

# IEA's Rosetta Stone: Project and Implementation

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*Researching education, improving learning*

**TIMSS & PIRLS**  
International Study Center  
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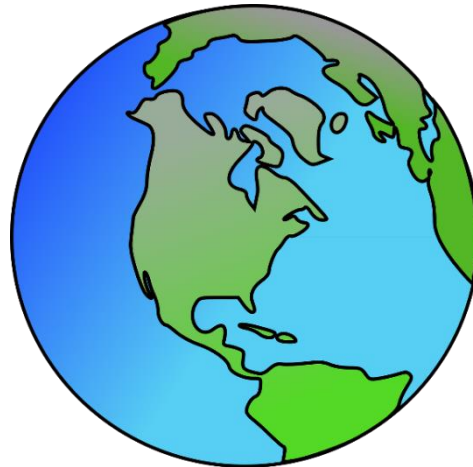


# Objectives

- To provide data on proportions of students of regional assessments achieving TIMSS and PIRLS Minimum Proficiency Levels (MPLs) serving as a measure for SDG 4.1.1b
- ...by establishing a **concordance** between regional assessment results at the end of primary education and the TIMSS intermediate and PIRLS international low benchmarks
  - This concordance enables one to project, with a certain confidence, regional assessment results onto the TIMSS mathematics and PIRLS reading scales
- Objectives were achieved through close collaboration between UIS, IEA, the TIMSS & PIRLS ISC at Boston College, the coordination centers for regional studies (LLECE & CONFEMEN), and participating countries → thanks to all the teams involved!
- Special thanks to Khalil Diarra & Massar Diop (Senegal), Thierry Rocher (IEA Chair), and to Sebastian Meyer and Juliane Kobelt from the IEA Hamburg team

# Implementation

- To create the concordance table, Rosetta Stone needs to be implemented in a subset of countries per regional assessment
- As a first step, Rosetta Stone has been implemented in two Latin American countries (ERCE) and three African countries (PASEC)
- It would be possible and desirable to administer Rosetta Stone in other regional studies as well (e.g., SACMEQ, SEA-PLM, PILNA)



# Instrument Development and Test Design

- Eight Rosetta Stone booklets with easier TIMSS 2015/2019 and PIRLS 2016 items were administered at the same time as PASEC and ERCE to students at grade 6
- That is, the same students took their regional assessment followed by TIMSS and PIRLS booklets in a separate session
- The combined data was used to construct concordance tables

# Administration

- ERCE 2019: Administration of the Rosetta Stone material took place in combination with the ERCE 2019 Main Survey implementation
- PASEC 2019: Project was administered in 2020, where PASEC was re-administered in combination with the Rosetta booklets for about half of the regular sample size

ERCE Countries	N (Students)	N (for analysis)
Colombia	4,467	2,619 – 3,108
Guatemala	4,894	3,902 – 4,716
Total	9,361	6,521 – 7,824

PASEC Countries	N (Students)	N (for analysis)
Burundi	2,304	2,271
Guinea	2,252	2,207
Senegal	2,072	2,059
Total	6,628	6,573

Depending on the type of analyses

# Challenges

## ERCE

- Drop out of Chile for the main data collection
- Delays with the ERCE Main Survey and consequently with the Rosetta implementation due to the pandemic and other reasons

## PASEC

- Covid pandemic delayed test administration in Guinea and for part of the sample in Senegal by half a year
- Harmonization needed between the different survey operation procedures and data entry systems of the assessments

**→ All challenges overcome by excellent collaboration between contributing teams on local, regional, and international level**

# Thank you for your attention!

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