

# Newsletter

## Teaching Reading IS Rocket Science

From *Everybody Reads*

Helping to make sure that all children are good readers

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### News Release of April 13, 2000 by the National Institute of Child Health and Human Development (NICHD)

Possibly the most important event of the year in the field of reading research was the issuing of the final report of the National Reading Panel (NRP). A copy of the news release and the message to the sponsoring Senate Committee by Dr. Duane Alexander can be found on these links:

[www.nichd.nih.gov/new/releases/nrp.htm](http://www.nichd.nih.gov/new/releases/nrp.htm) and  
[www.nichd.nih.gov/about/dir\\_nrp.htm](http://www.nichd.nih.gov/about/dir_nrp.htm)

The NICHD is a part of the National Institutes of Health, which is the Federal government's major biomedical research agency. The NICHD supports and conducts research on the reproductive, neurobiological, developmental, and behavioral processes that determine and maintain the health of children, adults, families, and populations. For the NRP panel, NICHD recruited not only top educators, but also leading members of the scientific, medical and psychological communities. It also included parents.

The panel adopted a scientifically rigorous set of standards similarly used in the fields of psychology and medicine upon which to evaluate studies. These standards include such criterion as: sufficient identification of ages, sufficient demographics, replicability, fidelity of instruction

actually provided, and full description of actual outcomes.

Many feel that the NRP probably is the most scientifically astute panel ever assembled to look at reading instruction. It was charged with assessing the status of research-based knowledge and determining what conclusions could be drawn from the evidence about the effectiveness of various approaches to teaching children to read.

From their investigation, the panel determined that sufficient evidence exists to conclude that effective reading instruction includes

- 1.) teaching children to break apart and manipulate the sounds in words (phonemic awareness),
- 2.) teaching them, that these sounds are represented by letters of the alphabet which can then be blended together to form words (phonics),
- 3.) having them practice what they've learned by reading aloud with guidance and feedback (guided oral reading), and
- 4.) applying reading comprehension strategies to guide and improve reading comprehension.

For the topic of phonemic awareness, the subcommittee of the panel found 1,962 studies. Of these, only 78 met the general NRP research criteria. Only 52 satisfied the more specific criteria. The subcommittee focusing on phonics found 1,373 studies. From these, only 38 adhered to the general and specific NRP criteria. On the question of oral reading fluency, the panel found 364 studies. Of these, 37 were accepted.

The topic of Reading Comprehension was divided into two parts: vocabulary and text comprehension. In the area of



vocabulary comprehension, 20,000 research citations were found. Of these, only 50 studies were included. For text comprehension, 481 studies were found. Of these, 205 met the general criteria, but because of the large variation in methods and implementations used, none met the specific criteria of the panel.

From this assessment of research studies, one can possibly conclude that much of what is commonly considered as credible research upon which conclusions are drawn, is problematic. A prominent educational researcher recently stated, "Educators are deluged by a huge amount of opinion and advocacy. Much of it is poorly conceived, ill-written, and biased. Little is based on the findings of rigorous inquiry. For this reason, education has not made the fact-based productivity strides enjoyed by other professions, and industries." (Walberg, W.J. 1998)

Yet, the evidence that was found and that did meet the highest scientific standards, firmly supports the conclusions of the panel that improving reading requires knowing the alphabetic principle thoroughly. It is also interesting to observe that virtually the same conclusions have been drawn by every previous review that included studies of lesser quality. Given an alphabetic writing system, it should not come as a great surprise that in order to read well, the reader needs to thoroughly know how the alphabet works.

A copy of the complete report can be downloaded from the panel's website, <http://www.nationalreadingpanel.org>.

This Newsletter is dedicated to providing up-to-date information about research findings or research-based publications or events on teaching early reading. It is edited by Charles Arthur, Executive Director of the Mastery Learning Institute and founder of the Everybody Reads after-school program.

## Fall Conference Features Drs. Kameenui and Simmons

On September 29, 2000 the Oregon Branch of the International Dyslexia Association had it's Annual Conference in Portland, entitled, Literacy 2000: Scientific Practices for the New Millennium. Edward Kameenui, Ph.D. and Deborah Simmons Ph. D of the University of Oregon were the feature presenters. This team of researchers developed the Reading/language Arts Curriculum Framework K-12 for the California Department of Education in 1998.

Dr. Kameenui was one of the 17 researchers selected to serve on the National Research Council's Committee on the Prevention of Reading Difficulties in Young Children (1996-1998). This report, often referred to as the Snow report, was published by the National Academy of Sciences.

Drs. Kameenui and Simmons made three presentations.

- 1.) "Schools as Complex Host Environments: All Reading in 540 Days." This presentation addressed what complex host environments known as schools can do to ensure that all are successful readers at the end of grade 3.
- 2.) "The Nuts and Bolts of Building and Sustaining a Schoolwide Reading Improvement Model" In this model they described (a) a self-auditing tool for school to take stock of their reading commitments, (b) a formative, dynamic assessment system for monitoring student reading performance on a weekly basis, (c) guidelines for customizing reading interventions to meet the unique instructional needs of a school, (d) a prevention framework for anticipating and addressing problems, and (e) school-based teams for building the instructional capacity within schools.
- 3.) "Science and the Alphabetic Writing System, Ten Steps to

Preventing Reading Failure" On this topic, Dr. Kameenui talked about current research on effective beginning reading instruction for the full range of diverse learners, and examined the relation between language, speech, and the alphabetic writing system. In so doing, he addressed the Big Ideas (vocabulary and listening comprehension, phonological awareness, alphabetic understanding, automaticity with the code) in beginning reading instruction as revealed in the National Academey of Sciences (1998) report.

### Kameenui's Ten Steps to Preventing Reading Failure.

1. In order to provide consumers with highly trustworthy information to make decisions on fit and outcomes, a center or consortium on Evidence in Education is needed. This center would evaluate three "sizes" of educational approaches: school-wide improvement models, classroom-wide instructional programs, specific instructional strategies.
  2. Understand that reading is learned. It is not a natural process. It is learned through a symbolic system called an alphabetic writing system.
  3. It thus must be taught by applying scientific principles of learning with an emphasis on early prevention.
- "Quality is never an accident; it is always the result of high intention, sincere effort, intelligent direction, and skillful execution; it represents the wise choice of many alternatives."  
Willa A. Foster
4. Understand that teaching reading takes place in a complex host environment called a school....and schools can be hostile and unforgiving places.
  5. It is essential to prepare children as readers when they are very young and before the problem gets too big and children get too big.

“Reading has cognitive consequences that extend beyond its immediate task of lifting meaning from a particular passage. Furthermore, these consequences are reciprocal and exponential in nature. Accumulated over time-spiraling either upward or downward - they carry profound implications for the development of a wide range of cognitive capabilities.”  
 Cunningham & Stanovich (1998)  
What reading does for the mind.

- 6. It is essential to teach a few “Big Ideas” in beginning reading (versus many small ideas) and to give those topics high instructional priority.
- 7. It is essential to apply valid, reliable, efficient, and sensitive measures that are linked to the “Big Ideas” of beginning reading to monitor children’s reading progress.
- 8. It is essential to establish, promote,

- and maintain clear, specific, research-based content and performance standards in beginning reading.
- 9. It is essential to adopt research-based reading programs and implement them daily, consistently, and intelligently.
- 10. It is essential to focus, focus, focus (avoid distractions, teach relentlessly, assess frequently, and administer dynamically).

**BOOK REVIEW**

**STRAIGHT TALK ABOUT READING, How Parents Can Make a Difference During the Early Years. By Susan Hall and Louisa Moats, Contemporary Books, 1999**

This is a book about how to help parents raise a reader. It contains reliable, realistic, and useful information that should give parents confidence in nurturing their child’s reading development. It takes the reader out of the middle of reading politics and methods arguments to the essentials that will help.

The authors wrote this book because they believe that parents want a reliable source of information about reading and that this information is not readily available in a format that makes it accessible to them. They believe that parents can play a critical role in helping prepare their child for reading instruction, in monitoring instruction, in observing progress, and in advocacy if their child is struggling with reading. They believe that parents armed with the information in this book may help turn their children into avid readers and avoid pitfalls of misinformed teaching.

The book was written collaboratively by a parent and an educator. Susan Hall, the parent, has two children, one of whom struggled in learning to read. The educator, Louisa C. Moats, has been a teacher of children with learning disabilities and reading problems, a psychologist, and reading specialist. She is currently a researcher with the NICHD.

This book has three sections. Part One (Chapters 1-5) gives background information. Part Two (Chapters 6-9) emphasize activities for each grade starting with preschool through third grade. Part Three (Chapter 10) gives information about what to do if your child is having a reading problem.

**G. Ried Lyon, Ph.D.**, Chief Development and Behavior Branch of the National Institutes of Health writes in the forward of the book.

“It is unusual that a book about reading written for parents can be informative, understandable, and true to the scientific basis for understanding reading. To my knowledge, this book is the first of its kind. The scientific research in reading has progressed to the level that dissemination of critical findings to a child’s most important teacher - the parents - is not only possible but imperative.”

**An Action Plan by the Learning First Alliance**

At the Learning First Alliance Summit on Reading and Math held in Washington DC, January 26-28, 1998, an “action paper” was adopted, entitled, **Every Child Reading: An Attainable Goal.**  
[www.learningfirst.org/publications.htm](http://www.learningfirst.org/publications.htm)

The paper starts out by stating: “Our goal is for all healthy children to learn to read well. With what we now know, this country’s reading problems are largely solvable if we have the will to solve them.”

The Learning First Alliance is composed of the following 12 largest educational organizations in the country.

- American Association of Colleges for Teacher Education,
- American Association of School Administrators,
- American Federation of Teachers,
- Association for Supervision and Curriculum Development,
- Council of Chief State School Officers,
- Education Commission on the States,
- National Association of State Boards of Education,
- National Association of Elementary School Principals,
- National Education Association,
- National PTA,
- National School Boards Association.

