



Press Release

PISA 2018 – National Results for Ireland

Ireland's performance in reading literacy, science and mathematics was relatively stable between 2015 and 2018 – Students in Ireland amongst the highest performers in reading literacy

(Dublin, 3rd December 2019)

Key points:

- Students in Ireland are significantly above the OECD average in all three domains, with performance in reading literacy among the highest across OECD and EU countries.
- There are no significant changes in student performance in Ireland in reading literacy, science and mathematics, 2015-2018.
- There are significantly fewer low-performing students in Ireland in reading, science and mathematics compared to the average across OECD countries.
- There is a significantly higher proportion of high-performing students in reading literacy, relative to the average across OECD countries.
- There is an average proportion of high-achievers in science and a significantly lower proportion of high-performing students in mathematics in Ireland, compared to the average across OECD countries.
- In PISA 2018, female significantly outperform their male counterparts in reading literacy as in previous cycles; however in science and mathematics there were no significant gender differences in 2018, whereas males had significantly higher mean scores in 2015.

In PISA 2018, 15-year-old students in Ireland performed above the OECD average in reading literacy, science and mathematics. Student performance in Ireland in reading literacy continues to be amongst the highest across OECD and EU countries. However, while students in Ireland achieve significantly above the OECD average in mathematics and science, the gaps in average student performance relative to the highest-performing countries remain. Ireland has below average percentages of low-performing students in all three domains than on average across OECD countries. Despite relative stability in overall student performance in Ireland, a challenge remains in supporting students to maximise their potential at the highest levels of proficiency in science and mathematics.

The Programme for International Student Assessment (PISA) is a project of the Organisation for Economic Cooperation and Development (OECD), of which Ireland is a member. PISA, which has taken place every three years since 2000, assesses the preparedness of 15-year-olds to meet the challenges they may encounter in their future lives, including education. In 2018, over 600,000 15-year-olds in 79 countries/economies, including all 37 OECD countries, took part in PISA. In Ireland, 5,577 students in 157 schools took part. Reading literacy was the major assessment domain in 2018, with science and mathematics assessed as minor domains. In Ireland, PISA is implemented by the Educational Research Centre, on behalf of the Department of Education and Skills.

PISA 2018 was the second full administration on a computer-based platform. Several changes were incorporated into the design and administration of PISA in 2018, along with the revisions to the reading literacy framework. Adaptive testing was integrated in the assessment of reading literacy, and the machine-scoring of some open-ended responses was incorporated across the three domains. The incorporation of a test of reading fluency into PISA 2018 was designed to provide a better measure of performance among students scoring at or below the lowest levels of proficiency.

On reading literacy, Ireland's mean score of 518.1 is significantly higher than the OECD average¹ of 487.1. Students in Ireland ranked 4th out of 36 OECD countries, and 3rd out of 27 EU countries. Student performance on PISA reading literacy in Ireland is characterised by an above average percentage of high performers (12.1%), and a small and below average percentage of low performers (11.6%); there are significantly fewer low performers and significantly more high performers in Ireland than on average across OECD countries. Comparing student performance in reading literacy in Ireland to 2009 (when reading was the major assessment domain), the overall mean score was 22.4 points higher in 2018. However, caution should be exercised when drawing comparisons between 2009 and 2018, as issues with student engagement and the statistical model used to scale the PISA 2009 data may have resulted in an underestimate of Ireland's reading literacy score back in 2009. Student performance in Ireland in reading literacy in PISA 2018 is at a similar level to prior to 2009, and to that achieved in 2012 and 2015.

On science, Ireland's mean score of 496.1 is significantly higher than the OECD average of 488.7. Students in Ireland ranked 17th among 37 OECD countries, and 11th out of 28 EU countries. Student performance on PISA science in Ireland is characterised by an average percentage of high-performing students (5.8%), and a significantly lower percentage of low-performing students (17.0%) than on average across OECD countries. The overall trend in science performance in Ireland between 2015 and 2018 relatively stable, with a small non-significant decline.

On mathematics, Ireland's mean score of 499.6 is significantly higher than the OECD average score of 489.3. Students in Ireland ranked 16th out of 37 OECD countries, and 11th out of 28 EU countries. Student performance on PISA mathematics in Ireland, like science, is characterised by a significantly lower percentage of high achievers (8.2%), and a significantly lower percentage of low performing students (15.7%) than on average across OECD countries. The overall trend in mathematics performance between 2012 and 2018 is stable, with a non-significant change in mean score.

The relatively narrow range of achievement (low standard deviations around mean scores) in reading literacy, mathematics and science in Ireland, compares favourably with OECD, EU, and selected comparator countries. The between-school variation, as a percentage of the average total

¹ The OECD average for reading literacy is based on 36 countries, while for mathematics and science, the average is based on 37 countries. Reporting on PISA 2018 reading literacy data for Spain is deferred until sub-optimal response patterns are investigated. For trend comparisons in reading literacy 2009-2018, the OECD average is based on 35 countries; trends for Austria were not reported in 2009.

of variation in reading performance across OECD countries, is low in Ireland at 11.1%, compared to 29.0% on average across OECD countries. Post-primary schools in Ireland can be considered relatively equitable, in addition to having above average performance on the three assessment domains.

The gender gap in reading literacy in PISA 2018 in Ireland (23.2 points) is statistically significant. The gender difference was significantly higher at 39.2 score points in 2009, and narrowed to 12.0 score points in 2015. However, the gap in 2018 is among the lowest on average for OECD countries. For mathematics and science in Ireland in 2018, mean score differences between female and male students are not statistically significant. This differs from 2015 when male students performed significantly better than females in mathematics and science.

While the percentage of high achievers on reading literacy in Ireland is amongst the highest in the OECD and across EU countries, the percentages of students in Ireland performing at the highest levels in mathematics and science have receded slightly. A change in the proportion of high achievers in mathematics between 2012 and 2018 is statistically significant (-2.4), while the change in the percentage of high achieving students in science between 2015 and 2018 is not significant (-1.2 points).

The Educational Research Centre plans to publish a number of additional analyses on policy-relevant themes such as student well-being, digital technology, reading literacy and on the performance in PISA of students in DEIS schools, in 2020-2021.

Further information:

The national report on PISA 2018 in Ireland can be accessed at www.erc.ie.

International reports on PISA 2018 can be accessed at www.oecd.org/pisa.

Sample items from PISA reading literacy, science and mathematics can be viewed in the national report for Ireland. They can be taken interactively at www.oecd.org/pisa.

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