READING LITERACY ACHIEVEMENT: SENIOR SECONDARY SCHOOLING

New Zealand showed a decline in reading literacy performance at the senior secondary level, though only five out of 34 OECD countries achieved significantly higher mean scores than New Zealand.

Indicator Description

Reading literacy of 15-year-old students.

Why This Is Important

Reading literacy achievement at senior secondary level contributes to preparation for successful participation in tertiary education and training. Achievement level is also related to people's well being and influences their ability to contribute to, and participate in, a changing labour market and increasingly knowledge-based society.

Literacy involves the ability of individuals to use written information to fulfil their goals, and the consequent ability of complex modern societies to use written information to function effectively.

The Programme for International Student Assessment (PISA) study assessed 15 year-old students’ reading ability on accessing and retrieving information, integrating and interpreting texts, and reflection and evaluation.
How We Are Going

The reading scores from PISA 2000, 2003, 2006, 2009 and 2012 can be summarised on a combined reading literacy scale. This enables a comparison to be made between the reading literacy achievements of 15 year-old students in each of these years.

New Zealand continues to perform well in reading literacy at the senior secondary level, as measured by the PISA reading tasks, but there has been a decline in performance over recent years.

In PISA 2012, New Zealand 15 year-old students had a mean reading literacy score significantly above the Organisation for Economic Co-operation and Development (OECD) mean across 34 countries. Five OECD countries achieved significantly higher mean scores than New Zealand, as did four non-OECD countries.

Between 2000 and 2012 there has been a significant drop in New Zealand’s average 15 year-old student performance in reading literacy. Most of this decline happened between 2009 and 2012. Several countries that achieved above the OECD average in 2000 have had larger declines than New Zealand between 2000 and 2012 including Finland, Iceland and Sweden. In contrast, the increase in scores for Poland and Germany mean that both of these countries which were below New Zealand in 2000 are now at the same level.

New Zealand’s proportion of poor readers (level 2 and below) increased from 14% in 2000 to 16% in 2012. The proportion of advanced readers (level 5 and above) declined from 19% to 14%. The proportion of very advanced readers (level 6) stayed constant at around 3% since 2009 (when this level was introduced).
Figure 1: PISA reading literacy mean scores for New Zealand and OECD 2000, 2003, 2006, 2009 and 2012

Note:
1. Error bars on the graphs provide a 95 percent confidence interval for the estimate of the average.
Gender

In PISA 2012 fifteen year-old New Zealand girls achieved a significantly higher mean reading literacy score than boys, continuing a trend evident since 2000. Between 2000 and 2012, girls’ performance has declined by 23 points, whereas boys’ performance has declined less; by only 11 points.

Figure 2: New Zealand PISA reading literacy mean scores by gender, 2000, 2003, 2009 and 2012

Note:
1. Error bars on the graphs provide a 95 percent confidence interval for the estimate of the average.
Ethnicity

Māori and Pasifika students are priority students traditionally under-served by the education system, along with special education students, and those from low socio-economic areas. The Ministry of Education is dedicated to improving outcomes for these students.

In PISA 2012, average reading scores for Māori and Pasifika were significantly lower than both the New Zealand and OECD averages. Lower proportions of Māori and Pasifika students achieved at the highest levels of proficiency in reading, and were over-represented at the lower levels when compared with the overall New Zealand average.

*Figure 3: New Zealand PISA Reading Literacy Mean Scores by Ethnic Group, 2000, 2003, 2006, 2009 and 2012*

Note:
1. Error bars on the graphs provide a 95 percent confidence interval for the estimate of the average.
**Socio-economic**

Improving education outcomes for students from low socio-economic areas is another priority for the Ministry of Education.

In this indicator, socio-economic status is measured using the PISA index of economic, social and cultural status (ESCS). This index is created by asking the students about their parents’ occupation and education level, their access to educational resources like books and computers, and whether they had certain items in their household that are likely to be related to parental income e.g. dishwasher, pay television etc. New Zealand has an ESCS score that is similar to the OECD average.

The New Zealand students were split into quarters based on their ESCS index scores. The PISA mean reading score for those in the lowest quarter (lowest socio-economic group) in 2012 was well below the New Zealand mean and OECD mean scores. Scores had dropped in all socio-economic groups since 2000.
Where to Find Out More

This indicator is closely linked to other national assessment programmes for reading, as well as achievement indicators for senior secondary school students, such as:

- Reading literacy achievement: primary schooling.
- Literacy skills in the adult population
- Mathematics literacy achievement: senior secondary schooling
- Science literacy achievement: senior secondary schooling.

The Ministry of Education has established an Iterative Best Evidence Synthesis Programme to systematically identify, evaluate, analyse, synthesise and make accessible, relevant evidence linked to a range of learner outcomes. Evidence about what works for this indicator can be found at:

- BES (Iterative Best Evidence Synthesis) Programme

References