

Russian Federation and Singapore top PIRLS global assessment in reading, maintaining 10-year lead

Singapore also outperforms peers in inaugural ePIRLS study of online reading, reports IEA's TIMSS & PIRLS International Study Center at Boston College

International results find reading achievement on the rise, gender gap favors girls, and early start has lasting benefits

Chestnut Hill, Mass. (12/5/2017) — Students in the Russian Federation and Singapore outshined their international peers in reading achievement at the fourth grade, according to results released today from PIRLS, a large-scale international assessment of 50 countries and 11 benchmarking regions.

Other high performers included Hong Kong SAR, Ireland, Finland, Poland, and Northern Ireland, according to the assessment directed by Drs. Ina V.S. Mullis and Michael O. Martin at IEA's TIMSS & PIRLS International Study Center at Boston College.

Singapore also took top place among 14 countries in the inaugural ePIRLS assessment of online informational reading, followed by Norway and Ireland. The electronic extension of PIRLS simulates an Internet environment, and evaluates how well students read, interpret, and critique online information in an increasingly digital world.

"The world has seen a rapid increase in the use of digital media, both inside and outside the classroom," said Mullis. "This is changing the way young people gather and process information."

More than 319,000 students worldwide participated in 2016 in PIRLS, the Progress in International Reading Literacy Study. PIRLS has been administered every five years since its 2001 inception, and is sponsored by the International Association for the Evaluation of Educational Achievement (IEA) in Amsterdam.

Internationally, there are more good readers now than there were 15 years ago when PIRLS began. Trends over time show more increases than decreases in achievement, both in the short term (2011-2016) and the longer term (2001-2016). Almost all students demonstrated at least a basic level of reading achievement, with 96 percent reaching the PIRLS Low International Benchmark. On the other end of the spectrum, more than one-fourth of students in the Russian Federation and Singapore reached the Advanced International Benchmark.

All participants proved to be good to excellent readers on ePIRLS. On average, 50 percent of the students reached the High International Benchmark, demonstrating the ability to integrate information across webpages and interactive features and evaluate how graphic elements support content.

Other highlights include:

- **Gender gap favors girls.** Girls had higher reading achievement than boys in 48 of the 50 PIRLS countries, and in the other 2 countries there was no significant difference between the genders. The gender gap in reading achievement has favored girls since 2001 and does not appear to be closing.
- **Good readers have little difficulty reading online.** Students in the 14 ePIRLS countries demonstrated they were able to navigate to the appropriate webpages, completing the assessment in the allotted time. These students also reported a high degree of self-efficacy in computer use.
- **An early start has lasting benefits.** Students who attended preprimary education and/or have parents who engage them often in early literacy activities had higher reading achievement than their peers who began primary school with moderate or few literacy skills.
- About **1 in 4 students arrived at school hungry every day**, and had an average achievement score 32 points lower than students who arrived at school never feeling hungry.
- **A home environment that supports learning** was found to be related to higher achievement — such homes had books, study supports, digital devices in the home, educated parents with professional or technical occupations, and parents who enjoy reading. However, there was a **decrease in parents' positive attitudes in reading** in 31 countries, and 17 percent of the students' parents reported they did not like to read.
- **Students had positive attitudes about reading**, and those attitudes in turn were related to higher reading achievement. Results showed 94 percent reported being very or somewhat engaged in their reading instruction, and 84 percent liked reading very much or somewhat.
- **Well-resourced, academically oriented schools** were associated with higher achievement. These included schools with more affluent than economically disadvantaged students, where a higher proportion of students had early reading and writing skills when entering first grade, and where instruction was not affected by reading resource shortages.
- **The majority of students were in safe schools**, with 62 percent of the students having teachers who reported safe and orderly environments and 57 percent of students experiencing little to no bullying. However, students in disorderly environments had a lower average achievement than their peers.

PIRLS helps participating countries to make evidence-based decisions to improve education. Countries use PIRLS to monitor the effectiveness of their education system in a

global context, identify gaps in learning resources and opportunities, pinpoint areas of weakness, and measure the impact of new initiatives.

The TIMSS & PIRLS International Study Center is housed at the Lynch School of Education at Boston College, where researchers coordinate international staff, contractors, and collaborators to carry out an assessment that fairly and accurately measures reading achievement despite the world's multiplicity of languages, cultures, ethnicities, races, and available resources.

Reflecting on the PIRLS 2016 results, Martin underscored the long-term effects of an early start in reading.

"PIRLS shows that children whose parents had engaged them in literacy activities (reading books, playing word games, etc.) from an early age are better equipped with basic reading skills when they begin primary school and go on to have higher reading achievement in the fourth grade," Martin said. "These literacy skills provide a firm foundation as students progress through higher grades and increasingly complicated subjects."

The results of PIRLS 2016 and ePIRLS 2016 will be available at: <http://pirls2016.org/>

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