

# 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 Marshall Islands whose teacher 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 68% to 94%.

Across both year levels, areas where a lower proportion of students had teachers who expressed confidence were: 'Quality of ideas' (grade five, 86%; grade seven, 71%), 'Organisation and structure' (grade five, 86%; grade seven, 70%), and 'Phonemic awareness' (grade five, 84%; grade seven, 68%).

















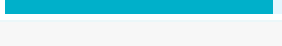
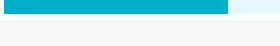
Areas with the highest proportions of students having teachers who expressed confidence were 'Vocabulary' (grade five, 93%; grade seven, 90%); 'Reading comprehension' (grade five, 90%; grade seven, 85%); and 'Oral language' (grade five, 94%; grade seven, 78%).

Areas where more students had confident teachers were in 'Comprehension', both written and oral, 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.

Of note was the fact that significantly fewer grade seven students had teachers who felt confident in teaching literacy strands than did year four students; 15% fewer students had teachers who felt confident in teaching 'Quality of ideas', 'Organisation and structure' for grade seven compared to grade five. When it came to 'Letter sound correspondence', only 70% of grade seven students had teachers who expressed confidence in teaching the strand, compared to 91% of grade five students.

Table TT2.7

## Percentage of students whose teachers express confidence in teaching literacy

Subject	Grade 5	Grade 7
Vocabulary	 93% (3.7)	 90% (3.9)
Grammar and syntax	 83% (5.8)	 74% (5.9)
Spelling and punctuation	 91% (4.7)	 77% (6.6)
Quality of ideas (writing)	 86% (4.8)	 71% (8.0)
Organisation and structure (writing)	 86% (4.9)	 70% (8.1)
Phonemic awareness	 84% (4.8)	 68% (6.5)
Letter sound correspondence	 91% (3.9)	 70% (5.9)
Reading comprehension	 90% (4.8)	 85% (4.4)
Oral language (speaking and listening)	 94% (3.5)	 78% (5.7)

## Percentage of students whose teachers expressed confidence in teaching literacy, RMI, PILNA 2021

( ) 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 between 2018 and 2021 PILNA cycles.

Compared with the 2018 PILNA cycle, more grade five students in 2021 had teachers who expressed confidence in teaching literacy across all areas. Every literacy area saw an increase in the proportion of grade five students who had a teacher confident in teaching it. For grade seven students the picture is mixed. Some strands, such as 'Grammar and syntax', and 'Quality of ideas' saw far more students with confident teachers, but other strands, such as the 'Oral language' strand had fewer grade seven students with confident teachers.

The vast majority of students in Marshall Islands have teachers who are confident in teaching literacy, but teachers of grade seven students may need more support to increase their confidence level to that of teachers of grade five students.

Table TT2.8

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

Subject	2018	Difference	2021
<b>Grade 5</b>			
Vocabulary	 80% (6.8)		 93% (3.7)
Grammar and syntax	 64% (9.2)		 83% (5.8)
Spelling and punctuation	 85% (4.8)		 91% (4.7)
Quality of ideas (writing)	 53% (8.1)		 86% (4.8)
Organisation and structure (writing)	 67% (8.4)		 86% (4.9)
Phonemic awareness	 56% (8.1)		 84% (4.8)
Letter sound correspondence	 72% (6.4)		 91% (3.9)
Reading comprehension	 78% (5.8)		 90% (4.8)
Oral language (speaking and listening)	 81% (4.7)		 94% (3.5)
<b>Grade 7</b>			
Vocabulary	 87% (4.2)		 90% (3.9)
Grammar and syntax	 62% (5.2)		 74% (5.9)
Spelling and punctuation	 81% (6.9)		 77% (6.6)
Quality of ideas (writing)	 55% (6.9)		 71% (8.0)
Organisation and structure (writing)	 67% (8.1)		 70% (8.1)
Phonemic awareness	 69% (6.7)		 68% (6.5)
Letter sound correspondence	 76% (5.1)		 70% (5.9)
Reading comprehension	 78% (8.8)		 85% (4.4)
Oral language (speaking and listening)	 89% (11.1)		 78% (5.7)

Percentage of students whose teachers expressed confidence in teaching literacy in 2018 and 2021, RMI, PILNA 2018, 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. No association was observed for teacher confidence and the level of qualifications they held.

- Female teachers were more significantly more confident in teaching literacy than male teachers.
- Teachers who were in the younger age range (20–35 years old) were more confident in teaching literacy 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 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). The scale was formed from statistical analysis of the 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 teachers expressed confidence in teaching numeracy topics.















Most students in both year levels had teachers who were confident in teaching numeracy topics. In both year levels, the proportion of students with confident teachers in the numeracy topics ranged between 65% and 88%.

Across both year levels, the topics where a lower proportion of students had teachers who expressed confidence were 'Geometry' (grade five, 65%; grade seven, 66%) and 'Data and chance' (grade five, 71%; grade seven, 64%).

Topics with the highest proportions of students whose teachers expressed confidence were 'Place value' (grade five, 84%; grade seven, 86%), and 'Numbers and patterns' (grade five, 88%; grade seven, 85%).

Table TT2.9

### Percentage of students whose teachers express confidence in teaching numeracy

Subject	Grade 5	Grade 7
Number and patterns	 88% (8.6)	 85% (4.4)
Place value	 84% (9.3)	 86% (5.1)
Fractions and percentage	 78% (9.9)	 72% (5.3)
Operations	 83% (8.9)	 77% (4.4)
Measurement	 76% (9.4)	 69% (6.7)
Geometry	 65% (10.3)	 66% (6.8)
Data and chance	 71% (10.2)	 64% (6.7)

Percentage of students whose teachers expressed confidence in teaching numeracy, RMI, PILNA 2021











































( ) 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 a teacher confident in teaching the various numeracy areas between 2018 and 2021 PILNA cycles.

Similar findings were found in numeracy as in literacy, as grade seven students were less likely to have a teacher confident in a strand than a grade five student. However, the confidence gap between grade five and seven students was narrower for numeracy than it was for literacy. In every numeracy area, across both year levels, a higher proportion of students had a teacher confident in teaching the areas in 2021 than in 2018. The only exception to this was in 'Numbers and patterns' for grade five students, which saw a slight decrease in the number of students with confident teachers when compared to 2018.

Table TT2.10

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

Subject	2018	Difference	2021
<b>Grade 5</b>			
Number and patterns	 95% (3.0)		 88% (8.6)
Place value	 90% (4.8)		 84% (9.3)
Fractions and percentage	 74% (7.5)		 78% (9.9)
Operations	 78% (5.1)		 83% (8.9)
Measurement	 61% (10.6)		 76% (9.4)
Geometry	 38% (8.6)		 65% (10.3)
Data and chance	 58% (7.6)		 71% (10.2)
<b>Grade 7</b>			
Number and patterns	 82% (7.4)		 85% (4.4)
Place value	 83% (8.1)		 86% (5.1)
Fractions and percentage	 63% (6.0)		 72% (5.3)
Operations	 66% (5.0)		 77% (4.4)
Measurement	 51% (12.7)		 69% (6.7)
Geometry	 47% (11.0)		 66% (6.8)
Data and chance	 57% (5.3)		 64% (6.7)

Percentage of students whose teachers expressed confidence in teaching numeracy in 2018 and 2021, RMI, PILNA 2018, 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). There were no gender or teaching experience differences for numeracy teaching confidence, but significant differences were found.

- Teachers who had a degree level or higher qualification were more confident in teaching numeracy than teachers who did not.

- 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).

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). The scale was formed by statistical analysis of the answers to six out of seven questions teachers were asked about their confidence in teaching this area.

## What does this mean?

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

In literacy, more students have confident teachers in areas around comprehension. 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.

Grade five students are more likely to have confident teachers in literacy and numeracy strands than grade seven students.

Differences were noted within the comparisons for teacher demographic factors. Firstly, younger teachers (those between 20 and 35 years old) were more confident in teaching literacy and numeracy. Female teachers were more confident in teaching literacy than male teachers, although no differences were found between female and male teachers in numeracy. Teachers with less than ten years' experience were more confident in teaching literacy, while teachers with a qualification lower than a degree were more confident in teaching numeracy. 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.