

PHONICS WARS, 2019. COMMENTS ON MOATS: (1) ARE 60% OF CHILDREN “WIRED FOR READING”? (2) IS PHONEMIC AWARENESS TRAINING NECESSARY? (3) THE CASE AGAINST SYSTEMATIC INTENSIVE PHONICS.

Stephen Krashen

Moats (2007) has recently gotten renewed attention because of the current interest in phonics. As the request of colleagues, I am commenting here on a few of Moats central points in her defense of systematic and intensive direct teaching of phonemic awareness and phonics. (Links are provided for some of my papers cited here, as well as Moats original paper.

Moats, L. 2007. Whole-Language High Jinks. New York: Fordham Foundation.
<https://files.eric.ed.gov/fulltext/ED498005.pdf>

Wired for Reading?

Moats repeats the familiar claim that some children are able to learn to read with little or no direct instruction, that “roughly 60 percent of children are ‘wired’ from birth for reading” (p. 11) but 40% are not. This is based on test score data, the finding (p. 11) that about 2/5 of children “score in the bottom two quintiles on screening and predictive measures.”

But by definition, 2/5 must score in the bottom two quintiles. If reading comprehension scores double in the next five years, we will still have the lowest two quintiles, the lowest 40%.

Moats points out that poor and minority children have lower scores on standardized reading tests. Is it because they are not “wired” for reading from birth? A more reasonable explanation is the role of poverty: Those living in poverty have much less access to reading material at home, in their communities and in school (e.g. Neuman and Celano, 2001). This has been confirmed many times in the research, and it has also been shown that children of poverty do better in reading when books are made available, i.e. in the form of a library (Krashen, Lee, and McQuillan, 2012.)

References: Wired for Reading?

Krashen, S., Lee, S.Y. and McQuillan, J. 2012. Is the library important? Multivariate studies at the national and international level. *Journal of Language and Literacy Education*, 8(1): 26-36.

Neuman, S.B. & Celano, D. 2001. Access to print in low-income and middle-income communities: An ecological study of four neighborhoods. *Reading Research Quarterly*, 36, 1, 8-26.

IS PHONEMIC AWARENESS (PA) TRAINING NECESSARY?

Phonemic awareness (PA) is the ability to divide a word into its component sounds, i.e. the ability to take the word “pit” and divide it into “pe” “i” and “te.” It is thus an aural ability.

Moats claims that phonemic awareness is prerequisite to learning to read, and must be trained. Research and observations cast doubt on this claim, however, and strongly suggest that phonemic awareness, beyond the most basic level, is a result of reading, not a cause.

No Evidence PA Training Improves Reading

Children who get phonemic awareness training improve on tests of phonemic awareness, but there is no evidence that PA training benefits reading comprehension, that is, performance on tests in which children have to understand what they read.

Few studies have been done in which researchers even attempt to see if PA training has an effect on reading. A review of research included in the National Reading Panel Report (Krashen, 2001a) produced only six studies and eleven comparisons. Only three studies dealt with English-speaking children, several produced low, zero and even negative effects for PA training, and in some studies the number of children who underwent the training was very small.

(Members of the National Reading Panel reacted to my claims about the limits of PA training in Ehri, Shanahan, and Nunes (2002). Ehri et. al. provided no additional studies, supporting my claim that few exist, In response to my finding that only three studies dealt with English-speaking children, Ehri et al reported that the average effect size for these three was .28, which they note falls short of statistical significance. They conclude that this “supports Krashen’s claim” but add that “more comparisons would yield a firmer conclusion” (p. 129). Maybe. Maybe not.]

There was only one study that reported substantial effects as well as statistically significant results in favor of those trained in phonemic awareness, a study done in Israel with Hebrew-speaking children, involving only 15 children who underwent PA training.

Low PA Read OK

It has been widely observed that many children with low or even no phonemic awareness learn to read quite well. Also, many children judged to have low phonemic awareness when young develop good reading ability later in life, and some adults who are excellent readers do poorly on tests of phonemic awareness (research reviewed in Krashen, 2001b). These results cast doubt on the claim that phonemic awareness is a prerequisite to learning to read.

PA Develops Without Training

Even if PA were necessary or even helpful in learning to read, it doesn't have to be trained. Phonemic awareness can develop on its own, without training: In PA “training studies” one group of children receives training in PA and the other does not. Those who received the training do better on tests of PA, but the comparison group also makes gains on PA, without training. Also, several longitudinal studies reveal growth in PA without training (Krashen, 2003).

PA: The Result of Reading

PA beyond the initial levels appears to be the result of reading. This conclusion is consistent with studies showing low levels of PA among adult illiterates and the observation that all but the most rudimentary aspects of phonemic awareness emerge at about the age children learn to read. In addition, reading aloud to children has been associated with growth in PA (Krashen, 2003).

I have informal evidence to add to this: I have asked audiences to perform the classic PA task of stripping the initial consonant from a word like "pit." Of course, everybody gets this right with no problem. Then I ask them to do the same with "split." After some hesitation, most people get it right. I then ask them how they did it. Universally, people report that they spelled the word in their mind's eye, removed the /p/ sound, and pronounced the remainder. This confirms that the ability to do complex PA activities is dependent on the ability to read.

What all this suggests is that PA need not be taught. It is not essential for learning to read, and those who develop it do so from reading itself.

References: Phonemic Awareness

Krashen, S. 2001a. Does “pure” phonemic awareness training affect reading comprehension? *Perceptual and Motor Skills*, 93, 356-358.

Krashen, S. 2001b. Low PA can read OK. *Practically Primary*, 6(3), 17-20.
<http://tinyurl.com/yaaca2sj>

Krashen, S. 2003. The unbearable coolness of phonemic awareness. *Language Magazine* vol. 2, no 8: 13-18. <https://tinyurl.com/y7eodokr>

PHONICS

Phonics means the rules relating sounds to spelling, i.e. the fact that the letter “b” is generally pronounced in as in the first sound in “bomb,” but is sometimes silent, as the last “b” in “bomb.”

Moats supports “intensive, systematic phonics,” which assumes that we learn to read by first learning the rules of phonics, that is, learning how letters are pronounced (“sounding out”), and by practicing these rules in reading out loud (“decoding to sound”). It also asserts that our knowledge of phonics must be deliberately taught and consciously learned, that intensive instruction is essential.

The Evidence Against Intensive Systematic Phonics.

Complexity

An argument against intensive systematic phonics is the observation that many rules are very complex and many don’t work very well. Teachers have told me that they have to review the rules before coming to class: If teachers who have taught the rules for years can’t remember them, how can we expect six year olds to remember them?

As Smith (2003) notes, many phonics rules are “unreliable ... there are too many alternatives and exceptions ... 300 ways in which letters and sounds can be related” (p. 41). His most famous example is the fact that each of these uses of “ho” has a different pronunciation: hot, hoot, hook, hour, honest, house, hope, honey, and hoist. Smith notes that even if a reader knew the rules, the words cannot be read accurately from left to right, letter by letter: The reader needs to look ahead. (Some have claimed that the rules of phonics that appear not to work

very well can be repaired and should be taught, but attempts to state better generalizations have resulted only in more complex rules that are only slightly more efficient (Krashen, 2002b)).

Smith also notes the different phonics programs teach different rules, a stunning counterargument to the claim that teaching complex rules is necessary.

Experienced professionals agree that the rules for pronouncing most initial consonants and a few other rules can be learned and applied to text by small children, but some rules will be impossible for six year-olds (and most adults), rules such as this one, recommended by Johnson (2001): “the a-e combination is pronounced with the long vowel and the final e silent (except when the final syllable is unaccented - then the vowel is pronounced with a short-i sound, as in ‘palace,’ or the combination is ‘are,’ with words such as ‘have’ and ‘dance’ as exceptions”).

The limited impact

The National Reading Panel (NICHD, 2000) concluded that the experimental research supports intensive systematic phonics. Garan (2002), in an examination of this report, noted that the impact of intensive phonics is strong on tests in which children read lists of words in isolation, but it is miniscule on tests in which children have to understand what they read. Thus, intensive phonics instruction only helps children develop the ability to pronounce words in isolation, an ability that will emerge anyway with more reading. Garan's results agree with the results of many other studies that show that intensive phonics instruction has a positive impact on tests of decoding but not on tests of comprehension (Krashen, 2009).

The Reading Panel also concluded that Intensive Systematic phonics was superior to Whole Language, but this claim does not hold if Whole Language is defined correctly, as including the reading of interesting texts that teachers help children understand (Krashen, 2002a).

Competence without instruction

Another strong argument against the necessity of intensive systematic phonics are the many attested cases of children who learned to read on their own with little or no explicit decoding instruction and who appear to be able to decode quite well (e.g. Goodman and Goodman, 1982, McQuillan, 1998).

Reading experience results in both reading ability and the ability to do well on tests of "decoding."

Children who have been given the opportunity to do a great deal of interesting, comprehensible reading and have less decoding instruction perform as well as or better than children in decoding-emphasis classes on decoding tests, and typically score higher on tests that test what really counts in reading: comprehension (Morrow, O'Conner and Smith, 1990, Eldridge, 1991; Klesius, Griffith, and Zielonka, 1991).

References: Phonics

- Ehri, L., Shanahan, T. and Nunes, S. 2002. Response to Krashen. *Reading Research Quarterly* 37(2): 128-129.
- Eldridge, L. 1991. An experiment with a modified whole language approach in first-grade classrooms. *Reading Research and Instruction* 30 (3): 21-38.
- Garen, E. 2002. *Resisting Reading Mandates*. Heinemann.
- Goodman, K. and Goodman, Y. 1963. Spelling ability of a self-taught reader. *The Elementary School Journal* 64 (3): 149-154.
- Johnson, F. 2001. The utility of phonics generalizations: Let's take another look at Clymer's conclusions. *The Reading Teacher*, 55, 132-143.
- Klesius, J., Griffith, P., and Zielonkia, P. 1991. A whole language and traditional instruction comparison: Overall effectiveness and development of the alphabetic principle. *Reading Research and Instruction* 30: 47-61.
- Krashen, S. 2002a. The NRP comparison of whole language and phonics: Ignoring the crucial variable in reading. *Talking Points*, 13(3): 22-28. <http://tinyurl.com/ybvlqqwo>
- Krashen, S. 2002b. Defending whole language: The limits of phonics instruction and the efficacy of whole language instruction. *Reading Improvement* 39 (1): 32-42. <http://tinyurl.com/y8opzwpn>
- Krashen, S. 2009. Does intensive decoding instruction contribute to reading comprehension? *Knowledge Quest* 37 (4):72-74. <http://tinyurl.com/jc6x8mk>
- McQuillan, J. 1998. Is learning to read without formal instruction common? *Journal of Reading Education* 33 (4): 15-17.
- Morrow, L., O'Conner E. and Smith, J. 1990. Effects of a story reading program and literacy development of at-risk kindergarten children. *Journal of Reading Behavior* 22: 250-275.
- National Institute of Child Health and Human Development (NICHD), 2000. Report of the National Reading Panel: Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction: Reports of the Subgroups. Washington, DC: NIH Publication 00-4654.
- Smith, F. 2003. *Understanding Reading*. Erlbaum.

Second Language Acquirers

Moats argues that children acquiring English as a second language need intensive instruction in the alphabetic code. Krashen and Hastings reviewed studies showing that PA in English as a second language improves without instruction, and studies that claim to show that PA has a positive effect on learning to read only test children on their ability to pronounce words presented in isolation.

References: Second Language Acquisition

Krashen, S. and Hastings, A. 2011. Is Phonemic Awareness Training Necessary in Second Language Literacy Development? Is it Even Useful? *International Journal of Foreign Language Teaching* 7(1). <https://tinyurl.com/y8gy2uhn>