

A game changer to boost literacy and maths skills

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(Medical Xpress)—Finding the best way to teach reading has been an ongoing challenge for decades, especially for those children in underprivileged areas who fail to learn to read. What is the magic ingredient that will help turn the literacy lights on quicker?

A new study by researchers at Massey University and The University of Auckland, published in *Frontiers in Psychology*, has discovered that a balanced approach to reading, combining book-centered reading with explicit phonics, achieves better results across a number of key literacy areas for children in underprivileged schools.

The study's co-author, leading literacy expert Professor Tom Nicholson, says the research is a game changer, and could help solve New Zealand's literacy and maths problems without having to make dramatic changes to the present ways of teaching literacy or maths.

"Despite doing reasonably well in international surveys, New Zealand has struggled for decades to lift its long tail of underachievement, affecting one in five pupils – and especially those in underprivileged homes. This new research promises a solution to this problem without dramatic changes to our current way of teaching."

The main focus of the study was reading. Other literacy experts have argued for a balanced approach to teaching reading, but Professor Nicholson says this is the first study to show that a balance of [book reading](#) and explicit phonics is more effective than either approach on

their own.

"Balance makes sense, of course. Learning to play netball by playing match after match will not teach essential skills like catching, throwing and passing. On the other hand, practicing essential skills only will not help unless you also get match practice. Both are needed. But this sensible idea of a balanced approach has not been scientifically researched until now," he says.

In most classrooms, a book-centred approach is used. This is where the [teacher](#) reads books to the class from almost the first day of school. This is called Big Book reading, where enlarged copies of graded readers, big enough for the whole class to see the print, are read out loud to the class.

The teacher reads and re-reads the Big Book to the class, showing how to use illustrations, meaning, and some letter clues to figure out unfamiliar words.

In a phonics lesson, the teacher focuses on teaching a rule to help work out the words – for example: the "silent e" rule. The teacher might write "mat" on the whiteboard, then add the silent e, and explain to the class how this changes the word to "mate".

In a balanced approach, the teacher combines both Big Book reading with explicit phonics.

The teacher would reinforce this with a strategy called "turtle talk" – so named because words are said as slowly as a turtle walks. The teacher says the individual sounds of a word slowly, with pupils attempting to guess the word. In addition to the oral language form, the teacher also prints words on a whiteboard, pointing to the letters in the words while the pupils are turtle talking.

By modelling how to decode words according to the letter sounds, the teacher is able to get a message across to pupils that they can apply turtle talk to the decoding of words. After the explicit phonics mini-lesson, the teacher reads the Big Book to the class.

In the study, a group of 96 six-year-olds from three disadvantaged schools were randomly put into four different instructional groups that compared Big Books enhanced with explicit phonics (BB/EP); Big Book reading on its own; phonics on its own; or no literacy instruction at all (this was the control group who received an alternative instruction in mathematics). None of the children in the study were receiving Reading Recovery tuition, and all students had already completed a year of formal reading instruction.

Professor Nicholson says the results from the study are very exciting.

"After only 12 lessons of 30 minutes per lesson, once a week, over several months, the BB/EP and the Big Book group were similar in reading accuracy, but the BB/EP group was superior in five other areas of literacy: reading comprehension, spelling, word reading, basic decoding skills, and phonemic awareness. The BB/EP group was similar to the phonics group in basic decoding skills, but was superior in all other areas, including reading accuracy.

"And that's not all. The control group, who received tutoring in maths, and did simple sums, like addition, subtraction and multiplication, lifted their scores on a formal maths test to Stanine 6, which is above average. Their maths skills were much higher than the other three groups who did not receive maths tutoring.

"In hindsight, it would have been interesting to combine maths instruction with Big Book reading to see if this would also improve maths skills – and there are a number of children's books that have a

maths aspect to them that could be used to teach computation. But that's something that will require further research," says Professor Nicholson.

The results of the study could be a model not only for New Zealand but for other countries wanting to shorten (or eliminate) their long tail of underachievement, not just in literacy but in maths as well.

"The next step is to find funding to scale up this study, and deliver this enhanced way of teaching not only to New Zealand's underprivileged children, but hopefully children overseas as well. Literacy and numeracy underachievement is a global problem – we need to implement effective ways to help those poor children that we are most concerned about."

More information: "The effect of phonics-enhanced Big Book reading on the language and literacy skills of 6-year-old pupils of different reading ability attending lower SES schools." *Front. Psychol.*, 13 November 2014 [DOI: 10.3389/fpsyg.2014.01222](https://doi.org/10.3389/fpsyg.2014.01222)

Provided by Massey University

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