



NFER Education Briefings

Key findings from PIRLS 2021 in Northern Ireland

What is PIRLS?

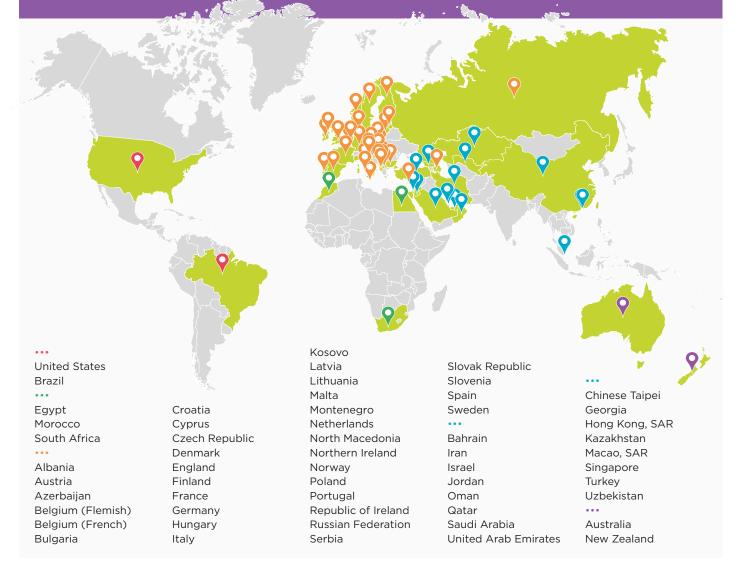
The Progress in International Reading Literacy Study (PIRLS) is an independent worldwide research study organised by the International Association for the Evaluation of Educational Achievement (IEA) which provides data about reading literacy. It takes place every five years and assesses the knowledge and skills of pupils aged 9 to 10 years old.

To contextualise pupils' attainment findings in reading, PIRLS also gathers extensive background information about pupils' school and home learning environments. This information can be used to provide education policymakers, school leaders, teachers and researchers with powerful insights into how education systems are functioning, including strategies used to teach reading, and pupils' level of engagement.

Who takes part?

PIRLS 2021 involved 57 countries along with eight benchmarking participants¹.

The PIRLS 2021 participants were varied and included high- and middle-income countries or regions. Education systems differ considerably across countries, including the age at which pupils start school and the policies and practices employed. More information about the education system in each participating country and region can be found in the PIRLS encyclopedia².



PIRLS 2021 in the UK

The four countries of the United Kingdom are regarded separately by the IEA and, of these, Northern Ireland and England chose to participate in the 2021 cycle. Northern Ireland also participated in PIRLS 2011 and 2016, so comparisons can be made with these earlier studies. England has participated in all five cycles since 2001. Scotland has also participated in previous cycles. NFER has a long history of involvement in international large-scale assessments dating back over fifty years. We have delivered PIRLS since its inception in 2001, including administration of the 2011 and 2016 studies in Northern Ireland. Findings from previous reports and further research can be found at www.nfer.ac.uk/pirls-research

- 1 Countries participating in PIRLS follow guidelines and strict sampling targets to provide samples that are nationally representative. 'Benchmarking participants' are regional entities which follow the same guidelines and targets to provide samples that are representative at regional level.
- 2 Reynolds, K. A., Wry, E., Mullis, I.V.S. and von Davier, M. (2022) *PIRLS 2021 Encyclopedia: Education Policy and Curriculum in Reading*. Available at: https://pirls2021.org/northern-ireland/.

Interpreting the results

It is important that the PIRLS results are interpreted appropriately, as a simplistic view can be misleading. The following points should, therefore, be borne in mind.



Comparisons between countries

Rather than focussing on the rankings of countries, it is more important to know whether countries are statistically similar or different. For example, a country may have an improved average score in reading, but fallen in the rankings due to the improved performance of other countries, or just the mix of countries in any given cycle.



Changes over time

A change in score from one cycle to the next does not necessarily indicate that national attainment has improved or declined. It is crucial to consider whether a score is statistically different from previous scores and that changes have not arisen solely by chance. Moreover, any change in scores may not necessarily be attributed directly to national education policies, as it may take many years to understand the full picture. Further analysis is often needed to follow up initial headline findings.





Variations in pupil attainment

A simple average score does not provide a full picture of a particular country. For this reason, PIRLS also looks at the range of pupil attainment within countries. PIRLS provides data on the 'spread' of attainment in two ways: the proportion of pupils achieving certain 'International Benchmarks'; and the difference between a country's highest and lowest scores. This can be used to look at variation across pupils and identify particular groups where resources can be targeted most effectively.



Education policy

PIRLS provides in-depth information about education systems, schools and pupils. It explores the relationship between contextual background factors and pupil attainment. This information can help countries to make evidence-based decisions, triangulating PIRLS results alongside other sources of evidence to develop and adapt education policy.



PIRLS 2021 – changes in some countries' data collection periods

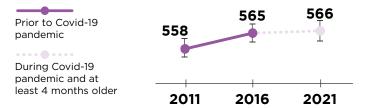
Due to the school disruptions and closures caused by the Covid-19 pandemic, PIRLS 2021 data collection extended over 22 months. Pupils in Northern Ireland were at the beginning of Year 7, as opposed to the end of Year 6 as for many other countries and, on average, four to five months older in PIRLS 2021 compared to previous cycles. The change in timing introduced additional factors that may affect overall attainment ³.

3 These are discussed in more detail in the National report: www.education-ni.gov.uk/articles/progressinternational-reading-literacy-study-pirls

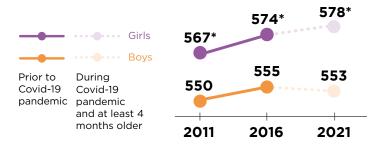
Key findings from PIRLS 2021 in Northern Ireland

Attainment

- Primary-age pupils in Northern Ireland performed very well in PIRLS 2021. They significantly outperformed those in 52 of the other 56 participating countries and were significantly outperformed by pupils in just two, Singapore and the Republic of Ireland.
- Northern Ireland's overall score in PIRLS has increased over time. Pupils' reading performance in 2021 was similar to 2016 but significantly higher than in 2011.



- Almost a quarter of pupils (23 per cent) in Northern Ireland reached the Advanced international benchmark. This was the third highest percentage internationally.
- There was a relatively wide spread of reading attainment in Northern Ireland. The gap between high attainers and low attainers was 204 scale score points. This was narrower than in Singapore (213), but wider than in England (193) and the Republic of Ireland (191). The narrower spread of attainment in England and the Republic of Ireland compared with Northern Ireland is due to a lower score for high attainers (in England) and a higher score for low attainers (Republic of Ireland).
- Girls' reading scores were significantly higher than those of boys in Northern Ireland. This was the case in 51 of the 57 PIRLS countries. In 2021, Northern Ireland had a gender gap of 24 score points⁴. A steady increase in girls' attainment over time has resulted in a widening of the gender gap.



*indicates the score is significantly higher than the other gender



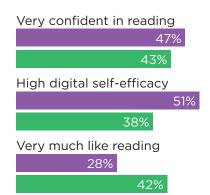
National Foundation for Educational Research Milestone House, The Mere Upton Park, Slough SL1 2DQ Pupils who were eligible for Free School Meals (FSME) performed less well in PIRLS compared with those who were not eligible. The size of the gap (49 score points) was similar to that in 2016 (48 score points⁵).

Covid-19

- The Covid-19 pandemic affected all PIRLS countries' education systems in some way. Principals were asked to estimate the number of weeks during which normal primary school operations were affected by the Covid-19 pandemic. Compared to pupils on average internationally, pupils in Northern Ireland experienced substantially more disruption.
- Most parents in Northern Ireland reported their child's learning had been at least *Somewhat adversely* affected by the pandemic.

Pupils' attitudes

• Pupils in **Northern Ireland** appeared more confident in reading than the **international average**, but liked reading less.



School learning environment

- In Northern Ireland, 81 per cent of pupils attended schools which were perceived to be *Somewhat affected* by resource shortages, a higher proportion than the international average.
- Two-thirds of pupils reported *Never* or *almost never* being bullied; this was similar to the international average.
- Teachers in Northern Ireland appeared to be less satisfied with their job than was seen internationally and in PIRLS 2016 in Northern Ireland.

- after taking into account the rounding of figures
 Sizmur, J. Galvis, M. and Kirkup, C. (2020) *PIRLS 201*
- Sizmur, J., Galvis, M. and Kirkup, C. (2020) PIRLS 2016 further analysis: Investigating pupil performance and attitudes in Northern Ireland across ILSA studies: PIRLS, TIMSS and PISA. Slough: NFER.

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