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Phonological Awareness

Overview Guide

Waterford Early Learning's

Six Instructional Strands for Literacy

Research-Based Principles

Phonological awareness, the ability to attend to and manipulate the units of sound that make up spoken language, is foundational for learning to read. More specifically, numerous studies have shown that explicit instruction in *phonemic* awareness (the ability to attend to and manipulate individual phonemes) is a critical building block on the path to proficient reading.

English is an alphabetic system in which speech sounds are represented by letters. To break the reading code, students must be able to hear units of sounds within speech and connect these sounds with the letters that represent them. "Just as proteins must first be broken down into their underlying amino acids before they can be digested, words must first be broken down into their underlying phonemes before they can be processed by the language system" (Shaywitz & Shaywitz, 2020, p. 42).

Phonological Awareness
The ability to attend to and manipulate the units of sound that make up spoken language, including whole words, syllables, onset-rime, and individual phonemes

Phonemic Awareness
The ability to attend to and manipulate individual phonemes, the smallest units of sounds within spoken words

Because oral language is experienced as a continuous stream of speech, breaking it into smaller units of sound is not intuitive—phonological awareness skills must be explicitly taught. The challenge is significant, as phonemes overlap in speech, and individual sounds can be altered slightly by the sounds that come before and after them (Castles et al., 2018; Willingham, 2017; Moats, 2010).

The importance of phonological awareness—and phonemic awareness, the subset of skills that involve individual phonemes—is clear (see Adams, 1990; National Reading Panel, 2000; National Early Literacy Panel, 2008; Kilpatrick, 2015; Foorman et al., 2016). Beginning readers as well as many older struggling readers benefit from foundational instruction in phonological awareness (Kilpatrick, 2015). Studies have shown that even for high school students, phonemic awareness is the best predictor of students' ability to identify words quickly and accurately (Shaywitz & Shaywitz, 2020).

Phonological Awareness Skills Development

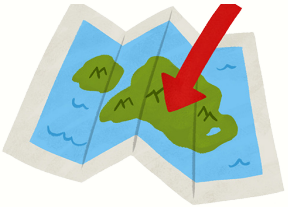
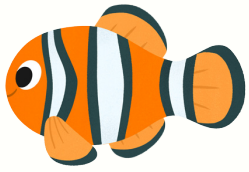
Beginning	Developing	Advanced
• Rhyme • Alliteration • Syllable counting, blending, and segmenting • Onset-rime blending and segmenting • Beginning phonemic awareness	• Initial, final, and medial phoneme Isolation • Phoneme blending and segmenting	• Phoneme manipulation (addition, deletion, substitution)

Waterford Early Learning Instruction

→ Phonological Awareness Skills Taught and Scope & Sequence

View example phonological awareness activities from Waterford Early Learning's adaptive learning path → here.

Phonological Awareness

Word Level	Syllable Level	Onset & Rime Level	Individual Sound Level Phonemic Awareness
Rhyming  	ba-by = 2 syllables 		/f/ /i/ /sh/ fish = 3 phonemes 
Alliteration **big** **brown** **bear** 	ex-er-cise = 3 syllables 	m - ap	*phonemic awareness skills (and phoneme manipulation skills in particular) are the most advanced skills within phonological awareness
Sentence Segmentation I / see / the / dog. = 4 words		Onset = m ap Rime = m ap	

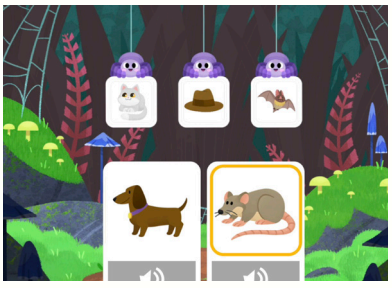
Phonological awareness instruction begins with attention to larger units of sound, including work with syllables, rhyme, and onset-rime. It then progresses to help students learn to identify, blend, and segment individual phonemes (Yopp, 1998).

Activities feature engaging interactive modeling followed by guided practice with feedback and scaffolded support. Exploration, modeling, and practice include multimodal instruction with chips, boxes, or other visual markers to represent phonemes.

The adaptive logic ensures that phonological awareness skills are frequently checked and reviewed. Skills are reinforced through engaging books, songs, and nursery rhymes. As students develop their phonics skills in parallel, they learn about specific grapheme-phoneme connections and begin to apply their phonemic awareness skills in early decoding practice.

Beginning Phonological Awareness

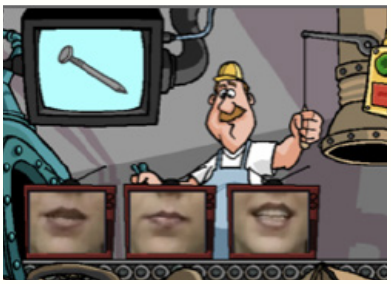
Students hear and identify the larger units of sound—syllables and onset-rime—in words.

Syllables	Rhyme	Onset-Rime
		
Determine the number of syllables in a spoken word.	Determine which word has the same rhyme as *cat, hat,* and *bat*.	Determine whether the spoken onset and rime blend to make the word represented by the picture.

Modeling includes video examples of how the lips, teeth, or tongue are placed to make the target phoneme.

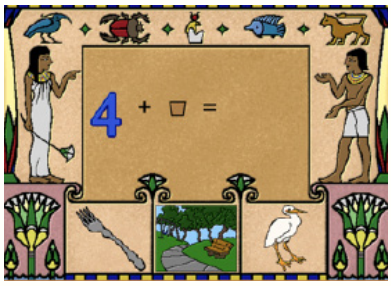
Intermediate Phonological Awareness

Students isolate, blend, and segment individual phonemes in words.

Phoneme Isolation	Phoneme Blending	Phoneme Segmentation
		
Determine the position of a given phoneme in a spoken word.	Determine whether a series of phonemes blends to make the word represented by the picture.	Determine the number of phonemes in a spoken word.

Advanced Phonological Awareness

Students isolate, blend, and segment individual phonemes in words.

Phoneme Addition	Phoneme Deletion	Phoneme Substitution
		
Determine the new word that is formed when a given phoneme is added.	Determine the new word that is formed when a given phoneme is deleted.	Build and identify new words by substituting individual phonemes.

Phonological Awareness Activity

Students blend phonemes and identify the word that is formed.

Phonics Activity

For the same word, students connect sounds (phonemes) with letters (graphemes) to decode and identify the word.

Resources

Resources to support phonological-awareness skills development in the classroom and at home include the following:

- → Segmenting Syllables
- → Segmenting: First Phoneme
- → Counting Individual Phonemes
- → Blending: Onset-Rime
- → Blending Bingo Cards
- → Medial Sound Picture Cards
- → Rhyming Cards
- → Syllable Cards
- → Where's the Sound?
- → Sound Sense Cards
- → Consonant Phonemes
- → Vowel Valley
- → In Resources & Activities,
  - FILTER for **Resource Type>WEL Activity** and **Subject & Strand>Literacy>Phonological Awareness**.
  - find alliterative books at **Collections>Books: Read With Me**.
  - find rhyming books at **Collections>Books: Sing a Rhyme**.

A Waterford account is required to access program hyperlinks (displayed in orange). If you do not have an account, you can request a demo account here.

Playlists

- In Resources & Activities, FILTER for **View>All Playlists** and **Subject & Strand>Literacy>Phonological Awareness.**

Family Resources

- Family Fact Sheet: Phonological Awareness
- Hoja de datos familiars—Conciencia Fonológica

- Family Video: Phonological Awareness
- Video de elemento instructivo de conciencia fonológica

- Syllables
- Sílabas

- Put Syllables Together to Make Words
- Unir sílabas para formar palabras

- Sound Cards
- Tarjetas de sonidos

- I Spy
- Yo espío

Instructional Routines

The following instructional routines can serve as frameworks for whole-class, small-group, and individual instruction. These routines leverage the elements of effective instruction that are built into the adaptive learning path for Waterford Early Learning.

Phoneme Blending

Use this routine to provide explicit instruction for blending phonemes.

1. **Model** the steps. For example, with the word *mat*:
    - Display three boxes or three chips to represent the phonemes in the word *mat*.
    - Put your finger under the first box and say /mmm/.
    - Put your finger under the second box and say /ăăă/.
    - Slide your finger slowly under the two boxes, blending the sounds to say /mmmăăă/.
    - Slide your finger quickly under the two boxes, saying /mă/.
    - Put your finger under the last box and say /t/.
    - Slide your finger slowly under all three boxes, blending the sounds to say /mmmăăăt/.
    - Slide your finger quickly under all three boxes, saying *mat*.
2. **Show** a picture of a mat and share a student-friendly definition to connect the word with its meaning.
3. **Guide** students to follow the same process to blend the phonemes in the word *mat*.
4. **Repeat** the process with additional words that follow a similar pattern (for example, *cat*, *bat*, and *rat*).

Phoneme Manipulation

Use the following template scripts for phoneme manipulation to guide students in manipulating initial, final, and medial phonemes. Manipulating medial phonemes will be the most challenging.

As you engage students in these routines, maintain a focus on meaning by displaying images that represent each word and sharing student-friendly definitions.

Phoneme Addition

- **Teacher:** Say *for*.
- **Student:** *for*
- **Teacher:** Now say *for* and add /*t*/ at the end.
- **Student:** *fort*
- **Teacher (for reinforcement or to provide scaffolded support):** When you say *for* and add /*t*/ at the end, you get /*for*/ /*t*/—*fort*!

Phoneme Deletion

- **Teacher:** Say *fort*.
- **Student:** *fort*
- **Teacher:** Now say *fort*, but don't say /*t*/.
- **Student:** *for*
- **Teacher (for reinforcement or to provide scaffolded support):** When you say *fort* without /*t*/, you get *for*. *Fort* changes to *for!*

Phoneme Substitution

- **Teacher:** Say *fort*.
- **Student:** *fort*
- **Teacher:** Now say *fort*, but instead of /*t*/, say /*k*/.
- **Student:** *fork*
- **Teacher (for reinforcement or to provide scaffolded support):** When you say *fort* and change the /*t*/ to /*k*/, you get *fork*. *Fort* changes to *fork*!

Corrective Feedback

Corrective feedback has been shown to be a particularly powerful form of feedback (Hattie & Jaeger, 1998). It has a substantial effect size, meaning it can significantly improve learning outcomes. Within Waterford Early Learning's adaptive learning path, corrective feedback helps students build new understandings through productive struggle.

As you engage students in the instructional routines outlined above, provide corrective feedback that

- is immediate and timely;
- is targeted and specific;
- is asset-based and encouraging;
- provides additional information, as applicable (e.g., modeling how specific phonemes are formed by the mouth);
- approaches the task in a new way, as applicable (e.g., using chips to represent phonemes or tapping the phonemes on your hand);
- is shared through multiple modalities (e.g., visual and auditory); and
- does not simply provide the correct answer, but instead guides students to confirm or self-correct their thinking to arrive at the correct answer.

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→ **A full list of references is included in the *Educator Overview Guide for Waterford Early Learning: Reading Curriculum*.**