



EVIDENCE-BASED PRACTICES

Topic: Phonological Awareness, Part 2

Successful classroom instruction begins by using what research has identified as effective. This bulletin examines research-based evidence and is intended to help educators improve instructional practices. This issue focuses on the role phonological awareness plays in the development of reading skills. Phonological awareness is the ability to detect and manipulate sound; it is an awareness of sounds in spoken words in contrast to written words. It is hearing language, not seeing words. The three articles reviewed below analyze why students have difficulty learning to read. Each article concludes that phonological awareness is necessary in the early learning process and recommends explicit and systematic teaching of phonemic skills. Classroom implications are noted next to each review.

Literature Reviews

Lyon, R. Report on learning disabilities research. Adapted from the testimony given by Dr. Reid Lyon before the Committee on Education and the Workforce in the U.S. House of Representatives on July 10, 1997. [Online] Available: www.idonline.org/ld_indepth/reading/nih_report.html.

Data from ongoing national studies and assessments report 44% of fourth graders across all socioeconomic levels are below basic levels in reading skills. This article reveals many of these students lack phonemic awareness and understanding of the alphabetic principle. Fluency and automaticity in decoding and comprehension are usually dependent on a child developing phonological awareness. National Institute of Child Health and Human Development (NICHD) research involving over 10,000 children has documented that a fifteen-minute assessment of phonological skills in kindergarten or grade one can predict, to 92% accuracy, those who will have later difficulty reading. If intervention does not take place by the time the child is nine, approximately 75% of these students will continue to have reading problems throughout high school and adulthood. Early reading problems detract from a student's motivation and expectations for success. Issues related to motivation can usually be addressed by having children practice reading what they have learned. Deficiencies in the phonological areas lead to problems with decoding. Laboriously sounding out words uses the energy and memory the student needs in order to use comprehension skills. Since no single method, approach, or philosophy for teaching reading is equally effective for all, the teacher is responsible for tailoring a program for the specific child who has deficits in early reading skills. This requires teachers to have in-depth training in how to teach reading and to move away from those theories espousing a single methodology that excludes critical components such as phonology and phonics.

Torgesen, J. K. and Mathes, P.G. (1998). What every teacher should know about phonological awareness. Monograph published by the State of Florida, Department of Education, Tallahassee, FL.

Current research indicates phonological awareness is critical to the ability to phonetically decode, which is crucial to the development of reading skills. Phonological awareness activities must go beyond rhyming and syllable awareness to teach explicitly the phonemes in the words. By mid-first grade, normal development of phonological awareness includes the ability to blend two phonemes into simple one-syllable words and to say what is left when a given sound or syllable is dropped from a word. Research indicates that while the acquisition of early phonemic skills

Classroom Implications

- Provide direct instruction in phonemic awareness early in kindergarten through third grade to reduce the likelihood of continued reading problems through high school.
- Tailor reading programs to fit the needs of a child who has deficits in early reading skills.
- Train teachers to understand the development of reading, reading assessment, and how to design effective reading programs for those students who have difficulties in their early years.
- Teach young children to divide words into syllables, to hear phonemes, generate rhyming words, and compare words based on initial sounds.
- Use direct and systematic teaching in phonological awareness in early reading instruction.
- Research indicates the use of

may be influenced by genetic and environmental variables, it depends largely on what is taught and the student's response to that instruction. Direct and systematic instruction in the phonological area, along with teaching sound-letter correspondence in both reading and spelling, is critical. Classroom level instruction will not be sufficient to prevent reading difficulties for all children. Some children will require more intensive, detailed, and explicit instruction in order to develop the comprehensive skills needed to support reading success.

Smith, S. B., Simmons, D. C., & Kameenui, E. J. (n.d.) Synthesis of research on phonological awareness: Principles and implications for reading acquisition. [Online] Available: <http://idea.uoregon.edu/~ncite/documents/techrep/tech21.html>.

This report reviews two decades of research on the relationship between reading disability and deficits in phonological awareness. These studies focused on a wide range of normal and diverse learners. Research results supported phonological awareness as critical to early reading success and as a key factor in distinguishing between good and poor readers. Assessment of these skills is considered a necessary part of preschool and kindergarten curricula. Instruction in phonological awareness to children with delays or disabilities is critical in the early grades. Effective components of instruction were identified as explicit teaching using concrete representation and oral modeling of individual sounds, student production of sounds, addition of teaching letter-sound correspondence to phonemic instruction, and segmentation of increasingly difficult phonological units. These interventions, common to all the research examined, are seen as contributing to subsequent reading acquisition and achievement.

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direct and systematic instruction may outweigh the influence of genetics and environment in influencing student success in reading.

- Provide more intensive, detailed, and explicit instruction in phonological skills to students with reading difficulties.

- Provide instruction in phonological processing (awareness, coding, and retrieval) as significant deficits in these abilities explain differences between good and poor readers.

- Teach the multiple dimensions of phonological awareness, coding, and retrieval progressing from easiest to hardest.

- Since phonological awareness is necessary but not sufficient for reading acquisition, instruction in sound-letter correspondence, coding, and automaticity are also critical.

- Attention to instructional variables and learner characteristics can promote the effectiveness of teaching phonological awareness.

- Teach phonological awareness in an explicit, direct, and systematic manner.

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