

## Phonics, Phonological Awareness, and the Alphabet

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### Good News

Consider the list of factors below that are related to learning to read. Select the two that you think are probably the most powerful predictors, the ones that are most highly correlated with success in early reading:

- Phonemic segmentation
- Letter naming (knowledge of the alphabet)
- Peabody Picture Vocabulary (a measure of oral language and IQ)
- Father's occupational status (a measure of socio economic status)
- Parents reading to children
- Sex
- Age
- Parents read in their spare time
- Preschool attendance

If you are like many teachers you may have included as one or both of your top two, whether or not the parents have exposed the children to books by reading aloud in the home, or whether the parents model an interest in literacy by reading in their spare time. We know that these environmental factors play an important role in early reading. However, according to a longitudinal study by Share et al. (1984), these factors, selected from a longer list, are in rank order. This means that the most powerful factors are the ability to isolate or segment the individual phonemes or sounds in a word and knowing the alphabet.

The importance of the first two factors should not devalue experiences such as reading aloud to children. However, look at the factors on this list and ask yourself which ones teachers can do anything about. As educators this should come as very good news! We cannot change a family's economic status as measured by the father's occupation. We would have limited success convincing parents to read more in their spare time or even to read to their children more. But teachers can certainly do something about the top two. (Of course we can and should read to children a great deal in preschool and primary classrooms to make up for any lack of books in the home.)

Why might phonemic segmentation and alphabet knowledge be more powerful predictors than other factors? Let's consider this scenario. A kindergarten teacher has taught her students, who are not yet true readers, to memorize the words to a short jingle: Sam, Sam the baker

man/washed his face in a frying pan. The two lines are written on a chart and the children are asked to come forward and point to the words as they recite it from memory. If a child has some awareness of oral language, he or she might segment the first line into four rhythmic units: Sam/Sam/the baker/man. Or a child might segment it into six syllabic units: Sam/Sam/the/ba/ker/man. Since the line has five words, a child will get off track with either one of these strategies when attempting to match spoken units to the words on the page. But if the child has alphabet knowledge and the ability to segment at least an initial phoneme, then he or she may realize that when saying the word man, one should have a finger on the group of letters that has an m in it and when saying baker, the letter b should be touched. This ability to track a line of print using at least partial alphabetic clues and to self-correct when off track is known as a concept of word (Morris, 1981, 2003). A concept of word enables a child to actually find the words on the page, certainly an indisputable skill if one is to learn to read. Without a concept of word no amount of book exposure or interest in reading or oral language ability will help a child identify the words out of the sea of letters on a page of print.

### The Alphabet

It should come as no surprise that knowing the graphic symbols of the alphabet is critical to learning to read, and this knowledge has been long identified as the most highly correlated factor in numerous studies (see reviews in Chall, 1967, Adams, 1990, Snow, Burns & Griffin, 1998, NRP

2000). Reading is, after all, the process of translating visual symbols on the printed page into meaningful language. Many children learn their letters before they come to kindergarten through playful interactions with puzzles, magnetic letters, videos, bingo games, software, television programs, etc. They learn them from siblings, from parents, and from child care providers. It takes several years for most children to learn to recite the letters in order to recognize and name the different forms of letters (uppercase and lowercase), and to write the letters for themselves. Lucky children from literacy rich homes have both the time and adult attention that it takes to master the alphabet prior to kindergarten.

If children come to kindergarten not knowing most of their letters, then teachers need to plan intensive instruction in the early part of the school year. Children without alphabet knowledge in today's kindergartens may be at risk in the current environment of high expectations. Twenty years ago children were expected to learn to read in first grade. Now children are being retained in kindergarten if they are not able to read at proscribed levels. A "letter a week" will not cut it—27 weeks is more than two thirds into the school year.

What should instruction in alphabet look like? Along with systematic coverage of the letters, teachers should be sure that students are shown why letter knowledge is important. Activities such as "name of the day" (Cunningham, 1995) and interactive writing (Button, Johnson & Furgeson, 1996) not only show students how letters are used to record important information but teach a variety of concepts related to print. Asking students to write, spelling as best they can, to label drawings, and to make journal entries is another impetus for learning letters. Children can take part in shared reading (Holdaway, 1979) even if their alphabet knowledge is limited. Indeed, shared reading, in which children use their memory and knowledge of language to support their initial attempts to read, is one more way to demonstrate the value of learning those letters. Teachers should direct children's attention to letters on charts, in big books, in little books, on posters, on T-shirts, and everywhere print occurs. Children are most likely to master letters quickly when they are seeing them and using them all day long for a variety of purposes.

Alphabet knowledge includes not only visual recognition but knowledge of the letter names, and letter names give

children insight into the sounds they represent (Adams, 1990, Bear et al, 2004). The letter name for B is "bee" and it starts with /b/. The letter name for M is "em" and it ends with /m/. There are some letters that offer no clue such as H or W and some offer less useful clues such as the soft sounds of C and G but if students are exposed to alphabet books and activities that pair letters and sounds then they will begin to use letter names as a clue to sound correspondences.

### **Phonological Awareness**

Phonological awareness refers to the ability to consciously attend to sound segments of our spoken language: to syllables, onsets, and rimes, and to the smallest units known as phonemes. Phoneme tasks involve segmenting sounds in words (cat = /c/a/t/) as well as blending sounds, deleting sounds, and substituting sounds. In study after study, various measures of phonological awareness have consistently been highly correlated with success in beginning reading (Juel 1983, Adams 1990, NRP 2000, etc.). For example, Maclean, Bradley, and Bryant (1987) found that children who knew nursery rhymes and were able to identify rhyming words were more successful at learning to read than children without this kind of knowledge. Curiously, the role of phonological awareness received widespread attention in only the last fifteen years or so. Prior to that, reading teachers talked of auditory discrimination as a factor, but we now understand that much more is involved than is suggested by that term. It should come as no surprise therefore that parents and even many teachers are not fully aware of the role that it plays and are often confused about how it differs from phonics.

Phonological awareness is not something parents understand well enough to directly teach their children before school because it is an oral skill and much more abstract than the very concrete and well-defined task of naming or writing letters. Still, parents who share alphabet books, read rhyming books, such as those by Dr. Seuss, and help their children memorize songs and jingles are helping their children develop some aspects of phonological awareness indirectly. It is a rare parent who models phoneme segmentation or blending, so children are much more likely to enter kindergarten with limited phonological awareness than with limited alphabet knowledge.

Fortunately research shows that most children can be taught phonological awareness as a means to enhance

early reading achievement (i.e., Bradley & Bryant, 1983; Ball & Blachman, 1988). Such instruction need not take a lot of time (NRP, 2000), but some instructional time is critical. Teachers in kindergarten and first grade should plan activities that address phonological awareness and many resources are available including games and software. While children are learning about letters in the activities listed earlier, they can also learn about sounds. Nursery rhymes are a natural resource for not only listening pleasure and memorizing but also shared reading. During interactive writing teachers model writing letters and segmenting words into sounds. It turns out that phonological awareness, although it need not involve print since it is an oral language skill, is most readily learned in connection with print (Bradley and Bryant 1983). As children are asked to match the sounds they can hear to the letters they know, phonological awareness and alphabet knowledge are coming together and this is what we know as phonics.

### **Phonics**

Phonics knowledge depends upon those two important factors noted earlier. No phonics program will be successful unless children have alphabet knowledge and some degree of phonological awareness. It seems necessary to say something about what phonics is not before we talk about what it is. Phonics is not a method for teaching children to read. It is a tool, a knowledge set that enables children to understand the alphabetic nature of our writing system and as such it facilitates young readers' efforts to both read and spell. All reputable reading programs include some attention to phonics and this has been the case for many years, especially since the publication of Jean Chall's book, *Learning to Read: The Great Debate* in 1967. Her findings helped put an end to purely "look-say" programs. However, in all those years no phonics-based reading program has surfaced that makes learning to read especially easy. Phonics is no quick fix as some proponents would have us believe. Literature-based programs have been criticized for the lack of systematic instruction but even phonics-intensive programs that teach isolated sounds and how to blend them together before children read even one word of carefully constructed decodable text have not been dramatically more effective when carefully researched. No best method of teaching phonics has ever been established even though research does consistently show that students who have phonics knowledge get off to a better start in reading (Stahl, Duffy-Hester, & Stahl, 1998).

Why is there not a more dramatic difference? That may be because children learn phonics in at least two different ways. To begin with, children teach themselves phonics when they induce letter sound relationships in the process of reading (Thompson, 1999). They construct their own understanding of the phonic system as they match their oral language to print (Stahl, Duffy-Hester & Stahl, 1998). Initially this print may have been memorized in familiar predictable books or from charts such as our example of Sam, Sam. Students with alphabet knowledge and phonemic awareness have a distinct advantage in such self-teaching since they are more likely to notice how the sounds they say match to the letters on the page. Because some children are capable of teaching themselves phonics we should never withhold engaging whole text at the same time we are instituting a systematic phonics program. To do so limits the phonics knowledge many children are capable of learning for themselves. Children in literature-based programs that de-emphasize the systematic teaching of phonics must rely on self-teaching to learn phonics. The children who become skilled readers induce it for themselves through lots of reading practice just as children must have done during the "look-say" era of Dick and Jane. Unfortunately we cannot be sure that all children are able to do this effectively enough to make the kind of progress needed for success in school.

Children also learn phonics from the instruction provided by teachers. Such instruction might be systematic and direct or it might be incidental and random but it does involve providing children with information about how letters match to phonemes. Undoubtedly most children learn phonics through a combination of induction and instruction but since phonics is necessary to become a skilled reader it only makes good sense to address it early and in depth.

Given the importance of phonics, the issue of how to teach phonics is critical. Since no particular program has been shown to be more effective than others/ the answer does not lie in promoting any particular approach. Instead there are general principals that must be heeded.

1. Phonics instruction should be early, systematic, and explicit (NRP 2000, Stahl, Duffy-Hester & Stahl, 1998)). This does not mean that it must be skill and drill with endless worksheets to complete, but it does mean that teachers should have a good understanding of the phonics features appropriate for the level and needs of students.

Instruction should be fast paced and carefully planned, not simply left to chance or addressed only in the immediate context of something children may be reading.

2. Phonics is only one part of a total reading program and must not supplant the opportunity for children to do lots of reading in engaging text (NRP 2000, Stahl, 1992). Lots of reading offers students the opportunity to apply phonic understandings they have been taught and, as noted above, offers students the opportunity to induce phonic relationships. At the same time students will reap the other benefits associated with engaged reading such as vocabulary growth and the development of comprehension skills.

3. Phonics should help students develop automatic word recognition so that the focus of reading instruction is upon comprehension (Stahl 1992). The ability to recite rules or sound out words is not the goal of phonics instruction. Instead, readers need to be able to recognize words effortlessly and automatically (Adams, 1990). Not all effective phonics programs will require students to sound out words as a measure of successful learning. Analytic approaches to phonics begin with words students can already read. These words are then analyzed and

compared to other words in an effort to discover phonic generalizations and spelling patterns (i.e., Bear et al, 2004).

4. A good phonics program should include opportunities for students to write, spelling as best they can (Stahl, 1992). Ironically proponents of phonics are sometimes opposed to allowing students to invent spellings. However, there can hardly be a more meaningful exercise of phonics knowledge than in the act of writing. This is particularly true in kindergarten and first grade where children are learning the most basic letter-sound relationships and patterns. In a study of first graders Clarke (1989) found that children who were encouraged to invent spellings rather than to wait to be given correct spellings during writing time, did better on reading and spelling measures at the end of the year.

Phonological awareness and alphabet knowledge underpin any phonics instruction. They need not precede instruction in letter-sound relationships but should be regarded as key pieces in the literacy puzzle. Phonics understandings may develop as children learn to read but should not be left to chance. An effective early literacy program must attend to all three of these aspects to assure that all children are successful at learning to read.

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