

Teacher confidence in teaching

Teachers were asked two sets of questions about their confidence in teaching: one set for literacy topics and the other for numeracy topics. The questions were phrased as: 'How do you find teaching the following aspects of literacy/numeracy?'. Their response options were limited to a four-point scale: 'Very difficult', 'Difficult', 'Easy', and 'Very easy'.

Confidence in teaching literacy

For reporting purposes, teachers who responded with 'Easy' or 'Very easy' were considered to demonstrate confidence in teaching a particular topic.

Table TT2.7 shows the percentage of students in Small Island States whose teachers expressed confidence in teaching literacy topics.

Overall, most students in both year levels had teachers who were confident in teaching literacy topics. In both year levels, the proportions of students with such teachers ranged from 72% to 96%.



















Across both year levels, areas where a lower proportion of students had teachers who expressed confidence were: 'Quality of ideas' (year four, 73%; year six, 78%), 'Organisation and structure' (year four, 72%; year six, 83%), and 'Phonemic awareness' (year four, 73%; year six, 87%).

Areas with the highest proportions of students having teachers who expressed confidence were 'Spelling and punctuation' (year four, 94%; year six, 96%); 'Vocabulary' (year four, 86%; year six, 96%); and 'Reading comprehension' (year four, 83%; year six, 94%).

Areas where more students had confident teachers appear to be rules-based subjects or those with more established teaching criteria, such as spelling, punctuation and vocabulary. Areas where fewer students had confident teachers appear to be in areas with more subjective, or more complex, teaching and assessment criteria, such as quality of ideas and organisation and structure in writing.

Table TT2.7

Percentage of students whose teachers express confidence in teaching literacy

Subject	Year 4	Year 6
Vocabulary	 86% (4.8)	 96% (2.6)
Grammar and syntax	 77% (7.3)	 87% (3.9)
Spelling and punctuation	 94% (3.9)	 96% (2.6)
Quality of ideas (writing)	 73% (7.0)	 78% (4.7)
Organisation and structure (writing)	 72% (6.4)	 83% (5.4)
Phonemic awareness	 73% (6.4)	 87% (5.8)
Letter sound correspondence	 83% (4.2)	 92% (3.8)
Reading comprehension	 83% (5.9)	 94% (2.8)
Oral language (speaking and listening)	 78% (7.6)	 93% (3.1)

Percentage of students whose teachers express confidence in teaching literacy

() Standard errors appear in parentheses.

The same questions were asked of teachers in the 2018 PILNA cycle and results from both the 2018 and 2021 cycles of PILNA are presented here for comparison. Table TT2.8 shows the differences in the percentages of students who had a teacher confident in teaching the various literacy areas in the 2018 and 2021 PILNA cycles.

Compared with the 2018 PILNA cycle, more students in 2021 had teachers who expressed confidence in teaching literacy. Almost every literacy area saw an increase in the proportion of students who had a teacher confident in teaching it. This was true across both year four students and year six students.

Table TT2.8

Percentage of students whose teachers express confidence in teaching literacy in 2018 and 2021

Subject	2018	Difference	2021
Year 4			
Vocabulary	 62% (7.9)		 86% (4.8)
Grammar and syntax	 60% (4.8)		 77% (7.3)
Spelling and punctuation	 74% (6.7)		 94% (3.9)
Quality of ideas (writing)	 58% (6.0)		 73% (7.0)
Organisation and structure (writing)	 54% (7.5)		 72% (6.4)
Phonemic awareness	 55% (7.9)		 73% (6.4)
Letter sound correspondence	 83% (7.7)		 83% (4.2)
Reading comprehension	 70% (7.5)		 83% (5.9)
Oral language (speaking and listening)	 75% (14.9)		 78% (7.6)
Year 6			
Vocabulary	 89% (3.3)		 96% (2.6)
Grammar and syntax	 81% (3.9)		 87% (3.9)
Spelling and punctuation	 86% (4.1)		 96% (2.6)
Quality of ideas (writing)	 66% (8.7)		 78% (4.7)
Organisation and structure (writing)	 64% (8.4)		 83% (5.4)
Phonemic awareness	 89% (3.0)		 87% (5.8)
Letter sound correspondence	 87% (3.8)		 92% (3.8)
Reading comprehension	 80% (6.2)		 94% (2.8)
Oral language (speaking and listening)	 82% (4.1)		 93% (3.1)

Percentage of students whose teachers express confidence in teaching literacy in 2018 and 2021

() Standard errors appear in parentheses.

Confidence in teaching literacy and teacher qualities

A regional scale focused on measuring teachers' confidence in teaching literacy based on teachers' responses was established. Higher scores on this scale indicate higher levels of confidence in teaching literacy. The literacy teaching confidence scores were analysed against teacher demographics (gender, age, teaching experience, and qualification level). The significant findings are listed below.

- Male teachers were more confident in teaching literacy than female teachers.
- Teachers with less experience in teaching (less than 10 years) expressed more confidence in teaching literacy than teachers with more experience (more than 10 years).

The PILNA scale for teachers' confidence in teaching literacy has an average of 200 and a standard deviation of 40. Most scores are expected to be within 40 points of 200 (160–240). Using statistical analysis, it was formed from answers to all nine questions that teachers were asked about their confidence in teaching this area.

Confidence in teaching numeracy

Table TT2.9 shows the percentage of students whose teacher expressed confidence in teaching numeracy topics.















Most students in both year levels had teachers who were confident in teaching numeracy topics. The proportion of students with confident teachers in the numeracy topics ranged between 75% and 98%, a slightly higher range than for literacy topics.

Across both year levels, the topics where a lower proportion of students had teachers who expressed confidence were 'Fractions and percentages' (year four, 80%; year six, 75%); 'Geometry' (year four, 81%; year six, 91%); and 'Data and chance' (year four, 75%; year six, 89%). However, in Small Island States, a higher proportion of students had teachers who were confident in teaching 'Geometry' and 'Data and chance' compared to the region. The regional averages were 79% for 'Geometry' and 78% for 'Data and chance'.

Topics with the highest proportions of students whose teacher expressed confidence were 'Place value' (year four, 91%; year six, 98%) and 'Numbers and patterns' (year four, 93%; year six, 96%).

Table TT2.9

Percentage of students whose teachers express confidence in teaching numeracy

Subject	Year 4	Year 6
Number and patterns	 93% (3.6)	 96% (2.7)
Place value	 91% (4.0)	 98% (1.0)
Fractions and percentage	 80% (6.1)	 75% (6.0)
Operations	 83% (5.9)	 94% (3.2)
Measurement	 85% (7.7)	 94% (3.2)
Geometry	 81% (2.8)	 91% (2.7)
Data and chance	 75% (6.1)	 89% (3.9)

Percentage of students whose teachers express confidence in teaching numeracy










































() Standard errors appear in parentheses.

The same questions were asked of teachers in the 2018 PILNA cycle and results from both the 2018 and 2021 cycles of PILNA are presented for comparison. Table TT2.10 shows the differences in the percentages of students who had teachers confident in teaching the various numeracy areas in the 2018 and 2021 PILNA cycles.

Similar findings were found in numeracy as in literacy. In most numeracy areas, across both year levels, a higher proportion of students had a teacher confident in teaching the areas in 2021 than in 2018.

Table TT2.10

Percentage of students whose teachers express confidence in teaching numeracy in 2018 and 2021

Subject	2018	Difference	2021
Year 4			
Number and patterns	 96% (1.7)		 93% (3.6)
Place value	 86% (5.7)		 91% (4.0)
Fractions and percentage	 57% (6.0)		 80% (6.1)
Operations	 82% (7.4)		 83% (5.9)
Measurement	 85% (3.5)		 85% (7.7)
Geometry	 78% (6.8)		 81% (2.8)
Data and chance	 67% (4.1)		 75% (6.1)
Year 6			
Number and patterns	 98% (1.5)		 96% (2.7)
Place value	 95% (2.5)		 98% (1.0)
Fractions and percentage	 80% (6.8)		 75% (6.0)
Operations	 81% (9.2)		 94% (3.2)
Measurement	 90% (2.8)		 94% (3.2)
Geometry	 73% (8.3)		 91% (2.7)
Data and chance	 87% (3.6)		 89% (3.9)

Percentage of students whose teachers express confidence in teaching numeracy in 2018 and 2021

() Standard errors appear in parentheses.

Confidence in teaching numeracy and teacher characteristics

A regional scale with nine items focused on measuring teachers' confidence in teaching numeracy based on teachers' responses was established. Higher scores on this scale indicate higher levels of confidence in teaching numeracy. As with literacy, the numeracy teaching confidence scores were compared to teachers' demographic groups (gender, age, teaching experience, highest qualification). The significant findings are listed below.

- Male teachers were more confident in teaching numeracy than female teachers.
- Teachers who were in the younger age range (20–35 years old) were more confident in teaching numeracy than teachers in the older age range (over 35 years old).

- Teachers with less experience in teaching (less than 10 years) expressed more confidence in teaching than teachers with more experience (more than 10 years).
- Teachers who had a degree level or higher qualification were less confident in teaching numeracy than teachers who did not.

The PILNA scale for teachers' confidence in teaching numeracy has an average of 200 and a standard deviation of 40. Most scores are expected to be within 40 points of 200 (160–240). Using statistical analysis, the scale was formed from six out of seven answers to questions teachers were asked about their confidence in teaching this area.

What does this mean?

A high proportion of students in Small Island States have teachers who are confident in teaching literacy and numeracy. The proportion of students who have confident teachers was generally higher across the numeracy domain than the literacy domain.

In literacy, more students have confident teachers in areas that are structured or rule based, such as spelling, punctuation and vocabulary. Fewer students have confident teachers in areas that require more subjective or complex teaching and assessment, such as quality of ideas and organisation and structure in writing.

Differences were noted within the comparisons for teacher demographic factors. Male teachers and teachers with less experience tended to be more confident in teaching literacy than their counterparts. Male teachers, younger teachers, less experienced teachers, and less qualified teachers tended to be more confident in teaching numeracy than their counterparts. The reasons for this are not clear. It is possible that these differences could be explained by changes to pre-service teacher education or perhaps these groups have an inflated sense of ability that is not necessarily reflective of teacher quality.