



2021 Regional Report / Performance / Year 6 cohort

## Year 6 cohort

The numeracy, reading, and writing performance of year six students.

Year six students who participated in PILNA 2021 have had different schooling experiences from previous PILNA cohorts. Formal learning in the Pacific region has been significantly disrupted since 2019, when the Covid-19 pandemic resulted in periodic school closures throughout the region. Other health-related events and natural disasters, such as the measles outbreak in Samoa and the Hunga Tonga-Hunga Ha'apai volcanic eruption, have created further learning disruptions.

These events may have also had wider impacts on school-age children, such as changes to their mental health, community commitments, or their access to education, although further research is needed to validate any wider impacts of these events.

The 2021 year six cohort of students have had a smaller proportion of their total school years affected by these learning disruptions than the 2021 year four students, who may have been more affected by them. The effects of learning disruptions on students with more years of formal schooling compared with fewer years of formal schooling have not, however, been well established. Future research and analysis are needed in this area.

Importantly, PILNA 2021 is the first large-scale regional assessment to show the consequences of these disruptions. It has collected the information necessary to link learning disruptions to student performance. Analysis of this information will be undertaken in the near future and provided alongside the PILNA 2021 results when available.

In PILNA 2021, the numeracy performance of 19,563 year six students was analysed (9,875 girls; 9,688 boys), the reading performance of 19,602 year six students was analysed (9,913 girls; 9,689 boys), and the writing performance of 19,593 year six students was analysed (9,905 girls; 9,688 boys).

Read and learn more about the performance of year 4 students' performance in each domain here:

- Numeracy
- Reading
- Writing

Across the region, on average, year six students are exceeding the minimum expected performance level in numeracy and are meeting the minimum expected performance level in reading, but only just.

Expected levels of performance have not yet been established for writing but the average writing performance was about the same as in 2018.





Year six students appear to be performing well, typically meeting minimum performance levels in numeracy and reading, although there are some points to consider for each of the domains.

The first of these is the decrease in the average numeracy performance compared with PILNA 2018. Year four students and year six students both experienced a moderate decrease in average numeracy performance compared with 2018. For year six students, the 2021 numeracy performance was higher than in 2012 and 2015, but the decrease in 2021 is still something to be concerned about. Future research should focus on understanding what drove this difference in performance.

There is a small decrease in average reading performance. As the average reading score for year six students in PILNA 2021 is only just reaching the expected performance level, any decreases in this score are of concern. The distribution of year six reading scores also has a cluster of student scores at the highest levels of performance: levels seven and eight.

It is possible that the performance of a small group of high performing students throughout the region is an outlier which is skewing the average to the expected level. For this reason, stakeholders should also consider the proportions of students who are not meeting the minimum expected levels in reading. This may be a better gauge of student performance than just the average reading score.

Also, the long-term trend in year six reading performance is unclear. This needs further investigation to establish if there are any underlying factors that are affecting student progression.

For the writing domain, there are currently no proficiency scales that can explain whether students are meeting performance expectations. The only benchmark of writing performance that can be used is the trend of writing performance over time.

Year six students scored similarly in average writing performance compared with 2018. The scores in both 2018 and 2021 were moderate increases over 2015, but writing performance has been maintained, not improved. It is critical that once the writing proficiency scale and the expected levels of performance have been established, these findings are re-analysed to identify whether year six students are meeting the expected level of performance.

2021 performance findings also need to be analysed in the context of the new <u>rotated test booklet design</u>. PILNA 2021 collected more information about lower performing students than previous cycles, therefore, it is possible that performance differences are influenced by an increased accuracy of assessment.

There is no clear overall performance outcome for year six students in PILNA 2021. Students are, on average, meeting minimum reading performance expectations but the distribution of scores may mean that fewer students are meeting this benchmark than the average score implies.

In writing, year six students are performing about the same as in 2018, but it cannot be determined whether this performance meets stakeholder expectations. Students are, on average, meeting the minimum expected standard in numeracy but numeracy appears to show greater performance changes than reading and writing at this level.

Writing performance was about the same as 2018, reading performance was slightly lower, but numeracy performance experienced a moderate decrease.





A similar trend was seen in the year four students' performance results. In these, numeracy performance showed a large decrease, there was a small decrease in reading, and writing performance saw a large increase.

Additional research is needed to identify whether there are any associations between the numeracy and literacy performances of students and whether school closures had an effect on either or both.

One thing is clear: year six girls scored higher than year six boys across all the PILNA assessments. On average, girls scored higher than boys in every area that PILNA assessed: reading, writing and all areas of numeracy performance. The differences were frequently sizeable.

It will be important to understand how effectively Pacific education systems are meeting the needs of boys or whether anything can be learnt from girls' higher performance at this stage of schooling.

## Year 6 numeracy

- Year six students are, on average, exceeding the minimum expected numeracy performance level.
- There was a decrease in the average numeracy score in PILNA 2021 for year six students compared with PILNA 2018.
- 72% of year six students met the minimum expected numeracy performance level in 2021.
- The proportion of year six students meeting the minimum expected numeracy level decreased in 2021 compared with 2018.
- Year six girls scored higher than year six boys in every numeracy area.
- For full conclusions see the <u>numeracy</u> section.

## Year 6 reading

- Year six students are, on average, meeting the minimum expected reading performance level.
- Small decreases in reading performance were found in PILNA 2021 compared with PILNA 2018 for year six students, but it is unclear whether these are significant.
- 53% of year six students met the minimum expected reading performance level in 2021.
- Year six girls scored higher than year six boys in their average reading scores in 2021.
- A larger proportion of year six girls met the minimum expected reading performance level than did year six boys.
- For full conclusions see the <u>reading</u> section.





## Year 6 writing

- The average writing scores of year six students were the same as in PILNA 2018.
- The average writing scores of year six girls were higher than those of year six boys in PILNA 2021.
- For full conclusions see the writing section.