

Phonological Awareness: A Sound Beginning

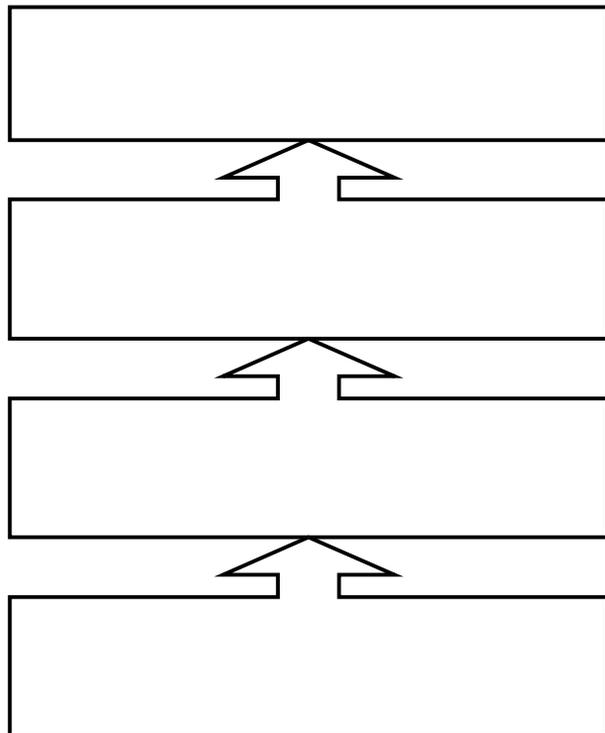
Holly B. Lane
University of Florida

Georgia Reading First
2nd Annual Struggling Reader Conference
Athens, Georgia
September 6-7, 2007

What is phonological awareness?

Phonological awareness is the conscious awareness of or sensitivity to the sound structure of language. PA includes the ability to detect, match, blend, segment, or otherwise manipulate the sounds in spoken language.

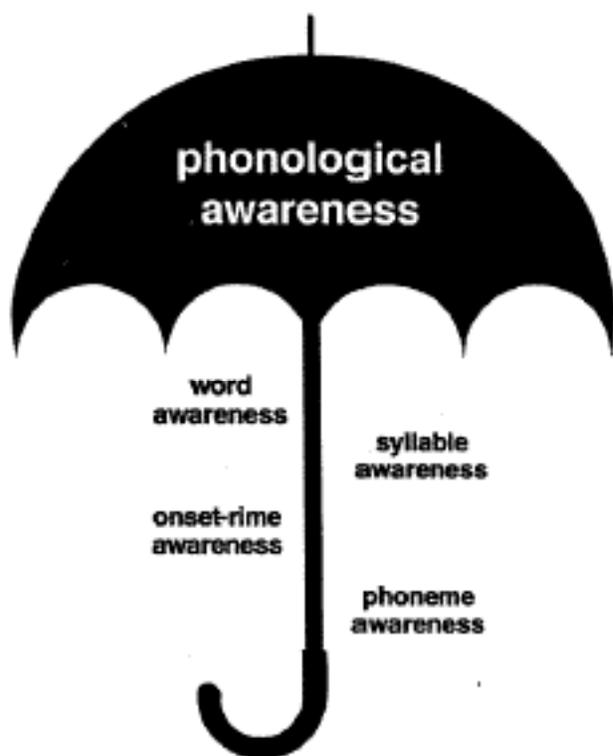
Why is phonological awareness important?



- ✓ PA is directly related to reading ability.
- ✓ Although the relationship is reciprocal, PA precedes skilled decoding.
- ✓ PA is a reliable predictor of later reading ability.
- ✓ Deficits in PA are usually associated with deficits in reading.
- ✓ Early intervention can promote the development of PA.
- ✓ Improvements in PA can and usually do result in improvements in reading ability.

Levels of Phonological Awareness

Phonological awareness is an umbrella term used to explain several levels of metalinguistic skill. The term is often—but incorrectly—used interchangeably with phonemic awareness. *Phonemic awareness* refers only to the most sophisticated level of phonological awareness.



The Word Level – the ability to isolate individual words from the speech flow.

The Syllable Level – the ability to blend and segment chunks within words.

The Onset-Rime Level – the ability to manipulate intrasyllabic units.

The Phoneme Level – the ability to manipulate individual sounds within words.

Figure 1. Levels of phonological awareness (Lane, Pullen, Eisele, & Jordan, 2002)

Phonological Skills

Detecting: Does this word have a /t/ sound? top? sit? fun? little?

Matching: Which begins with the same sound as red? bun, rip, or farm?

Blending: What word do these sounds make: /s/ + /u/ + /n/?

Segmenting: Say this word sound by sound: sun.

Deleting: Say “sit” without saying /s/.

Manipulating: Move the /s/ in “fist” to the end of the word.

Rhyming: Do these words rhyme: hat/cat? hat/sit? sit/sick? sick/pick?

Tapping: Tap once for each part of the word “alligator”?

Counting: How many sounds do you hear in the word “fish”?

Oddity detection: Which of these words doesn’t belong: hat, sat, fit, mat?

Why do we teach children the sounds of letters?

We teach children the sounds of letters so that they can . . .

Sound Types

Most of the sounds in English can be categorized as either continuous or stop sounds and as either voiced or unvoiced sounds. Understanding the type of sound each letter makes helps teachers produce the sound in a way that is useful to children.

Continuous Sounds

- ✓ “Stretch-able” sounds
- ✓ Can be held out or elongated without distortion
- ✓ Easiest sounds for children to produce and blend
- ✓ Use first

Voiced Sounds

- ✓ “Voice” occurs when the vocal folds (aka vocal cords) vibrate.
- ✓ This vibration makes the sound more audible.
- ✓ The vibration may also contribute to sound distortion, especially in voiced stop consonants.

Stop Sounds

- ✓ “Quick” sounds
- ✓ Cannot be held out or elongated without distortion
- ✓ Voiced stop sounds are impossible to produce in isolation
- ✓ Avoid adding “uh” or “schwa” sound after

Unvoiced Sounds

- ✓ Unvoiced sounds are produced without vocal fold vibration.
- ✓ Air moves past still vocal folds during an unvoiced sound.
- ✓ Unvoiced stop consonants are easier to blend.

	Continuous	Stop
Voiced		
Unvoiced		

Phonological Awareness Assessment Purposes and Methods

Screening – Screening instruments are used to determine whether any students within a group may be likely to struggle. Following administration of a screening measure, the teacher should identify children in need of further diagnostic assessment. Screening measures should be easy to administer in a brief period of time. Typically screening is conducted with all children at the beginning of each school year and as new children enter a school throughout the year.

Diagnosis – Diagnostic assessment should be conducted with any child having difficulty or identified through screening assessment as likely to have difficulty. Diagnostic measures should be administered by highly qualified assessors, who can interpret test results and make recommendations for intervention.

Progress Monitoring – Monitoring children's growth in reading is essential to determine whether the current course of instruction is appropriate and effective. Regular progress monitoring assessments provide the teacher with ongoing data on which to base instructional decisions. Progress monitoring assessments should be conducted at least three or four times during the school year.



Dynamic Indicators of Basic Early Literacy Skills (DIBELS)

Phonological Awareness Measures

- ✓ *Initial Sounds Fluency (ISF)*: Assesses a child's skill to identify and produce the initial sound of a given word.
- ✓ *Phonemic Segmentation Fluency (PSF)*: Assesses a child's skill to produce the individual sounds within a given word.

Alphabetic Principle Measure

- ✓ *Nonsense Word Fluency (NWF)*: Assesses a child's knowledge of letter-sound correspondences as well their ability to blend sounds together to form unfamiliar "nonsense" (e.g., fik, lig, etc.) words.

Phonological Awareness Instruction in the Reading Curriculum

In Kindergarten

- carefully sequenced from easy to more difficult tasks
- regular part of the curriculum -- 15-20 min. a day
- involve both analytic and synthetic activities
- emphasis on oral language activities initially, but work with letters can be integrated as soon as initial levels of phonemic awareness are reached
- instruction should be fun for teachers and students

Sequence of Activities for Kindergarten

Listening Games

- sharpen ability to listen selectively to sounds

Rhyming Activities

- use rhyme to introduce the idea of listening for the sounds in words

Sentences and Words

- awareness that sentences are made of words

Syllables

- segment and blend syllables

Initial and Final Sounds

- introduce to individual phonemes
- show how phonemes sound and feel when spoken in isolation

Phonemes

- phoneme blending and segmenting

Letters

- introduce relationship of letters to speech sounds



Activities in First and Second Grade

- opportunities to listen for sounds in words as letter-sounds are taught
- listening for all the sounds in words before they are spelled
- explicit instruction and practice in blending activities with letters
- review of oral language activities for children lagging behind

A Sound Beginning: Phonological Awareness Activities

Word Level Activities

Hopping Words: Children hop once for each word in a sentence.

Counting Words: Using bead strings or tally marks on a page, children count the words in a sentence.

Silly Sentence Switching: Teacher says a sentence, first student changes one word in the sentence, second student switches a different word.

Adding Attributes: Using a picture or toy as the stimulus, each child adds a one-word attribute to the description.

Matchsticks: Each child is provided with a picture card that represents one word of a compound word. Child finds another child to combine words with to form a compound.

Other Word Level Activities:

Syllable Level Activities

Clapping Syllables: Children clap once for each “word part” in a multi-syllable word.

Counting Syllables: Using bead strings or tally marks on a page, children count the syllables in a word.

Highlighting Syllables: After reading a book to children, the teacher takes the children back through the book looking for words with a given number of syllables. Each word found is highlighted with highlight tape.

Syllable Sorts: Children match picture cards to the number of syllables in the word represented.

Junk Box Rock: Child chooses a toy from the “Junk Box” and then rocks hips back and forth while saying the name of the object one syllable at a time.

Other Syllable Level Activities:

Onset-Rime Level Activities

Word Bird: Child says a word and tosses a beanbag to a classmate, who must generate a rhyming word.

CLUMP!: Each child is provided a picture card. When the teacher says “Clump!” the children walk around the room looking for classmates who have words that rhyme with theirs. They “clump” with these classmates.

Rime Graphing: Using the cards from the “Clump!” activity, children place their card in a pocket chart next to the phonogram for their word. The teacher can guide the children in determining which rimes are most important to know based on how many words it appears in.

Rhyming Pairs: Using a poem chart, teacher covers the second word in a rhyming pair and asks children to generate possible words to go in the blank.

Alphabet Sponging: With wet sponges cut into alphabet shapes, children make lists of words in the same word family on construction paper.

Croak: Children draw cards with words or pictures from a container. They must generate a rhyming word or put the card back in the container. Mixed in with the other words are some “Croak” cards. When a child draws a “croak” card, he or she must put all cards back in the container.

Rhyming Memory: Picture cards are placed face down on the table. Children take turns flipping one pair at a time, trying to match the rhyming words.

Rhyming Bingo: Children use bingo cards with pictures or words, teacher calls out words, children find words on their cards that rhyme.

Other Onset-Rime Level Activities:

Phoneme Level Activities

Sound Detective: Given a target phoneme, children listen for which word in a list contains that sound. Start this activity by providing words that begin with the target sound. Add words that contain the word in the medial or final position.

Sound Play: Children practice inserting or deleting individual sounds to words to form new words. (Inserting—“Say cat. Now add a /s/ to the end of cat. Deleting—“Say Mike. Now say Mike without saying /k/.”)

Counting Sounds: Children use bead strings to count individual phonemes within a given word.

Sound Bingo: Teacher calls out a sound, children find pictures on their cards that represent a word with the same beginning sound.

I Spy!: Teacher finds an item in the classroom that begins with a target sound and says, “I spy something that begins with ___ “ Children guess which item the teacher spied.

Sound Hound: Played much like “Old Maid” but with picture cards with matching pairs of words that begin with the same sound and a “Sound Hound” card.

Sound Off!: Played like “War!”—two players, each with 20 picture cards. Each player turns over a card and counts the phonemes in the word pictured. The player with the most phonemes takes the pair. If the players have a picture with the same number of phonemes, they have a *SOUND OFF*. Each player places two cards face down, and a third face up. The players compare phonemes and the player with the word with the most phonemes takes all the cards. The game ends when one player ends up with all of the cards.

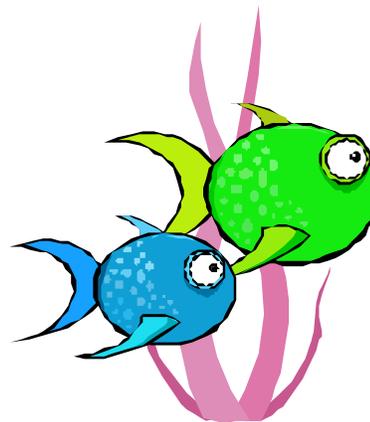
Sound Board Games: Child draws a picture card and moves the number of spots indicated by the number of phonemes in the word represented.

Robbie the Robot: Children converse with a “robot”—the catch is that the robot can only say words and can only understand words when they are said one sound at a time.

Other Phoneme Level Activities:

Elkonin Boxes

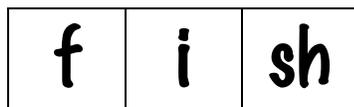
One of the earliest researchers to link phonological awareness to reading was Elkonin (1963), a Russian psychologist. He developed a method of teaching children to segment the sounds in a word by moving markers into boxes on a piece of paper, hence the name "Elkonin boxes". This early use of Elkonin boxes to assist in the development of phonological awareness has since been adapted to accomplish many related objectives. Elkonin boxes may be used in several ways to help students hear the sounds in words and recording the sounds in sequence.



-  Count the sounds in the word with the child.
-  Draw one box for each sound.
-  Use chips to represent sounds at first.
-  Insert the letter(s) for each sound.



Count the sounds for each word, then draw your Elkonin boxes here . . .



Phonological Awareness Instruction

Summary of Key Research Findings...

- ✓ Phonological awareness instruction can improve students' phonological awareness, spelling, and reading.
- ✓ Most phonological awareness instruction should happen in kindergarten and first grade.
- ✓ Small-group instruction is generally better than large group and more efficient than one-on-one.



- ✓ More phonological awareness instruction is not necessarily better. For *most* students, 15-20 hours of instruction is sufficient.
- ✓ Connection between skills practice and meaningful application is essential. Children need to understand when and how they will use the phonological skills they are developing.
- ✓ Phonological awareness instruction that includes letters is most effective for improving reading outcomes.

The most important thing to remember is that phonological awareness instruction can and should be fun!

References

- Elkonin, D. B. (1963). The psychology of mastering the elements of reading. In B. Simon & J. Simon (Eds.), *Educational psychology in the U.S.S.R.* (pp. 165-179). Stanford, CA: Stanford University Press.
- Lane, H. B., Pullen, P. C., Eisele, M. R., & Jordan, L. (2002). Preventing reading failure: Phonological awareness assessment and instruction. *Preventing School Failure, 46*, 101-110.
- National Reading Panel. (2000). *A report of the national reading panel: Teaching children to read*. Washington, D C: National Institute of Child Health and Human Development.

Teacher Resources

Developing Phonological Awareness and Understanding of the Alphabetic Principle

Books & Curricula

Ladders to Literacy, by O'Connor, Notari-Syverson, & Vadasy, published by Brookes

Making Sense of Phonics, by Isabel Beck, published by Guilford

Making Words, by Cunningham & Hall, published by Good Apple

Phonemic Awareness Activities for Young Children: A Classroom Curriculum, by Adams, Foorman, Lundberg, & Beeler, published by Brookes

Phonological Awareness Assessment & Instruction: A Sound Beginning, by Lane & Pullen, published by Allyn & Bacon

Road to the Code: A Phonological Awareness Program for Young Children, by Blachman, Ball, Black, & Tangel, published by Brookes

Word Journeys, by Ganske, published by Guilford

Word Matters, by Pinnell & Fountas, published by Heinemann

Words Their Way, by Bear et al., published by Merrill

Computer Programs

- *Daisy Quest and Daisy's Castle*, available from Pro-ED (<http://www.proedinc.com/>)
- *Earobics*, available from Cognitive Concepts, Inc. (<http://www.earobics.com/>)
- *Fast ForWord*, available from Scientific Learning
- *Read, Write, and Type*, available from The Learning Company (<http://www.learningcompany.com/>)
- *Waterford Early Reading Program*, available from Pearson Digital Learning (<http://www.pearsondigital.com/>)

A Few Web Sites Worth a Visit

National Reading Panel (<http://www.nationalreadingpanel.org/default.htm>)

National Institute for Literacy (<http://www.nifl.gov/>)

Florida Center for Reading Research (<http://www.fcrr.org/>)

Reading Rockets (<http://readingrockets.com/>)

SEDL (http://www.sedl.org/work/teaching_reading_language.html)

Gamequarium (<http://www.gamequarium.com/readquarium/phonicsandphonemes.html>)

Assessments

- ✓ Comprehensive Test of Phonological Processing (CTOPP) (Pro-ED)
- ✓ Dynamic Indicators of Basic Early Literacy Skills (<http://dibels.uoregon.edu/>)
- ✓ Early Reading Diagnostic Assessment (ERDA) (<http://harcourtassessment.com/>)
- ✓ Fox in a Box (<http://www.sraonline.com/>)
- ✓ Phonological Awareness and Literacy Screening (PALS) (<http://pals.virginia.edu/>)
- ✓ Texas Primary Reading Inventory (TPRI) (<http://www.tpri.org/>)
- ✓ Woodcock Diagnostic Reading Battery (WDRB) (<http://www.riverpub.com/>)

Classroom Materials

Magnetic Letters

Remember that for young children, magnetic letters that are just one color are better than sets with multiple colors. Lowercase letters are better than uppercase letters.

- ✓ Know-Its (<http://know-its.com/>) makes foam magnetic letters in all blue. They are durable and just the right size.
- ✓ Resources for Reading (abcestuff.com) has a large selection of magnetic letters. You can order one set with either red or blue vowels (I buy two sets and switch vowels!): http://www2.abcestuff.com/cgi/Web_store/web_store.cgi?item=ML025
- ✓ Lakeshore also has a variety of magnetic letters (www.lakeshorelearning.com). Item #AA234 is a set of all blue foam letters with magnetic backing.

Other Manipulative Letters

- ✓ **Foam Letter Boards**—available from Think It by Hand in Irvine, CA www.thinkitbyhand.com or (888) 723-4402 (ask for all blue)
- ✓ Lakeshore's **Lowercase Learning Letters** are great for learning letter formation (Item #TT779)
- ✓ **Felt Letters**—teachersparadise.com has lowercase felt letters (item #J-010025) available for flannel boards
- ✓ **Letter stamps**—these are available at any scrapbook supply store. Find letters in a simple font style.
- ✓ **Ellison die cuts**—these can be used to make letter sets and will even cut through sponges to make sponge letters (www.ellison.com)

Letter Boards

- ✓ **Burner Covers**—square burner covers make ideal magnetic letter boards for small-group work. Reston Lloyd (<http://www.restonlloyd.com/>) is a good, inexpensive source if you are buying a minimum of 100 sets. For smaller orders, try Burner Cover King (<http://burnercoverking.com/>)
- ✓ Lakeshore has a **Magnetic Write & Wipe Board** that serves multiple purposes (Item #PH345)

Writing Boards

- ✓ For very inexpensive **dry erase boards**, visit your local Home Depot or Lowe's to purchase a large (4'x8') sheet of white shower tile board. This can be cut into 48 rectangles measuring 8"x12" or into 24 rectangles measuring 12"x16". Be careful to test several brands of dry erase markers, because some work better on some boards than others (I have generally been successful with Expo markers).
- ✓ **Gel boards** are available from <http://imagneticsonline.com/> and from <http://www.kaplanco.com/>, among other sources.