

Supporting phonemic awareness development in the classroom

Playful and appealing activities that focus on the sound structure of language support literacy development.

Although it is widely acknowledged that phonemic awareness is important in learning to read, considerable confusion remains about what phonemic awareness is, the role it plays in reading development, and how it should be addressed in classrooms.

Some educators confuse the term *phonemic awareness* with the terms *auditory discrimination*, *phonetics*, or *phonics* and believe that a new label has been invented for an old idea. This is not true. The term *phonemic awareness* refers to a construct relatively new in our understanding of how children become readers. Although related, phonemic awareness is different from auditory discrimination, phonetics, and phonics. The definitions of each of these terms can be found in Figure 1. (See also Harris & Hodges, 1995; Snow, Burns, & Griffin, 1998.) The definition of phonemic awareness, also in Figure 1, is elaborated upon here.

Phonemic awareness is the awareness that the speech stream consists of a sequence of sounds—specifically phonemes, the smallest unit of sound that makes a difference in communication. It is a phoneme that determines the difference between the words *dog* and *hog*, for instance, and between *look* and *lick*. These differences influence meaning. Place these words in sentences (“You dog!” vs. “You hog!” and “Take a look” vs. “Take a lick”), and the power of the phoneme becomes obvious. Individuals who are phonemically aware recognize that the speech stream is a sequence of these small sounds. They can identify the three sounds in the spoken word *fish* (/f/-i/-sh/), for example, and

can blend phonemes together to form words (/h/-o/-p/ is *hop*). They have the ability to notice, mentally grab ahold of, and manipulate these smallest chunks of speech.

Phonemic awareness may be better understood when placed in the context of two superordinate constructs: phonological awareness and metalinguistics. Phonemic awareness is a type of *phonological awareness*, that is, the awareness of the sound structure of language in general. Phonological awareness refers to a sensitivity to *any size unit of sound*. Thus, the ability to generate and recognize rhyming words, to count syllables, to separate the beginning of a word from its ending (e.g., as in the *st* and *op* in the word *stop*), and to identify each of the phonemes in a word may each be an indication of phonological awareness. Phonemic awareness—a subset of phonological awareness—refers to a sensitivity to and control over the phonemes.

Phonological awareness can, in turn, be placed into the larger context of metalinguistic awareness. Like metacognition, which entails thinking about one’s thinking (or cognition), metalinguistic awareness entails thinking about one’s language. It refers to one’s awareness of and control over one’s language in general; it is the ability to focus attention on language in and of itself, independent of meaning (see Hodges & Harris, 1995; Tunmer, Herriman, & Nesdale, 1988; Yaden & Templeton, 1986).

Thus, phonemic awareness is one aspect of phonological awareness which is one component of metalinguistic awareness.

Figure 1
Definition of terms

Term	Definition	Example
Auditory discrimination	The ability to hear likenesses and differences in phonemes and words	Say these sounds: /t/ /p/. Are they the same or different?
Phonetics	The study of the speech sounds that occur in languages, including the way these sounds are articulated	The first sound in <i>pie</i> is a bilabial—it is made with the two lips.
Phonics	A way of teaching reading and spelling that stresses symbol-sound relationships (in alphabetic orthographies)	The symbol <i>m</i> is used to represent the italicized sounds in the following words: <i>ham, jump, my</i> .
Phoneme	The smallest unit of speech sounds that makes a difference in communication	The spoken word <i>fly</i> consists of three phonemes: /f/-/l/-/t/. It differs from the word <i>flea</i> by one phoneme.
Phonemic awareness	The awareness that spoken language consists of a sequence of phonemes	How many sounds in the spoken word, <i>dog</i> ? Say all the sounds you hear.

Phonemic awareness and reading

The awareness that the speech stream is made up of a sequence of small units of sound and the ability to manipulate those small units—phonemic awareness—appears to be critical for readers of an alphabetic orthography. Why? Because an alphabetic orthography maps speech to print at the level of the phoneme. In other words, users of an alphabetic written system record the smallest units of sound of their spoken language in print. (Although not a pure alphabetic orthography, English is considered fundamentally alphabetic.) The young child whose writing is shown in Figure 2 clearly is attending to the sounds in her speech stream as she records her ideas.

The temporary or inventive spellings seen in Figure 2 reveal much about how the child is thinking about the written system. This child has made the empowering discovery that users of English write down the smallest pieces of the language. In order for a beginning reader to capture the logic of this written system, it appears that he or she must notice that running speech is made up of a sequence of small sounds. Without this insight—without phonemic awareness—the

symbol system is arbitrary. The task of dealing with the symbol system, then, can quickly become overwhelming. It is, in short, to one's advantage to be aware of the level of sounds that the written system encodes.

Much has been said about phonemic awareness in the literature in recent years, and many states in the U.S. are addressing phonemic awareness in standards documents and even in legislation governing the funding of professional

Figure 2
A kindergartner's inventive spelling of "I like my cousin"

I L i k m i
C U Z N.

development activities and the content of teacher training programs. Professional organizations such as the International Reading Association are publishing position statements on phonemic awareness and its role in the teaching of reading (International Reading Association, 1998). Influential documents such as the report of the Committee on the Prevention of Reading Difficulties in Young Children (Snow et al., 1998) recommend that kindergartners have some basic phonemic awareness by the end of their kindergarten year. Moreover, the report asserts that enhancing children's abilities to attend to the sound structure of spoken language should be a *priority* goal in kindergarten classrooms. *Every Child Reading: An Action Plan of the Learning First Alliance* (1998) identifies phonemic awareness as one of the most important foundations of reading success and recommends that its development be addressed in prekindergarten and kindergarten.

School administrators and teachers of young children are anxious to apply recent research findings to practice and are looking for guidance. What does phonemic awareness instruction look like, they ask. How much time should be devoted to it? The purpose of this article is to provide some guidelines for planning phonemic awareness instruction and to share 14 activities that are representative of the type of instruction appropriate for children in preschool, kindergarten, and first-grade classrooms.

Phonemic awareness instruction

What does phonemic awareness instruction look like in the classroom? First, most experts call for phonemic awareness activities that are child appropriate (International Reading Association & the National Association for the Education of Young Children, 1998). Adams and Bruck (1995), for instance, submitted that songs, chants, and word-sound games are ideally suited toward developing young children's sensitivity to the sound structure of language. Beck and Juel (1995) posited that time spent on word play, nursery or Dr. Seuss rhymes, and general exposure to storybooks contribute to phonemic awareness. Mattingly (1984) encouraged classroom teachers to provide their students with linguistic stimulation in the form of storytelling, word games, rhymes, and riddles in order to facilitate phonemic awareness. Yopp (1992), describing developmentally appropriate activities,

argued that phonemic awareness instruction for young children should be playful and engaging, interactive and social, and should stimulate curiosity and experimentation with language.

Second, phonemic awareness instruction should be deliberate and purposeful. Although some teachers have engaged their students in playful language activities for years, they may have done so without knowing the full value of these activities. Any phonemic awareness development that resulted was incidental; it was unrecognized byproduct of the activities. Yet, Adams and Bruck (1995) emphasized that playful language activities will be most effective in developing phonemic awareness if they are used with that goal in mind. Thus, in addition to being child appropriate, phonemic awareness instruction should be intentional, not incidental (even accidental), in classrooms.

Third, phonemic awareness instruction must be viewed by educators as only one part of a much broader literacy program. Phonemic awareness development is not meaningful in and of itself. It is important only in the context of comprehensive reading instruction. Indeed, Griffith and Olson (1992) argued that phonemic awareness activities will not be helpful unless they can be placed in a context of real reading and writing. Furthermore, teachers must recognize that while sensitivity to the sound basis of language supports literacy development, it is also an outcome of literacy experiences. Therefore, to overemphasize this component of literacy instruction in the initial years of schooling is to limit children's opportunities for more comprehensive literacy development.

In addition to these general guidelines, teachers should consider various dimensions of phonemic awareness instruction when planning and designing learning activities. These include the unit of sound to be emphasized, the type of operation to be performed on those units, and whether the activities are to be strictly oral or include concrete cues such as chips and letters.

Units of sound. As teachers plan phonemic awareness instruction, it will be helpful to consider the sequence displayed in Figure 3. Children appear to be better able to capture and gain control over larger units of sound before smaller units of sound (Stahl & Murray, 1994; Treiman & Zukowski, 1991). Thus, with younger children, such as preschoolers, or older children who have

Figure 3
A sequence for phonemic awareness instruction

Instruction	Example
Activities that focus on rhyme	Let's think of something that rhymes with <i>cow</i> . (now)
Activities that focus on syllable units	Clap twice for Harry's name. Har (clap)—ry (clap)
Activities that focus on onset and rime	Say just the first part of <i>brown</i> . (/br/)
Activities that focus on phonemes	Let's put these sounds together. /ch/—/ā/—/n/ (chain)

very little sensitivity to the sound structure of language, teachers initially may wish to focus predominantly on rhyme (see Bishop, Yopp, & Yopp, 2000). Then, teachers may engage students in activities that focus on the units of sound within words, the largest unit of which is the syllable. In the word *hopscotch*, for example, there are two syllables: *hop* and *scotch*. Next, instruction might focus on the largest subsyllabic units—the onset and rime. The onset is the part of the syllable that precedes the vowel; the rime is the vowel and any consonants that follow it. The onset in *hop* is /h/ and the rime in *hop* is /op/; the onset in *scotch* is /sk/; the rime in *scotch* is /och/. Some syllables such as *it*, *un*, and *on* have no onset. Finally, attention can be directed to the phoneme. Thus, when planning phonemic awareness instruction the size of the unit of sound to be addressed should be considered, with a general plan to move from larger to smaller units of sound.

Tasks or operations. Another dimension of phonemic awareness instruction is the task or operation the students must perform with sounds. For instance, children may be asked to match sounds, as when they indicate whether two words begin the same (e.g., Do these words begin the same? *fish fight*). They may be asked to isolate sounds (e.g., What is the first/middle/last sound in *run*?) They may be asked to blend sounds together to form a word (e.g., What word would we have if we put these sounds together? /j/-/u/-/m/-/p/). They may be asked to segment words into their constituent parts (e.g., Tell all the sounds you hear in the word *dog*).

A sampling of tasks is presented in Figure 4, with examples for syllable, onset-rime, and phoneme units. There is evidence to suggest that some tasks may be easier than others (see

Adams, 1990; Smith, Simmons, & Kameenui, 1998; Yopp, 1988). For example, matching sounds (especially initial sounds) is one of the easier tasks, and more difficult may be the ability to blend sounds together to form words. The ability to segment spoken words into their constituent parts may be more difficult still. However, the difficulty of the task depends in part upon the number of sounds (fewer sounds are easier than more), which sounds they are (liquids are typically easier than nasals or stops), and their location in the word (middle sounds are more difficult to attend to than initial or final sounds). (See McBride-Chang, 1995, for a discussion.) Therefore, it is much too simplistic to identify a hard-and-fast order in which operations should be presented. Nevertheless, we provide a possible order of what appears to be easier to more difficult operations for many children, given that the same types of sounds, the same number, and the same location are the focus of attention. This information is offered only to support the teacher in making thoughtful decisions about potential sound manipulation activities and is not intended to be prescriptive.

Use of cues. A third dimension of phonemic awareness instruction to consider is the use of cues. Some activities may be strictly oral. These include games, activities, poetry, stories, or songs that demand attention strictly to the spoken language itself. Other activities may make use of some sort of cue or concrete manipulative. Many successful training studies include concrete representations of sounds in order to make mental manipulations more overt (e.g., Ball & Blachman, 1991). For instance, auditory cues are in play when children are asked to clap the number of syllables they hear in a spoken word. Visual cues are

Figure 4
Types of sound manipulation with examples using different linguistic units

	Syllable	Onset-rime	Phoneme
Matching	Do these start the same? <i>sandwich sandbag</i> (yes)	Do these start the same? <i>start stand</i> (yes)	Do these start the same? <i>cat kite</i> (yes)
Isolation	What do you hear at the beginning of <i>under</i> ? (/ʌn/)	What do you hear at the beginning of <i>black</i> ? (/b/)	What do you hear at the beginning of <i>bug</i> ? (/b/)
Substitution	What word would you have if you changed the /bā/ in <i>baby</i> to /may/? (<i>maybe</i>)	What word would you have if you changed the /bl/ in <i>black</i> to /cr/? (<i>crack</i>)	What word would you have if you changed the /ch/ in <i>chain</i> to /r/? (<i>rain</i>)
Blending	What word would you have if you put these sounds together: /pʌp/-/py/ (<i>puppy</i>)	What word would you have if you put these sounds together: /pl/-/ane/ (<i>plane</i>)	What word would you have if you put these sounds together: /p/-/l/-/ā/-/n/ (<i>plane</i>)
Segmentation	Tell the parts you hear in this word: <i>table</i> (/tā/-/ble/)	Tell the sounds you hear in this word: <i>spoon</i> (/sp/-/oon/)	Tell the sounds you hear in this word: <i>dog</i> (/d/-/ol/-/g/)
Deletion	Say <i>napkin</i> without the /kin/. (<i>nap</i>)	Say <i>grin</i> without the /gr/. (<i>in</i>)	Say <i>meat</i> without the /m/. (<i>eat</i>)

used when blocks or chips represent sounds. Kinesthetic cues are used when children jump as they repeat sounds. Finally, some activities may incorporate the use of letters as children manipulate and reflect on sounds in speech. In fact, the combination of phonemic awareness activities and letter-sound instruction has been found to be particularly supportive of children's emerging understanding of the alphabetic principle (Bradley & Bryant, 1983; Byrne & Fielding-Barnsley, 1993; Hohn & Ehri, 1983), although the optimal timing of combining these aspects of literacy instruction remains unclear. (Note that once letters are attached to the sound manipulation in phonemic awareness instruction, the activity also becomes a phonics activity. This overlap explains some of the confusion between the terms *phonemic awareness* and *phonics*.)

Time

How much time should be devoted to phonemic awareness instruction? Training pro-

grams described in the research literature suggest that relatively modest amounts of time result in increases in phonemic awareness performance (Brady & Moats, 1998; Yopp, 1997). The duration of instruction was anywhere from 10 minutes to 30 minutes per session; in some studies, instruction occurred daily; in other studies the instruction was less frequent, occurring two or three times a week. Training occurred over the course of a minimum of 3 weeks up to 2 years.

We will not recommend a particular amount of time be devoted to phonemic awareness instruction in this article, although we have seen time allocation requirements implemented in a number of school districts across the U.S. Unfortunately, time allocations do not take into account individual differences among learners. It is the *quality* of instruction and the *responsiveness* of the instruction to the individuals in the classroom that should have greater consideration than the amount of time.

We believe that phonemic awareness can be stimulated in many students in large part by providing them with linguistically rich environments—ones in which they are exposed to rich vocabulary, syntactic complexity, and decontextualized language as well as ones in which language itself is explored and experimented with deliberately. In linguistically rich classrooms, phonemic awareness activities will be incorporated intentionally into literature sharing experiences, music experiences, movement experiences, and other experiences throughout the day.

Activities for building sensitivity to sounds of speech

The activities we share here adhere to the general guidelines discussed above: They are playful, they are deliberate in focusing on the sound structure of spoken language, and they can readily be included in a comprehensive reading program. The activities are organized by size of linguistic unit emphasized—rhyme, syllables, onset-rime units, or phonemes. They demand a variety of operations, such as matching, substituting, or segmenting sounds. Some activities are strictly oral; some make use of auditory, visual, or kinesthetic cues to help children attend to sound units; and some include the relationship of letters to the sounds.

Activities that focus on rhyme

1. *The Hungry Thing* (oral)

The Hungry Thing, by Jan Slepian and Ann Seidler, is the story of a creature that asks townspeople for food by pointing to a sign on his chest that says FEED ME. When the townspeople ask what he would like to eat, he responds, "Schmancakes!" The townspeople are flustered and attempt to determine what schmancakes are. After wise men and a cook offer ideas, a little boy declares that "Schmancakes sound like fancakes sound like pancakes to me!" and the townspeople feed him some. The Hungry Thing asks for more and more food and each time the people try to identify what he wants.

The charm of this book is the play with language. Nonsense rhyming words are clues to what the Hungry Thing wishes to eat. The townspeople—and the listener—must think of rhyming foods in order to make sense of the Hungry Thing's requests.

As you read this book aloud, encourage the children to make predictions. The Hungry Thing wants feetloaf. What can that be? Pause before the little boy in the story concludes that "Feetloaf sounds like beetloaf sounds like (pause) meatloaf to me!" Allow the children to make guesses before you read "meatloaf."

After reading the book, pull out a lunchbag and announce how hungry you are. Look into the bag and tell the children what you have for lunch today. "Ah! Mogurt! I love mogurt!" Encourage the children to guess what mogurt is. Once they have figured out that mogurt is yogurt, take it out of the bag to show them and ask them how they knew. Repeat this with three or four other food items you have in the lunchbag.

Next, provide the children with paperbags, paper, and markers (or magazines with photographs of food) so they can create their own lunchbags full of food. After they draw or select and cut out their favorite foods and put them in the bag, have each child sit with a partner and provide "clues" about what his or her bag contains. "I have a piece of nizza." The partner's task is to determine what "nizza" is.

You may also create a center with plastic foods and lunchbags. Children will play with these items, retelling the story and creating rhymes as they have their peers guess what they have in their bags. A copy of the book should be available at the center.

We read this book to a group of 4- and 5-year-olds and discovered how quickly they participate in the story. After reading the Hungry Thing's first request for food, the young audience began to predict each of the other requests upon hearing the nonsense rhyme. When the story was finished, they begged to see what was inside a paperbag that was nearby. When we said that we brought some food and wondered if they could figure out what we had, they grinned with delight. "We have some napes in our lunch today." "Grapes! Grapes!" the children exclaimed. We pulled the grapes from the sack and confirmed their response. Then we said, "Oh, we also have a kanana." "Banana! Banana!" Then we showed the children a stack of paper bags and a tray of plastic foods. We encouraged them to make their own lunches if they wished and to see if others could figure out what they had. The stuffing of bags began in a fury. Bags loaded, the children then moved around the room to seek out

one another, parent volunteers, and the teacher. "Look! Look! I have cherries—no, I mean terries!" "I have a pamburger." Children shared their own "lunch" items and guessed one another's lunch items. (See Photo 1.) The bags and plastic foods remained on the table for the day, alongside the book, and children made frequent visits to the center. The book is often requested during story time.

You may also wish to follow a reading of the story with placing a FEED ME sign around your neck. Distribute cards with pictures of foods and begin making requests using nonsense rhymes: "Feed me the nandwich." The child who holds the picture of the food you request (in this case, the sandwich) brings it to you whereupon you pretend to gobble it up. Give volunteers the opportunity to be the Hungry Thing as well.

The Hungry Thing Returns and *The Hungry Things Goes to a Restaurant* are two additional

Photo 1



After listening to *The Hungry Thing*, preschoolers use plastic foods and paper bags located at a literacy center to create their own lunches. Spontaneous retellings and language play often occur at this time. Photo by Hallie Kay Yopp

books by the authors that follow the same pattern. Read these at a later time and include menus and food trays at a center so children may engage in play with these items, too. (See Bishop et al., 2000, and Yopp, 1995, for children's books that draw attention to sounds.)

2. Twenty Kids Have Hats (oral)

The book *Ten Cats Have Hats* by Jean Marzollo is a counting book of rhymes: "One bear has a chair, but I have a hat. Two ducks have trucks, but I have a hat." Read the book aloud to the children, and invite predictions. "Five pigs have . . ." The children may respond with *wigs* or *twigs* or *figs*. (Picture clues will allow them to predict the author's rhyme. Because you want the students to attend to the sound clues, you may wish to hide the pictures on the first reading.) Ask the children how they made their guesses. "Why did you guess wigs/twigs/figs?" Children who have not discovered the author's rhyming pattern will hear their peers pointing out the rhyme element. Prompt the children to listen for rhymes as you read further. Continue to encourage predictions.

After sharing the book, create a class big book about students who have hats. Each child selects a number, dictates to an adult a rhyme that follows the pattern in the book, and then illustrates the rhyme. For example, Fatima may be responsible for "one," Kevin may be responsible for "two," and Phyllis may be responsible for "three." Fatima might say, "One dog has a frog, but I have a hat" and paint or otherwise illustrate one dog with a frog. Then each child paints a picture of himself or herself wearing a hat. Compile the book from one to however many children you have. Teacher Bev Maeda had 20 kindergartners in her multiage class one year. Her students made the book pictured in Photo 2: *Twenty Kids Have Hats*. After each child's rhyme, insert the author's painting of himself or herself wearing a hat. This student-created book becomes part of the classroom library.

3. "The Ants Go Marching" (oral)

Many songs make use of rhyme. The song "The Ants Go Marching" is an excellent example. Once children catch on to the pattern, they may create their own verses. While marching in a line, children sing the following:

Photo 2



Two pages from one group of kindergartners' version of Ten Cats Have Hats. Photo by Hallie Kay Yopp

The ants go marching one by one,
Hurrah! Hurrah!
The ants go marching one by one,
Hurrah! Hurrah!
The ants go marching one by one,
The little one stops to have some fun,
And they all go down to the ground,
To get out of the sun.
Boom! Boom! Boom!

The song continues with the ants marching two by two, three by three, and so on with any appropriate corresponding rhyme.

We observed kindergartners singing and marching around their classroom to this song. Each time the group sang, "the little one stops to—" a different child proposed a rhyming lyric

and everyone mimed the action. Then they all marched lower and lower, bending over, as they "go down to the ground...."

"Down by the Bay" is another song that offers children the opportunity to create their own lyrics. After learning verses such as "Did you ever see a whale with a polka dot tail?" and "Did you ever see llamas eating their pajamas?" children create their own verses such as, "Did you ever see a shark strolling in the park?" We sing "The Corner Grocery Store" with our own young children as we go to the market. The original lyrics include, "There were peas, peas walking on their knees at the store, at the store" and similar silly rhymes. We develop rhymes for the food items on our market lists such as "There

was steak, steak, going shake shake at the store, at the store." See Yopp and Yopp (1996) for a collection of songs that draw attention to sounds.

Activities with syllable manipulation

1. "Clap, Clap, Clap Your Hands" (cues)

This popular traditional song is sung in many classrooms across the U.S. Like many songs, it may readily be adapted for language manipulation (Yopp, 1992). In this example, we modify "Clap, clap, clap your hands" to encourage blending syllables. The first two verses below are traditional (there are many more); these are followed by an adaptation.

Clap, clap, clap your hands,
Clap your hands together.
Clap, clap, clap your hands,
Clap your hands together.

Snap, snap, snap your fingers.
Snap your fingers together.
Snap, snap, snap your fingers.
Snap your fingers together.

Say, say, say these parts.
Say these parts together.
Say, say, say these parts,
Say these parts together:

Teacher: moun (pause) tain (children respond, "mountain!")

Teacher: love (pause) ly (children respond, "lovely!")

Teacher: un (pause) der (children respond, "under!")

Teacher: tea (pause) cher (children respond, "teacher!")

This example suggests two-syllable words. However, once children are comfortable with the activity, you may include words with three or four syllables.

2. How Many Syllables in a Name? (cues)

Read the story *Tikki Tikki Tembo* by Arlene Mosel about a pair of Chinese brothers, one of whom has a very long name ("Tikki Tikki Tembo No Sa Rembo Chari Bari Ruchi Pip Peri Pembo") and the other of whom has a very short name ("Chang"). After reading and discussing the story, encourage your students to say the two boys' names. Say them again and this time clap with each syllable that is said. Tikki Tikki Tembo's name will have 21 claps. Chang's name will receive one clap.

Then have your students try clapping the syllables in their own names. As a group, say each child's name and clap as you separate the syllables. *Erica* would be said "Er" (with a clap)

- "i" (clap) - "ca" (clap). *Richard* would be said with two claps. Further develop the activity by placing colored pieces of paper in a pocket chart as you say each syllable in a particular child's name. Point to each piece of paper as you say each syllable. Later, let children work at tables to glue the appropriate number of colored pieces on a piece of drawing paper to represent the number of syllables in their names. Encourage them to draw pictures of themselves. *Erica*, for example, takes three pieces of colored paper from a pile in the center of the table and glues them side by side at the top of a piece of drawing paper. (See Photo 3.) She then draws a picture of herself. Afterwards, children move around the room with their papers in hand and group themselves with others who have the same number of colored pieces glued on the drawing paper. *Erica* will stand by others who have three colored pieces glued on their papers. As the others in the class listen, ask each child in a group to say his or her name. Encourage all students to say the syllables as each name is slowly said. Comment that they do, indeed, each have the target number of syllables. ("Yes! *Jean*, *Bill*, *Juan*, and *Li* each have one beat! Let's go to our next group. Let's say their names: *Terry*, *José*, *Peter*, *Danny*. Do they each have two beats? Yes!" and so on.) Develop a bar graph reflecting the number of students that have a given number of syllables in their names.

As a follow-up activity, you may wish to use clapping when taking attendance for several days, clapping the number of syllables as you call each child's name. And at dismissal time you may clap once and anyone with a one-syllable name may leave. Clap twice and students with two-syllable names may leave, and so on.

Later share the story *Tingo Tango Mango Tree* by Marcia Vaughan in which an iguana is named *Sombala Bombala Rombala Roh*, a flamingo is named *Kokio Lokio Mokio Koh*, a parrot is named *Dillaby Dallaby Doh*, a turtle is named *Nanaba Panaba Tanaba Goh*, and a bat is named *Bitteo Biteo*.

3. "Humpty Dumpty" (cues)

This familiar nursery rhyme may be used in a syllable blending activity. Each child should have about five separate cubes of the type that can be snapped together. Recite the nursery rhyme. Tell the children that *Humpty Dumpty*

Photo 3



Children share their work after representing the number of syllables in their names with pieces of paper and drawing self-portraits. Photo by Hallie Kay Yopp

broke and that you have some broken words, too. Ask them if they can help to put the words back together again. Say the parts of a word (e.g., pop-si-cle) and ask the children to repeat the parts by picking up a cube for each part they say. In this example, they pick up three cubes, one at a time. Then they snap the cubes together, saying each part and then the entire word. Are they able to help Humpty Dumpty? Repeat the process, reciting the poem and then asking the children to put together a new “broken word.”

4. Teacher, May We? (cues)

As in the game Mother May I? have your students line up some distance away and face you. Give directions that require children to count the number of syllables in a word such as “You may jump the number of times as there are syllables (some teachers say “beats” or “chunks” for syllables) in the word *bunny*. Students respond, “Teacher, may we?” With your affirmative response, the children say “Bun—ny!” and each child moves two jumps forward. Alter the number of syllables in the cue words you provide (e.g., from one syllable as in *good* up to four—or more—syllables as in *motorcycle*) and

vary the types of movement the students may make (e.g., take small steps, take giant steps, or skip). The first student to reach you may give directions on the next round.

Activities with onset-rime manipulation

1. Mail a Package (oral)

Use a large box or container with a lid to serve as a mailbox. Cut a slit in the lid through which cards can be deposited into the box or container. Give each child a picture card of an object. To ensure familiarity with the objects, ask each child to show his or her card to the class and name the object. The objects should be single-syllable words such as the following: *cup, ring, flag, street, rug, dog, cat, plum, brick*. In this activity, the teacher says the name of an object by segmenting it into its onset and rime components (c-up, r-ing, fl-ag, str-eet, and so on). The child who has the picture of the object named holds the card in the air, blends the sounds to say the word, and brings the card forward to mail. You may wish to recite the following chant prior to each turn.

A package! A package!
 What can it be?
 A package! A package!
 I hope it's for me!

2. Going on a Word Hunt (cues)

Read *We're Going on a Bear Hunt* by Michael Rosen. Then propose to the children that you go on a word hunt. Have children sit on the floor with their feet together and their knees bent up. Everyone slaps their toes, then slaps their knees with the beat of the chant. Keep the rhythm going throughout the chant. The teacher begins and the students echo.

Teacher:	Going	on	a	word	hunt!
	Slap toes	slap knees	slap toes	slap knees	
Students:	Going	on	a	word	hunt!
	Slap toes	slap knees	slap toes	slap knees	
Teacher:	What's	this	word?		
	Slap toes	slap knees	slap toes	slap knees	
Students:	What's	this	word?		
	Slap toes	slap knees	slap toes	slap knees	
Teacher:	/m/	(pause)	/ap/	(pause)	
	slap toes		slap knees		
Students:	/m/	(pause)	/ap/	(pause)	
	slap toes		slap knees		
Together:	mmmmmmmmmmmmmmmmmmmmmap			map!	
	slide hands from toes to knee			slap knees	

Again, use single-syllable words such as *light, six, man, van, no, zoo, fist*. We also recommend that you use words that begin with continuant sounds so that they may be elongated as hands are sliding from the toes to the knees for the final part of the chant (as in mmmmmmap, above). Continuant sounds include /f/, /v/, /m/, /n/, /r/, /s/, /v/, /w/, /y/, /z/, /th/, /sh/ and vowel sounds. (If you select words that begin with a vowel, such as *it*, there is no onset to separate from the rime. This activity would be used to segment and blend phoneme level units, in that case.)

3. Make a Word (letters)

Select rime units such as *at* to focus upon. Have a card with the letters *at* written on it. In a bag have letter cards that may serve as the onset for this family. A child draws a card from the bag. The class says the sound of the letter drawn, blends it with the *at* and determines whether or not a real word is made. Students give a thumbs up or thumbs down. For instance, a student draws the card *b*. Students say /b/ and blend it with /at/, /b/—/at/: bat. Everyone indicates thumbs up because this is a real word. Someone else draws the letter *g*. Students say /g/—/at/: gat! Thumbs down for this one.

Activities with phoneme manipulation

1. *Cock-a-doodle-moo!* (oral)

In the book *Cock-a-doodle-moo!* by Bernard Most, a rooster wakes up one morning to discover that he cannot crow above a whisper. So the farm animals sleep on. “Z-z-z-cheep,” snore the chicks. “Z-z-z-quack,” snore the ducks. The rooster tries desperately to teach the cow to “cock-a-doodle-doo” so that she can awaken the farm animals. The cow struggles with this task, substituting phonemes in many ways. She says, “Mock-a-moodle-moo!” and “Rock-a-poodle-moo!” but she just cannot say “cock-a-doodle-doo.” When she gets close enough—with “Cock-a-doodle-moo!”—the rooster encourages her to awaken the farm animals. The animals awaken with a laugh: “Oink-ha!” “Quack-ha!” “Meow-ha!” and so on.

In this book, the author engages in phoneme addition and phoneme substitution. As the story is read aloud, children will join in with the phoneme addition, anticipating the “z-z-z” and the “ha” added to the animal sounds. They will enjoy listening to the cow’s manipulation of sounds. As you read, talk about what the author is doing in this story to make it so entertaining.

After reading the story, think about farm animals that are not mentioned in the book. How would the author have a goat snore? A sheep snore? How would an awakening horse sound? Reread each of the ways that the cow tried to crow. Have your students think of other ways to say “cock-a-doodle-doo.” Encourage as many children to share as possible. (You may wish to write some of their ideas on chart paper or an erasable board, adding letters to the phonemic awareness activity. Write *cock-a-doo-*

dle-doo, erase the initial letters, and replace with letters suggested by the children. Say the new wake-up cry.) Then, think about other sound manipulations. For instance, what if the situation were altered and the pig tried to teach the cow to oink? What might the cow's attempts at inking sound like?

Place plastic farm animals at a center. Leave the book at the center, too. The children will retell the story and play with sounds as they manipulate the plastic animals. (See Photo 4.)

One of the authors read this story to a small group of preschoolers at a community nursery school. She read through the chicks' snoring, the cows' snoring, and the ducks' snoring. After hearing /zzzzzzz/ read through these pages, 4-year-old Byron interrupted and shouted, "Zzzzack!" (dragging out the initial sound in the name of a fellow student). Byron was attending to the sounds of speech and realized that one of the members of his class had a name that started with the very sound that was being repeated in the story.

2. Find Your Partners (oral)

Using a set of picture cards with which the children are familiar, distribute the cards so that

each child has one. Be sure that each card can be matched with another that begins or ends with the same sound or has the same sound in the medial position. For example, if you choose to focus on ending sounds you should select cards such as dog and flag, and hat and nut. Then tell the children that once you give the signal they are each to circulate and find a classmate whose card shares the same sound in the targeted position.

3. Bag Game (cues)

Have a large grocery bag or box that contains many small plastic bags that can be sealed so that objects do not fall out. In each of these smaller bags place one object and the number of interlocking cubes as there are sounds in the name of the object. For instance, one bag might contain a key and two cubes that are connected (representing the two sounds in *key*). Another bag might contain a dime and three cubes that are connected for the three sounds in *dime*. A third bag might contain several nails and four connected cubes for the four sounds in *nails*. To begin the activity, ask a volunteer to draw a small bag from the large grocery bag. The child opens the small bag, pulls out the object and the

Photo 4



A set of farm animals placed at a literacy center with the recently shared book *Cock-a-doodle moo!* stimulates further play with sounds and reenactment of the story. Photo by Hallie Kay Yopp

cubes. He or she names the object and then says the sounds in the object, breaking apart the cubes as he or she speaks each sound. If the child draws a bag that contains a little book, he or she would say, "This is a book. Book." Then, holding up the three connected cubes, the child would break the cubes apart one by one while saying /b/-/oo/-/k/.

4. Scavenger Hunt (letters)

Organize children into teams of about three. Give each team a bag or box that has on it a letter and picture of an object that begins with that letter. For instance, one team receives a bag with the letter *M* on it and a picture of a monkey; another team receives a bag with the letter *S* on it and a picture of a snake. Children then set off on a scavenger hunt to find objects in the classroom that begin with their target sound. Children with the *B* bag may locate a baby doll in the house-keeping center, a block in the building area, a brush in the painting area, and a book from the library corner. Children with the bag that has the letter *P* written on it may find a pencil, pen, and paper to put in their bag. Give the children enough time and support to be successful, then bring them together to state their target sound and share their objects. Then they may return their objects, trade bags, and repeat the activity.

Comments and cautions

The suggestions shared here represent the type of activities we hope to see young children engaging in with their teachers in preschool, kindergarten, and first-grade classrooms. Some of them also may be used with older children. The activities are playful and appealing while deliberately focusing attention on the sound structure of spoken language. They spring from children's literature, music, or traditional childhood games and therefore are easily incorporated into rich literacy programs. Most of these activities can be modified to focus on a different unit of sound than the one described here. For example, the Bag Game, described here for phoneme manipulation, can be used for syllable manipulation. Mail a Package, suggested for onset-rime level manipulation, can be used with rhymes, syllables, and phonemes as well. Letters easily can be added to most of the activities. Teachers should be flexible with the use of these

suggested activities and adapt them for various purposes.

Although we shared a possible sequence of instruction in Figure 4, teachers should avoid rigid adherence to a sequence. It is not the case that teachers should engage exclusively in rhyme activities for weeks before they engage in syllable activities. Likewise, we do not believe that children must "pass" one type of operation (e.g., matching) before having experiences with another (e.g., blending). Phonemic awareness development is not a lockstep process.

We urge teachers to be watchful for children who are not catching on—after multiple exposures—to games and activities such as those presented here. These children may need extra support in phonemic awareness development. It may be helpful to increase the use of concrete objects or other cues to represent sounds and to provide more phonemic awareness instruction that includes familiar letters. Also, by focusing on sounds that can be elongated, teachers are more likely to draw students' attention to those sounds. For example, notice that each of the sounds in the word *safe* can be stretched and thus exaggerated (sssssssss-aaaaaaaaa-fffffffff) whereas the initial and final sounds in *get* cannot be stretched (g-eeeeeee-t). *Get* is a poor choice, then, for an item of reflection in a phonemic awareness activity for a child who is struggling. In addition, using words with fewer phonemes can be helpful; it is easier to manipulate the phonemes in words such as *cat* and *up* (with three and two phonemes, respectively) than in words such as *lips* and *sand* (each having four phonemes).

Our hope is that phonemic awareness instruction becomes a thoughtful, conscious component of early literacy programs. Our concern is that in some classrooms phonemic awareness instruction will replace other crucial areas of instruction. Phonemic awareness supports reading development only if it is part of a broader program that includes—among other things—development of students' vocabulary, syntax, comprehension, strategic reading abilities, decoding strategies, and writing across all content areas.

In sum, we encourage teachers to provide their students with linguistically rich environments in which written and spoken language are used to learn, to communicate, to express ideas, to understand the ideas of others *and* in which

language itself is explored and examined—even the smallest parts of language. “Look at the way I write this.” “Wasn’t that an interesting word?” “My, listen to all the sounds in this word!” “Your two names start alike.” “What a sense of humor this author has! Notice the way he plays with words in this section.” By providing linguistically rich programs in which both the content and the form of language are examined we are supporting literacy development in the fullest sense.

Yopp and Yopp teach in the Department of Elementary, Bilingual, and Reading Education, California State University at Fullerton, Fullerton, CA 92834, USA. They may be contacted at hyopp@fullerton.edu and ryopp@fullerton.edu.

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