

# Learning to Read Depends on Phonological Awareness and Alphabet Knowledge

BY FRANCINE R. JOHNSTON, Ed.D.

## 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 (breaking words into individual sounds)

Letter naming (knowledge of the alphabet)

Peabody Picture Vocabulary (a measure of oral language and IQ)

Father's occupational status (a measure of socioeconomic status)

Parents reading to children

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 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. This should not discredit the importance of experiences such as reading aloud to children. However, as educators this should come as very good news! Look at the factors on this list and ask yourself which ones teachers can do anything about? 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.



### FRANCINE R. JOHNSTON, Ed.D.

Francine Johnston is retired from the School of Education at the University of North Carolina at Greensboro, where she coordinated the graduate reading program and directed the reading clinic. She taught in public schools for twelve years as a first-grade teacher and reading specialist. She is interested in how children learn to identify and spell words and the relationship between those.

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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. A child might point by four rhythmic units: *Sam, / Sam / the baker / man.* Or a child might point by six syllabic units: *Sam / Sam / the / ba / ker / man.* When attempting to match spoken units to the words on the page a child will get off track with either one of these strategies since the line has five words. 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 in print (Morris, 1981, 2003). A concept of word enables a child to actually *find and follow* 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 learn to identify the words in 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 it 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 (upper case and lower case), 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.

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If children do not come to Kindergarten 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 may be 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 2/3rds 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, 2013) 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 make journal entries is another impetuous for learning letters. Children can take part in shared reading (Holdaway, 1979) even if their alphabet knowledge is limited. Indeed, shared reading, in which

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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 children who know the letter names are more likely to learn the associated sounds (Kim, Petscher, Foorman, & Zhou, 2010). 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 sound 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

Here are suggestions for instruction of students with Phonological awareness refers to the ability to consciously attend to sound segments of our spoken language: to syllables, to onsets, and rimes, and to the smallest units known as phonemes (phonemic awareness). 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.), and research shows that most children can be taught phonological awareness as a means to enhance early reading achievement (Ball & Blachman, 1988). Such instruction need not take a lot of time (NRP, 2000), but some instructional time is critical.

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Teachers in Kindergarten and first grade should plan activities that address phonological awareness and many resources are available (Johnston et al, 2010). While children are learning about letters in the activities listed earlier, they can also be learning about sounds. Nursery rhymes are a natural resource for not only listening pleasure and memorizing but also for 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 and 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, many children *teach themselves* much about 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, Duffey-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.

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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.

## Principles for Effective Phonics Instruction

Given the importance of phonics the issue of how to teach phonics is an important one. 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 principles that must be heeded (Stahl, 1992).

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 the 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. (i.e. Johnston, Invernizzi, Helman, Bear and Templeton, 2015)
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). 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 lot of 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. 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). Phonics programs need not require students to sound out words as a measure of successful learning. Analytic approaches to phonics begin with pictures and 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, 2019).

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4. A good phonics program should include lots of opportunity for students to write, spelling as best they can. There can hardly be a more meaningful exercise of phonics knowledge than 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 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, are needed to develop a concept of word in print and are essential in learning to read.

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