

Should phonemic awareness be taught without letters?

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Statement of the problem

It has been claimed that phonemic awareness instruction should not involve the presentation of letters (e.g. in the form of tiles). This is based on the premise that, without the capacity to perform phonemic awareness tasks in an oral-only context, students show more limited orthographic mapping (i.e. the theorised process by which a word's spelling, pronunciation and meaning bond together).

Proposed solution

The proposed solution is to have students work towards performing phonemic awareness tasks (and often complex phonemic manipulation tasks) in the absence of letters.

The theoretical rationale – how does it work?

According to the theoretical rationale underlying oral-only phonemic awareness instruction, the provision of such instruction refines readers' underlying phonological representations for words. Consequently, it may enable orthographic mapping by providing a frame onto which incoming orthographic information can connect during the sight word learning process (Ehri, 2014). Note that targeting phonemic awareness for the purpose of refining phonological representations does not preclude the use of letters. Indeed, it may be argued that the presentation of letters serves to reinforce orthographic and phonological bonds. However, a strong interpretation of the orthographic mapping theory has been used to justify the recommendation that students need to become highly proficient in performing phonemic awareness tasks, such that they do not need to rely on letters (or other stimuli) as a crutch. In particular, this recommendation is given in the context of helping children with reading difficulties, who often show weaknesses in orthographic mapping and who also often struggle to perform tasks with high phonological demands.

Importantly, the theoretical rationale underlying oral-only phonemic awareness instruction is distinct from that underlying more traditional phonemic awareness instruction that is taught as a precursor to – or in conjunction with – beginning or remedial literacy instruction. By practising tasks like identifying the first sound in a word, children become aware of individual phonemes and can then start attaching these phonemes to individual letters or graphemes. Other phonemic awareness tasks like blending and segmentation are also directly applicable to the basic

processes of decoding and spelling. In these cases, the goal of instruction is to facilitate learning of alphabetic knowledge and improve closely linked literacy skills. As such, there is a clear reason for incorporating letters into lessons as soon as possible.

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

The role of letters in phonemic awareness instruction was examined in a meta-analysis by Erbeli et al. (2024). They found that oral-only phonemic awareness instruction produced initially strong gains with diminishing returns after a certain period of time (approx. 10 hours). In contrast, phonemic awareness instruction that incorporated letters produced improvements that accelerated further skill development. Stalega et al. (2024) also investigated this question from a different angle in studies examining phonemic awareness training. Specifically, they looked at how the nature of the instruction in the comparison group affected results. Their meta-analysis indicated that print-based instruction (that involves letters and has phonemic awareness inherently embedded into activities) can improve phonemic awareness just as well as instruction that specifically targets phonemic awareness. The results from these two recent meta-analyses do not support the teaching of phonemic awareness in an oral-only context and in isolation from word-level literacy instruction.

Conclusion

At this point, there is no evidence-based rationale for withholding letter stimuli from students as they perform phonemic awareness tasks. This applies to typically developing readers and those with observed difficulties.

Key references

- Ehri, L. C. (2014). Orthographic mapping in the acquisition of sight word reading, spelling memory, and vocabulary learning. *Scientific Studies of Reading*, 18(1), 5–21. <https://doi.org/10.1080/10888438.2013.819356>
- Erbeli, F., Rice, M., Xu, Y., Bishop, M. E., & Goodrich, J. M. (2024). A meta-analysis on the optimal cumulative dosage of early phonemic awareness instruction. *Scientific Studies of Reading*, 28(4), 345–37. <https://doi.org/10.1080/10888438.2024.2309386>
- Stalega, M. V., Kearns, D. M., Bourget, J., Bayer, N., & Hebert, M. (2024). Is phonological-only instruction helpful for reading?: A meta-analysis. *Scientific Studies of Reading*, 28(6), 614–635. <https://doi.org/10.1080/10888438.2024.2340708>