

Professional Library

Phonemic awareness

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The last dozen years can be characterized, without too much exaggeration, as the Age of Phonemic Awareness. Adams's (1990) comprehensive review of research about beginning reading established that early word identification depends on phonemic awareness. Her review had a major impact on subsequent research and especially on classroom practice. Numerous journal articles and books have been written and whole kindergarten and first-grade literacy curricula designed with the purpose of promoting young children's phonemic awareness.

As usually happens when some fact about reading and writing processes receives new and widespread attention, the results have been mixed. Certainly, some children come to early literacy instruction without the requisite phonemic awareness and should be taught it. That it can be taught is pretty widely accepted; as usual, how it should be taught is much debated. That not all children need phonemic awareness instruction is often overlooked.

Some methods for teaching phonemic awareness can be described as isolated skill instruction, others as more holistic, contextualized instruction. Some are explicitly offered as supplements to other teaching and learning about literacy in kindergarten and first grade; others are

touted as if they are the missing link, that lack of phonemic awareness is the only obstacle in the way of most children's becoming fluent readers and writers. Very few phonemic awareness programs or methods provide teachers with adequate background information about *phonemes* and *awareness* and a number of other essential linguistic constructs—information that they need in order to be wise consumers of those programs and methods.

Criteria for evaluating phonemic awareness materials

I suggest that adequate background for informed decision making about phonemic awareness instruction should include at least the following five factors:

1. *A definition of phoneme that tells how phonemes work in spoken language.* Phonemes are the smallest units of sound that matter in a language. In other words, it is the combining and contrasting of phonemes that makes words possible. Consider that in English, for example, the phonemes /d/, /u/, and /k/ are combined to make the word *duck*, and the /d/ and /t/ phonemes are contrasted when distinguishing the words *duck* and *tuck*. The difference in the pronunciations of /d/ and /t/ is slight. It is only that for /d/ you use your voice and for /t/ you don't; everything else—

how you use your tongue and throat, how you shape your lips, how you part your teeth—is identical. Yet speakers and listeners rely on that very small difference, that contrast; it is all that signals two very different English meanings, an animal that says "Quack" versus a small fold sewn into a garment.

2. *A definition of awareness that emphasizes conscious attention.* This is in contrast to the unconscious perception of and use of phonemes that drives production and comprehension of speech. Speakers and listeners don't need conscious awareness of phonemes; beginning readers and spellers do.

3. *The realization that phonemes are not discrete entities, but rather are categories within which there is much variation.* For example, even while it is important in spoken language to be able to perceive the slight difference between /d/ and /t/ in *duck* and *tuck*, it is equally important to ignore differences in pronunciations of /d/, for example in *rudder* and *radish*. This is no problem for speakers and listeners, for whom it is all automatic, all a matter of unconscious perception. It can be a problem for beginning readers and writers. To them phonemes can seem slippery constructs, difficult to identify in the stream of speech.

4. *Delineation of the differences among phonological, phonemic, and phonic.* Phonological awareness is

awareness of anything to do with the sounds of language, from intonation patterns and the sounds of words and syllables (*duck* is emphasized differently in *I saw a duck*, *Did you see a duck?* and *Watch out for that duck!*), to the sound of a phoneme. Only sounds of phonemes are involved in phonemic awareness; thus, phonemic awareness is a subcategory of phonological awareness. Phonics is use of phoneme-letter correspondences to aid word identification. It is only in phonics, and not in phonemic awareness, that spelling /d/ with a *d* and /k/ with *ck* is an issue.

5. *An appreciation of the small, albeit necessary, part that phonemic awareness plays in beginning reading and writing.* There are many other equally necessary contributors to successful reading of words and especially of whole texts. Beginning readers and writers also need, for example, concepts of print; the message concept; and appreciation of genres, text forms, and purposes of writing. Furthermore, accomplished readers and writers seldom need conscious awareness of phonemes. It helped them in the beginning stages of their mastery of an alphabetic code, but their fluent reading and writing are automatic enough that they no longer need to attend to individual phonemes and think about what letters correspond to them.

I looked at books with *phonemic awareness* or *phonological awareness* in their titles. They fall into the following two categories:

Guidebooks. These are short (less than 100 pages), written to be read in their entirety, chapter-by-chapter, with the idea that the reader will come away informed about the linguistic bases for phonemic awareness teaching and learning, and will be able to apply that information in classroom assessment and instruction.

Activity books. These are not organized as expository texts, with chapters to be read by teachers in order to learn about phonemic awareness. They are collections of things to do with children, supposedly to promote or assess phonemic awareness. Most have introductions that provide some background information for teachers about phonemes and

awareness and their roles in language. These are by far the most numerous of the phonemic awareness books, and they can be further divided into two subcategories as follows:

Activity books that include at least a fair amount of accurate and helpful linguistic background information for teachers. Some of these describe isolated skill activities; some describe more holistic, contextualized activities.

Activity books that fall way short of meeting the criteria in my list. These also include programs of mostly isolated skill work and programs of more holistic instruction. The former amount to nothing better than old-fashioned phonics activities. The latter may promote phonemic awareness, but they are not clear about—and thus will not help teachers who are unclear about—the constructs and distinctions in my list of criteria.

Guidebooks

A Basic Guide to Understanding, Assessing, and Teaching Phonological Awareness

Joseph K. Torgesen and Patricia G. Mathes. 2000. Pro-Ed (8700 Shoal Creek Blvd., Austin, TX 78757-6897, USA). 88 pp. Softcover. ISBN 0890798443. US\$18.00.

Teaching Phonics, Phonemic Awareness, and Word Recognition

Ashley Bishop and Suzanne Bishop. 1996. Teacher Created Materials (6421 Industry Way, Westminster, CA 92683, USA). 76 pp. Softcover. ISBN 1576901262. US\$9.95.

Torgesen and Mathes's guidebook is comprehensive; it meets all the criteria in my list; and it provides detailed reviews of eight standardized and non-standardized tests of phonological awareness; eight individual, small-group, and whole-class programs for instruction in phonological awareness; and four computer programs for promoting phonemic awareness. As its title suggests, it almost always uses the

broader term *phonological awareness*, but its focus is clearly on phonemic awareness. For example, a section titled "What Is Phonological Awareness?" begins, "To understand the concept of phonological awareness, one must first know what a phoneme is. A phoneme is the smallest unit of sound in a language that makes a difference to its meaning" (p. 1). In this same section, the authors define phonological awareness in terms of phonemic awareness: "Acquiring phonological awareness actually involves learning two kinds of things about language. First, it involves learning that words can be divided into segments of sound smaller than a syllable. Second, it involves learning about individual phonemes themselves" (p. 2).

Later, Torgesen and Mathes are correct and quite explicit about the difference between *phonological* and *phonemic*: "[*Phonological*] can be used when referring to all levels of awareness of the phonological structure of words.... [*Phonemic*] is frequently used to describe tasks or instructional activities that are focused specifically on the individual phonemes in words" (p. 8). But then they go on to acknowledge, "In this manual, we usually use the term phonological awareness because it is more general, but often we are referring to awareness at the level of the phoneme" (p. 8). I wish that they had preserved the distinction by using *phonemic awareness* when that is what they mean, as is the case in the majority of times they use *phonological awareness*.

Bishop and Bishop's guidebook also is comprehensive and provides additional practical information; it meets most of my five criteria. The additional practical information is in the form of suggestions for classroom applications of ideas presented in each of the chapters about phonemic awareness, the alphabet, phonics, structural analysis, sight words, and context clues. For example, Bishop and Bishop provide the Yopp-Singer Test of Phonemic Segmentation (Yopp, 1995), lists of children's books for use with each skill they discuss, sample lesson plans and extension activities, and a 100-item sight word list.

Thus, this guide goes beyond phonemic awareness to provide information about and teaching suggestions for phonics and word identification. To achieve this wider scope, Bishop and Bishop sacrifice the depth of treatment of phonemic awareness that Torgesen and Mathes provide. Bishop and Bishop, for example, never explicitly define *phoneme*; they only imply a definition—and one that is vaguer than mine in criterion 1—when they define *phonemic awareness* as “the awareness that sounds are in our language and that spoken words are made up of individual sounds” (p. 9). Bishop and Bishop’s, however, may be the more helpful of the two books for teachers who want basic information about phonemes and phonics for use in designing their own assessments and lessons.

Their going beyond phonemic awareness heightens the need for Bishop and Bishop to meet my fourth and fifth criteria. They do. For example, in satisfaction of my fourth criteria, their chapter on phonemic awareness begins,

We must remember that one goal of phonics instruction is to assist students in understanding the relationship between printed letters and speech sounds. Thus, in this chapter, we will discuss the concept of phonemic awareness—awareness of sounds in our language. It will be followed by a chapter that focuses on printed letters—our alphabet. These two chapters must precede a discussion on phonics if we want to develop a rich understanding of the process students go through as they associate sounds (phonemes) with symbols (graphemes). (p. 9)

Bishop and Bishop begin their longest chapter, the one about phonics, with the assertion, “Phonics does not work very well” (p. 21), and they end that chapter by stating, “Teaching phonics skills to students is a viable instructional process; however, it certainly is not a perfect process” (p. 48). And they go on, in the chapters on structural analysis, sight words, and context clues, to suggest ways to support students’ learning of other information, skills, and processes that together with phonics make successful reading possible. (See criterion 5.) Their emphasis throughout is on providing instruction in “a balanced environment where students are given authentic reasons to read and write and are systematically provided

with instruction that allows them to do so” (p. 72).

Activity books with some good linguistic background information

Phonemic Awareness in Young Children: A Classroom Curriculum

Marilyn Jager Adams, Barbara R. Foorman, Ingvar Lundberg, and Terri Beeler. 1998. Paul H. Brookes (PO Box 10624, Baltimore, MD 21285-0624, USA). 180 pp. Spiral bound. ISBN 1557663211. US\$24.95.

Road to the Code: A Phonological Awareness Program for Young Children

Benita A. Blachman, Eileen Wynne Ball, Rochella Black, and Darlene M. Tangel. 2000. Paul H. Brookes (PO Box 10624, Baltimore, MD 21285-0624, USA). 391 pp. Spiral bound. ISBN 1557664382. US\$49.95.

Phonemic Awareness: Playing with Sounds to Strengthen Beginning Reading Skills

Jo Fitzpatrick. 1997. Creative Teaching Press (PO Box 2723, Huntington Beach, CA 92647-0723, USA). 128 pp. Softcover. ISBN 1574712314. US\$12.98.

Phonemic Awareness Activities for Early Reading Success: Easy, Playful Activities That Prepare Children for Phonics Instruction

Wiley Blevins. 1997. Scholastic (555 Broadway, New York, NY 10012, USA). 64 pp. Softcover. ISBN 0590372319. US\$9.95.

Phonemic Awareness Songs and Rhymes

Wiley Blevins. 1999. Scholastic (555 Broadway, New York, NY 10012, USA). 64 pp. Softcover. ISBN 0590644092. US\$15.95.

Each of these books begins with an introduction that meets most or all of the five criteria I listed earlier. As their subtitles suggest, Adams et al. and Blachman et al. offer complete programs for teaching phonemic awareness. Their introductions give good basic linguistic information. Adams et al., for example, define phonemes as “the minimal units of sound that make a difference to meaning” (p. 3). About phonemic awareness, they write that it is “explicit, reflective knowledge” (p. 3) and that “[c]onscious awareness of phonemes is distinct from the built-in sensitivity that supports speech production and reception” (p. 3). (See criterion 2.)

Of all the authors reviewed here, Adams et al. are best at meeting my third criterion: “Part of the difficulty in acquiring phonemic awareness is that, from word to word and speaker to speaker, the sound of any given phoneme can vary considerably. These sorts of variations in spoken form that do *not* indicate a difference in meaning are referred to as *allophones* of a phoneme” (p. 3). Blachman et al. are especially clear about the difference between spoken language and written language, the difference that makes phonemic awareness an issue: “Explicit awareness that speech can be segmented into phonemic units, however, is not a natural byproduct of learning to speak. In fact, becoming consciously aware of these smaller linguistic units is only necessary when learning to read” (p. xiii). (See criterion 3.)

Both Adams et al. and Blachman et al. offer structured, sequential lessons. Adams et al. include a suggested kindergarten schedule with sample activities for 26 weeks of instruction and a reproducible form for recording children’s achievements in 51 activities grouped in seven categories (Listening Games, Rhyming, Words and Sentences, Awareness of Syllables, Initial and Final Sounds, Phonemes, and Introducing Letters and Spellings). This record form provides a scope and sequence of phonemic awareness skills. Blachman et al. offer 44 individual lessons, many with scripted teacher talk and expected student responses. There are 130 pages of reproducible materials, such as Say-it-and-Move-It sheets, Alphabet Picture Cards, Sound

Categorization Cards (with four pictures for a “Which one of these things doesn’t belong here?” game), and Bingo cards. Lesson 1 introduces moving a token while saying a sound; by Lesson 13, activities include use of Elkonin boxes; Lesson 44 is a “Sound Bingo” game with both letters and pictures for the short-*a*, short-*i*, *r*, *b*, and *f* initial sounds. Adams et al. present some lessons that use poetry, songs, and rhyme stories, and Blachman et al. sometimes place target sounds or words in a text, such as “The Adventures of Ed the Cat,” which the teacher tells by stretching out the pronunciation of words such as *mad* and *cat* and then asking the students to “fix the words by blending the sounds and saying the words normally” (p. 113). The Ed the Cat stories, however, are insipid, and the dominant approach in both programs is isolated skill instruction and practice. Both programs are among the eight instructional programs reviewed in more detail in Torgesen and Mathes.

All of these activity books, by their very nature, are more prescriptive and teacher centered than the best holistic instruction. Still, Fitzpatrick’s program leaves more room for teacher and student choice and creativity than do those of Adams et al. and Blachman et al. (Fitzpatrick’s is also less comprehensive). Fitzpatrick advocates teaching phonemic awareness “in meaningful, interactive games and activities” (p. 7) and admonishes,

[K]eep in mind that [phonemic awareness] is not an isolated skill. For meaningful reading development, phonological training should be incorporated into current reading materials or programs. The goal is integrated practice, so when doing the activities, choose vocabulary related to a current story or theme. (p. 7)

Fitzpatrick’s introduction gives important linguistic background information. For example, meeting my third criterion, she notes that

[S]ounds (phonemes) are abstract in nature. For example, when we say the word *dog*, the three distinct sounds that form the word are not heard separately—the phonemes are not auditorily divisible. The only way the sounds /d/ /o/ /g/ are heard is by thinking of them separately, one at a time. (p. 6)

For each activity, Fitzpatrick identifies the task and gives short lists of materials

and directions. Standard phonemic awareness techniques are included, but often with a playful twist. For example one say-it-and-move-it activity is called “Eat Your Words” and uses as tokens crackers and raisins that the children eat as they blend the sounds. Fitzpatrick organizes the activities into five levels: Rhythm and Rhyme, Parts of a Word, Sequence of Sounds, Separation of Sounds, and Manipulation of Sounds.

Fitzpatrick is clear that “[a]lthough it can have visual overtones, phonemic awareness is basically oral in nature” (p. 7). Nonetheless, she offers a separate “Moving into Print” section with activities organized by the same five levels, but with the addition of letters. She provides a Phonemic Awareness Inventory, also organized by the five levels of phonemic awareness; word lists; reproducible picture cards; rhyming sentences and stories; other game materials; and a list of recommended children’s books.

Blevins’s two books are similar in approach to Fitzpatrick’s. They have good introductions; they provide a variety of creative activities from which teachers can choose, including the songs and poems in Blevins (1999); and they are organized by level of phonemic awareness, using Adams’s (1990) five types of phonemic awareness tasks (hearing rhymes and alliteration, doing oddity tasks, blending words and splitting syllables, segmenting words by phonemes, and manipulating phonemes). The *Songs and Rhymes* book (1999) comes with an audiotape, and with each song or poem are two activities labeled for the level of phonemic awareness required.

Activity books with poor or no linguistic background information

I looked at many activity books that give little or no linguistic background information in their introductions. Most can serve as resources for teachers who want ideas, and in some cases specific lesson plans, for phonemic awareness instruction. I will mention three of these books.

KinderSounds: Skills: Hands-On Phonemic Awareness Activities

Lillian Lieberman. 2001. Monday Morning Books (PO Box 1680, Palo Alto, CA 94302, USA). 96 pp. Softcover. ISBN 1576121291. US\$12.95.

Natural Learning from A to Z: Thematic Activities and Phonemic Awareness Emphasis for Letters and Letter Sounds

Mary Jo Ayres. 1997. Natural Learning (103 Sycamore St., Leland, MS 38756, USA). 160 pp. Softcover. ISBN 0966129806. US\$19.95.

Phonemic Awareness Through Language Play

Jill Norris. 1998. Evan-Moor (18 Lower Ragsdale Dr., Monterey, CA 93940-5746, USA). 113 pp. Softcover. ISBN 1557996652. US\$14.95.

Lieberman’s is representative of activity books with many creative, sometimes holistic activities, but without adequate introductory material to help teachers understand phonemic awareness. In its list of definitions, for example, phonemic awareness is defined only as “[t]he understanding that spoken words are made up of a sequence of sounds” (p. 12). It contains 124 activity descriptions. Like those in Fitzpatrick, each activity contains short lists of materials and directions. They are organized by Adams’s five levels of phonemic awareness, but there also are two earlier levels. The titles Lieberman gives these two earlier levels betray a confusion about phonemic awareness that is consistent with the book’s poor introduction. These levels are “Phonemic Awareness for Words” and “Phonemic Awareness for Syllables,” where the foci are not on phonemes at all, but on hearing words and syllables. These may build an appropriate foundation for later attending to phonemes, but if they develop awareness, it is phonological awareness, not phonemic awareness.

Ayres’s is representative of those activity books that are not much different from old-fashioned phonics books except that they use the newly fashionable

term *phonemic awareness*. It has no introduction; it begins with "Letter A Investigations" and proceeds through the alphabet to "Letter Z Investigations," each with art, tactile, baking, counting, game, field-trip, book, and song suggestions. Most of these suggestions are unelaborated, for example, in Letter A Investigations, "Make ant cookies (raisin cookies). Pretend they are ants" (p. 6) and "Visit an airport" (p. 7). This is basically a letter-of-the-week approach. Ayers does not distinguish between phonemic awareness and phonics (see my fourth criterion); each investigation uses letters as well as sounds.

Norris's is representative of activity books that can seem to be easy answers to the phonemic awareness challenge. It offers 34 weeklong units, each with five minilessons using that week's chant, poem, or language game. It is organized around the same five levels of phonemic awareness that Fitzpatrick uses. Being given something to do each day for 34 weeks may tempt some teachers to see those 5 x 34 activities as all they need to do about phonemic awareness. Teachers may use such books in a one-size-fits-all manner and without understanding how the books' objectives fit in a larger emergent literacy curriculum.

This is especially true for teachers who lack necessary linguistic background information. Those teachers will find no help in Norris's inadequate, one-page introduction. Phonemic awareness is defined there as "knowing how spoken language works" (p. 1) and a phoneme as "an individual sound" (p. 1).

A flood of phonemic awareness books

To make informed decisions about phonemic awareness instruction, teachers need to know more than what they will teach their students. They need to know some basic linguistics; they need full understanding of the ideas I merely sketch in my five-item criteria list. The market seems flooded with phonemic awareness programs and activity books. Too many fail to provide adequate information about phonemes, phonemic

awareness, and phonics. I recommend that anyone who teaches phonemic awareness read one or both of the guidebooks I described. Torgesen and Mathes give the best linguistics tutorial and then offer detailed reviews that will help teachers to choose from published assessment measures and prepackaged instructional programs. Bishop and Bishop give a good linguistics tutorial and then help the reader to design good phonemic awareness instruction, perhaps using some of the activity books as resources, perhaps even finding them altogether unnecessary.

References

- Adams, M.J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: MIT Press.
- Yopp, H.K. (1995). A test for assessing phonemic awareness in young children. *The Reading Teacher*, 49, 20-29.

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