While the importance of teaching phonics (i.e. sound-symbol relationships) has been established, methods to effectively teach beginning and struggling readers to blend sounds together to read words are less clear. There are three necessary prerequisites for blending:

(1) knowledge of phonics (i.e. the sound-symbol relationships)

(2) physical and cognitive ability to coarticulate sounds (i.e. bridge articulation from one phoneme to another, like in /l/ /a/ /p/) *and*

(3) automatic phonemic awareness skill of blending (i.e. similar to coarticulation, the ability to quickly process two-three phonemes and blend them into a word)

Coarticulation is the blending of speech sounds in oral language, without the presence of letters. Once the print is added, the process is typically called blending. If a child has weak coarticulation and phonemic awareness in the area of blending, they will be unable to blend when letters are present.

Popular programs, such as Wilson Fundations, teach blending with a sound-by-sound approach, sometimes referred to as "tapping out," wherein the child says each sound in isolation and then says the whole word (Carreker, 2011). For example, for the word *cat*, the student says each sound, /k//a///t/, then "cat." This approach presents challenges for beginning readers. First, children with working memory deficits have difficulty holding onto three separate sounds long enough to blend them into a word (Beck, 2013; Gonzalez-Fry, 2019). A second challenge is students often add a schwa sound, /uh/, to the end of consonants ("/kuh//a//tuh/"), making it difficult to recognize the blended word (O'Connor, 2014; Blevins, 2017; Gonzalez-Fry, 2019).

Successive blending is an alternative method to sound-by-sound blending, or tapping, that helps children blend sounds efficiently.

What is successive blending?

Unlike sound-by-sound blending, successive blending teaches readers to blend the first two sounds of a word together, usually the first consonant and vowel, before adding the final consonant sound (Beck, 2013; Dillon, 1987, 2015; O'Connor, 2014). This is sometimes referred to as body-coda: The body of the word involves everything up to and including the vowel sound (i.e. /b//l//a/ in *black)*. The coda is any consonants that come after the vowel sound (i.e. /ck/ in *black.)*

What are the advantages?

Successive blending is less taxing on working memory, requiring children to hold no more than two sounds in their working memory (Beck, 2013). In addition, the blending technique avoids the addition of the schwa to consonant sounds, making the word unrecognizable. While successive blending can be used to teach readers to blend simple and complex closed syllables and words of other syllable types, "the expectation is that students will eventually recognize the words as units and find successive blending wholly unnecessary" (Beck, 2013, pg. 72).

Is there research?

There is an emerging source of research on the effectiveness of successive blending versus sound-by-sound blending. In a small study, Gonzalez-Frey (2019) found that kindergarteners who were taught successive blending, accurately decoded more nonsense words that started with stop consonants (e.g. /b/, /d/, /p/, /k/, /t/) than children who read the same words using sound-by-sound blending. In addition, other structured literacy programs

use successive blending with anecdotal and documented success. The DC Reading Clinic has taught successive blending to students for whom tapping does not work and had success in every case.

How to teach successive blending?

For beginning readers, it is recommended that successive blending first be introduced with continuous sounds in the initial position (e.g. /f/, /l/, /m/, /n/, /r/, /s/, /v/, /z/) because the sounds are easier for students to blend with a vowel sound than stop consonants (e.g. /b/, /d/, /p/, /k/, /t/).

Procedure for introducing successive blending using "s," "a," and "t" grapheme cards:

Teacher: Points to one letter at a time and say, "/s/.../a/"

Student: Repeats

Teacher: Slide "a" closer to the "s". Run your finger under "sa" and say, "/sa/" (**Teacher** repeats x3)

Student: Repeats

Teacher: Slide your finger under the "sa." Say "/sa/" until you point to the "t" and say "/t/"

Student: Repeats.

Teacher: Move the "t" over to the "sa." Slide your finger under *sat* and say "*sat*."

Student: Slides finger under the word and says, "*sat*."

Children may need more teacher modeling at the beginning with fading support as their blending skills strengthen. Another strategy that facilitates successive blending is "singing through the vowel." The teacher models how to extend the vowel sound, so that there is no pause between the vowel and the adjacent consonant sound. For example, if the word is *sat*, the teacher will model /s//aaaaaa//t/. As with successive blending, children may need more support initially. Children also tend to enjoy singing through the vowel.

References:

Beck, I. & Beck, M. (2013). *Making Sense of Phonics: The Hows and Whys.* New York, NY: The Guilford Press.

Blevins, Wiley. (2016). *A fresh look at phonics*. United States: Corwin. Carreker, Suzanne. (2011). *Teaching reading: Accurate decoding. In Birsh, J., Multisensory teaching of basic language skills (pp. 207 - 250)*. Paul H. Brookes Publishing, Co.

Dillon, Sandra. (1987, 2015). *Sounds in syllables: Multisensory, structured, language therapy.*

Gonzalez-Frey, Selenid. (2019). "Connected versus segmented phonation."

O'Connor, Rollanda (2014). *Teaching word recognition, 2nd Edition.* New York, NY: The Guilford Press.