

## Brief 5 • July 2016

# Phonological Awareness: An Essential Component of Reading Instruction

---

Martha Hougen, Ph.D.

*Center for Collaboration for Effective Educator Development, Accountability, and Reform (CEEDAR)  
University of Florida*

## Introduction

Research in the field of reading instruction during the past 3 decades has yielded a convergence of evidence supporting best practices. We know how to teach students how to read, including students from diverse backgrounds and with varying abilities. Our challenge is how to ensure that each teacher has the knowledge and skills to implement what works for students in their classrooms. Of particular concern are students who have difficulty learning to read because they are learning English, have limited academic experiences, or have disabilities. To ensure that all students learn to read well, educators need to understand the essential components of reading instruction. Phonological awareness is one of the first and most critical skills teachers must teach students to master. Phonological awareness is the most potent predictor of reading success (Liberman et al., 1989; National Reading Panel, 2000; Torgesen et al., 1997).

Note: In this brief, a pair of slanted lines (/ /) is used to denote a particular sound. For example, /c/ and /ake/ indicate the sound made by the c in *cake* and the sound made by the remaining letters, *a-k-e*.

## What It Is

**Phonological awareness** refers to the conscious awareness that language is composed of sounds and the ability of students to detect sounds in speech to learn sound-letter relations. It is an overarching concept that includes listening, rhyme and alliteration, sentence segmentation, and syllable and onset-rime blending and segmenting (Adams, 1990; Al Otaiba et al. 2012; Ehri, 2000). The most complex and most important phonological skill is phonemic awareness (Torgesen et al., 2001; Troia, 2004), the awareness of the individual sounds in words and the ability to manipulate the sounds. This is discussed in more detail in the brief in this series *Phonemic Awareness: The Single Sound Challenge*.

The experiences students have before entering school with their parents and other adults affect their development of oral language skills, listening skills, and vocabulary development—all of which have a significant impact on later reading development (Hart & Risley, 1995). By the end of kindergarten, most students have developed phonological awareness and are ready to learn to read. However, some students need support in phonological awareness through second grade or longer, and phonological awareness is the most common difficulty for stu-

dents with reading disabilities such as dyslexia. Thus it is important that parents and educators in prekindergarten and the early elementary grades have an understanding of phonological awareness.

**Listening to and recognizing sounds** is an important skill that begins to develop before students start formal schooling. Toddlers can usually identify a door slamming, a truck driving past, or a helicopter or an airplane flying over them. They can also follow simple directions and say some words. Gradually, students need to think about words not only as having meaning, but also as a collection of sounds (O'Connor, 2014). By age 5, most students can identify rhyming words and complete sentences such as “the cat in the hat,” or “mouse in a house.” With support, students can make up sentences using alliteration, such as “busy bees buzz” or, using their own names, “Freddie fights fires” or “Bradley bites bugs.” Although these skills sound simple, some students need explicit instruction, with modeling and scaffolding, to become aware of rhymes and alliteration.

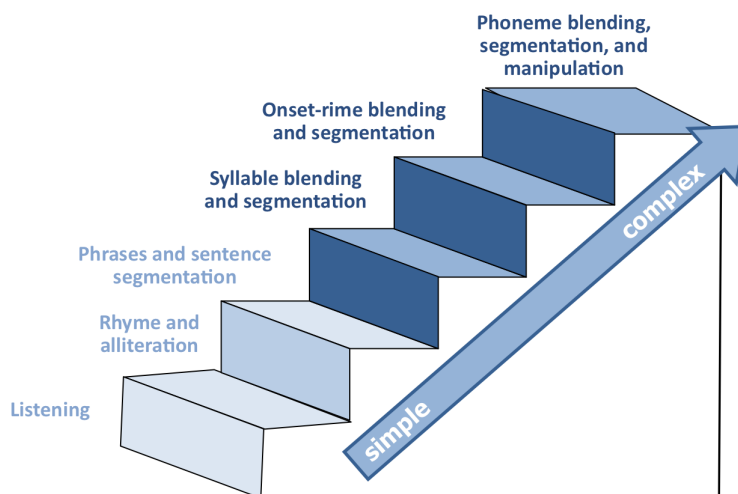
**Sentence segmenting** refers to the ability to recognize the separate words in a sentence. When you first learned a foreign language, you may remember having difficulty listening to a native speaker and not being able to identify the individual words. To support students in learning this skill, teach them to count words in a sentence, stomp for each word, clap the words, or move a manipulative, such as plastic chips, one for each word.

**Syllable blending and segmenting** develops the awareness that words are made of chunks or syllables. A syllable is a word or part of a word with one vowel sound. To introduce syllable blending and segmenting, it is best to start with compound words. For example, the teacher says “birdhouse” and asks the students what was the first word they heard, *bird*, and the second word they heard, *house*. The teacher says, “Put them together and what is the word? *Birdhouse*.” Again, using manipulatives or hand gestures provides a scaffold for students.

**Onset-rime blending and segmenting** requires students to be aware of the initial consonants, up to the vowel (onset), and then the vowel and following letters (rime). For example, in the word *cake*, the *c* is the onset and *ake* is the rime. When teaching this skill, it is important to use the letter sounds, not the names, as indicated by /c/ /āk/.

The most complex level of phonological awareness is **phonemic awareness**, or the awareness of the individual sounds in words. This skill is most important for later reading success, accounting for about 65% of the variance in reading of first-graders and 49% of the variance of reading skills of eighth-graders. (Vaughn Gross Center for Reading and Language Arts at The University of Texas at Austin, 2011). Students with phonemic awareness can identify the initial, final, and medial sounds in words and can segment and blend the sounds in words, as discussed in the brief in this series *Phonemic Awareness: The Single Sound Challenge*.

**Figure 1. Phonological Awareness Continuum**



## What It Looks Like

Instruction in phonological awareness is most effective when done in small groups of eight students or fewer, if the students are struggling with the concepts. It is important for the teacher and students to be able to hear each other. The students also need multiple practice opportunities, so they should be required to say the words, word parts, and phonemes aloud as often as possible and to use tiles or other manipulatives.

Phonological awareness instruction involves no print. It can be done with eyes closed and lights off. Though phonological awareness is an essential foundation for reading, it is a listening skill, not a reading skill.

Students use manipulatives to scaffold their awareness of word parts and sounds. For example, they watch their mouth in a mirror while they make words and letter sounds, put their hand under their chin to feel it drop as they say syllables, and use tokens or sticky notes to represent word parts or letter sounds.

The teacher models clear diction, enunciating all the word parts and sounds correctly and clearly; no schwas are added to letter names (e.g., *buh* instead of /b/). The teacher models the left-to-right progression of reading, which typically means mirroring the students. For example, when teaching the concept of segmenting syllables in compound words, when the teacher faces the students, the teacher uses the right hand for the first word and the left for the second word, putting the hands together to blend the words. From the viewpoint of the students, they will be “reading” the words left to right.

The teacher maintains a brisk pace and applies the features of effective instruction: explicit instruction with modeling, systematic instruction with scaffolding, multiple opportunities for practice, immediate corrective feedback, and frequent monitoring of progress.

Teachers target only one type of phonological awareness during a lesson. They begin with easier activities and progress to more difficult ones. The teacher models each activity and provides many opportunities for students to practice before they work independently.

In kindergarten, about 15–20 minutes is spent each day on phonological awareness skills (National Reading Panel, 2000). The time is spread throughout the day, and the teacher often provides students opportunities to practice phonological awareness at times other than during formal instruction, such as when students are lining up for lunch or recess.

The skills do not necessarily have to be taught in sequence from listening through rhyming and alliteration up to phonemic awareness. Some students have difficulty with rhyming at first. Teachers should not wait for students to master rhyming before proceeding with sentence segmentation, for example. Rather, teachers provide scaffolds and opportunities to practice to systematically guide students through the steps of phonological awareness.

## Benefits

- Most students will learn the alphabetic principle and how to read if they have a strong understanding of phonological awareness.
- The activities are engaging and enjoyable for students.
- Teachers will be more efficacious and their students more successful when phonological awareness skills are mastered.

## What the Research Says

- Students who enter school with phonological awareness are highly likely to learn to read successfully; those lacking phonological awareness have trouble acquiring alphabetic coding skills and difficulty recognizing words (Stanovich, 2000).
- Introducing the skills of phonological awareness to all students should occur in preschool and continue through the early grades (National Reading Panel, 2000).
- Preschoolers and kindergartners provided phonological and phonemic awareness training become better readers (Vaughn & Linan-Thompson, 2004).
- Phonological awareness skills benefit students who are English language learners, students with reading difficulties, and students from all socioeconomic groups (National Reading Panel, 2000; Vaughn & Linan-Thompson, 2004).

## Examples

Several websites provide research-based, effective instructional strategies and materials (see the sources listed on the following pages). Examples of activities from the Florida Center for Reading Research are presented below; additional materials for each activity are provided on the website **[www.fcrr.org](http://www.fcrr.org)**.

Figure 2. Compound Word Game

# Phonological Awareness

PA17

## Compound Word Game

## Compound Word Deletion

Benchmarks: A.2a, F.2c



### Objective

The child will determine what word is left when one of the two individual words from the compound word is deleted.



### Materials

- Game Board (Activity Master) - *Copy on cardstock, color spaces three different colors (e.g., blue, green, and yellow) in a random pattern, connect, and laminate.*
- Compound Word Game Cards (Activity Master) - *Copy on cardstock, cut apart, and laminate.*
- Counters (or other game pieces)



### Activity

After teacher introduction, children segment compound words into two individual words while playing a board game.

1. Place the Game Board and stack of Compound Word Picture Cards front side up on a flat surface. Place game pieces at START on the Game Board.
2. Taking turns, children select the top card and reads the compound word (using the pictures as clues), then says the phrase “minus ” for the minus (-) symbol under the CW, then reads the given individual word from the compound word (e.g., “cupcake minus cake”).
3. The child then announces their answer and flips the card over to see if it is correct.
4. If correct, move game piece to the next space that is the same color as the picture card. If incorrect, leave game piece where it is.
5. Place the card at bottom of the stack.
6. Continue until children reach the end.
7. Peer evaluation.



### Adaptations and Extensions

- Make other word cards to use in game.
- Make several blank RED cards. If the child picks RED, he/she must make up his/her own compound word and separate it into the two words.
- Work as partners. Two children pick a card together. One reads the front of the compound picture card and the other guesses the individual word left after one of the words is deleted.
- Work as a team. If the first child doesn't know, he/she is allowed to ask his/her partner.

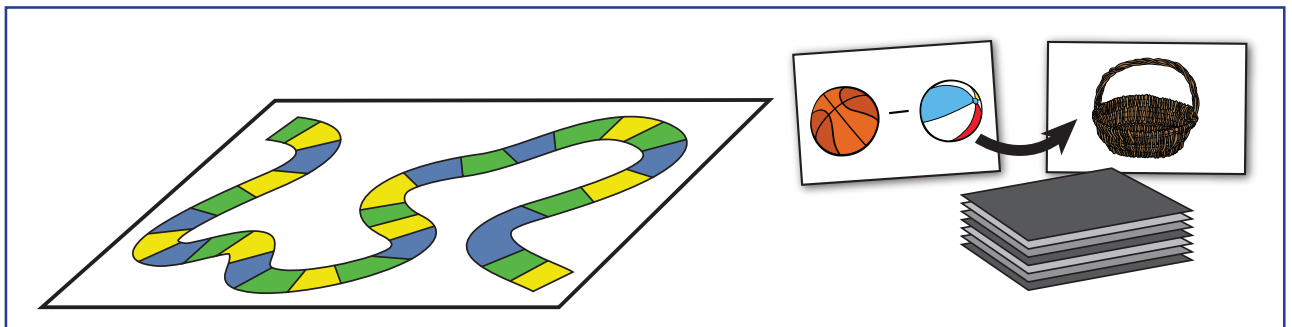


Figure 2. Sound Detective

# Phonological Awareness

PA20

Onset Rime

Sound Detective

Benchmarks: A.2a, F.2f



## Objective

The children will segment and blend onsets and rimes in words.



## Materials

- Detective Hat Template (Activity Master) - *Enlarge, copy twice, and attach to a headband.*
- Two Magnifying Glasses (Activity Master) - *Copy on cardstock, cut, and laminate.*
- Rime Boards (Activity Master) - *Copy on cardstock, cut on the outside line, and laminate.*
- Onset and Rime Picture Cards (Activity Cards) - *Copy on cardstock, cut apart, and laminate.*
- Basket



## Activity

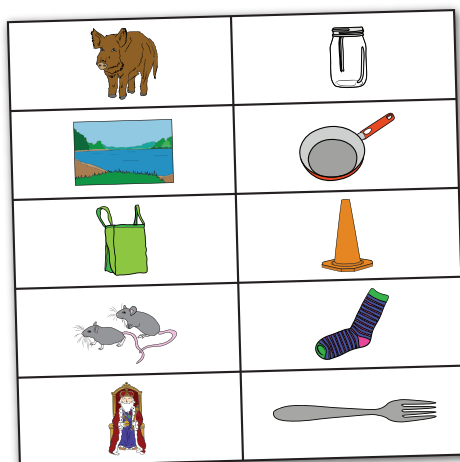
After teacher introduction, children will work with a partner to play detective while segmenting and blending onset and rimes in words.

1. Place Rime Boards and basket of Onset and Rime Picture Cards on a flat surface.
2. Children put on detective hats and hold magnifying glasses.
3. Taking turns, child one chooses a picture from the basket, says the word, and segments the onset and rime. For example, the child chooses a picture of a pan and says, "pan, /p/ /an/!"
4. Child two says the word by blending the sounds (e.g., "pan") and uses a magnifying glass to search on the Rime Board for the matching picture.
5. Place the match on the rime board, and say, "Mystery Solved."
6. Peer evaluation



## Adaptations and Extensions

- Have the child name a word with the same rime and break word apart into onset and rime.



"pan, /p/ /an/"

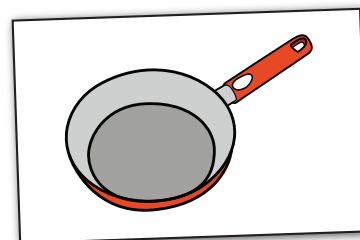


Figure 3. Syllable Clapping Hands

# Phonological Awareness

PA7

Syllables

## Syllable Clapping Hands

Benchmarks: A.2a, F.2d, F.2e



### Objective

The child will segment syllables in words.



### Materials

- Child Sheet (Activity Master)
- Clapping Hands (Activity Master) - *Copy twice, cut, attach to popsicle sticks, and decorate.*
- Child photographs - *Make multiple copies.*
- Glue
- Writing Utensils



### Activity


After teacher introduction, children clap and chart the number of syllables in classmates' names.

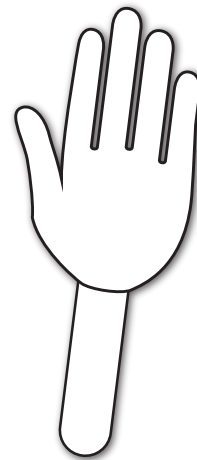
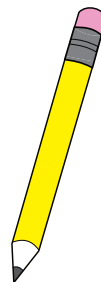
1. Place child photographs, glue, and Clapping Hands at the center. Provide each child with a Child Sheet.
2. Taking turns, children name a classmate, find the classmate's photograph, and glue it on his Child Sheet.
3. Use the "clapping hands" to count the syllables in the name.
4. Say the name again while segmenting each syllable. Make an "X" in each box for every corresponding syllable.
5. Continue activity until Child Sheets are complete.
6. Teacher evaluation.



### Adaptations and Extensions

- Use interlocking cubes to count syllables.
- Use pictures of animals.

Name _____									
									
1	2	3	1	2	3	1	2	3	
1	2	3	1	2	3	1	2	3	
1	2	3	1	2	3	1	2	3	



## Implications for Practice

- Explicitly and systematically teach phonological skills to students in preschool through first grade and longer for those who may need more support.
- Share phonological games with your colleagues and students' parents to ensure that students have ample practice opportunities.
- Spend about 15–20 minutes, dispersed throughout the day, addressing phonological skills, including working with small groups.
- Choose read-alouds that support the phonological skill on which you are focused. For example, select books that use alliteration and explicitly point out the alliteration to students.
- Encourage students to make up “funny” or “nonsense” words that rhyme, such as *banana* – *fofana*.
- Phonological awareness is not phonics! Print is not used to teach phonological awareness.
- Share your enjoyment of language.

## Conclusion

Phonological awareness is the foundational skill that supports reading acquisition. Students who master this skill by the end of first grade typically become proficient readers; those who do not may struggle with reading the rest of their school years (O'Connor, 2014). Therefore, it is essential that teachers of young students and of older students who struggle with reading understand the importance of phonological awareness and how to teach it effectively.

## Helpful Websites

Building RTI Capacity: **<http://buildingrti.utexas.org>**

Videos, papers, and myriad resources provide explicit examples of activities to teach phonological awareness.

Check out this video: *3-Tier Reading Model, Reading Intervention: Tier II*. The teacher models all the stages of phonological development and the features of effective instruction.

**<http://buildingrti.utexas.org/videos/3-tier-reading-model-reading-intervention-tier-ii>**

Florida Center for Reading Research: **[www.fcrr.org](http://www.fcrr.org)**

Activities, including colored and blackline masters, for building phonological and phonemic awareness with a whole class, in small groups, and 1:1, for various grade levels.

**[http://www.fcrr.org/for-educators/prek\\_cca.asp](http://www.fcrr.org/for-educators/prek_cca.asp)**

The Meadows Center for Preventing Educational Risk: **[www.meadowscenter.org](http://www.meadowscenter.org)**

A presentation including a presenter's guide, presentation slides, handouts with activities and resources, and references is available, *Foundations of Reading: Effective Phonological Awareness Instruction and Progress Monitoring*:

**[www.meadowscenter.org/library/resource/foundations-of-reading-effective-phonological-awareness-instruction-and-pro](http://www.meadowscenter.org/library/resource/foundations-of-reading-effective-phonological-awareness-instruction-and-pro)**



## References

- Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: MIT Press.
- Al Otaiba, S., Kosanovich, M., & Torgesen, J. (2013). Assessment and instruction in phonemic awareness and word recognition skills. In A. Kamhi & H. Catts (Eds.), *Language and reading disabilities* (pp. 112–145). Pearson Higher Ed.
- Brady, S. (2011). Efficacy of phonics teaching for reading outcomes: Indications from post-NRP research. In S. Brady, D. Braze, & C. Fowler (Eds.), *Explaining individual differences in reading: Theory and evidence* (pp. 69–96). New York, NY: Psychology Press.
- Ehri, L. C. (2000). Learning to read and learning to spell: Two sides of a coin. *Topics in Language Disorders*, 20, 19–36.
- Ehri, L. C. (2005). Learning to read words: Theories, findings, and issues. *Scientific Studies of Reading*, 9(2), 167–188. doi:10.1207/s11532799xssr0902\_4
- Florida Center for Reading Research. (2014). *Phonological awareness activities*. Retrieved from [www.fcrr.org/for-educators/prek\\_cca.asp](http://www.fcrr.org/for-educators/prek_cca.asp)
- Hart, B., & Risley, T. (1995). *Meaningful differences in the everyday lives of young American students*. Mahwah, NJ: Lawrence Erlbaum.
- Lieberman, I. Y., Shankweiler, D., & Liberman, A. M. (1989). The alphabetic principle and learning to read. In D. Shankweiler & I. Liberman (Eds.), *Phonology and reading disability: Solving the reading puzzle* (pp. 1–33). Ann Arbor, MI: University of Michigan Press.
- National Reading Panel. (2000). *Report of the National Reading Panel: Reports of the subgroups*. Washington, DC: U.S. Department of Health and Human Services, National Institute of Health.
- O'Connor, R. (2014). *Teaching word recognition*. New York, NY: Guilford Press.
- Stanovich, K. E. (2000). *Progress in understanding reading: Scientific foundations and new frontiers*. New York, NY: Guilford Press.
- Torgesen, J. K., & Mathes, P. (2000). *A basic guide to understanding, assessing, and teaching phonological awareness*. Austin, TX: PRO-ED.
- Troia, G. A. (2004). Phonological processing and its influence on literacy learning. In C. Stone, E. Silliman, B. Ehren, & K. Apel (Eds.), *Handbook of language and literacy: Development and disorders* (pp. 271–301). New York, NY: Guilford Press.
- University of Texas Center for Reading and Language Arts. (2004). *Foundations of reading: Effective phonological awareness instruction and progress monitoring*. Austin, TX: Author. Retrieved from <http://www.meadowscenter.org/library/resource/foundations-of-reading-effective-phonological-awareness-instruction-and-pro>
- Vaughn Gross Center for Reading and Language Arts at The University of Texas at Austin. (2011). *Phonological awareness*. Austin, TX: Author.