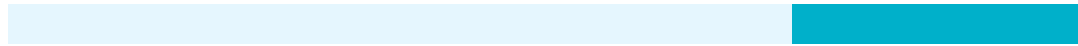




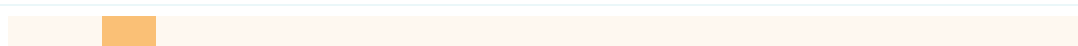


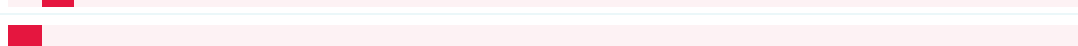


Benchmarking Year 4 Numeracy performance: Are standards being met ?

Table CNT4.1

Year 4 Numeracy distribution by proficiency scores

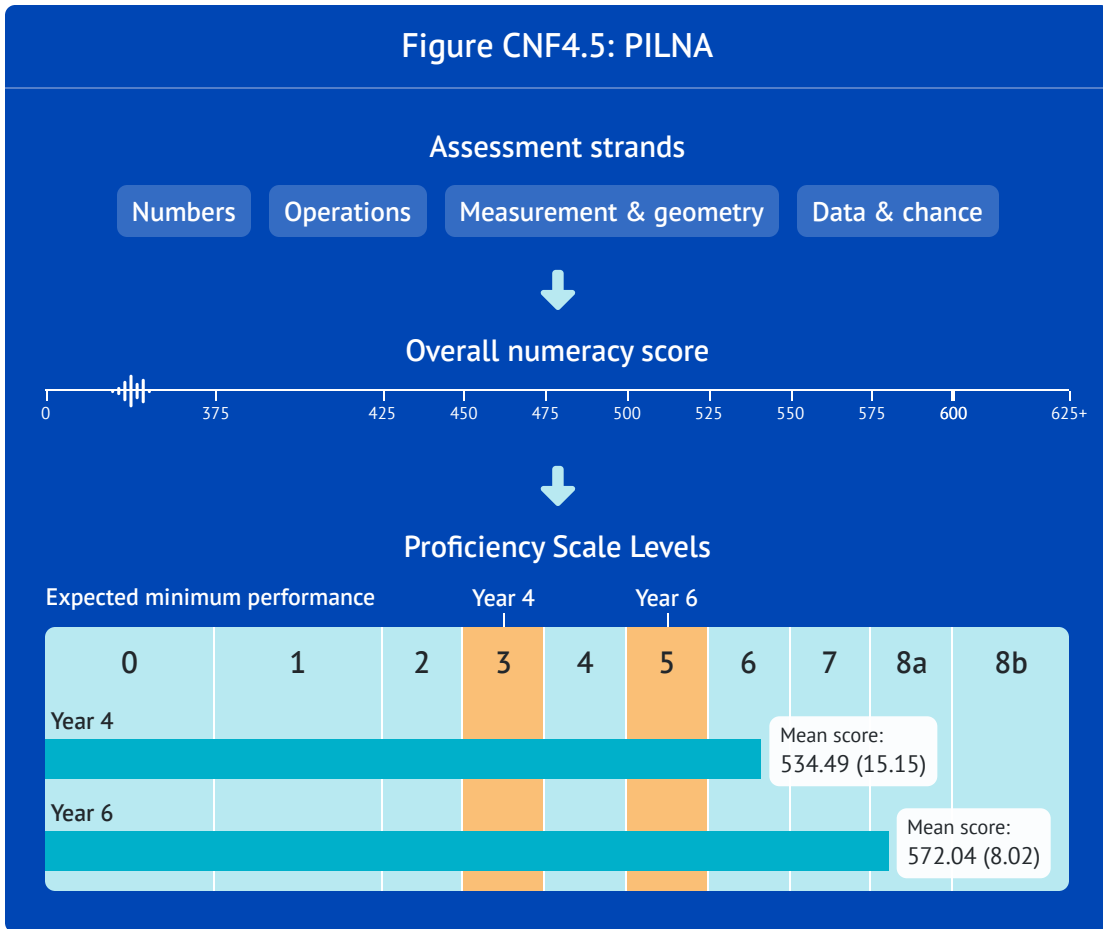
Level	Distribution	
8		26.88% (11.76)
7		16.88% (9.14)
6		15.63% (8.62)
5		11.25% (6.22)
4		15.63% (4.84)
3		5.00% (6.53)
2		2.50% (4.68)
1		3.13% (5.41)
0		3.13% (3.12)

Distribution of year 4 students by proficiency levels, Niue, PILNA 2021

() Standard errors appear in parentheses.

Table CNT4.1 shows the distribution of year four overall numeracy scores in Niue against the PILNA numeracy proficiency scale. This scale converts a student's overall numeracy score into a level ranking from zero to eight. The expected minimum overall numeracy performance for year four students is proficiency level three. Pacific stakeholders expect these students to reach or exceed this proficiency level

The average overall numeracy score for year four students in Niue in 2021 was 534.49 (SD = 71.64). This corresponds to proficiency level six in the PILNA numeracy proficiency scale (level six is assigned to scores 525–550). On average, year four students in Niue are achieving and exceeding the minimum expected standard in numeracy (Figure CNF4.5).



The average numeracy score does not tell us the whole story. The proportion of students who are meeting the minimum expected standard is also important. Approximately 91% of the year four students in Niue performed at or above this expected level (levels 3–8) in PILNA 2021, while approximately 9% of the students performed below it (levels 0–2). In other words, most year four students are meeting the minimum expected level for numeracy but there are a few students (9%) who are yet to meet this level.

Table CNT4.2

Year 4 student numeracy proficiency relative to the region

level	Region	SIS	Niue
8	7.82% (0.48)	13.85% (2.64)	26.88% (11.76)
7	7.52% (0.35)	9.59% (1.60)	16.88% (9.14)
6	11.40% (0.35)	10.74% (1.22)	15.63% (8.62)
5	13.95% (0.39)	9.88% (0.96)	11.25% (6.22)
4	14.03% (0.41)	9.53% (1.28)	15.63% (4.84)
3	12.45% (0.51)	9.50% (1.10)	5.00% (6.53)
2	10.48% (0.45)	8.83% (1.32)	2.50% (4.68)
1	14.11% (0.56)	14.13% (2.19)	3.13% (5.41)
0	8.24% (0.59)	13.94% (2.92)	3.13% (3.12)

Distribution of Year 4 student numeracy proficiency relative to the region, SIS and Niue, PILNA 2021

() Standard errors appear in parentheses.

On average, year four students in Niue (534.49) are scoring higher in numeracy than year four students in the region (478.91). Further, the proportion of year four students meeting the minimum expected proficiency level for numeracy (91%) is substantially higher than the proportion across the region (67%) and in Small Island States (63%) (Table CNT4.2).

Table CNT4.3

Year 4 numeracy distribution by proficiency scores and gender

Level	Girls	Boys
8	25.71% (10.74)	29.41% (24.61)
7	18.57% (14.01)	15.29% (17.23)
6	25.71% (17.27)	7.06% (6.74)
5	7.14% (9.88)	12.94% (12.15)
4	11.43% (8.85)	18.82% (9.34)
3	5.71% (6.30)	4.71% (10.67)
2	1.43% (4.24)	3.53% (6.97)
1	4.29% (5.97)	2.35% (6.38)
0	0%	5.88% (5.88)

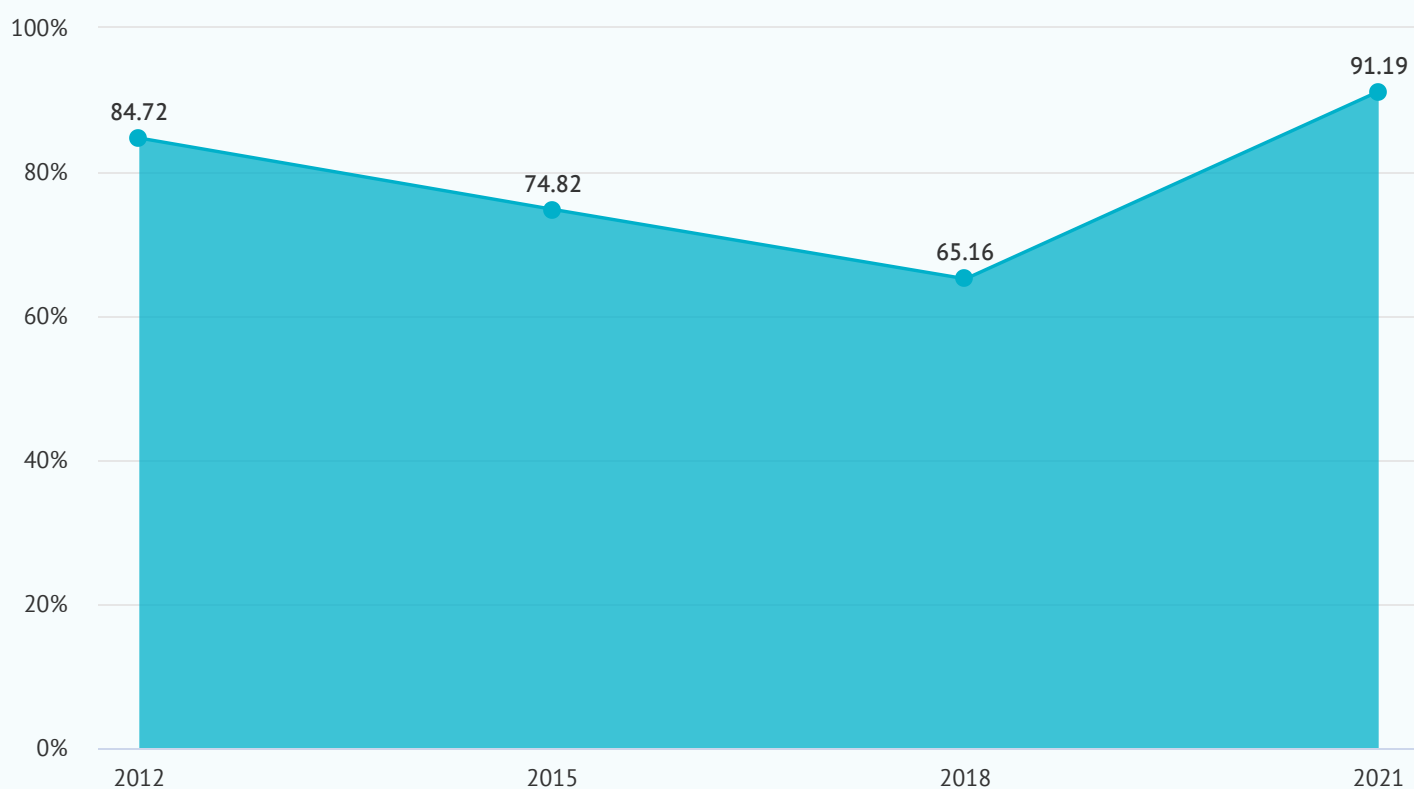
Distribution of Year 4 students' proficiency in numeracy by gender, Niue, PILNA 2021

() Standard errors appear in parentheses.

When looking at the Niue distribution of year four numeracy proficiency scores in 2021 by gender (Table CNT4.3), differences can be seen for girls and boys. Approximately 94% of girls performed at or above the minimum expected proficiency level (levels 3–8) compared to approximately 88% of boys. In other words, 12% of boys were not meeting the minimum expected level compared with 6% of girls. Interestingly, a higher proportion of boys scored at the highest level, level eight, compared with girls, but a higher proportion of girls scored at levels seven and six, so we see a slightly higher proportion of boys scoring at the highest level in numeracy, but a higher proportion of girls meeting the minimum expected proficiency level.

Figure CNF4.6

Proportion of Year 4 students meeting the overall numeracy standard over time



Year	Students at/above minimum
2012	84.72
2015	74.82
2018	65.16
2021	91.19

Distribution of Year 4 student's proficiency levels in Niue, PILNA 2012, 2015, 2018 and 2021

Figure CNF4.6 shows the proportion of Niue year four students meeting the overall numeracy standard over time. As seen in Figure CNF4.6, a higher proportion of year four students met the minimum expected level in 2021 than in all previous PILNA cycles (2012 = 85%, 2015 = 75%, 2018 = 65%, 2021 = 91%). Crucially, in 2021, substantially higher proportions of year four students scored in the higher proficiency levels (6-8) than previous PILNA cycles. This included a large increase in the proportion scoring in level eight (2012 = 5%, 2015 = 0%, 2018 = 2%, 2021 = 27%). Also, in 2021, a higher proportion of year four students in Niue (91%) met the minimum expected proficiency level in numeracy compared with PILNA Small Island States (63%) and the region (67%).