

2021 Federated State of Micronesia Report / Performance / Numeracy / Grade 5 numeracy /

Benchmarking: Are standards being met ?

Benchmarking Grade 5 numeracy performance: Are standards being met ?

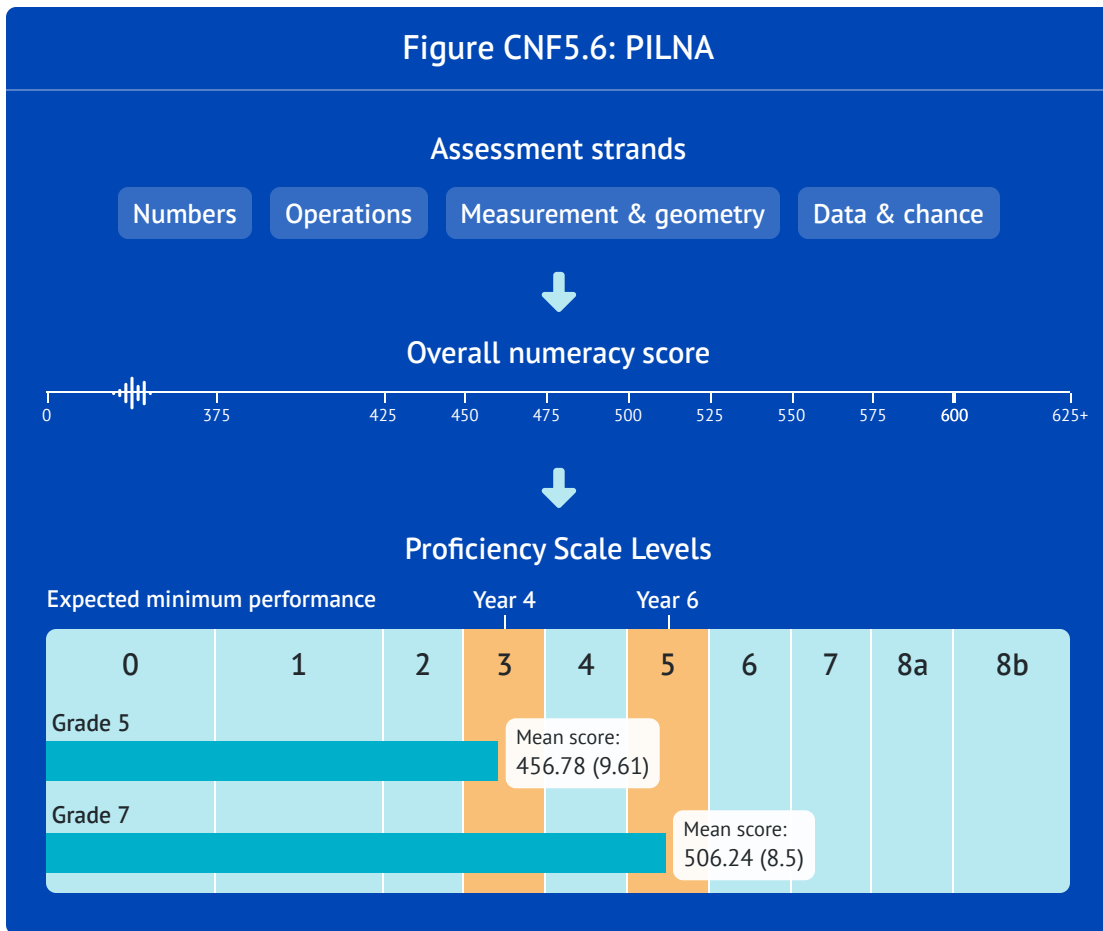
Table CNT5.1	
Grade 5 Student proficiency in numeracy	
Level	Distribution
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Distribution of Grade 5 students by proficiency levels, FSM, PILNA 2021

() Standard errors appear in parentheses.

Table CNT5.1 shows the distribution of grade five overall numeracy scores in Federated States of Micronesia 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 grade five students is **proficiency level three**. Pacific stakeholders expect these students to reach or exceed this proficiency level.

The average overall numeracy score for grade five students in Federated States of Micronesia was 456.78 (SD = 76.81) in 2021. This corresponds to the lower threshold of proficiency level three in the PILNA numeracy proficiency scale (level three is assigned to scores 450–475) as shown in the common proficiency scale 'meter' of numeracy for year four students in the Federated States of Micronesia (Figure CNF5.6). On average, grade five students in Federated States of Micronesia 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 55% of the grade five students in Federated States of Micronesia, over half, performed at or above this expected level (levels 3–8) in PILNA 2021. Conversely, approximately 45% of the students performed below the expected proficiency level (levels 0–2). In other words, the majority of grade five students are meeting the minimum expected level for numeracy, but there is a significant proportion (45%) who are yet to meet that level.

Table CNT5.2

Grade 5 student numeracy proficiency relative to the region

Levels	Region	FSM
	7.82% (0.48)	5.02% (1.19)
	7.52% (0.35)	5.76% (1.23)
	11.40% (0.35)	9.41% (1.48)
	13.95% (0.39)	12.06% (1.64)
	14.03% (0.41)	12.02% (2.33)
	12.45% (0.51)	10.94% (1.85)
	10.48% (0.45)	9.56% (1.31)
	14.11% (0.56)	18.82% (2.64)
	8.24% (0.59)	16.42% (4.06)

Distribution of grade 5 students in numeracy proficiency relative to the region, FSM 2021 PILNA

() Standard errors appear in parentheses.

Table CNT5.2 compares the numeracy performance of grade five students in Federated States of Micronesia with that of students. While 55% of grade five students performed at or above the expected level (levels 3–8) for numeracy in Federated States of Micronesia, this figure was higher in the region (67%).

Table CNT5.3

Grade 5 Numeracy distribution by proficiency scores and gender

Level	Girls	Boys
8	5.27% (1.79)	4.90% (1.19)
7	6.34% (1.50)	5.34% (1.47)
6	9.70% (1.92)	9.33% (1.60)
5	12.52% (2.13)	11.79% (2.00)
4	12.25% (2.55)	12.09% (2.63)
3	10.52% (1.91)	11.55% (2.35)
2	9.41% (1.98)	9.75% (1.68)
1	18.17% (3.73)	18.85% (2.38)
0	15.83% (3.66)	16.39% (4.73)

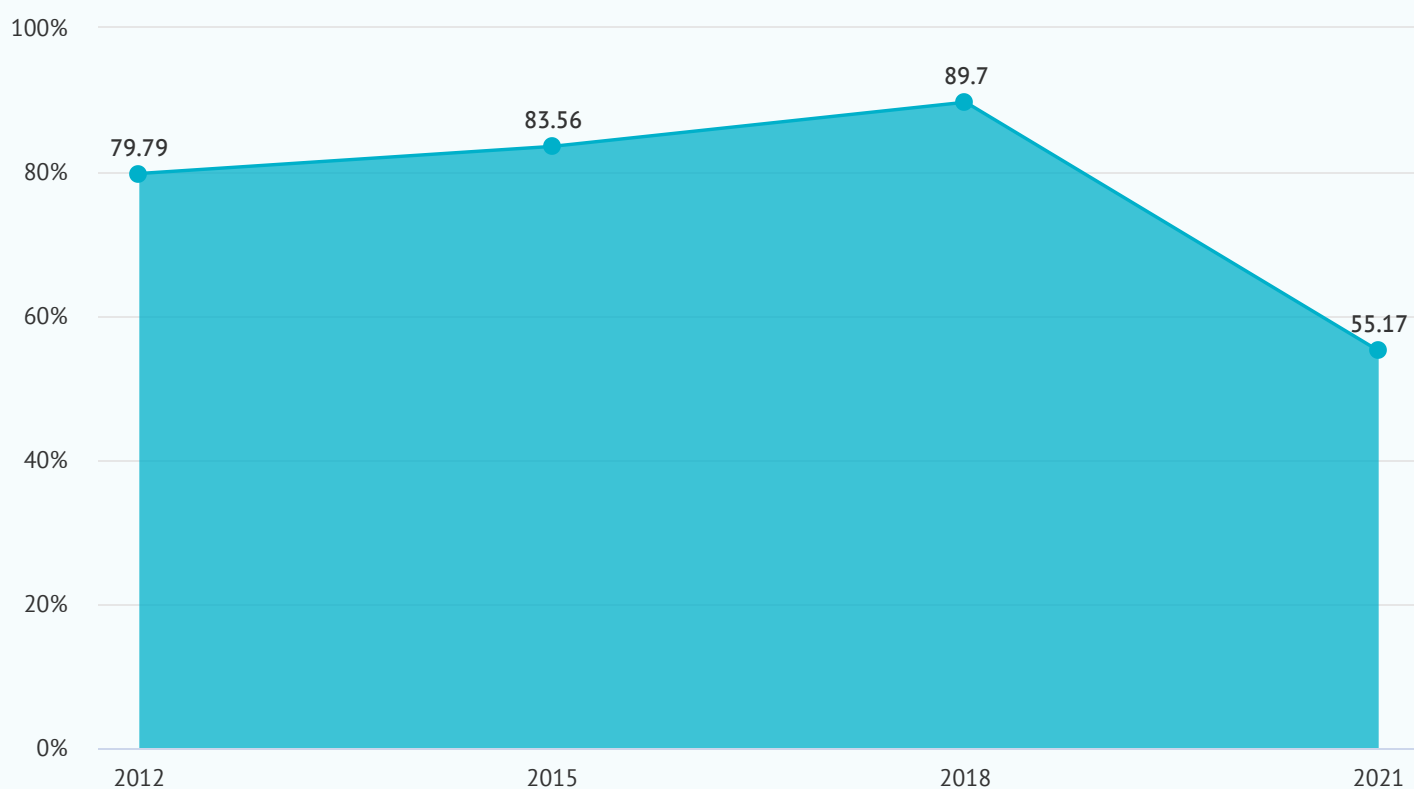
Distribution of Grade 5 students' proficiency in numeracy by gender, FSM, PILNA 2021

() Standard errors appear in parentheses.

When looking at Federated States of Micronesia's distribution of grade five numeracy proficiency scores in 2021 by gender (Table CNT5.3), the results are similar for girls and boys. Approximately 57% of girls performed at or above the minimum expected proficiency level (levels 3–8) compared to approximately 55% of boys. Additionally, similar proportions of boys and girls were performing at each proficiency level.

Figure CNF5.7

Grade 5 students proficiency levels



Year	Students at or above
2012	79.79
2015	83.56
2018	89.7
2021	55.17

Distribution of Grade 5 student's proficiency levels in FSM, PILNA 2012, 2015, 2018 and 2021

Figure CNF5.7 shows the proportion of Federated States of Micronesia grade five students meeting the overall numeracy standard over time. As seen in Figure CNF5.7, a lower proportion of grade five students met the minimum expected level of overall numeracy performance in 2021 than in all previous PILNA cycles (2012 = 80%, 2015 = 83%, 2018 = 90%, 2021 = 55%). Fewer grade five students performing at or above the minimum expected level of numeracy performance in 2021 aligns with the results for the region, which saw a similar trend (2012 = 74%, 2015 = 86%, 2018 = 83%, 2021 = 67%). This is a critical finding from PILNA 2021: a decrease in the proportion of grade five students achieving the minimum expected level of numeracy.