Dispelling Misrepresentations and Misconceptions About Reading Recovery:

Response to Perspectives on Language and Literacy, Fall 2011

Introduction

In this white paper we respond to the fall 2011 issue of *Perspectives on Language and Literacy*, a quarterly publication of the International Dyslexia Association. This entire themed issue comprises five articles, all discounting various aspects of Reading Recovery. Perhaps Reading Recovery was singled out because of its scientific evidence of effectiveness and the international scalability of the intervention.

Typically, editors of scholarly journals invite a response from the perspective under review. This was not the case for Reading Recovery. Because we were not invited to respond to the criticisms of Reading Recovery within the pages of *Perspectives on Language and Literacy*, we respond instead in the form of a white paper.

While we are not opposed to entering into a conversation about the science, theory, or effectiveness of early intervention, we expect higher evidence standards than the nonscientific approach used to produce this collection of articles. The theme editor states that authors were not required to incorporate external reviewer requirements and were given the freedom to present their own ideas and their own data. This freedom led to selective and skewed support of their arguments.

In this paper we address some of the issues raised in the journal. We first respond to faulty reporting of the effectiveness of Reading Recovery, then to the authors' misconceptions about the theoretical foundations of the intervention, and finally, we address areas representing a lack of understanding about Reading Recovery instructional practices.

Response to Claims About the Effectiveness of Reading Recovery

Chapman and Tunmer make sweeping claims that research on Reading Recovery indicates that it is not effective. They begin by stating that the What Works Clearinghouse (WWC) (2007, 2008) identified just five research papers that met the organization's standards.

Indeed, the WWC does maintain high standards for study inclusion. To be included in the WWC review, studies must be either randomized control trials or quasi-experiments with documentation of group equivalence on pretest measures. Having five experimental studies that met these standards was exceptional. The WWC has reviewed evidence for hundreds of interventions, but only a small proportion of those interventions had enough

evidence for which the WWC could generate reviews. That five of these studies examined the effectiveness of Reading Recovery meant that most of the other interventions had only one or no studies that met these criteria. The five experimental studies of Reading Recovery included in the WWC review converged on the same conclusion that Reading Recovery has extensive scientific evidence to support its effectiveness.

Furthermore, on general reading achievement the WWC computed an overall effect of 32 percentile points, a .91 overall effect size. When the scientific evidence is considered, Reading Recovery has the largest effect size of any beginning reading intervention; no intervention has an effect size that is close to Reading Recovery, and very few interventions reviewed by the WWC had the same degree of extensive evidence supporting its effectiveness.

Chapman and Tunmer also argue that Reading Recovery instruction is not based on modern research and they go on to cite Clay's publications from 1979, 1980, 1991, and 1993. Surprisingly, given their attention to the need for modern, up-to-date publications, they ignore Clay's more recent publications from 2002 and 2005. In fact, Clay's publication record is unbroken, reflecting a constant updating of theory and practice over the years, with publications in 2002 and 2005 representing updates in assessment, instructional practices, and related theory.

Chapman and Tunmer rely heavily on a review by Elbaum, Vaughn, Hughes, and Moody (2000) to support their claim that Reading Recovery is not effective. That review, however, contains serious flaws — serious enough to render the authors' conclusions suspect.

Perhaps the most serious methodological error lies in the fact that Elbaum et al. did not attend to potential publication bias in their review. This is a problem because over half of the 30 studies that they reviewed were from unpublished sources, and the greatest proportion of those unpublished sources were examinations of Reading Recovery. Specifically, 8 of the 11 (73%) selected reviews of Reading Recovery were from unpublished sources, including dissertations and unpublished manuscripts, yet just 8 of the 19 studies of non-Reading Recovery interventions (42%) were from unpublished sources. Only three studies related to Reading Recovery and selected by Elbaum et al. for inclusion in their review were published. This imbalance means that Elbaum et al.'s conclusions about Reading Recovery were based, for the most part, on manuscripts that never met the rigorous standards required by the general academic community for publication and dissemination. Why is this a problem?

We computed additional analyses using data available in the Elbaum et al. manuscript and noted a sizable difference in effect sizes between unpublished and published manuscripts. The unpublished manuscripts yielded much smaller effect sizes. Clearly, the fact that the majority of studies about Reading Recovery were from unpublished sources confounded the results and likely produced a bias that had a greater negative impact on Reading Recovery's effect sizes.

Chapman and Tunmer also claim, citing Elbaum et al., that Reading Recovery does not successfully discontinue up to 30% of students and that Reading Recovery emphasizes effect sizes for only those students who successfully discontinued. Reading Recovery continues to be one of the few—if not the only—intervention that reports outcomes for every single student who receives the intervention, no matter the outcome. By contrast, there is no disaggregation by completion status for the other interventions reviewed by Elbaum et al. The reader cannot know if the computed effect sizes for the other interventions were based on all students who were offered the treatments or only those students who completed the interventions and were post tested. This lack of information about the individual studies included in their review was identified by Torgerson (2007). It is impossible to draw valid conclusions between Reading Recovery and the other interventions because we do not know the outcome status for students in the other interventions.

The WWC method, conducted by an external unbiased group, found a large effect size for Reading Recovery of .91 on general reading achievement.

Response to Authors' Ongoing Theoretical Misconceptions About Reading Recovery

In setting the theoretical perspective for this themed issue, Nicholson raises this question: "Which approach is better for teaching struggling readers, code-based instruction or meaning-based instruction?" (p. 8). Nicholson, Greaney, Chapman and Tunmer, and Arrow and McLachlan all position Reading Recovery as a meaning-based intervention aligned with *whole language* and therefore not likely to provide struggling beginning readers with the explicit phonological and phonics skills they need.

The journal authors set up their own definitions of *whole language*. Yet, Reading Recovery is clearly not a whole-language approach according to any of their varied definitions. For example, Greaney characterizes whole language as implying that skilled reading is a process in which minimal word-level information is used to predict and confirm word recognition. Yet Reading Recovery is designed to promote fast perceptual processing of words in print. In one of Marie Clay's texts a section titled "Fast perceptual processing" includes this statement: "Everything we do in mature reading and writing will rely on fast accurate perceptions of language sounds (captured by the ear) and visual symbols (captured by the eye) as we read and write" (2005a, p. 43).

While Reading Recovery instruction acknowledges the supportive role of meaning and comprehension in learning to read, it does not attempt to foster the whole-language goal these authors find so objectionable. Adams (1990) might take exception to even characterizing Reading Recovery as meaning based. She argued that, "The Reading Recovery program has been methodically designed to establish and secure that whole complex of lower-order skills on which reading so integrally depends" (p. 421). When

reading continuous text, children engage in extensive problem solving and use a variety of information sources. Limiting a child to one source of information would deprive a child of actively processing information to make decisions and monitor the effectiveness of those decisions.

As Nicholson points out, most approaches offer a mix of meaning-based and code-based instruction, so judging an appropriate mix becomes less a matter of theory and more a question of empirical outcomes. As we have argued above, and elsewhere (Schwartz, 2009; Schwartz, Hobsbaum, Briggs, & Scull, 2009), the experimental evidence for Reading Recovery is very strong, with students showing large gains relative to control groups on general reading achievement as well measures of component skills related to phonics and phonological awareness.

Learning to read is a complex skill (Clay, 2001, 2005a, 2005b; Schwartz & Gallant, 2011). Not every child needs a one-to-one intervention to support literacy learning (Clay, 2005a; Schwartz, Schmitt, & Lose, in press). For those who do need this support we think we know what works best — an early intervention by a knowledgeable teacher, working in a framework that emphasizes real reading and writing, with the flexibility to use ongoing observations and assessments to adjust instruction to the strengths, needs, and changing competencies of a particular child. For millions of children in New Zealand, Australia, the United States, Canada, the United Kingdom and their affiliates, this support has been, and continues to be, provided by Reading Recovery.

Response to Authors' Misconceptions/Confusions About Reading Recovery Practices

- The authors in this journal issue confuse their theoretical arguments with empirical outcomes of interventions. In arguing for code-based instruction, they selected only studies that supported their theoretical views. Yet they failed to provide empirical evidence of *outcomes* resulting from any well-defined intervention targeting the population served by Reading Recovery. They ignored the experimental evidence for Reading Recovery's effectiveness as an intervention, seemingly negating the intent of their own journal theme, "Beyond Reading Recovery: What Works Best?"
- Reading Recovery is not focused on the debate highlighted in the journal: code-based instruction vs. meaning-based instruction. Reading Recovery is not defined as whole language, a meaning-based approach, a multiple-cues approach, or a cueing-systems model of word reading. Reading Recovery researchers in multiple contexts around the world have evidence confirming the effectiveness of this early intervention based on a *literacy processing theory* of reading and writing acquisition. Furthermore, Reading Recovery is effective with children of diverse backgrounds (e.g., diverse language and cultural backgrounds), with children of limited levels of emergent literacy acquisition, and with children limited in phonological awareness or alphabet knowledge.

Reading Recovery is based on a complex theory of literacy acquisition, and
instruction focuses on supporting each learner in constructing a literacy processing
system that involves all knowledge sources (meaning, language structure, words and
word structure, letters, features of letters, and sounds of letters). Contrary to
misunderstandings revealed by journal authors, every Reading Recovery lesson
includes attention to developing decoding skills.

In a *literacy processing theory*, there are "many working systems in the brain which search for and pick up verbal and perceptual information governed by directional rules; other systems which work on that information and make decisions; other systems which monitor and verify those decisions; and systems which produce responses. Working in complex networks these systems make literacy processing possible." (Clay, 2001, p. 1). Therefore, reading development involves code information, meaning, and much, much more. And running records of text reading serve to shed light on a child's processing that includes use of the code, language structures, and meaning.

- Journal authors Chapman and Tunmer imply that phonemic awareness, decoding fluency, and reading fluency are not assessed by Reading Recovery professionals. This is inaccurate; subtests of Clay's An Observation Survey of Early Literacy Achievement (2002, 2005) include assessment of each of these reading behaviors. The Observation Survey recently received the highest possible ratings for screening tools from the National Center on Response to Intervention (NCRTI). Phonemic awareness, decoding fluency, and reading fluency are also monitored daily through teacher observations of reading and writing.
- The journal perpetuates misunderstandings about who is served by Reading Recovery. Reading Recovery standards explicitly state that the children who most need Reading Recovery are the first to be entered (*Standards and Guidelines of Reading Recovery in the United States*, 2011). And evaluation studies of Reading Recovery have consistently shown that children entering the intervention have the lowest scores along a range of measures as compared to the overall school population (Gómez-Bellengé, Rodgers, Wang, & Schulz, 2005).
- The journal presents confusing and even contradictory arguments about one-to-one instruction, again reflecting selective choice of reported studies. No mention is made of studies supporting the influence of one-to-one teaching in Reading Recovery such as the study by Pinnell, Lyons, DeFord, Bryk, and Seltzer (1994).

Journal authors seem to lack appreciation of the need for and power of one-to-one teaching for children with extreme difficulties in literacy learning. Reading Recovery professionals acknowledge that literacy difficulties result from idiosyncratic difficulties. Because there is no single cause of children's reading difficulties, no one instructional plan can accommodate diverse needs. Only with one-to-one instruction can the teacher adjust instruction to "find ways around a child's limitations in some

functions" (Clay, 2001, p. 220). One-to-one teaching creates opportunities for accelerated learning so the child can catch up with class peers.

- A perplexing argument presented by Chapman and Tunmer reveals a lack of understanding of Reading Recovery. They state that the most serious shortcoming of Reading Recovery is the differential effectiveness of the program. They claim that 15–30% do not complete the program but are referred for further assessment and future action.
 - Their first misconception is the definition of a 'complete' program. In Reading Recovery, a short-term intervention, a complete series of lessons is about 12 to 20 weeks. There are two outcomes of a 'complete' intervention:

 (a) the child meets grade-level expectations and lessons are discontinued or
 (b) after about 20 weeks, a child has made progress but has not reached grade-level criteria and is recommended for further study and future actions.
 - Secondly, turning around their own argument, after a complete intervention, Reading Recovery was effective for 70–85% of the *lowest* achievers—a remarkable accomplishment. And there is a positive outcome for the other 15–30%—additional evaluation and plans for support for each child. And these children have made progress in reading and writing.

Isn't this the intent of Response to Intervention (RTI) – providing an opportunity for a response to an appropriate intervention and reducing the number of children identified with learning disabilities?

• The article on Matthew effects seems to ignore the impact that Reading Recovery has on the lowest literacy achievers. The authors describe the Matthew effects phenomenon (the rich get richer and the poor get poorer) by arguing that "those who start with high levels of skill make good progress and those with low levels of skills do not" (p. 28). Yet Reading Recovery, committed to serving children with the lowest literacy achievement, demonstrates that approximately 75% of these 'lowest' children who complete the intervention reach grade-level expectations—providing them with advantages for continuing to learn along with their class peers. Reading Recovery reverses the Matthew effects phenomenon for many poor readers in Grade 1, documenting that the poor *can* get richer with an intensive, effective early intervention.

Closing Remarks

In their attempt to argue for a specific approach for teaching struggling readers, the journal authors revealed significant misunderstandings and made inaccurate claims about Reading Recovery. In this White Paper, we have attempted to respond to some of their misconceptions and claims. By attempting to align Reading Recovery with whole

language, the authors showed a basic misunderstanding of what the intervention is — a short-term early literacy intervention for the lowest achieving first graders — not an *approach* to literacy instruction. The intervention is supplementary to the classroom literacy program and lessons are individually designed and individually delivered to meet the unique literacy needs of each child.

Reading Recovery professionals are committed to both a scientific and practical approach to evaluating the impact of Reading Recovery. Supported by the positive review of Reading Recovery by the What Works Clearinghouse, we recognize the need to continue rigorous research to establish what works. But we also need to stress that schools are complex organizations. What works in a well-controlled experimental study may not produce similar effects in hundreds of thousands of schools when implemented on a large scale. Reading Recovery's scalability has been made possible because of standards and guidelines that include rigorous data collection on every child as well as university-school partnerships.

Annual evaluation studies of the effectiveness of Reading Recovery offer compelling evidence. In the United States alone, data on more than 2 million children across more than 25 years reveal consistently positive outcomes for Reading Recovery children. The 30-plus years of international implementation of Reading Recovery continues to demonstrate what is necessary to bring the promise of educational research to fruition for the lowest achievers in our schools.

References

- Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: MIT Press.
- Clay, M. M. (2001). *Change over time in children's literacy development*. Portsmouth, NH: Heinemann.
- Clay, M. M. (2002, 2005). *An observation survey of early literacy achievement* (2nd ed., rev. 2nd ed.). Portsmouth, NH: Heinemann.
- Clay, M. M. (2005a). *Literacy lessons designed for individuals part one*. Why? when? and how? Portsmouth, NH: Heinemann.
- Clay, M. M. (2005b). *Literacy lessons designed for individuals part two: Teaching procedures.* Portsmouth, NH: Heinemann.
- Gómez-Bellengé, F., Rodgers, E., Wang, C., & Schulz, M. (April 2005). *Examination of the validity of the Observation Survey with a comparison to ITBS*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.

- Pinnell, G. S., Lyons, C. A., DeFord, D. E., Bryk, A. S., & Seltzer, M. (1994). Comparing instructional models for the literacy education of high risk first graders. *Reading Research Quarterly*, 29(1), 8–39.
- Schwartz, R. M. (2009). Reading Recovery research in North America. In B. Watson & B. J. Askew (Eds.), *Boundless horizons: Marie Clay's search for the possible in children's literacy* (pp. 162–189). Rosedale, New Zealand: Heinemann.
- Schwartz, R. M., & Gallant, P. (2011). The role of self-monitoring in initial word recognition learning. In C. Wyatt-Smith, J. Elkins, & S. Gunn (Eds.), *Multiple perspectives on difficulties in learning literacy and numeracy* (pp. 235–253). London: Springer.
- Schwartz, R. M., Hobsbaum, A., Briggs, C., & Scull, J. (2009). Reading Recovery and evidence-based practice: A response to Reynolds and Wheldall (2007). *International Journal of Disability, Development and Education*, 56(1), 5–15.
- Schwartz, R. M., Schmitt, M. C., & Lose, M. K. (in press). The effect of teacher-student ratio on early intervention outcomes. *The Elementary School Journal*.
- Standards and guidelines of Reading Recovery in the United States (6th ed.). (2011). Worthington, OH: Reading Recovery Council of North America.
- Torgerson, C. J. (2007). The quality of systematic reviews of effectiveness in literacy learning in English: A 'tertiary' review. *Journal of Research in Reading*, 30(3), 287–315.
- What Works Clearinghouse (2007, updated 2008). *Beginning reading intervention report: Reading Recovery*. United States Department of Education, Institute of Education Sciences.