

SUMMARY

Achievement in Mathematics and Statistics at Year 4 and Year 8

Findings from the 2022 National Monitoring Study of Student Achievement (NMSSA)

KEY FINDINGS

The 2022 study

In 2022, NMSSA assessed achievement in mathematics¹ at Year 4 and 8. About 2000 students from 100 English-medium state and state-integrated schools were involved at each year level. NMSSA previously assessed mathematics in 2013 and 2018.

Trained teachers administered the programme as part of a two-and-a-half-day visit to each school in Term 3 of 2022.

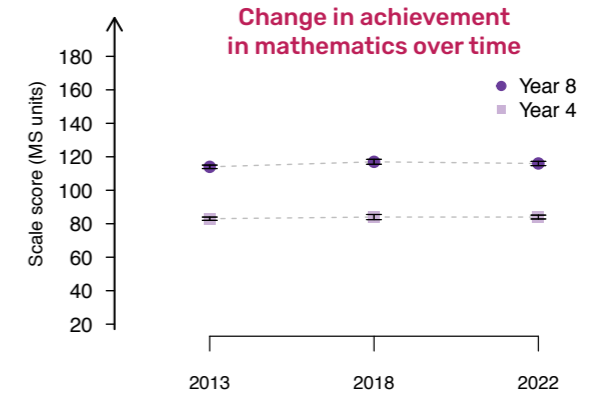
This summary provides the key achievement findings from the study. More detailed achievement information can be found in the 2022 NMSSA Achievement report for mathematics and on the NMSSA mathematics data window. Both are available on the NMSSA website (www.nmssa.org.nz).

¹ For brevity, this summary uses the term 'mathematics' to refer to the mathematics and statistics learning area.

Trends over time

How has achievement changed?

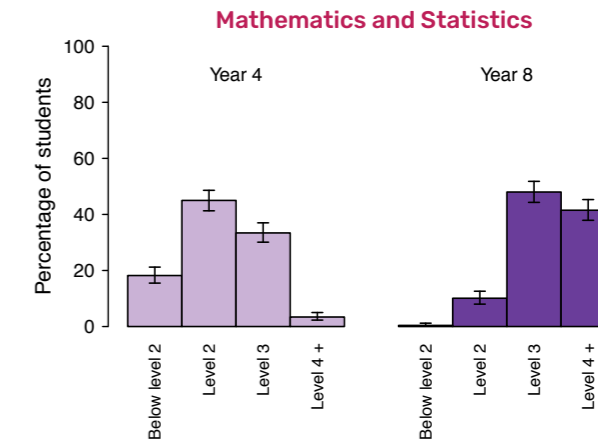
- Achievement in mathematics has remained relatively stable between 2013 and 2022.
- Between 2018 and 2022, there was no statistically significant change in the average score in mathematics at either Year 4 or Year 8.
- Although the change in the overall average score at Year 8 was not statistically significant in 2022, there were statistically significant declines in the average scores at Year 8 for Māori learners, Pacific learners, and for girls (3, 4, and 3 scale score units, respectively).



Achievement against the curriculum

What proportion of students were meeting curriculum expectations?

- While most Year 4 students (82%) were meeting curriculum expectations, less than 50% of students were doing so at Year 8 (42%). The curriculum expectation is that most students are meeting the demands of curriculum level 2 by the end of Year 4 and curriculum level 4 by the end of Year 8.



Group differences in achievement

How equitable is achievement in mathematics?

- There were differences in achievement across ethnic groups. These favoured non-Māori and non-Pacific students.
- Girls scored lower than boys on average. There was also less variation in girls' scores, meaning that fewer girls than boys scored at the higher levels.

- School decile was strongly correlated with achievement, with students from high decile schools scoring higher, on average, than those from mid and low decile schools.

