

PIRLS 2021

20 Years of PIRLS

Implementing the Data Collection



Ina V.S. Mullis, Michael O. Martin,
& Matthias von Davier

62nd IEA General Assembly
October 2021

Transitioned to Digital Assessment

18 Engaging Reading Passages

Matching digitalPIRLS and paperPIRLS versions

6 Newly Developed -- Visually Attractive

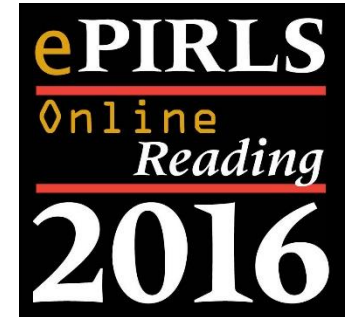
12 Trend – Also Visually Attractive

- Literary passages – variety of stories
- Informational passages – variety of content and ideas



ePIRLS in 2021

- ePIRLS launched in 2016 with 14 countries to reflect the changing nature of reading
- Simulates authentic internet reading experience
- 5 ePIRLS tasks – 3 trend and 2 newly developed
- Operationally integrated with digitalPIRLS in 2021
- In 2021, some digitalPIRLS students will take both a PIRLS passage and an ePIRLS task for research purposes (and those countries also have the paperPIRLS bridge)



<http://magellanmuseum.org/backtospain>

Magellan's Voyage

Magellan's Voyage

Home

South America

Pacific Ocean

Back to Spain

Back to Spain



A parade in Spain to celebrate the Victoria's return

Finally, after its three-year journey and many hardships, the *Victoria* arrived back in Spain with only 21 sailors on board. The ship was leaking badly and the crew was starving. However, the people who paid for the expedition sold the spices for a profit.

Most importantly, the *Victoria* had circled the globe and demonstrated that the world was a much larger place than previously imagined.

ePIRLS Class Project

D. The trip took much longer than planned.

Choose one

✓ SAVED



Mr. Webster

Now, click on the website tab "Back to Spain."

6.

Based on what you have read, do you think getting the cargo of spices was worth the difficulties the crew faced?



Student

Check your choice.

☐ Yes☐ No

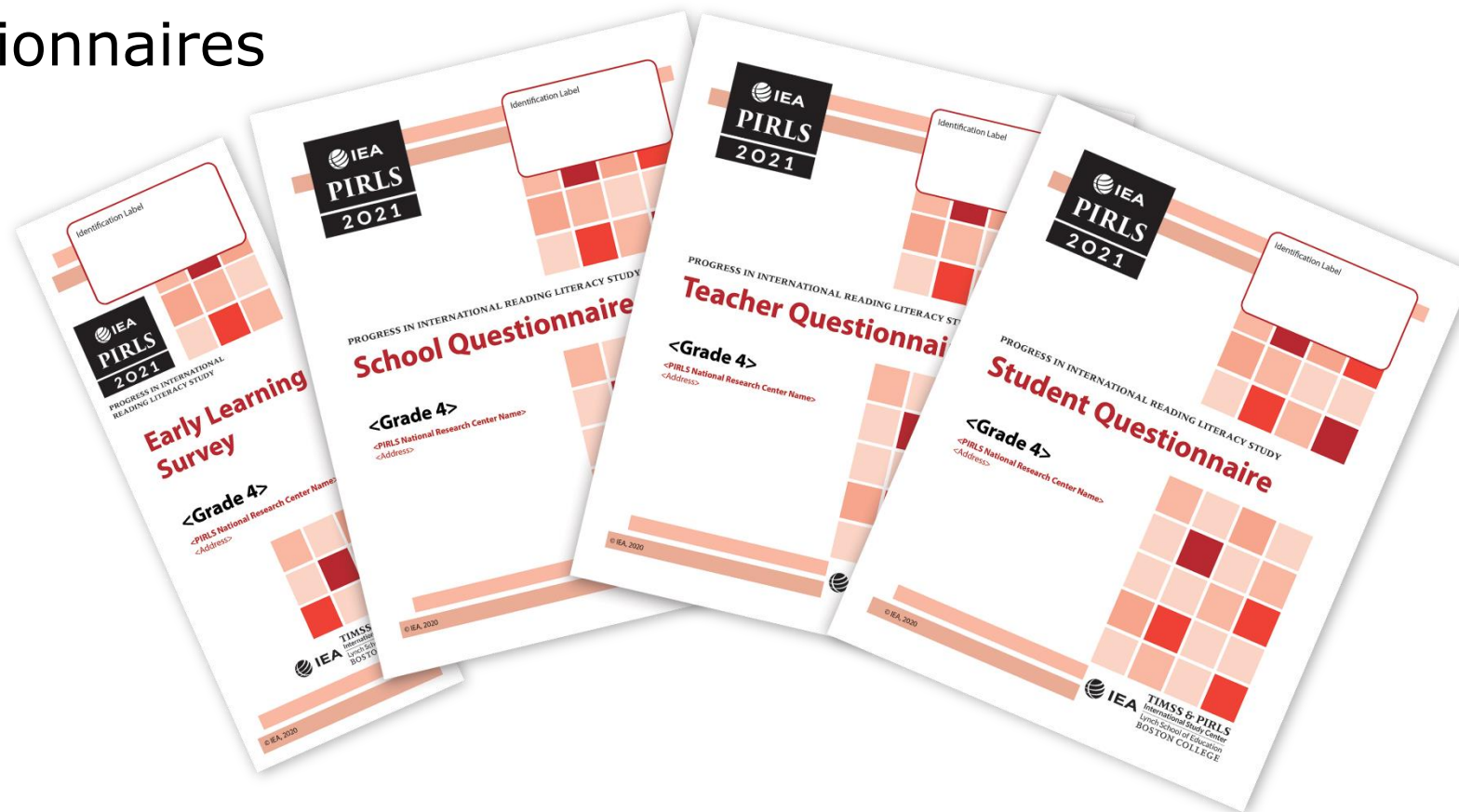
Give one reason why you think so.

SAVE

Also, in 2021

- Context Questionnaires

- Home
- School
- Teacher
- Student

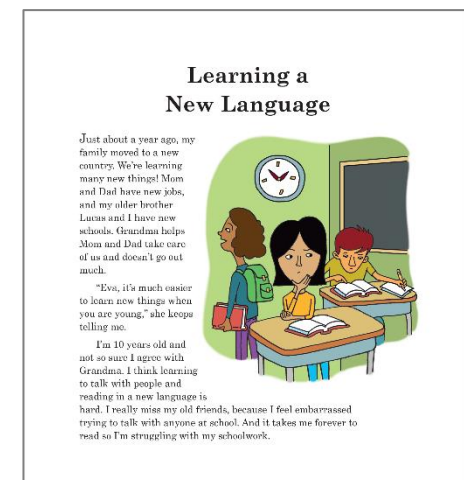


New PIRLS 2021 Group Adaptive Design for digital and paper

Goal: Improve measurement by better alignment of assessment difficulty with student ability

The assessment should match the ability of targeted population

- Include more challenging content for advanced students (address any ceiling effect)
- Include less challenging content for weaker students (address any floor effect)



Design Essentials

Group adaptive design applies to both digitalPIRLS and paperPIRLS

- Three levels of passage difficulty
 - Difficult (6) – Medium (6) – Easy (6)
- Passages combined into two levels of booklet difficulty
 - More difficult booklets (9)
 - Composed of difficult and medium passages
 - Less difficult booklets (9)
 - Composed of medium and easy passages

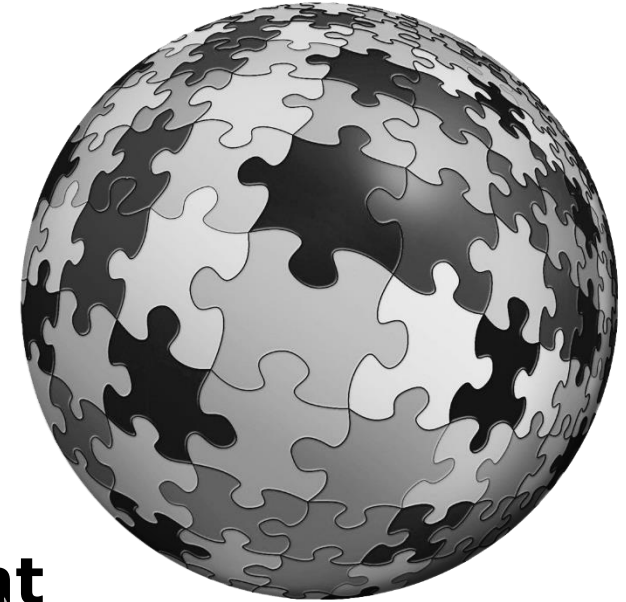


Design Essentials

All countries administer all 18 booklets

- Higher performing countries:
 - Proportionally more of the more difficult booklets
- Lower performing countries:
 - Proportionally more of the less difficult booklets

Goal is a better match between assessment difficulty and student achievement in each country



PIRLS 2021 Countries

Albania

Australia

Austria

Azerbaijan

Bahrain

Belgium (Fl.)

Belgium (Fr.)

Bosnia and Herzegovina

Brazil

Bulgaria

Canada

Chile

Chinese Taipei

Croatia

Cyprus

Czech Republic

Denmark

Egypt

England

Finland

France

Georgia

Germany

Hong Kong SAR

Hungary

Ireland

Israel

Italy

Jordan

Kazakhstan

Kosovo

Kuwait

Latvia

Lithuania

Macao SAR

Malta

Montenegro

Morocco

Netherlands

New Zealand

North Macedonia

Northern Ireland

Norway

Oman

Poland

Portugal

Qatar

Russian Federation

Saudi Arabia

Serbia

Singapore

Slovak Republic

Slovenia

South Africa

Spain

Sweden

Turkey

United Arab Emirates

United States

Uzbekistan

Benchmarking Participants

Ontario, Canada

Quebec, Canada

Moscow City, Russia

Republic of Srpska

South Africa 6th grade

Abu Dhabi, UAE

Dubai, UAE

60 countries

+ 7 Benchmarkers

Evenly Balanced

Digital: 28 + 5

Paper: 32 + 2



PIRLS

2021



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

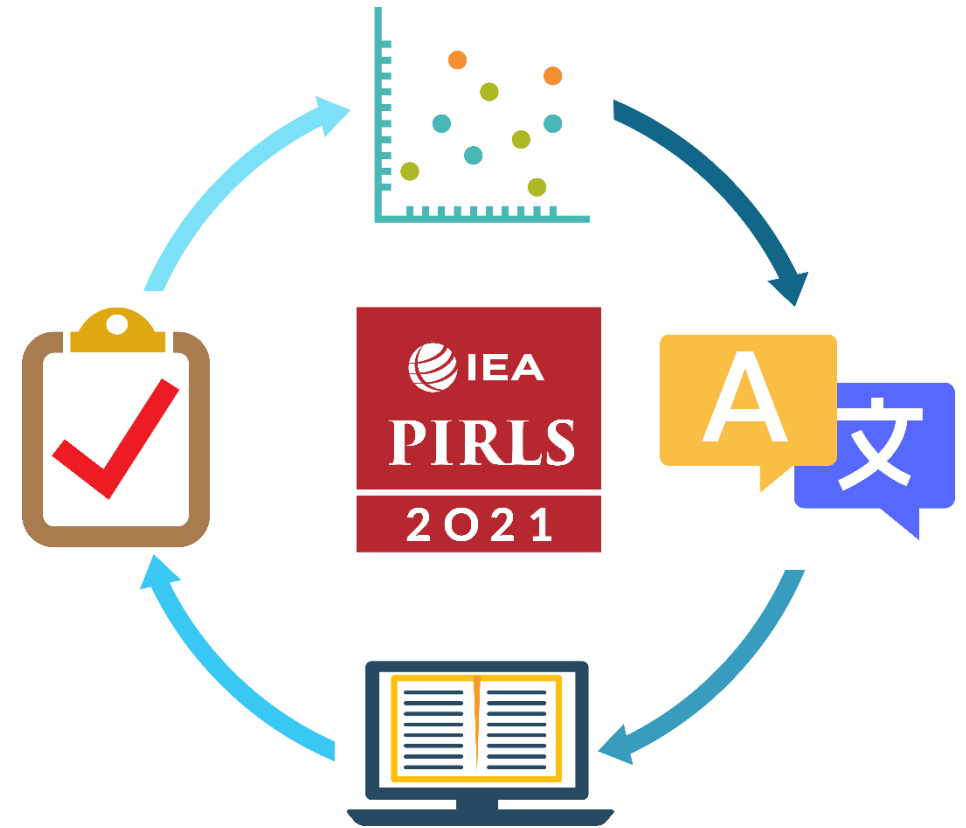
Original Data Collection Schedule

- October-December 2020
Southern Hemisphere
 - 2 Completed and 4 postponed
- March-June Northern Hemisphere
 - 36 Implemented and 16 postponed
- Implemented – approximately
half digital/half paper



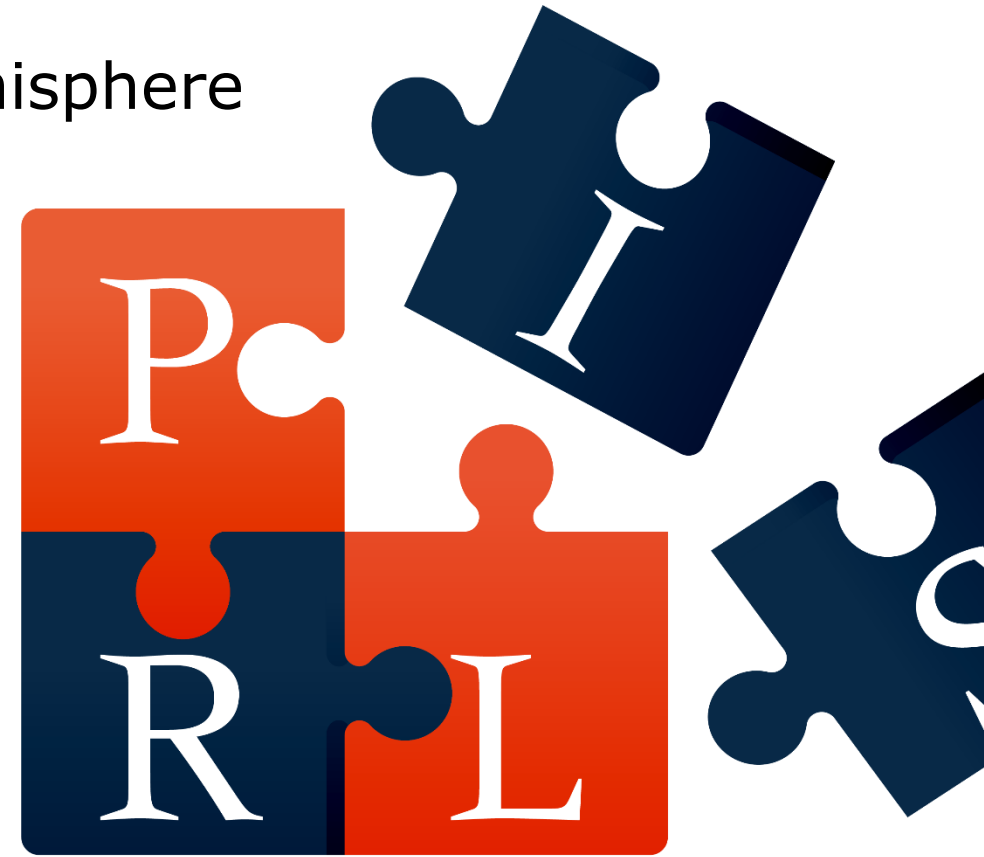
For Countries on the Original Schedule

- Implemented sampling plan
- Prepared manuals (all countries)
- Conducted translation verification
- Conducted Layout Verification
 - paperPIRLS, digitalPIRLS, bridge sample
- Prepared players (digitalPIRLS)
- Quality control monitors
- Data received from 27 countries
 - 18 at IEA Hamburg, 9 at TIMSS & PIRLS ISC



Delayed Data Collection Schedule

- October-December 2021 Southern Hemisphere (1 year late)
 - 4 countries (3 underway)
- October-December 2021 5th Grade Northern Hemisphere - same cohort of Fourth Grade students but in the fall
 - 16 countries (8 underway)
- March-June 2022 (1 year late)
 - 2 countries



Current and Upcoming Schedule

- June 2021 -- Data Processed 2 Southern Hemisphere Countries
- December 2021 -- Data Processed 38 Countries
- April 2022 -- Data Processed from Oct-Dec Data Collection (Northern and Southern Hemispheres)
- December 2022 Report Released as Planned



Heroic Efforts of Countries

- Rescheduling sessions in schools
- Rescheduling QCM sessions
- Rescheduling the rescheduled sessions and visits



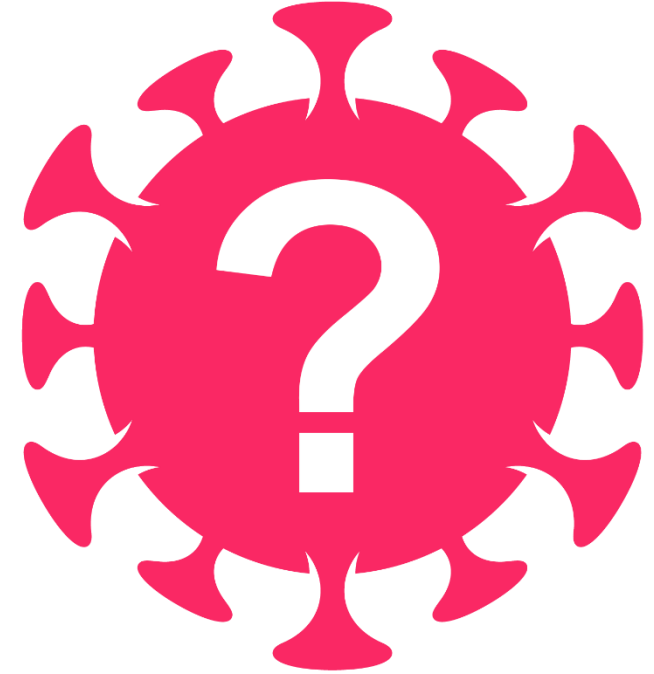
Comparability of Samples

- Adjudicate and annotate participation as usual
- High standards
 - at least 85% school participation and 85% student participation (or 75% combined)
- Document when annotation unavoidable due to COVID-19
- First chapter of international report to document the challenges of data collection during the pandemic



Information about Disruptions due to COVID-19

- School Questionnaire
 - Number of days schools closure
 - Remote instruction—types of support
- Teacher Questionnaire
 - Number of students impacted by disruptions
- Home Questionnaire
 - If child's school was closed, negative impact on learning



Section in PIRLS 2021 Encyclopedia

Country's Response to COVID-19

- Impact on teaching and learning
 - Degree of school closures
 - Efforts to support remote learning, online instruction, printed materials
 - Resources provided to teachers and students
 - National efforts to evaluate or compensate for disruptions in learning



Section in PIRLS 2021 Encyclopedia

Country's Response to COVID-19 (-cont.)

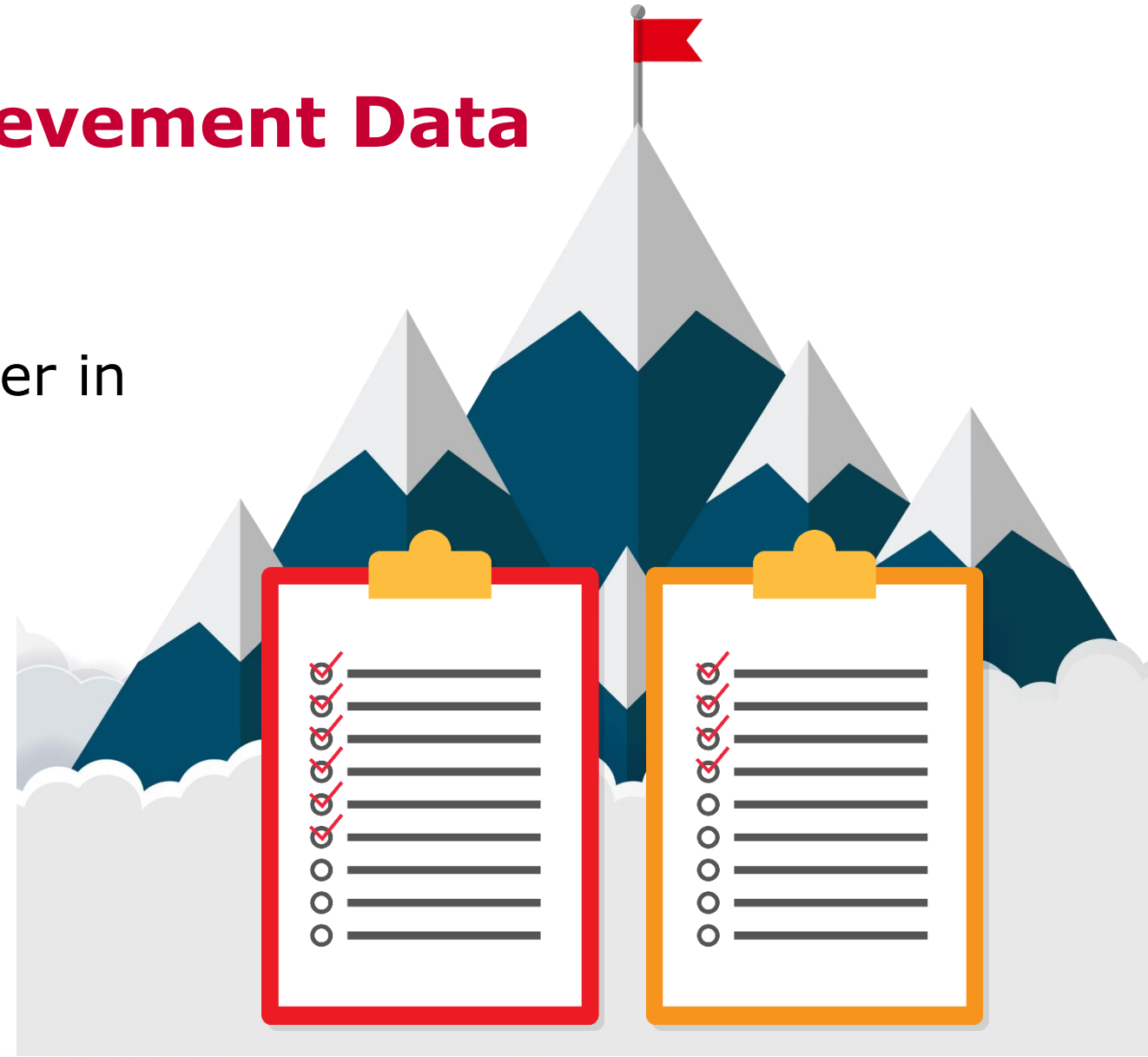
- Impact on data collection procedures for PIRLS 2021
 - Degree of school non-participation because of COVID
 - Degree within-class participation impacted by COVID
- NRC survey on impact on
 - Data collection schedule, national quality control, human scoring, and any departures from standard procedures



Comparability of Achievement Data

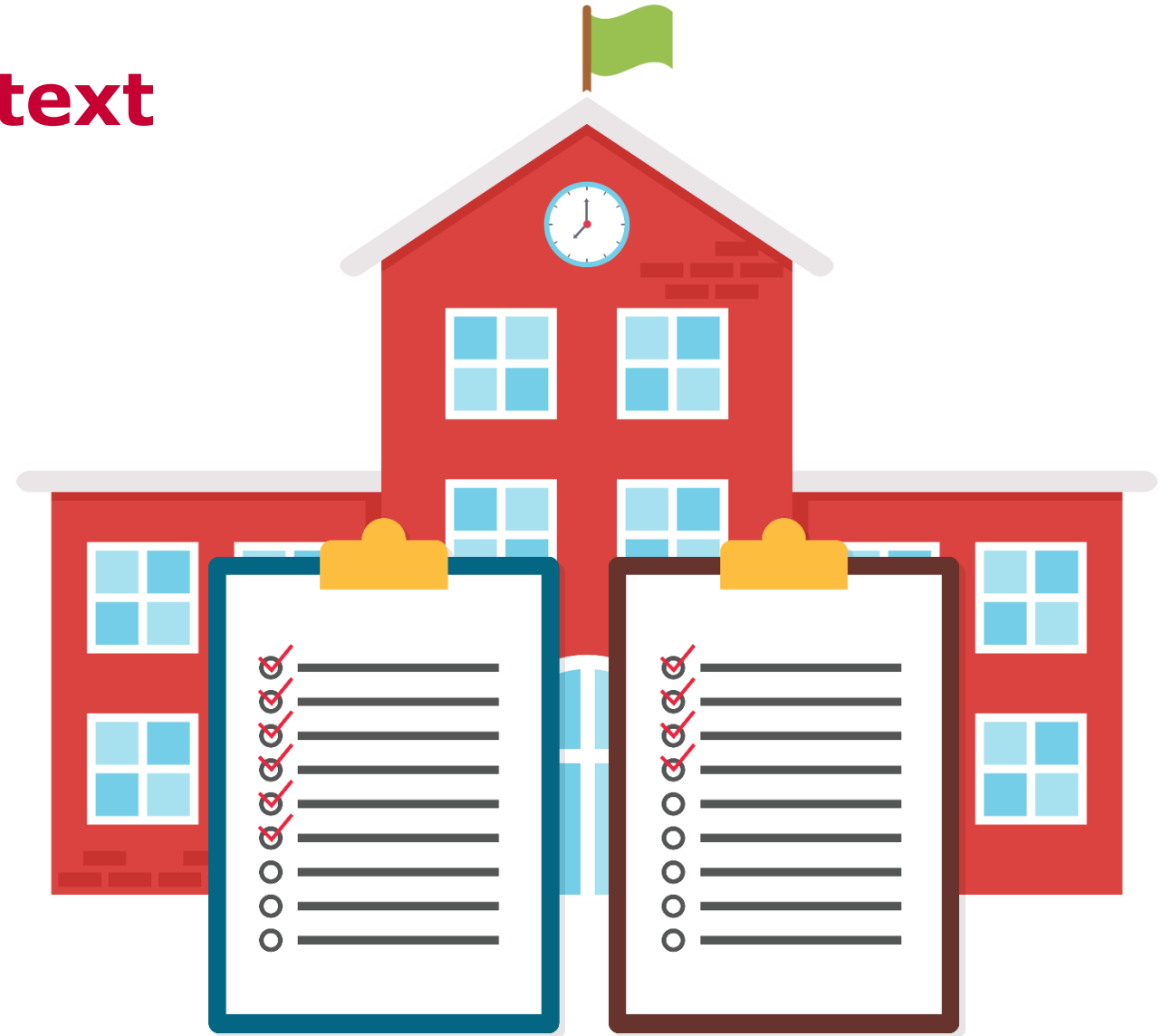
Trends in achievement data

- Countries will need to consider in light of
 - Participation rates
 - School closures
 - Remote learning initiatives
 - Parents' reports
 - Teachers' reports



Comparability of Context Questionnaire Data

- School data
 - 10 countries assessing 5th grade, will locate 4th grade teachers
- Teacher data
- Student attitude data



PIRLS 2021 Provides Unique Data During Pandemic

- Usual excellent data on student reading achievement
 - digitalPIRLS and paperPIRLS on same scale
- Usual extensive array of context questionnaire information

Also have

- Extensive data about school closures
- Countries and schools efforts to compensate for COVID impact



PIRLS 2021

20 Years of PIRLS

Implementing the Data Collection



Ina V.S. Mullis, Michael O. Martin,
& Matthias von Davier

62nd IEA General Assembly
October 2021