

National Reading Panel Findings on Phonemic Awareness

Phonemic awareness is the ability to notice, think about, and work with the individual sounds in spoken words. Before children learn to read print, they need to become aware of how sounds in words work. They must understand that words are made up of speech sounds, or *phonemes*.

Phonemes are the smallest parts of sound in a spoken word that make a difference in the word's meaning. For example, changing the first phoneme in the word *hat* from /h/ to /p/ changes the word from *hat* to *pat*, and so changes the meaning. A letter between slash marks shows the phoneme, or sound, the letter represents, not the name of the letter. For example, the letter *h* represents the sound /h/.

Children can show us that they have phonemic awareness in several ways, including:

- Recognizing which words in a set of words begin with the same sound—
“*bell, bike, and boy* all have /b/ at the beginning.”
- Isolating and saying the first or last sound in a word—
“The beginning sound of *dog* is /d/.” “The ending sound of *sit* is /t/.”
- Combining or blending the separate sounds in a word to say the word—
“/m/, /a/, /p/—*map*.”
- Breaking or segmenting a word into its separate sounds—“*up*—/u/, /p/.”

Although phonemic awareness is a widely used term in reading, it is often misunderstood. One misunderstanding is that phonemic awareness and phonics are the same thing. Phonemic awareness is *not* phonics. Phonemic awareness is the understanding that the sounds of *spoken* language work together to make words. Phonics is the understanding that a predictable relationship exists between phonemes and the letters that represent those sounds in *written* language. If children are to benefit from phonics instruction, they need phonemic awareness. The reason is obvious: children who cannot hear and work with phonemes of spoken words will have difficulty learning to relate these phonemes to the letters when they see them in written words.

Another misunderstanding about phonemic awareness is that it means the same as phonological awareness. The two names are *not* interchangeable. Phonemic awareness is a subcategory of phonological awareness. The focus of phonological awareness is much broader than that of phonemic awareness. It includes identifying and manipulating larger parts of spoken language, such as words, syllables, and onsets and rimes—as well as phonemes. It also encompasses awareness of other aspects of sound, such as rhyming, alliteration, and intonation.

Children can show us that they have phonological awareness in several ways, including:

- Identifying and making oral rhymes:
“*The pig has a (wig).*”
“*Pat the (cat).*”
“*The sun is (fun).*”
- Identifying and working with syllables in spoken words:
“*I can clap the parts in my name: An-drew.*”
- Identifying and working with onsets and rimes in spoken syllables or one-syllable words:
“*The first part of sip is s-.*”
“*The last part of win is -in.*”
- Identifying and working with individual phonemes in spoken words:
“*The first sound in sun is /s/.*”

What does scientifically-based research tell us about phonemic awareness instruction?

- ⇒ **Phonemic awareness can be taught and learned. However, you do not need to devote a lot of class time to phonemic awareness instruction. During the school year, the entire phonemic awareness program should take no more than 20 hours. Some students will need more instruction than others.**
- ⇒ **Phonemic awareness instruction helps preschoolers, kindergartners, and first graders who are just starting to read, and older, less able readers learn to read.**
- ⇒ **Phonemic awareness instruction helps children learn to spell.**
- ⇒ **Phonemic awareness instruction is most effective when children are taught to manipulate phonemes by using the letters of the alphabet. Instruction should be explicit about the connection between phonemic awareness and reading and writing.**
- ⇒ **In general, small group instruction is more effective in helping students acquire phonemic awareness and learn to read.**

NOTE: Phonemic awareness instruction is not a complete reading program; it cannot guarantee the reading and writing success of students. Adding well-thought-out phonemic awareness instruction to a beginning or remedial reading program is very likely to help students learn to read and spell. Whether these benefits last, however, depends on the comprehensiveness and effectiveness of the entire literacy curriculum.