



Researching education, improving learning

TIMSS & PIRLS
International Study Center
Lynch School of Education
BOSTON COLLEGE



Special LaNA Administration: Establishing a link between LaNA and TIMSS/PIRLS

9th Meeting of the Global Alliance to Monitor
Learning (GAML)

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The LaNA Assessment



What is LaNA?

- A new ready-to-use Literacy and Numeracy Assessment targeting low- and middle-income countries
- Developed by IEA and its partner the TIMSS & PIRLS ISC at Boston College to deliver high-quality standardized data as a basis for evidence-based education policies
- Rooted in the TIMSS and PIRLS frameworks -> same construct
- Administered at the end of primary school (4th – 6th grades) as a stand-alone paper-and-pencil assessment
- Student and school questionnaires allow for the association of achievement results with important factors that influence the learning environment

What is LaNA?

- Comprised of easier items from TIMSS Numeracy and simplified passages from PIRLS Literacy adapted to meet the needs of less advanced student populations
- LaNA can also be considered easier than TIMSS and PIRLS in terms of administration
 - Multiple-choice items only (no scoring)
 - No teacher questionnaire (i.e., no student-teacher linking)
 - More flexibility in terms of timelines and operation procedures
- Previously administered in Haiti, Nigeria, North Macedonia, Pakistan (Punjab), and Serbia

LaNA Design

- Rotated booklet design (4 rotated booklets) with two literacy and two numeracy blocks each
 - One common easy literacy block and four rotating literacy blocks: 2 literary (stories) and 2 informational passages
 - Four rotating numeracy blocks
- Multiple-choice format only
- 2*40-minute testing sessions followed by a context questionnaire session
- Additional administration of a school questionnaire

Next Step: Establishing a link between LaNA and TIMSS/PIRLS

Objective

- Collect sufficient data to establish a link between LaNA results and TIMSS/PIRLS achievement scales
 - To provide an indication of the percentage of students reaching minimum proficiency levels in reading and mathematics (via TIMSS/PIRLS benchmarks)
 - To monitor progress towards SDG 4.1.1b via LaNA
- In the future, only the LaNA booklets will need to be administered to measure progress toward SDG 4.1

LaNA Linking Study: Design

- About 4500 students per country for five+ countries needed -> country acquisition nearly finalized
 - LaNA design will be complemented by four additional linking booklets (reading material from PIRLS Literacy and mathematics items from TIMSS Numeracy)
 - Materials from PIRLS and TIMSS represent the lower end of the difficulty level in the two studies
 - Half of the students will receive LaNA material, while the other half will receive linking booklets
- Statistical linking* approach will benefit from experiences gained with the Rosetta concordance approach

*LaNA can be linked to TIMSS/PIRLS as both measure the same construct

Tentative LaNA timeline

Timeline	Activity
31 Dec 2022	Deadline to confirm participation
Mar – Apr 2023	1 st NRC Meeting (training for Practice Administration)
Apr – May 2023	Practice Administration (5-10 schools)
June 2023	2nd NRC Meeting (review of Practice Administration & preparation for Main Data Collection)
Sep 2023	Workshop on data entry and scoring (Main Data Collection)
Oct – Nov 2023	Main Data Collection (100 schools)
May 2024	3rd NRC Meeting (table review, preparation for analysis)
Aug 2024	Release of draft IDB and User Guide
Sep/Oct 2024	Release of LaNA reports (linking & international results and methods)

Summary

- Objective: Establish a psychometrically sound link of LaNA to IEA's TIMSS and PIRLS (allowing eventual measurement of SDG 4.1.1b via TIMSS and PIRLS benchmarks) in 5 to 10 countries
- Link will provide participating (and future) LaNA countries a means to monitor progress towards SDG 4.1.1b
- Once link is established, no further administration of link material needed; measuring of progress toward SDG 4.1.1b (via PIRLS and TIMSS benchmarks) should be possible directly through administration of LaNA Assessment

Outlook

- LaNA is a ready-to-use monitoring tool for measuring numeracy and literacy achievement, and can be administered at any time on demand
- LaNA also indicates strength and weaknesses of education systems and can be used to monitor changes over time
- LaNA provides capacity building experience in the implementation of standardized international large-scale assessments
- Countries who want to join the linking study are still welcomed until the end of the year – no international study fees will be charged*

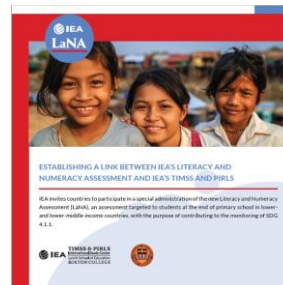
*Regular LaNA costs: 150.000 Euros for the first country and 100.000 Euros for each additional country administering LaNA on the same schedule

Thank you for your attention!

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More information on LANA:
<https://www.iea.nl/studies/iea/LaNA>



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