
The Settled Science of Teaching Reading – Part 2

By Gina Fugnitto | Categories: SIPPS, Being a Reader, Collaborative Literacy, Thought Leadership

In Part 1 of this blog series, we discussed the fraught history of and continued debates around the science of reading instruction. What is the conversation like in your district or school? In this blog, we'll focus on explicit and systematic instruction in decoding and what the science tells us.

The Research Is Clear: Explicit and Systematic Instruction in Decoding

There is no question that instruction in decoding leads to better readers. To develop as readers, students need instruction in the foundational skills to decode text and comprehension skills to make meaning of text. In her widely publicized article, Hanford (2018) states, "The basic assumption that underlies typical reading instruction in many schools is that learning to read is a natural process, much like learning to talk. But decades of scientific research has revealed that reading doesn't come naturally." This is settled science. In fact, it is so settled that prominent journals will no longer publish studies testing the effectiveness of phonics instruction (Hanford, 2018).

In their seminal work, Snow, Burns & Griffin (1998) state, "there is converging research support for the proposition that getting started in reading depends critically on mapping the letters and the spellings of words onto the sounds and speech units that they represent. Failure to master word recognition impedes text comprehension." Students must learn that words are made up of sounds, that letters represent sounds, and that there is a relationship between letters and the sounds they represent. They must also learn to rely on that knowledge in order to decode effectively so that they are able to read fluently and make sense of the text they are reading.

Learning to read seems effortless for approximately 5 percent of the population (Young, 2018). These "spontaneous readers" can give teachers a false sense of security. The terms "Third Grade Wall" or the "Fourth Grade Slump" arose because by third and fourth grade, "spontaneous readers" often struggle because they can no longer rely on other cueing systems to support their decoding. An additional 35 percent of the population is able to learn to read relatively easily.



This group of students can also give teachers a false sense of security. These students may be able to decode “cat” easily but when they encounter a complex, polysyllabic word like “catastrophic,” they have no strategies or knowledge for how to decode it. This situation points to the need for explicit instruction in polysyllabic decoding. Unfortunately, phonics instruction often ends at the simple alphabetic and spelling-sound phase of the continuum.

In polysyllabic decoding, sounding out words from left to right and recognizing basic sight words are not successful strategies in unlocking text (Just & Carpenter, 1987; Shefelbine, Lipscomb, and Hern, 1989). Students need instruction in the third phase of reading development, the polysyllabic-morphemic phase, in which they learn to read by syllables and morphemic units (Adams 1990; Shefelbine 1990).

Students who are unable to decode polysyllabic words effectively pronounce fewer affixes and vowel sounds correctly, disregard large portions of available letter information, and are two to four times as likely to omit syllables as they read (Shefelbine & Calhoun, 1991).

Instruction at this more sophisticated phase includes:

- Morphemes
- Syllable types
- Syllable division rules
- Implications of the schwa

This instruction also needs to incorporate the flexible application of all that a student knows to decoding. Students “must strategically apply and broaden their knowledge base to accommodate the increase in complexity that comes with multisyllabic words” (Heggie, 2017). Students’ increased ability to analyze and read polysyllabic words along with opportunities to read frequently and widely will impact their ability to comprehend text (Shefelbine, 1990).

Ultimately, the goal of reading instruction is not phonics proficiency. It is “to get students to the point where most of the words they

encounter are automatically recognized so that their attention can be devoted to making meaning” (Rasinski, 2019). We do a disservice to students when we do not provide effective phonics instruction that allows them to develop the word-recognition strategies necessary to develop as fluent, automatic, proficient readers.

Small-group, Differentiated Phonics Instruction

There is a clear path to becoming a fluent reader who decodes accurately and automatically. The path includes explicit instruction on a continuum of foundational skills—the simple alphabetic phase, the spelling-pattern phase, and the more sophisticated polysyllabic and morphemic phase.

Furthermore, the settled science has shown us that the traditional, whole-class phonics lesson is not the way to develop fluent readers. Students come to school with a variety of literacy experiences and knowledge about letters, sounds, books, and vocabulary, but whole-class phonics instruction assumes our students all have the same instructional need. Whole-class phonics is an “instructional misstep [that] means that fewer children will develop strong word-reading skills. In addition, ineffective phonics instruction is likely to require more class time and/or later compensatory intervention, taking time away from the growth of other important contributors to literacy development.” (Duke & Mesmer, 2019) Snow et al. (1998) also assert that “...intensity of instruction should be matched to children’s needs. Children who lack these understandings should be helped to acquire them; those who have grasped the alphabetic principle and can apply it productively should move on to more advanced learning opportunities.”

How should we teach phonics, if not whole class?

1. Use data to determine the students’ instructional needs along the foundational skills continuum; not all students need to start at the beginning.
2. Use this same data to group students for small-group differentiated phonics instruction. In their article, Duke & Mesmer (2019) affirm that “some children are able to develop letter-sound knowledge more quickly and efficiently than others” and advise providing differentiated phonics instruction.
3. Follow a clear scope and sequence. Both the content and sequence are essential in phonics instruction. A scope and sequence allows us to place students at their instructional point of need, teach in a systematic way, and adjust the intensity of instruction. As Duke & Mesmer (2019) assert, “across decades, evidence has accumulated to suggest that systematic phonics instruction with a scope and sequence will produce better outcomes than instruction that does not follow a scope and sequence.”
4. Rely on explicit instruction. “There is evidence that explicit instruction that directs children’s attention to the phonological structure of oral language and to the connections between phonemes and spellings helps children who have not grasped the alphabetic principle or who do not apply it productively when they encounter unfamiliar printed words ” (Snow et al., 1998). “[E]xplicit instruction is direct, precise, and unambiguous (e.g., telling children what sound the letters /sh/ represent together, rather than making the connection indirectly or asking them to figure it out themselves)” (Duke & Messmer, 2019)
5. Respond to the needs of the students. On-going observational and assessment data allows us to respond to the student’s needs and support their word-reading development (Duke & Mesmer, 2019). Snow et al. (1998) further clarify, “because the ability to obtain meaning from print depends so strongly on the development of word recognition accuracy and reading fluency, both of the latter should be regularly assessed in the classroom, permitting timely and effective instructional response where difficulty or delay is apparent.”
6. Give students the opportunity to apply their learning immediately in connected text. The National Center for Education Evaluation and Regional Assistance (NCEE) recommends students practice reading new and familiar words or word parts in text “as soon as students can decode simple words” (Foorman, et al. 2016). Duke & Mesmer (2019) affirm, “the evidence is clear that

young children benefit from opportunities to read text that emphasizes letter-sound relationships they have learned to date. This reinforces the value of their hard work and of using decoding to read words.”

The research is clear: students need differentiated, explicit, and systematic decoding instruction that is connected to text. How does the settled science around explicit and systematic instruction in decoding instruction play out in your district/school? What are your thoughts about ensuring students get phonics instruction at their point of need?

The next installment of our series will discuss the role of comprehension strategies and building a body of knowledge. We look forward to you joining us in the conversation!

The full article, “The Settled Science of Teaching Reading,” was written by Marisa Ramirez Stukey, Gina Fugnitto, Valerie Frasier, and Isabel Sawyer.

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