PIRLS 2016

PIRLS - A Global Metric for Reading Proficiency PIRLS, PIRLS Literacy, and ePIRLS



Ina V.S. Mullis and Michael O. Martin

Executive Directors
TIMSS & PIRLS International Study Center
Boston College

PIRLS Literacy 2016 56th IEA General Assembly October 2015, Mexico City



Since last General Assembly...

Two major accomplishments

- Development completed
 - Ambitious field test!
- Data collection underway
 - Southern Hemisphere Oct-Dec
 - Northern Hemisphere Mar-Jun





PIRLS 2016

- Assesses reading comprehension at the fourth grade – worldwide standard for reading achievement
- Trends over 16 years 2001, 2006, 2011, 2016
- Expanded to provide more information at lower part of achievement scale
- 12 reading passages 141 items
- 50 countries and
 9 benchmarking
 participants







PIRLS Literacy 2016

- A less difficult assessment of reading comprehension at fourth grade
- 12 reading passages 158 items (same as PIRLS)
- Enables countries where students are still developing reading skills to participate in PIRLS
- 4 passages in common with PIRLS to link PIRLS Literacy to the PIRLS metric



- Countries participating in PIRLS Literacy will have their results reported on the PIRLS scale
- 7 countries participating





ePIRLS 2016

 Extends PIRLS to assess how well students read, comprehend, and interpret online information



- Computer based assessment students navigate through webpages in an engaging, simulated internet environment
- School-like assignments about science and social studies topics
- Five 40-minute tasks; students take two tasks
- 14 countries and 2 benchmarking participants





PIRLS 2016 Context Questionnaires

Five questionnaires for PIRLS/ePIRLS and PIRLS Literacy

- Learning to Read Survey (Home Questionnaire)
- School Questionnaire
- Teacher Questionnaire
- Student Questionnaire/extra in ePIRLS
- Curriculum Questionnaire

Approx. 20 policy relevant questionnaire scales

PIRLS 2016 Encyclopedia – chapter from every country





PIRLS 4th Grade - Participants

Australia

Austria

Azerbaijan

Bahrain

Belgium (FI)

Belgium (Fr)

Bulgaria

Canada*

Chile

Chinese Taipei*

Czech Republic

Denmark*

Egypt (Literacy)

England

Finland

France

Georgia*
Germany

Hong Kong SAR

Hungary

Iran (and Literacy)

Ireland*

Israel*

Italy*

Kazakhstan

Kuwait (Literacy)

Latvia

Lithuania

Macao SAR

Malta

Morocco (and Literacy)

Netherlands

New Zealand

Northern Ireland

Norway*

Oman

Poland

Portugal*

Qatar

Russian Federation

Saudi Arabia

Singapore*

Slovak Republic

Slovenia*

South Africa (Literacy)

Spain

Sweden*

Trinidad & Tobago

United Arab Emirates*

United States*

Benchmarking Participants

Buenos Aires, Argentina

Ontario, Canada

Quebec, Canada

Denmark (Literacy - Gr 3)

Norway (younger grade)

Eng/Afr - RSA (5th)

Andalusia, Spain

Abu Dhabi, UAE*

Dubai, UAE*





Progress Since Last General Assembly

- Conducted full scale field test of PIRLS, PIRLS Literacy and ePIRLS - 60,000 students
- Analyzed field test data for items and questionnaires
- 3. Reviewed field test results and proposed final assessment instruments
- NRCs reviewed and approved passages, items, and questionnaires for 2015/16 data collection





Field Test

March 1 – April 15

· PIRLS

 58,078 students in 49 countries and 7 benchmarking entities

PIRLS Literacy

 6,795 students in 7 countries and 1 benchmarking entity

ePIRLS

 13,701 students in 13 countries and 2 benchmarking entities







Passages and Items for Field Test

PIRLS passages

4 literary, 4 informational – 132 items

PIRLS/PIRLS Literacy passages

2 literary, 2 informational – 71 items

PIRLS Literacy passages

3 literary, 3 informational – 102 items

ePIRLS tasks

6 informational – 115 items

Total: 24 passages - 420 items





4th PIRLS 2016 NRC Meeting Floriana, Malta February 2015

- Constructed response scoring training for field test
 - PIRLS
 - PIRLS Literacy
 - ePIRLS
- Sampling, operations, and quality control procedures for field test
 - PIRLS and PIRLS Literacy
 - ePIRLS software components and procedures





Analyzing the Field Test Data

Very successful field test!

- Countries sent all data on time to IEA DPC
- IEA DPC very efficient in processing data
- TIMSS & PIRLS International Study Center had data for analysis from all countries
- Comprehensive item statistics for all passages, items, and questionnaires







3-Step Field Test Review Process

- Internal review by expert consultants and staff of TIMSS & PIRLS International Study Center – June
- 2. Review by expert committees July
 - RDG review of passages and items Stockholm
 - QDG review of questionnaires Hamburg
- Final review by National Research Coordinators – August
 - 5th NRC meeting Jyväskylä, Finland





Internal Review – June 2015



- Reviewed field test results for all passages and items – PIRLS, PIRLS Literacy, ePIRLS
- Made preliminary recommendations for RDG consideration
- Reviewed field test results for all questionnaires
- Prepared draft questionnaires for QDG review





PIRLS 2016 RDG - 3rd Meeting - Reading Development Group

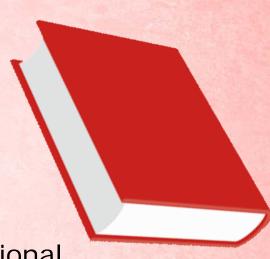
July 15-17, Stockholm, Sweden

- Reviewed proposed passages, items and scoring guides
 - PIRLS and PIRLS Literacy Literary
 - PIRLS and PIRLS Literacy Informational
 - ePIRLS online informational

Outcome: proposed selections of passages and items for NRC review







Reading Development Group (RDG)

- Julian Fraillon, Australia
- Jan Mejding, Denmark
- Galina Zuckerman, Russian Federation
- Elizabeth Pang, Singapore
- Jenny Wiksted Folkeryd, Sweden
- Ahlam Msaiger, UAE Abu Dhabi
- Karen Wixon, USA
- Don Leu, USA
- Marian Sainsbury, Chief Reading Consultant







PIRLS 2016 QDG - 2nd Meeting - Questionnaire Development Group

July 20-21, Hamburg, Germany

 Reviewed field test results and proposed questionnaires for Home, School, Student, and Teacher

 Reviewed Curriculum Questionnaire and TIMSS 2015 Encyclopedia outline

Outcome: proposed questionnaires for NRC review





Questionnaire Development Group (QDG)

- Joanne Latourelle, Canada
- Ko Hwa Wei, Chinese Taipei
- Marc Colmant, France
- Maryam Al-Osted, Kuwait
- Megan Chamberlain, New Zealand
- João Maroco, Portugal
- Sarah Howie, South Africa







PIRLS 2016 NRCs - 5th Meeting - National Research Coordinators

August 9-14, Jyväskylä, Finland

- NRCs reviewed and finalized all passages and items
 - PIRLS, PIRLS Literacy, ePIRLS
 - Passage by passage, item by item!
- NRCs reviewed and finalized home, student, teacher, and school questionnaires
- Reviewed sampling plans and operations procedures for the PIRLS 2016 data collection
- Reviewed ePIRLS software and procedures





Finalized Data Collection Instruments

- August 27
 - Posted final PIRLS, PIRLS Literacy, and ePIRLS data collection materials
 - Countries began translation
- Sept 3-Nov 25
 - ePIRLS software systems being made available

ePIRLS very popular, but complicated!





ePIRLS Field Test

- Engaging tasks contributed to very successful field test
- In general, the ePIRLS software worked well in most countries
- Valuable feedback provided by all countries
- High quality tasks and items 5 of 6 tasks with good measurement properties and wellliked





Engaging Characteristics of Tasks

- A range of interesting topics
- Very colorful visual displays
- Variety of approaches to web navigation tabs, links, graphic icons, scroll bars
- Animation (videos)
- Choosing websites
- Integrating information across websites





Mars

- Science content about the planets and space exploration, particularly of Mars
- Contains some animation about planning to get to Mars
- Contains considerable interaction to learn about the features of the Mars rover





Rainforests

- Environmental science content about the wonders of the rainforests and preserving the rainforests
- Contains interaction and navigation learning about the animals that live in the rainforests







Troy

 Social science content about the legend of Troy and the archaeological search for the city

 Contains a variety of online features, such as links and pop-ups





Blackwell

- Biographical content about Elizabeth Blackwell, the first woman doctor
- Also contains a variety of online features, such as timelines and scrolling





Migration

- Biology content about animal migration in search of food
- Contains animation of animal migration paths
- Contains pop-ups about predator-prey relationships

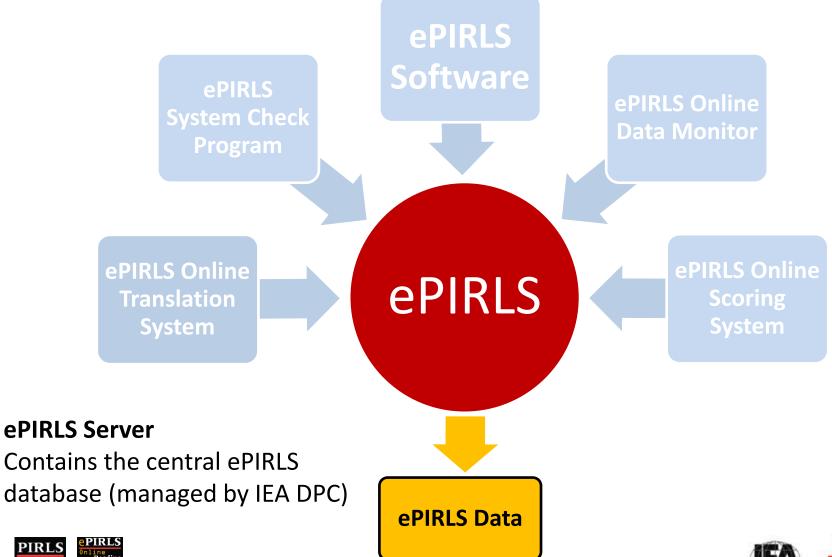


Supported by Complex Software Systems

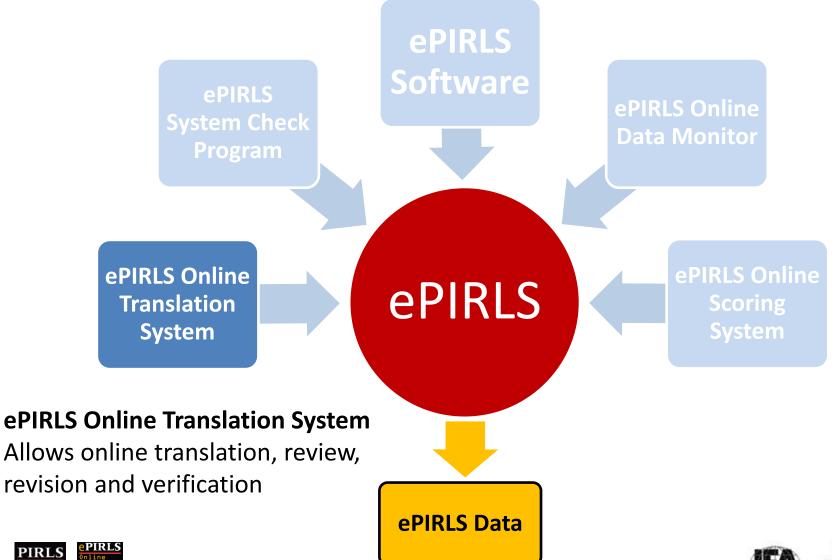
- Complete assessment system
- Custom designed for ePIRLS by TIMSS & PIRLS International Study Center and IEA DPC
- Substantial investment to develop but may provide some efficiencies in long run – translation, translation verification, scoring
- Foundation for future IEA e-assessment activities – notably eTIMSS





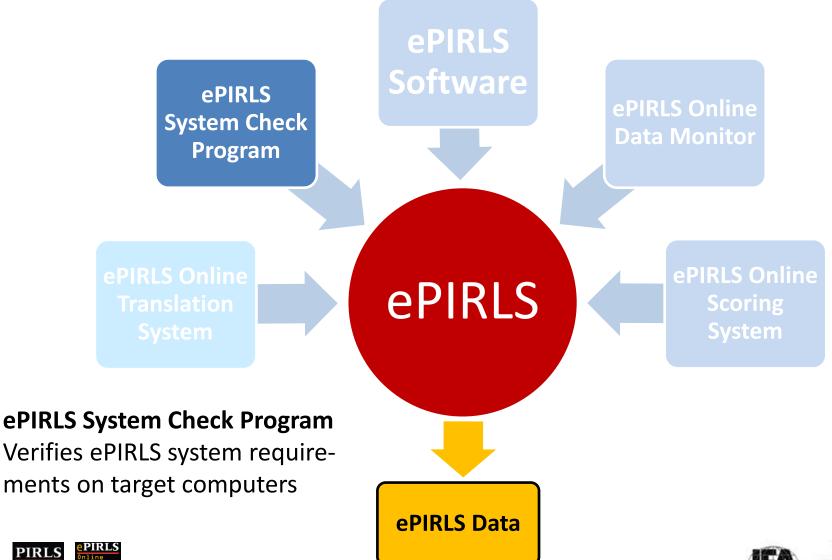






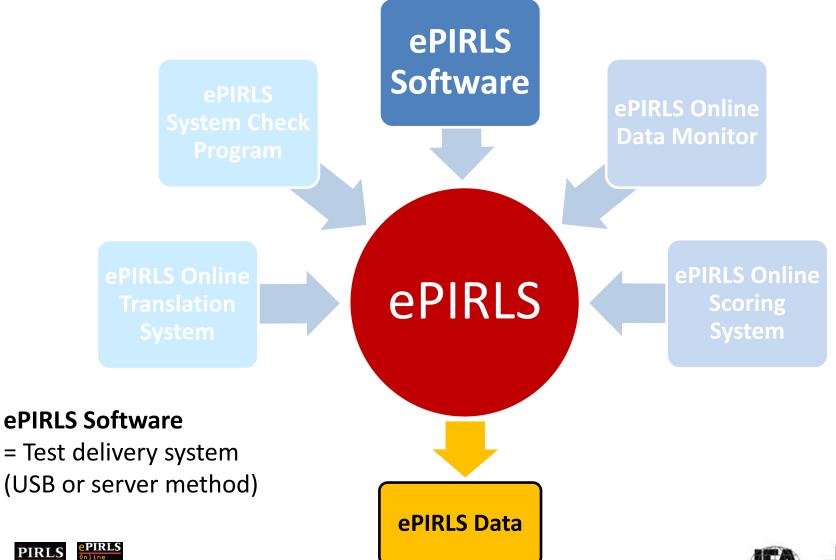




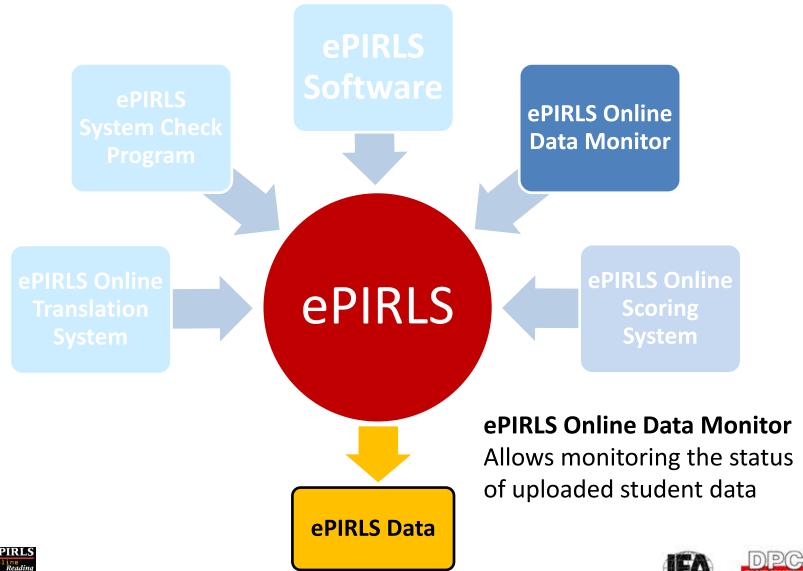




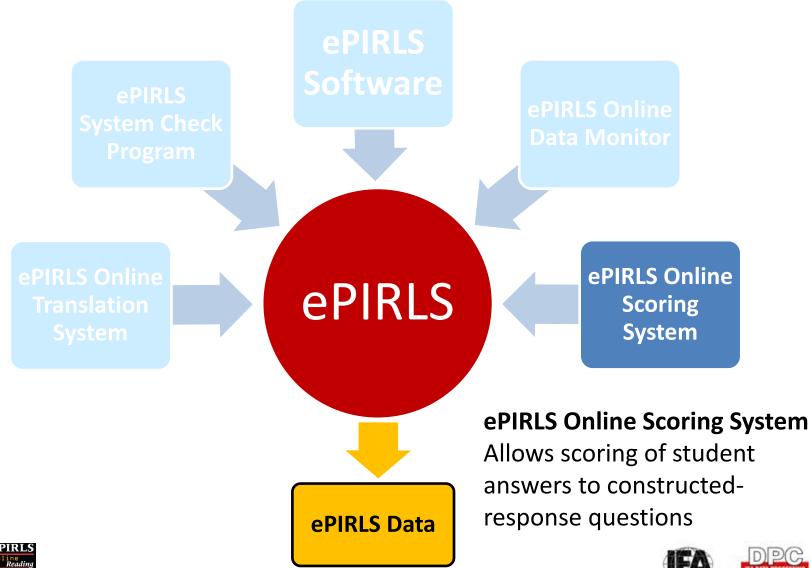
















Reporting ePIRLS

- PIRLS 2016 International Results in Reading
 - Similar to previous PIRLS reports
- Special chapter on ePIRLS results
 - In comparison with overall PIRLS score
 - In comparison with PIRLS Literary and Informational scores





Upcoming Schedule Highlights 2015

>Southern Hemisphere Data Collection < October - December

Southern Hemisphere scorer training — Buenos Aires (Nov 9-11)

2016

Northern Hemisphere Data Collection
March – June

Northern Hemisphere scorer training — PIRLS 2016 6th NRC Meeting, Hong Kong (Feb 28-Mar 4)





PIRLS 2016

Thank

You!



Ina V.S. Mullis and Michael O. Martin

Executive Directors
TIMSS & PIRLS International Study Center
Boston College

56th IEA General Assembly October 2015, Mexico City

PIRLS Literacy 2016

