

Summary of the findings of Colenbrander et al (2022)

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August 2026

Colenbrander, D., Kohnen, S., Beyersmann, E., Robidoux, S., Wegener, S., Arrow, T., Nation, K., & Castles, A. (2022). Teaching children to read irregular words: A comparison of three instructional methods. *Scientific Studies of Reading*, 26(6), 545–564.
<https://doi.org/10.1080/10888438.2022.2077653>

THE STUDY

Colenbrander et al (2022) compared three instructional approaches to teach irregular words for reading. Children in this study were in their third term of formal schooling (average age 6: range 5 years 1 month – 6 years 8 months). They had limited reading experience and therefore words were presented out of context.

HOW TO READ THIS DOCUMENT

Gold panels provide links to practice or further advice and guidance. Pink panels provide additional information provided by the author of this document. Blue panels provide direct quotations. Everything in plain text is a report of what Colenbrander et al (2022) themselves found and argue.

• The three methods

Look and Say

NO ORTHOGRAPHIC PROCESSING

Children see the written word and hear it spoken, they say the word, they look at it again, and say what it is. This did not involve any explicit processing of orthography.

Look and Spell

ACTIVE ORTHOGRAPHIC PROCESSING

This involved active processing of the word's orthography by learning to spell the word by writing it down, but no explicit attention to decoding or active connection to existing vocabulary knowledge. Children looked at the word, the trainer said the word, then asked the children to write the word on their whiteboard, the trainer asked them to show him what they had written — saying that they had done great work! Then he asked them to rub it out and they had another go by repeating the same process.

Mispronunciation Correction

ACTIVE ORTHOGRAPHIC PROCESSING

Involved the trainer sounding out the phonemes in the word pointing to the graphemes as he sounds them out, children are asked to sound out with him, mispronunciation was corrected by actively connecting partially decoded responses to existing spoken vocabulary knowledge.

Children in all conditions were shown a picture corresponding to each irregular word, and children in the mispronunciation correction condition were taught to correct their mispronunciations using the pictures as cues. Picture cues were used because they were unable to use the context of a sentence in this research and context within a sentence would be the norm when developing the skill of mispronunciation correction (p558).

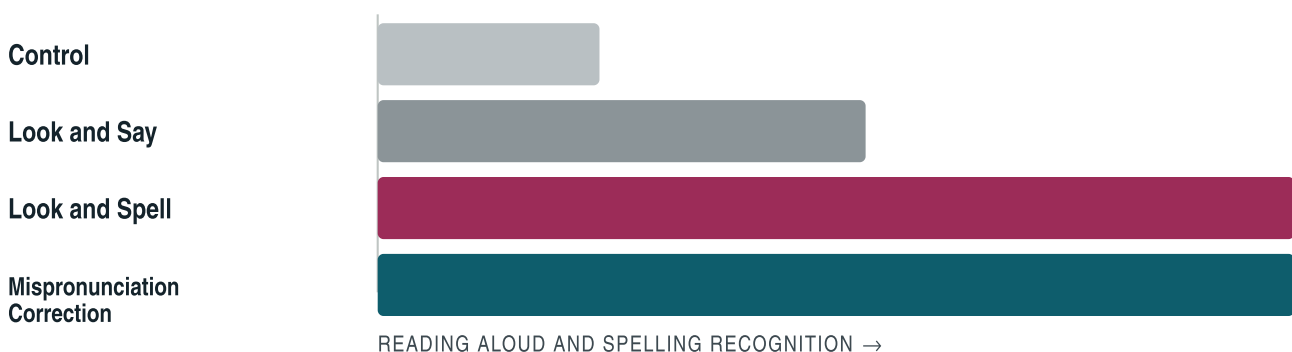
A CONCERN

This is in direct contrast to the DfE core phonics criteria which require SSP programmes not to use context as a strategy for identifying words. If children couldn't use context how would they know how to pronounce BOW in "She had a pink bow on her dress" or "He had to bow when he met the King"?

• What they found

Colenbrander et al (2022) found that all three methods produced better reading of the trained words than the children in the control condition, but 'Look and Spell' and 'Mispronunciation Correction' were significantly more effective than 'Look and Say' on both reading aloud and spelling recognition tasks. There was no significant difference between 'Look and Spell' and 'Mispronunciation Correction' which was contrary to their prediction that 'Mispronunciation Correction' would be significantly better than the other two. What is most interesting was that the 'Look and Spell' approach, which did not involve sounding out, was as effective as the 'Mispronunciation Correction' which involved sounding out.

ADDED ILLUSTRATION — THE PATTERN OF RESULTS DESCRIBED ABOVE



Added illustration. Bar lengths are schematic and show only the ordering reported in the text, not measured effect sizes. The two equal bars indicate that no significant difference was found between them.

The authors contend that both methods work better than simple 'Look and Say' because they both require active engagement with the word's orthography (its spelling), rather than passive exposure to the written and spoken form together. **Colenbrander et al (2022) do not discuss onset and rime** although this paper was referenced to support not using onset and rime for reading in one of the DE presentations on 9th December 2025.

● Why mispronunciation correction has become necessary

This mispronunciation process for correcting irregular words that cannot be fully decoded is a strategy that is necessary because SSP programmes require children to rely on decoding phoneme by phoneme. This results in children having to identify the irregular part of the word (described as Heart Words DE, 2025 p47). Irregular words can be more easily learned using orthographic methods and semantic and syntactic links negating the need for this heart word process or mispronunciation correction.

Because orthographic methods and semantic and syntactic links are not used to learn irregular words from the beginning, 'a mispronunciation correction skill' has become necessary, to the point that research has been required.

LINKS TO PRACTICE

The HRP (McMurray, 2000-2002) action research provides evidence that children with the greatest difficulty learning to read can learn irregular words if they are taught using orthographic methods and semantic and syntactic links. This approach to learning ensures reading fluency and anchors in memory, so that an effective phonics strategy can be developed and children can recognise irregular words that can't be decoded when these words are encountered in their reading book.

● The authors' conclusion

In Colenbrander et al's (2022) concluding paragraph they state that

'In summary, our results clearly support the view that irregular word reading instruction should include active processing of a word's orthography during instruction'

COLENBRANDER ET AL (2022)

The 'Look and Spell' result in this research provides evidence that 'mispronunciation correction' is not needed if the spelling of an irregular word is taught, thus avoiding this very protracted and unnecessary 'mispronunciation correction' process. Why would you need it, if children can be effectively taught to recognise an irregular word by learning to spell it. This mispronunciation of irregular words was not an issue prior to the whole language and synthetic phonics approaches to teaching children to learn to read. Children were taught irregular words using a range of orthographic methods to ensure secure sight word learning.