

Does Phonics Deserve the Credit for Improvement in PIRLS?

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England's 9- and 10-year olds showed a modest improvement on the 2016 PIRLS reading test, compared to 2011 scores. School Standards Minister Gibb has given the credit to an 'increased emphasis on phonics' (Weale, 2017). New Zealand, however, experienced a modest drop in PIRLS scores. The reason, according to New Zealand experts: Not enough phonics (Tuckey, 2018). But phonics does not deserve the credit for PIRLS improvement or the blame for the declines.

Definitions

It will help to distinguish three different views of phonics: (1) intensive, or heavy phonics, (2) basic, or light phonics, and (3) zero phonics. Basic phonics appears to have some use, but there are good reasons why intensive phonics is not the way to improve reading.

Intensive Phonics. This position claims that we learn to read by first learning the rules of phonics, and that we read by sounding out what is on the page, either out-loud or to ourselves (decoding to sound). It also asserts that all rules of phonics must be deliberately taught and consciously learned.

Basic Phonics. According to Basic Phonics, we learn to read by actually reading, by understanding what is on the page. Most of our knowledge of phonics is subconsciously acquired from reading (Smith, 2004: 152).

Conscious knowledge of some basic rules, however, can help children learn to read by making texts more comprehensible. Smith (2004) explains how this can happen (p. 152): The child is reading the sentence 'The man was riding on the h____' and cannot read the final word. Given the context and recognition of *h*, the child can make a good guess as to what the final word is: the reader will know that the word is not *donkey* and *mule*. This won't work every time (some readers might think the missing word was 'Harley'), but some knowledge of phonics can restrict the possibilities of what the unknown words are.

Basic Phonics is the position of the authors of *Becoming a Nation of Readers*, a book widely considered to provide strong support for phonics instruction: '...phonics instruction should aim to teach only the most important and regular of letter-to-sound relationships ... once the basic relationships have been taught, the best way to get children to refine and extend their knowledge of letter-sound correspondences is through repeated opportunities to read. If this position is correct, then much phonics instruction is overly subtle and probably unproductive' (Anderson *et al.*, 1985: 38).

Zero Phonics. This view claims that direct teaching is not necessary or even helpful. I am unaware of any professional who holds this position.

The Evidence Against Intensive Phonics

Complexity Many phonics rules are very complicated and many don't work very well. As Smith (2003) notes, phonics rules are unreliable: 'There are too many alternatives and exceptions. Every letter of English can represent more than one sound (or silence) and every sound of English (or silence) can be represented by more than one letter. There are over 300 different ways in which letters and sounds can be related' (p. 41).

This was demonstrated by Clymer (1963), who analyzed 121 generalizations taught in school. Clymer reported that the generalizations did not succeed very well in determining the pronunciation of words that appeared in four basal series. Some noteworthy failures: The popular ‘when there are two vowels side by side, the long sound of the first one is heard and the second is usual silent’ (as in ‘bead’) was only 45% accurate, and the ‘final e-rule’, ‘if the first vowel is long, the final e is silent (as in ‘cake’)’ was only 60% effective. Another obvious argument against the necessity of teaching intensive phonics include the fact that most highly competent readers are aware of only the most basic rules of phonics.

Impact of Intensive Phonics

The impact of intensive phonics is strong on tests in which children pronounce lists of words in isolation. It is, however, miniscule or absent on tests of reading comprehension given after grade 1, tests in which children have to understand what they read. Garan (2002) showed this to be the case in studies reviewed by the National Reading Panel, and a similar pattern was found in a number of additional studies (Krashen, 2009; Johnson and Watson, 2005; McQuillan, 2018).

Tests of Reading Comprehension

Study after study has shown that access to books and the amount of self-selected reading done is an excellent predictor of scores on tests of reading comprehension, both in first and second language acquisition (for reviews, see McQuillan, 1998; Krashen, 2004).

In a meta-analysis published in 2000, The National Reading Panel concluded that students in skills-based classes did better on tests of reading than those in whole language classes. The NRP averaged the results of all reading tests, however, including those in which children pronounced words in isolation.

When the analysis was restricted to tests of reading comprehension, children in classes in which more reading was done did better than those in skills-emphasis classes (effect size, $d = .7$), and even when the amount of reading done was not reported in studies, students in whole language classes did better ($d = .17$) (Krashen, 2002).

And Now, PIRLS

PIRLS is a test of reading comprehension, given to ten-year-olds in 50 countries. Students take the PIRLS in their home language. It is not a test of decoding, not a test of pronouncing words out-loud presented out of context.

Consistent with other research on tests of reading comprehension, access to reading material (school libraries in this case) is a significant and substantial predictor of reading comprehension on the PIRLS test (Krashen *et al.*, 2012; Krashen *et al.*, 2017: chapter 7). Multiple regression analysis revealed that the impact of libraries is independent of the effect of poverty. Also, the impact of access to a library was substantial: the effect of the library balanced, to at least some extent, the effect of poverty. This result was present in analyses of PIRLS 2006 and 2011, and I discovered the same relation in PIRLS 2016 (as yet unpublished). There was also very little relationship (sometimes none) between the amount of reading instruction children received in grade 4, which may have included some phonics, and PIRLS scores in 2006, 2011, and 2016.

The same was true for early literacy instruction: There was either no correlation or a negative correlation between letter-recognition, and the ability to read and write ‘some words’ before entering school and PIRLS performance in grade 4 (PIRLS 2011, in Krashen *et al.*, 2017: chapter 7; PIRLS 2016, unpublished).

Conclusion

The case against intensive phonics is easy to summarize: (1) Some of the rules are very complicated and don't work very well. (2) Those who study intensive phonics only do better on pronouncing words presented out of context. (3) Intensive phonics does not contribute to performance on reading comprehension tests. (4) High performance on tests of reading comprehension, such as PIRLS, are the result of doing lots of pleasure reading, which requires access to books.

Backing heavy phonics is backing the wrong horse: Children don't need more intensive phonics instruction. They need access to interesting books, and a time and place to read them.

This paper is written in the academic style, with academic citations to back up the points made. For those interested in a more casual (and certainly more comprehensible) approach, I recommend a short video (under 12 minutes) by Debbie Stone Bruell that makes many of points I make here: 'Are schools turning kids off to reading?' <https://youtu.be/wD4IRdeR0tE>

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