

Literature Review: Morphology in Spelling

— Evidence and Rationale for the Grammarsaurus Scheme

What does the research say is the impact of morphological instruction on children's achievement in spelling?

Learning to spell in English can feel overwhelming. With its many rules, exceptions, and inconsistencies, it's no wonder that children — and even adults — might agree with the sentiment that "English can't be spelt", a quote often attributed to twentieth-century writer and Nobel Prize winner George Bernard Shaw (Kessler & Treiman, 2003). This literature review outlines Grammarsaurus's commitment to effective, engaging spelling instruction and positions our approach within current research — highlighting how it aligns with what the evidence says about how children learn to spell.

Shaw's comment highlights just how tricky English spelling can be, especially when it comes to the relationship between sounds and letters. A single sound can be spelled in many different ways, often with limited clues to help young children remember which to use when. For example, the /s/ sound can be written as s, ss, se, c, or ce, depending on the word in which it appears (Miskin, 2020). Many phonics programmes attempt to manage this complexity by producing complex speed sound charts — but even these can feel overwhelming. When children rely solely on phonics for spelling, they often have to juggle a vast number of rules and patterns, which can lead to confusion, frustration, and cognitive overload — even with everyday words (Bowers & Bowers, 2017).

The teaching of phonics is, of course, an essential part of spelling instruction — particularly for early readers. But it's only one piece of the language puzzle, as shown in the figure below (Peters, et al., 2025).

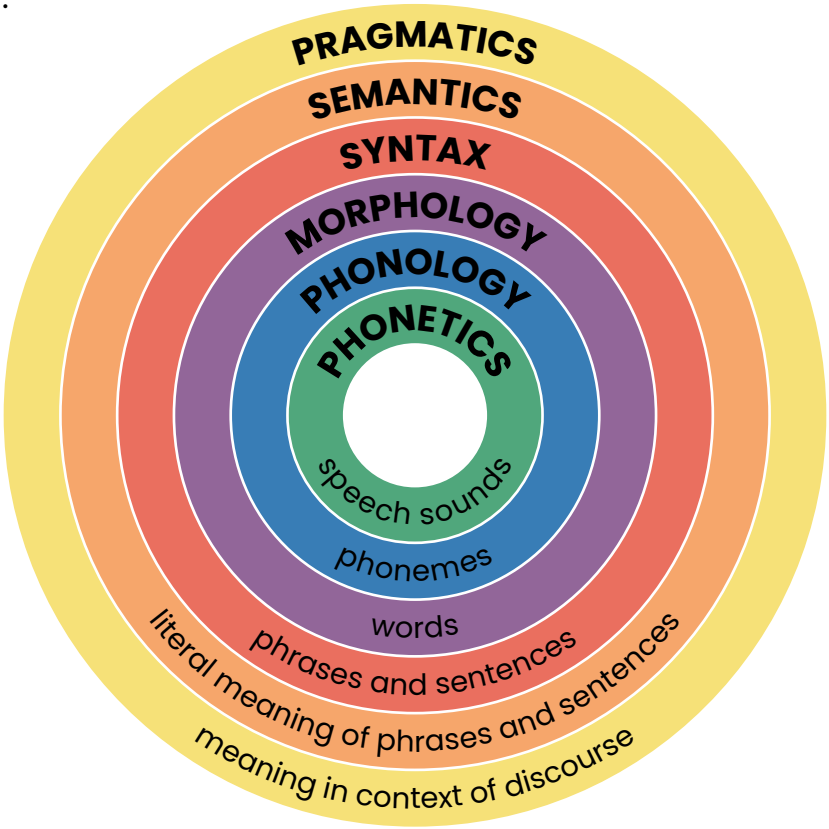


Figure 1, Key elements of language, taken from Peters, et al., (2025), having been adapted from Thomas and Cook (2005).

What is morphological spelling instruction?

Morphology is an element of linguistics. It explores how words are built and how each part of a word creates meaning (Lieber, 2021). In fact, if we break down the word morphology itself (see Figure 2), we see its meaning — literally, the study of word forms.

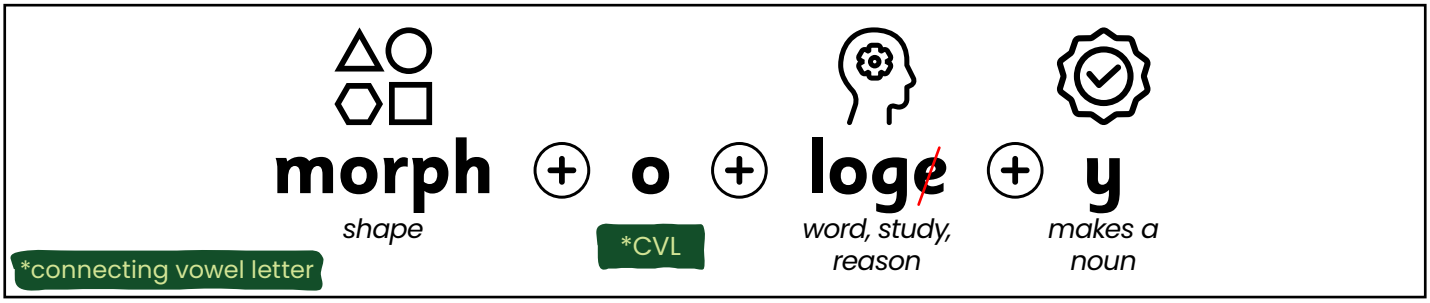


Figure 2, Morphological breakdown of the word "morphology"

Morphology is all about morphemes — the smallest units of meaning in a word—and how they can be combined to build new words or make sense of existing ones (Aronoff & Fudeman, 2011). When learners understand that words are made of meaningful parts, they start to form stronger mental links between how a word looks, how it sounds, and what it means. This turns spelling into a more logical, pattern-based process, rather than a guessing game (Wood, et al., 2024).

Bowers & Bowers (2017) take this further, suggesting that spelling should be taught as a logical, scientific system. Through exploring word families, spotting morphological patterns, and forming hypotheses about new spellings, children become curious, active learners. Their approach, Structured Word Inquiry (SWI), shifts the focus away from memorising disconnected word lists and toward understanding how English spelling works at a deeper level. This emphasis on morphology is echoed in the Department for Education's **Writing Framework** (2025), which recognises morphological knowledge as central to developing confident, capable writers and highlights the importance of teaching spelling through meaningful, language-rich instruction.

Share's (2025) *Combinatorial Model* builds on this idea with a helpful metaphor: learning to read is like growing a tree. Phonics skills are the early twigs; morphology grows the branches. Rather than replacing early skills, morphology builds on them — adding meaning, flexibility, and strength to a child's literacy. This layered view supports the case for morphology as a core component of spelling instruction — not just an add-on.

How does our scheme work?

The Grammarsaurus Spelling Scheme introduces children to morphology from Year 2, steadily building their morphological schema through to Year 6. Before starting the scheme, children should already have a strong grasp of basic phonics (Bowers & Bowers, 2017) — ideally at Phase 5 or above. We've also created guidance on the key grapheme–phoneme correspondences required, so teachers can support children for whom phonics may not have been appropriate, ensuring no one is excluded from meaningful spelling instruction.

The scheme begins with baseline assessments, helping teachers identify class-wide trends and individual needs. The first three units for all learners, regardless of age are about consonants and vowels, compound words, and an introduction to morphology. These are the building blocks of understanding morphology and the suffixing conventions that allow morphemes to come together (Lieber, 2021). From there, children explore bases, prefixes, and suffixes — along with the four main suffixing conventions that cover most English spelling changes.

Crucially, the order in which morphemes are introduced aligns with the Grammarsaurus Writing Scheme, allowing children to use new spellings in context right away. This makes the learning stick. Colenbrander et al. (2024) found that this kind of purposeful, contextual morphological instruction had a strong positive effect on both reading and spelling outcomes. We've also considered how commonly certain morphemes appear in English and how they interact with the morphemes children already know — ensuring each new concept builds logically on what's come before.

Unlike traditional schemes, we do not assign weekly spelling lists or tests. Research increasingly shows that developing a broad, transferable morphological awareness is more effective than rote memorisation (Wood et al., 2024). By helping children understand the structure and meaning of words, our approach empowers them to tackle unfamiliar spellings with confidence — and apply what they know across a wide range of vocabulary (Bowers & Bowers, 2017).

How does morphological instruction help all learners?

One of the most compelling strengths of a morphological approach is its accessibility: it supports learners across the full attainment range. For children who find phonics-based instruction difficult, morphology offers a meaningful, pattern-based alternative that doesn't rely solely on sound-letter correspondences, which can often be inconsistent and ambiguous (Bowers et al., 2010; Colenbrander et al., 2024; Wood et al., 2024). By focusing on morphemes — units of meaning — children with dyslexia or other literacy difficulties can build greater confidence and accuracy in spelling, grounded in logic rather than memorisation.

Research increasingly demonstrates that morphological instruction benefits not only typically developing learners but also those with specific literacy challenges. Wolter and Green (2021) undertook a series of interventions targeting students with reading disabilities, language impairments, and broader learning needs. They found consistent positive effects on spelling, word reading, and vocabulary. These gains extended beyond dyslexia, suggesting that morphology provides a cognitively supportive framework for learners for whom traditional phonics has not been effective. By explicitly connecting word parts to meaning, morphology helps learners make sense of complex words, even when phonemic decoding remains a barrier.

At the same time, more confident learners also benefit from the richness of a morphological approach. Investigating word families, prefixes, suffixes, and word origins gives them the chance to grow their vocabulary, spot patterns, and think more deeply about how language works (Bowers & Bowers, 2017). It encourages curiosity and independence, as children begin to explore where words come from, how they connect to other words they know, and why they're spelled the way they are.

Morphology plays a central role in the structure of language, and a growing amount of research points to the clear benefits of morphological instruction across all domains of literacy — particularly spelling (Share, 2025). Morphology is not just a linguistic concept — it offers all learners a practical, logical, and effective way to understand how words function. Evidence suggests that when children are taught to recognise and manipulate morphemes, they not only become more accurate spellers but also more confident readers and writers, equipped with tools to navigate the complexity of English (Colenbrander et al., 2024; Department for Education, 2025).

The Grammarsaurus approach reflects these findings by embedding morphology into a cohesive, accessible, and engaging curriculum. By aligning with the latest research and providing structured opportunities for investigation and application, our programme supports all learners. Our goal is to develop confident, curious spellers who not only understand how words are built but who are also empowered to explore and use language with skill and purpose.

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