Gender difference in mean age-standardised score

The difference in the mean age-standardised score for boys and girls shows:

- Girls out performed boys in the reading tests in all national curriculum year groups;

- Boys out performed girls in the numeracy reasoning test in most national curriculum year groups. The only exception was the Year 7 test.

Transition to online assessment for reading and numeracy

Online personalised assessments are replacing the current paper-based national tests for all learners in Years 2 to 9 over a three-year period. In 2019, pupils took a new online personalised assessment for Procedural Numeracy instead of a paper-based test. This release presents results for the paper-based tests only.

Due to the transition to online assessment, the statistical releases for 2019 tests will be the last to be produced (see Future plans).
Introduction

National tests in reading and numeracy are taken by pupils in Years 2–9 each summer.

There are reading tests in English and Welsh. In Welsh medium schools all pupils in Years 4–9 take both English and Welsh tests but pupils in Years 2 and 3 are only expected to take the Welsh reading test. In English medium schools, all pupils in Years 2–9 take the English reading test only. The reading tests are made up of short questions based on two or more texts. Some of the questions check how well the text has been understood, others aim to find out if children are able to make judgements about what they are reading.

In 2019, pupils also took a Numeracy Reasoning test, a test in which pupils apply their skills to solve everyday problems. Pupils took a new online personalised assessment for Procedural Numeracy (the numerical ‘tools’ that are used to apply numeracy within a range of contexts), instead of a paper-based test.

The numeracy tests were available in either English or Welsh (the questions are the same).

Transition to online assessment for reading and numeracy

Online personalised assessments are replacing the current paper-based national tests for all learners in Years 2 to 9 over a three-year period.

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<tr>
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<th>2019</th>
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<tr>
<td>Numeracy</td>
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<td>Procedural Numeracy</td>
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<td>Reading</td>
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<tr>
<td>Numeracy Reasoning</td>
<td>Paper</td>
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The new personalised assessments adjust the difficulty level of the questions in order to provide appropriate challenge for each learner.

More information can be found on the [Hwb website](#).

Age-standardised scores

Pupils’ raw test scores have been converted into age-standardised scores (showing how individual learners performed compared to other learners of the same age, in years and months, taking each test). Age-standardised scores provide a measure of relative performance only. The average age-standardised score is set to approximately 100 and the average range is between 85 and 115. About 68 per cent of learners taking the test will have a score in this range. A score above 115 indicates test results that are higher than those for most children of the same age. A score below 85 indicates test results that are lower than those for most children of the same age.

This release presents analysis of pupils’ age-standardised scores by gender for the 2019 paper-based tests. The results for each year group and test are independently standardised every year. Therefore the data in this release cannot be used to compare the relative performance of pupils between the different tests. Please also note that because data are independently standardised each year, the results cannot be compared over time.
National Reading Tests – age-standardised scores

Chart 1: Percentage of pupils in all year groups achieving age-standardised scores within the bands shown in the National Reading Test (English), by gender, 2019 (a)(b)

- More girls than boys achieved a standardised score greater than 115 for all year groups combined. The gap between girls and boys was 4.2 percentage points.
- More boys than girls achieved a standardised score less than 85 for all year groups combined. The gap between boys and girls was 6.8 percentage points.
- The variability of standardised scores was higher for boys than girls, with a standard deviation of 15.7 and 15.2 respectively.

(a) Does not include optional English reading test results for pupils in year 3 studying Welsh first language.
(b) Pupils who were disapplied or absent during the test window or received a score of ‘less than 70’ have been treated as a score of 69, those with a score of ‘more than 140’ have been treated as a score of 141.
(c) Includes pupils who were disapplied or absent during the test window.

Chart 2: Percentage of pupils in all year groups achieving age-standardised scores within the bands shown in the National Reading Test (Welsh), by gender, 2019 (a)

- More girls than boys achieved a standardised score greater than 115 for all year groups combined. The gap between girls and boys was 6.9 percentage points.
- More boys than girls achieved a standardised score less than 85 for all year groups combined. The gap between boys and girls was 7.9 percentage points.
- The variability of standardised scores was fairly similar for boys and girls with a standard deviation of 14.9 and 14.8 respectively.

(a) Pupils who were disapplied or absent during the test window or received a score of ‘less than 70’ have been treated as a score of 69, those with a score of ‘more than 140’ have been treated as a score of 141.
(b) Includes pupils who were disapplied or absent during the test window.

The gender gap for the percentage of pupils achieving a standardised score greater than 115 was larger in the Welsh reading test than any of the other National tests.

For more detailed data tables, please refer to Table 1 of the accompanying spreadsheet.
National Numeracy Test (reasoning) – age-standardised score

Chart 3: Percentage of pupils in all year groups achieving standardised scores within the bands shown in the National Numeracy Test (reasoning) by gender, 2019

(a) Pupils who were disapplied or absent during the test window or received a score of ‘less than 70’ have been treated as a score of 69, those with a score of ‘more than 140’ have been treated as a score of 141.
(b) Includes pupils who were disapplied or absent during the test window.

- More boys than girls achieved a standardised score greater than 115 for all year groups combined. The gap between boys and girls was 3.7 percentage points.
- More boys than girls achieved a standardised score less than 85 for all year groups combined. The gap between boys and girls was 1.3 percentage points.
- The variability of standardised scores was higher for boys than girls with a standard deviation of 16.8 and 15.3 respectively.

For more detailed data tables, please refer to Table 2 of the accompanying spreadsheet.

Further details

This document and a quality report containing information on the policy context, other related publications and on the data sources, definitions, methodology and key quality information related to this release is available at:


Future plans

The statistical headline “National Reading and Numeracy Tests and entitlement to free school meals” will be published in February 2020. Given the phasing in of online assessments to replace the paper-based tests, the data will no longer be held by Welsh Government statisticians. Therefore the February 2020 output will be the last statistical output for the National Tests. Data for the 2020 paper-based Numeracy Reasoning test will be available on request.

We want your feedback

We welcome any feedback on any aspect of these statistics which can be provided by email to school.stats@gov.wales

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