# Science of Reading

## Infusing Phonics with Appropriate Multisyllabic Strategies or "Big Words for Little Kids"

# What is morphology in multisyllabic word reading?

Multisyllabic word reading is decoding, or reading, words with more than one syllable. A syllable is a word part with one vowel sound. Morphology in multisyllabic word reading is adding meaning through morphemes to multisyllabic reading whenever possible. A morpheme is a single unit of meaning like *-s, -ed, -ing, pre-*, or *light*. *Jump* is a single-syllable, single morpheme word, while *jumps* is a single-syllable, multimorphemic word, and *jumping* is a multisyllabic, multimorphemic word.

When young students are first beginning to read, they learn how graphemes (i.e., letters or groups of letters) correspond to phonemes (i.e., single sound units) such as *d, g, o,* or *s*. These graphemes combine into single-syllable words like *dog* or *dogs*. Students apply knowledge of new graphemes in single-syllable words because single-syllable words are the simplest and easiest to read.

In addition to practicing phonics skills in isolation and in word reading, students also read connected texts to practice skills in an applied context. Reading words in texts has many more cognitive demands because texts contain different types of words: plurals, different verb types, prepositions, and vocabulary. Some of those words have to be more complex than simple CVC words like *cat, sat*, or *dog*. Put another way, even for very young readers, texts are full of "big words" (Kearns & Hiebert, 2022).

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# Why should we introduce morphology into multisyllabic word reading in early grades?

Multisyllabic word reading instruction for early readers is typically based on syllable patterns such as open and closed syllables, vowel team syllables, and r-controlled vowels. These patterns are a useful starting point for syllable instruction because syllable patterns can correspond to phonics patterns.

But syllable patterns are often inconsistent because English orthography (i.e., spelling) is so inconsistent (Kearns, 2020). Furthermore, English is a morphophonemic language, meaning the alphabetic code represents sound units as well as meaning units. Teaching students these meaning units, or morphemes, as they learn to read helps them learn the alphabetic code.

Introducing students to morphology along with phonics helps facilitate orthographic mapping (Kirby, et al., 2012). As students learn to decode words, they orthographically map patterns of spelling, sound, and meaning until word reading becomes automatic (Ehri & Roberts, 1979; Goldenberg, 2020). With explicit instruction in the patterns and meanings of simple morphemes like *-s, -ed,* and *-ing*, students more easily orthographically map *jump, jumps,* and *jumping*. As students progress into Grades 2 and 3, these principles apply to more complex morphemes, word reading, and vocabulary (Bowers, et al., 2010).

# What are some principles for effective instruction?

Research supports the introduction of morphology in the early grades when it was previously believed to be beneficial only for older students (Henry, 2019). Nevertheless, it is important to stick to principles of instruction for best results. These principles are as follows:

1.  Instruction should be explicit and systematic, which means explicit instruction, teacher modeling, opportunities for practice and application, and skills should follow a logical sequence (National Reading Panel, 2000).

2.  Morphology and multisyllabic word instruction must be grounded in single-syllable words. In other words, students need to be able to decode a base word before adding morphemes.

3.  Begin with simple derivational endings like *-s, -ed, -ing,* and *-y* first to base words without spelling changes. Circle the morphemes and explain how they change a word's meaning. Ask students to compare two or more versions of a word, such as *dog* and *dogs* or *jump, jumps,* and *jumped*.

4.  Add CVC compound words like *hotdog, suntan,* and *bedbug* and talk about what each word part means separately and what the compound word means.

5.  Continue to teach syllable types, which are a fail-safe for decoding multisyllabic words. Multimorphemic words outnumber single morpheme words 4:1 (Moats & Brady, 2000), but learning morphemes takes time. Having more than one way to read big words may help ensure student success over time (Kearns & Whaley, 2019).

## Works Cited

Bowers, P. N., Kirby, J. R., & Deacon, S. H. (2010). The effects of morphological instruction on literacy skills: A systematic review of the literature. *Review of Educational Research, 80*(2), 144–179.

Ehri, L. C., & Roberts, K. T. (1979). Do beginners learn printed words better in contexts or in isolation? *Child Development, 50*(3), 675–685.

Goldenberg, C. (2020). Reading wars, reading science, and English learners. *Reading Research Quarterly, 55*(S1), S131–S144.

Henry, M. K. (2019). Morphemes matter: A framework for instruction. *Perspectives on Language and Literacy, 45*(2), 23–26.

Kearns, D. M. (2020). Does English have useful syllable division patterns? *Reading Research Quarterly, 55*(S1), S145–S160.

Kearns, D. M., & Hiebert, E. H. (2022). The word complexity of primary-level texts: Differences between first and third grade in widely used curricula. *Reading Research Quarterly, 57*(1), 255–285.

Kearns, D. M., & Whaley, V. M. (2019). Helping students with dyslexia read long words: Using syllables and morphemes. *Teaching Exceptional Children, 51*(3), 212–225.

Kirby, J. R., Deacon, S. H., Bowers, P. N., Izenberg, L., Wade-Woolley, L., & Parrila, R. (2012). Children's morphological awareness and reading ability. *Reading and Writing: An Interdisciplinary Journal, 25*(2), 389–410.

Moats, L. C., & Brady, S. (2000). *Speech to print: Language essentials for teachers*. (p. 304). Brookes Publishing.

National Reading Panel (US), National Institute of Child Health, & Human Development (US). (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups.* National Institute of Child Health and Human Development, National Institutes of Health.