What We Know Works: Instruction (Science of Reading series, Part 3)

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An interest in books can be sparked easily. Simply sitting for hours in a room with many books and hearing these books read aloud can generate interest in books. To become independent and proficient at reading, however, requires that children receive guidance, including opportunities to participate in specific kinds of activities.

Of the numerous instructional procedures that have been proposed, some have been evaluated and found effective by researchers. Fundamentally, effective reading instruction is based on three critical dimensions.

(a) Metalinguistic talk about letter-sound relationships and word features is essential.

In metalinguistic talk, adults direct children's attention to the sounds and features of written words. A teacher might say, "It's lunchtime and we're going to the lunchroom. What word do both *lunchtime* and *lunchroom* share? That's right, *lunch. Lunchtime* and *lunchroom* are examples of compound words."

Conversations and lessons that support children's reading acquisition help students see consistencies and variations in letter-sound relationships. For example, one of the 10 most-frequent words, was, has a vowel that varies from the short a that is often taught early in reading instruction. A useful lesson would be to involve beginning readers in contrasting the sound of a in was with the a in other high-frequency words, such as at, that, and can. Children shouldn't be left guessing about consistent letter-sound relations, onset-rimes, syllables, and morphemes in words.

(b) The content of lessons and application should be connected.

Children should read texts containing words that allow them to apply what they have learned. Let's take a group of first-grade students who have had lessons on short a and short i in words, including highly frequent words such as and, in, it, is, and that. Lessons have also addressed highly-frequent words with irregular vowel patterns, especially the, I, of, to, a, and was. A text such as the following would give these first-graders ample opportunity to apply this new knowledge:

Hiss! Hiss! It is the cat. The cat is mad. A mad cat can hiss!

Every word in this text gives children the chance to apply what they have learned about letter-sound correspondences—both regular and variant ones. By contrast, consider a text that is offered at a similar point in a reading program:



"I like bugs and bats," said Dan.

"I like books. Can I help?"

"You are too little," said Kim.ii

In this text, less than half of the words have elements that have been the focus of lessons. Not only will most beginning readers struggle with unknown words, but these beginning readers are unlikely to be fluent with the patterns they have been taught. They need a text that will let them practice. Research has shown that a connection between the content of lessons and texts goes a long way in developing skillful and confident young readers.

(c) Writing is a primary means for children to apply their knowledge of letter-sound relations.

Unlike reading, where a word is either recognized or it is not, writing gives children to get at least some parts of a word right and, in so doing, convey meaning. A teacher who sees the message that a young child has written—"I lik mi kt"—can discern that the child likes their cat.

Writing gives young children opportunities to test their hypothesis about the relationships between sounds and letters. Their attempts can also be very useful for teachers. In "I lik mi kt," a teacher sees that the child has a fairly good understanding of consonant letter-sound relationships, but the vowels need some attention.

Preformed letters, such as those made of magnetic, felt, or cardboard, can be an early venue for young children to write. Preformed letters can support beginning readers in attending to the middles and ends of words, not just the beginning letters and sounds, as is often the case. For example, a lesson might begin by asking young children to spell the word sit, followed by sat, bat, bit, and big. Such writing opportunities—as well as those where children write with pen or pencil—have been shown to support children's ability to decode new words in reading.



¹ Hiebert, E.H. (2020). *The cat is mad.* Santa Cruz, CA: TextProject.

[&]quot;Yee, W.H. (2020). Dan had a plan. In A.F. Ada et al. into reading (Book 1). Houghton Mifflin Harcourt.