EVIDENCE- BASED RESEARCH ON READING RECOVERY

We are an international group of researchers who study reading development and interventions with struggling readers. This letter responds to a number of questions that have been raised by educators, policymakers, and parents about the effectiveness of Reading Recovery, a tutoring program designed for struggling first grade students. We hope the following summary analysis will be helpful to those who are considering the most effective ways to help struggling students become proficient readers.

These are not isolated opinions and the findings here are summaries of several peer-reviewed studies and syntheses of research on Reading Recovery. However, it is not our goal to discredit Reading Recovery, but as with any other program, outline its weaknesses to suggest how it can be improved. We believe this should be done for any program that is widely used to address reading difficulties

- 1. Reading Recovery is not successful with its targeted student population, the lowest performing students. There is little evidence to show that Reading Recovery has proved successful with the lowest performing students. Reading Recovery targets the lowest 10-20 percent of first graders who have the prerequisite skills for Reading Recovery. While research distributed by the developers of Reading Recovery indicates a positive effect of the program, analyses by independent researchers have found serious problems with these conclusions. Studies conducted by researchers associated with Reading Recovery typically exclude 25-40% of the poorest performing students from the data analysis. In contrast, the studies funded by the National Institute for Child Health and Human Development (NICHD) and the Office of Special Education Programs (OSEP) in the Department of Education never purposely exclude a child. The data on efficacy is based on all those who are enrolled and available for followup. This is known as an "intent to treat" approach, which is standard for any evaluative research. Reading Recovery's "in-house research" does not follow an "intent to treat" approach. In fact, for the poorest readers, empirical syntheses of "in-house" and independent studies indicate that Reading Recovery is not effective. In Elbaum et al. (2000), the gains for the poorest readers instructed with Reading Recovery were almost zero. There is also evidence that students who do complete the Reading Recovery sequence in first grade lose much of their gains, even in the 65-75% of better students who finish the program (Hiebert, 1994; Shanahan & Barr, 1995; Snow, Burns, & Griffin, 1998; Tunmer & Chapman, in press b). A recent study by a group from New Zealand (Chapman, Tunmer, & Prochnow, 2001) shows that students in Reading Recovery may experience problems with self-esteem when they do not perform well. One of the authors, Chapman, stated in an interview with a New Zealand newspaper (The Press, November 1, 1999) "Students actually declined in self-esteem throughout the course of the program and continued to show no acceleration or improvement in the period following the programme." (See also Tunmer & Chapman, in press a).
- 2. Reading Recovery is not a cost effective solution. Even if it were maximally effective, Reading Recovery is not cost effective because the developers require one-to-one interventions by highly trained teachers. An analysis by Hiebert (1994) found that Reading Recovery was very expensive, costing over \$8,000 per student, reflecting in part the costs of 1

training. But Elbaum et al. (2000) found that students who participated in Reading Recovery did not outperform students who were provided one-on-one reading instruction by trained volunteers. At least two studies have compared Reading Recovery in a one-to-one grouping with a modified version of "Reading Recovery" administered to a small group (by definition this can't be Reading Recovery; Evans, 1996; Iversen, 1997). There was no advantage of one-to-one instruction over small group instruction. There are other first grade programs that are demonstrably efficacious, impact more students because they do not require 1:1 tutoring, are easier to implement, and do a better job than Reading Recovery of improving student reading skills because they do not drop students (Snow et al., 1998; Torgesen, 2000).

Altogether, several studies indicate that teacher: student groupings of 1:3 work as well as groupings of 1:1 (Elbaum et al., 2000). Many of the current NICHD and OSEP pullout interventions utilize group sizes of 1:3 and higher. Thus, solely by virtue of the number of students who can be reached, Reading Recovery is at least 200% more expensive than other first grade interventions. Reading Recovery specifically states that it is not a program for groups, but provides little empirical support for this philosophy. This philosophy is inconsistent with the research on early intervention.

- 3. Reading Recovery efficacy studies do not use standard assessment measures. Most evaluations are restricted to the Reading Recovery developers' own, nonstandard measures. These same measures are used to determine which students will be considered as part of the sample (continued versus discontinued students). Thus, outcomes are inflated and unconvincing to the research community. The primary outcome measure used by Reading Recovery "in-house" researchers that has shown the largest effect is an assessment of "text reading" developed by the authors. However, even Reading Recovery specialists acknowledge that "The text reading measure is not an equal interval scale, that is, there are smaller differences in the beginning levels than at upper levels. For beginning readers, it is necessary to look at the reader's progress in more detail" (Askew et al., 1998, p.10). Obvious candidates would involve continuous progress monitoring as implemented in numerous research studies and norm referenced tests that are widely available and commonly used in reading intervention research. With use of standard measures like those implemented by independent researchers, student performance could be compared across studies, permitting calculation of response to instruction based on the number of hours of instruction across interventions (see Torgesen, 2000).
- 4. Reading Recovery does not change by capitalizing on research. Reading Recovery developers have been and continue to be resistant to integrating the findings of independent, scientifically based reading research into their program and making it more cost effective. The failure to attend to research in modifying the program is its major downfall. The lack of efficacy of Reading Recovery with the poorest readers is not surprising given the research base that highlights the importance of explicit teaching of phonics for this group. Reading Recovery teaches phonics, but the instruction is not sufficiently explicit. A common finding in research on Reading Recovery is that those students who do not respond are weak in phonological awareness (Snow et al., 1998; Tunmer & Chapman, in press b). In fact, research by New Zealand researchers Iverson and Tunmer (1993) in which an explicit phonics component was added to a standard Reading Recovery intervention reduced the time required to complete the program by about 30%. Morris, Tyner, and Perney (2000) found that a reading program constructed like Reading Recovery with the addition of an explicit

component addressing spelling-to-sound patterns was highly effective, even with those students most at risk.

Reading Recovery has been independently evaluated in New Zealand, the country in which it was developed. These researchers, who have cosigned this letter, asked that this summary be included:

"In New Zealand, where Reading Recovery was developed, the programme has been independently examined on two occasions. Both studies found shortcomings. In essence, the programme is failing to meet the claims regarding its objectives and success. Senior Reading Recovery administrators have also overtly blocked attempts by graduate students to independently examine aspects of Reading Recovery. The New Zealand Ministry of Education has stated that because of copyright issues, the Ministry is unable to make changes to the program. Despite strong evidence in New Zealand, Australia, and the US that changes are needed to make Reading Recovery more effective, Reading Recovery leaders do not seem willing to incorporate the findings of such research to make the programme more effective. There is and has been considerable debate about the efficacy of Reading Recovery in New Zealand; this debate is indicative of an increasing dissatisfaction among researchers and some educators about the nature of the Reading Recovery programme. Finally, the Ministry of Education commissioned a report from the "Literacy Experts Group", released in 1999. Included in this report was a recommendation, unanimously agreed to by experts from the full spectrum of views on reading: "We recommend that Reading Recovery place greater emphasis on explicit instruction in phonological awareness and the use of spelling-to-sound patterns in recognizing unfamiliar words in text." This recommendation has not been adopted by Reading Recovery."

There are three additions that would impact positively the number of students who benefit from Reading Recovery, their rate of progress, and reduce costs: (1) increased group size; (2) *explicit* instruction in phonics and phonemic awareness; and (3) use of standardized outcome measures and continuous progress monitoring. These additions have been ignored despite research summarized in the National Research Council report, *Preventing Reading Difficulties in Young Children*, which specifically outlined many of these concerns (Snow et al., 1998, pp. 255-258), the National Reading Panel report, the New Zealand Ministry of Education, and various reviews suggesting that such steps would greatly benefit students who are placed in Reading Recovery.

In summary, the Reading First initiative, recently enacted into law as part of the No Child Left Behind Act of 2002, requires the use of scientifically based classroom reading instruction for all students. Even with the best classroom instruction, there will still be some students who don't make adequate progress and need additional, more intensive instruction. Reading Recovery has not met the needs of these lowest performing students. Most significantly, its excessive costs can make it more difficult for a school to provide help for all students in need, especially those who are behind in the upper grades. Thus, Reading Recovery is not a productive investment of taxpayers' money or students' time and is a classic example of a "one size fits all" method. No single method works with all students. Methods like Reading Recovery that are rigidly implemented and limited in the number of components of effective reading instruction will not work with all students. Reading Recovery leaves too many students behind.

Sincerely,

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References

- Askew, B.J., Fountas, I.C., Lyons, C.A., Pinnell, G.S., & Schmitt, M.C. (1998). *Reading Recovery review: Understanding outcomes, & implications*. Columbus, OH: Reading Recovery Council of North America.
- Chapman, J.W., Tunmer, W.E., & Prochnow, J.E. (2001). Does success in the Reading Recovery program depend on developing proficiency in phonological processing skills? A longitudinal study in a whole language instructional context. *Scientific Studies in Reading*, 5, 141-176.
- Elbaum, B., Vaughn, S., Hughes, M.T., & Moody, S.W. (2000). How effective are one-to-one tutoring programs in reading for elementary students at-risk for reading failure? A meta-analysis of the intervention research. *Journal of Educational Psychology*, *92*, 605-619.
- Evans, T.L.P. (1996). *I can read deze books: A quantitative comparison of the reading recovery program and a small-group intervention*. Unpublished doctoral dissertation, Auburn University, Auburn, Alabama.
- Hiebert, E.H. (1994). Reading Recovery in the United States: What difference does it make to an age cohort? *Educational Researcher*, 23, 15-25.
- Iversen, S. (1997). *Reading Recovery as a small group intervention*. Unpublished doctoral dissertation, Massey University, Palmerston North, New Zealand.
- Iversen, S.A., & Tunmer, W.E. (1993). Phonological processing skill and the Reading Recovery program. *Journal of Educational Psychology*, 85, 112-125.
- Morris, D., Tyner, B., & Perney, J. (2000). Early Steps: Replicating the effects of a first-grade reading intervention program. *Journal of Educational Psychology*, 92, 681-693.
- Shanahan, T., & Barr, R. (1995). Reading Recovery: An independent evaluation of the effects of an early instructional intervention for at-risk learners. *Reading Recovery Quarterly*, *30*, 958-996.
- Snow, C., Burns, M.S., & Griffin, P. (Eds.) (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.
- Torgesen, J.K. (2000). Individual responses to early interventions in reading: The lingering problem of treatment resisters. *Learning Disabilities Research & Practice*, *15*, 55-64.
- Tunmer, W.E., & Chapman, J.W. (in press a). The relation of beginning readers' reported word identification strategies on reading achievement, reading-related skills, and academic self-perceptions. *Reading and Writing: An Interdisciplinary Journal*.
- Tunmer, W.E., & Chapman, J.W. (in press b). The Reading Recovery approach to preventative early learning: As good as it gets? *Reading and Writing Quarterly*.