

2021 Niue Report / Performance / Numeracy / Year 6 numeracy / Benchmarking : Are standards being met ?

Benchmarking Year 6 Numeracy performance. Are standards being met ?

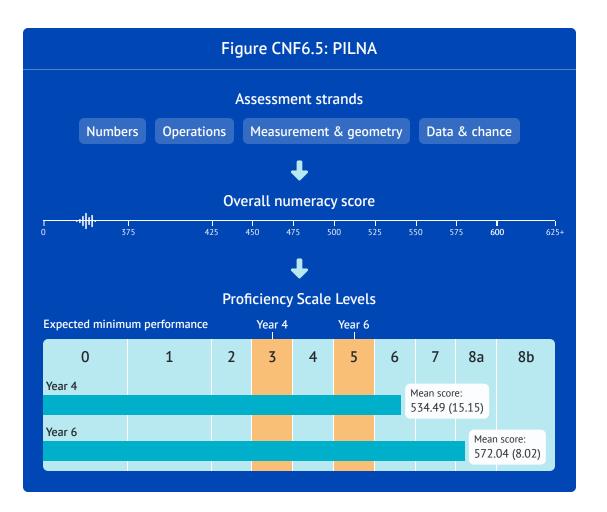
Year 6 Numeracy distribution by proficiency scores				
Level	Distribution			
8b		13.66% (8.73		
8a		37.56% (11.9		
7		14.63% (10.0		
6		16.10% (7.85		
5		10.73% (5.83		
4		4.39% (6.08)		
3		2.93% (2.72)		
2		0%		
1		0%		
0		0%		

() Standard errors appear in parentheses.

Table CNT6.1 shows the Niue distribution of year six overall numeracy scores 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 six students is proficiency level five. Pacific stakeholders expect these students to reach or exceed this proficiency level.

The average overall numeracy score for year six students in Niue in 2021 was 572.04 (SD = 48.01). This corresponds to proficiency level seven in the PILNA numeracy proficiency scale and is almost at level eight (level seven is assigned to scores 550–575). On average, year six students in Niue are achieving above the minimum expected standard in numeracy (Figure CNF6.5).





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 93% of students, nine out of ten, performed at or above this expected level (levels 5–8). Conversely, approximately 7% of students performed below the expected proficiency level (levels 0–4). In other words, most year six students are meeting the minimum expected level for numeracy (93%) and only a small proportion (7%) are yet to meet that level. Further, about half of the students scored at level eight, the highest level in the PILNA numeracy proficiency scale (51%).



Table CNT6.2

Year 6 student reading proficiency relative to the region and SIS

level	REGION	SIS	NIUE
8b	5.21% (0.44)	9.91% (2.34)	13.66% (8.73)
8a	18.31% (0.68)	21.36% (2.83)	37.56% (11.92)
7	16.87% (0.51)	15.56% (1.73)	14.63% (10.05)
6	16.66% (0.53)	14.75% (1.50)	16.10% (7.85)
5	14.94% (0.48)	11.42% (1.31)	10.73% (5.81)
4	10.31% (0.44)	8.49% (1.33)	4.39% (6.08)
3	6.52% (0.39)	5.78% (1.73)	2.93% (2.72)
2	4.84% (0.34)	4.72% (1.36)	0.00%
1	4.80% (0.39)	6.15% (1.78)	0.00%
0	1.53% (0.21)	1.85% (0.78)	0.00%

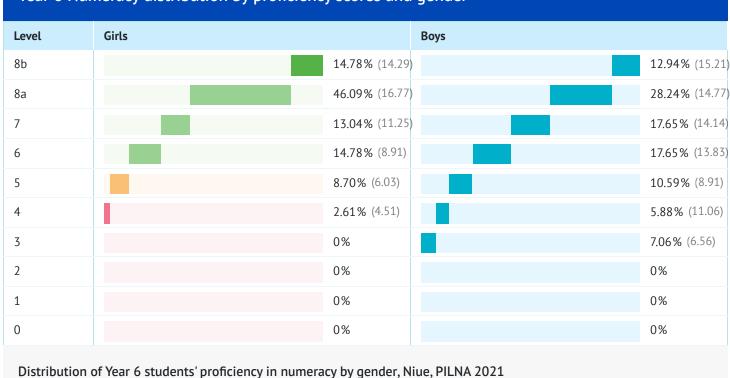
Distribution of Year 6 student numeracy proficiency relative to the region and SIS, Niue, PILNA 2021

Niue is performing well in numeracy, not only against the PILNA proficiency level benchmarks, but against the regional and Small Island States performance in PILNA 2021 (Table CNT6.2). On average, year six students in Niue are scoring higher in numeracy (572) than year six students in the region (530.59). Further, about 93% of year six students in Niue met or exceeded the expected minimum numeracy proficiency levels compared with 72% across the region and 73% in Small Island States.





Table CNT6.3



Year 6 Numeracy distribution by proficiency scores and gender

() Standard errors appear in parentheses.

When looking at the Niue distribution of year six numeracy proficiency scores in 2021 by gender (Table CNT6.3), differences can be seen for girls and boys. Approximately 97% of girls performed at or above the expected proficiency level (levels 5–8) compared to approximately 87% of boys. Also, a substantially higher proportion of girls scored in proficiency level eight (61%) than did boys (41%).





Table CNT6.4

Year 6 PILNA numeracy proficiency scale over time

Level	2012	2015	2018	2021
8	7.50%	15.56%	19.34%	51.22%
7	12.50%	20.74%	17.33%	14.63%
6	13.33%	16.30%	18.00%	16.10%
5	27.50%	7.41%	12.00%	10.73%
4	24.17%	8.15%	20.67%	4.39%
3	5.83%	12.59%	9.33%	2.93%
2	6.67%	11.11%	2.67%	0.00%
1	2.50%	8.15%	0.67%	0.00%
0	0.00%	0.00%	0.00%	0.00%

Distribution of Year 6 student's proficiency levels in Niue, PILNA 2012, 2015, 2018 and 2021

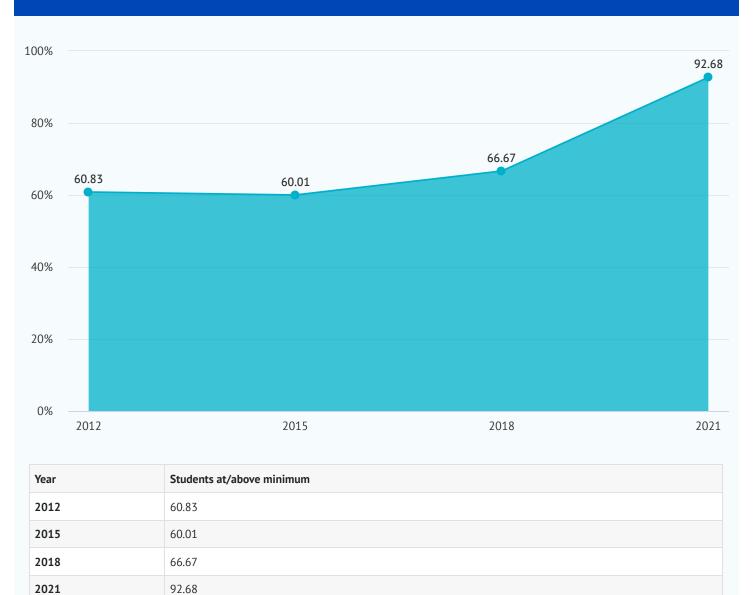
() Standard errors appear in parentheses.

Table CNT6.4 shows year six scores for Niue students on the PILNA numeracy proficiency scale over time. Accompanying this is Figure CNF6.6, showing the proportion of year six students in Niue meeting the minimum overall numeracy standard over time. A higher proportion of year six students met this level in 2021 than in all previous PILNA cycles (2012 = 61%, 2015 = 60%, 2018 = 67%, 2021 = 93%).



Figure CNF6.6

Proportion of Year 6 students meeting the overall numeracy standard over time



Distribution of Year 6 student's proficiency levels in Niue, PILNA 2012, 2015, 2018 and 2021