

Benchmarking Year 6 numeracy performance: Are standards being met?

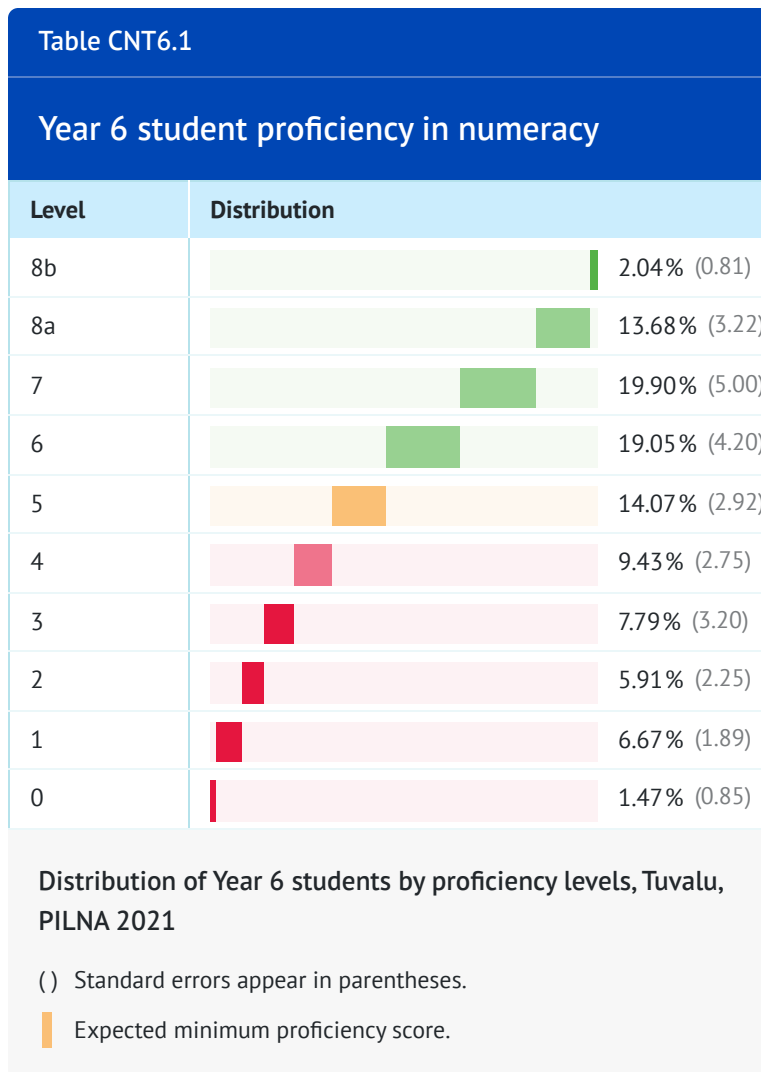
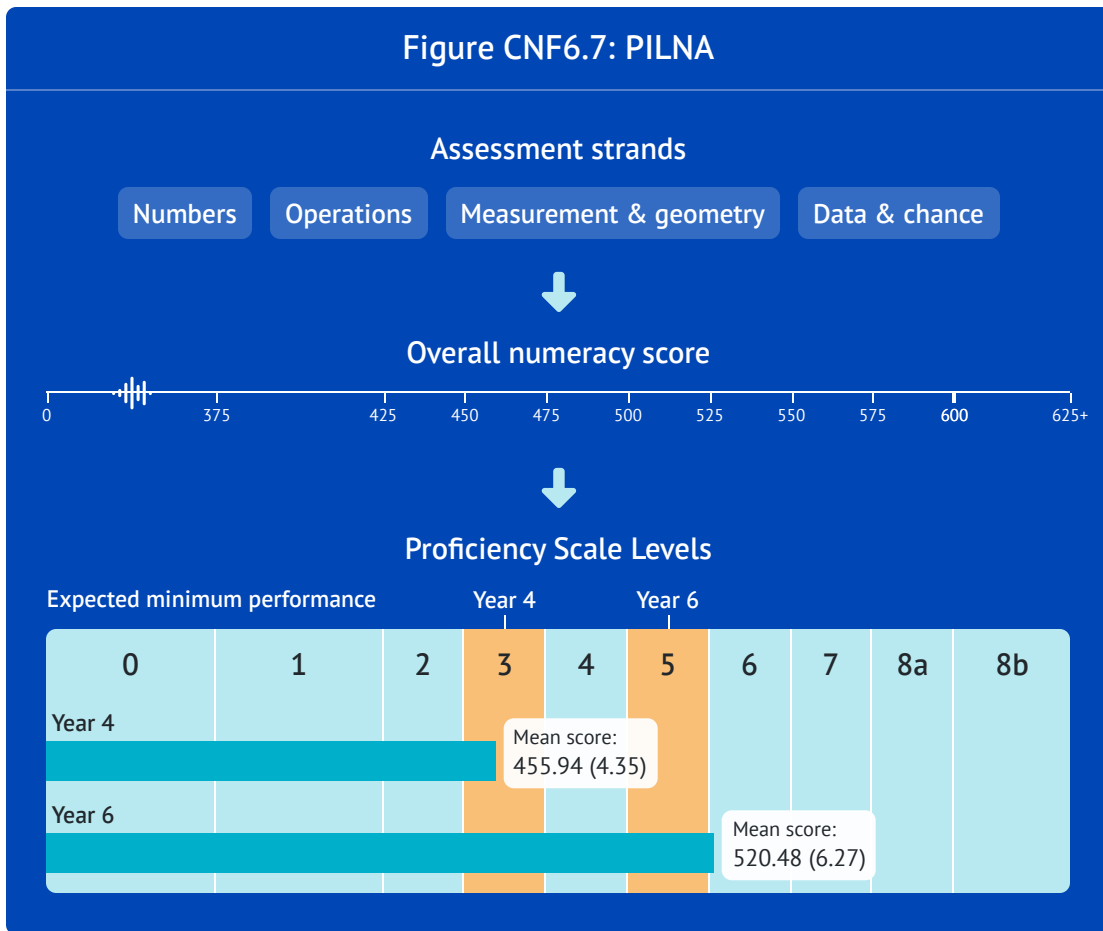


Table CNT6.1 shows the Tuvalu distribution of year six overall numeracy scores against the PILNA numeracy proficiency scale. This scale converts a student's overall numeracy score into a level ranking from zero to eight. The expected minimum overall numeracy performance for year six students is **proficiency level five**. Pacific stakeholders expect these students to reach or exceed this proficiency level.

The average overall numeracy score for year six students in Tuvalu in 2021 was 520.48 (SD = 60.20). This corresponds to proficiency level five in the PILNA numeracy proficiency scale (level five is assigned to scores 500–525). On average, year six students in Tuvalu are achieving the minimum expected standard in numeracy.



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 69% of students, nearly three out of four, performed at or above this expected level (levels 5–8) and approximately 31% of students, more than one out of four, performed below it (levels 0–4). In other words, most year six students are meeting the minimum expected level for numeracy (69%), but a significant proportion (31%) are not.

Table CNT6.2

Year 6 student numeracy proficiency relative to the region

Level	Region	SIS	Tuvalu
8b	5.21% (0.44)	9.91% (2.34)	2.04% (0.81)
8a	18.31% (0.68)	21.36% (2.83)	13.68% (3.22)
7	16.87% (0.51)	15.56% (1.73)	19.90% (5.00)
6	16.66% (0.53)	14.75% (1.50)	19.05% (4.20)
5	14.94% (0.48)	11.42% (1.31)	14.07% (2.92)
4	10.31% (0.44)	8.49% (1.33)	9.43% (2.75)
3	6.52% (0.39)	5.78% (1.73)	7.79% (3.20)
2	4.84% (0.34)	4.72% (1.36)	5.91% (2.25)
1	4.80% (0.39)	6.15% (1.78)	6.67% (1.89)
0	1.53% (0.21)	1.85% (0.78)	1.47% (0.85)

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

() Standard errors appear in parentheses.

On average, year six students in Tuvalu (520.48) are scoring lower in numeracy than year six students in the region (530.59). Further, about 69% of year six students met or exceeded the expected minimum numeracy proficiency levels compared with 72% in the region and 73% in Small Island States (Table CNT6.2).

Table CNT6.3

Year 6 Numeracy distribution by proficiency scores and gender

Level	Girls	Boys
8b	1.81% (1.24)	2.27% (1.13)
8a	16.05% (3.68)	11.44% (3.88)
7	23.42% (8.27)	16.57% (5.58)
6	22.77% (7.54)	15.54% (3.76)
5	15.27% (4.15)	12.93% (4.04)
4	8.54% (2.44)	10.27% (4.61)
3	4.04% (3.23)	11.33% (4.75)
2	3.70% (2.44)	7.99% (2.91)
1	3.26% (1.47)	9.90% (3.34)
0	1.15% (0.84)	1.77% (1.17)

Proportions of Year 6 numeracy proficiency scores by gender, Tuvalu, PILNA 2021

() Standard errors appear in parentheses.

When looking at the Tuvalu distribution of year six numeracy proficiency scores in 2021 by gender (Table CNT6.3), differences can be seen. Approximately 79% of girls performed at or above the expected proficiency level (levels 5–8) compared to approximately 59% of boys.

Table CNT6.4

Year 6 student proficiency levels in numeracy

Level	2012	2015	2018	2021
8	11.33%	15.45%	32.20%	15.72%
7	10.36%	17.95%	19.49%	19.90%
6	11.33%	21.02%	16.83%	19.05%
5	20.72%	16.82%	14.88%	14.07%
4	17.35%	13.64%	7.27%	9.43%
3	10.12%	9.55%	5.21%	7.79%
2	7.71%	4.32%	2.47%	5.91%
1	5.54%	1.02%	1.55%	6.67%
0	5.54%	0.23%	0.10%	1.47%

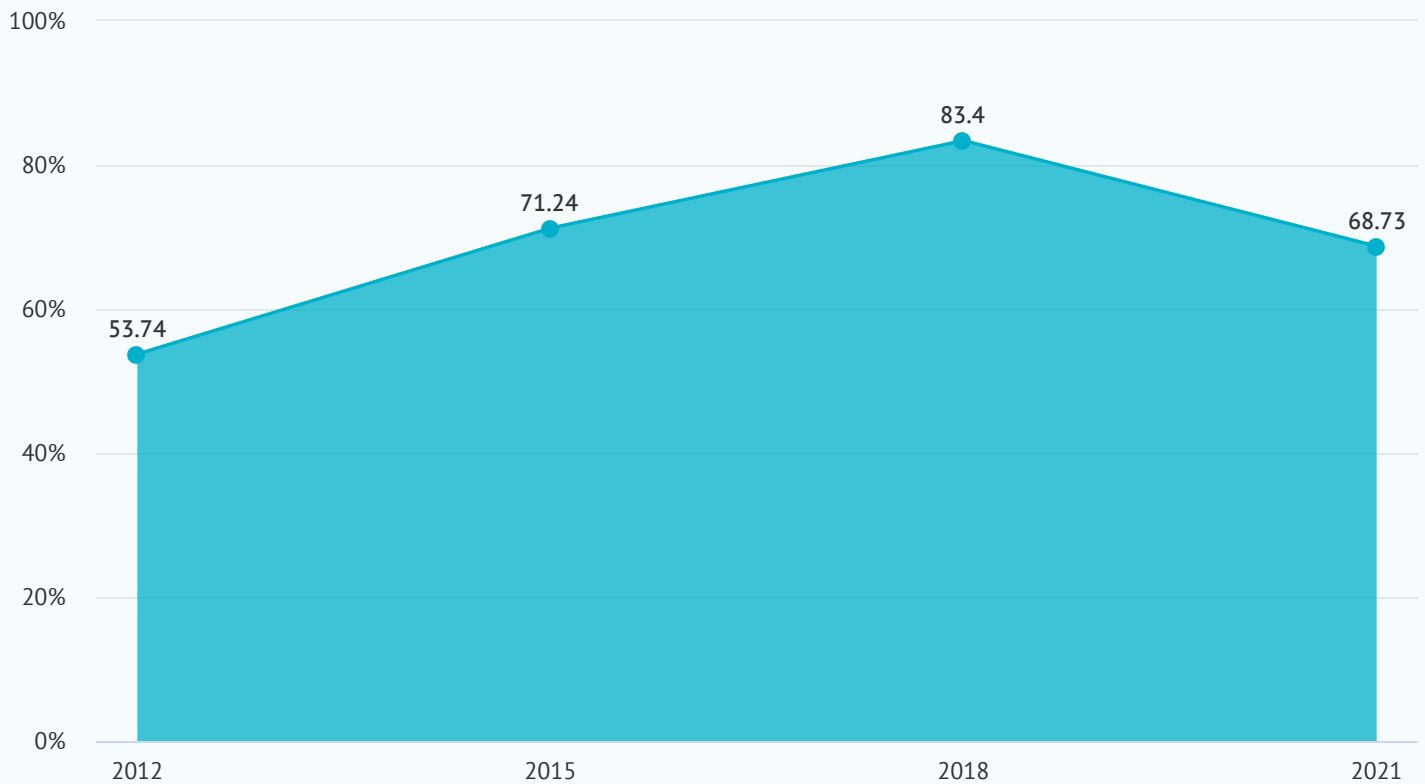
Distribution of Year 6 students' proficiency levels in Tuvalu, PILNA 2012, 2015, 2018 and 2021

() Standard errors appear in parentheses.

Table CNT6.4 shows year six scores for Tuvalu students on the PILNA numeracy proficiency scale over time. Accompanying this is Figure CNF6.8, showing the proportion of year six students in Tuvalu meeting the minimum overall numeracy standard over time. A lower proportion of year six students met the minimum expected level of overall numeracy performance in 2021 than in 2018 and 2015, but this proportion is still higher than in 2012 (2012 = 54%, 2015 = 71%, 2018 = 83%, 2021 = 69%).

Figure CNF6.8

Year 6 students proficiency levels



Year	Student at or above
2012	53.74
2015	71.24
2018	83.4
2021	68.73

Distribution of Year 6 students' proficiency levels in Tuvalu, PILNA 2012, 2015, 2018 and 2021