

Language

Language is the one of the most important tools we use to learn. While English is a common language of instruction in Pacific schools, there are hundreds of Pacific languages and the language students use at home is not always the language they use at school. Similarly, the language that students took the PILNA assessments in may not have been the language most familiar to them.

Taking assessments in a language that is not a student's most familiar language may affect their performance. This is important to consider, as the PILNA assessments aim to assess student performance independently from any one language – literacy and numeracy can be demonstrated using any Pacific language. Therefore, the PILNA programme takes into account the language.

Students were asked about the language they mostly used to converse with family, friends, teachers, and in other settings. This was recorded alongside the language the student used to sit the PILNA assessments. In Papua New Guinea, the PILNA assessment was administered in English for both year levels. With this information, a regional scale was formed to describe how much a student used the language they completed the PILNA assessments in.

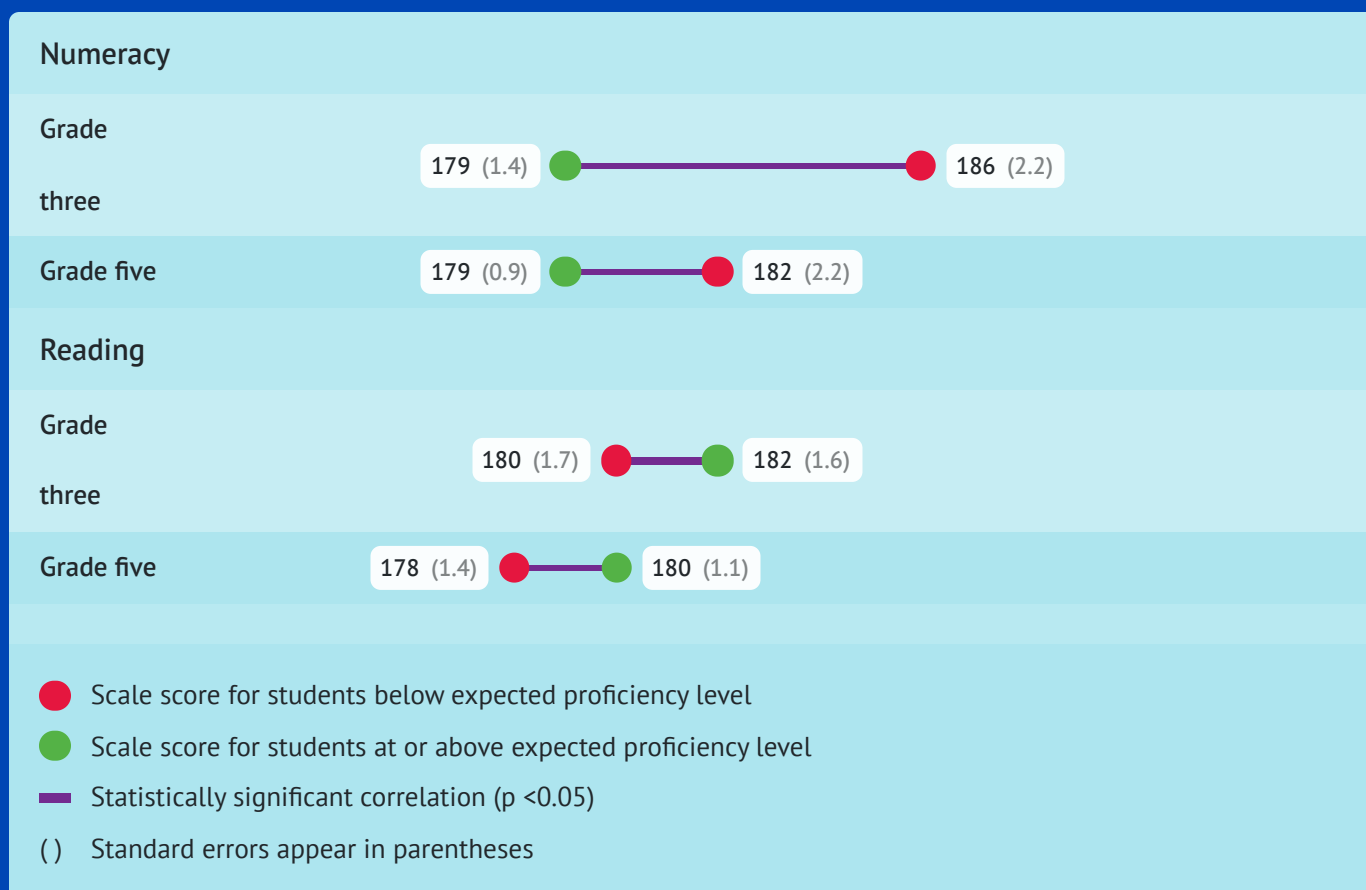
The PILNA language scale has an average of 200 and a standard deviation of 40. Most scores are expected to be within 40 points of 200 (160–240). The scale was formed statistical analysis of six out of ten answers to questions about students' language use.

Higher scores on this language scale indicate that the student uses the language that they completed the PILNA assessment with for conversing across a greater range of settings. Lower scores indicate that the student uses the language they completed the PILNA in for conversing across fewer settings.

This scale allowed for comparisons between student performance and the number of settings the students use the language they completed the PILNA assessments in. Figure STF1.1 shows differences in average language scale scores by grade level, domain (numeracy and reading), and by meeting or not meeting the expected (benchmarked) performance in each domain for students in Papua New Guinea. Note that comparisons to the writing domain are unavailable, as the proficiency scale for writing (benchmarks) has not yet been established.

Figure STF1.1: PILNA Language Scale

Average scores of students on language scale by year level and proficiency



Language and numeracy performance

When looking at language scale scores by numeracy performance, the results are consistent between grade levels. Students whose main language of conversing was the same language of PILNA tended to perform slightly worse in numeracy than students whose language of conversing was different from the language of assessment.

Grade three students who met the expected level of numeracy performance had slightly lower average language scale scores (179) than grade three students who did not meet the expected level of numeracy performance (186). Similarly, grade five students who met the expected level of numeracy performance had slightly lower average language scale scores (179) than grade three students who did not meet the expected level (182).

The results for Papua New Guinea contrast with those observed regionally. Looking regionally at language scale scores by numeracy performance, the results differ between year levels. There was no difference between the average language scale scores for year six students who met the expected levels and year six students who did not, but grade three students who met the expected level of numeracy performance had slightly higher average language scores (202) than grade three students who did not (198).

Language and reading performance

For language scores by reading performance, both grade levels show similar results. Students whose main language of conversing was the same as the language of PILNA (English) tended to perform slightly better in reading, than those whose language of conversing was different.

For both grade three and grade five students, those who met the expected levels of performance in reading used the language they completed PILNA in to converse in more settings than those who did not meet the expected levels of performance. This aligns with the results observed regionally, where students who met the expected level of reading were more likely to converse in the language of assessment for PILNA.

What does this mean?

Interestingly, but perhaps intuitively, students who performed better in reading tended to use the language they were assessed with in more settings. This suggests that using a language in everyday conversation may improve students' reading ability.

The comparisons for numeracy were less clear. Regionally, there were no differences in language usage between grade five students who met expected numeracy performance levels and those who did not. Differences were found, however, for Papua New Guinea grade three students that contrast with those observed for the region. This suggests that a different language of conversing was associated with higher numeracy performance, rather than the opposite. It could be that the more common use of a different language allows students to engage with the abstract elements of mathematics more effectively. It is an area of research that would be well worth further investigation.