How Now Brown Cow: Phoneme Awareness Activities

By: Edwin S. Ellis (1997)

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Research indicates a strong relationship between early phoneme awareness and later reading success, and it links some reading failure to insufficiently developed phoneme awareness skills. Intervention research clearly demonstrates the benefits of explicitly teaching phoneme awareness skills.

Many children at risk for reading failure are in general education classrooms where phoneme awareness training is not part of their reading program. This article presents a set of developmental phoneme awareness training activities that the special educator can integrate collaboratively into existing kindergarten and first-grade reading programs.

Instructional considerations

Before preparing to conduct phoneme awareness activities in a general education setting, the special educator needs to become familiar with the method being used to teach reading and should observe the class in action.

Most of the phoneme awareness activities should not take more than 15 or 20 minutes to complete and should fit the context of the classroom. Although a particular activity can be selected well in advance, the specific words targeted for phoneme awareness should be selected from material used actively in the class, such as a story or picture book that was just read and discussed, the immediate environment, words fitting a thematic unit being taught, or discussions about a field trip.

Phoneme awareness activities work well in classrooms where teachers implement shared reading. Typically, after previewing the text with the class, the teacher reads aloud a large-print text on a chart or in a big book, the teacher and children read the selection together, and then students complete individual activities related to the selection (Holdaway, 1979). Phoneme awareness activities are a natural extension of the shared reading activities.

To be successful, however, the general educator and special educator must plan ahead for sharing time, space, and teaching together in a collaborative effort. The benefits for the children far outweigh any disadvantages for the teachers. The willingness of the special educator to fit the activities to the contexts of the classroom can help diminish any existing reluctance a general education teacher might have toward phoneme awareness training.

Specific guidelines

Teachers need to be aware of the developmental requirements of phoneme awareness activities. For example, when teaching children to partition words into parts, segmenting a compound word into its two parts ("What two words do you hear in *cowboy*?") precedes segmenting syllables and sounds.

Similarly, identification tasks ("Which one doesn't rhyme – *cat*, *hat*, *sun*?") are generally easier than production tasks ("Tell me the first sound in *car*"). The difficulty level of most activities can be manipulated by changing the input or response modes. For example, "Find the picture that starts with /r/" will be easier than "What sounds do you hear in *robe*?" A set of guidelines to keep in mind when planning instructional activities is provided below.

Instructional Guidelines for Planning Phoneme Awareness Activities

1. Identify the precise phoneme awareness task on which you wish to focus and select developmentally appropriate activities for engaging children in the task. Activities should be fun and exciting – "play" with sounds, don't "drill" them.

2. Be sure to use phoneme sounds (represented by / /) and not letter names when doing the activities. Likewise, remember that one sound may be represented by two or more letters. There are only three sounds in the word *cheese*: /ch/-/ee/-/z/. You may want to target specific sounds/words at first and "practice" beforehand until you are comfortable making them.

3. Continuant sounds (e.g., /m/, /s/, /i/) are easier to manipulate and hear than stop consonants (e.g., /t/, /q/, /p/). When introducing continuants, exaggerate by holding on to them: *rrrrrring*; for stop consonants, use iteration (rapid repetition): *k-k-k-k-katie* .

4. When identifying sounds in different positions, the initial position is easiest, followed by the final position, with the medial position being most difficult (e.g., *top*, *pot*, *setter*).

5. When identifying or combining sound sequences, a CV pattern should be used before a VC pattern, followed by a CVC pattern (e.g., *pie*, *egg*, *red*).*

*Note: CV = consonant-vowel; VC = vowel-consonant; CVC = consonant-vowel-consonant

Awareness of onset and rime

Phonograms are the common elements in word families (e.g., the letter sequence "and" in *sand*, *hand*, *band*, and *land*). The initial consonant that changes the meaning of the word is called an onset and the following vowel/consonant combination that remains constant is called a rime. Because an awareness of syllables, onsets, and rimes develops before an awareness of phonemes (Goswami, 1994, p. 36), the first set of suggestions focuses on ways to expose children to word play.

Literature

A natural and spontaneous way of providing children with exposure to phonemes is to focus on literature that deals playfully with speech sounds through rhymes. Simple rhyme patterns are easily recalled after repeated exposure, and children will get the idea of creating new rhymes.

In *There's a Wocket in My Pocket* (Seuss, 1974), initial sounds of everyday objects are substituted as a child talks about the strange creatures around the house, such as the "zamp in the lamp." Children can make up their own strange creatures in the classroom such as the "zuk in my book."

Alliteration is the repetition of an initial consonant sound across several words, such as presented in the alphabet book *Faint Frogs Feeling Feverish and Other Terrifically Tantalizing Tongue Twisters* (Obligato, 1983).

Assonance, the repetition of vowel sounds within words, is often combined with rhyme, as in "It rains and hails and shakes the sails" from *Sheep on a Ship* (Shaw, 1989) or in humorous ways such as "The tooter tries to tutor two tooters to toot" in *Moses Supposes His Toeses Are Roses* (Patz, 1983). Some books include music to go with the rhymes, such as *Down by the Bay* (Raffi, 1987), in which two children try to outdo one another in making up questions that rhyme, such as "Did you ever see a goose kissing a moose?"

Yopp (1995) presented an annotated bibliography of 44 books for young children that deal playfully with language. She also provided guidelines for using these books in class:

a. read and reread the stories;

b. comment on the language use;

c. encourage predictions of sound, word, and sentence patterns;

d. comment on or elicit specific aspects of sound patterns (e.g., "What sound do you hear at the beginning of all those words?"); and

     e. be creative in inventing new versions of the language patterns utilized in the stories.

Word families chart

The exposure to rhymes leads naturally to the use of phonograms and the creation of word family charts. Charts can contain words from one story or a brain-stormed list from the children.

A story that leads naturally to a word family chart is *Tog the Dog* (Hawkins & Hawkins, 1986), which is constructed so that as each page is turned, a different letter lines up with the rime "og." For example, when Tog takes a jog, the letter "j" lines up with the "og." The children can dictate to the teacher words to be placed on a word family chart. As they begin to develop letter/sound knowledge, they can copy or write the words themselves.

You can use magnetic letters to "create" words for a word family chart. Provide a rime of plastic letters (e.g., *at*) and have the children take turns placing different letters in the onset position to create new words (e.g., *hat, bat, sat, rat*). These charts can be used as reference charts (or the children can make their own word families reference book) for spelling and creative writing activities.

Direct instruction

Children who are struggling with recognizing and creating rhymed words may need more direct intervention. Initial rhyme recognition can be reinforced by direct modeling of instances (*nose/rose*) and non-instances (*bed/car*) of rhyming word pairs. The children are then presented other word pairs and asked if the two words sound the same or sound different.

This can be made into a game-like activity by having them respond with a "happy face" card if the words rhyme and a "sad face" card if they don't (or they can use a "thumbs up" and "thumbs down" response). It is important for the teacher to ask a child to repeat the rhyming pairs in this and the following activities to reinforce the verbal production of rhymed words.

Pictures provide visual cues for rhyme recognition and can be used during the modeling phase of instruction. The teacher can then present three pictures and ask the child to select and say the two that rhyme. A variation would be to display two nonrhyming pictures and have the child select the one that rhymes with the word being said by the teacher.

Bradley and Bryant (1983) used an activity called "Odd Word Out," which can be done with or without pictures. Four words, three of which rhyme, are presented by the teacher (e.g., *weed, bead, pill, seed*). The child determines which word is the odd one that doesn't belong with the others.

The game of concentration or memory is a good practice activity for rhyme recognition. Separate pictures (not printed words) of rhyming word pairs (e.g., *cat/bat*) are shuffled, and all are placed facedown in a grid pattern. The children take turns turning two cards face-up, trying to match a rhyme pair. If a match is made, the child keeps that pair and takes another turn. If not, the cards are turned facedown and the next child gets a turn.

A summary of activities to heighten awareness of onset and rhyme is offered in the table below.

Awareness of Onset and Rime

Focus	Example	
Literature	a. Rhyme patterns:	*There's a Wocket in My Pocket* (Seuss, 1974)
	b. Alliteration:	*Faint Frogs Feeling Feverish and Other Terrifically Tantalizing Tongue Twisters* (Obligato, 1983)
	c. Assonance:	*Moses Supposes His Toeses Are Roses* (Patz, 1983)
Word families chart	a. Phonograms	Create words by adding beginning sounds – /b/ + *at* = *bat*
		What is another word that sounds like *bat*?
		Use literature – *Tog the Dog* (Hawkins & Hawkins, 1986
		Create individual word family reference books
Direct instruction	a. Rhyming word pairs:	Do these sound the same (*nose*/*rose*) or different (*bed*/*car*)
	b. Odd word out	Which one doesn't belong? (*weed*, *bead*, *pill*, *seed*)
	c. Rhyming word pair concentration	Name the pictures out loud. Find two that rhyme.

Simple phonemic awareness

Isolated sound recognition

As stated by Lewkowicz (1980), "Children should be familiarized with speech sounds in isolation before they attempt to detect sounds within words" (p. 694). Because children are usually unaware that words are made up of individual speech sounds that can be produced in isolation, it is up to the teacher to provide children with a concept of speech sounds.

This is probably best done by associating phonemes with a creature, an action, or an object that is familiar to the child. For example, the phoneme /s/ can be associated with the hissing sound a snake makes – *sssssss*. A sound personality can be created by calling /s/ the "Sammy snake" sound. Many sounds have natural associations, such as a crowing rooster for /r/, a buzzing bee for /z/, and the "be quiet" sound for /sh/.

Figure 1. An example of pictures of sound personalities incorporating letter-shape association.

Sound personalities can be introduced naturally and in context by selecting a particular sound to talk about that is stressed in alphabet or other books that use alliteration. For example, Obligato (1983) presented "smiling snakes sipping strawberry sodas" for the alphabet letter *S*. It is helpful to create or provide pictures that represent these sound personalities and to post them in the room as each is introduced. A natural connection can sometimes be made between the sound and the letter, such as presenting a picture of "Sammy snake" drawn in the shape of the letter *S* or "Buzzy bee" flying in a pattern of the letter *Z* (see Figure 1).

Besides providing a label to facilitate talking about sounds, the pictures provide self-correcting cues for children engaged in initial sound isolation and sound-to-word matching activities.

Word, syllable, and phoneme counting

Because words and syllables are more salient and more directly perceivable than individual phonemes, activities that involve counting the number of words in a sentence or syllables in a word can be used as initial steps leading to isolated phoneme synthesis and segmentation (Lundberg, Frost, & Peterson, 1988).

Word counting can be done for any sentence selected from a reading or writing lesson. The sentence should be read to the children without being visible. The children listen and place a marker from left to right for each word heard. The teacher can confirm the number of words by showing the printed sentence to the children, pointing to each word as it is read, and having the children touch their tokens in one-to-one correspondence. Or the teacher can reinforce the children's "counting" using auditory input only by repeating the sentence and having them touch each token to confirm the number of words heard.

To count syllables in words, activities can be used such as clapping hands, tapping the desk, or marching in place to the syllables in children's names (*Ma-ry*), items in the immediate environment (*win-dow*), or words from a favorite story (*wi-shy, wa-shy*). Initially, two-syllable words can be targeted, building up to three. Visible, manipulable representation of sounds also helps to clarify and guide counting and segmentation tasks for beginners (Lewkowicz, 1980).

The marker activity used for word counting can be adapted for use in counting syllables by providing each child with two or three horizontally connected boxes drawn on a sheet of paper. The children place a token in each box from left to right as they hear each syllable in a word. These same activities can be used to count sounds in words.

Sound synthesis

Sound synthesis or sound blending is an essential skill related to later reading ability (Lewkowicz, 1980; Lundberg et al., 1988; Wagner, Torgeson, Laughon, Simmons, & Bashotte, 1993) and one of the easiest phoneme awareness tasks for children to perform (Yopp, 1988).

Sound synthesis can be done using the following sequence: blending an initial sound onto the remainder of a word, followed by blending syllables of a word together, and then blending isolated phonemes into a word.

The teacher can model blending an initial sound onto a word by using the jingle, "It starts with /l/ and it ends with *ight*, put it together, and it says *light*." When they have the idea, the children supply the final word.

An element of excitement can be created by using children's names for this activity and asking each child to recognize and say his or her own name when it is presented – "It starts with /b/ and it ends with *etsy*, put it together and it says <u> </u>." Context can be provided by limiting the words to objects that can be seen in the room or to words from a particular story the children just read. As the children become proficient, they can take turns using the jingle to present their own words to be blended by the class.

Guessing games that utilize words broken into syllables or isolated phonemes provide fun sound blending activities.

One involves using a puppet (perhaps representing a character from a current reading lesson) who speaks "funny" by saying words syllable-by-syllable or sound-by-sound for the children to figure out. Initial clues can be provided by displaying three pictures, one of which is the word being said by the puppet. The puppet can confirm or negate a student response by picking up the picture and saying the word being segmented: "/f/-/i/-/sh/ – I said *fish*!"

Another is the familiar "What's in the bag?" activity. Instead of describing what is in the bag, the teacher says the word syllable-by-syllable or sound-by-sound and the children guess the word. A correct response is confirmed when the teacher brings the object out of the bag.

Yopp (1992) suggested the use of song games and presented an example to the tune of "If You're Happy and You Know It, Clap Your Hands":

> If you think you know this word, shout it out!
> If you think you know this word, shout it out!
> If you think you know this word,
> Then tell me what you've heard,
> If you think you know this word, shout it out!

The teacher says a segmented word such as /k/-/a/-/t/, and the children respond by saying the blended word (pp. 700-701).

Sound-to-word matching

Sound-to-word matching is useful as a beginning step in sound segmentation. Basically, sound-to-word matching requires that the child identify the beginning sound of a word.

Awareness of the initial sound in a word can be done by showing the children a picture (dog) and asking the children to identify the correct word out of three: "Is this a /mmm/-*og*, a /d/d/d/-*og*, or a /sss/-*og*?" A variation is to ask if the word has a particular sound: "Is there a /d/ in *dog*?" This can then be switched to "Which sound does *dog* start with – /d/, /sh/, or /l/?" This sequence encourages the children to try out the three onsets with the rime to see which one is correct.

It is easiest to use continuants that can be exaggerated and prolonged to heighten the sound input. Iteration should be used with stop consonants to add emphasis.

Yopp (1992) also suggested the use of songs in sound matching activities. One of several examples she presented uses the tune of "Old MacDonald Had a Farm":

> What's the sound that starts these words?
> *Turtle*, *time*, and *teeth*.
> (Wait for a response from the children.)
> /t/ is the sound that starts these words:
> *Turtle*, *time*, and *teeth*.
> With a /t/, /t/ here, and a /t/, /t/ there,
> Here a /t/, there a /t/, everywhere a /t/, /t/.
> /t/ is the sound that starts these words:
> *Turtle*, *time*, and *teeth*! (p. 700)

The children might use favorite stories from their reading lessons to identify different sets of three words that start with the same sound to incorporate into the song. Each repeated verse could then emphasize a different sound. The teacher again is cautioned to use the phoneme sounds, not the letter names for these activities.

Identification of sound positions

Establishing that sounds occur in different positions of words – initial, final, and medial – helps some children with the later task of segmenting whole words into isolated sound components.

One method of representing sound positions is to display a picture of a train composed of an engine, a passenger car, and a caboose. Three connecting boxes can be drawn under each component: one under the engine, connected to one under the passenger car, connected to the one under the caboose (use poster board and laminate). Explain that words have beginning, middle, and end sounds just like the train has a beginning, a middle, and an end part.

Demonstrate by slowly articulating a CVC (consonant-vowel-consonant word (e.g., /p/-/i/-/g/) and pointing to the box corresponding to the position of each sound in the word. You can then repeat the word and ask the children to identify where they hear the different sounds – "Where do you hear the /g/ in *pig*?" Slowly articulate other CVC words for them to listen to and have them mark the box under the train that indicates the position of the sound you specify.

Sound segmentation

Segmenting refers to the act of isolating the sounds in a spoken word by separately pronouncing each one in order (Ball & Blachman, 1991; Spector, 1992; Wagner et al., 1993).

Yopp (1988) stated that segmenting the sounds in a word is one of the more difficult simple phonemic tasks for children to perform. Lewkowicz (1980) and Yopp (1992) suggested starting with isolated productions of initial phonemes as a precursor to segmenting entire words. The previous sound-to-word matching and identification of position activities help in early recognition and practice with initial phonemes.
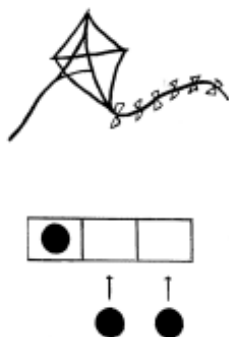

Figure 2. An example of Elkonin boxes used for hearing sounds in words.

Several researchers (Ball & Blachman, 1991; Bradley & Bryant, 1985; Griffith & Olson, 1992; Lewkowicz, 1980) have used visual and tactile cues based on Elkonin boxes (Elkonin, 1973) to help with phoneme segmentation. A card is prepared with a picture of a simple word at the top. Below the picture is a matrix that contains a box for each phoneme (not letter) in the word (see Figure 2).

The teacher models the process by slowing articulating the word phoneme-by-phoneme while pushing a counter into a box for each phoneme. The children can say the word with the teacher while the counters are being placed. Gradually the children should participate in this "say it and move it" (Ball & Blachman, 1991) activity by taking turns placing the counters in each box while saying each sound in a word. Both the matrix and picture can be eliminated over time so that the children are segmenting the word without visual clues.

Words should be selected from familiar text to ensure a whole-to-part sequence of instruction and to provide the children with contextual cues that link word segmentation to everyday classroom lessons.

Letter-sound association

Many researchers (Ball & Blachman, 1991; Byrne & Field- Barnsley, 1993; Hurford et al., 1994; Iversen & Tunmer, 1993) have demonstrated the advantage of combining phoneme awareness with letter knowledge in a classroom setting. As stated by Griffith and Olson (1992), "The most pedagogically sound method of phoneme awareness training is one that eventually makes explicit the complete letter-to-sound mappings in segmented words" (p. 518).

All phoneme awareness activities that use tokens or other visual representations of sounds can be modified to include letter- sound associations. As individual sounds are mastered by the children, their corresponding letter names can be introduced and placed on the tokens (magnetic letters or Scrabble tiles can be used) and gradually introduced into the segmentation activities.

At first, only one letter or tile should be provided, and the remainder should be blank. After the child has successfully segmented with one letter or tile, others can be added as new letter names are mastered.

To reinforce letter names, Blachman (1991) played "post office" – the children select a picture, say the initial sound of the picture, and identify the letter represented by the first sound by "mailing" it in the appropriate letter pouch.

A modified game of bingo can provide practice in sound-letter association. The desired letters to be emphasized are selected, starting with two or three, and adding more as the children progress. The letters are printed in random order on cards that have 4-by-4 or 5-by-5 grids drawn on them, one card for each child.

The teacher draws from a container letter tiles matching those on the children's cards. The teacher says the phoneme for the letter drawn from the container (replacing it each time) and asks the children to identify the letter corresponding to the phoneme by placing a marker in the appropriate box on their cards. Any child who fills a row or column can then name the letters aloud.

The practice of invented spelling in a classroom can also be used to make explicit connections between sound segments and letters. Children select words they wish to write but don't know how to spell.

A box is drawn for each sound in the word (remember that one sound may be represented by two or more letters – the word *shoes*, for example, has only three phonemes, /sh/-/oo/-/z/). A child can fill in the letters he or she hears and knows with the teacher's help. The teacher can fill in any letters the child does not know.

A summary of activities for enhancing simple phonemic awareness is presented in the table below.

Compound phonemic awareness
Simple Phonemic Awareness

Targeted Skill	Example
Isolated sound recognition	Sammy snake sound says… (/s/)
Word/syllable/phoneme counting	How many (words/syllables/sounds) do you hear in this (sentence/word)?
Sound synthesis	It starts with /l/ and ends with *ight*, put it together and it says… (*light*) What word am I saying? Put these sounds together to make a word – /f/-/i/-/sh/.
Sound-to-word matching	Is there a /k/ in *cat*? What is the first sound you hear in *dog*?
Identification of sound positions	Where do you hear the /g/ in *pig* (at the beginning middle or end of the word)?
Sound segmentation	What sounds do you hear in the word *ball*? Say each one.
Letter-sound association	What letter goes with the first sound in this word: *book*?

Word-to-word matching

Compound phonemic awareness requires holding a given sound in memory while performing a second operation such as determining whether two words begin with the same sound in a word-to-word matching task (e.g., "Do *cup* and *cake* begin the same?"; Yopp, 1988). Byrne (1991) offered several games for practicing word-to-word matching.

1. Make a set of dominoes that have two pictured objects on each card. The children are required to join cards sharing beginning (or ending) sounds.

2. A version of "snap" uses cards having one picture. The children take turns drawing a card from a face-down pile and placing it in a face-up pile. When a newly drawn card has the same beginning (or end) sound as the top card in the face-up pile, the first child to identify the match by saying "snap" collects the pile.

3. Sound bingo uses bingo cards with pictures that children mark if one of their pictures has the same beginning (or end) sound as the word said by the caller.

Each of these games can be related to other classroom activities by having the children make their own dominoes, snap cards, and bingo cards using pictures cut from catalogs or magazines, or hand drawn and laminated. The pictures selected by the children can represent things related to the literature and themes being covered in class.

Sound deletion

Because sound deletion tasks require manipulation of phonemes in words, they are considered to be more difficult than other types of phoneme awareness tasks.

Cole and Mengler (1994) stated that it is not until a mental age of approximately 7 years that children are able to perform phoneme deletion tasks adequately. Lewkowicz (1980) suggested that sound deletion activities be done after the children exhibit some skill in segmentation and after letter names have been introduced. Because phoneme deletion of medial consonants puts an undue burden on young children's memory, sound deletion should target only initial or final sounds in words.

To introduce the idea of deleting parts of a word, the teacher can show pictures or point to objects in the room that are compound words and demonstrate how each word can be said with a part missing. For example, "This is a seesaw. If I say *seesaw* without the *see*, it says *saw* (give other examples). Now you try it. This is a hotdog. Say *hotdog* without the *dog*." An element of fun can be introduced by making it a "Simon says" activity: "Simon says, 'say *bookmark* without the *book*.'"

Identification of a missing sound can be accomplished through a "What's missing?" guessing game. The teacher says two words for comparison and asks the children to identify the missing element: "Listen: *eat/meat*. What's missing in *eat* that you can hear in *meat*?"

Final position deletions can be done in the same way (e.g., "What's missing in *play* that you can hear in *plane*?"). The children can be encouraged to make up their own "What's missing?" words for the initial position by referring to the phonograms on the word families charts: "What's missing in *an* that you can hear in *pan* (*man*, *ran*, *can*)."

Identifying the missing element using phonograms tends to be easier than using unrelated words because the initial consonant determines the meaning of the word for the child and the rime remains constant.

The actual task of deleting a sound from a word can be made easier by building on earlier segmentation practice, playing a game of "sound take-away." The teacher models how to orally segment a word into the "target" sound plus "everything else" and then take the target sound away.

A modified version of the sound blending jingle can be used: "*Chair*. It starts with /ch/ and it ends with *air*; take the first sound away, and it says *air*." The jingle can be used until the children can delete sounds with a simple prompt: "Say *ball* without the /b/." A sound deletion that results in a "real" word such as *deer* becoming *ear* or *card* becoming *car* is easier than one resulting in a "nonsense" word such as *book* becoming *ook* or *sun* becoming *su* (although some children enjoy making "alien" or funny words).

Children who have difficulty with deleting sounds might benefit from visual clues. By placing two colored blocks side-by-side, the teacher can designate one as representing the target sound and the other as representing the remainder of the word: "I'm going to use these blocks to say *moon*. This (red block) says *moo* and this (yellow block) says /n/." The child is then asked what the first block says when the second block is removed.

A summary of compound phonemic awareness activities is given in the table below.

Conclusion

Compound Phonemic Awareness

Targeted Skill	Example
Word-to-word matching	Do *cup* and *cake* begin (end) the same?
Sound deletion	Say *hotdog* without the *dog*.

Research has demonstrated not only a predictive relationship between phoneme awareness and reading success, but also a causal relationship. Phoneme awareness that has a positive impact on reading can be developed in children through systematic instruction in kindergarten and first-grade settings. Early training in phoneme awareness should be a priority

What sound do you hear in *meat* that is missing in *eat*?
What word would be left if you take the /s/ off of *sun*?

for those interested in improving early reading instruction and in reducing reading failure.

General and special educators should be supported in their efforts to collaborate on incorporating phoneme awareness activities into kindergarten and first-grade classrooms.

These activities are not intended to replace children's interactions with meaningful language and print, but to be incorporated into classrooms as part of a language-rich environment. Reading aloud, using big books and predictable books, developing language experience charts, and using other language-oriented practices give children valuable reading experiences.

However, by supplementing these experiences with related phoneme awareness activities, general and special educators can draw children's attention to a critical aspect of their language – its phonemic base.

It takes only a few minutes a day to integrate activities that emphasize the sounds of language into the rich, oral language environments we are creating for our children. Those few minutes can result in a lifetime of reading benefits to children who otherwise might not learn to read.

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