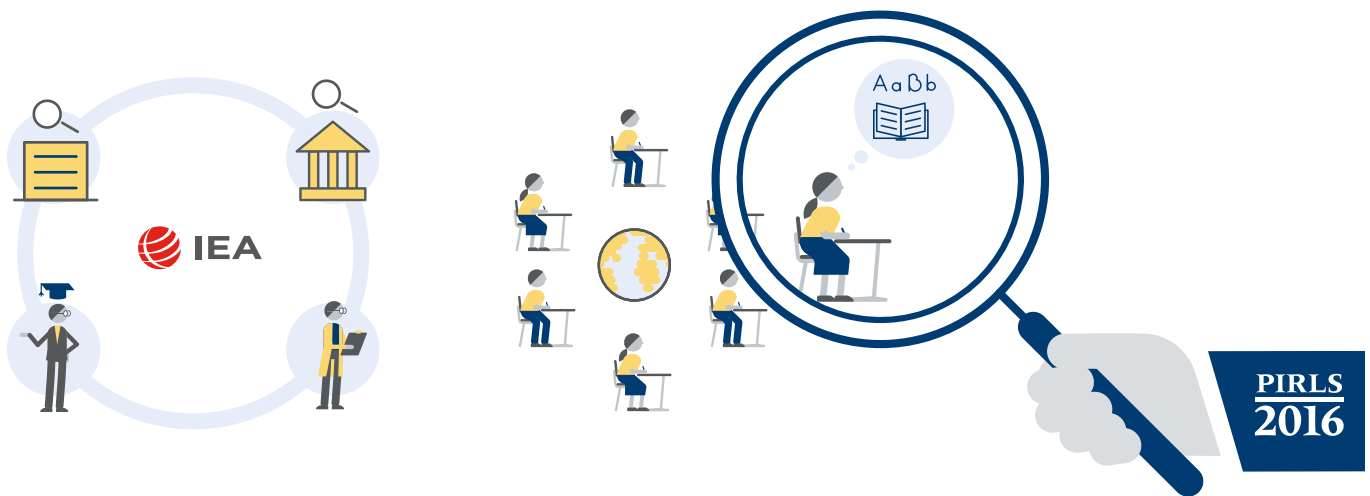


Measuring SDG 4: How PIRLS can help

International large-scale assessments, such as the Progress in Reading Literacy Study (PIRLS), conducted by the International Association for Evaluation of Educational Achievement (IEA), can serve as reliable data sources for evaluation of progress towards targets of the Sustainable Development Goal 4 (SDG 4), quality education for all.

About IEA and PIRLS



The IEA is an international cooperative of national research institutions, government research agencies, scholars, and researchers working to evaluate and improve education worldwide. The IEA's PIRLS provides policy-relevant information for improving teaching and learning.

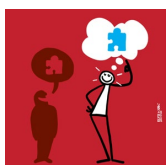
About SDG 4



Target 4.1
Universal primary and secondary education



Target 4.2
Early childhood development and universal pre-primary education



Target 4.4
Relevant skills for decent work



Target 4.5
Gender equality and inclusion



Target 4.a
Effective learning environments



Target 4.c
Increase the supply of qualified teachers

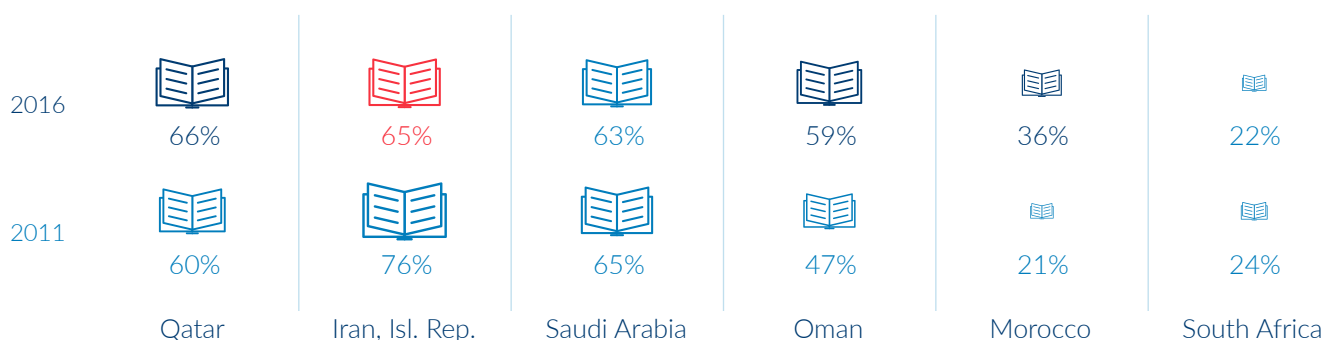


As a part of the United Nations' 2030 Agenda for Sustainable Development, SDG 4 aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

Measuring SDG 4: How PIRLS can help. Targets 4.1 and 4.2

With its system of international achievement benchmarks, PIRLS provides the evidence that enables participating countries to evaluate the success of their educational programs and compare their progress toward achieving target 4.1. Evidence from PIRLS also supports target 4.2 revealing that investment in early childhood education may enhance future learning outcomes.

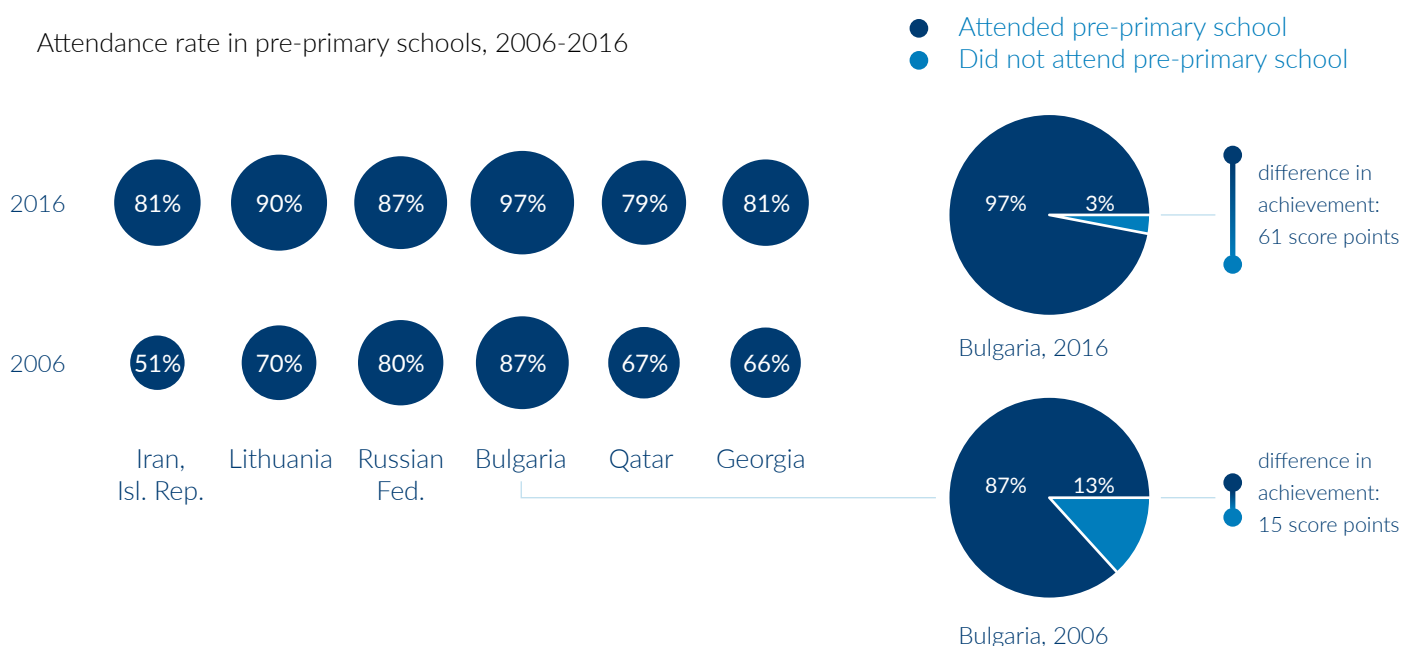
The education efforts made by countries in order to increase students' achievement in reading can be monitored from cycle to cycle in PIRLS. The graph demonstrates the changes in percentages of students above the PIRLS low international benchmark in a selection of low performing countries:



Children who receive pre-primary education generally achieve higher scores in PIRLS. Access to pre-primary education has been encouraged in many countries:

For example, in Bulgaria the rate of pre-school attendance has increased considerably since 2006:

Attendance rate in pre-primary schools, 2006-2016

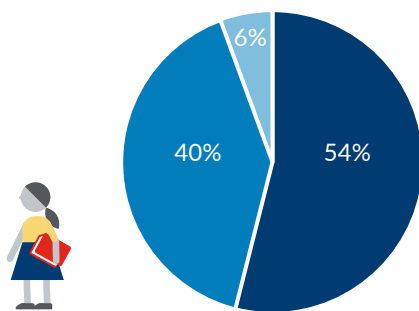


Measuring SDG 4: How PIRLS can help. Target 4.5

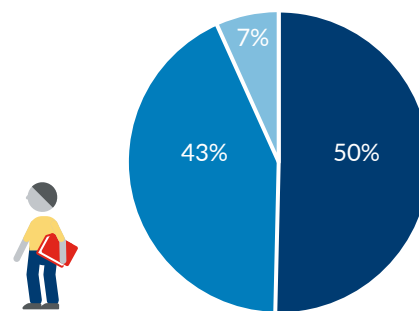
PIRLS data reaffirms that girls considerably outperform boys in reading skills. Do the differences in how parents approach early reading activities at home with respect of their sons and daughters affect the students' reading achievement?

PIRLS 2016 shows that early childhood reading activities may have an influence on reading achievement. In a majority of countries, parents of girls reported slightly more frequent early reading activities than parents of boys.

Early reading activity reported by parents of girls, 2016



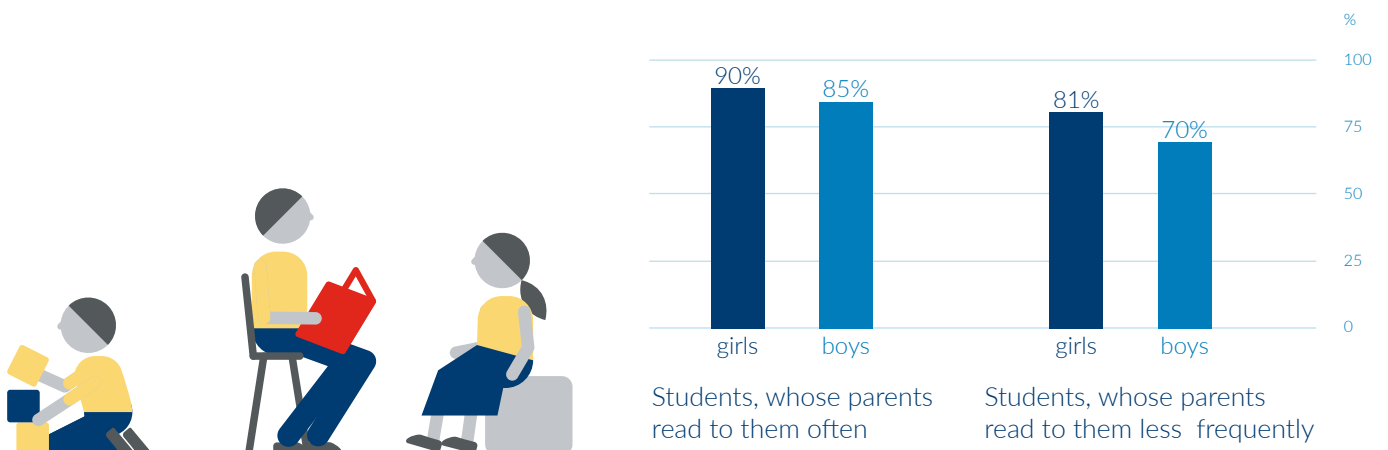
Early reading activity reported by parents of boys, 2016



- Often
- Sometimes
- Never or almost never

Are boys more strongly affected than girls by less frequent early reading activity? The example of Trinidad and Tobago demonstrates that among students, whose parents had read less to them in early childhood, fewer boys than girls achieved the PIRLS low international benchmark.

PIRLS 2016, Trinidad and Tobago, students above the PIRLS low international benchmark:



Measuring SDG 4: How PIRLS can help. Target 4.5

The international education agenda calls on leaving no one behind. Large-scale assessments establish links between students' achievement, their socioeconomic background and linguistic disadvantages they may experience in school.

PIRLS asks Grade 4 students to report the number of books at home as a proxy of their socioeconomic and cultural status and the learning support they receive from their families.

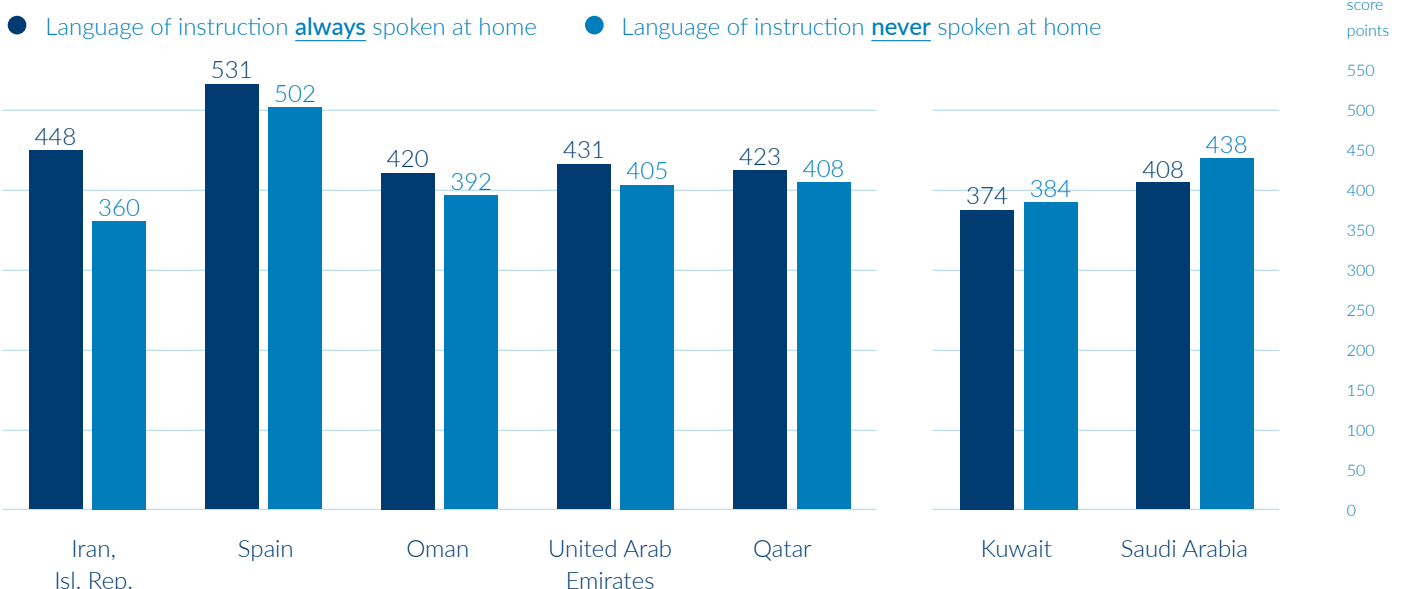


Growing up in a home with books may be positively related to higher achievement in reading, but it does not tell the full story...

In some countries, students with more books at home, but who did not like reading, had lower PIRLS scores than those who did not have as many books, but enjoyed reading a lot. While number of books at home is important for achievement, enjoyment of reading also plays a key role.

When children are taught in a language that they do not speak at home, they might be at a disadvantage. The reading scores of students who never speak the language of instruction at home tend to be lower, however, there are exceptions to the rule.

PIRLS 2016: countries with highest percentages of students who reported to never speak the language of instruction at home

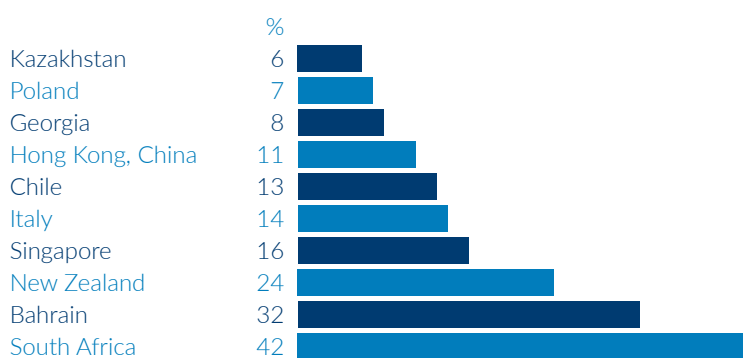


Measuring SDG 4: How PIRLS can help. Target 4.a

The international education agenda recognizes a safe learning environment as an important factor for learning. PIRLS provides insights into the quality of learning environments.

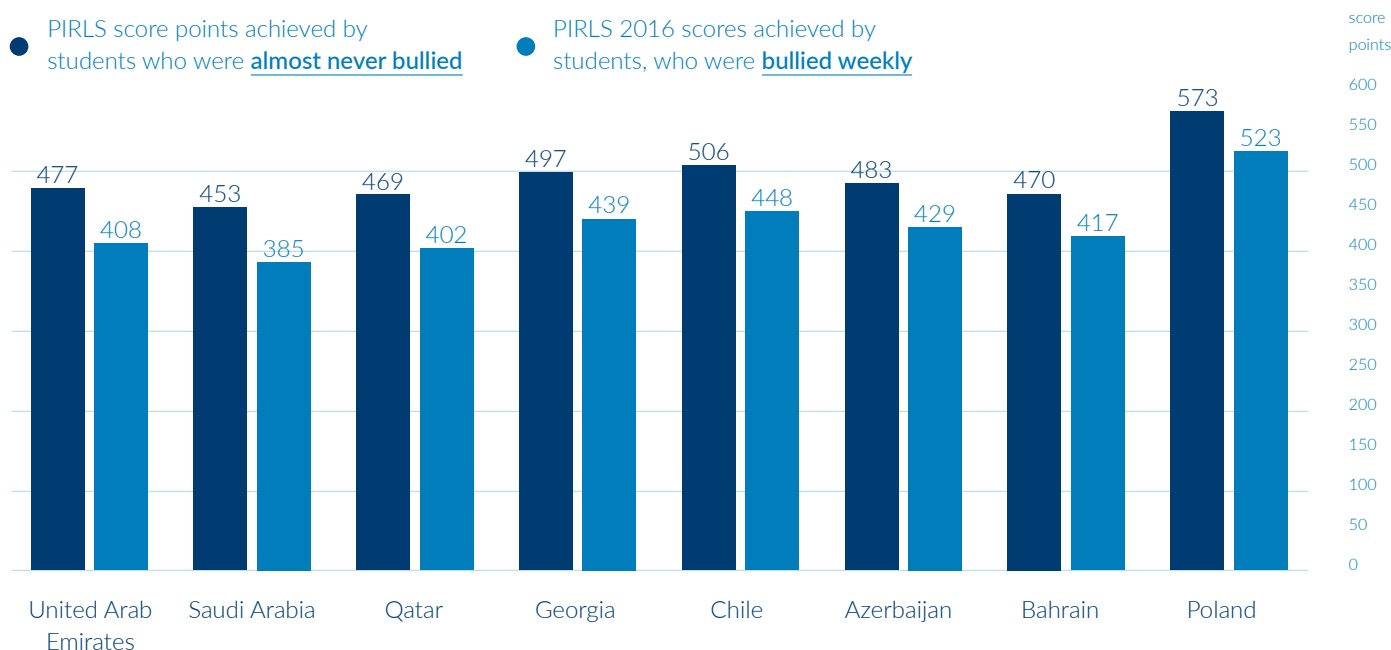
Bullying at school strongly affects learning outcomes. PIRLS data reveal large variations in the occurrence of bullying at schools across countries.

PIRLS 2016: students who reported being bullied about weekly



The results of PIRLS suggest an association between students' experiences with bullying at school and their reading achievement.

PIRLS 2016 countries with largest achievement gaps between students who reported to almost never experience bullying and those who reported to experience it weekly

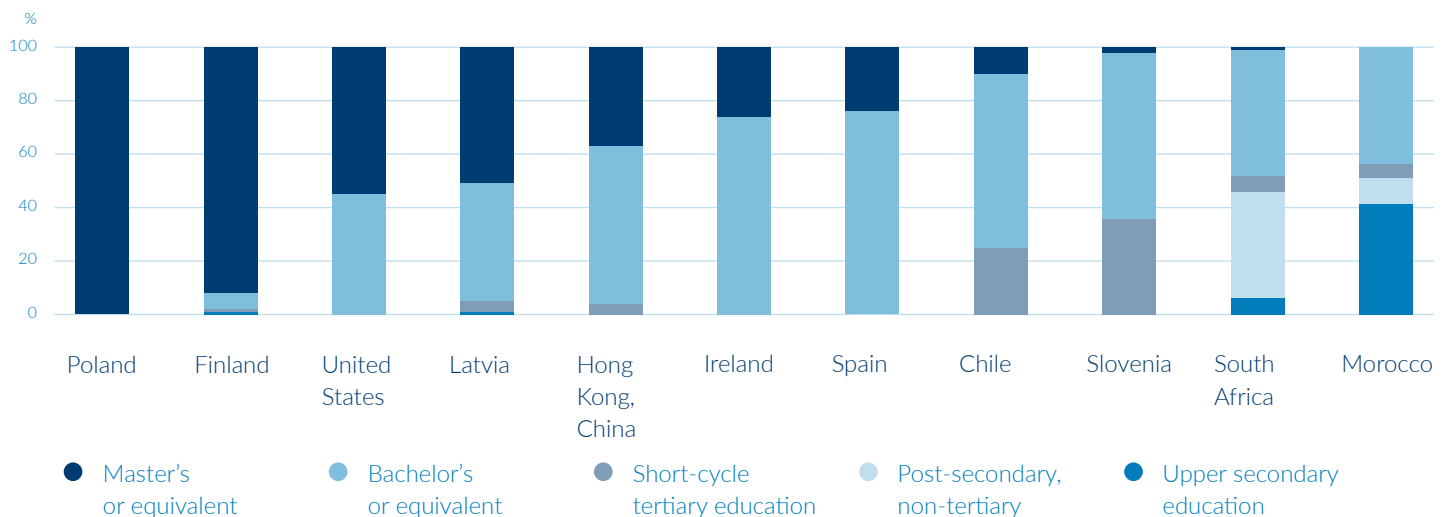


Measuring SDG 4: How PIRLS can help. Target 4.c

Quality education relies on the availability of qualified teachers. PIRLS reports on teachers' academic qualifications, their professional development, and techniques they deploy in classrooms.

While there is no international consensus on what defines a qualified teacher, a teacher's highest level of formal education may serve as one indicator. This information is recorded by PIRLS for teachers of reading at Grade 4.

Grade 4 students by the qualification level of their teachers



Additional pedagogical training and other specialized qualifications may produce teachers who are better at assessing and overcoming gaps in students' achievement:

Grade 4 students by the focus area of study of their teachers

