Various Essays and Papers by Dr. Patrick Groff

Collected from various sources by Donald L. Potter

February 8, 2020

Titles

- 1. 90+ Surveys of Experimental Research on Reading Instruction, May 7, 2014
- 2. A Return to Scientific Reading Instruction, June 20, 2000
- 3. Observations on Reading Recovery, October 2, 1996
- 4. Observations on California Commission on Teacher Credentialing (1997).
- 5. The NEA Misconstrues Reading Instruction Research (c. late 1997)
- 6. Observations on Ohio State University Phonics Institute '98 Columbus, OH, July 26-29, 1998
- 7. Roll Call of Combatants in the Reading Wars (no date)

90+ Surveys of Experimental Research on Reading Instruction

May 7, 2014

by Dr. Patrick Groff

NRRF Board Member & Senior Advisor

Dr. Patrick Groff, Professor of Education Emeritus San Diego State University, has published over 325 books,

monographs, and journal articles and is a nationally known expert in the field of reading instruction.

- 1. Adams, M. J. (1990). Beginning to read: Thinking and learning about print. Cambridge, MA: MIT.
- 2. Almasi, J. F. (1994). Toward disciplined inquiry: A methodological analysis of whole language research. Educational Psychologist, 29, 193-202.
- 3. Anderson, R. C. et al. (1985). Becoming a nation of readers. Washington, DC.: U.S. Department of Education.
- 4. Anderson, T. H. & West, C.K. (1995). Commentary: An analysis of a qualitative investigation: A matter of whether to believe. Reading Research Quarterly, 30, 562-569.
- 5. Balmuth, M. (1982). The roots of phonics. New York, NY: McGraw-Hill.
- 6. Bennett, W. J. (1986). First lessons: A report on elementary education in America. Washington, DC: U.S. Department of Education.
- 7. Blumenfeld, S. L. (1996). The whole language/OBE fraud. Boise, ID: Paradigm.
- 8. Brady, S. A. & Shankweiler, D. P. (1991). Phonological processes in literacy. Hillsdale, NJ: Erlbaum.
- 9. Bryant, P. L. & Bradley, L. (1985). Children's reading problems. New York, NY: Basil Blackwell.
- 10. California State Board of Education. (1997). Collection of articles on beginning reading instruction. Sacramento, CA: CSBE.
- 11. Carnine, D., Silbert J., & Kameenui, E. (1990). Direct reading instruction. Columbus, OH: Merrill.
- 12. Center, Y., Wheldall, K., & Freeman, L. (1992). Evaluating the effectiveness of Reading Recovery: A critique. Educational Psychology, 12, 263-274.
- 13. Center, Y., Wheldall, K., Freeman, L., Outhred, L., & McNaught, M. (1995). An experimental evaluation of Reading Recovery. Reading Research Quarterly, 30, 240-263.
- 14. Chall, J. S. (1967 and 1983). Learning to read: The great debate. New York, NY: McGraw-Hill.
- 15. Chall, J. S. (1989). Learning to read: The great debate twenty years later. Phi Delta Kappan, 71, 521-38.
- 16. Chapman, J. W., & Tunmer, W. E. (1991). Recovering Reading Recovery. Australia and New Zealand Journal of Developmental Disabilities, 17, 59-71.
- 17. Cornoldi, C. & Oakhill, J. (1996). Reading comprehension difficulties. Hillsdale, NJ: Erlbaum.
- 18. Curry, L. (1990). A critique of the research on learning styles. Educational Leadership, 48 (2), 50-56.
- 19. 19. Dreher, M. J. & Slater, W. H. (1992). Elementary school literacy. Norwood, MA: Christopher-Gordon.
- 20. Feitelson, D. (1988). Facts and fads in beginning reading. Norwood, NJ: Ablex.
- 21. Finn, C. E. (1986). What works: Research about teaching and learning. Washington, DC: U.S. Department of Education.
- 22. Foorman, B. R. (1995). Research on the great debate: Code-oriented versus whole language approaches to reading instruction. School Psychology Review, 24, 276-292.
- 23. Glynn, T., Crooks, T., Bethune, N., Ballard, K., & Smith, J. (1992). Reading Recovery in context: implementation and outcome. Educational Psychology, 12(3 & 4), 249-261.
- 24. Gough, P., Ehri, T. L. C., & Treiman, R. (1992). Reading acquisition. Hillsdale, NJ: Erlbaum.
- 25. Groff, P. (1987). Preventing Reading Failure. Portland, OR: Halcyon House.
- 26. Groff, P. (1989). Two reactions to the Report Card on Basal Readers. Bloomington, IN: ERIC, Indiana University.

- 27. Groff, P. (1991). An analysis of the debate: Teaching reading without conveying phonics information. Interchange, 21 (4), 1-14.
- 28. Groff, P. (1998). Groff responds to Lapp and Flood. Reading Teacher. 52(2), 144.
- 29. Groff, P. (1991). Teachers' opinions of the whole language approach to reading instruction. Annals of Dyslexia. 41, 83-95.
- 30. Groff, P. (1991). Word recognition and critical reading. Journal of Reading, Writing, and Learning Disabilities International. 7 (1), 17-31.
- 31. Groff, P. (1994). Differing views on context cues. Interchange. 25, 171-81.
- 32. Groff, P. (1996). Questions and conclusions from a discussion of Reading Recovery. Effective School Practices, 15(3), 24-29.
- Groff, P. (1994). Reading Recovery: Educationally sound and cost-effective? Effective School Practices, 13(1), 65-69.
- 34. Groff, P. (1996). Whole language: It's a matter of a wrong assumption. Reading & Writing Quarterly, 12, 217-226.
- 35. Groff, P. (1998). Preventing reading failure. Portland, OR: Halcyon House.
- 36. Groff, P. & Seymour, D. Z. (1987). Word recognition. Springfield, IL: C.C. Thomas.
- 37. Grossen, B. (1997). 30 years of research: what we now know about how children learn to read. Santa Cruz, CA: Center for the Future of Teaching and Learning.
- 38. Grossen, B. & Carnine, D. (1990). Translating research on initial reading instruction into classroom practice. Interchange, 21, 15-23.
- 39. Grossen, B., Coulter, G., & Ruggles, B. (1996). Reading Recovery: An evaluation of benefits and costs. Effective School Practices, 15(3), 6-24.
- 40. Hedley, C. N., et al. (1995). Thinking and literacy. Hillsdale, NJ: Erlbaum.
- 41. Henderson, L. (1982). Orthography and word recognition in reading. New York, NY: Academic.
- 42. Heibert, E.H. (1996). Revisiting the question: What difference does Reading Recovery make to an age cohort? Educational Researcher, 25, 7, 26-28.
- 43. Hirsch, E. D. (1996). Reality's revenge: Research and ideology. American Educator, 20 (3), 4-5, 31-46.
- 44. Iverson, S. & Tunmer, W. E. (1993). Phonological processing skills and the Reading Recovery program. Journal of Educational Psychology, 85, 112-126.
- 45. Just, M. A. & Carpenter, P. A. (1987). The psychology of reading and language comprehension. Boston, MA: Allyn and Bacon.
- 46. Kameenui, E. (1991). Designing instructional strategies. Columbus, OH: Merrill.
- 47. Kavale, K. A. & Forness, S. R. (1987). Substance over style: Assessing the efficacy of modality testing and teaching. Exceptional Children, 54, 228-239.
- 48. Liberman, I. Y. & Liberman, A. M. (1990). Whole language vs. code emphasis: Underlying assumptions and their implications for reading instruction. Annals of Dyslexia, 40, 51-76.
- 49. Macmillan, B. (1997). Why schoolchildren can't read. London, UK: Institute of Economic Affairs.
- 50. McGuinness, D. (1997). Why our children can't read. New York, NY: Free Press.
- 51. McKenna, M. C. et al. (1990). Whole language: A research agenda for the nineties. Educational Researcher, 19 (8), 3-11.
- 52. Mather, N. (1992). Whole language reading instruction for students with learning disabilities: Caught in the cross fire. Learning Disabilities Research and Practice, 7, 87-95.
- 53. Moorman, G. B., et al. (1994). The rhetoric of whole language. Reading Research Quarterly, 29, 308-329. 13 (2), iii-xv.
- 54. National Advisory Council on Adult Education (1986). Illiteracy in America: Extent, causes, and suggested solutions. Washington, D. D: U. S. Department of Education.
- 55. Nicholson, T. (1991). Do children read words better in context or in lists? Journal of Educational Psychology, 83, 444-450.
- 56. Nicholson, T. (1989). A comment on Reading Recovery. New Zealand Journal of Educational Studies, 24(1), 95-97.
- 57. Orton Dyslexia Society (1987). Intimacy with Language. Baltimore, MD: ODS.
- 58. Orton Dyslexia Society (1991). All language and the creation of literacy. Baltimore, MD: The Society.

- 59. Orton, S. T. (1989). Reading, Writing, and speech problems in children and selected papers. Austin, TX: PRO-ED.
- 60. Pearson, P. D. (1984). Handbook of reading research. New York, NY: Longman.
- 61. Pinker, S. (1994). The language instinct. New York, NY: William Morrow.
- Perfetti, C. A. (1985). Reading ability. New York, NY: Oxford University. 63. Pressley, M. & Menke, D. J. (1994). State-of-the-science primary-grade reading instruction or whole language? Educational Psychologist, 29, 211-215.
- 63. Putnam, L. R. (1996). How to become a better reading teacher. Englewood Cliffs, NJ: Prentice-Hall.
- 64. Rayner, K. & Pollatsek, A. (1989). The psychology of reading. Englewood Cliffs, NJ: Prentice-Hall.
- 65. Rasinski, T.V. (1995). Commentary On the effects of Reading Recovery: A response to Pinnell, Lyons, DeFord, Bryk, and Seltzer. Reading Research Quarterly, 30, 264-270.
- 66. Resnick, L. B. & Weaver, P. A. (1979). Theory and practice in early reading. Hilsdale, NJ: Erlbaum.
- 67. Rieben, L. & Perfetti, C. A. (1991). Learning to read: Basic research and its implications. Hillsdale, NJ: Erlbaum.
- 68. Samuels, S. J. & Farstrup, A. E. (1992). What research has to say about reading instruction. Newark, DE: International Reading Association.
- 69. Sandman, B. (1992). Learning to read: It's time to stop the pendulum swing. California School Boards Journal, 51, 37-42.
- 70. Shanahan, T., & Barr, R. (1995). Reading Recovery: An independent evaluation of the effects of an early instructional intervention for at-risk learners. Reading Research Quarterly, 30(4), 958-996.
- 71. Share, D. L. & Stanovich, K. E. (1995). Cognitive processes in early reading development. Issues in Education, 1, 1-57.
- 72. Shimron, J. (1996). Literacy and Education. Cresskill, NJ: Hampton.
- 73. Singer, M. H. (1982). Competent reader, disabled reader: Research and application. Hillsdale, NJ: Erlbaum.
- 74. Smith, C. B. (1994). Whole language: The Debate. Bloomington, IN: EDINFO.
- 75. Snider, V. E. (1992). Learning styles and learning to read: A critique. Remedial and Special Education, 13, 6-18.
- 76. Spear-Swerling, L. & Sternberg, R. J. (1996). Off track. Boulder, CO: Westview.
- 77. Stahl, S. A. (1988). Is there evidence to support matching reading styles and initial reading methods? A reply to Carbo. Phi Delta Kappan, 70, 317-322.
- 78. Stahl, S. A. & Miller, P. D. (1989). Whole language and language experience approaches for beginning reading: Quantitative research synthesis. Review of Educational Research, 59, 87-116.
- 79. Stahl, S. A. & Kuhn, M. R. (1995). Does whole language or instruction matched to learning styles help children learn to read? School Psychology Review, 24, 393-404.
- 80. Stanovich, K. E. (1996). Romance and reality. Reading Teacher, 47, 280-291.
- 81. Sweet, A. P. & Anderson, J. I. (1993). Reading research into the year 2000. Hillsdale, NJ: Erlbaum.
- 82. Sweet, R. W. (1997). Don't Read, don't tell. Policy Review. No. 83, 38-42.
- 83. Templeton, S. & Bear, D. R. (1992). Development of orthographic knowledge ad the foundations of literacy. Hillsdale, NJ: Erlbaum.
- 84. Thompson, G. B., Tunmer, W. E., & Nicholson, T. (1993). Reading Acquisition Processes. Philadelphia, PA: Multilingual Matters.
- 85. Truch, S. (1991). The missing parts of whole language. Calgary, Canada: Foothills Educational Materials.
- 86. Tunmer, W. (1989). Does Reading Recovery work? Massey University "Funding for literacy scheme stopped", Sunday Times, London, England, Dec 4, 1994.
- 87. Turner, M. & Buchard, T. (1996). Reading fever: Why phonics must come first. London, UK: Center for Policy Studies.
- 88. Von Euler, C., Lundberg, I., & Lennerstrand, G. (1989). Brain and reading. London: Macmillan.
- 89. Yussen, S. R. & Smith, M. C. (1993). Reading across the life span. New York, NY: Springer-Verlag.

A Return to Scientific Reading Instruction

June 20, 2000

Patrick Groff

Professor Emeritus San Diego State University

San Diego, California

The importance of science in modern society is manifested in numberless ways. We look to guidance from science as to how to best protect or restore our physical or emotional well-being. Great confidence is placed on scientific solutions to everything from infant earaches to the construction of bridges and intercontinental missiles.

Knowing of the deep respect there is for scientific care of sick youngsters and for prevention of childhood diseases, it is logical to presume that science also should be consulted for answers to questions about the ways children are educated. It therefore is startling to find that many public schools today teach students to read using unscientific procedures.

Of late, reading instruction in schools has moved so far away from how relevant experimental research findings indicate it should be conducted that a vigorous controversy over this matter has developed. On one side of the "reading wars," as the media has dubbed the debate, are reading instruction specialists who honor experimental findings as the most suitable source of information on how to teach children to read. Lined up against defenders of scientific evidence in this regard are members of the Whole Language movement.

They are reading teaching professionals who argue that students best learn to read in the same informal, natural manner in which they previously learned to speak, as preschoolers. It consequently is held that direct, early, and systemic (DES) teaching of a prearranged hierarchy of reading skills is unnecessary. The DES teaching of reading is impractical, advocates of Whole Language teaching contend, since each child supposedly enters school with a unique, immutable learning style. In genuine Whole Language classes, a student is empowered not only to decide how he/she will learn to read, but also to personally construct the meanings of written materials.

No reputable psychologist, linguist, cognitive scientist, nor neurologist currently endorses The Whole Language hypothesis that children's learning to speak and to read are the same linguistic processes. In addition, the effectiveness of none of the original principles nor novel practices of Whole Language reading instruction is corroborated by relevant experimental evidence. The Whole Language movement reacts to these facts by producing much qualitative (anecdotal, nonnumerical, subjective, loosely organized, unreplicable, nonscientific) research evidence as support for its instructional innovation. This kind of evidence consistently contradicts that generated by experimental studies of children's reading development. The present dispute over reading instruction grew from the realization by reading teaching authorities that findings about their educational specialty from experimental, as versus qualitative research, are irreconcilable. Accordingly, anyone convinced that children must be afforded full opportunity to learn to read has to make a forced-choice between DES reading instruction based on scientific findings, and Whole Language reading teaching founded on qualitative evidence.

There is reassurance for parents, teachers, school officials, education professors, lawmakers, business and social organizations, and the public in general, who opt in favor of DES reading instruction, that they have made the correct choice. This is found in the April 2000 report by the National Reading Panel (NRP) of its critical analysis of experimental research on reading instruction (published by the National Institute of Child Health and Human Development). From a total of 300 applicants to serve as unpaid volunteers on the NRP, 14 were selected: 1 teacher, 1 school principal, 1 certified public accountant, 2 university officials, and 9 professors of education, psychology, and medicine.

The NRP's report on how children best learn to read is based on its reference to over 100,000 applicable experimental studies on this matter. To be able to read proficiently, children must acquire four essential knowledges and skills, the NRP concluded. These are:

- 1. Conscious awareness of the speech sounds in spoken words. This is called phonemic awareness;
- 2. Recognition that letters are used to represent speech sounds. This is called phonics information;
- 3. Capacity to read a text so as "to understand what is read." To "understand" a text, the NRP believes, is to read it with the presumption that part of its meaning "resides in the intentional problem solving, thinking process of the reader." In this view, meanings in a given text are "constructed" by each student through "a reciprocal interchange of ideas" between him/her and the message that an author intended to communicate. This is called reading comprehension. However, to many defenders of DES teaching of reading, this sort of interchange between reader and author is nothing more than imprecise reading comprehension. It is argued that personal opinions by children of the meanings authors wish to transmit are not accurate enough to be called authentic, reliable reading comprehension.
- 4. Ability to read silently and aloud with "speed, accuracy, and proper expression." This is called reading fluency. The NRP concedes that there is a "close relationship between [reading] fluency and reading comprehension." This fluency also depends upon students ' "well developed word recognition skills." However, "such skills do not inevitably lead to fluency," the panel cautions. Thus, "students who are low in fluency may have difficultly getting the meaning of what they read. Here the NRP implies that a lack of fluency causes children's inadequate reading comprehension, rather than the other way around. However, the NRP errs in asserting that "there is common agreement" among reading instruction specialists about that conclusion. To the contrary, many of these experts maintain that reading fluency depends on how well students comprehend what they read. Lack of fluency thus is judged to be a symptom, not a cause of interior reading comprehension. It consequently is held that the most effective way to improve reading

fluency is to upgrade how precisely students can understand the content that authors intend to relate. Beyond the fact that the NRP describes reading comprehension and its relationship to reading fluency in a controversial manner, its report nonetheless is a faithful reflection of how the preponderance of experimental findings indicates reading instruction should be conducted. This scientific evidence discloses that:

- Development of beginning readers' phonemic awareness (PA) should be carried out in an "explicit" manner. This instruction thus should focus "on one or two skills" of PA at a time. Moreover, speech "sounds need to be overlearned so that children can work with them automatically" (i.e., quickly and accurately). Teaching children in "small groups" is "the best way" to develop their PA.
- 2. The "hallmark" of successful instruction of phonics information is:

• Instruction of "a planned, sequential set of phonic elements." These are letters, speech sounds, and generalizations about how letters represent speech sounds (the alphabetic code);

· Teaching "these elements explicitly and systematically";

• Instruction intensive enough that children "acquire sufficient knowledge and use of the alphabetic code"; and,

· Training in phonics information that "begins in kindergarten or 1st grade"

- 3. Children's reading fluency is best improved by teacher "guided oral reading procedures" and "feedback." On the other hand, experimental research "has not yet demonstrated" in "a clear and convincing manner" if students' silent reading, "individually on their own with little or no specific feedback," has the same effect.
- 4. Children "who are not explicitly taught" reading comprehension procedures "are unlikely to learn, develop, or use them spontaneously." Therefore, teachers are advised they can increase students' reading comprehension best "by explaining fully what it is they are teaching:
 - \cdot what to do, why, how, and when;
 - · by modeling their own thinking processes;
 - · by encouraging children to ask questions and discuss possible answers among themselves";
 - \cdot and by assigning reading tasks "that demand active involvement" by students.

This direct and systematic method of instruction particularly is effective when students are taught "a variety of reading comprehension strategies" (techniques for gaining an understanding of meanings that authors wish to transmit).

However, the NRP is not always so straightforward in its remarks about the effect of children's knowledge of words upon their reading comprehension. On the one hand, the panel discloses that "the finding that vocabulary [knowledge] is strongly related to [reading] comprehension seems unchallenged."

Later on, however, the NRP deduces that a "causal link between increasing vocabulary [knowledge] and an increase in [reading] comprehension has not been demonstrated" experimentally. Despite that disclaimer, the

panel feels it necessary to devote nineteen pages of its report to a description of "vocabulary instruction," and to citations of studies made about it.

It is apparent that the NRP's "assessment of the scientific literature on reading and its implications for reading instruction" leaves some mixed messages about teaching reading comprehension and fluency. Nevertheless, its overall impact is clear. The document clearly signals the necessity of a return to DES reading teaching that is based on experimental research findings, rather than on ideological ruminations about this instruction. Thus, in many ways the NRP report constitutes a direct confrontation to the now popular Whole Language approach to this teaching.

It is highly unlikely, however, that advocates of the Whole Language approach will react passively to the NRP's challenge to their present eminence in the field of reading teaching. Educational organization that recommend Whole Language teaching, such as the International Reading Association and the National Council of Teachers of English, doubtless will remonstrate that the NRP report is not believable since leading members of the Whole Language movement were not selected to participate in its proceedings. The fact the panel exclusively examined scientific findings, and not qualitative evidence, also probably will be viewed with alarm.

A preview of the mode of attack upon it that the NRP report subsequently will face is found in the "Minority View" of it written by a single panel member, Joanne Yatvin. This defender of Whole Language reading teaching is a school principal from Boring, Oregon, a small suburb of Portland.

The NRP report is not credible, Yatvin unconvincingly contends, because the panel "has not fulfilled" its "obligation" to "settle the 'Reading Wars'," by "determining which of the many [reading] teaching methods used in schools," that are "of the highest interest and controversy in the public arena," are the ones that "really work best." In short, the NRP report does not adequately "address the key issues" involved in the ongoing reading wars, Yatvin complains.

It is true, as Yatvin asserts, that the NRP report does not comment directly nor at length on the competing "theoretical models of reading" instruction. However, what the NRP did do, which is far more practical than to mull over theories, was to determine how closely the methods of instruction that these theories recommend conform to the available scientific evidence.

Particularly distressing to Yatvin in this respect are the NRP's resolutions that direct and systematic instruction of children's phonemic awareness, phonics skills, reading comprehension, and reading fluency are corroborated by experimental evidence. She also protests the importance that the panel places on children's understanding of word meanings, ability to read words accurately and fluently, and reading to learn. By doing so, however, Yatvin reveals little more of significance than her exasperation with scientific findings on these matters.

In a further attempt to disparage the NRP's report, Yatvin resorts to making accusations against it that have no foundation in fact. For example, the report does not testify in favor of separating "work pronunciation from work understanding." Nor is it opposed to the development of students' self-motivation to read, or to reading teachers "getting students to understand the main idea of a short story." The report does not downgrade the need for students to "perform multiple [mental] operations in dealing with text," and to use special "strategies in dealing with more difficult text," Yatvin's views to the contrary, notwithstanding.

Therefore, unwarranted is Yatvin's pessimistic opinion that the NRP report, which "Congress intended to be a boon to the teaching of reading, will turn out to be a further detriment" to reform of this instruction. To the contrary, the panel clearly met its assignment to single out the most prominent aspects of children's reading development, and to try to determine how experimental data indicate they are taught the most effectively. These issues are not "the only topics of importance in [children's] learning to read," the panel admits. But, the panel explains, the "sheer number of studies" on reading and its instruction "precluded an exhaustive analysis of the [experimental] research in all areas of potential interest."

I predict that most Americans (and people from other English-speaking countries) who gain access to the NRP's report will appreciate it. There thus should be widespread acceptance and application of the NRP's recommendations in reading instruction programs in our nation's public schools. Society must make sure that the changeover away from Whole Language teaching, that the panel's report recommends, actually occurs. The demonstration of society's civic responsibility in this regard will be the true test of the merit of the time, effort, and funds expended by the NRP to institute a return to scientific reading instruction.

Patrick Groff is professor of education emeritus at San Diego State University.

Observations on Reading Recovery

October 2, 1996

by Dr. Patrick Groff

NRRF Board Member & Senior Advisor

Patrick Groff, Professor of Education Emeritus, San Diego State University, has published over 300 books, essays, and journal articles and is a nationally known expert in the field of reading.

These books are evaluated:

Marie M. Clay (1993). *An Observation Survey of Early Literacy Achievement*. Portsmouth, NH: Heinemann. pp. 93.

Marie M. Clay (1993). *Reading Recovery: A Guideline for Teachers in Training*. Portsmouth, NH: Heinemann. pp. 112.

The Reading Recovery Reports, the published evidence that Clay offers for Reading Recovery's effectiveness.

The first two volumes were written by Marie Clay, the creator of the remedial reading tutoring program called "Reading Recovery" (RR). The texts are the official guidebooks for teachers who refer children for RR, and those who aspire to become RR tutors. The two books offer (1) Clay's version of the reading process; (2) her descriptions of how to decide which first-grade children need RR; (3) the official teaching procedures of RR; and (4) information on when to transfer (discontinue) pupils out of RR as they recuperate from their reading disabilities.

Clay's Version of the Reading Process

Clay's conceptualizations of the "reading process," which she expects all RR tutors to honor and adopt, violate what the experimental evidence says about reading development. For example, Clay insists that beginning readers be engaged by their teachers (for some unspecified time) in "reading for meaning" before these pupils are taught to apply phonics information to decode written words. She maintains that beginning readers' ability to apply phonics information is a "grossly simplified explanation" of what they "need to know or do in order to be able to read." She scoffs at the belief that a beginning reader's underachievement ever could be brought on by a "simple" cause "such as not having learned his phonics."

It is unintended, but likely, that the delay in phonics teaching that Clay advises actually causes reading problems that RR is designed to remedy. It is indisputable, as Clay notes, that "the larger the chunks of printed language the child can work with" the better. But then, without support from the empirical evidence on reading development, she maintains that children's ability to recognize individual words is not the foundation for their successful reading of larger chunks of written material.

A proper theory of the latter "cannot arise from a theory of word reading," Clay mistakenly insists. So, she further misreckons, there are eight word recognition cues beginning readers "need to use" when perusing written material, before they begin to apply phonics information to recognize words. For example, Clay advises that these pupils "use" sentence structure, size of words, "special [unnamed] features of sound, shape and layout," and "possible meanings of the text" for some indefinite period of time before they begin to apply phonics information.

The relevant experimental research makes clear to the contrary, however, that direct and systematic teaching of phonics skills generates more written word recognition ability for beginning readers than otherwise is possible. Nothing relates more closely to beginning readers' quick and accurate (automatic) word recognition ability than does their skill at applying phonics information. Moreover, this automatic word recognition is associated more closely to reading comprehension of the stories first-graders typically are given to read than is any other factor–including any of the eight cues that Clay insists precede the application of phonics information.

Phonics knowledge thus is not, as Clay erroneously contends, a "less reliable" and more "confusing and distorting source of cues" for reading words than is sentence structure, the empirical evidence indicates. The "high progress readers" to whom Clay refers do not depend more heavily on sentence structure to recognize words than they do on phonics knowledge. Clay's pronouncement that beginning readers need to be adept at "scanning" written material to gain its meaning clearly is not corroborated by scientific evidence. To the opposite, beginning readers must be weaned away from the use of sentence context cues if they are to learn to recognize individual words in a quick and accurate fashion, it indicates.

In addition, Clay wrongfully assumes that beginning readers' "pretend writing," the "jumble of disoriented letters" that pre-literate children produce when trying to spell words, greatly reinforces these pupils' ability to recognize words. It is true that correctly spelled words perform this reinforcing function. As children apply phonics information to decode words, they begin to recognize familiar spelling patterns. These pupils eventually can read these spelling patterns in words without sounding them out, letter-by-letter. In this fashion, children learn to read words faster and faster. However, misspelled ("pretend writing") words have relatively little utility in reinforcing a beginning reader's ability to read correctly spelled words.

Finally, Clay's inaccurate version of the reading process apparently causes her to set a relatively low standard as to the percent of first-grade children who can be expected to learn to read and write. She believes in this regard that only "most children can become literate." This reduced level of reading attainment in children is ordained, according to Clay. We should not hope that improvements in reading methodology will make reading problems disappear, since a child's "intelligence" supposedly predetermines if he or she will read better or worse than do other children. Unfortunately, Clay does not explain what "intelligence" means to her. She inexplicably protests the use of intelligence test data in assessments of reading disability. Nonetheless, decisions about children's intelligence indicate to Clay that teachers are "sensitive to individual differences" in reading ability.

If a first-grade teacher faithfully implemented Clay's version of the beginning reading process, there likely would be closer to 51 percent rather than 100 percent of children being taught who would learn to read well. Clay concedes elsewhere (in *The 3 Early Detection of Reading Difficulties*, 1985), that in New Zealand, where her version of the reading process ("Whole Language") is federally mandated for reading programs, 30 to 50 percent of children read so poorly they qualify for Reading Recovery. In California, where the Whole Language approach to reading development is more popular than in any other state, students are now the least capable readers in the nation.

How children are assigned to Reading Recovery

Would-be tutors are told how to assign children to Reading Recovery in Clay's book, An Observation Survey of Early Literacy Achievement. These RR trainees are warned emphatically that "standardized tests do not measure slow progress [in children's learning to read] well." Elsewhere in the book, however, Clay reverses herself noting that "several standardized tests can be applied" to measure underachievement in reading and spelling. One must put more weight in her negative criticism of standardized tests, however. Throughout the book, Clay emphasizes that to determine as quickly as possible which students should be assigned RR, first-grade teachers must conduct "systematic observation" of each of their pupils' reading behavior, rather than to use standardized test data for this purpose. It is notable that Clay does not recommend standardized reading tests be administered when pupils enter and leave RR.

Remedial teaching should be scheduled early for the underachieving student, preferably at the beginning of the second grade, Clay reasonably argues. But, she continues, if a teacher used a standardized reading test to determine a pupil's underachievement, the "child with reading difficulties has had to wait until the third or fourth year of school before being offered special instruction." This conclusion obviously is uninformed and therefore misleading, since there are many readily available, well-designed, effective diagnostic standardized tests of reading that are applicable at the first-grade level. One need only consult leading textbooks on diagnostic and remedial reading instruction, or standard indexes of reading assessment, such as Mental Measurements Yearbook or Test Critiques, to be convinced of Clay's error in this matter.

It is true, as Clay complains, that standardized visual discrimination tests have not proved themselves useful in providing guidance to teachers as to what reading instruction underachieving beginning readers need. On the other hand, she finds no support from the empirical evidence for her view that the same is true for standardized tests (a) of children's conscious awareness of speech sounds, and (b) of phonics skills.

Instead of using standardized reading tests to determine which children are in need of Reading Recovery, Clay recommends that teachers conduct an elaborate "Observation Survey." As opposed to standardized tests, the Observation Survey involves "only slight emphasis on scores and quantifying process," Clay claims. This is an underestimation of what Clay actually later recommends, as is demonstrated below. The Observation Survey requires that the teacher fulfill six tasks. First, teachers must keep a "running record" for each child. This means "recording [in writing] everything that a child says or does as he tries to read [aloud] the book" given him for this purpose. For example, the teacher must calculate the child's oral reading error rate, accuracy of word recognition, and self-correction ratio (number of errors divided by self-corrections), and use data conversion tables. Furthermore, the teacher must use the data so collected to make generalizations about the reading "strategies" the child uses, and recommendations for instruction, all of which are recorded on record sheets. Clay devotes an entire chapter (22 pages) of An Observation Survey of Early literacy Achievement to the details of this time-consuming and complicated process.

The percent of a child's oral reading errors (substitutions, additions, omissions, mispronunciations, and no response), minus his self-corrections, are useful for deciding how difficult a book is for a child to read independently, Clay correctly contends. A "hard" book for a child, one that frustrates him, is one on which he makes more than 10 percent of certain oral reading errors, it is true. Clay is mistaken in believing, however, that this informal reading inventory can be authentically administered "even if it is only for a couple of lines of print."

Unfortunately, Clay refuses to accept the empirically verified fact that instructing beginning readers in a direct and systematic way to apply phonics information has been proved to be the most effective way to reduce oral reading errors. In fact, she misleads teachers by directing them to spend much time puzzling out and recording how the young child uses sentence context cues when reading aloud, and planning ways to encourage the child to continue to do so. As noted, the empirical evidence indicates that beginning readers must be taught not to depend on context cues if they are to learn how to recognize words most accurately. Second, Clay's Observation Survey requires that a test be made of each child's ability to identify upper- and lower-case letters (54 letters). A table of the distribution of scores on this test of 6 to 7-year-old New Zealanders is provided so that "an individual child can be compared with other children." There is no evidence, however, that children's ability to recognize upper-case letters relates as closely to their word recognition skill as does pupils' recognition of lower-case ones. Thus, combining data on both kinds of letter recognition leads to a flawed statistic. As well, the validity of the table of letter recognition scores provided by Clay is of doubtful usefulness since she concedes that New Zealand children "do not score in similar ways" to American children in the Observation Survey.

Third, the Observation Survey involves giving a 24-item test "on what children have learned about the way we print language." Two books for children written by Clay are required when giving this "Concepts about Print" test. It commands of children, for example, in Item 1: "Show me the front of the book"; in Item 12: "What's wrong with this page?" (words read aloud out of proper sequence); in Item 24: Show me a capital letter." The test gives equal scoring weight to each of its items. It thus ignores the likelihood that some of its items are more predictive of a beginning reader's print knowledge than are others. Neither does Clay offer any evidence as to whether scores on this test are more predictive of reading ability than are letter recognition scores, or other test evidence. The table of distribution of pupils' scores provided here also is suspect since it

12

represents scores of New Zealand, not American children. In short, in comparison to standardized reading tests, Clay's "Concepts about Print" test indicates in several ways the relative inferiority of its design and authentication.

Fourth, the Observation Survey administers a "Ready to Read" Word Test. This measures children's ability to recognize "the most frequently occurring words." The scores on this test are said by Clay to predict accurately the difficulty level of books a child can read independently, plus to indicate how children should be grouped for reading instruction.

To a limited degree, scores on this test do appear to have utility in these respects. This is because most of the words in the test are spelled highly predictably (e.g., at, big, let, not, will, and, up), and consequently to read them successfully gives some indication of a child's phonics skills. However, a far better test of how well beginning readers can read independently, and what kind of word recognition instruction they still need, would be a reading test of a wide range of individual words carefully sequenced into a hierarchical order of how predictably they were spelled. This would be a more complete and accurate test of how much phonics information a child has acquired, how many phonics rules he can apply successfully, and how well a child can infer the correct pronunciation of a word after gaining its approximate pronunciation through the application of phonics information. These are factors more related to the ability of young children to read independently than being able to read some relatively unpredictably spelled words such as are, come, here, or Mr., the empirical evidence indicates. As before, the table of distribution of scores on this test provided by Clay has doubtful use since the scores are from New Zealand, not American, children.

Fifth, the Observation Survey requires the teacher to take three samples of children's story writing. The teacher then rates each sample on a scale of 1-6 as to whether it is a "successful composition." Considered are evidence of letters, words, sentences, punctuation, concepts or original ideas, and proper directional patterns (writing top to bottom, right to left, etc.). Since these ratings are highly subjective, it is doubtful if this test is a reliable one (since all teachers would not rate a child's writing the same).

In addition, each child is asked to write all the words he knows during three 10-minute test periods. Points are awarded here for correct spellings, i.e., the writing of the letters of a word in the proper order–either from left to right, or right to left. Here Clay wrongly assumes, however, that a word whose letters appear right to left reinforce a child's recognition of it, as does a word spelled in the proper order.

The teacher also is required to make personal judgments as to the "strategies that work" for the child whose writing is tested, and of "analogies that are tried." All this evidence from writing is a necessary part of the Observation Survey, Clay avers, because writing "is a good indicator of a child's knowledge of letters and of the left-to-right sequencing behavior required to read English." As well, writing reveals the child's knowledge of "the details of letter formation and letter order," and how "hand and eye support and supplement each other," she goes on.

There is no empirical evidence, however, that the analysis of children's writing behavior that Clay insists be part of the Observation Survey is the most time-effective, precise, or objective way to determine whether children need remedial tutoring for reading deficiencies. Writing letters and spelling words correctly do reinforce beginning readers' ability to recognize them. Why, then, does she give test points for right-to-left spelling? Moreover, objective tests of children's abilities to recognize letters, to decode words using phonics information, and to understand what authors intended to convey provide adequate information about the status of children's reading development on which to decide if they need remedial teaching. As before, the table of distribution of writing scores Clay provides here may not be dependable for reasons previously given.

The sixth, and final part of Clay's Observation Survey "asks the child to record [in writing] a dictated sentence." The objective of this "Hearing and Recording Sounds in Words" test is to determine if the child can hear each separate speech sound in spoken words, and write an acceptable letter or letter cluster for it as evidence that he has heard this sound. Any letter or letter cluster so written is awarded a point if the speech sound in question "is sometimes recorded in that way," Clay sets forth.

This stipulation obviously poses an enormous challenge for the teacher trying to score this test. I have calculated that on the average there are 13.8 different ways to spell each vowel sound, and 5.2 different ways to spell each consonant sound. Some vowel sounds can be spelled 22 different ways. The difficulty in scoring this test is demonstrated by the fact that Clay herself does not always follow her scoring rule that for a letter used by a child to receive a point it must "sometimes" be used that way to represent a speech sound. For example, Clay indicates that if on this test the child spells *vary* as *vare* he would receive 4 points. However, the *e* at the end of words with this spelling pattern never represents the final sound in *very* (long e). There also is no evidence given by Clay that the five alternative forms of this test are equal in difficulty. So, alternative forms used for pre-testing and post-testing could give faulty evidence about pupils' improvement in recognizing speech sounds, and writing letters that "sometimes" represent them. The reliability of this test (ability of all teachers to score it equally accurately) thus is compromised badly. Teachers who know much about the range of ways speech sounds are spelled would score the test significantly differently from teachers relatively unknowledgeable in this respect. The reliability of the test also is jeopardized by the fact Clay urges teachers to make various kinds of personalized prompting "comments" to children taking it.

That teachers after administering the test are required to make personal judgments about children's "unusual" use of space when writing, of "unusual" placement of letters within words, and of "partially" correct attempts to spell words, also negatively affects the test's reliability. No criteria are offered as to what "unusual," etc., precisely mean. Nor is any indication given as to how much weight in the total score of this test these subjective judgments should be awarded. The table of distribution of scores of children on this test given by Clay thus especially are unacceptable as age-norms for how well children should be able to write letter representations of speech sounds. There are available more recommendable ways to test children's ability to hear speech sounds than this test.

When the six parts of Observation Survey are completed, the teacher then is expected to transfer the results onto summary sheets that are provided. That is, "the teacher brings together what she has observed," and then adds comments on the "useful" versus "problem strategies" each child uses in reading single words, connected text, and with the application of phonics information.

Now, Clay asserts, the teacher is prepared fully to make "early identification of children at risk in literacy learning," i.e., to make referrals of children to Reading Recovery. However, nowhere at the end of Clay's *An Observation Survey of Early Literacy Achievement* does one find presented precise indications of how poorly the "low" achieving, "slow progress" child must perform to meet the various qualitative and quantitative criteria for entry into RR. That is, nowhere is the teacher shown here how to lay out the mass of subjective judgments and numerical data that have been made or gathered, how to weigh each aspect of these data according to its predetermined respective importance, and then how to reach an exact summative decision at this point as to which children need RR, and which do not.

One also looks in vain in the opening chapters of Clay's *Reading Recovery: A Guidebook for Teachers in Training* for such instruction or counsel in determining which children should be given priority as RR students. Here the teacher receives little more than vague advice to be "looking for movement in appropriate directions" in students as a sign they do not need RR, or to try "to understand the strategies the child is using" when reading. By implication, it appears that a student may be assigned to RR in a more or less makeshift, irregular, or arbitrary fashion without being methodically evaluated as meeting a carefully defined and explicit set of admittance standards.

Reading Recovery Teaching Procedures

Official Reading Recovery teaching procedures are described in Clay's *Reading Recovery: A Guidebook for Teachers in Training*. It is clear that the principles of RR instruction are based on Clay's version of the reading process. It is not surprising, therefore, that she warns prospective RR tutors against becoming "involved in teaching for detail" of print (i.e., letters, letter-speech sound correspondences, individual words, etc.). Only "from time to time" does the disabled reader in RR supposedly need "to pay attention to the detail of print." Beginning readers' knowledge of such detail thus "is of very limited value," Clay avers. It therefore must be kept "always in a subsidiary status to message getting" in RR sessions, since the child's rate of progress in learning to read is "seriously threatened" by instruction of this detail. Consequently, the "main focus" of RR "is reading books and writing stories," Clay emphasizes.

This view of reading instruction is not corroborated by experimental research in reading development, however. To the contrary, the empirical evidence stresses the need for anyone learning to read to pay close attention to all the details of print. Beginning readers' main problems thus generally are not an inability to understand the "message" involved in ordinary oral language situations, or when listening to stories read aloud to them. Instead, they need to learn how to recognize individual written words, ones that they can understand

when spoken aloud to them. Clay also makes clear her antagonism to "programs and teaching sequences of any standard kind." The bona fide RR tutor thus must have the extremely high qualifications of being familiar with all the teaching techniques, sequences, and activities that have been promoted so far, and then to "pick and choose" among them deciding on effective instructional arrangements, different for each child that is tutored. There is no indication that this requirement is a reasonable nor an attainable one, however. Or for that matter, that it is more than shallow rhetoric on Clay's part. That is, to graduate as a RR tutor one does not have to pass a test on one's knowledge of the wide range of propositions that have been made about reading instruction, and how to use them selectively with individual children.

Moreover, despite her supposed disfavor with standard teaching procedures, Clay proceeds forthrightly to name four orthodox instructional procedures for RR that its tutors must use. They are by no means discrete, as it turns out, since their details overlap considerably–and unpredictably. It is mandatory that RR tutors teach children (1) the "directional rules of print"; (2) story writing skills; and (3) reading "strategies," such as self-monitoring, self-correction, and use of context cues. The RR tutor also (4) must direct the child to read and reread books. The established sequence of activities in a typical RR session follows this order, Clay explains: the child (1) reads (always aloud, it appears) a "familiar" book; (2) identifies individual letters, or uses letters to make words; (3) writes or dictates a story; (4) rearranges the words of a cut-up story; and (5) reads (always aloud, it appears) a "new" book.

Except for instruction in use of context cues, this teaching does not violate what experimental research says about reading development. Generally speaking, these aspects of instruction have some positive influence, of varying degrees, on children's acquisition of word recognition skills—which actually is the fundamental goal of beginning reading teaching. As noted previously, direct and systematic teaching of a pre-arranged hierarchy of phonics information, sequenced into the order of difficulty that children have in learning it, is the best way devised to develop beginning readers' word recognition skills. The merit of RR teaching therefore must be judged as to how closely it conforms to this empirical imperative.

In this respect, Clay assumes that children entering RR are able to read "several" books "at about 90 percent accuracy or better." This appears to be an overly optimistic conclusion. The dependability of Clay's judgment here becomes even more suspect, since her views about the relative readability of written materials is faulty. Clay assumes that the least difficult material for a child in RR to read is "a simple text [or "story"] he has dictated." Growing steadily more difficult for this child, she goes on, are "a very simple story" that has been read aloud to him; "a simple book about the child's own experiences"; and "an easy book." The relative readability levels of these materials can be expressed better, however, by reversing the order into which Clay places them. That is, an "easy book," such as one written by Dr. Seuss, that utilizes a limited number of predictably spelled words, doubtless would be the least demanding task for the child in RR, who typically has limited word recognition skills. A story this child dictates to the RR tutor, which utilizes the full range of the student's spoken vocabulary and syntactic structures, would be the most difficult for him to read.

Also, Clay unfortunately devotes as much space commenting on ways to establish children's mastery of the "directional rules of print" (a relatively easily accomplished goal) as she does on advising teachers how to develop pupils' phonics knowledge, and ways to apply it to decode written words. It is clear, as well, that Clay wrongly assumes that building children's conscious awareness of speech sounds, and their ability to name letters, largely suffices for these pupils' attainment of phonics skills.

Where Clay directly discusses "linking sound sequences with letter sequences" (i.e., teaching phonics information), she advances the idea that teaching children correspondences between isolated speech sounds and letters, and how to blend isolated sounds to pronounce words, should be undertaken only as a last resort. The time in the RR session spent on instruction of phonics information and its application (the amount never is disclosed precisely) instead should be given to having children listen and look at whole words, it is recommended by Clay. In this regard, children "play with rhymes," notice differences at the beginnings (onsets) of whole words (e.g., went-sent), notice differences in less predictably spelled whole words (e.g., hear-bear), cut-up and reassemble words from stories, clap the number of syllables in a word, and guess at the identity of words after sounding out their initial letters.

Clay makes some offhand suggestions that the RR tutor "may note," when children are writing stories, that some of them may be deficient in their ability to apply phonics information to the spelling of words. No suggestions are offered the RR tutor at this point as to how to correct these pupil inadequacies, however. Also when reading books, children incidentally should practice taking some (indeterminate number and type of) words apart, Clay emphasizes. The advice from Clay for developing beginning readers' word recognition skills is not wholly acceptable, however, says experimental research, for several reasons. For example, she does not call for a clearly designated, adequate amount of time for phonics teaching. She wrongly assumes that the development of young underachieving children's knowledge of phonics and how to apply it is not the best way to teach them to recognize words accurately, and thus to comprehend what they attempt to read. She does not arrange phonics skills into the hierarchy of difficulty that beginning readers have in learning them. She provides no systematic way to measure how many phonics rules children know and can apply effectively.

When to Discontinue RR Tutoring for a Child

"This decision [to discontinue RR tutoring for a child] must be weighed very carefully," Clay reminds RR tutors. The exasperating irony of this statement immediately becomes evident, however. Clay announces in the same breath that "there is no fixed set of strategies nor any required levels of text nor any test score that must be attained to warrant discontinuing" a child from RR. As previously noted, the standards for admission into RR appear be haphazard, disordered, subjective, and even capricious. The prerequisites for transferring a child out of RR, as stipulated by Clay, are even less regulated, objective, or methodical. The only statements even semi-noteworthy by Clay, in her very brief (2-page) discussion of "when to discontinue tutoring," are that "usually the child ready for discontinuing can read a text which the average child in his second year at school

can read. He can write a couple of sentences for his story." No indications are given by Clay as to what "read" precisely means in this statement, nor what kind of sentences would be acceptable. Otherwise, all that Clay offers in this regard are vague directions to RR tutors to look for "marked improvement" in a child, or to decide if he has gained "a strategy of getting from sounds to letters."

Clay's "Research" Is Flawed

In the Reading Recovery Reports, Clay offers some information about seven pieces of "research" on Reading Recovery's effectiveness that she conducted. The findings of these studies are not very useful. For one thing, Clay admits that her research on RR did not "ask how well this program worked compared with competing programs" that tutor beginning readers. Furthermore, as other analysts of RR research data (see References) have reported, the studies that Clay did on RR have design flaws and statistical irregularities that render their findings less than acceptable. These faults doubtless are the result of Clay's opposition to research "which looks for explanations of what causes what, or what conditions bring about differences."

References

- Center, Y. et al. (1992). Evaluating the effectiveness of Reading Recovery: A critique. Educational Psychology! 12, 263-273.
- Center, Y., et al. (1995). An experimental evaluation of Reading Recovery. Reading Research Quarterly, 30, 240-263.

Glynn, T. et al. (1989). Reading Recovery in context. Wellington, New Zealand: NZ Department of Education.

Groff, P. (1994). Reading Recovery: Educationally sound and cost-effective? Effective School Practices, 13 (1) 65-69.

- Iverson, J. A. & Tunmer, W. E. (1993). Phonological processing skills and the Reading Recovery program. Journal of Educational Psychology, 85, 112-125.
- Hiebert, E. H. (1994). Reading Recovery in the United States: What difference does it make to an age cohort? Educational Researcher, 23 (9), 15-25.
- Rosinski, T. V. (1995). Commentary on the effects of Reading Recovery. Reading Research Quarterly, 30, 264-270.
- Shanahan, T. & Barr, R. (1996). Reading Recovery: An independent evaluation of the effects of an early instructional intervention for at risk learners. Reading Research Quarterly, in press.

Questions and Conclusions from a Discussion of Reading Recovery

May 22, 1996 **by Dr. Patrick Groff** NRRF Board Member & Senior Advisor

Dr. Patrick Groff, Professor of Education Emeritus San Diego State University, has published over 325 books, monographs, and journal articles and is a nationally known expert in the field of reading instruction.

Introduction

The effectiveness and cost of Reading Recovery have become a subject for serious examination. School district response to the discussion contained in these excerpts will have a direct affect on California school district Language Arts curriculum expenditures and on the reading ability of California school children.

Are Gains From RR Enduring?

It is vitally important, of course, that for an experimental remedial reading program, such as RR, to be adopted and funded for regular, long-term use in schools, it first must demonstrate experimentally that it generates relatively large gains for students involved in it. Such gains are of little if any consequence, however, if they soon fade away, leaving the students who achieved them no better able to read than are students who had no RR tutoring. It therefore is essential for RR to prove that the initial gains in reading that it produces are lasting in nature.

It is clear that RRI has failed to meet this test of its effectiveness. That is to say, several disinterested, independent critics of RR (Center, et. al, 1995; Glynn, et al., 1989; Groff, 1994; Ohio Department of Education, 1995; Shanahan & Barr, 1995; Wasik & Slavin, 1993) have pointed out that most of the reading improvement gains brought on by RR are temporary; they "wash-out" over time. This finding is underscored by the fact that students released from RR, as remediated, often read so poorly that they qualify for inclusion in other remedial reading programs. (Groff, 1994).

The most impressive of the studies so far of whether reading gains in RR endure or evaporate is the one recently commissioned by the Ohio Department of Education, and conducted by the consulting firm, Battelle, of Columbus, Ohio. The exceptionally well-designed Battelle study (Ohio, Department of Education, 1995) surveyed the permanency of RRI reading scores in many Ohio schools over a four-year school period, 1990-1994.

The Battelle Study concluded that there were initial reading gains from RRİ, greater even than those made by students in other remedial reading programs in use in Ohio schools at the time. "The differences in achievement level [favoring RR], however, were not evident in the three subsequent years" of the RR students schooling (Ohio Department of Education, 1995, p. 73.). "The average score advantage of Reading Recovery students was not maintained at the end of the second grade," nor on "tests for the third and fourth grades" (p.1).

Is Reading Recovery Cost-Effective?

As Slavin, et al. (1993) convincingly demonstrate, one teacher-one student tutoring, per se, has been proved experimentally to be the most effective instructional arrangement known. This one-to-one tutoring also is the most expensive kind of teaching, of course. School districts thus almost always must sacrifice some other educational services to students in general, omit purchases of educational materials, equipment, supplies, and housing, and/or increase regular teachers' workloads or delay their pay raises, in order to find the money necessary to provide tutoring for selected students.

Any school district or board of trustees contemplating the adoption of RR as a tutoring vehicle therefore must look beyond the question whether RR actually is the most effective program of its kind. In addition, they must consider carefully whether the financial costs of adopting RR outweigh its actual contributions toward the remediation of students' reading handicaps.

In this regard, the present analysis of RR so far has suggested that for several reasons this tutoring program is not the most pedagogically-effective remedial reading tutoring program available. If this negative judgment of RR is accurate and convincing, it is double important that school officials inspect carefully the cost-effectiveness of RR.

Those who control whether purchase of RR will be made for use in schools should realize, first, that the promoters of RR typically downgrade its cost, depicting them as very reasonable, and therefore as apt payment for RR's supposed great successes in overcoming students' reading handicaps. For example, Dyer (1992) sets the teacher salary costs per student of RR at \$2063. By comparison, he maintains, the cost of the federally-funded program, Title 1, is \$4715. Here Dyer wrongly assumes that all Title 1 students need 5 years of remedial reading tutoring. He also conveniently ignores other costs of RR. This relative low cost of RR is claimed by other of its advocates. For example, the cost per student in McAllen, Texas is reported as \$2538 (Salinas, et al., 1993).

In contrast to these figures, are ones more recently gathered in schools in Ohio (Ohio Department of Education, 1995). These schools estimated that the costs of RR are 50 per cent higher than other (unnamed) remedial reading programs that they used. Earlier on, a study of RR in the Canton, Ohio schools found, however, that "Reading Recovery (sic) is approximately four times as expensive as Chapter 1" (now called Title 1) over the same period of time–but is less effective (Fincher, 1988, p. 20). Fincher noted that the low estimates of the cost of RR by its advocates fail to take into account costs of fringe benefits to RR teachers, materials and supplies used in RR, teacher training, salaries and travel expenses of RR program officials, and other miscellaneous financial outlays.

Hiebert (1994, p. 22) agrees that estimates of the cost of RR by its proponents "represent a deflated figure per student because teacher benefits have been excluded," along with start-up costs of training, and costs of training rooms. These underestimated costs of RR also are based on the dubious assumptions that RR is successful with all students, that students never require any remedial reading instruction after they exit RR, that each RRI tutor serves sixteen students, and that none of the reading handicapped students not given RR ever will attain proficiency in reading, Hiebert (1994) adds. Taking all these ordinarily unreported costs and lack of careful oversight of RR into account, Hiebert (1994, p. 22) places the "cost per successful student [in RR] at \$8333," or \$278 per hour of tutoring.

Shanahan and Barr's (1995) estimate of the costs of RR are significantly lower than that of Hiebert (1994), but higher than those offered by the proponents of RR. Taking into consideration fewer of RR's normally ignored, but necessary, financial outlays than did Heibert (1994), Shanahan and Barr put the cost of RR at \$4625 per student. The addition of RR thus doubles the average cost of educating a student, or triples it, if one accepts Hiebert's estimate in this regard.

Another way of deciding the economic practicality of RR is offered by Rasinski (1995). In his view, when investigating whether RR is fiscally feasible, it is necessary, first, to determine how many times larger were the reading gains generated by RR than were the average reading gains made by non-RR students. The reading gains from RR must double or triple (Shanahan/Barr) or Hiebert) those of regular classroom instruction if the extra cost that is incurred by RR is to be justified.

Using Rasinski's formula, the reading gains made by students in the Pinnell, et al. (1994) investigation of RRİ thus appear to be too small to warrant the extra costs of RR. For example, on the two standardized tests given there, the RR reading scores surpassed the "direct instruction skills plan" (DRA) scores by only 9 percent and 9 percent, respectively. As noted, the DRA is designed for group teaching. We therefore need to know if RR reading gains would double or triple gains made with DRA group teaching.

Public Reaction to RR

Furthermore, it is likely that the high cost of RR creates a public relations problem for the schools. In this sense, it is predictable that people outside the educational establishment who learn of the high price of RRİ, and the severe contraction, over time, of reading gains initially obtained with it, will protest that expenditures for RRİ are not a wise use of the limited school funds that are now available.

This potential for public remonstration against the adoption of high-cost RR is exemplified in a 1995 letter from Ohio state senator Cooper Snyder (chair of his senate's education committee) to the Ohio superintendent of education regarding the Battelle study of RR. As noted above, this study found that significant extra money spent on RRI did not result in enduring reading gains for RR students. "To put it mildly, I am chagrined with the findings reported" by the Battelle study, Snyder wrote. To Snyder, "RR is nothing more nor less than a band-aid for the first grade." I thus "am further dismayed to learn that the [Ohio] Department [of Education] apparently concludes Reading Recovery is okay," of the general public as to the need for RR. "Why aren't we doing the [reading instruction] job right to begin with?" he asks, suspecting that "something has to be fundamentally and very basically wrong" in the way students ordinarily are taught to read.

The "something" that is "fundamentally and basically wrong" about reading instruction, to which Snyder refers, is the "Whole Language" approach to reading development that has been adopted in his state, and even

more so in California. The introductory remarks of the present analysis of RR explain why California students now are the least capable readers in the nation, and thus are prime candidates for RR. Here it is noted that more schools in California have made the unfortunately wrong decision to adopt WL than have schools in other states. As a consequence, California students are now the least capable readers in the nation.

It is important, as well, that future reports from local school districts that proclaim the purported successes of RR (e.g., Holmes, 1994) carefully consider beforehand the critiques of RR as made in the present analysis of it, especially those regarding: (a) the evidence that tests used to decide students' entry and exit from RR are not valid nor reliable for that purpose; (b) the empirical invalidity of certain RR practices, ones that are based on WL; (c) the lack of longevity of reading gains generated by RR; and (d) the need for a precise and comprehensive formula for deciding if RR is cost- effective, as compared with other remedial reading tutoring plans, with small group teaching in the regular classroom, or with remedial reading programs that use paraprofessional or volunteer tutors. In short, no longer acceptable at face value are statements from RR promoters that RR "remains cost- effective because of its short-term nature" (Swartz & Klein, 1994, p. 6). This is a far too simplistic view of the cost issue of RR, and therefore no longer can be tolerated.

Conclusions

The conclusions that may be drawn from the present analysis of the empirical validity of Reading Recovery (RR) can be expressed in a series of Questions and Answers about this remedial reading tutoring program:

Q: Does RR Produce gains in reading for reading handicapped first grade students?

A: Yes, but only initially. The preliminary advances in reading ability generated by RR for these students soon disappear.

Q: Is RR based solidly on the relevant experimental research findings on reading development?

A: No. To the contrary, RR is a projection of the empirically unverified "Whole Language" approach to literacy development. The principles and practices of RR are very similar to those of Whole Language. Whole Language has been shown clearly to be a failed instructional innovation.

Q: Is RR the best remedial reading tutoring program now available?

A: Probably not. Theoretically, RR is inferior to competing tutoring programs since they conform more to the experimental research findings than does RR. Empirical evidence in this regard, gained from disinterested, independent studies of RR versus competing tutoring programs, is badly needed if this question is to be answered satisfactorily.

Q: What are the major reasons why studies of RR by its advocates always find that RR is highly effective?

A: These investigations typically do not compare RR with competing tutoring programs. In action, these studies often have been designed and implemented, either expressly or incidentally, so that they result in favorable outcomes for RR. Of note here: when disinterested researchers study RR, it is not found to be exceptionally effective.

Q: How closely do RR tutors follow the prescriptions for its conduct laid down by Clay (1993b)?

A: This issue has not been investigated so far. Thus, it may be that tutors in RR programs that produce exceptional reading gains do not carefully follow Clay's directions in many respects. For example, these tutors may spend considerably more time on explicit instruction of word recognition skills than Clay recommends should be done. There thus may be some useful informal corrections made of the official RR procedures by its practitioners.

Q: Is RR the most cost-effective of all remedial reading tutoring programs?

A: Clearly not, since some competing tutoring programs use paraprofessionals or volunteers as tutors, and have a greater chance for success because they align their practices more closely to what the experimental research reveals about reading development than does RR. The fact that initial reading gains generated by RR soon fade away also negatively reflects on its costs-to- results ratio.

Q: Has RR become a commercial product?

A: Some RR proponents claim it is not (Swartz & Klein, 1994). However, the fact that the name, Reading Recovery, now is trademarked signifies that it is considered a marketable item. Clay has profited from the increasingly large sales of her books on RR. Centers that charge fees for training RR tutors have grown increasingly numerous as more and more school districts have been sold on the idea they need to adopt RR. By 1992, there were such commercial enterprises in 38 states (Shanahan & Barr, 1995). As well, RR is advertised in much the same way as common consumer products are. That is, its advertisements stress its supposed advantages, while conveniently leaving undisclosed its shortcomings.

Q: Is RR the best way to reverse the current decline in students' reading ability?

A: No remedial educational program is preferable to initial and regular teaching of reading that is based on pertinent empirical evidence, i.e., instruction that has the best chance to be effective. Thus, if school reading programs conform to the findings of experimental research on reading development, there would be much less need for RR, or for that matter, any other special education services.

Q: Is RR in its present form, as prescribed by Clay (1993b), the most desirable one?

A: No. It is clear that RR needs to modify the practices that Clay invented for it so that RR is in greater conformity with what the experimental research says about beginning reading development. However, many RR advocates likely will strongly resist this modification of RR. In this regard, they declare it their duty "to protect the integrity of the [RR] program" (Swartz & Klein, 1994, p. 6) from such reform.

Q: Should school boards vote to purchase RR purely on the basis of recommendations of school officials to do so?

A: At this point in time, only by putting blind trust in these recommendations, and by ignoring the evidence of RR's pedagogical weaknesses, and its relative high costs, can school boards justify making this decision to adopt RR. School boards would act more wisely if they made sure, first, that the initial, regular teaching of reading in their schools closely conformed to the relevant empirical findings. They then should search out less expensive, more empirically relevant tutoring programs, than RR is, for students who make less than normal progress in reading.

Bibliography

- Center, Y., et al. (1995) An experimental evaluation of Reading Recovery. *Reading Research Quarterly*, 30, 240-263
- Dyer, P. C. (1992) Reading Recovery: A cost-effectiveness and educational outcomes analysis. *ERS Spectrum*, 10 (1), 10-19
- Fincher, G. E. (1988). Reading Recovery and Chapter 1: A three-year comparative study. Canton, OH: Canton, Ohio, City Schools.
- Glynn, T., et al. (1989). Reading Recovery in context. Wellington, New Zealand: New Zealand Department of Education.
- Groff, P. (1994). Reading Recovery: Educationally sound and cost-effective? Effective School Practices, 13 (1), 65-69
- Hiebert, E. H. (1994). Reading Recovery in the United States: What difference does it make to an age cohort? *Educational Researcher*, 23 (9), 15-25.
- Holmes, J. (1994). Reading Recovery site report. San Diego, CA: San Diego County Consortium, San Diego County Office of Education. Ohio Department of Education (1995). Longitudinal study of Reading Recovery, 1990-91 through 1993-94. Columbus, OH: Ohio Department of Education.
- Pinnell, G. S., et al. (1994). Comparing instructional models for the literacy education of high-risk first graders. Reading Research Quarterly, 29, 8-39.
- Rasinski, T. (1995). On the effects of Reading Recovery. Reading Research Quarterly, 30, 264-270.
- Salinas, A., et al. (1993). Reading Recovery 1992-93 evaluation report. McAllen, TX: McAllen Independent School District.
- Shanahan, T. & Barr, R. (1995). Reading Recovery: An independent evaluation of the effects of an early instructional intervention for at-risk learners. *Reading Research Quarterly*, 30 (4) 958-996.
- Slavin, R. E., et al. (1993). Preventing early school failure: Research, policy and practice. Boston, MA: Allyn and Bacon.
- Snyder, C. (September 22, 1995). Letter to Dr. John Goff, Superintendent, Ohio Department of Education, Columbus, Ohio.
- Swartz, S. L. & Klein, A. F. (1994). Reading Recovery: An overview. Literacy, Teaching and Learning, 1 (1), 3-7.
- Wasik, B. S. & Slavin, R. E. (1993). Preventing early reading failure with one-to-one tutoring: A review of five programs. *Reading Research Quarterly*, 28, 179-200.

Appendix

Observations on California Commission on Teacher Credentialing (1997).

California Standards for the Teaching Profession. Sacramento, CA: California Department of Education.

By Dr. Patrick Groff, Professor of Education Emeritus, San Diego State University

The California Standards for the Teaching Profession (CSTP) was created to "facilitate the induction of beginning teachers into their professional roles" in that state. The CSTP is said to be "an integral part of the State's efforts to foster excellence in teaching and learning."

Despite its proclamation of that noble goal, the document then humbly avers that it is not a set of "regulations" for novice teachers' behavior. Instead, it serves the more modest role of merely a "guide" for these neophytes, to help them "define and develop their practice." Shortly after making this point, however, the CSTP proclaims that the standards it lists are "clear and realistic," as well as "based on current research and expert advice."

These standards "describe best teaching practices at an accomplished level," CSTP then proudly asserts. Consequently, the CSTP's implication that first-year teachers somehow can improve on its content appears to be a false flattery of them, for some undetermined reason.

The CSTP is critiqued here from the special perspective of the NRRF. Its goal is to improve the quality of reading instruction in the nation by urging it to conform to relevant experimental research findings. This critique thus attempts to answer the question, What is the CSTP's actual impact on effective reading teaching? This is a practical way to examine the CSTP, since students' learning to read competently has an immense effect on their acquisition of other academic abilities and skills.

It immediately is clear that some of the "research" of which the CSTP approves is not of the experimental variety. For example, the document supports the idea that each child by schoolentry age has acquired or inherited a unique "learning style" which must be matched by appropriate teaching. This notion has come under severe critical attack for not being corroborated by empirical evidence.

Reading instruction is not a practice "in which a single approach to professional practice will be effective," the CSTP continues. To the contrary, experimental findings consistently make evident that direct, systematic, intensive, comprehensive, and early development of students' phonics skills is the single best way to foster their quick and accurate (automatic) written word recognition ability. Almost no other factor relates more closely to children's reading comprehension than does their automatic word identification skills.

Despite this shaky start, the CSTP does go on to proffer several acceptable generalizations about effective reading pedagogy. For example, it urges reading teachers to never be satisfied about their "expertise, capabilities, and accomplishments." Left to the beginning teachers' devices, however, is how to decide what is the best source of information on instruction for them to "actively seek." The CSTP should have made clear in this respect that experimental evidence is the most reliable. The advice that these teachers should engage in "advanced study" is pointless unless the object of the study is clearly defined.

The CSTP divides its list of standards into six different categories. These have to do with (1) engaging students, (2) creating teaching environments, (3) organizing subject matter, (4) planning instruction, (5) assessing student learning, and (6) teachers' professional "growth." It is gratifying to report that many of the standards so listed are at least pertinent to reading instruction, if not definitive about its practice. On the other hand, some standards unfortunately are a hazard to the success of that enterprise.

For example, in *category 1*, the CSTP falsely maintains that individual students have "diverse needs" in learning to read, and use "different ways" to do so. The established empirical truth is that all children need to gain the same skills in order to read competently. Then, the unproved nature of the learning styles theory was referred to earlier. There is no convincing evidence that giving students "autonomy and choice" as to what they personally need to learn to read has exceptional merit.

In category 2, the CSTP wrongly insists that "encouraging students to take risks and be creative" when identifying written words promotes "fairness and respect" for students, and "facilitates development of their self-esteem." To the contrary, students' habits of guessing at a word's identity when reading handicaps their reading comprehension development. It is students' ability to recognize words quickly and accurately that truly builds their self-esteem.

In *category 3*, the CSTP recommends that the novice teacher employ "a repertoire of instructional strategies" when conducting reading lessons. The advice must be rejected for at least two reasons: (a) it is impossible for most newcomers to teaching to follow it, and (b) experimental research reveals that direct, systematic, comprehensive, and intensive instruction of a hierarchy of prearranged reading skills develops students' reading ability better than does a varying mass of instructional practices utilized randomly on the spur of the moment.

Category 4 of the CSTP repeats the unfortunate "repertoire of instructional strategies" advice given earlier. This misjudgment mars an otherwise acceptable list of standards. Lamentably, they are immeasurable in terms of teacher performance.

Category 5 of the CSTP raises the sensitive issue, should teachers' versions as to how well students are learning to read be held in higher regard in judging this matter, than students' scores on standardized reading tests? The document ducks dealing with the issue specifically, falling back on statements such as, teachers should make sure reading "grades are based on multiple sources of information," including standardized tests.

It is obvious, however, that none of the standards listed in this category can be interpreted meaningfully without an exact designation of the respective roles that teachers and objective tests have in determining precisely how well students read. For example, the standard that teachers should "collect, select, and reflect upon evidence of student learning," has no utility unless it indicates exactly what must be done to resolve the common dilemma that occurs when teachers' judgments of students' reading ability are much higher than are their standardized test scores.

In its *category* 6, the CSTP lists standards relating to teachers personal responsibility to improve their "professional practice." Regrettably, all standards in this regard are hopelessly vague, quantitatively indeterminate, and thus impossible to measure as to whether a teacher has made progress toward meeting their demands. For example, since there are no norms of accomplishment indicated, a teacher could not say with any certitude whether he/she has "maintained an attitude of lifelong learning," or "values and respects students' families" (as if that always is a desirable practice), or has "expanded his/her knowledge of new instructional methods" (again, a dubious goal, since many pedagogical innovations are not experimentally verified).

In general, the CSTP exhibits the same kind of weaknesses and shortcomings that plague other standards documents concocted by state agencies, commissions, boards, or departments. These documents suffer similar disfigurations from being designed by a group of experts and advisors whose appointments by state agencies for this service are not open to critical review.

Under the guise of gaining a sample of expert and public opinion on an educational issue (such as teaching standards) a government body will appoint an advisory group whose conclusions predictably will closely match the agency's previously-held views. As a result, educational standards produced in this manner tend to be politically correct, to be unrepresentative of what parents and the general public expect of public education, and to be stated in imprecise, innocuous, misleading, and thus nonfunctional terms. Dr. Patrick Groff, Professor of Education Emeritus, San Diego State University, has published over 325 books, monographs, and journal articles and is a nationally known expert in the field of reading instruction.

Accessed on February 8, 2020. http://www.readingstore.com/CaCCTCStandrdforTchProf.htm

Note: This paper was taken off the *Reading Reform Foundation* website. The Reading Reform Foundation was an effort by Walton Washburn in beginning in 1962 and in operation until about 1996 when Robert Sweet Jr. founded the Right to Read Foundation, which now is part of The Reading League.

The NEA Misconstrues Reading Instruction Research

Dr. Patrick Groff, Professor of Education Emeritus, San Diego State University

NEA Today is the monthly "newspaper" of the National Education Association (NEA). This publication typically presents news about legislation that affects teachers, money matters of concern to them, short contributions that they submit, and advice on how to conduct classroom instruction.

In light of its huge membership, this teachers' union is in a unique position to correctly inform teachers what experimental research has to say about reading instruction. Unfortunately, *NEA Today* frequently misleads its readers in that regard.

Two prime examples of such distortions of the empirical evidence about reading teaching are found in its January 1998 issue. The first is an article by the president of the NEA, Bob Chase, called "Teaching the First R: Is There a Best Way?" The second is an anonymous piece, called "What's the Secret to Teaching Reading?"

In the first instance, Chase falsely claims that "different children learn to read differently." Thus, there supposedly can be no "best way to teach reading." In this respect, Chase reflects the empirically unverified notions that each child at school-entry age has acquired an immutable learning style different from each of his/her classmates, and that every child inherits a unique, unalterable set of intelligences.

There also is no such thing as "truth" about reading instruction, the NEA president warns. Therefore, each classroom teacher, whether he/she chooses the experimentally discredited Whole Language (WL) approach, or verified direct and systematic reading instruction, must decide personally which is the better way to conduct reading lessons.

A "balance" between WL and direct and systematic teaching of phonics information is the "key," Chase concludes. By doing so, he ignores the discovery that none of the novel principles or

30

practices of WL is corroborated by replicable, reliable experimental research. He rejects the fact that findings from replicable, reliable, experimental research, and those from the qualitative (i.e. anecdotal) research used to defend WL, frequently contradict each other absolutely.

Chase therefore blithely mingles evidence on children's reading development that clearly is irreconcilable. He nonetheless takes pride that this irrational treatment of research data is the way "our Association intends to keep the spotlight on reading."

The second article on reading instruction in the January 1998 issue of *NEA Today* also has many faults. For example, NEA members are told that the principles and practices of the WL approach, and direct and systematic teaching of phonics information, are both based on doctrines rather than on empirical date. The controversy between supporters of these distinctly different reading instruction methods thus is summarily dismissed as nothing more than an "ideological war."

Also repeated here is the now tiresome canard that only WL advocates favor children having experiences "with good literature" that "tells a story." Then, the "new reading research" produced by WL proponents purportedly is translatable into "practical strategies" for teaching even "poor, immigrant, and at-risk students [to] learn to read." The empirical findings say otherwise, however. The WL approach consistently is found to be ineffective with these groups of students.

"Phonics is an absolutely crucial component of teaching children to read," the article continues. The phonics instruction program that is described is not the one that experimental studies find to be the most efficient, however.

For example, "teaching nursery rhymes" is not the most efficacious way to develop children's phonemic awareness (i.e., their conscious awareness of the speech sounds in spoken words). There also is little if any evidence that increasing beginning readers' comprehension skills is an unavoidable prerequisite to their adequate acquisition of phonics skills.

31

The cause and effect relationship between written word recognition and reading comprehension actually operates in the opposite direction. That is to say, children's mastery of the application of phonics rules provides the best means for them to recognize words quickly and accurately (automatically). Then, almost nothing relates more closely to reading comprehension than does automatic identification of words.

Despite this experimentally verified evidence, the *NEA Today* article insists that not all children need to gain the same amount of phonics knowledge. To the contrary, the more phonics rules a child can acquire and apply appropriately, the sooner he/she can recognize written words automatically, i.e., proficiently.

In parting, NEA Today advises NEA members, "don't buy psychologist Diane McGuinness's new book, *Why Our Children Can't Read*." Doubtless, a main reason for this renunciation of McGuinness is that her book is firmly based on replicable, reliable, experimental evidence about reading instruction. As the above discussion suggests, for some inexplicable reason, the NEA views dependence by teachers on empirical findings on children's reading development as offensive.

Dr. Patrick Groff, Professor of Education Emeritus San Diego State University, has published over 325 books, monographs, and journal articles and is a nationally known expert in the field of reading instruction. Accessed on February 8, 2020.

http://www.readingstore.com/NEAmisconstruesRSRCH.htm

There is no date on this document, but from internal evidence, it was written in late 1997.

Observations on Ohio State University Phonics Institute '98 Columbus, OH, July 26-29, 1998

By Dr. Patrick Groff, Professor of Education Emeritus, San Diego State University

Objectives of the Institute

According to its Program notes, this conference was designed to provide its attendees information about the characteristics of "exemplary phonics instruction." To that effect, sessions were held on the following topics:

- 1. What teachers need to know about language and learning;
- 2. What teachers need to know about spelling and how children learn it;
- 3. How to find out what students know about phonics information through analyses made of their spellings of words;
- 4. How to detect how much phonics knowledge students have acquired by observing them read and write;
- 5. The student's "eye-view" [?] of phonics information;
- 6. The classroom environment that supports phonics and word study;
- 7. How students learn words during "interactive" [?] writing;
- 8. Students' study of the language found in children's literature;
- 9. Students' study of the connections between spelling, meaning, and word history; and
- 10. A "sort, search, and discover" procedure in which students self-select a list of the words to learn to spell, cut up this word list, rearranging its words according to their spelling patterns, and finally hunt for other words with similar patterns.

In terms of their importance in fully describing exemplary phonics instruction, more relevant topics, as given below, should have been exchanged for some of the ones listed. For example:

- 1. A test of teachers' knowledge of phonics information;
- 2. The relationship of students' phonemic awareness to their mastery of phonics rules;
- 3. Why explicit teaching generates the largest amount of phonics information, in the shortest time possible;
- Three competing procedures for developing students' phonics skills: (a) teaching students to spell speech sounds; (b) teaching students to attach speech sounds to letters, or (c) some combination thereof;
- 5. Why the largest number of phonics rules students master, the better;
- 6. Why beginning readers' phonics skills correlate highly with their reading comprehension ability;
- 7. Identifying the best performing direct and systematic phonics program;
- 8. The most impressive experimental research findings on phonics teaching of the past thirty years; and
- 9. The important place of standardized testing of phonics.

What Does "Research" Mean?

To make a critical examination of the details of the information presented at the OSU Summer Phonics Institute '09, it first is necessary to identify the source of the information offered by its speakers, as proof of the validity of their contentions. For instance, at this meeting professor of education Richard Allington referred to "research" that he maintains supports his conclusion that "decodable" words are a relatively unneeded feature of beginning reading teaching. A decodable word in a written text is one for which a beginning reader previously has been instructed to recognize, by learning to sound-out each of its letters, and to blend these speech sounds together into a proper serial order. This blending results in an approximate pronunciation of the word. After this, it is found that novice readers can readily infer the correct pronunciation of the word. However, it no longer is feasible to refer to the term, reading "research," with the assumption that it holds a common meaning for all who come into contact with it. Quite to the contrary, there are at present two remarkably different research paradigms used in discovering the characteristics of exemplary phonics programs: experimental research and qualitative research.

Experimental Research

Until fairly recently, the most popular of these two research models was the experimental (empirical or scientific) approach. For example, in a typical implementation of the scientific method of reading research, it is hypothesized that inclusion of distinctive phonics teaching variables into a reading instruction program will produce significantly greater word recognition learning by students in this program, than otherwise is possible.

A matched-group of students, and teachers with the same general level of instructional ability as the experimental teachers, serve as a control group in this empirical investigation. The control reading program is the same as the experimental one except it does not include the unique phonics teaching variables found in the latter.

The progress of students in learning to read of both the experimental and the control groups in the study then is measured with a standardized reading test. The objective data gathered in this regard is subjected to sophisticated statistical analysis to determine which reading program was the more effective, i.e., to make sure that differences in reading scores between the two groups did not happen due to chance factors.

It is clear that this piece of experimental research is replicable. That is to say, it is designed so that researchers in the future can repeat its procedures to determine if its findings can be duplicated. After a scientific study has been replicated a satisfactory number of times, and produces similar findings in each instance, these data are judged to be valid. At that point, recommendations for their application to reading instruction are offered. Modern statistical science also has developed a mathematical process in which data from experimental studies on a given topic, that have dissimilar designs, may be acceptably combined and analyzed. This recent

35
advance in statistics provides even more reliability for experimental research findings than traditionally was the case.

Qualitative Research

Qualitative Research is the second major form of educational inquiry. Qualitative studies on phonics information are conducted with remarkably different goals in mind than those set for experimental research. For example, qualitative research does not pose a hypothesis about the best way to teach students phonics information. It does not design and conduct a closely controlled examination of this issue, nor carry out an inquiry of that presumption in a neutral, disinterested, and skeptical way. It does not collect nor statistically analyze numerical data, nor make claims it generates serviceable generalizations about the best way for all students to learn phonics information.

To the contrary, qualitative research on phonics instruction begins and proceeds with the investigator interacting with students in an informal, nonintrusive, and ingratiating fashion. The objective here is to observe students in natural classroom settings, as they are learning phonics information and how to apply it to decode written words. The qualitative researcher will write nonnumerical accounts of what he/she has witnessed (rather than to run tests on students). These accounts are official records of what he/she believes took place as students acquire phonics knowledge. The researcher's observations of the learning processes that occurred in this regard are considered to be more critical than are products of students' performance that may be gathered.

To that effect, narratives, anecdotes, memoirs, case histories, results of interviews and questionnaires, audiovisual records, and the like, take the place of test scores. The qualitative researcher must be endlessly creative and inventive, even intuitive in gathering these kinds of evidence, and especially when determining their relative importance or pertinancy. Nonetheless, it is attested that classroom teachers make effective qualitative researchers.

Proponents of qualitative research insist that the kinds of evidence they gather about students' phonics skills are superior to those gained through experimental queries. It is said the latter do not have the capacity to satisfactorily detect students' learning processes. Particularly held up to scorn in this respect are standardized reading tests, the kind customarily used in experimental research. Their scores are misleading, it is held, since they do not take into consideration the total natural context in which students' reading behavior occurs. Moreover, standardized tests, given only seldomly, supposedly cannot be authentic measures of reading ability because students' reading skills are in a constant state of flux.

It also is maintained that standardized tests wrongly presume there is an external reality about students' knowledge of phonics information waiting to be discovered, that is independent of students' personal and eccentric perspectives of it. Qualitative research views the validity, reliability, and objectivity of evidence about phonics skills as being highly problematic and personal in nature. That is to say, reality about phonics information varies unpredictably according to how individual students personally perceive its existence. Thus, the only reality about phonics information putatively is that constructed by students involved in the process of dealing with it, qualitative inquiry insists.

With these theories in mind, qualitative research rejects the experimental research assumption that it is necessary for research on how students best acquire phonics skills to be as value-free and unbiased on the researcher's part as is possible. In qualitative research, broad allowances are made for such partisanship. It is held that as long as qualitative researchers are aware that their peculiar dispositions, prejudices, or temperament are influential factors in their study of phonics teaching, the merit of their investigation of it will not be compromised. Therefore, the qualitative study of students' acquisition of phonics information makes no pretense at dealing with students' reading behavior in a dispassionate, or otherwise disinterested fashion. The empathy and attachment shown by qualitative researchers toward their student subjects in a study of phonics acquisition does not result in a distorted accounted of this learning, it is argued. To the contrary, it is proposed that it has a salutary effect on discovering the truth on this matter.

The Whole Language-Qualitative Research Connection

Almost all the findings on how students best learn phonics information that is produced by members of the Whole Language movement are gained through qualitative research. The wholesale adoption by Whole Language advocates of qualitative research, and their rejection of the experimental variety, is understandable. None of the unique principles nor practices of Whole Language is corroborated by relevant experimental evidence. Findings from the latter source consistently contradict those from qualitative studies, and vice versa.

Whole Language advocates thus avoid a potentially embarrassing loss of prestige of their scheme by conducting qualitative research about the workings of their unorthodox instructional innovation. The avoidance of experimental research for this reason clearly is imperative. The former research is a more convenient choice for Whole Language for yet another reason.

Whole Language purports to be a "philosophy" of teaching reading and writing. It thus is largely ideological in nature. Therefore, the qualitative research that Whole Language promoters conduct is aimed at explaining and confirming its underlying philosophy. This research is not designed to critically examine the Whole Language philosophy for its potential faults. It is assumed there are none. The only valid research finding thus is one that compliments the novel Whole Language doctrines and practices, it is said. In this manner, Whole Language maintains itself as an irreproachable and unassailable instructional approach. Proof of the success of this impregnable defensive stand is the fact that none of the multitudinous complimentary accounts of Whole Language that are published cite a qualitative study that found fault with its original theories and operating procedures.

The distinctive nature of Whole Language instruction, as opposed to teaching based on experimental evidence, has never been better summarized than by one of the leaders of this movement, professor of education Carole Edelsky (Educational Researcher, November 1990). Whole Language holds "a different view of education, language, and learning; uses different discourse; maintains different values; and emanates from a different educational community." It is based on "a major philosophical framework [deconstructionism] and a particular political ideology" (socialism). It offers different answers to questions such as "What is reality? Where do facts come from? What is truth? How should power be distributed?" (away from those presently in authority to the poor and people of color).

The Attractions of Whole Language

One of the main attractions of Whole Language to teachers is its claim to be the most humane form of reading instruction available. It is true, in this regard, that Whole Language is more concerned with upgrading students' dignity, freedom, and power to decide how and what they will learn, than with how fast they learn to read competently. It also captures teachers' fancy with its promise that once it is instituted into schools, teachers will become the exclusive judges of how well students have learned to read. Teachers also have been taken in by Whole Language's false assertion that it alone favors having students read much high quality literature, and frequently engage in written composition and in editing and sharing it with others.

Many teachers who subscribe to Whole Language also doubtless are impressed with the purported simplicity of the scheme. The guiding principle of Whole Language is that students best learn to read in the same natural, informal manner in which they previously learned to speak at home, as preschoolers. Thus, in bona fide Whole Language classes, direct, systematic, intensive, comprehensive, and early teaching of a prearranged sequence of phonics skills is greatly de-emphasized. Instead, students are "immersed" in written language (e.g., are read to aloud as they "follow along" in identical texts). From this experience students readily are able to infer how much phonics information they personally need to learn in order to develop effective written word recognition ability, it is held. Group teaching of prearranged phonics information also is rejected on the grounds that each student has one of the large number of unalterable learning styles, most of which are incompatible with explicit phonics instruction.

To be come genuine Whole Language advocates it also is necessary for teachers to accept several other empirically unverified assumptions about phonics instructions. For example, that:

- Phonics skills cannot be arranged into a hierarchy of the difficulty that students have in learning them;
- All phonics skills should be taught simultaneously or instantaneously (hence the Whole in Whole Language);
- Effective phonics teaching does not require controls to be put on the kind of words students are given to read (e.g., decodable words are relatively unnecessary in this regard);
- No explicit instruction in learning to identify letters is called for;
- No explicit instruction in students' phonemic awareness (their conscious awareness of speech sounds in spoken words) is required;
- Direct, systematic, and intensive teaching of phonics information will handicap students' abilities to comprehend what they read;
- Students should often guess at the identities of written words, using sentence context cues for this purpose;
- English spelling is too unpredictable for the application of phonics information to work effectively; and
- Students should be empowered to add, omit, and substitute written words in sentences, as they see fit. Thus, the accurate recognition of words, the essential goal of the application of phonics information, is only of relatively minor importance.

The Peculiar Purpose of the OSU Phonics Institute

A survey of the academic activities and publications of the reading instruction specialists who were chosen to address the attendees of the OSU Phonics Institute reveals that they all are members of the Whole Language movement, in good standing. These are professors of education Richard Allington, Diane DeFord, Mary Jo Fresch, Amy McClure, John McCracken, Gay Su Pinnell, Patricia Scharer, and Jerry Zutell. No notable reading instruction specialist, who honors experimental research on phonics instruction, and thus who is a negative critic of Whole Language, was invited to speak at the Institute. Accordingly, the Institute was misnamed. In line with its purpose, it should have been called the "OSU Summer Phonics (According to Whole Language/Qualitative Research) Institute," or "The Institute on Exemplary Phonics Instruction As Interpreted by Whole Language Proponents and Qualitative Research." Any attendee at the Institute who anticipated hearing both sides of the current international debate over the best way to teach phonics information, and the relative importance of instruction of phonics knowledge in beginning reading programs, doubtless was sorely disappointed by the Institute's program.

Without doubt, the proceedings of the Institute were unsatisfactory and misleading for anyone who was unfamiliar with the particulars of the present widespread debate about phonics teaching. These would be beginning or relatively inexperienced teachers, new school board members, parents, the general public, state legislators who have responsibility for overseeing reading instruction, and members of the business and commercial community.

Compounding this problem is the fact that papers presented at the Institute offer a combination of some empirically irrefutable facts about phonics teaching, mixed in with information about it gleaned from qualitative studies that is irreconcilable with experimental evidence. One would have to be fully informed about the details of the present controversy over phonics teaching to be able to sort out these two kinds of information into their appropriate categories. (One exception to this fault was the copy of G. Reid Lyon's "Why Reading Is Not a Natural Process," Educational Leadership, March 1998, provided at the Institute.)

It is not the purpose of this critique to determine the exact extent to which this comingling of contradictory experimental and qualitative evidence took place. Nonetheless, generally speaking only seldom in the publications presented to Institute attendees can one find a page whose content can be judged to be based entirely on qualitative as versus experimental findings, or vice versa.

Not only is it proper that these publications be negatively criticized as not making clear whether their sources were qualitative as versus experimental research. They also must be faulted as raising frivolous and spurious objections to the experimental evidence that discredits Whole Language teaching. A prime example, to that effect, was the copy presented at the Institute of Richard Allington and Haley Woodside-Jiron (1998), "Thirty Years of Research in Reading: When is a Research Summary Not a Research Summary?" This material is a chapter in the book, *In Defense of Good Teaching*, edited by Kenneth S. Goodman, a co-founder of the Whole Language movement.

Here Allington and his colleague attack the recent review of experimental research on students' learning to read conducted by the National Institute of Child Health and Development. This animosity toward the survey is not surprising. It concluded that empirical evidence does not support the Whole Language approach to reading instruction.

Allington and his partner make three supposedly trenchant complaints about the NICHD survey: (1) it improperly included studies of students who had experienced difficulties in learning to read, and/or were "at risk of [experiencing] such difficulties"; (2) "the NICHD studies were not successful in improving students' [reading] performance"; and (3) the investigations inspected by the NICHD did not reflect one way or the other on "the importance of decodable text." In actuality, these objections respectively are (1) irrelevant, (2) inaccurate, and (3) obtuse.

Considering the review of experimental research on reading made by Rudolf Flesch in 1955, and the ones conducted by Jeanne Chall in 1967, 1983, and 1989, it is clear that the survey of the empirical evidence on reading carried out by the NICHD was an appropriate one. There also are more than fifty other recent critical analyses of the scientific evidence of reading that bear witness to this fact.

Although they offer no more than imitation proofs "that phonics [teaching] is being oversold," to schools, Allington and his associate are not deterred from contending that a dastardly "disinformation campaign" against Whole Language of a "political" nature, is afoot in the nation, managed by the NICHD. They chide the Whole Language movement for not carrying out

an "effective political public relations campaign" to decry the "legislative or regulatory restrictions on the nature of beginning reading materials" that the NICHD survey stimulated. To this effect, they bemoan "there have been no position papers, no targeted mailings, no telephone campaigns, no media blitz, no glossy flyers, no news conferences, no news releases, no lobbying, no nothing" assembled and carried out to defend Whole Language teaching. Underlying this protest is the proposition that qualitative research evidence gathered by Whole Language enthusiasts should not be required to defend itself in the marketplace of educational ideas. The manner in which the OSU Summer Phonics Institute presents only one side of the current debate over phonics teaching echoes that sentiment.

"Perhaps the lesson to be learned is that learning to read is a political topic," Allington and his cohort conclude despairingly. In so saying, they inadvertently reveal a truth that may signal the demise of Whole Language. In California, for example, Whole Language became more popular than in any other state. As a consequence, students in this state devolved into the least capable readers in the nation. When this reading instruction disaster finally reached the attention of the California legislature, it held comprehensive hearings to determine its cause. Both sides of the great debate over phonics teaching were given ample opportunities to offer their reasons.

The side that honored instruction based on experimental research argued the California reading teaching catastrophe was the result of Whole Language teaching. On the other hand, Whole Language proponents claimed it was due to insufficient funding of the schools, white racism, a lack of school libraries, the public's disrespect for teachers, attempts to privatize the schools, a lack of diversity in school enrollments, too much standardized testing, the effects of drugs and gangs on students, insufficient teacher pay, attempts to make English the official language, and so on – anything but the fact that Whole Language is an empirically discredited form of instruction.

In this dispute, California lawmakers came out on the side of the negative critics of Whole Language. It no longer is lawful in this state to conduct the worst excesses of Whole Language teaching in public schools. California lawmakers thus have made sincere efforts to afford students the best chance possible to learn to read, knocking down decades of ideological barriers to that goal put in place by Whole Language teaching.

Summary and Recommendations

The Ohio legislature (or that in any other state) and school districts cannot legitimately decide how phonics instruction should be conducted in its public schools without the kind of dull hearings on this matter held in California. The OSU Summer Phonics Institute '98 therefore is not sufficient for that purpose. As has been described in this discussion, the Institute presented only a singly, highly partisan position regarding phonics teaching. This is the one promoted by the experimentally discredited Whole Language movement, and by the qualitative research findings that the movement produces.

Such information alone is not adequate for deciding how phonics should be taught, i.e., what are the characteristics of exemplary phonics instruction. Accordingly, it is imperative that a second phonics institute in Ohio be organized and conducted called, "The Institute on Scientific Phonics Instruction." Attendees at this meeting would be presented conclusions about phonics instruction drawn from the empirical evidence. If a certain practice in phonics teaching was supported by experimental findings, but not by those from qualitative research, teachers would be advised to adopt it. To the reverse, a teaching practice recommended by qualitative research would not be acceptable if contradicted by empirical evidence.

In short, to make rational decisions as to how phonics information is best taught, it often is necessary to make forced-choices between teaching recommended by experimental as versus qualitative evidence. The assumption that some reading instruction specialists make in this regard, that incompatible evidence from these two competing sources somehow can be balanced, melded, or otherwise combined is worse than merely unsound. It poses a severe handicap to the development and establishment of exemplary phonics instruction programs. Without such superior phonics programs, students will be denied what schools are basically designed to deliver: full opportunity for each student to learn to read.

Dr. Patrick Groff, Professor of Education Emeritus, San Diego State University, has published over 325 books, monographs, and journal articles and is a nationally known expert in the field of reading instruction.

In the light of the continued prevalence of Guided Reading, Leveled Literacy Intervention, and even Reading Recovery in schools today, this essay by Dr. Groff proves to be of abiding value.

Accessed and reformatted by Donald L. Potter on February 8, 2020. http://www.readingstore.com/OSUPHINST.htm

Roll Call of Combatants in the Reading Wars

Dr. Patrick Groff, Professor of Education Emeritus, San Diego State University

The media is prone to dub the current international controversy, over how English-speaking students are best taught to read, as the "reading wars." The point in calling this dispute a "war" obviously is to leave the impression that there must be some reasonable, overlooked means by which this argument can be resolved among educators, so that children learning to read will be the beneficiaries of its termination.

Some reading instruction specialists have joined the media in denouncing a continuation of this controversy over reading instruction. They contend that there is an "eclectic" solution to the conflict over how children acquire reading ability in the shortest time possible. It is their view in this respect that the "best" aspects of the competing proposals for teaching reading should be identified. These best parts would then be melded together to make up a supposedly defensible "balanced" reading instruction program, that will please both sides to the dispute.

Unfortunately, both the media and the reading specialists in question ignore, or are unaware of the true nature of the world-wide altercation over what kind of reading instruction is the most effective. This battle began in the 1970s, when the Whole Language (WL) approach to students' reading development was created, by Kenneth Goodman and Frank Smith. After that point in time, WL increasingly became a dominant force in reading instruction in English-speaking nations.

The guiding principle of WL is that students best learn to read in the same informal, natural way they previously learned to speak, as preschoolers. Therefore, in bona fide WL classrooms, **d**irect, **s**ystematic, **i**ntensive, **c**omprehensive, and **e**arly teaching, of a prearranged sequence of discrete reading skills, is greatly de-emphasized. The WL theory assumes that students best learn all reading skills in a simultaneous or instantaneous (holistic) fashion. Hence, the choice of the word, Whole, in WL teaching.

Also, only teachers who accept WL principles can properly determine whether students are learning to read satisfactorily, WL leaders insist. Standardized reading tests supposedly are unsuitable for that purpose. A cardinal goal of WL is to persuade educators to abandon their use.

Advocates of WL have produced many qualitative (nonnumerical, anecdotal, impressionistic, nonscientific) research findings that they claim confirm the validity of the fundamental principle of their reading instruction innovation, as well as its lesser doctrines. Nowhere in these many published reports is it ever written that WL teaching has any shortcomings. This is not a surprising situation since the goals of WL-qualitative research are to confirm, explain, and promote WL, not to determine if its ideological framework is supported by empirical data.

The other major type of research into students' reading progress is the experimental variety. As opposed to qualitative research, the experimental kind is expressly designed to objectively test whether a given hypothesis about reading teaching is true or false. For that purpose, it typically gathers standardized test data on students before and after they have been provided a carefully defined version of reading instruction.

Experimental research thus is devised so that it can be replicated. Findings of an individual experiment are not considered generally applicable to reading instruction until they have been reproduced through repeated tryouts of the model experiment. Experimental research therefore is a self-corrective process, not a self-aggrandizing one, as is the case with qualitative studies of the WL ideology.

The present widespread controversy over how to teach students to read arose out of the fact that findings of qualitative as versus experimental research on this question consistently contradict each other. In that respect, it is found that none of the unique principles and practices of WL is corroborated by experimental research. For example, qualitative findings indicate direct and systematic teaching of reading is a relatively ineffective procedure. Experimental evidence, to the contrary, steadfastly demonstrates that students learn to read better with this kind of instruction than with indirect and unsystematic teaching.

The greater the number of reports of WL-qualitative versus experimental research on reading teaching published, the clearer it has become that the findings from these two investigative sources are irreconcilable, incompatible, and mutually exclusive. This is not an unexpected outcome since, as WL leader Carole Edelsky explains: WL "constitutes a different view of education, language and learning; uses different discourse; maintains different values; and emanates from a different educational community" from the one that honors experimental research. It thus is predictable that the two educational communities would strongly disagree as to "What is reality? Where do facts come from? What is truth?" about reading instruction.

As a consequence, when the findings of qualitative as versus experimental research on reading instruction disaffirm each other, as often happens, it becomes necessary, for everyone concerned as to how reading instruction is conducted most effectively, to make a forced-choice between these two sets of information. Therefore, teachers, school officials, teacher unions, parents, school boards, PTAs, community organizations, business associations, state and local legislators, and the voters at large all must reject WL if they believe that the scientific method for resolving instructional issues must be favored over that employed by qualitative research.

The Roll Call of disputers in the reading teaching controversy, as given to follow, is designed to assist anyone, who is convinced that reading instruction programs must be based on relevant experimental evidence, to determine if the reading program in his/her local schools reflects his/her belief. The Roll Call first provides a list of relatively well-known reading instruction specialists whose publications indicate they defend the scientific method for deciding how reading should be taught.

The second list of names to follow is of recognized reading instruction specialists whose publications indicate they are active supporters of WL. Through their publications that congratulate WL, these literacy experts signify they prefer qualitative research findings, over those from experimental research, when the two refute each other.

The two lists provide help for determining whether or not a local school district's reading program is based on: (1) the findings of qualitative research, as versus (2) experimental research, or (3) an irrational blend of contradictory evidence from these two research methodologies. To carry out this discovery, one should proceed in this way:

First, inspect the citations to authors of books, journal articles, or other published sources that the school district offers as justification for the kind of reading instruction that it provides students. If these references are exclusively those of reading instruction specialists named in list one of the Roll Call, the district doubtless has consulted experimental evidence in determining how reading instruction should be conducted.

On the other hand, if the citations so offered by the school district are entirely authors from list two of the Roll Call, it is clear that the district's reading program is intended to be WL-oriented, if not dominated by WL's experimentally unverified principles and practices. An equal number of citations of reading instruction specialists who favor WL evidence on reading teaching, as versus those who defend experimental evidence for this purpose, may be given. This means that the district has devised an irrational, unprincipled reading instruction program.

Thus, if a school district cites only authors from list two, or ones from both lists, it is open to negative criticism. Among the questions that it then should be requested to answer in these events are:

• Why did you select a reading instruction program based on qualitative evidence rather than on the experimental kind?

• How do you justify basing your reading program on a combination of types of research evidence that often contradict each other?

• If you propose you have chosen the "best" evidence from qualitative and experimental reading instruction research, what was the rationale used for this choice?

Roll Call Number One: Defenders of Experimental Research in Reading Instruction

A: M. J. Adams; P. A. Alexander; J. Alford; A. Allport; J. F. Almosi; R. C. Anderson; T. H. Anderson

- B: J. Blackman; E. W Ball; M. Balmuth; J. Banks; J. Baron; Barbara Bateman; J. F. Baumann;
 W. C. Becker; W. J. Bennett; D. C. Berliner; B. A. Blackman; W. E. Blanton; L. Bradly;
 S. Brady; I. S. Brown; M. Buck; E. Bruner; P. E. Bryant; B. Byrne; T. Burkhard; B. Butler
- C: R. C. Calfee; D. Carnine; R. P. Carner; T. H. Carr; P. A. Carpenter; B. Carter; H. W. Catts; Jeanne S. Chall; C Cornoldi; R. C Crowder; A. E. Cunningham; L. Curry
- D: J. H. Danks; M. Danemann; M. B. Denchla; J. Downing; M. J. Dreher; P. A. Drum;D. Durkin; R. Dykstra
- E: Linnea C. Ehri; Siegfried E. Englemann; M. A. Evans
- F: Sylvia Farnham-Diggory; O. A. Feeman; D. Feitelson; R H. Felton; R. Fielding-Barnsley;
 C. E. Finn; F. W. Fisher; B. R. Foreman; S. R. Forness; C. A. Fowler; D. J. Francis's;
 J. R. Fredericksen; P. Freebody; J. Frost; R. Greste; L. R. Gleitman; R. J. Glushko;
 R. M. Golinkoff; U. Goswami; Patrick Groff; P. L. Griffith; B. Grossen; H. Gurren
- H: S. Haines; M. Herbert; C. N. Hedley; L. Henderson; M. Henry; E. H. Hiebert; D. Hill;M. L. Hillinger; E. D. Hirsch; T. Hogaboam; J. G. Holland; W. A. Hoover; Ann Hughes;C. Hume
- J: D. D. Johnson; A. F. Jorm; Connie Juel; J. F. Juola; M. A. Just
- K: A. G. Kahmi; E. J. Kameeuni; K. A. Kavale; M. Kinsbourne; W. Kintsch; M. R. Kuhn

- L: D. LaBerge; J. R. Layton; A. M. Lesgold; Alvin M. Liberman; Isabelle Liberman; Pat Lindamood; M. Y. Lipson; J. Lundberg
- M: B. Macmillan; V. A. Mann; D. W. Massaro; N. Mather; I, Mattingly; E. S. Mcaslin;
 S. McCormic; L. X. McCuster; Dianne McGuinness; T. McLaughlin; M. G. McKeown;
 M. C. McKenna; C. Meister; J. W. Miller; P. D. Miller; D. C. Mitchell; Louisa C. Moats;
 G. B. Moorman; J. M. Morris; F. J. Morrison; Hilda L. Mosse
- N: T. Nicholson; D. M. Novy
- O: R. Olson; Samuel T. Orton; J. Osborn
- P: S. G. Paris; E. P. Pate; P. D. Pearson; Charles Perfetti; C. L. Peterson; O. P. Pearson; A Pollatsek; Michael Pressley; L. R. Putnam
- R: J. P. Rack; Keith Rayner; D. Reinking; L. B Resnick; L. Rieben; C. Robbins; R. R. Robinson;B. Rosenshine.
- S. J. Samuels; D. J. Sawyer; D. Scanlon; N. Schermer; Donald Shankweiler; David L. Share;
 M. J. Shepherd; J. Simron; L. S. Siegel; J. Sibert; V. E. Snider; M. J. Snowling;
 L. Spear-Swerling; Stephen A. Stahl; Keith E. Stanovich; M. Stein. R. Stevens.
 Thomas G. Sticht; D. H. Scott
- T: B. B. Taylor; G. B. Thompson; R. Treiman; S. Truch; M. Turner; M. T. Turvey
- U: G. Underwood; J. K. Uhry
- V: F. Vellutino; Richard L. Venezky
- W: L. Wallach; M. Wallach; R. Wardhaugh; P. A. Weaver; C. K. West; R. F West;W. A. T. White; L. S. Wilce; J. P. Williams; M. R. Wilson; B. W. Wise; K. K. Wixson
- Y: S. R. Yussen

Roll Call Number Two:

Defenders of Whole Language Qualitative Research in Reading Instruction

- A: J. Allen; P. D. Allen; Richard C. Allington; B. Altweerger; G. S. Anderson; R. J. Anthony; M. W. Apple; S. Aronowits; N. Atwell; K. Au
- B: K. Barclay; A. S. Bayer; K. Beach; L. B. Bird; G. L. Bissex; M. L. Blansett; D. Bloom;M. Botel; L. B. Bridges; J. Brooks; H. Brown; R. Brown; E. Buchannan; C. L. Burke;M. Burma-Washington
- C: T. Cairney; Lucy M. Calkins; B. Clambourne; R. Campbell. Maria Carbo; Mary Clay;
 C. B. Cazden; M Chow; F. Christie; S. M. Church; M. M. Clark; M. A. Clark; J. Clyde;
 M. Cochran-Smith; P. Cordeiro; C. Cox; L. K. Crafrton; P. Crowley; B. Cullinan;
 D. Cushenbury; B. Cutting
- D: K. H. Dahl; J. E. DeCarlo; Emerald Dechant; D. E. DeFord; L. E. Desai; C. Dixon;D. B. Doake; K. Draper; C. Dudley-Marling; R. Dunn
- E: C. Edelsky; B. Eisele; M. Eisenhaert; J. L. Eldredge; C. Espe
- F: P. Farris; E. Ferreiro; M. Fields; P. J. Finn; B. Fisher; A. D. Flurkey; I. Forte; Irene C. Fountas; D. E. Freeman; Y. S. Freeman; P. Freire; V. Feroese
- G: L. Galda; J. Richard Gentry; P. Gilmore; H. A. Giroux; A. Gitlin; H. Goelman;
 Kenneth S. Goodman; Yetta M. Goodman; D. Goswami; D. Graves; B. Gruber; H. Grundin;
 L. Grunderson; K. Gunn
- H: N. Hall; J. Hansen; B. Harp; L. H. Harris; J. C. Harste; S. Harwayne; Gail Heald Taylor;
 J. L. Heap; L. Henke; D. Hittleman; D. Holdaway; P. M. Hollingsworth; W. J. Hood;
 David Hornsby; R. S. Hubbard

- J: A M. Jaggar; P. H. Johnson
- K: D. King; Stephen D. Krashen; S. E. Kucer;
- L: L. L. Lamme; D. F. Lancy; M. Laughlin; M. Lyle; C. A. Lyons
- M: D. Manning; G. Manning; M. McKenzie; M. Meek; H. Mills; C. Mohr; M. E. Mooney; L. M. Morrow; S. Murphy; J. Myers
- N: J. M. Newman
- O: T. O'Keefe
- P: G. Pace; N. Padak; L. Patterson; P. Pavelka; P. D. Pearson; A. Peetoom; K. M. Pierce; Gail Sue Pinnell; N. Polette; D. Powell; B. Power
- R: S C. Raines; T. E Raphael; T. Raskinski; J. Readance; J. Reiff; D. R. Reutzel; R. Reynolds; L. K. Rhodes; S. J. Rich; P. Riggs; L. Robb; A. Robinson; Reggie Routman; R. B. Ruddell
- S: M. R. Sampson; J. Sanacore; B. B. Schieffelin; L. Searfoss; S. Sebasta; N. L. Shanklin;
 J. Shapiro; Q. Q. Sharp; I. Shor; K. G. Short; Frank Smith; M. S. Smith; M. T. Smith-Burke;
 D. L. Spiegel; J. Stansell; D. Stephens; C. F. Stice; S. Stires; Dorothy Strickland; E. Stull;
 E. Sulzby
- T: D. Taylor; W. H. Teale; A. Teberosky; S. Temleton; J. K. Thomas; R. J. Tierny; D. Tovey; J. Trelease; M. O. Tunnell; R. C. Turner
- U: N. J. Unhau
- V: R. T Vacca; P. Vail; R. Van Allen

W: D. J. Watson; B. M. Weaver; Constance Weaver; G. Wells; S. Wilde; G. Winch;V. A Woodward

Y: D. Yaden; D. C. Yeager

Note: I do now know exactly when Dr. Groff drew up this list of combatants in the Reading Wars, I believe it was probably in the late 1990s, just the time I was taking my place in the trenches on the Phonics Side. Groff only used initials for the first name, assuming that was enough to identify the scholar. I have added first names here and there when they were known to me. I hope to add many more first names as soon as I can figure them out. I would appreciate help from anyone.

http://www.readingstore.com/RollCallofCombatants.htm

It would be nice to have an updated version of the Roll Call.

Note from Internet Publisher: Donald L. Potter

February 8, 2020

I recently read that Bob Sweet, just before he passed away, willed the assets of *The National Right to Reading Foundation* to *The Reading League*. *The National Right to Read Foundation* has been a beacon light of truth and sanity in a very dark educational scene since its founding in 1993.

Since its founding, Dr. Patrick Groff has been the leading consultant. His essays over the years have helped guide reading teacher like myself to negotiate the treacherous waters of reading instruction and stay close the safe shores of DES (Direct, Early, Sequential) instruction.

Over the years, I have made it a point to publish as many articles, papers, and essays by Dr. Groff on my website, <u>www.donpotter.net</u>. I felt that it was important to preserve the information and wisdom of Dr. Groff's research for researchers and historians of reading.

The papers in this document were taken off the NRRF website on Feb. 8, 2020 for their preservation and to make them easily accessible in pdf on the "Reading Research and Instruction page" of my website.

There is also material from the Reading Reform website.

http://www.readingstore.com/index.html