Reading literacy achievement: senior secondary schooling

New Zealand showed very little change in reading literacy performance at the senior secondary level from 2012 and only four out of 35 OECD countries achieved significantly higher mean scores than New Zealand in PISA 2015.

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 wellbeing 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 the first PISA in 2000 through to PISA 2015 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 performance has dropped significantly overall since the year 2000. The largest decline in reading performance occurred between 2009 and 2012.

In PISA 2015, New Zealand’s 15-year-old students had a mean reading literacy score significantly above the Organisation for Economic Co-operation and Development (OECD) mean across 35 countries. Four OECD countries achieved significantly higher mean scores than New Zealand, as did two non-OECD countries.

Several countries that achieved above the OECD average in 2000 have had larger declines than New Zealand between 2000 and 2015 including Iceland, Australia and Finland. In contrast, the increase in scores for Germany means that this country which was below New Zealand in 2000 is now at the same level.

New Zealand’s proportion of poor readers (level 2 and below) increased from 14% in 2000 to 17% in 2015. The proportion of high performing readers (level 5 and above) declined from 19% to 14%. The proportion of very advanced readers (level 6) has stayed constant at around 3% since 2009 when this level was introduced.

Figure 1: PISA Reading Literacy Mean Scores for New Zealand and OECD, 2000-2015.
Gender

In PISA 2015, New Zealand's 15-year-old girls achieved a significantly higher mean reading literacy score than boys, continuing a trend evident since 2000. Between 2000 and 2015, girls' performance has declined by 27 points, whereas boys’ performance has declined less; by only 14 points.

Figure 2: New Zealand PISA Reading Literacy Mean Scores by gender, 2000-2015
**Ethnicity**

Māori and Pacific students are a priority group traditionally under-served by the education systems. The Ministry of Education is dedicated to improving outcomes for these students.

In PISA 2015, the average reading scores for Māori and Pacific were significantly lower than both the New Zealand mean and the and OECD mean scores. Lower proportions of Māori and Pacific 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, 2000-2015*
Socio-economic

Improving education outcomes for students from low socio-economic backgrounds 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.

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 2015 was well below the New Zealand mean and OECD mean scores. Since 2003, when the earliest PISA ESCS data is available, reading scores have dropped significantly only for the highest socio-economic quarter; other socio-economic quarters have experienced no meaningful change in performance since 2003.
Where to Find Out More

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

- Reading / Pānui: primary schooling
- Science literacy achievement: senior secondary schooling
- Mathematics 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.

References