# The SpellEx approach to teaching spelling

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MultiLit has recently released SpellEx, a comprehensive wholeclass Tier 1 spelling program. The program aims to develop students' understanding of the English spelling system and is designed for students from Year 3. What follows is a rationale for the approach to spelling instruction used in SpellEx.

When we spell words, we write the letters in a way that conforms to an accepted set of conventions. For example, we know the words 'hoping' and 'hopping' have different pronunciations and different meanings signalled by the way they are spelled. We also know that English words can end with the *sound* /v/ but generally don't end with the *letter* 'v' ('glove' rather than 'glov'). Some consider spelling hard to teach, and this is mainly due to the complex nature of the English language.

English is considered to have a deep orthography. This means that there is not always a one-to-one correspondence between letters and sounds or graphemes and phonemes. But it turns out that English spelling is more regular than most people believe (Moats, 2005) and can be successfully taught using a rule-based approach. An analysis conducted by Hanna et al. (1966) found that only about 4% of English words are truly irregular; the rest are regular, mostly regular or can be spelled using knowledge of word meanings and word origins. While it would be overwhelming to teach every spelling rule, there is enough regularity in the English language to make it worth spending the time on the teaching of patterns, conventions and important rules.

# The importance of spelling

There are many reasons why spelling is important. Spelling is crucial for effective written communication. Correct spelling ensures that a message is conveyed clearly and contributes to coherent writing in essays, reports or articles. Beyond the school years, spelling is considered important for job opportunities. In addition to being required for jobs involving writing, good spelling on job applications and CVs can impact the chances of being considered for a position (Pan et al., 2021).

Spelling is clearly important for writing development (<u>Daffern, 2017</u>; <u>Hutcheon et al., 2012</u>; <u>Moats, 2009</u>; <u>Sayeski, 2011</u>). It is a lower-level writing skill and is said to be part of the mechanics of writing (along with typing skills and handwriting). Ensuring children are able to spell words automatically makes writing easier (<u>Joshi et al., 2008</u>) because it frees up working memory for other aspects of writing, such as getting ideas down on paper and making revisions while writing (<u>Graham & Santangelo, 2014</u>). Also, if children can spell more difficult words, they are more likely to use these in their writing. For example, they may choose the word 'miserable' rather than 'sad' if they can spell it. To benefit from technology that assists with spelling, you need to have some idea of how to spell the word to type it in the first place.

It is sometimes suggested that students don't need spelling skills because they can use technology such as 'spellcheck' and 'autocorrect' when they write (assuming they are typing rather than handwriting, of course). While this technology may help to reduce some spelling errors, it is certainly not foolproof. To benefit from technology that assists with spelling, you need to have some idea of how to spell the word to type it in the first place. Then you are often required to make the correct choice from multiple options. In addition, sometimes we type a word that is spelled correctly but isn't the intended word (for example, your/ you're or bred/bread).

The consequences of poor spelling can be far-reaching. Poor spelling not only affects written expression, but it can result in harsh judgement (even when the content of a text is sound). This can cause embarrassment and hamper further writing development.

Spelling is also important for reading development (Ehri, 2000; Graham & Santangelo, 2014; Joshi et al., 2008; Moats, 2005; Sayeski, 2011). Just as good phonemic awareness and phonics skills are critical for reading, they are also essential for the development of good spelling (Sayeski, 2011; Simonsen & Gunter, 2001). And early *spelling* ability is an important predictor of later *reading* performance (Treiman et al., 2019). It has been shown that we can improve reading decoding skills by providing good instruction in spelling (Graham & Hebert, 2011; Graham & Santangelo, 2014; Moats, 2005). Moreover, because spelling instruction has the added benefit of supporting the development of vocabulary (Moats, 2005), it is also highly correlated with reading comprehension (Joshi et al., 2008).

# The components of spelling

To spell well, children need to acquire knowledge and skills in three main areas (Apel et al., 2012):

- 1 Phonology is the study of speech sounds in a language and involves the ability to manipulate and segment the sounds in words. For spelling, students need to integrate their knowledge of phonics or grapheme-phoneme correspondences with their knowledge of phonological awareness to spell words. For example, at the beginning stage of instruction, if a student wanted to write the word 'cat', they would need to segment 'cat' into the sounds /k/ /a/ /t/ and write down the letters 'c' 'a' 't' to spell the word.
- 2 Orthography refers to the set of conventions for writing in a language. To spell well, students need to know what those orthographic conventions are. For example, words ending in /j/ are spelled with 'dge' (badge) or 'ge' (damage), never 'j'. Orthographic mapping involves the process of storing wordspecific representations (<u>Ouellette,</u> <u>2010</u>) and includes such skills as learning which sequence of letters are permissible in English, and the

ability to recognise when words are correct or incorrect.

3 Morphology refers to the study of morphemes or units of meaning within a word. Knowledge of morphology can help students spell lots of different words once they know the spellings and meanings of bases, prefixes and suffixes. For example, the word 'unpacking' is made up of three morphemes: 'un' is the prefix, 'pack' is the base and 'ing' is the suffix.

# Etymology

In addition to these three main areas, there is another area of study that students can apply to their spelling knowledge: etymology. This is the study of word origins. Evidence is emerging as to the important role etymology can play in spelling development (Devonshire & Fluck, 2010; Hutcheon et al., 2012). As many English words come from other languages, explaining the origins of some of these words can help children understand why English words are spelled in such diverse ways. For example, knowing that the words 'ballet' and 'parachute' are borrowed from French helps children to understand why some graphemes have been used to represent certain sounds.

# The development of good spelling skills

Theories on *how* children learn to spell have changed considerably over time, and these continue to evolve in response to research. It was once thought that children progressed through a series of sequential stages (Daffern, 2017), first moving through a phonological stage, then an orthographic stage and finally a morphological stage. As research into stages evolved, it was acknowledged that these stages could overlap (Hutcheon et al., 2012).

Recent research, however, has suggested that learning to spell may not follow a linear path. There is evidence that children use phonological, orthographic and morphological skills at all stages of their spelling development (<u>Bahr et al., 2012</u>). Triple Word Form Theory has been put forward to explain how children learn to spell. It suggests that spelling involves integrating phonological, Recent research, however, has suggested that learning to spell may not follow a linear path.

orthographic and morphological word forms from the beginning stages of spelling development (<u>Daffern, 2017</u>). Triple Word Form Theory has been used to guide the development of SpellEx, so students are learning how to apply knowledge in phonology, orthography and morphology to spell words.

### **Research on spelling instruction**

The available research on spelling instruction, and instruction in general, provides some important information on how spelling should be taught. But before examining that research, we consider whether spelling needs to be taught at all. Much debate about spelling has revolved around whether it is 'caught' or whether it should be 'taught' (<u>Graham & Santangelo, 2014</u>). Proponents of 'spelling is caught' approaches believe that spelling is acquired naturally through exposure, much like learning to speak, and that formal instruction is not required. But in fact, based on the results of a meta-analysis of studies testing the effectiveness of formal spelling instruction, <u>Graham and Santangelo</u> (2014) concluded that formal instruction in spelling is superior to no instruction, and that *more* formal instruction is superior to *less* formal instruction. In other words, 'spelling is taught' approaches produce better outcomes than 'spelling is caught' approaches.

Traditionally, a common approach to the teaching of spelling has involved the rote learning of lists of words, with an emphasis on the visual information each word conveys. In fact, using lists of words to 'teach' spelling has persisted since early in the 20th century (Pan et al., 2021). This approach often involves the teacher preparing a list of words for their students to learn for the week. Students may be given the words on Monday and are then tested on Friday. Spelling word lists may come from other areas of the curriculum, from children's own writing or from a spelling program. During the week, some light teaching may occur to practise these words (for example, copying the words out multiple times or writing the words in a sentence), but essentially there is often little, if any, in-depth instruction around the nature of the English language to assist students in their understanding of how spelling works. The main problem with this type of approach is the absence of any real, explicit instruction in spelling.

As stated above, we know we need to formally teach spelling (as distinct from merely assigning spelling activities). Good spelling instruction needs to start with a robust and detailed scope and sequence. This is a statement of the content that will be taught and the order in which that content will be taught. A scope and sequence ensures that instruction is not delivered in an ad hoc way, which could lead to conceptual gaps. Although assessment is important in deciding what to teach, a scope and sequence provides a framework for teachers so they can make sure that their students are presented with spelling content and skills in an appropriate order.

When deciding how to teach spelling, there are some things we need to do so that our instruction is evidence-based and effective. Firstly, we need to make sure that the spelling instruction is language-based. This means that students are taught about the structure of the English language and how it relates to spelling, rather than teaching students to memorise the spellings of individual words. Approaches based on rote memorisation are not effective as they do not allow children to consciously transfer their spelling skills to words that have not been taught (Dymock & Nicholson, 2017; Joshi et al., 2008; Mullock, 2012; Treiman, 2018). Providing languagebased English spelling instruction has been found to be superior to instruction based mainly on rote memorisation, and this is most likely due to the generalising potential offered by language-based instruction.

Moats (2009) has identified five principles that help explain the patternbased nature of English orthography:

- 1 Every phoneme is represented by a grapheme.
- 2 The spellings of some phonemes are determined by their position in a word.
- 3 Rules determine how certain letters can be used and what sequences of letters are permitted.
- 4 Spelling can represent morphemes.
- 5 Some spellings can be explained by the history of a word or its language of origin (etymology).

Secondly, the way we deliver instruction needs to be considered. SpellEx uses explicit instruction as it has been found to be instructionally effective (Archer & Hughes, 2011). This is a teacher-directed approach and includes features such as well-sequenced lessons, the use of clear, concise and consistent language, frequent student responses, guided practice, systematic and immediate error correction, distributed practice and cumulative review. In addition to the features of explicit instruction, SpellEx incorporates some extra strategies and activities to support this instruction. Some examples are listed below:

 Use of a spelling voice (sometimes referred to as spelling pronunciation or over-enunciation; <u>Hilte &</u> <u>Reitsma, 2006</u>) can assist students in learning to spell words with a schwa vowel sound in an unstressed syllable, like those in the words 'fountain' and 'parent'. In addition, a spelling voice can be helpful when students are spelling words with 'disappearing syllables' like 'Wednesday' and 'interesting'.

- Phoneme Boxes (also referred to as sound, Elkonin or word boxes) are useful in teaching phonemic awareness, letter-sound correspondences and spelling (Ross & Joseph, 2019). For spelling, Phoneme Boxes involve students writing a grapheme for each sound in a word. For example, the word 'starve' has four sounds: /s/ /t/ /ar/ /v/ and these would be written as 's' 't' 'ar' 've' in the four boxes.
- Sentence dictation is a spelling activity where students write sentences containing words they are learning, which are dictated by the teacher. This can provide additional spelling practice and has the advantage of enabling children to write words in context (rather than only writing words in isolation). Sentence dictation has been found to be effective alongside explicit spelling instruction (<u>Robinson-Kooi</u> & Hammond, 2020).

# Teaching irregular word spelling

Teaching children to read and write some high-frequency irregular words is important for reading and writing connected text. An irregular word is a word in which at least some of the letters are not represented by their most common pronunciation and, therefore, are not easily decoded or encoded. Some simple examples are 'was', 'of' and 'some'. In the past, children were sometimes taught to spell these words using a whole-word approach, often using rote memorisation. While we still have much to learn about how children learn to read and spell irregular words, more recent research has led to other ways of teaching these words (Colenbrander et al., 2020, 2022).

In the first few years of school, students should be taught phonics as part of their reading/spelling program. By Year 3, most children will have acquired knowledge of most grapheme-

phoneme correspondences. Since nearly all words can be at least partially encoded using phonic knowledge, children can put these skills to good use when spelling irregular words. This reduces the amount of new learning that needs to take place and allows spelling instruction to focus mainly on the irregular parts of words. For example, when teaching children to spell the word 'walk', they use their knowledge of grapheme-phoneme correspondences to spell the first and last letter and their attention is drawn to the irregular part that is, for the sound /aw/ in 'walk', we write the letters 'a' and 'l'.

## Spelling assessment and instruction

Spelling assessment can serve different purposes in the classroom, such as to measure gains in spelling ability over time, to evaluate an instructional program or to make decisions about the instructional needs of the class (Kohnen et al., 2009: Westwood, 2005, 2022). Curriculum-based assessment of spelling in the form of regular progress monitoring tests and cumulative reviews can provide teachers with information about each child's spelling skills to help them make instructional decisions, such as when to move on with instruction and when students need more practice. In addition to curriculum-based assessment, other tests of spelling may be used to provide additional information on students' spelling skills. Curriculum-based measurement assesses children's ability to generalise spelling rules to novel words (Hosp et al., 2016) and may be used frequently to track spelling progress over time. Normreferenced tests are used to compare students to those in the same grade or of the same age and are generally used less frequently to provide teachers with information such as percentile ranks, standard scores or spelling age equivalent scores.

In any class, there will always be a certain proportion of children who have difficulty with spelling. This will include students who need more instruction and practice to acquire the necessary spelling skills. These children may be catered for within whole-class instruction (referred to as Tier 1 in the Response to Intervention model). Teachers may utilise small group instruction within the Tier 1 classroom to provide extra assistance and practice to those who need it, with the aim of reducing the number of children who will need more formal small group Tier 2 instruction. In addition to extra instruction and practice, teachers may alter the difficulty level of words children are required to spell (Sayeski, 2011) and provide more scaffolding when completing spelling tasks. There are many ways in which teachers can provide instructional scaffolding to children who need extra support, for example, by adding structure like boxes to represent the sounds in a word (Keesey et al., 2015), modelling, prompting in the form of a rule reminder, or completing additional examples during the guided practice part of the lesson. So, even within a Tier 1 program, instruction should be differentiated to cater for students who need additional support and more capable spellers who may need extending. Note that a small proportion of children will have spelling needs that warrant more intensive intervention and should be provided with Tier 2 or 3 spelling intervention accordingly.

# Conclusion

Spelling is important for writing and reading, as well as for success in post-school life. Research on spelling development tells us that children need to learn to use phonological, orthographic, morphological and etymological information in order to spell well. In addition, research suggests that we need to teach spelling formally and in a way that is language-based. SpellEx is a whole-class Tier 1 spelling program that uses explicit, languagebased instruction to teach spelling to children from Year 3 onwards.

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