



University of Pittsburgh  
Office of Child Development

# background

early reading  
Futures At Stake

## Learning To Read

*Today, success demands higher reading skills*

**R**eading is essential to success in America. The good news is most children learn to read fairly well. However, too many children find their education imperiled by reading difficulties.

Poor reading instruction is a major reason for children developing problems. Some children are at risk of becoming poor readers simply because they live in homes where reading is considered of little value. Some children have trouble learning to read because of cognitive deficiencies or conditions such as hearing impairments.

Whatever the root of the problem, our technological society's ever-increasing demands for higher literacy raise the specter of a bleak future for the child who falls short.

The problem has not gone unnoticed. Reading difficulties are often at the heart of public debate over the effectiveness of schools and curriculum. Perhaps the highest profile and most contentious debate in education in recent years has been over which strategy for teaching reading is best, traditional phonetics or the newer whole-language approach.

Most educators agree, however, that a solid foundation in early reading is critical, regardless of the teaching method used.

The child most likely to become a successful reader is the child who enters grade school strong in domains such as letter knowledge, awareness of the sounds of language, and the basic purposes and mechanics of reading. A

child who begins school weak in reading fundamentals will likely have trouble learning to read and mastering other subjects in the years ahead.

Several sources suggest that, when it comes to early reading skills, too many school children are starting school at a disadvantage.

### Troubling Numbers

The precise number of U.S. children with reading difficulties remains elusive. Estimates suggest, however, that a significant number are having trouble.

One measure is the number of children receiving special education. The Department of Education reported that among the nation's 57.8 million schoolchildren, 2.5 million (4.4%) received special education services during the 1994-95 school year. If

### related reports

#### Why children struggle to read

Factors that contribute to reading difficulties are found at home, at school, and in the community. See Report 22.

#### Preventing reading difficulties

Comprehensive preschool reading programs and other approaches show promise. See Report 23.

estimates that reading disability accounts for about 80% of all learning disabilities are accurate, then 3.5% of all schoolchildren that year received services for a reading disability.

Other studies that measured low achievement in reading among specific populations report higher numbers. One estimates that as many as 17.5% of Connecticut children in primary and middle school grades have reading difficulties.<sup>1</sup>

Such findings suggest that millions of children face the grave consequences that can befall those who cannot read or read well.

And today, high school graduates seeking satisfying jobs and careers need to be more than merely literate.

*(Continued on back)*

# The Basics of Reading Begin Practically At Birth

Learning to read is a long, complex process that begins before a child's school years.

Language development begins practically at birth. In the early weeks, infants are able to distinguish all the sounds of any language. Soon, their perceptual abilities become tuned to their native language.

*Phonological development* – knowledge of the way sounds of a language operate – begins early in life and continues into early school years.

Comprehension of words emerges at around the child's first birthday, usually before the ability to produce words.

Vocabulary growth is rapid throughout the pre-school and school years.

Grammatical development and linguistic sophistication begin early and increase steadily. Children, for example, progress from just focusing on the names of objects in the pictures to asking questions about the content of the book.

*Phonological awareness and phonemic awareness* are also important. In English, printed symbols represent the component sounds of the language. To understand the basic alphabetic principle, a child needs to know that spoken language can be analyzed into strings of separable words and words, in turn, into sequences of syllables and phonemes within syllables.

Literacy development also occurs early. From ages 2 to 3 years, children usually move from babbling to making understandable speech in response to books and to markings they make themselves. They may create drawing-like scribbles, recognizable letters, and letter-like forms.

By ages 3 and 4 years, they show rapid growth in literacy, experimenting with random strings of letters, and sometimes inventing their own spellings.

The timing of acquiring these abilities varies. Ideally, a child will begin reading instruction with well-developed language abilities and early reading skills.

## (Continued from front) Futures Imperiled

One way researchers predict whether or not children will graduate from high school is to assess the level of their reading skills at the end of the third grade.

Using this method, which studies suggest is reliable, researcher report that, in general, children are not likely to earn a high school diploma if they are not at least moderately-skilled in reading by the end of the third grade.

Without a high school diploma, they are more likely to find themselves unemployed. In 1993, 9.8% of those without a high school degree were unemployed, compared to 5.4% of those

with a high school degree and 2.6% of those with a college degree.

Today's job market increasingly requires high school graduates to be able to read challenging material,

perform sophisticated calculations, and solve problems independently. In fact, the demands of the workplace are greater today than those placed on schooled, literate Americans as recent as a quarter of a century ago.<sup>2</sup>

## references

*This report was based on the following publications:*

**National Research Council (1998).** *Preventing Reading Difficulties in Young Children*, C.E. Snow, M.S. Burns, & P. Griffin, eds. Washington, DC: National Academy Press.

*References noted in the text follow:*

1 Shaywitz, S.E., & Shaywitz, B.A. (1996). Unlocking learning disabilities: The neurological basis. In S.C. Cramer & W. Ellis, (Eds.). *Learning disabilities, lifelong issues* (pp. 255-260). Baltimore: Paul H. Brookes.

2 Murnane, R., & Levy, F. (1993). Why today's high-school-educated males earn less than their fathers did: The problem and an assessment of responses. *Harvard Educational Review* 63, 1-19.

*Children, Youth & Family background* is published by the University of Pittsburgh Office of Child Development, a program of the University Center for Social and Urban Research. These reports are based on available research and are provided as overviews of topics related to children and families.

**Co-Directors:** Christina J. Groark, PhD.; Robert B. McCall, PhD. **Associate Director:** Carl N. Johnson, PhD.

**background Editor:** Robert B. McCall, PhD.; **Writer:** Jeffery Fraser (412) 731-6641, e-mail: Fraser53@msn.com

Office of Child Development, University of Pittsburgh, 2017 Cathedral of Learning, Pittsburgh, PA 15260; (412) 624-7425; fax: (412) 624-1187

This report and others can be found at the Office of Child Development web site: [www.pitt.edu/~ocdweb/](http://www.pitt.edu/~ocdweb/)