

EU Researchers Network

WORKSHOP II
ON PISA AND
PIRLS

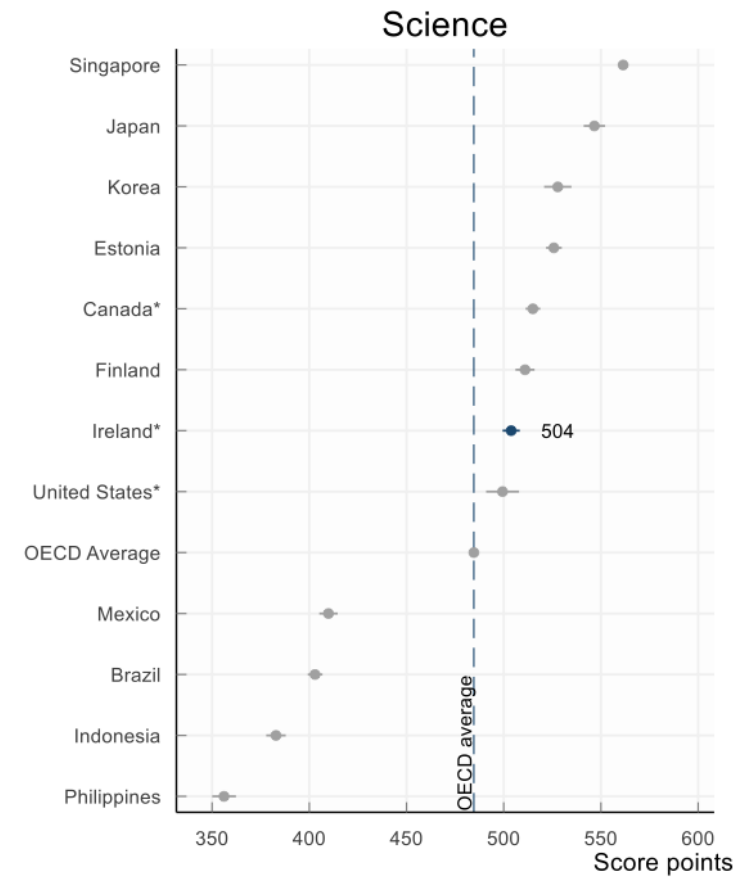
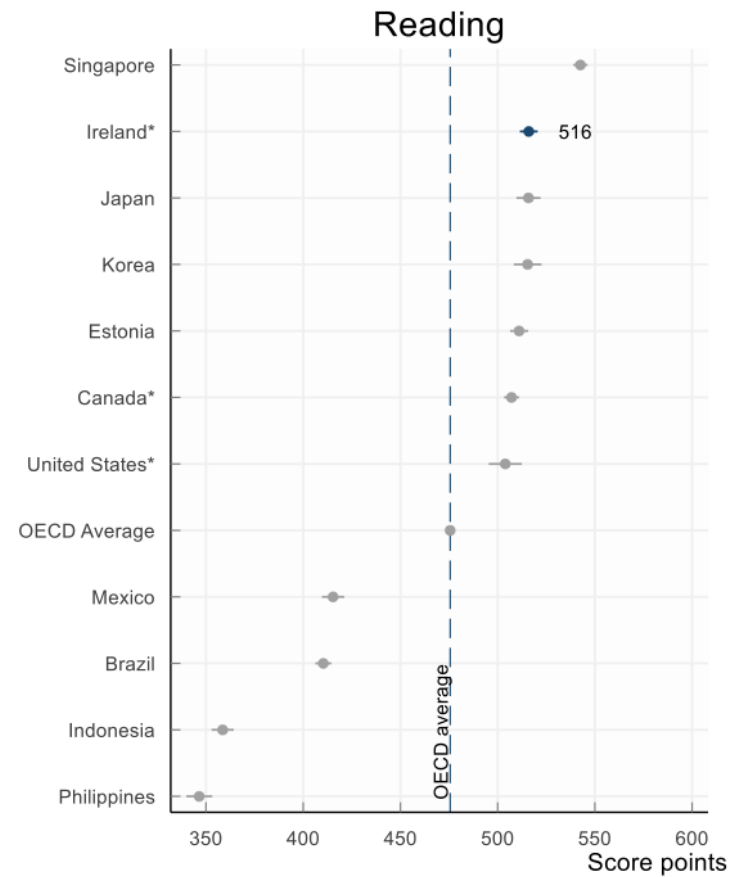
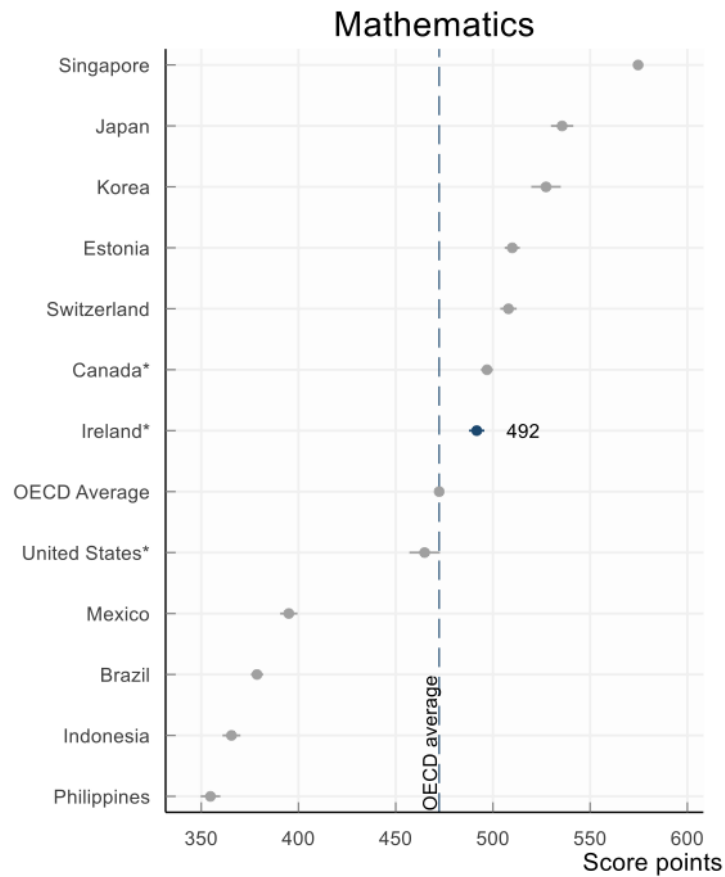
Countries represented

- Ireland
- England
- Scotland
- Netherlands
- Germany
- Jordan
- South Africa

Observations on Ireland PISA

- The usual pattern of the PISA cycle was interrupted in this iteration, as the planned implementation of the Main Study in 2021 was delayed by one year to 2022 due to disruptions associated with the COVID-19 pandemic.
- A further change in administration took place in Ireland, with Main Study data collection taking place in autumn instead of springtime. In response to reports of a crowded school calendar in springtime, and in an attempt to reduce the burden on schools, the decision was made to move main study testing to the autumn time. This means that data were collected a year and a half later than originally planned, and four and a half years since data were collected in the 2018 cycle of PISA.
- As found in PISA, girls are significantly more likely to read for pleasure and read more complex fiction and non-fiction books, PISA has consistently found that girls outperform boys in reading.

Donohue, B. et al. (2023) Education in a Dynamic World: the performance of students in Ireland in PISA 2022/ Brenda Donohue, Rachel Perkins, Theresa Walsh, Brendan O'Neill, Conall Ó Duibhir, and Alice Duggan, Dublin: Educational Research Centre



Notes: Comparison countries include the six highest-performing countries in each subject and the five countries with the largest population of 15-year-old students.

Horizontal lines that extend beyond the markers represent a measure of uncertainty associated with mean estimates (the 95% confidence interval).

Source: OECD, PISA 2022 Database, Tables I.B1.2.1, I.B1.2.2 and I.B1.2.3.

Observations on Ireland PIRLS

- In Ireland, pupils from 148 schools took part in Autumn 21 and at the start of fifth class (Start G5). The decision to test in Autumn was due to the impact of COVID-19 and school closures.
- The sample of schools was balanced by language of instruction, DEIS status and gender mix. A cohort of 4,663 pupils participated in the paper-based PIRLS written test. In addition, 4,322 parents, 4520 teachers, and 4,610 school leaders responded to questionnaires. This represented a very high participation rate from Irish schools.
- The 2021 score must be interpreted in the context of the relevant caveat: the average performance of the Start G5 pupils in autumn 2021 (with average age 11.0) was 11 points higher than that of the End G4 pupils in spring 2016 (with average age 10.5). It is reasonable to expect that pupils in Ireland performed somewhat better in autumn 2021 than they would have done in spring.
- In 51 of the 57 PIRLS countries, including Ireland, girls significantly outperformed boys in reading.
- **While the results are encouraging, there is a huge focus in Ireland on reading proficiency/attainment and not enough emphasis on reading for pleasure and independent reading. Children's Books Ireland emphasise the importance of reading for pleasure through their work.**

Exhibit 1.3: Average Reading Achievement and Scale Score Distributions

Assessed Fourth Grade Students at the End of the School Year

⌘ Assessed one year later than originally scheduled

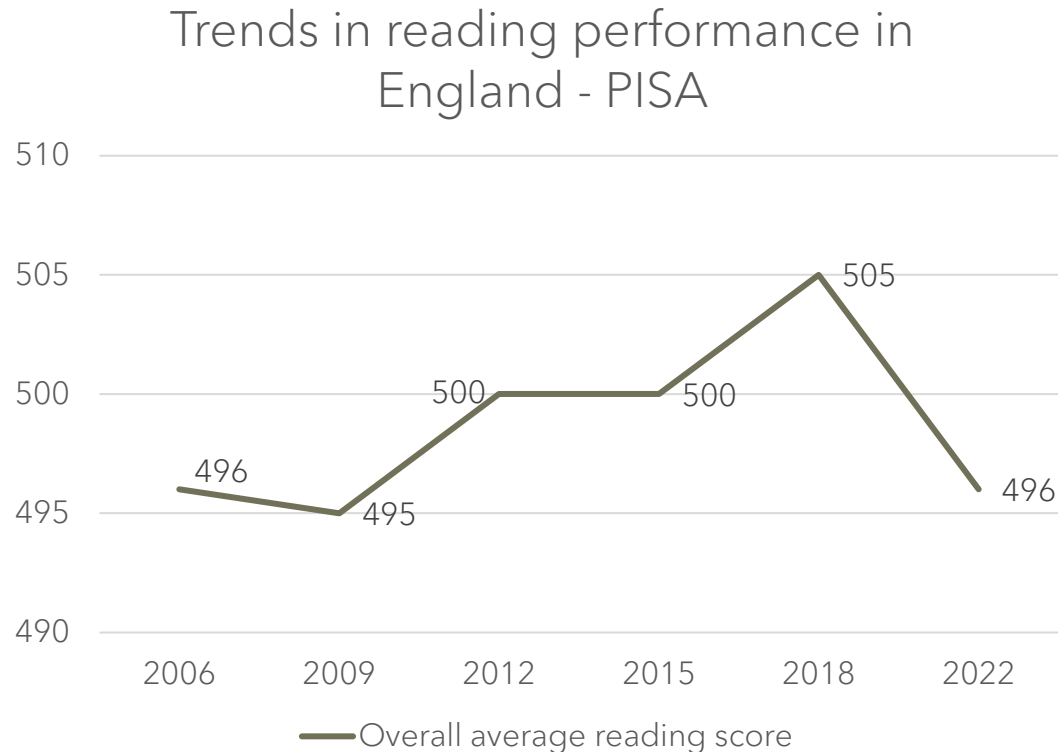
■ Delayed Assessment of Fourth Grade Cohort at the Beginning of Fifth Grade

Country	Average Scale Score	Reading Achievement Distribution
³ Singapore	587 (3.1) ▲	
Ireland	577 (2.5) ▲	
^{2†} Hong Kong SAR	573 (2.7) ▲	
Russian Federation	567 (3.6) ▲	
^{2†} Northern Ireland	566 (2.5) ▲	
England ⌘	558 (2.5) ▲	
[†] Croatia	557 (2.5) ▲	
Lithuania	552 (2.3) ▲	
Finland	549 (2.4) ▲	
Poland	549 (2.2) ▲	
^{2≠} United States	548 (6.8) ▲	
Chinese Taipei	544 (2.2) ▲	
² Sweden	544 (2.1) ▲	
Australia ⌘	540 (2.2) ▲	
Bulgaria	540 (3.0) ▲	
Czech Republic	540 (2.3) ▲	
Hungary	539 (3.4) ▲	
^{2†} Denmark	539 (2.2) ▲	
Norway (5)	539 (2.0) ▲	
² Italy	537 (2.2) ▲	

England - PISA

- In England, 4,763 15-year-old pupils from 165 schools completed a 2-hour computer-based assessment and pupil questionnaire. The study was carried out in November and December 2022.
- England's response rate in the study fell below the PISA sample standards and it is possible that higher performing students are overrepresented in the data.
- England's average score in reading (496) was above the OECD average (476).

Observations on England PISA

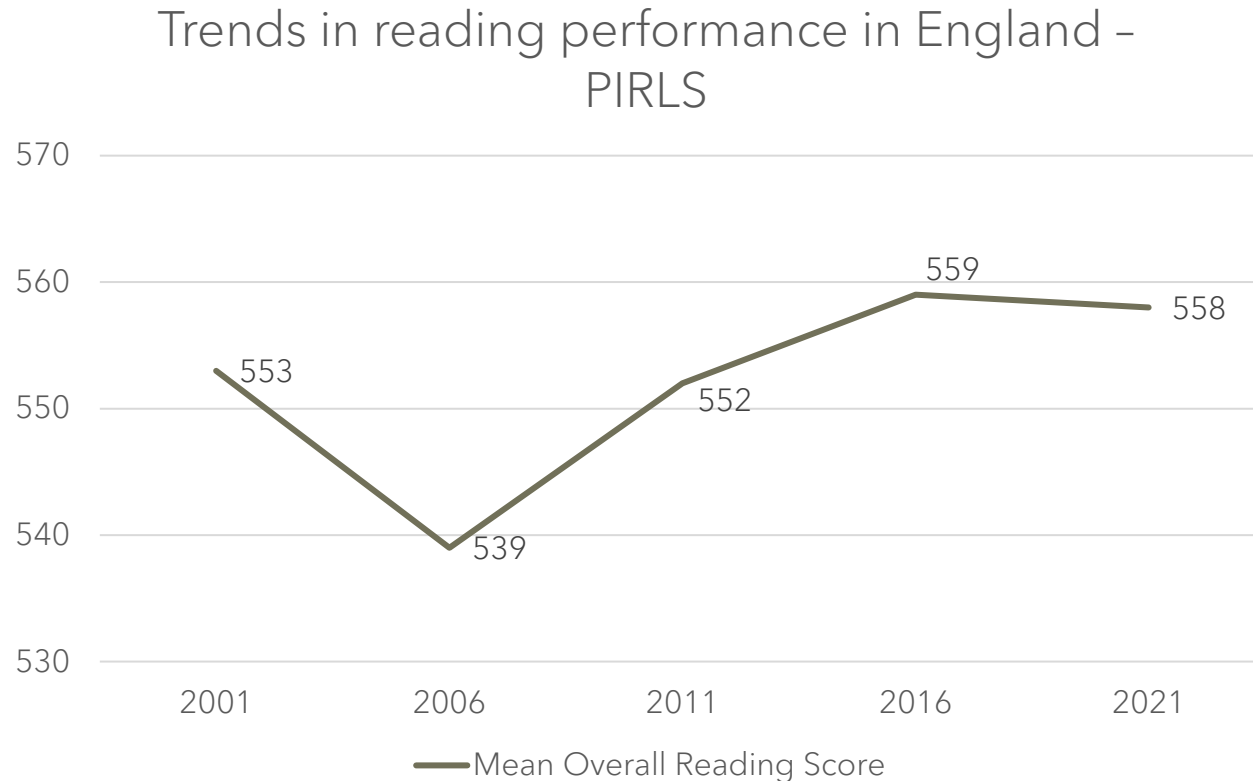


- England's score in 2022 was not significantly different from scores achieved between 2006 and 2015 but represents a significant drop of 9 score points from PISA 2018, in line with the OECD trend.
- Pupils from disadvantaged socio-economic backgrounds performed significantly worse on reading than those from relatively less disadvantaged backgrounds, in line with the rest of the UK and international trends.
- In line with the rest of the UK, girls have a significantly higher average score than boys for reading in England.

England - PIRLS

- In 2021, England's sample consisted of 4,150 year 5 pupils (10 years old) from 162 primary schools.
- While most countries reported on data from pupils in the autumn term of 2020 and spring term of 2021, covering results from the Covid period and therefore seeing a decline, England was among a handful to collect data later, in 2022.
- England ranked 4th of 43 countries taking part in the study with an average score of 558.

Observations on England PIRLS

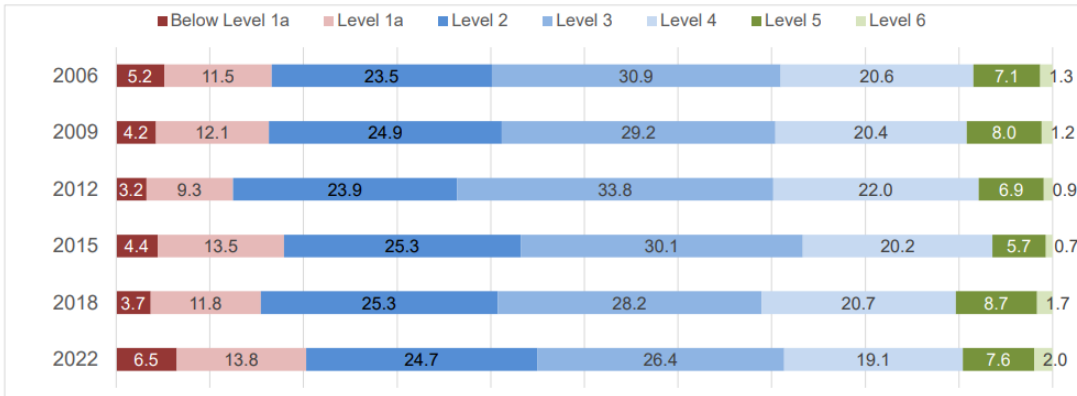


- England's actual score (as opposed to its ranking relative to other countries) shows there has been no progress in improving children's reading ability in England since the 2016.
- Reading enjoyment in England has declined since 2016. England is in the bottom half of countries on reading enjoyment measures. Just 29% of English pupils said they 'Very Much Like Reading' (compared with 42% internationally). A higher proportion of boys said they do not like reading compared to girls.
- Pupils from disadvantaged socio-economic backgrounds performed significantly worse on reading than those from relatively less disadvantaged backgrounds.

Source: [PIRLS 2021: National Report for England](#)

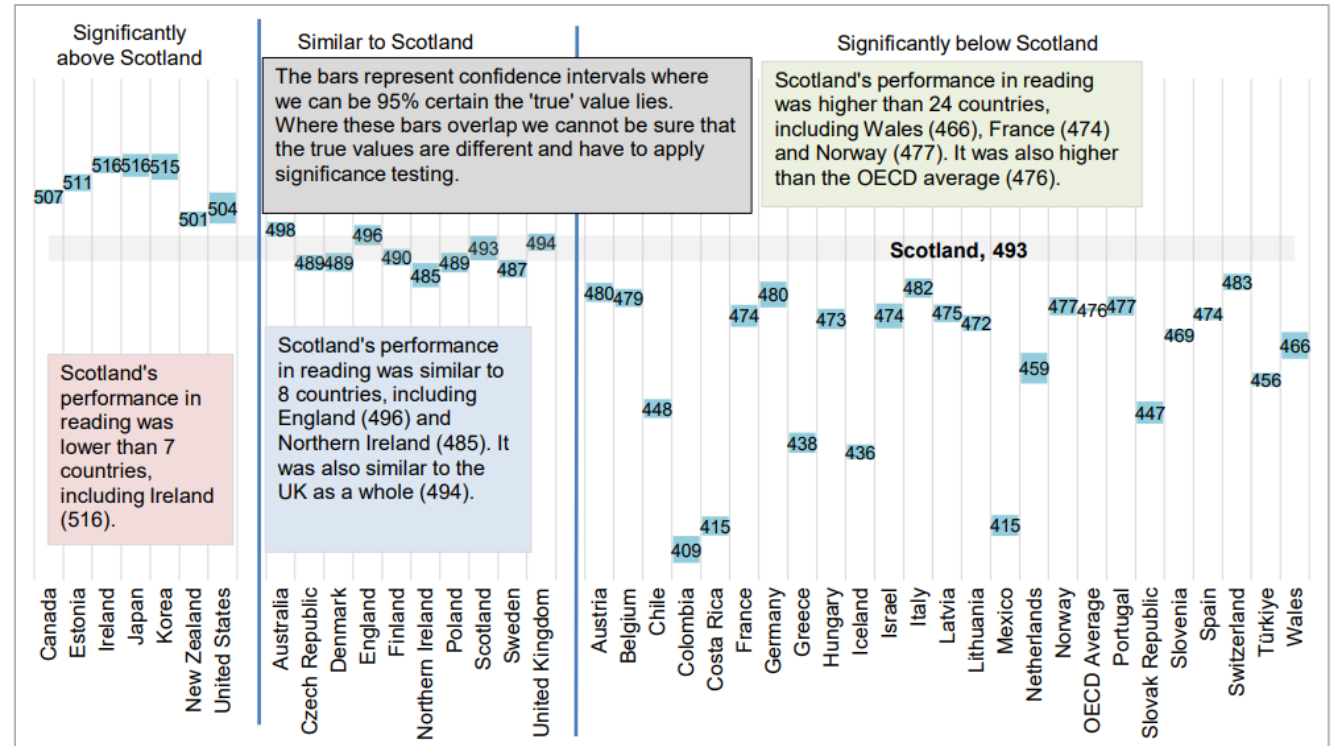
Scotland - PISA

Chart 3.1.4 Scotland's reading scores, by [PISA Proficiency Level](#), 2006-2022



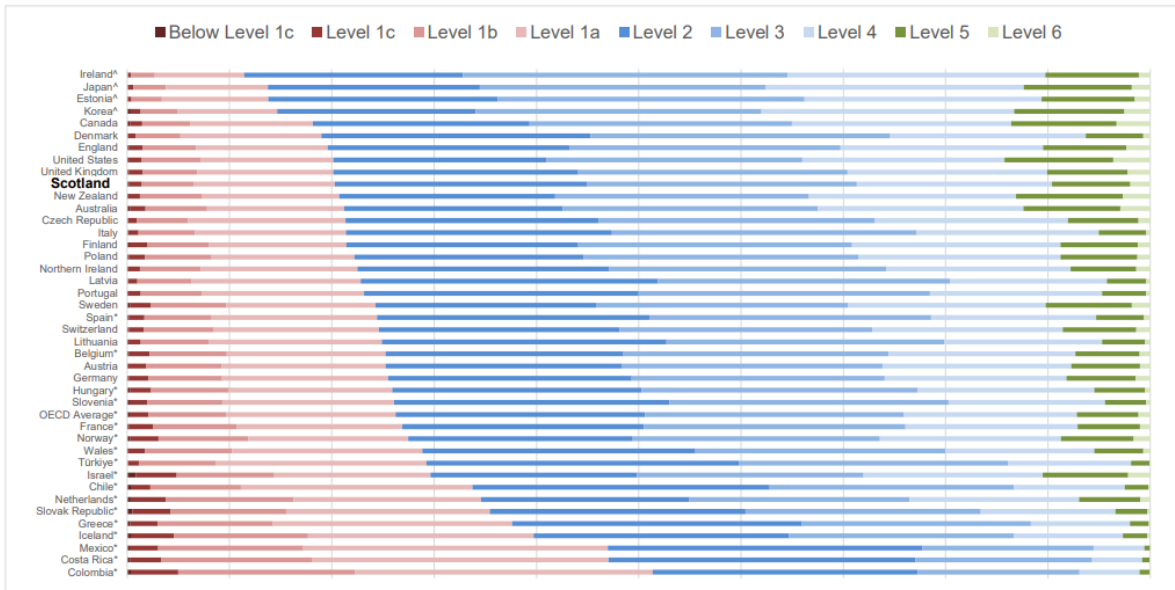
Scotland's scores in the 2022 PISA assessments (493) were above the OECD average in reading, but lower than Scotland's scores for 2018. The OECD average for reading also fell; Scotland's relative performance, when measured by the number of comparator countries that were above and below Scotland, stayed similar.

Chart 3.2.1 PISA reading [scores](#) of OECD countries (plus three other UK administrations), relative to Scotland, 2022



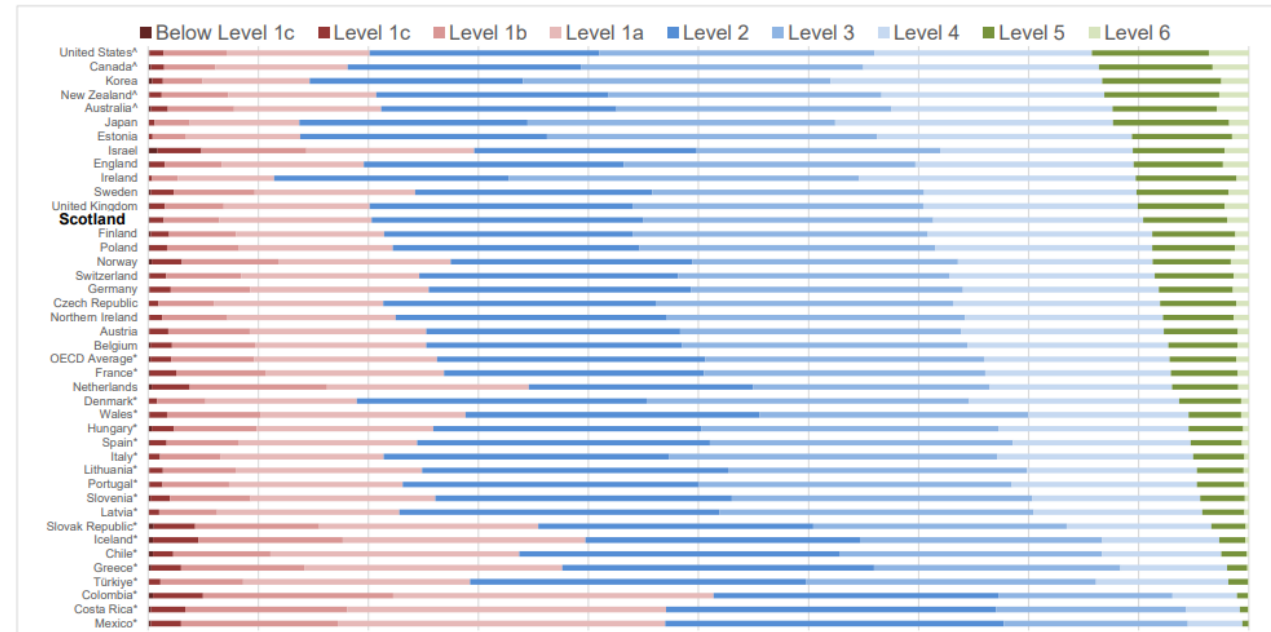
Scotland - PISA

Chart 3.2.4 [Proficiency Levels](#) in reading in OECD countries, arranged by percentage of students below Level 2, 2022



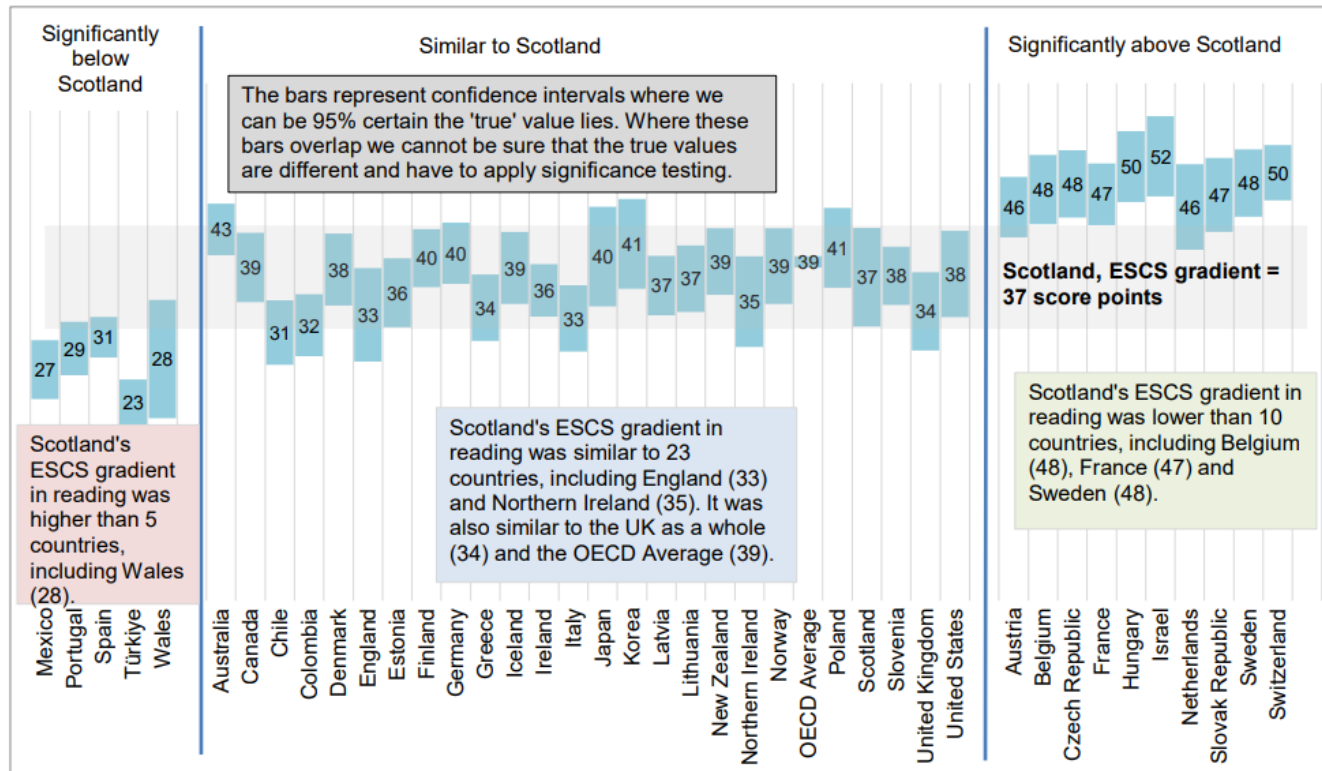
In 2022, 20.3% of students in Scotland performed below PISA Level 2 in reading, which was lower than the OECD average (26.3%). 9.6% of students in Scotland performed at PISA level 5 or better in reading. This was higher than the OECD average (7.2%).

Chart 3.2.5 [Proficiency Levels](#) in reading in OECD countries, arranged by percentage of students at Level 5 or better, 2022



Scotland - PISA

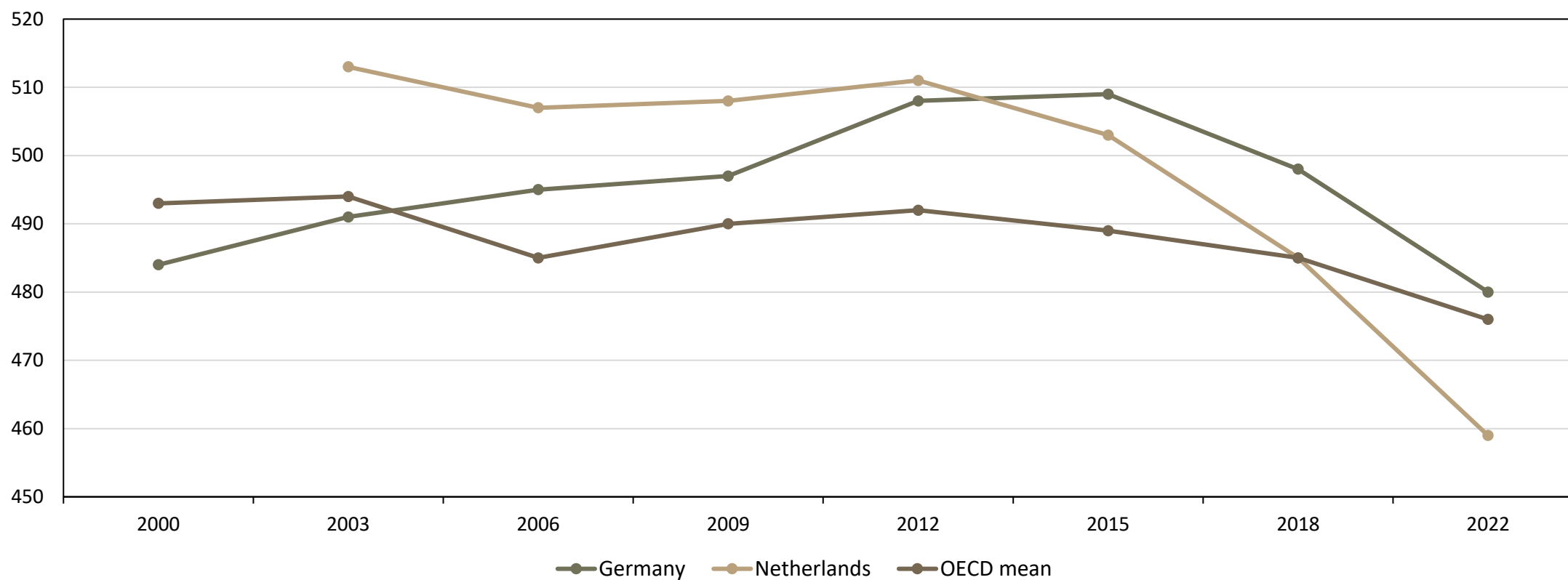
Chart 3.2.7 [ESCS gradient](#) in reading in OECD countries, relative to Scotland, 2022



The ESCS gradient was 37 points in the reading assessment for Scotland which was similar to the OECD average (39 points). This was lower than 10 countries, similar to 23 countries (as well as the UK as a whole), and higher than five countries.

PISA: Reading proficiency in the Netherlands & Germany

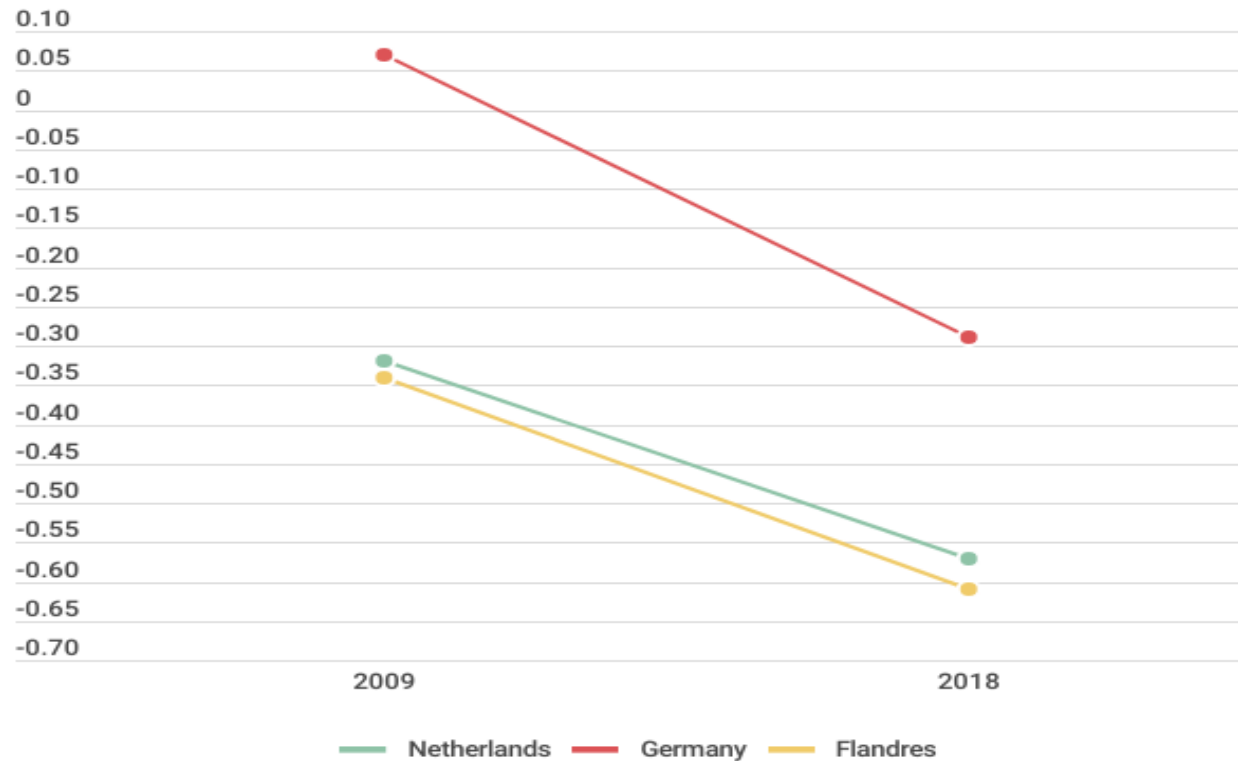
Reading proficiency



PISA: Reading pleasure in the Netherlands, Flandres & Germany

Trend in reading pleasure

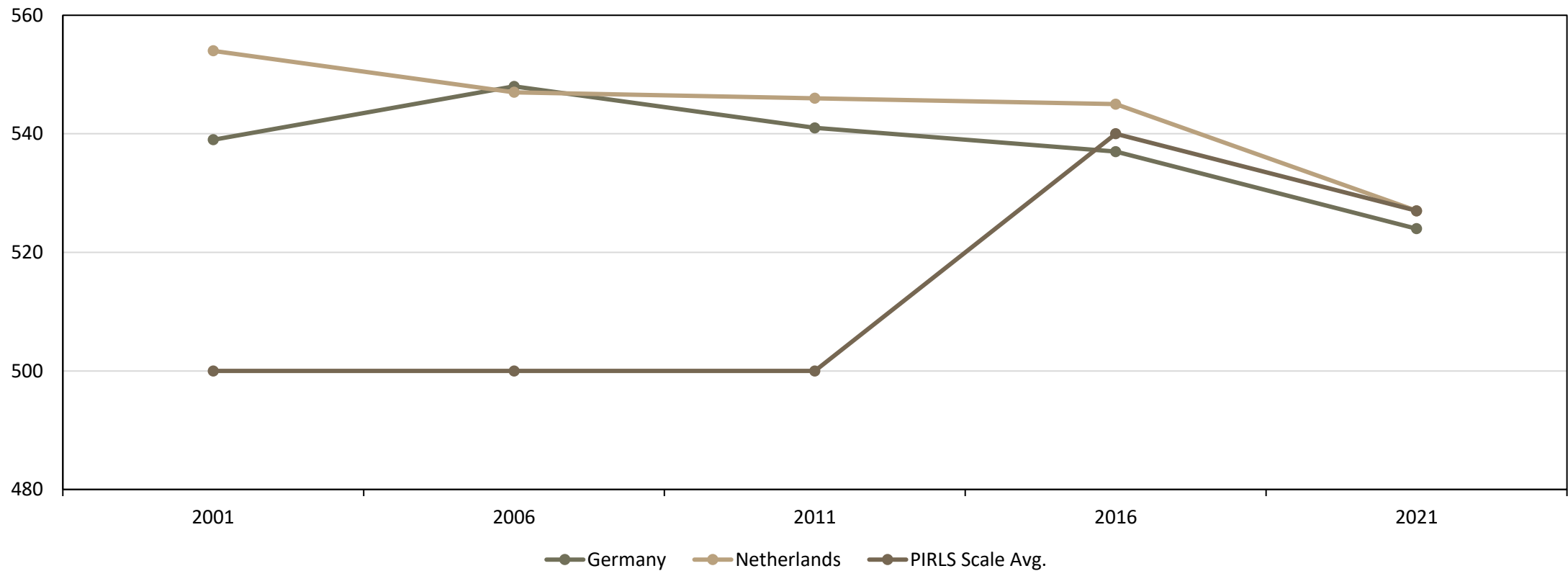
In mean scores



Source: Dood, Gubbels & Segers, 2020

PIRLS: Reading proficiency in the Netherlands & Germany

Reading proficiency





Jordan- PISA



7,799
students,
in 260
schools



Mean
reading
score of
342
Rank: 77/
81

20%

Attained
Level 2 or
higher



Females
outperformed
males in
reading by 46
points



Jordan - PIRLS

Average reading score of

381



- Jordan's average reading achievement score was significantly lower than the centerpoint of the PIRLS scale (500), higher only than Egypt and South Africa.
- Jordan ranked among the two lowest participating countries in the MENA region.

Female students scored 36 points higher in reading than males

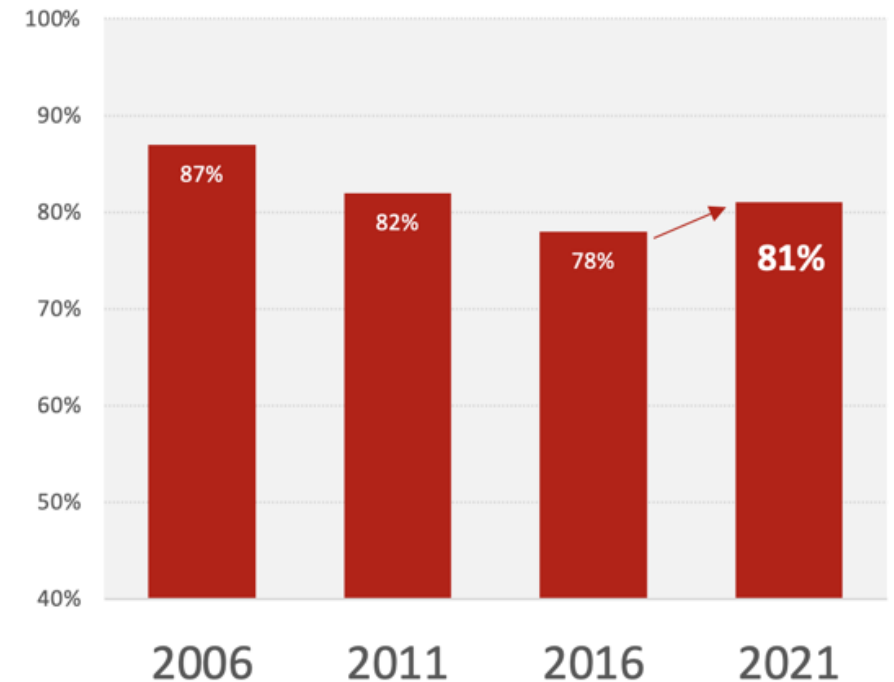
More than 6 in 10 students were either very or somewhat confident in reading, 33% were not confident

South Africa - PIRLS

- **Total number of Grade 4 children tested: 12,426**; Dates of testing: Aug-Nov 2021 (18 months after Covid 19-related school closures were introduced)
- **Of 43 countries participating in PIRLS 2021 South Africa came last** with a score of 288 (international average was 500). Each marker in the graph alongside represents one year of learning (40 points).
- **In 2021 81% of Grade 4 learners cannot read for meaning in any language, up from 78% in 2016.** This means that only 19% of South African Grade 4 children could read for meaning in any language in 2021. SA's PIRLS score dropped from 320 to 288, approximately 0,8 years of learning.
- **We have lost a decade of progress.** Between 2006 and 2016 the percentage of children that could not read declined from 87% (2006) to 82% (2011) to 78% (2016), but has now increased back to 81% (2021), wiping out a decade of slow progress and taking us back to 2011.
- **Northern rural provinces experienced the largest declines** in reading with coastal provinces experiencing the smallest declines. **English and Afrikaans schools did not experience a decline between 2016 and 2021.** In comparison, most African language schools did decline, highlighting that the pandemic increased inequality between no-fee and fee-charging schools.

% of SA Gr4's who **cannot** read in any language

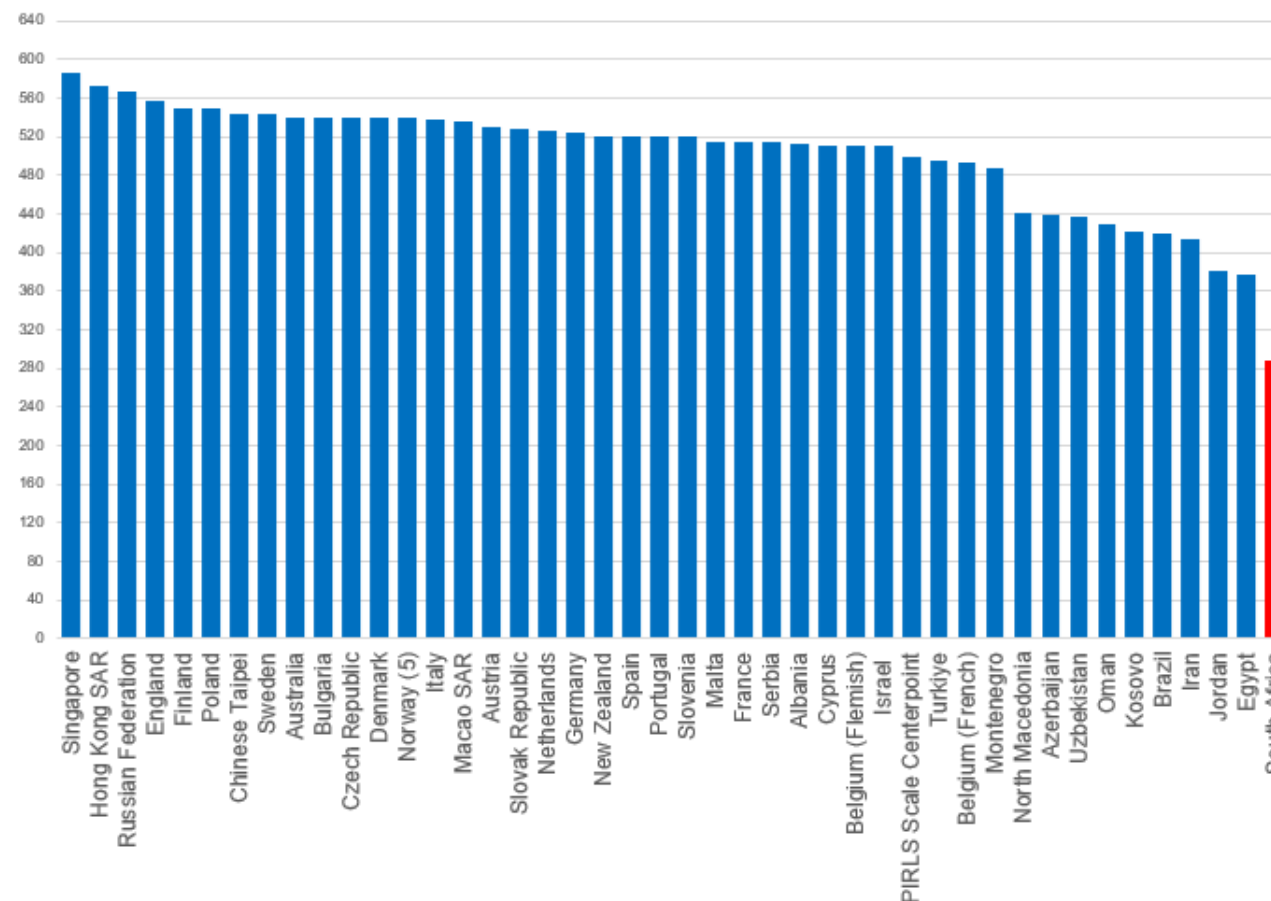
(i.e. could not answer straightforward comprehension questions (PIRLS 2006 - 2021) Note all 11 languages were assessed. This is the percentage of Grade 4's that could not reach the PIRLS Low International Benchmark (400 points)



Observations on *South Africa* - PIRLS

- **SA is 2-5 years behind other middle-income countries like Jordan, Egypt, Iran and Brazil.** The average Brazilian Grade 4 child is three years ahead of the average South African Grade 4 child. In Brazil 61% of Grade 4's could read at a basic level in 2021 compared to 19% in South Africa.
- **South Africa had the largest gender gap (pro-girl)** of all 57 participating countries/regions, with girls outperforming boys to the equivalent of 1,5 years of learning.
- **A 'generational catastrophe':** The new PIRLS 2021 reveal what can arguably be referred to as a 'generational catastrophe' due to Covid-related school closures and rotational timetables (no access to the internet, so no possibility to switch to online learning). Predicted: long-term adverse effects on the economy, and personal outcomes.
- While many factors contribute to poor reading comprehension, **extremely limited and unequal access to books plays a large role.** In South Africa, 65% of adults with children under 10 have no children's books, and only 10% have more than 10 books. Just 31% of adults say their oldest child owned a book by age 5. This means most children start school without important early learning experiences, leading to "inequality at the starting gate" and a lifelong struggle to close these gaps (Polzer-Ngwato et al. 2023).

PIRLS 2021 scores (Gr4)



Definitions

Reading literacy, as assessed in PISA 2022, is defined as

‘understanding, using, evaluating, reflecting on and engaging with texts in order to achieve one’s goals, to develop one’s knowledge and potential and to participate in society’ (OECD, 2019a, p.28).