

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
December 2000

PHONEMETIC AWARENESS

1. *"The results of the meta-analysis were impressive. Overall, the findings showed that teaching children to manipulate phonemes in words was highly effective under a variety of teaching conditions with a variety of learners across a range of grade and age levels and that teaching phonemic awareness to children significantly improves their reading more than instruction that lacks any attention to phonemic awareness (PA)." Page 7*
2. *"...PA training was the cause of improvement in students' PA, reading, and spelling following training." Page 7*
3. *"Importantly, the effect of PA instruction on reading lasted well beyond the end of training. Children of varying abilities improved their PA and their reading skills as a function of PA training." Page 7*
4. *"PA instruction also helped normally achieving children learn to spell, and the effects lasted well beyond the end of training." Page 8*
5. *"Specifically, the characteristics of PA training found to be most effective in enhancing PA, reading and spelling skills included explicitly and systematically teaching children to manipulate phonemes with letters, focusing the instruction on one or two types of phoneme manipulations rather than multiple types and teaching children in small groups." Page 8*
6. *"..The motivation of both students and their teachers is a critical ingredient of success." Page 8*

PHONICS INSTRUCTION

7. *"Phonics instruction is a way of teaching reading that stresses the acquisition of letter-sound correspondences and their use in reading and spelling. The primary focus of phonics instruction is to help beginning readers understand that letters are linked to sounds (phonemes) to form letter-sound correspondences and spelling patterns and to help them learn how to apply this knowledge in their reading." Page 8*
8. *"The hallmark of a systematic phonics approach or program is that a sequential set of phonics elements is delineated and these elements are taught along a dimension of explicitness depending on the type of phonics method employed." Page 8*
9. *Five Phonics Instructional Approaches: analogy, analytic, embedded, phonics through spelling, and synthetic phonics. Page 8*
10. *"Synthetic Phonics-teaching students explicitly to convert letters into sounds (phonemes) and then blend the sounds to form recognizable words." Page 8*
11. *"Systematic synthetic phonics instruction had a positive and significant effect on disabled readers' reading skills. These children improved substantially in their ability to read words and showed significant, albeit small, gains in their ability to process text as a result of systematic synthetic phonics instruction. This type of phonics instruction benefits both students with learning disabilities and low-achieving students who are not disabled. Moreover, systematic synthetic phonics was significantly more effective in improving low socioeconomic status children's alphabetic knowledge and word reading skills than instructional approaches that were less focused on these initial reading skills." Page 9*
12. *"The meta-analysis revealed that systematic phonics instruction produces significant benefits for students in kindergarten through 6th grade and for children having difficulty learning to read. The ability to read and*



spell words was enhanced in kindergartners who received systematic beginning phonics instruction. First graders who were taught phonics systematically were better able to decode and spell, and they showed significant improvement in their ability to comprehend text. Older children receiving phonics instruction were better able to decode and spell words and to read text orally....” Page 9

13. *“Across all grade levels, systematic phonics instruction improved the ability of good readers to spell.” Page 10*
14. *“The facts and findings provide converging evidence that explicit, systematic phonics instruction is a valuable and essential part of a successful classroom reading program.” Page 10*
15. *“It is important to recognize that the goals of phonics instruction are to provide children with key knowledge and skills and to ensure that they know how to apply that knowledge in their reading and writing. In other words, phonics teaching is a means to an end. To be able to make use of letter-sound information, children need phonemic awareness. That is, they need to be able to blend sounds together to decode words, and they need to break spoken words into their constituent sound to write words. Programs that focus too much on the teaching of letter-sound relations and not enough on putting them to use are unlikely to very effective. In implementing systematic phonics instruction, educators must keep the end in mind and ensure that children understand the purpose of learning letter sounds and that they are able to apply these skills accurately and fluently in their daily reading and writing activities.” Page 10*
16. *“Thus, one concern is how to maintain consistency of instruction while still encouraging the unique contributions of teachers. Other programs require a sophisticated knowledge of spelling, structural linguistics, or word etymology. In view of the evidence showing the effectiveness of systematic phonics instruction, it is important to ensure that the issue of how best to prepare teachers to carry out his teaching effectively and creatively is given high priority.” Page 10*
17. *“It is critical for teachers to understand that systematic phonics instruction can be provided in an entertaining, vibrant, and creative manner.” Page 11*
18. *“Systematic phonics instruction is designed to increase accuracy in decoding and word recognition skills, which in turn facilitate comprehension. However, it is again important to note that fluent and automatic application of phonics skills to text is another critical skill that must be taught and learned to maximize oral reading and reading comprehension. This issue again underscores the need for teachers to understand that while phonics skills are necessary to order to learn to read, they are not sufficient in their own right. Phonics skills must be integrated with the development of phonemic awareness, fluency and text reading comprehension skills.” Page 11*

FLUENCY

19. *“Recent research on the efficacy of certain approaches to teaching fluency has led to increased recognition of its importance in the classroom and to changes in instructional practices.” Page 11*
20. *“...the Panel concluded that guided repeated oral reading procedures that included guidance from teachers, peer, or parents had a significant and positive impact on word recognition, fluency, and comprehension across a range of grade levels.” Page 12*
21. *“This suggests the classroom readiness of guided oral reading and repeated reading procedures. These results also apply to all students – good readers as well as those experiencing reading difficulties.” Page 12*
22. *“With regard to the efficacy of having students engage in independent silent reading with minimal guidance or feedback the Panel was unable to find a positive relationship between programs and instruction that encourage large amounts of independent reading and improvements in reading achievement, including fluency.” Pages 12,13*

VOCABULARY

23. *“Vocabulary is critically important in oral reading instruction. There are two types of vocabulary – oral and print. A reader who encounters a strange word in print can decode the word to speech. If it is in the reader’s oral vocabulary, the reader will be able to understand it. If the word is not in the reader’s oral vocabulary, the reader will have to determine the meaning by other means, if possible. Consequently, the larger the reader’s vocabulary (either oral or print), the easier it is to make sense of the text.” Page 13*
24. *“The studies reviewed suggest that vocabulary instruction does lead to gains in comprehension, but that methods must be appropriate to the age and ability of the reader.” Page 14*



25. *"Vocabulary also can be learned incidentally in the context of storybook reading or in listening to others. Learning words before reading a text also is helpful. Techniques such as task restructuring and repeated exposure (including having the student encounter words in various contexts) appear to enhance vocabulary development." Page 14*
26. *"The findings on vocabulary yielded several specific implications for teaching reading. First, vocabulary should be taught both directly and indirectly. Repetition and multiple exposures to vocabulary items are important. Learning in rich contexts, incidental learning, and the use of computer technology all enhance the acquisition of vocabulary. Direct instruction should include task restructuring as necessary and should actively engage the student. Finally, dependence on a single vocabulary instruction method will not result in optimal learning." Page 14*

COMPREHENSION

27. *"The data suggested that text comprehension is enhanced when readers actively relate the ideas represented in print to their own knowledge and experiences and construct mental representations in memory." Page 14*
28. *"The rationale for the explicitly teaching of comprehension skills is that comprehension can be improved by teaching students to use specific cognitive strategies or to reason strategically when they encounter barriers to understanding what they are reading." Page 14*
29. *"The teacher generally demonstrates such strategies for students until the students are able to carry them out independently." Page 14*
30. *"In its review, the Panel identified 16 categories of text comprehension instruction of which 7 appear to have a solid scientific basis for concluding that these types of instruction improve comprehension in non-impaired readers: comprehension monitoring, cooperative learning, use of graphic and semantic organizers, question answering, question generation, story structure, and summarization." Page 15*
31. *"In general, the evidence suggests that teaching a combination of reading comprehension techniques is the most effective. When students use them appropriately, they assist in recall, question answering, question generation, and summarization of texts. When used in combination, these techniques can improve results in standardized comprehension tests." Page 15*
32. *"Teachers required instruction in explaining what they are teaching, modeling their thinking processes, encouraging student inquiry, and keeping students engaged." Page 16*

