

POSITION STATEMENT AND RESEARCH BRIEF

Phonological Awareness in Early Childhood Literacy Development

The International Literacy Association maintains that phonological awareness has a critical role in early literacy and language development. Purposeful, efficient, and developmentally appropriate instruction in phonological awareness can support young children’s literacy and language development and help them understand how to decode and spell words, particularly when combined with instruction in both alphabet and vocabulary knowledge.

Phoneme-level awareness is the most complex level of phonological awareness because it requires the detection and manipulation of the smallest linguistic units: phonemes.

The terms *phonological awareness* and *phonemic awareness* have been used interchangeably in research and practice; however, there are important distinctions between the two. Phonological awareness (PA) is a multilevel, oral language skill typically defined as the sensitivity to the sound (or phonological) structure of spoken words apart from their meanings. Phonological (linguistic) units include syllabic (words, syllables) and subsyllabic units (onsets and rimes, phonemes).

Phonemic or phoneme-level awareness is the most complex level of phonological awareness because it requires the detection and manipulation of the smallest linguistic units: phonemes. Initial phoneme-level skills include isolating, categorizing, and blending phonemes to form words, whereas more advanced skill requires segmenting and manipulating (adding, deleting, substituting) phonemes within words. Of note, the term *phoneme-level awareness* is used here because it more accurately reflects the different levels of phonological awareness (e.g., syllable or phoneme level) than *phonemic awareness*.

How Does Phonological Awareness Develop?

Research has identified a sequence of phonological awareness acquisition that considers both the size of the linguistic unit (linguistic complexity) and the difficulty of the task (task complexity; e.g., Liberman, Shankweiler, Fischer, & Carter, 1974; Treiman & Zukowski, 1991; Yopp, 1988). Typically, children younger than 4 years old do not demonstrate phonological awareness reliably (Lonigan, Burgess, & Anthony, 2000). However, after age 4, phonological awareness progresses from larger, more concrete linguistic units (words, syllables, onset/

rimes) to smaller, more abstract units (phonemes) in overlapping phases, not lockstep stages. Put another way, although syllable level awareness is evident before onset/rime level and onset/rime level before phoneme level, demonstration of more complex levels of PA is evident even as children are mastering lesser ones (Anthony, Lonigan, Driscoll, Phillips, & Burgess, 2003).

Children also demonstrate PA through three task categories that vary in complexity: detection (identifying similar sounds), synthesis (blending smaller linguistic units into syllables or words), and analysis (manipulating linguistic units or producing examples). Detection tasks are less difficult, followed by synthesis and then analysis tasks. However, as with linguistic complexity, acquisition occurs in overlapping phases. Moreover, the size of the targeted linguistic unit, its location in the word (beginning, middle, end), and the type and amount of support provided (e.g., picture prompts, memory or motor demands) can increase or decrease the task difficulty (Cassano & Schickedanz, 2015; Stanovich, Cunningham, & Cramer, 1984; Yopp, 1988).

Acquiring phoneme-level awareness can be challenging for some children because, in English, 44 phonemes are represented by 26 letters, and because children are accustomed to attending to the meaning of words, not to the sounds within them. Additionally, phonemes are often physically imperceptible, meaning they are articulated as words are spoken. In contrast, syllable and onset/rime units are acoustically distinct in speech. Many children acquire phoneme-level awareness without explicit instruction; however, with the increased emphasis on reading acquisition in earlier grades, direct instruction of PA is often recommended, particularly for children identified as at risk for reading difficulties (Lonigan, Schatschneider, & Westberg, 2008; National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010; National Institute of Child Health and Human Development, 2000).

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Why Is Phonological Awareness Important?

Phonological awareness, particularly at the phoneme level, has a direct role in many components of literacy development including decoding and spelling. There is a link between phoneme-level awareness and decoding and encoding in alphabetic writing systems because graphemes (letters) represent phonemes (sounds) in written words. That is, phoneme-level awareness, in conjunction with alphabet knowledge, enables children to understand how graphemes are mapped onto phonemes and blended to form spoken words (Adams, 1990; Share, 1995). Additionally, PA has an indirect effect on reading comprehension because decoding skill is related to reading fluency which, in turn, aids comprehension (LaBerge & Samuels, 1974; Storch & Whitehurst, 2001).

Children who begin first grade without phoneme-level awareness may experience reading difficulties that persist throughout their elementary years (Juel, 1988; Spira, Bracken, Fischel, 2005). Specifically, without adequate levels of phoneme-level awareness, children do not understand how print works and thus can fail to deploy phonics instruction that teachers provide. Fortunately, direct phoneme-level instruction supports reading skill, particularly when combined with alphabet instruction (e.g., Ehri et al., 2001; Lonigan et al., 2008; Lundberg, Frost, & Petersen, 1988).

Phonological awareness is also linked to vocabulary knowledge. Although the precise nature of this relationship is underspecified, a preponderance of evidence has led many researchers to conclude that the acquisition of PA is rooted in vocabulary development (e.g., Dickinson, McCabe, Anastasopoulos, Peisner-Feinberg, & Poe, 2003; Lonigan, 2007; Metsala, 1999; Whitely, Smith, & Connors, 2007). On the basis of this evidence, assuming that younger preschoolers (e.g., 4 years and under) would be better served in environments that emphasized vocabulary development and not phonological awareness skill (see California Department of Education, 2010), is reasonable.

Phonological awareness is also important for the literacy development of emergent bilinguals because PA knowledge developed in one language can transfer to another (Chiappe & Siegel, 1999; Dickinson, McCabe, Clark-Chiarelli, & Wolf, 2004; Durgunoglu, Nagy, & Hancin-Bhatt, 1993; López & Greenfield,

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2004). For example, once a child can attend to sounds in one language, that knowledge can be applied to all of the languages the child knows. The ease of transferability of PA, however, is related to the similarities and differences between the languages' phonological structures and writing systems (e.g., Bialystok, Luk, & Kwan, 2005).

Guidelines for Practitioners

Currently, PA is emphasized in early literacy curricula because of its recognized impact on literacy acquisition. Clearly, the preschool and kindergarten years provide important opportunities to develop skills associated with later literacy achievement. Yet devoting significant portions of instructional time to PA has minimal benefits and comes at a high cost of other areas of the curriculum (e.g., oral language, science, art, numeracy) not being given adequate attention. Thus, PA instruction must be purposeful, highly efficient, and focused primarily on skills that support literacy development. With that goal in mind, we have identified the following guidelines for instruction.

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Use a Broad Range of Oral Language Experiences

Oral language experiences with rhyming texts (e.g., poems, songs, chants, nursery rhymes), as well as opportunities to play with words, can support multiple levels of phonological awareness while also teaching new vocabulary and print knowledge. In addition to exposure to the sounds, rhymes, and rhythms of language, practitioners should direct children's attention to the sounds within meaningful words (e.g., their names) and playfully manipulate those sounds by segmenting and blending them. This intentional yet playful focus on language helps children "tune in" to the sound structure of words while also building children's oral language and interest in how language works.

Begin and Stay With Phonemes

Older preschoolers and kindergarteners can be taught to blend and segment initial phonemes without receiving syllable-level instruction first (Ball & Blachman, 1991; Torgeson, Morgan, & Davis, 1992). In fact, 4- and 5-year-olds who receive syllable-level instruction before phoneme-level instruction are more likely to confuse syllables and phonemes during the initial

phases of phoneme-level instruction than children who receive phoneme-level instruction alone. Put simply, phoneme-level awareness is not only achievable for 4- and 5-year-olds without prior syllable-level instruction but also seems to proceed more smoothly when children do not need to overcome a learned focus on syllable units (Ukrainetz, Nuspl, Wilkerson, & Beddes, 2011). If children do exhibit difficulty attending to the sounds within words, a brief focus on the more accessible syllable unit can be used. This introduction can include a few weeks of syllable blending and segmenting before progressing to phonemes: initial phonemes first and then phonemes in other locations in words (Schickedanz & Collins, 2013).

Use Meaningful, Multifaceted Instruction to Reinforce Phoneme–Grapheme Associations

Combining phoneme-level instruction with alphabet knowledge is both effective and efficient in helping children understand the associations between phonemes and graphemes. Further, demonstrating how phonemes are mapped to graphemes during teacher-modeled and interactive writing opportunities facilitates a deeper understanding of how they work together in reading and spelling. Invented spelling also allows children to practice letter–sound correspondences while also supporting phoneme-level awareness. Specifically, invented spelling requires children to segment words into phonemes and then represent those phonemes with graphemes as they engage in meaningful writing (Sénéchal, Ouellette, Pagan, & Lever, 2012).

Emphasize Vocabulary and Concept Knowledge

As noted previously, PA is likely rooted in vocabulary knowledge. Moreover, if children are unfamiliar with the words they encounter in print, decoding skill is of little value. Some research-based strategies that foster vocabulary and concept knowledge include using repeated exposures to sophisticated words during story readings (e.g., Collins, 2012; Elley, 1989), providing word learning support such as labeling, gesturing, and explaining (e.g., Sénéchal, Thomas, & Monker, 1995; Wasik & Bond, 2001; Weizman & Snow, 2001), and engaging children in extended conversations about interesting topics (Corrow, Cowell, Doebel, & Koenig, 2012).

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