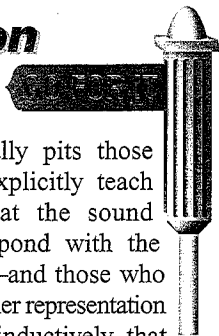


Phonics Instruction Go For It!



Controversy about phonics usually pits those who contend that instruction should explicitly teach children the alphabetic principle—that the sound stream of alphabetic languages correspond with the printed representation of that language—and those who believe that printed language is simply another representation of spoken language that is best learned inductively, that children can best become capable of understanding print by employing their syntactic and semantic competencies as well as phonology to understand what they read (Adams, 1990; Chall, 1967; Smith, 2004). Controversy about phonics dates to the 1920s when an “experience-based approach” to early reading came to the US from Great Britain (Hall, 1981; Mathews, 1966; Stauffer, 1980). The experience-based approach—which morphed into the language-experience approach and then the whole-language approach—emphasized children’s natural acquisition of the alphabetic principle. Although there is general agreement among reading scientists that students of teachers who teach explicitly and systematically the alphabetic principle will read more accurately, fluently, and with greater comprehension, there is still controversy about what “phonics” means.

What Is It?

Some confusion about the meaning of the term “phonics” revolves around whether it refers to a method of teaching or a content to be learned. In this *Alert!* we treat phonics as a method—an instructional approach that teaches children the systematic relationship between letters and sounds, and how to use that system (the alphabetic principle) to read words. According to *The Literacy Dictionary*, phonics instruction is “a way of teaching reading that stresses the symbol-sound relationships, used especially in beginning reading” (Harris & Hodges, 1995, p. 186). The National Reading Panel (NRP) employed a similar definition: “Phonics instruction is a way of teaching reading that stresses the acquisition of letter-sound correspondences and their use in reading and spelling” (2000a, p. 2-89). Later in this *Alert!* we define different types of phonics instruction and provide evidence on which types of phonics instruction provide the most help for children learning to read.

Discussions of phonics brings into play other topics, including the relationship between phonics and phonemic awareness, decoding, and the relative efficacy of different methods of promoting learners’ understanding of the alphabetic principle. We discuss these issues here.

Phonemic Awareness vs. Phonics

Discussions of phonics are confounded by confusion about whether phonological and phonemic awareness are synonymous with phonics. Phonological awareness refers to a learner’s understanding of the structure of oral language. As anyone who has listened to a native speaker of an unknown foreign language can attest, spoken language is composed a string of sounds that run together. For children learning to read, it is critical that they understand that the stream of sound is actually made up of smaller units of sound (e.g., syllables). Furthermore, they must acquire facility with attending to the individual sounds in words (the phonemes) that make up that stream in their native language. Understanding the sound stream of English at the phoneme level is necessary for learning to read English; this is called *phonemic awareness*. Instruction in phonemic awareness refers only to instruction that helps children master the sound system. Once letters are added to phonemic awareness instruction, it becomes *phonics*.

According to research synthesized in the report of the NRP (2000a), two prerequisite skills for understanding the alphabetic principle are *phoneme segmenting* and *blending*. Phoneme segmenting is breaking the sound stream into individual sounds (*phonemes*), and phoneme blending is taking those individual sounds and reassembling them to create words. Individuals who can segment and blend have much greater chances of learning to read easily, but facility with segmenting and blending is insufficient for reading (Troia, 2004). That competence must be combined with an understanding of how these phonemes are represented in printed English. Furthermore, competence in phonemic awareness advances as learners acquire competence in actually decoding print; that is phonemic awareness is a predecessor to decoding competence, but is also benefits from the thing it promotes (decoding). Decoding and phonemic awareness have a mutually beneficial, reciprocal relationship: Phonemic awareness promotes acquisition of phonics knowledge and phonics knowledge improves phonemic awareness.

Phonemic Awareness vs. Phonics

Even among those who agree that children must learn the alphabetic principle early in reading instruction, disagreement exists on how it should be taught. At one end of the phonics continuum stand the advocates of *synthetic phonics*, who posit that children benefit most from instruction that teaches blending, segmenting, and letter-sound relationships explicitly—build the whole from the parts. At the other end of the continuum stand the *analog* and *analytic phonics* advocates, who propose that children should use previous experience with print (e.g., their knowledge about the word “mom”) to help deduce the pronunciation of other words—analyze the whole to determine the parts.

There is variation along a continuum from one perspective to the other. It is represented in the five approaches to phonics instruction described by the NRP and shown in Box 1. It is important to understand that advocates of the approaches all along this continuum agree that the primary emphasis in early reading instruction should be mastery of the alphabetic principle, not on meaning alone.

BOX 1: PHONICS INSTRUCTIONAL APPROACHES	
APPROACH	DESCRIPTION
Analogy Phonics	Teaching students unfamiliar words by analogy to known words (e.g., reading brick by recognizing the -ick in the known word kick).
Analytic Phonics	Teaching students to analyze letter-sound relations in previously learned words to avoid pronouncing sounds in isolation.
Embedded Phonics	Teaching students phonics skills more implicitly and incidentally by embedding instruction in text reading.
Phonics through Spelling	Teaching students to segment words into phonemes and to select letters for those phonemes (i.e., spelling words phonemically).
Synthetic Phonics	Teaching students explicitly to convert letters into sounds (phonemes) and then blend the sounds to form words.

Adapted from National Reading Panel, 2000a, p. 2-99.

For Whom Is It Intended?

Beginning readers and older students who do not know how to read accurately will benefit from phonics instruction. For children who are just learning to read, phonics instruction is important because it helps form the bridge to decoding competence, which in turn helps develop reading fluency and comprehension, thus promoting learning from printed materials. For students with difficulties in decoding, phonics is important because it helps students to learn that they must derive the spoken message from the print on the page, not from the pictures or imagined content.

How Does It Work?

Phonics instruction provides students the connection between understanding spoken and written language. The logic of the argument is compelling: When learners acquire the alphabetic principle, their comprehension of print is limited primarily by their comprehension of spoken language. When readers can turn print into spoken language, they only need to be able to understand what they have just said while reading. Without mastery of the alphabetic principle—which is best learned through phonics instruction—children have less ability to decode novel words encountered in print. Phonics instruction is important because it is more efficient and effective than other methods of teaching reading.

Phonics instruction works by explicitly and systematically showing the relationship between spoken and printed language. For young children, understanding the relationship between print and speech is challenging. There are at least 40 English phonemes represented by the 26 letters of the alphabet; some of the letters are rarely used and other spoken sounds are represented by the same letters (/k/ and /s/ represent the possible two sounds of c; “long a” can be spelled many ways).

Given the complexity of written forms of English, it is important for phonics methods to use scaffolding systematically, making the task of acquiring facility with the alphabetic principle easier for learners. Instruction must be *explicit* and *systematic*, so that the alphabetic principle is transparent.

Recently, the terms explicit and systematic have almost become cliché. Before dismissing the terms, it is important to examine what they actually mean. Adams (2001) cited *Webster’s Dictionary* (Merriam-Webster, 1983) defining the two terms (see Box 2) to explain their relationship to phonics instruction:

The goal of systematic phonics instruction is one of maximizing the likelihood that whenever children are asked to learn something new, they already possess the appropriate prior knowledge and understandings to see its value and learn it efficiently and productively (Adams, 2001, p. 74).

The goal of explicit instruction is one of helping children to focus their attention on the relations that matter, because, again, that which one learns depends on that to which one attends (Adams, 2001, p. 75).

BOX 2
<ul style="list-style-type: none"> • Systematic—related to or consisting of a system; presented as a coherent body of principles; methodical in procedure and plan; and concerned with classification (p. 1199). • Explicit—fully revealed or expressed without vagueness, implication, or ambiguity; leaving no question as to meaning or intent (p. 483).

We must ensure that we teach students the alphabetic system in such a way that: (1) Students have the knowledge necessary to learn the new skills we are teaching, and (2) Students know exactly to what they should be attending. Although many phonics programs may be organized to help ensure systematic instruction, it is important to understand the underlying logic. There is no one sequence of instruction that can serve as a prescription for phonics, but there are guidelines that should be considered when teaching students the alphabetic system. . .

Guidelines For Teaching Phonics Systemically

- Teach letter-sound correspondences in a sequence that introduces the most common sound for a new letter, begin with letter-sound correspondences that are most useful (e.g., high utility), and separate auditorily and visually similar letters (Carnine, Silbert, Kameenui, & Tarver, 2004).
- Provide practice with connected text. Although the benefit of using decodable text needs further investigation, evidence suggests that text should be composed of a high percentage of words that contain sounds that students have learned (Juel & Roper-Schneider, 1985).
- Consider ease with which words can be decoded (e.g., two-letter words and consonant-vowel-consonant words are easiest to decode; continuous sounds are easier to blend than stop sounds.)
- Phonics instruction should be extended to include more complex patterns (e.g., -vce), letter combinations (e.g., ar, oo, ai), and multi-syllable words.
- Decoding instruction should be extended beyond simple phonics to morphological elements (e.g., affixes), structural analysis (e.g., connection between *comb* and *combine*), and so forth.

How Adequate Is The Research Knowledge Base?

A review of the extant literature on phonics instruction suggests that there is an adequate research knowledge base on which to draw conclusions about its efficiency (NRP, 2000b). The NRP identified 75 studies that met the initial criteria for inclusion in their meta-analysis; 38 were ultimately used in the statistical analyses. Analyses resulted in 66 different comparisons. Although the NRP employed rigorous standards for selecting studies for inclusion, some of the studies were quasi-experimental. However, these data were disaggregated and effect sizes were determined for experimental designs using random assignment. Results indicated that effect sizes were almost the same for experimental studies and quasi-experimental studies.

How Effective Is It?

Most experts in early reading consider phonics instruction superior to other methods of teaching reading. In comparisons of students' outcomes, phonics is superior to whole-word instruction, whole-language methods, and related approaches that de-emphasize acquisition of the alphabetic principle. Specially designed studies (e.g., Bond & Dykstra, 1968), large-scale comparisons (e.g., Abt Associates, 1976-1977), and comprehensive reviews (e.g., Adams, 1990; Chall, 1967; NRP, 2000a, b; Snow, Burns, & Griffin, 1998) consistently show that phonics approaches in beginning reading produce better outcomes in (a) decoding, (b) comprehension, and (c) collateral skills (e.g., spelling) than do alternative methods.

The relative benefits of phonics instruction are apparent when comparing the most rigorous studies of reading instructional methods, as the NRP (2000b) did. Figure 1 shows the benefits of various phonics approaches in comparison to control conditions across 38 studies. From those 38 studies, 66 treatment-control statistical comparisons were conducted. The comparison instruction was, essentially, the whole-language method of teaching. Box 3 summarizes findings of the meta-analysis conducted by the NRP.

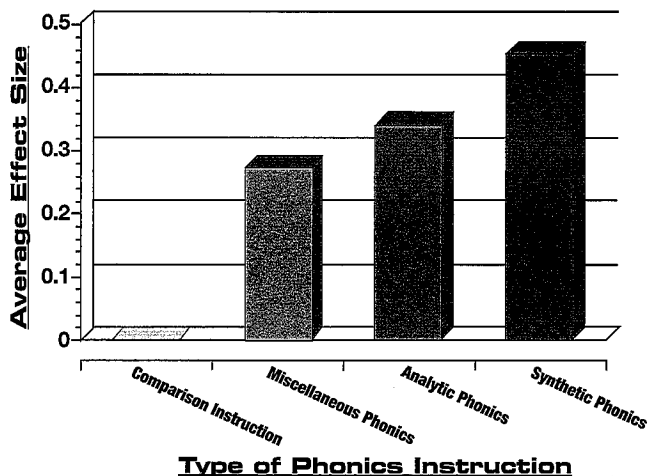
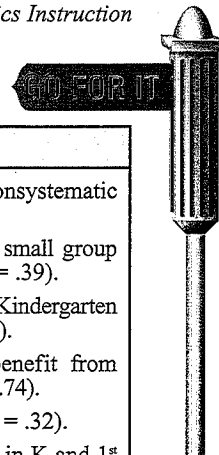


Figure 1: Relative Effects of Different Types of Phonics Instruction

Box 3

- Systematic phonics instruction is better than nonsystematic phonics ($d = .44$).
- Phonics instruction is effective in various settings: small group ($d = .43$); one-on-one ($d = .57$); and whole class ($d = .39$).
- Phonics instruction has the largest impact early: Kindergarten ($d = .56$); 1st grade ($d = .54$); after 1st grade ($d = .27$).
- Young students at risk for reading disability benefit from phonics—Kindergarten ($d = .58$) and 1st grade ($d = .74$).
- Students identified as LD benefit from phonics ($d = .32$).
- Phonics affects spelling growth of young students in K and 1st ($d = .67$), but not older readers.





What Questions Remain?

Unanswered questions from the extant literature are related to the pace and sequence of phonics instruction. A finding of the NRP suggests that phonics instruction should begin early (i.e., kindergarten or first grade), however, studies about the rate of letter instruction are not available. Carnine et al. (2004) suggests that one letter every second or third day may be an optimal rate for students with little alphabet knowledge, however, this rate has not been substantiated. Likewise, no specific sequence of instruction has been identified for phonics instruction.

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About the Authors

Paige C. Pullen, who received a Ph.D. from the University of Florida in 2000, is an associate professor at the University of Virginia's Curry School of Education. Her primary area of interest is the prevention of and effective instruction in reading disabilities. She is the author of articles and co-author of two books, *Students with Learning Disabilities and Phonological Awareness Assessment and Instruction: A Sound Beginning*.

John Wills Lloyd, who received a Ph.D. from the University of Oregon in 1976, is professor of education at the University of Virginia's Curry School of Education. Lloyd specializes in learning and behavior problems, reading instruction, and research methods. His studies of the characteristics of students with learning and behavior problems and of procedures for addressing those problems have appeared in special education and behavioral psychology journals.

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