Is systematic synthetic phonics effective?

Kevin Wheldall and Jennifer Buckingham

Statement of the problem

International studies have led to concerns regarding the academic performance of children in our schools, especially of those from less privileged backgrounds. This in turn has led to questioning of the teaching practices in schools. Critics have argued that some common methods of teaching foundational reading skills are not as effective as they should be and that, as a result, children are not progressing as quickly as they might. Particular concern has been expressed about the academic performance of Indigenous students, especially those from remote communities.

Proposed solution/intervention

Scientific reading research carried out over the past 40 years has consistently confirmed that the most effective way of teaching children to read (in the sense of being able to decode written text) is to provide instruction in the alphabetic principle and phonics. Phonics is an essential component of a comprehensive reading program that also includes explicit instruction in fluency, vocabulary and comprehension. Phonics requires that children be taught the relationships between the phonemes (sounds) of speech and their representations in written text (letters, or graphemes). Of the various approaches to achieving this goal, it is argued that the evidence to date indicates that systematic synthetic phonics (SSP) instruction is the best option.

The theoretical rationale - how does it work?

Some advocates of phonics instruction argue for an embedded approach whereby letter-sound correspondences are taught as they occur naturally in the beginning texts children encounter. Others favour a more structured systematic approach whereby letter-sound correspondences and other sub-word units are introduced and taught in a pre-determined scope and sequence. This can be done via an 'analytic' method that breaks words down to onset and rime units, also known as word families (e.g., b-ug), or by a 'synthetic' method that breaks words into the smaller grapheme-phoneme units (e.g., b-u-g). The latter group typically favour a more explicit, rather than an implicit, teaching method. The term 'synthetic' does not mean artificial or fake in this usage but rather that words should be decoded by synthesising the letter sounds sequentially through each word, blending the result into a whole.

What does the research say? What is the evidence for its efficacy?

There is now little doubt that systematic and explicit phonics instruction is the most effective method for teaching word reading. It has been described as one of the most secure findings in social science. There are relatively few specific research studies directly comparing synthetic and analytic phonics teaching methodologies but those that exist provide strong evidence in favour of the synthetic method. In addition, there are hundreds of studies from cognitive science and psychology demonstrating that fluent word reading is dependent on accurate and efficient decoding of letter-sound correspondences, which aligns with the instructional practices of SSP. Statistical text analyses have determined that children learn to read more words more quickly by using knowledge of letter-sound correspondences than by using knowledge of onsets and rimes. Multiple studies have found that high-performing schools include high quality SSP in their early reading instruction.

Conclusion

In view of the above, the current state of multi-disciplinary research evidence suggests that systematic synthetic phonics (SSP) is preferable and is to be recommended as best practice.

Key references

- Ehri, L. C. (2020). The science of learning to read words: A case for systematic phonics instruction. *Reading Research Quarterly*. Advance online publication. https://doi.org/10.1002/rrq.334
- Johnston, R., & Watson, J. (2014). Teaching synthetic phonics in primary schools (2nd ed.). Sage.
- Stainthorp, R. (2020). A national intervention in teaching phonics: A case study from England. *The Educational and Developmental Psychologist*. Advance online publication. https://doi.org/10.1017/edp.2020.14
- Vousden, J. I, Ellefson, M. R. Solity, J., & Chater, N. (2011). Simplifying reading: Applying the simplicity principle to reading. Cognitive Science: A Multidisciplinary Journal, 35(1), 34-78. https://doi.org/10.1111/j.1551-6709.2010.01134.x
- Buckingham, J., Wheldall, R., & Wheldall, K. (2019). Systematic and explicit phonics instruction: A scientific, evidence-based approach to teaching the alphabetic principle. In R. Cox, S. Feez & L. Beveridge (Eds.), *The alphabetic principle and beyond* (pp. 49-67). Primary English Teaching Association Australia.

