

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 5 shows the percentage of students 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 70% to 88%.

Across both year levels, areas where a lower proportion of students had teachers who expressed confidence were: quality of ideas (Year four, 70%; Year six, 73%), organisation and structure (Year four, 70%; Year six, 75%), phonemic awareness (Year four, 75%; Year six, 75%), and grammar and syntax (Year four, 78%; Year six, 79%).

Areas with the highest proportions of students having teachers who expressed confidence were spelling and punctuation (Year four, 87%; Year six, 88%); vocabulary (Year four, 86%; Year six, 87%); reading comprehension (Year four, 83%; Year six, 87%); and oral language (Year four, 83%; Year six, 85%).

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 RCTT#5

Percentage of students whose teachers express confidence in teaching literacy

Subject	Year 4	Year 6
Vocabulary	86% (1.3)	87% (1.2)
Grammar and syntax	78% (1.5)	79% (1.5)
Spelling and punctuation	87% (1.3)	88% (1.3)
Quality of ideas (writing)	70% (1.5)	73% (1.5)
Organisation and structure (writing)	70% (1.5)	75% (1.6)
Phonemic awareness	75% (1.5)	75% (1.5)
Letter sound correspondence	82% (1.2)	82% (1.3)
Reading comprehension	83% (1.4)	87% (1.2)
Oral language (speaking and listening)	83% (1.3)	85% (1.3)



















() 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 5A 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 students in 2021 had teachers who expressed confidence in teaching literacy across all areas. 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 RCTT#5A

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

Subject	2018	Difference	2021
Year 4			
Vocabulary	77% (1.7)		86% (1.3)
Grammar and syntax	67% (1.9)		78% (1.5)
Spelling and punctuation	79% (1.6)		87% (1.3)
Quality of ideas (writing)	54% (2)		70% (1.5)
Organisation and structure (writing)	59% (2)		70% (1.5)
Phonemic awareness	68% (1.9)		75% (1.5)
Letter sound correspondence	77% (1.7)		82% (1.2)
Reading comprehension	73% (1.7)		83% (1.4)
Oral language (speaking and listening)	78% (2.1)		83% (1.3)
Year 6			
Vocabulary	80% (1.4)		87% (1.2)
Grammar and syntax	70% (1.6)		79% (1.5)
Spelling and punctuation	83% (1.4)		88% (1.3)
Quality of ideas (writing)	58% (1.9)		73% (1.5)
Organisation and structure (writing)	61% (2)		75% (1.6)
Phonemic awareness	70% (1.7)		75% (1.5)
Letter sound correspondence	76% (1.6)		82% (1.3)
Reading comprehension	76% (1.7)		87% (1.2)
Oral language (speaking and listening)	78% (1.8)		85% (1.3)

() 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.

- Female teachers were more confident in teaching literacy than male teachers.
- Teachers who had a degree level or higher qualification were more confident than teachers who did not.
- 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). It was formed from all nine questions that teachers were asked about their confidence in teaching this area using statistical analysis.

Confidence in teaching numeracy

Table 6 below 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. In both year levels, the proportion of students with confident teachers in the numeracy topics ranged between 77% and 94%, 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 geometry (Year four, 76%; Year six, 79%) and data and chance (Year four, 77%; Year six, 78%).

Topics with the highest proportions of students whose teacher expressed confidence were: place value (Year four, 93%; Year six, 94%), numbers and patterns (Year four, 94%; Year six, 93%), and operations (Year four, 88%; Year six, 90%).

Table RCTT#6

Percentage of students whose teachers express confidence in teaching numeracy

Subject	Year 4	Year 6
Number and patterns	 94% (1.2)	 93% (0.9)
Place value	 93% (1.2)	 94% (0.9)
Fractions and percentage	 81% (1.6)	 82% (1.3)
Operations	 88% (1.4)	 90% (1)
Measurement	 81% (1.7)	 85% (1.3)
Geometry	 76% (1.5)	 79% (1.4)
Data and chance	 77% (1.7)	 78% (1.4)

() 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 6A 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. 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.

Table RCTT#6A

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

Subject	2018	Difference	2021
Year 4			
Number and patterns	92% (1.1)		94% (1.2)
Place value	89% (1.3)		93% (1.2)
Fractions and percentage	68% (1.7)		81% (1.6)
Operations	85% (1.3)		88% (1.4)
Measurement	75% (1.8)		81% (1.7)
Geometry	66% (1.9)		76% (1.5)
Data and chance	67% (1.7)		77% (1.7)
Year 6			
Number and patterns	92% (1.1)		93% (0.9)
Place value	92% (1.2)		94% (0.9)
Fractions and percentage	75% (1.6)		82% (1.3)
Operations	86% (1.4)		90% (1)
Measurement	77% (1.9)		85% (1.3)
Geometry	69% (1.9)		79% (1.4)
Data and chance	71% (1.6)		78% (1.4)

() 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 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).
- Teachers with less experience in teaching (less than 10 years) expressed more confidence in teaching than teachers with more experience (more than 10 years).

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). It was formed from six out of seven questions that teachers were asked about their confidence in teaching this area using statistical analysis.