

Year 4 numeracy performance

The average overall numeracy performance for year four students in Cook Islands in 2021 was 461.69 (SD = 85.78).

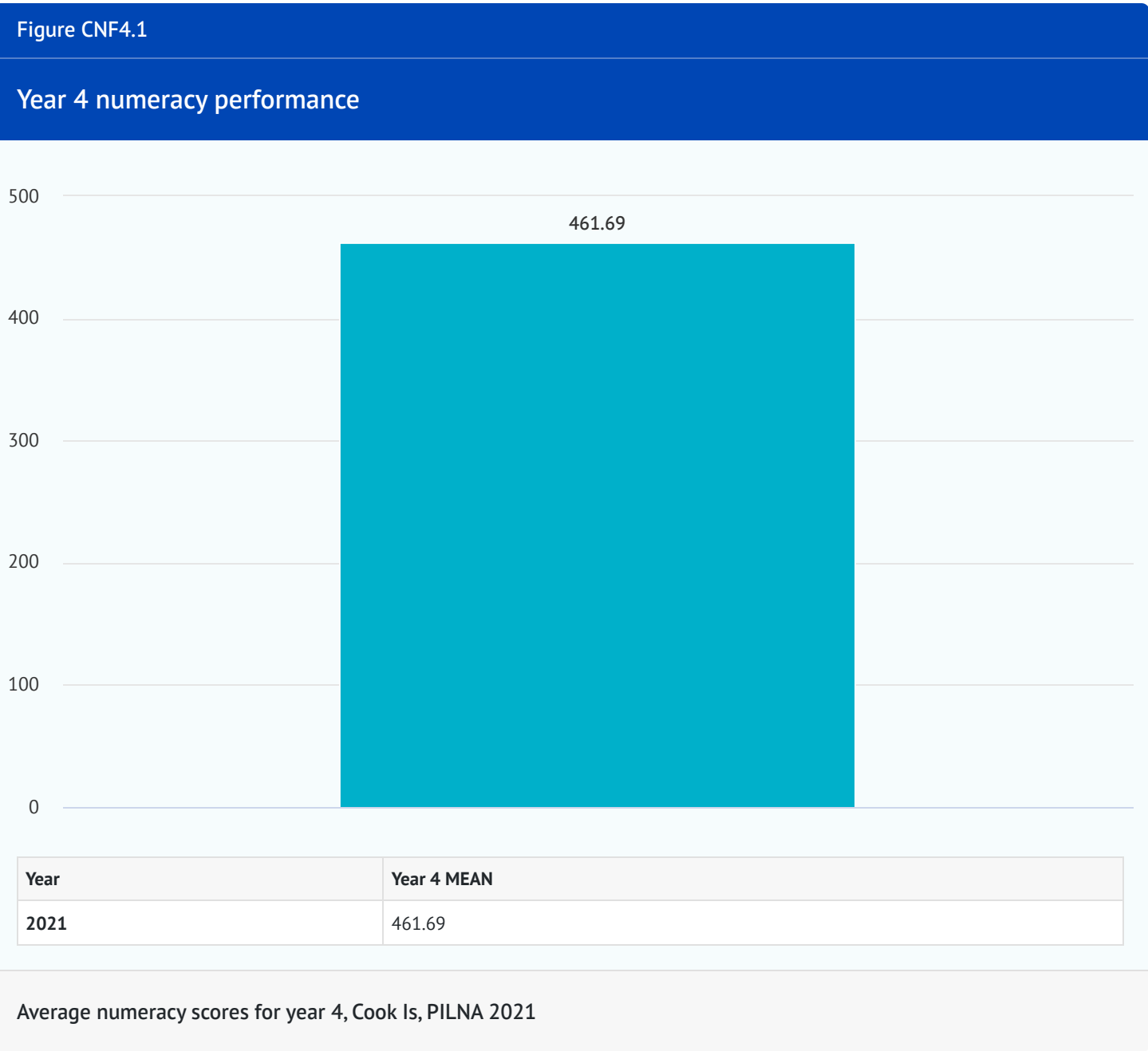
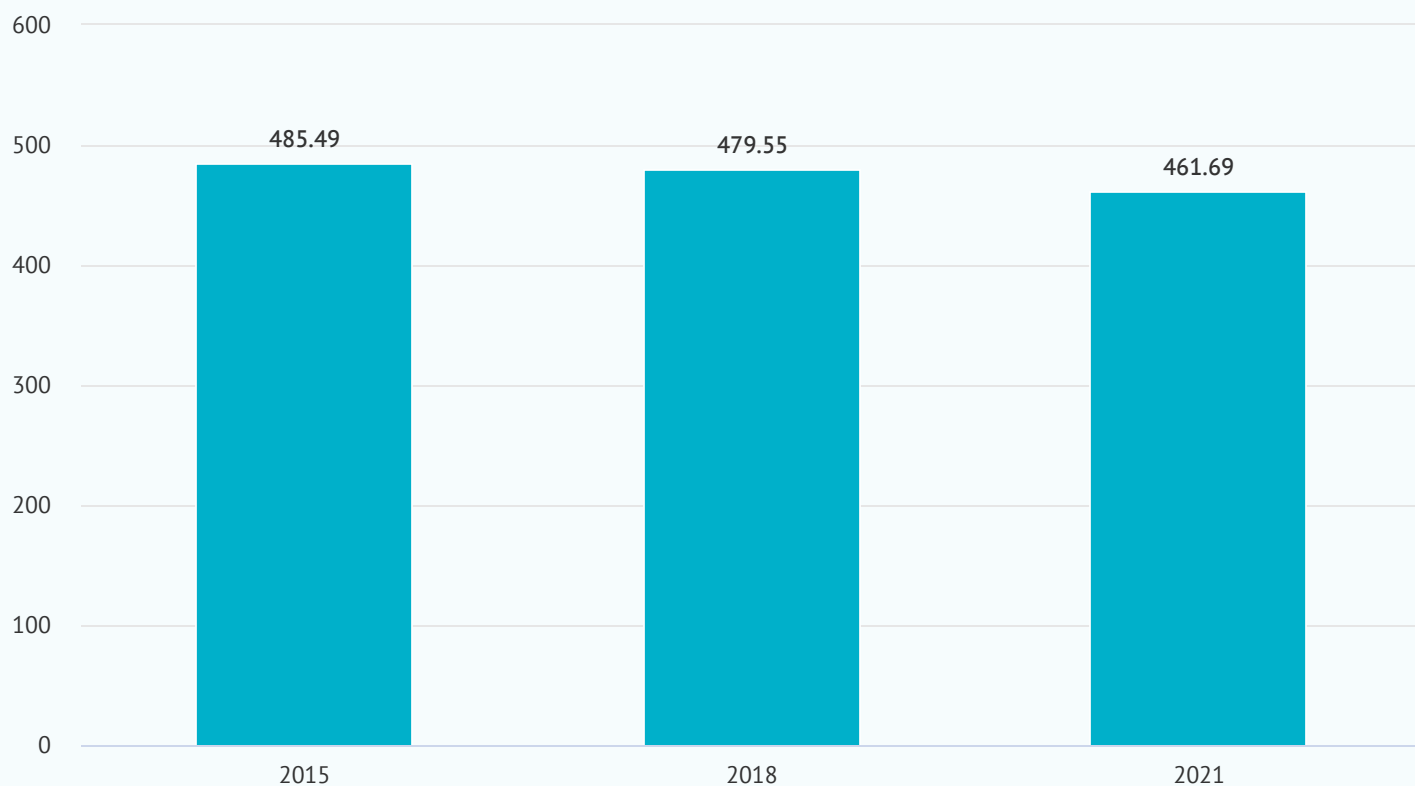


Figure CNF4.2

Year 4 numeracy performance over time



Year	Year 4 MEAN
2015	485.49
2018	479.55
2021	461.69

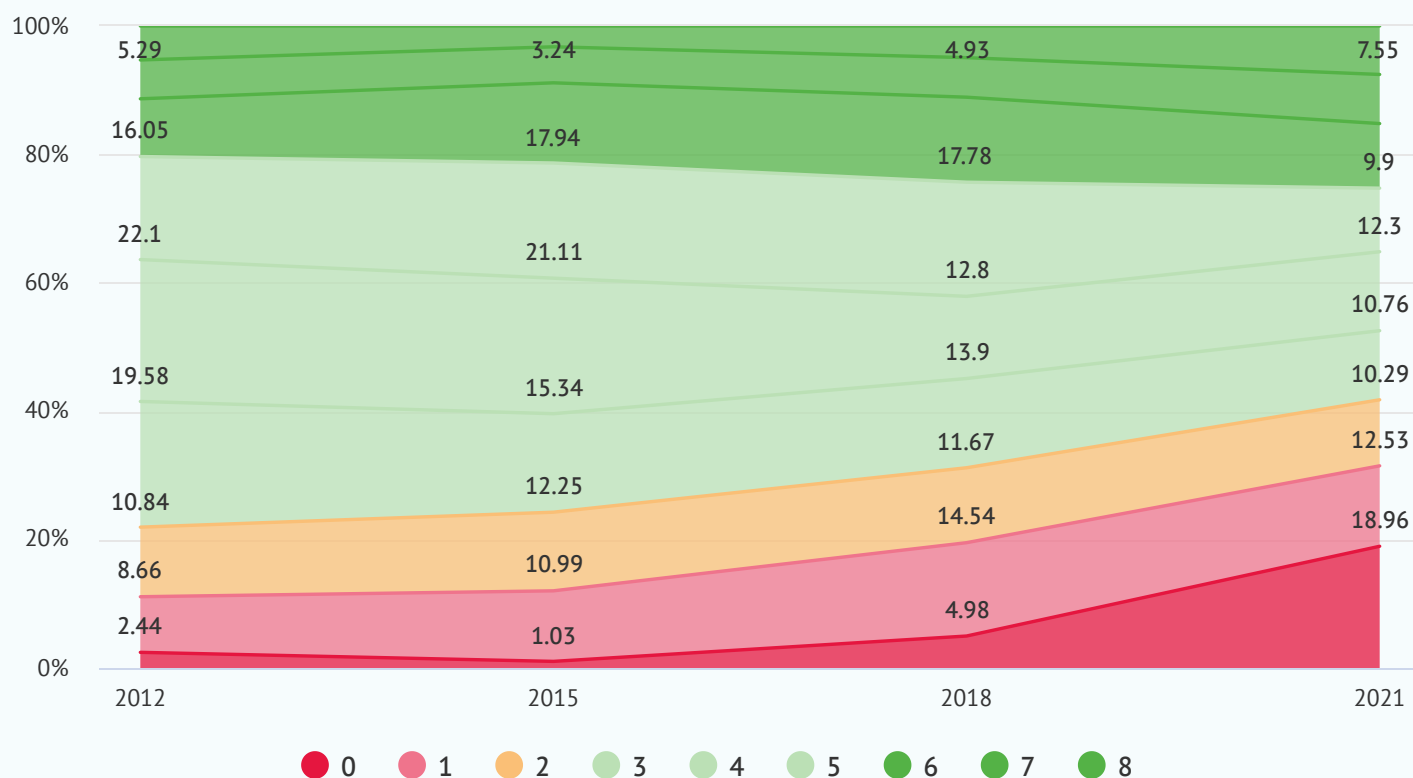
Average numeracy scores for year 4, Cook Is, PILNA 2015, 2018, 2021

Figure CNF4.2 shows the average numeracy scores of this group and of year four students in Cook Islands in previous PILNA cycles. The average overall numeracy score for Cook Islands' year four students in 2021 was lower than in all previous PILNA cycles. Also, the standard deviation for this group was greater than in all previous PILNA cycles. This means that the distribution of overall numeracy scores in 2021 was more spread out than in previous PILNA cycles. Year four students also had lower overall numeracy scores than the regional average, with 58% of Cook Island students performing at or above the expected level while the regional score was 67%. More analysis needs to be done to understand whether these differences in scores are statistically significant.

Standard deviation shows how close data points are to the average. A lower standard deviation means that data points are, overall, closer to the average; a higher standard deviation means that data points are, overall, further away from the average.

Figure CNF4.3

Year 4 Numeracy distribution by proficiency scores over time



Year	8	7	6	5	4	3	2	1	0
2012	5.29	6.05	8.99	16.05	22.1	19.58	10.84	8.66	2.44
2015	3.24	5.61	12.49	17.94	21.11	15.34	12.25	10.99	1.03
2018	4.93	6.16	13.24	17.78	12.8	13.9	11.67	14.54	4.98
2021	7.55	7.65	10.06	9.9	12.3	10.76	10.29	12.53	18.96

Proficiency scores over time, Cook Is, PILNA 2012, 2015, 2018, 2021