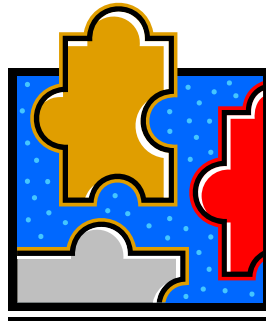


Mystery Solved ... a Missing Piece to Literacy



Systematic Phonics Research
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SYSTEMATIC PHONICS RESEARCH

Many Americans can't read. And many teachers lack the instructional background and tools to teach reading according to the recent guidelines established by the National Reading Panel (NRP).

An affordable, easy-to-administer reading program has important implications for our nation's economic future. While technology brings our citizens seemingly limitless opportunities, at the same time illiteracy and poverty rates are escalating rapidly. The Ohio Literacy Resource Center estimates that 90 million, or nearly half of all American adults, have limited literacy skills. Recently, a prominent lawyer confided to us that many law firms are sending their new lawyers back to school to learn to write.

The National Assessment of Education Progress (NAEP) tested 140,000 children in grades 4, 8 and 12 in public and private schools in thirty-nine states. Less than one-third of the children were proficient in reading, and very few (3%) were reading at advanced levels. Sadly, according to NAEP results, over the last eight years the low-performing fourth graders continue to show test score decreases. Only high performing students show increases.

Similarly, North Coast Education Services has tested more than 700 Cleveland City School children in grades K through 6 over a three-year period. We found 75% of the children read below grade level and many did not read at all. Suburban results weren't much better. We tested 300 children in a Cleveland suburb and found 53% read below grade level.

NCES has also tested several thousand workers in many manufacturing companies over the past ten years, including office staff. The results are similar to those found with school children. 33% of the workforce read below the 6th grade level, and 15% read below the 3rd grade level.

Why Can't They Read?

Literature-based or Whole Language is the reading program currently used in many schools. Children are taught to guess at words by looking at pictures to get clues to words they don't know. Further, "inventive spelling" is encouraged in writing. In other words, when a child doesn't know how to spell a word, guessing is okay. Other schools use an "eclectic" approach which consists of "a little of this and a little of that." Teachers create their own reading programs by using little pieces from several different reading programs. These spliced together reading programs -- for the most part -- do not work. There is no real plan, no consistency from class to class, and struggling children are not learning to read.

Teacher training programs in most colleges do not prepare teachers to actually teach students to read. Rather, student teachers are lectured about theories and provided little practice in hands-on instruction. Most Whole Language supporters really "hate" phonics. A survey of 43 teacher education texts found that none approved of using phonics to teach reading, and only nine mentioned phonics as an alternative to Literature-based/Whole Language.

Carole Richards, the principal investigator, has been aware of this shortcoming in our colleges for a long time. Over the past 17 years she has interviewed thousands of teachers,

and witnessed this bias first hand in many colleges and universities, including her alma mater, Miami University (Ohio). Carole Richards suggested that the government force our schools of education to improve their teacher training based on the NRP research. An aide to Ohio's Senator George Voinovich said, "We can't tell our colleges what to teach." So while our children are not learning to read in our schools, our teacher colleges continue to teach theories that do not match proven literacy research.

What works?

In the 1930s, Dr. Samuel Orton, a neurologist, studied dyslexia. He and two teachers, Anna Gillingham and Bessie Stillman, studied the English language and identified a system within it¹. Dr. Orton's systematic, multi-sensory phonics method is an explicit organized structure of sounds, syllables, and word patterns that give students a method to identify unfamiliar words. All of the research cited in this proposal is related to Dr. Orton's work.

The multi-sensory RICHARDS READ Systematic Language is based on Dr. Orton's research. NCES added writing, comprehension, and study skills to Dr. Orton's original concepts.

RICHARDS READ Systematic Language includes all of the NRP recommendations for literacy instruction, including phonemic awareness, systematic phonics, fluency, vocabulary and comprehension. Most important, it teaches students of all ages to read, write and THINK! It has worked with individual and small groups of clients, in schools and in businesses.

21st Century Economy

The working environment that economist Harry Dent, Jr. predicted in his book, "The Roaring 2000s"², is upon us. Today both white and blue collar workers are being expected to use computers, read, write, solve problems, and work together in teams. We must improve the literacy skills of our children and our workforce, or the challenge to create a "thinking" and problem-solving society becomes considerably more difficult.

The American Federation of Teachers agrees. It made this observation: "This we can say with certainty: If a child in a modern society like ours does not learn to read, he doesn't make it in life. If he doesn't learn to read well enough to comprehend what he is reading; if he doesn't learn to read effortlessly enough to render reading pleasurable; if he doesn't learn to read fluently enough to read broadly and reflectively across all content areas; the chances for a fulfilling life, by whatever measure -- academic success, financial success, the ability to find interesting work, personal autonomy, self-esteem -- are practically nil."³

Studies by Outside Sources

Several specific, independent research studies all reached the same conclusion:

- I. "Code emphasis method ... better results in terms of reading for meaning are achieved ... The results are better, not only in terms of the mechanical aspects of literacy alone, as

¹ Gillingham, Anna and Stillman, Bessie W., Remedial Training for Children with Specific Disability in Reading, Spelling, and Penmanship, 1940.

² Dent, Harry S. Jr., The Roaring 2000s, 1998.

³ Learning to Read: Schooling's First Mission, American Federation of Teachers, and summer 1997 p12.

was once supposed, but also in terms of the ultimate goals of reading instruction – comprehension and possibly even speed of reading.”⁴

II. Study two found, “In summary, deep and thorough knowledge of letters, spelling, patterns, and words, and of the phonological translations of all three, are of inescapable importance to both skillful reading and its acquisition.”⁵

III. The National Education Association (NEA), the American Association of School Administrators (AASA) and others, only three models showed “strong evidence” of effectiveness. “Only two of the three were applicable in elementary school (the third was a high school model), and both of these models featured highly structured phonics instruction; most of the other models did not feature such instruction.”⁶

IV. In Project Follow-Through, the U.S. Department of Education compared a systematic, comprehensive, phonics-based approach against eight other styles of teaching reading. The results indicated the overwhelming superiority of this phonics-based approach.⁷

V. The State of California inadvertently performed its own large-scale “research” during the late 1980’s and early 1990’s by literally burning their spelling and phonics books and focusing on the Whole Language methodology to teach reading. Student performance dropped to the very bottom of the national scores on the U.S. Department of Education’s NAEP Reading Report Card.⁸

VI. “Only 5% of our nation’s children learn to read effortlessly. Another 20 to 30% learn to read relatively easily once exposed to formal instruction. Unfortunately, 60% of our nation’s children find learning to read a formidable challenge.”⁹

“Phonemic awareness skills assessed in kindergarten and first grade serve as potent predictors of difficulties learning to read. This assessment can predict with 92% accuracy which children will have difficulties learning to read.

Productive word learning in alphabetic orthographies ultimately depends on viewing words as a sequence of letters and associating their spellings with sounds.”¹⁰

VII. “...There are literally hundreds of articles to support these conclusions. Over and over, children’s knowledge of the correspondences between spellings and sounds is found to predict the speed and accuracy with which they can read single words, while the speed and accuracy with which they can read single words is found to predict their ability to comprehend written text”¹¹

⁴ Chall, Jean S., 1967, 1983, 1996. “Learning to Read: The Great Debate” Harvard University p. 307.

⁵ Adams, Marilyn J., *Beginning to Read: Thinking and Learning Print*, 1990 p.416.

⁶ An Educator’s Guide to School-wide Reform, published on line by the American Association of School Administrators 1999.

⁷ <http://projectpro.com/ICR/Research/Phonics/Summary.htm>.

⁸ <http://projectpro.com/ICR/Research/Phonics/Summary.htm>.

⁹ Lyon, G. Reid, Dr., Chief, Why Kids Can’t Read, Statement of Dr. G. Reid Lyon, Child Development and Behavior Branch National Institute of Child Health and Human Development, Nation Institutes of Health, Committee on Education and the Workforce United States House of Representatives, Hearing on Literacy: July 10, 1997

¹⁰ Bruck and Treiman, Learning to read: The limitations of analogies. *Reading Research Quarterly*.1992; Marsh, Desberg & Cooper, Developmental strategies in reading. *Journal of Reading Behavior* 1977, 9:391-394

¹¹ Curtis, Developmental components of reading skill. *Journal of Educational Psychology* 1980, 72:656-669; Stanovich, Cunningham & Freeman, Relation between early reading acquisition and word decoding with and without context: A longitudinal study of first-grade children. *Journal of Educational Psychology* 1984, 76:668-677

VIII. “... In order to understand written text, the reader must be able to derive meaning from strings of printed symbols on the page. Phonics methods are built on the recognition that the basic symbols – the graphemes -- of alphabetic languages such as English encode phonological information. By making the relationships between spelling and sounds explicit, phonics methods are intended to assist the learning process by providing young readers and writers with a basis both for remembering the ordered identities of useful letter strings and for deriving the meanings of printed words that, though visually unfamiliar, are in their speaking and listening vocabularies.”¹²

IX. The National Reading Panel (NRP) issued the following statement in its press release: “In the largest, most comprehensive evidenced-based review ever conducted of research on how children learn reading, a Congressionally mandated independent panel has concluded that the most effective way to teach children to read is through instruction that includes a combination of methods. The panel determined that effective reading instruction includes teaching children to break apart and manipulate the sounds in words (phonemic awareness), teaching them that these sounds are represented by letters of the alphabet which can then be blended together to form words (phonics), having them practice what they’ve learned reading aloud with guidance and feedback (guided oral reading), and applying reading comprehension strategies to guide and improve reading comprehension.”¹³

The National Reading Panel found the following problems with non-systematic phonics programs:

- “Literature-based (Whole Language), basal programs emphasize reading and writing activities. Phonics instruction is embedded in these activities, but letter-sound relationships are taught incidentally, usually based on key letters that appear in student reading materials.
- Basal reading programs that focus on whole-word or meaning-based activities. These programs pay only limited attention to letter-sound relationships and provide little or no instruction in how to blend letters to pronounce words.
- Sight-word programs that begin by teaching children sight-word reading vocabulary of from 50 to 100 words. Only after they learn to read these words do children receive instruction in the alphabetic principle.
- Add-ons, adding phonics workbooks or phonics activities to these programs of instruction has not been effective. Such “add-ons” confuse rather than help children to read.”¹⁴

NRP found that systematic phonics instruction does not get in the way of reading comprehension ... the argument used by supporters of the above reading methods.

“Quite the opposite is true. Because systematic phonics instruction helps children learn to identify words, it increases their ability to comprehend what they read. Reading words accurately and automatically enables children to focus on the

¹² Marilyn J. Adams and Maggie Bruck, Resolving the ‘Great Debate’, American Educator, Learning to Read, Schools First Mission p 7.

¹³ National Reading Panel. Teaching Reading to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction, Press Release April 13, 2000.

¹⁴ National Reading Panel. Teaching Reading to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction—Reports of the SubGroups. 2000

meaning of text. The research is quite convincing in showing that phonics instruction contributes to comprehension skills rather than inhibiting them.”¹⁵

Research Studies of RICHARDS READ Systematic Language (Conducted for NCES)

RICHARDS READ Research Study One: Cleveland City Schools 1992-1995¹⁶

An early version of RICHARDS READ Systematic Language was used in two Cleveland City Schools, Miles Park and Joseph Landis Elementary Schools. The data collected was from 1993-94 and 1994-95 school years. Two types of measures were analyzed.

- Type I--The California Achievement Test (CAT) is given at the end of each school year to pupils in the Cleveland School System. Students in classes using the RICHARDS READ curriculum have been matched with students in classes at the same school and same grade level, using traditional school reading curriculum. Year-end CAT scores were analyzed for each group.
- Type II--As part of the RICHARDS READ Program students were given a battery of assessment tests at the beginning and end of the school year. These results were examined to determine the average increase in test scores.¹⁷

Test Type I -- California Achievement Test

Year-end CAT scores were obtained for 327 first, second, and third grade children receiving RICHARDS READ curriculum and instruction.

Type II -- North Coast Education Skills Assessment (NCTSSAT)

Pre-testing (n=215)¹⁸ found that 67% of children were at risk for reading level in grades kindergarten through grades 3.

- Kindergarteners tested at the beginning of the 1993 school year (n=15) knew, on average, 0.2 lowercase letter sounds. At the end of the year the same children knew, on average, 20 letter sounds.
- In 1994, 38 kindergarten children received the RICHARDS READ curriculum. At the beginning of the year children could identify, on average, 10 uppercase and 7 lowercase letters. Post-testing results show that the children on average could identify 26 uppercase and 25 lowercase letters.
- First grade pre-post testing (n=136) also revealed that children learned on average all of the lowercase and uppercase letters by year-end.
- Second graders (n=45) were given a more extensive test. On the San Diego Graded Word lists-Independent Reading Level, second graders began the year on average below the first grade level (0.2), and ended the years ahead (1.27). The gain on Instructional Level of the Graded Word list is more dramatic. Average pre-test scores fell below the first grade level (0.89), and average post-test score at the second grade level (2.09)

¹⁵National Reading Panel. *Teaching Reading to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction* 2000

¹⁶ Angelopoulos, Jennifer, M.Ed. (1996) *Cleveland City Schools 1992-1995*. Case Western Reserve University School of Medicine, Department of Pediatrics

¹⁷ Dr. Joseph Kretovics, Professor of Education, University of North Carolina Chapel Hill (Model Clinical Teaching Network) reviewed the RICHARDS READ pre and posttests. He states, The test is a good test and I would argue that it is better than most standardized tests because it involves one-on-one contact with the student and actually had students reading words and sentences rather than answering multiple guess questions.

¹⁸ This number does not include Title I reading students or fourth and sixth graders involved in the program.

- Third graders (n=52) had the identical test battery to the second graders. Results were similar with their Independent Level on graded word lists began the year below second grade level (1.75); post-test scores indicate an average gain of about one school year (2.84). Ekwall Instructional levels gain more than a grade level (pre-test = 2.1, post-test = 3.71)

Summary

The benefit of the RICHARDS READ curriculum is reflected in significantly higher year-end CAT scores for 1st and 3rd graders enrolled in the program as compared with children in classrooms where standard reading curriculum was taught. In analysis, differences between the groups were greatest for vocabulary skills. These gains are particularly significant when considered with typical teaching methods that require extensive rote memorization of word lists in every grade. Impressive gains are also seen in pre-post testing done as part of the curriculum.

RICHARDS READ Research Study Two -- Bedford City Schools 1995-96¹⁹

Significant Results:

- 101 of 136 first graders in the RICHARDS READ Program scored above 70% mastery on the Reading Competency Test administered by the Bedford City Schools.
- Grade three RICHARDS READ (n=54) students increased an average of 5/25 NCE's more than the control group on the Stanford Achievement Test.
 - **Pre-training Results**--Grade three RICHARDS READ (n=54) students began third grade with 28 students scoring 40 NCE's or better on the second grade Stanford Achievement Test. The Control group of third graders (n=54) began third grade with 28 students scoring 40 NCE's on the second Grade Stanford Achievement Test.
 - **Post-training Results**--Third Grade Stanford Achievement scores showed 38 RICHARDS READ students scoring 40 NCE's or better on the test. Just 12 of 54 control group students scored 40 NCE's on this test.
 - **Conclusion**--The number of children in the RICHARDS READ classes scoring 40 NCE's or better grew significantly, while the number of children scoring 40 NCE's or better decreased significantly in the control group.

¹⁹ Truelson, Nancy, Ph..D. (1996) Review of Test results compiled by Carole Richards, President, North Coast Education Services

RICHARDS READ Research Study Three²⁰ - The Impact of Basic Skills Training on Employee and Organization Effectiveness
Evaluation Results for Nine Cleveland Companies--October 2000

Major Gains in Competence – Reported by Employees

- Interest in learning 83%
- Improved confidence 69%
- Improved reading 69%²¹
- Improved math 63%

Employee Changes After Training – Reported by Supervisors

- More initiative 60%
- Better decision making 53%
- More accurate in their work 86%
- Improved attitude 53%
- Get along better with co-workers and supervisors 66%

Observations About Employees – Reported by Instructors

- Considerable improvement in employees' ability to think
- Improved interpersonal and team skills
- Improved self-esteem
- Proud to be attending training
- Improved attitude toward learning

Dollar Savings – Reported by Individual Companies

Scrap-Waste Savings

- Scrap and waste for a one-year period was reduced \$88,700 in one company
- Defect rate was reduced 61% in another company

Productivity-Profitability

- Profit improved in one company from \$14,200 to \$75,000.
- Base productivity factors increased while shop wages decreased even when sales decreased for this company.

Safety -- Workers Compensation

- Best safety record in the nation in its industry for this company
Accidents declined from 24 in 1998 to 8 in 2000.
Worker's compensation claims dropped from \$352,782 to \$175,242
- Significant reduction in annual workers compensation premiums

Survey Results

Workers, supervisors and executives all indicated on surveys conducted in the nine companies, "Employees were more willing to learn new things and better able to think and problem-solve on the job as a result of their basic skills training."

²⁰ O'Connor, Patrick, Ph.D. (2000), The Impact of Basic Skills Training on Employee and Organization Effectiveness, Kent State University

²¹ Some employees took either a math or reading course, therefore not all employees would be expected to see a gain in both reading and math skills.