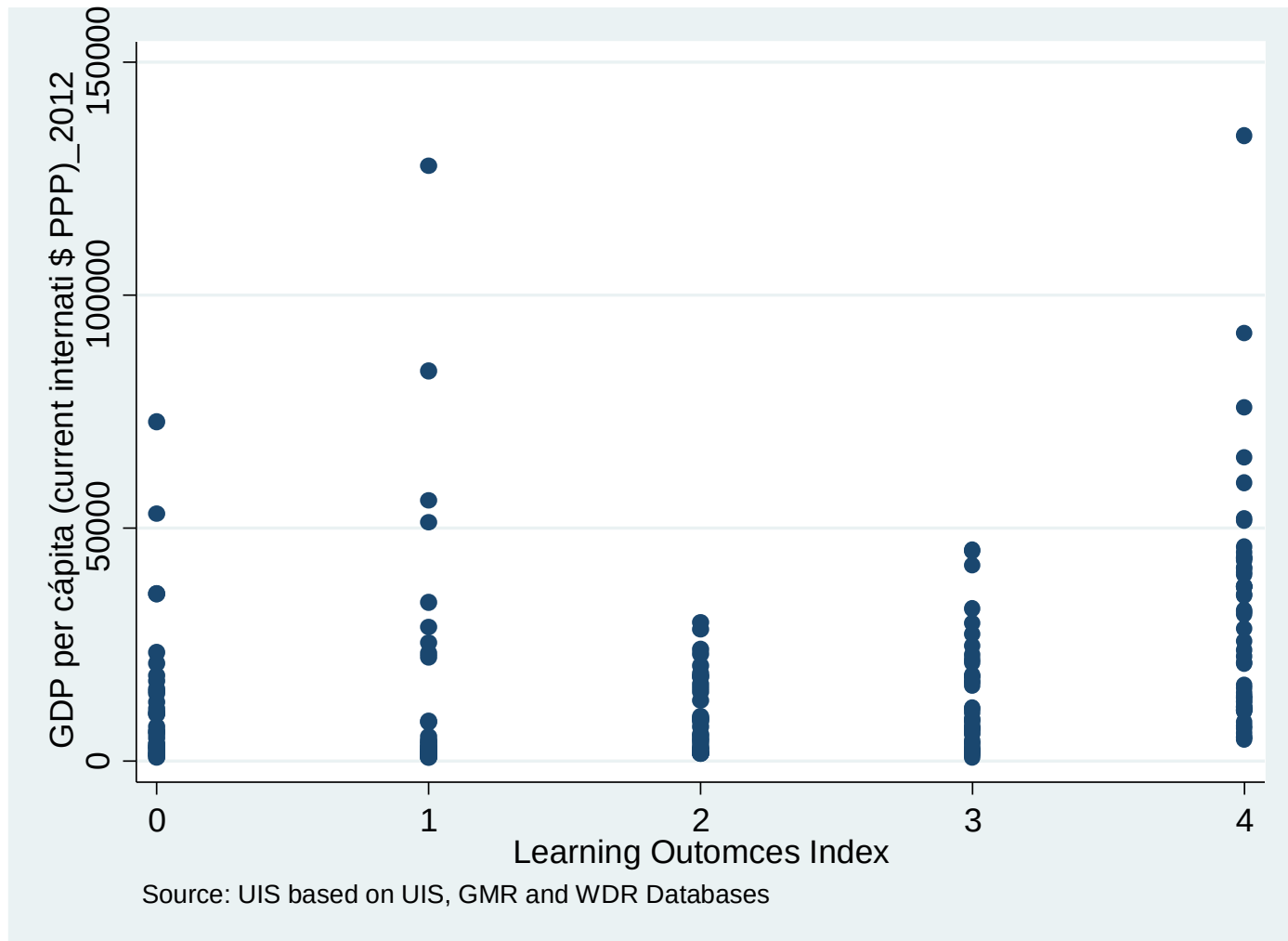


If transformed in index some countries get maximum level



Source. UIS based on UIS, GMR and WDI databases.

It does appear any strong correlation with income levels



But we do not know the characteristics

- Detailed information about assessment:
 - Purpose
 - Scope
 - Funders and other stakeholders
 - Test design
 - Coverage
 - Data reporting and use
- Except for some sources with
 - Detailed information about the culture of assessment in countries
 - Some reporting UIS catalogue of LO, Saber, OECD and some other efforts

Outline

- ▣ The political landscape: SDGs and the post-2015 agenda
- ▣ What do we know about national assessments?
- ▣ What do we know about the political economy of assessments?
- ▣ Monitoring learning outcomes in the SDGs
- ▣ The next steps

What do we know: The political economy of international assessments

- Psychometrics matters but...
 - Sampling, administration and operations are much bigger sources of error and bias
 - There is a need for a more quality assurance on these aspects
- Results are politically sensitive and at times difficult to handle: complacency does not belong only to the developing world.
- It is not only about methods: it is about sound policymaking

But we also know that there are business still unfinished

- Engaging stakeholders
- Communication
- Respecting Life cycle o data
 - Conceptual and methodological design
 - Data collection
 - Data Processing and Cross Check
 - Data Dissemination

And the need to migrate to data-based policy and practice (evidence based policy)

- Feeding decisions on educational policy and management.
- Modify behavior and there we have some challenges
 - We have a most of the time invisible problem whose effects wouldn't manifest until some time
 - That to improve depend on many factors and stake holders who most of the times are neglected in the conversation.
- Different approaches to tackle
 - You should do X : regulations and punishments
 - You should do X version B: incentives
 - A change in system and a culture where X is *“what we do?”*

A case data-based practice : Information for improvement: city of Buenos Aires 2012-2014

DGECE

Dirección General de Evaluación de la Calidad Educativa

SABER ES MEJORAR

Devolución de Información

Boletines



Tu Escuela



Inversión



IECEP



La Educación en Perspectiva



Sitio Web



Explorador interactivo de datos



El Estado de la Educación



Tu Comuna en Cifras



Fichas Supervisores



First Pillar: a comprehensive evaluation and educational data system

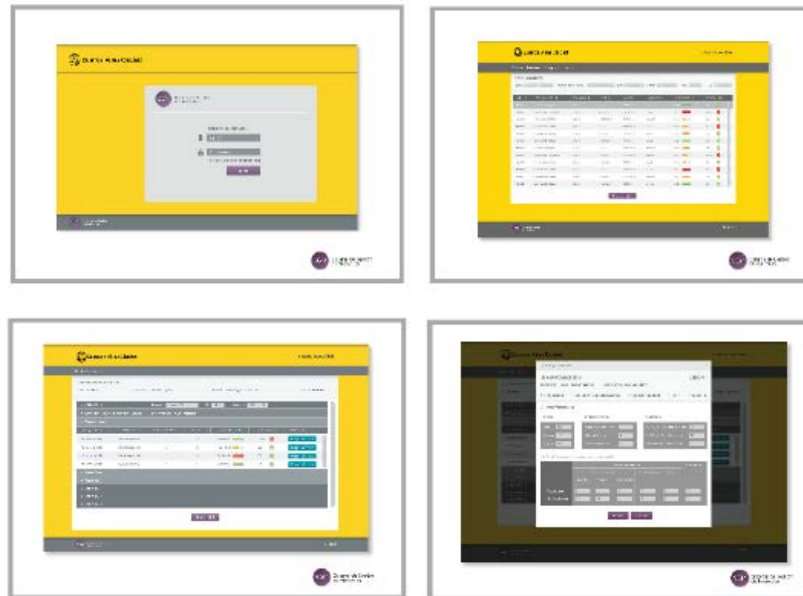
Student

- End of Primary and Secondary Education
- PISA 2012 and 2015 Oversample
- Digital Literacy test (ICILS)
- Citizenship and Civic Values (ICCS 2009 and 2016)
- Science and Math (TIMSS)
- Reading Literacy (PIRLS)
- School Readiness at 4/5 years olds
- Non Cognitive skills (Longitudinal Study -ESP/OECD)

Comprehensive Evaluation and Educational Data System (2)

- Adult
 - Adult Literacy (LAMP/UNESCO)
 - Adult Skills (PIAAC)
- School
 - Process Indicators
- Investment per School System for each category of spending and sector
- Teaching Practices and human capital diagnosis
- Impact Evaluation of main Ministry's initiatives

Changes in data collection tools: Online enrollment



Sistema de Gestión
de Matrículas

Institutional website: data explorer

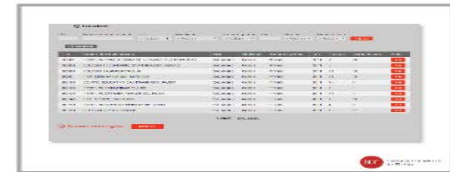
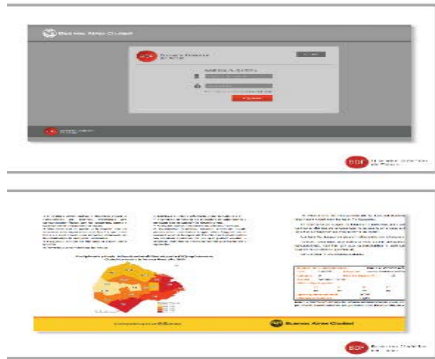


<https://equidadycalidadeducativa.buenosaires.gob.ar>



Sitio Web
DGECE

School Report Cards: first time

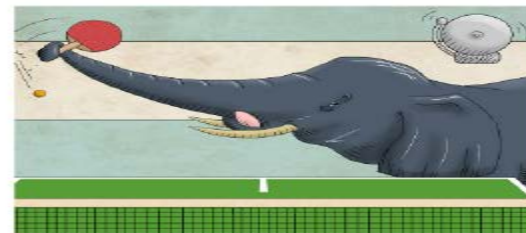
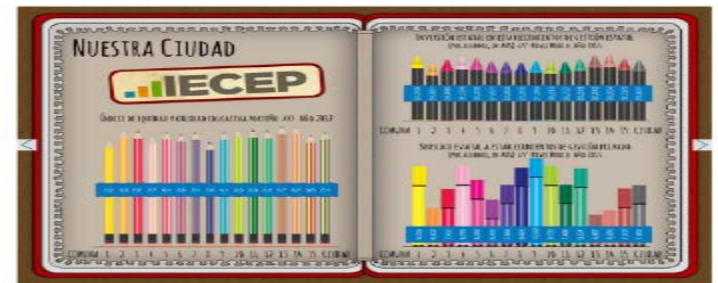


Buscador Dinámico
de Fichas

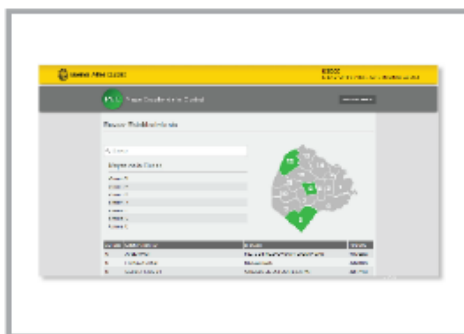
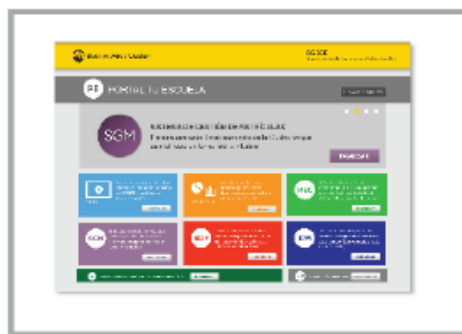
bdf.portaltuecuela.com.ar



www.mejoratuescuela.com.ar



Your school portal: school management



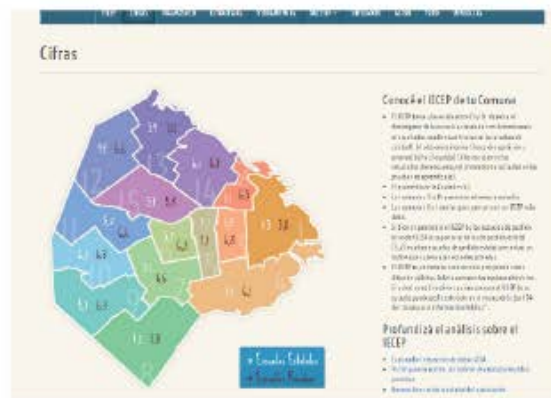
Portal Tu
Escuela

<http://portaltuescuela.com.ar/>

Improve your school with Astor



Índice de Calidad y Equidad de la Educación Porteña:
Simulador y estrategias para mejorar



www.mejoratu escuela.com.ar

Supporting Improvement: Astor helped to understand and simulate results

IECEP

INICIO | HELP | CERRAR | DIAGNÓSTICO | ESTRATEGIAS | HERRAMIENTAS | SIMULADOR | ASTOR | FORO | CONSULTAS

1 → 2 → 3

1. Buscá los resultados de tu escuela acá y acá y completá las variables.

2. Obtene el IECEP de tu escuela y comprendé su situación actual.

3. Lee consejos personalzados y armá un plan de acción para mejorar.

COMPLETÁ LOS RESULTADOS DE TU ESCUELA

TIPO DE ESCUELA
● PÚBLICA ○ PRIVADA

###.##
TASA DE PROMOCIÓN (%)

###.##
RENDIMIENTO LENGUA ALIO (%)

###.##
RENDIMIENTO LENGUA MEDIO (%)

###.##
COMPLEMENTO DE REPETICIÓN (%)

###.##
RENDIMIENTO MATEMÁTICA ALIO (%)

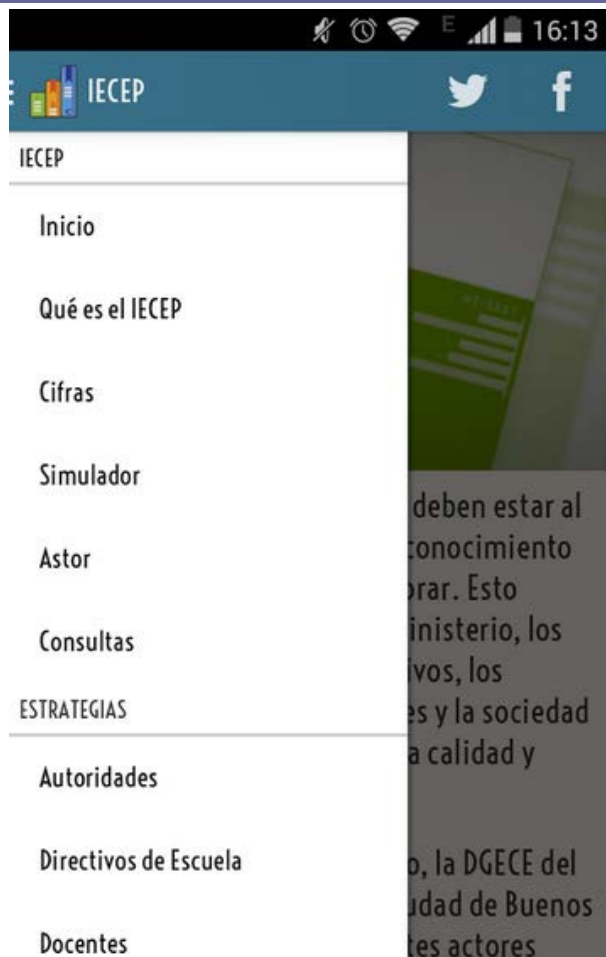
###.##
RENDIMIENTO MATEMÁTICA MEDIO (%)

Calcular IECEP

Índice de Equidad y Calidad de la Educación PtoRta | Dirección General de Evaluación de la Calidad Educativa

www.mejoratuescuela.com.ar

IECEP's App



Practice for tests with Astor

PRACTICÁ CON ASTOR: Ejercitación para alumnos

www.practicaconastor.com.ar

Buenos Aires Ciudad DGBCE
Dirección General de Evaluación de la Calidad Educativa

Matemática 7 / 40

7. Con referencia a la siguiente afirmación: "La altura que corresponde al lado desigual de un triángulo isósceles, divide al ángulo opuesto a ese lado por la mitad", y teniendo como ayuda la siguiente figura, ¿es la siguiente afirmación correcta? "La afirmación es verdadera porque se ve a simple vista."

Mostrar gráfico

☐ Sí

☐ No

Anterior Siguiente

Practicá para las pruebas internacionales TIMSS y jurisdiccionales FESBA y de Finalización del Nivel Primario

En este sitio podés practicar para las evaluaciones de estudiantes de la Dirección General de Evaluación de la Calidad Educativa.

Si estás en 4to grado del Nivel Primario o 1er año del nivel secundario podés practicar para la evaluación internacional TIMSS: mide las habilidades en Ciencias y Matemática. La evaluación es la segunda y tercera semana de octubre.

Si estás en el último año del Nivel Secundario te invitamos a ejercitarte para la prueba FESBA en Matemática y Lengua y Literatura. La evaluación será las últimas dos semanas de octubre.

Si estás en 7º grado del Nivel Primario te invitamos a ejercitarte en Matemática y Prácticas del Lenguaje. Las pruebas serán las dos primeras semanas de noviembre.

Ciclo Grado/Año Materia Tipo de examen



Comenzar

?

School Investment Website



Outline

- Political landscape: SDGs and the post-2015 agenda
- What do we know about national assessments?
- What do we know about the political economy of assessments?
- Monitoring learning outcomes in the SDGs
- The next steps

Indicator proposals for global targets on basic education and literacy

- Percentage of children who achieve **minimum proficiency standards** in reading and mathematics at end of: (i) primary (ii) lower secondary
- Percentage of youth/adults **proficient** in literacy and numeracy skills
- Parity indices (female/male, urban/rural, bottom/top wealth quintile] for all indicators that can be disaggregated

Key criteria

Relevance: reflect the most critical policy themes in the targets

Alignment: construct to be measured must be valid and reliable and have the same meaning in all settings.

Comparability: data are collected on a regular basis.

Communicability: indicator easily understood and allows a clear narrative regarding progress towards the targets

Proposed levels of monitoring (UNSG*)

National

Link to national plan;
consult national stakeholders; recognise context and address inclusion and broader learning goals

Regional

Indicators to monitor frameworks validated by regional groupings (AU Education decades, EU2020)

Thematic

Broader set of indicators covers the range of sectoral priorities (42 indicators)

Global

Focused set of globally comparable indicators based on clear criteria (10-15 indicators)

*UN Secretary General's Synthesis Report, December 2014

Focus on quality and equity themes reflected in the global indicators

■ Quality

- Should focus on small set of **outcomes** measures
- Should have **direct measures** of learning and skills
- **Other quality measures** also considered important

■ Equity

- **Disaggregate** indicators where possible, strengthening messages on gender equity
- Ensure that **multiple disadvantage** is captured
- Ensure that **disadvantaged groups and contexts** difficult to measure receive special attention

Monitoring: “the” options

- Define benchmarks and indicators based on nationally defined standards (from national assessments)
- Develop a “global” mechanism on measuring and framing indicators at one point in time i.e. snapshots at different grades / different ages? Based on current instruments
- Indicators derived from an empirically developed scale

For an approach that...

Against an approach that ...

... is based on “snapshots” at set grades/ed. levels

Has the potential to provide the most valid and reliable data in a realistic time frame (e.g. to report on equity in learning outcomes)

Can rely and build on existing assessments

Costs can be forecasted in a relatively reliable way.

Implication on counties (financial, operational requirements) can be relatively well defined /explained

Strengthens collaboration among different assessment organizations

Focuses sing on a limited number of grades that may lead to additional resources devoted to those grades

May require developing test instruments – stand-alone

Different instruments/definitions used for each of the desired monitoring of education levels

Could be expensive if only an “intermediate solution”

Will need to rely on an existing metric, so political buy-in may be more difficult

For an approach that...

Against an approach that ...

... results in monitoring indicators derived from an empirically validated scale

The advantage of the scale being that it is not an instrument but “just” a scale hence everyone can gauge themselves on it

Lay the foundations for high-quality and comparable data that governments can use to improve the learning outcomes of their children while benchmarking their progress

Requires significant amount of time and resources. There are substantiate technical, political and financial implications associated to it.

Reading competency levels may vary across countries and progress may not be linear. It will be hard, if not impossible to accommodate foundational reading skill competencies in all languages and scripts

In the absence of more complete data on learning trajectories in various countries, it seems limited in its ability to accurately measure learning

Needs significantly more research

Implication on counties (financial, operational requirements) are not clearly defined. Participation is “optional”.

To get there, we need to choose the path that is...

Ultimate goals

Which path to take?



Technically robust



Yields timely results



Easy to communicate



A sustainable approach

Responds to international community demands



Responds to country demands



Sensitive to the political economy



1. Report on progress in learning outcomes towards the 2030 education goals

2. Countries take action to use assessment to improve learning

On the same path at different speeds

- ❑ Many questions to answer
 - some easier than others
 - timeframe trade-offs (restrict some aspects in the short term while develop the first attempt at a global learning scale)?
- ❑ Defining scope
 - Domains: which learning domains to start with
 - Would it be a developmental scale?
- ❑ Target population
- ❑ Geographic coverage

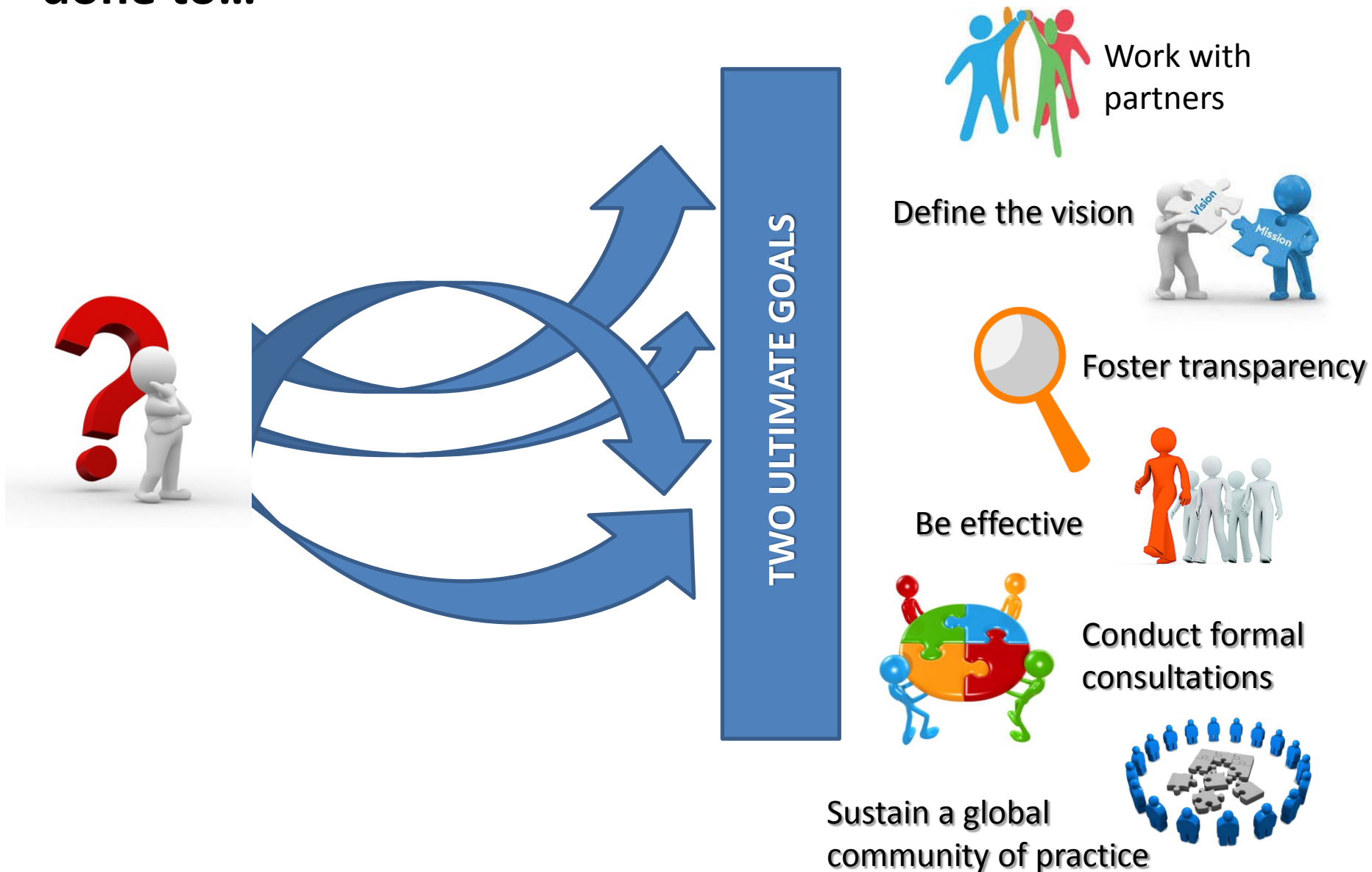
What does it take?

- ▣ Measurement tools that yield data on outcomes
- ▣ Assessments used for establishing baselines and more importantly for feedback
- ▣ Knowledge that repeated measurement is needed
- ▣ Focus on well-define outcomes and related benchmarks
- ▣ Awareness of the relevance of measurement for the different stakeholders
- ▣ Capacity for action
- ▣ Resources and sound policy making to achieve the goals

On the same path at different speeds

- ❑ Many questions to answer
 - some easier than others
 - timeframe trade-offs (restrict some aspects in the short term while develop the first attempt at a global learning scale)?
- ❑ Defining scope
 - Domains: which learning domains to start with
 - Would it be a developmental scale?
- ❑ Target population
- ❑ Geographic coverage

Regardless which path chosen, some work needs to be done to...



Next Steps: Formal consultations to countries

□ Political issues?

- Perception of a universal scale for reading / numeracy?
- Expectations of impact of learning indicators/usability at the national level
- Willingness to collaborate with different stakeholders at country level
- General interest to monitor at different grades/levels

□ Technical issues?

- Approaches for developing indicators
- Robustness of methods proposed

□ Financial implications?

Next steps – the extended TAG

Target date	Activity	Purpose
Ongoing	Regional consultation process	Elicit regional views on existing proposal before first in-person meeting
16-17 July	First in-person meeting	Present regional views and next steps
July-September	Virtual meetings, as needed	Elicit further regional views on existing proposal
24-25/28-29 Sept.	Second in-person meeting	Present proposal integrating regional views
Related events		
1-2 October	EFA Steering Committee	Review Framework for Action
6 November	UNESCO high-level meeting	Adopt the Framework for Action
End of November	Deadline for UNSC inputs	IAEG-SDGs to provide draft indicator framework ⁴⁴

Next steps: UN processes related to indicators

- First meeting of the Inter-Agency and Expert Group on SDG Indicators (June)
- Inter-governmental meeting on goals and targets (June-July)
- UN General Assembly meets to adopt targets (September)
- 47th UN Statistical Commission to consider the new indicator framework (March 2016)
- Framework submitted to ECOSOC for final adoption (July 2016)

Monitoring learning outcomes globally: think of users instead of producer

- to raise awareness on children's low levels of learning
- to build advocacy on the relevance of utilizing robust measurement tools
- to provide evidence for developing targeted approaches towards better school and classroom practices
- to generate a global community of practice in this area
- to define indicators to report progress in learning outcomes towards the 2030 education goals

A last thought..

- Edwards Deming said that “We are to make another world”.
 - Systems and Information's are important
 - The intangible is most of the times more relevant
 - But is the combination of the two the power of the system and an understanding of the power of the intangible to produce the desired changes
 - It is about leadership our as international community, the countries as responsible of policy delivery, principals schools as parents as

Thank you!

Silvia Montoya

Director, UNESCO Institute for Statistics

s.montoya@unesco.org

@montoya_sil

Back- up slides
