# Reading Recovery and the failure of the New Zealand national literacy strategy

William E. Tunmer, James W. Chapman, Keith T. Greaney, Jane E. Prochnow, and Alison W. Arrow

n this LDA *Bulletin* article, we summarise arguments and evidence reported in a detailed paper (Tunmer, Chapman, Greaney, Prochnow & Arrow, 2013) showing that New Zealand's national literacy strategy has failed and particularly the role of Reading Recovery in contributing to that failure.

In response to growing concerns during the 1990s about New Zealand's relatively "long tail" of literacy underachievement, the government established a Literacy Taskforce to provide recommendations aimed at raising the literacy achievement of all students but with particular attention given to "closing the gap between the lowest and highest students" (Ministry of Education, 1999, p.7). The recommendations of the Taskforce constituted the national literacy strategy for reducing the large disparity in reading achievement outcomes between good and poor readers.

A decade later, concerns were still being expressed about the literacy achievement gap. In December 2011, the New Zealand Ministry of Education's Briefing to the Incoming Minister following the New Zealand general election (Ministry of Education, 2011) stated that:

"...the gap between our high performing and low performing students remains one of the widest in the Organization of Economic Cooperation and Development (OECD). These low performing students are likely to be Mãori or Pasifika and/or from low socioeconomic communities. Disparities in education appear early and persist throughout learning" (p.8). Based on these findings, the Briefing concluded that, "The greatest challenge facing the schooling sector is producing equitable outcomes for students" (p.23). This conclusion can be taken as an admission that the national literacy strategy was failing to reduce the gap.

## Evidence that New Zealand's national literacy strategy has failed

Evidence that New Zealand's national literacy strategy has failed is demonstrated in the recently released Progress in International Reading Literacy Study (PIRLS) 2011 report (Mullis, Martin, Foy, & Drucker, 2012). The PIRLS focuses on the achievement and literacy learning experiences of children from countries throughout the world in grades equivalent to Year 5 in New Zealand. It is a fiveyear cycle of assessments that was first administered in 2001, then in 2005/2006, and again in 2010/2011. It includes a state-of-the-art test of reading comprehension that was designed to assess two aspects of reading literacy: purposes of reading and processes of comprehension.

The PIRLS 2011 results show that the large disparity between good and poor readers in New Zealand has continued, despite a decade of policies and resources aimed at closing the gap.

These data show, for example, that:

• The average reading achievement score for New Zealand in the PIRLS 2011 study was not significantly different from either the PIRLS 2001 or 2006 studies.

- The number of countries that significantly outperformed New Zealand exceeded the number of countries that New Zealand significantly outperformed. (Similar result to PIRLS 2006.)
- Of the six English-speaking comparison counties, all but one significantly outperformed New Zealand.
- Trend data revealed that, although there were more increases than decreases in mean reading achievement scores across countries from 2001 to 2011, New Zealand showed no significant increases in reading performance.
- The standard deviation and range (between the 5th and 95th percentiles) for New Zealand's reading scores were almost unchanged from the PIRLS 2001 and 2006 studies and exceeded the values of most other countries, including those of the six Englishspeaking comparison countries.
- The large differences in reading achievement scores between Pakeha/European and Mãori/ Pasifika students have also not changed over the past decade.
- There were no significant changes from the PIRLS 2001 or 2006 results in either the relatively high percentage of New Zealand students who performed at the advanced international benchmark or the relatively high percentage of students who failed to reach the low international benchmark, despite a general improvement across other countries in the percentages of students reaching international benchmarks from 2001 to 2011.

# Reading Recovery and the national literacy strategy

The Reading Recovery (RR) program is an important part of the New Zealand literacy strategy, and has now been operating for close to three decades. According to the RR New Zealand website (www.readingrecovery.ac.nz), "Reading Recovery is supported and significantly funded by the New Zealand Ministry of Education *as part of the Literacy and Numeracy Strategy*" (emphasis added). The following section from the RR website (www.readingrecovery.ac.nz/reading\_ recovery/) is particularly important and bold in its claim:

"The aim of Reading Recovery is to *prevent* literacy difficulties at an early stage before they begin to affect a child's educational progress. Providing extra assistance to the *lowest achievers* after one year at school, it operates as an *effective prevention strategy against later literacy difficulties*. Nationally, it may be characterised as an *insurance against low literacy levels*" (emphases added).

The claim is probably based on Clay's assertion that the RR program "should clear out of the remedial education system all children who do not learn to read for many eventproduced reasons [i.e., environmental, cultural, or economic causes] and all the children who have organically based problems but who can be taught to achieve independent learning status in reading and writing despite this" (Clay, 1987, p.169).

Both Clay's avowal and RR New Zealand's website claim are demonstrably false. There is no evidence in the Ministry of Education RR National Monitoring data over the last 10 years to show that the claims can be supported (Lee, 2011). If the RR program had been successful in attaining its goal of substantially reducing the number of children who develop ongoing reading difficulties (i.e., providing the "insurance" against low literacy levels), then the relatively large gap in reading performance consistently observed between good and poor readers since the 1991 International Educational Achievement (IEA) study should have steadily decreased after RR was introduced throughout the country in the late 1980s. This has not been the case.

The Deputy Secretary for Education (Student Achievement) recently cited the 80 per cent successful completion rate for RR as an indication of the success of RR (Phair, 2013). However, this is a misleading claim because what matters is whether the gains are sustained over time. That is. simply completing the program does not guarantee that the child will actually benefit from having participated. Unfortunately, after more than 25 years of RR in New Zealand, there is virtually no rigorous empirical evidence to indicate that successful completions in RR result in sustained literacy achievement gains. One relatively recent New Zealand study (Limbrick & Jesson, 2010) reported that standardised reading data for children who had successfully completed RR showed mean gains were on average one standard deviation below that of same-age cohorts, two, three, and four years following the RR program. These results, and others referred to in international publications (e.g., Reynolds & Wheldall, 2007 in Australia), clearly show that the 80 per cent "success" rate is misleading and that the claims on the RR New Zealand website are without substance.

Another factor usually omitted when considering the success of RR that is based on annual discontinuation rates is the withdrawal of children from the program who make slow progress, or the decision not to place children in the program because of the belief that they would make insufficient progress. While Clay was opposed to such practices, she conceded that they occurred: "Schools have wanted to select children for the intervention, who in their judgement, would be 'able to profit from the intervention' and they have been willing to exclude some lowest-achievers from selection" (Clay, 2005a, p.22).

Similarly, McDowall et al. (2005), in their NZCER study of RR for the Ministry of Education, made reference to information from teacher interviews that supported the widelyknown practice that many children with the most challenging literacy support needs are either not placed in RR (in schools that offer the program) or are withdrawn if progress is too slow. This view is supported by findings reported in a University of Waikato Masters thesis (Belgrave, 2009). In discussions with RR teachers following formal interviews, most told the author that they "were manipulating which children they took on, so as to have a degree of success with their students... They also indicated that to take the very bottom students is a waste of time and money for all involved and that it is better to take on the students that will benefit from the sessions" (p.51). Our own postgraduate students, who are or have been RR teachers, have also told us that they were explicitly advised during their RR training to engage in this practice.

Evidence to support our view that the claims about RR are unsubstantiated is shown in the following summary of key data from the 2011 RR Monitoring Report (Lee, 2011):

- 64% of state schools with 6-year-old children offered RR, serving 75% of the 6-year-old population. Of the total 6-yearold population, 14% entered RR in 2011.
- 18% of 6-year-olds in the schools that offered RR entered in 2011. 25% of 6-year-olds in RR schools were involved in RR at some point in the year, and included children

carried over from 2010.

- RR was more likely to be implemented in high decile (8-10) schools (71%) than in low decile (1-3) schools (56%). (Schools in New Zealand are ranked according to income/ SES levels of the neighborhoods they serve, with decile 1 schools serving generally very low income neighborhoods and decile 10 schools serving generally high income neighborhoods.)
- In low decile schools, 17% of the total 6-year-old population entered RR compared to 11% in high decile schools.
- The average RR hours allocated per children in decile 1 schools were 52 hours; the average in decile 10 schools was 43 hours.
- Mãori and Pasifika (people of Polynesian Pacific Island descent) children constituted 35% of the total 6-year-old population in 2011; they made up 44% of children in RR.
- Of the total 6-year-old population of children involved in RR (in RR schools), 33% were Mãori, 35% were Pasifika, and 23% were NZ European/Pakeha. The higher participation rate for Mãori and Pasifika children shows they were already more likely to fall behind after one year of schooling than NZ European/Pakeha children.
- Mãori and Pasifika children were less likely to be successfully discontinued from RR than NZ European/Pakeha children. Successful discontinuation rates for 2011 were 76% Mãori, 81% Pasifika, and 85% NZ E/Pakeha. The pattern has been stable for 10 years.
- Of the total number of children "referred on" (not successfully discontinued), 49% were Mãori or Pasifika.

- Successful discontinuation rates in relation to school decile show that 77% of RR children in low decile schools (1-3) were successfully discontinued, compared to 86% in high decile (8-10) schools.
- 15% per cent of children in decile 1 schools were "referred on"; this is double the 7% in decile 10 schools who were referred on.

These data show that Mãori and Pasifika children, and children from low decile schools (largely the same groups), were less likely to have been successfully discontinued from RR and were also more likely to have been referred on for specialist help. In addition, many of the referred on children had failed to respond adequately to RR despite having received extra lessons and more time in the program.

Further evidence of the differential effectiveness are data on entry and exit scores, as assessed by the Burt Word Reading Test (Gilmore, Croft & Reid, 1981) and the Writing Vocabulary Task (Clay, 2002).

- Entry and exit scores for successfully discontinued children were much higher than for the referred on children.
- Entry and exit scores of *successfully discontinued* children for the Burt and Writing vocabulary tests overlapped so much that some children had entry scores that exceeded the mean of exit scores.
- RR children in high decile schools are more likely to enter and exit from the program with higher scores than children from low decile schools.

In summary:

- Mãori and Pasifika children are less likely to be successfully discontinued despite receiving more lessons and extra time in RR.
- Children who enter RR with high scores (typically from higher

decile schools) are more likely to be successfully discontinued than children who enter with relatively low scores (typically from low decile schools).

- Research indicates that positive maintenance effects for the majority of successfully discontinued children are modest or non-existent.
- For these reasons, RR has had little or no impact on reducing New Zealand's relatively large literacy achievement gap.

### Why has Reading Recovery contributed to the failure of New Zealand's national literacy strategy?

New Zealand has followed a predominantly constructivist approach to literacy education for the past 25 vears. In this approach literacy learning is largely seen as the *by-product* of active mental engagement. There is little or no explicit, systematic teaching of phonemic awareness (the ability to reflect on and manipulate the phonemic segments of spoken words) and alphabetic coding skills (the ability to translate letters and letter patterns into phonological forms). Yet, both phonemic awareness and alphabetic coding skills are essential for learning to read successfully (Pressley, 2006; Snow & Juel, 2005).

Underpinning the constructivist approach to literacy teaching is the "multiple cues" theory of reading (sometimes called the "searchlights model"). According to this view, skilled reading is considered as a process in which minimal word-level information is used to confirm predictions about the upcoming words of text based on multiple sources of information (Clay, 1991). Learning to read is seen largely as a process in which children use multiple cues in identifying words in text. Text-based cues (i.e., picture cues, sentence context cues, preceding passage context, prior knowledge

activated by the text) are used by students to predict the text yet to be encountered. Letter-sound information is generally used only to confirm word predictions or guesses and for selfcorrection (Clay, 1998).

RR is also based on the multiple cues theory of reading (see Greaney, 2011). In RR lessons particular emphasis is placed on reading strategies that involve children developing the flexible use of multiple cues to detect and correct errors while reading text (Clay, 2005a, b). Although there are serious shortcomings and much needed improvements in several aspects of RR, the most serious shortcoming concerns the differential effectiveness of the program.

The program is beneficial for some struggling readers but not others, especially those struggling readers who need help the most. Research indicates that for these children, more intensive and systematic instruction in phonemic awareness and phonemically-based decoding skills is needed than what is normally provided in RR lessons (Chapman, Tunmer, & Prochnow, 2001; Church, 2005; Iversen, Tunmer, & Chapman, 2005).

The scientific community has firmly rejected the constructivist/multiple cues model of reading (Pressley, 2006). The major shortcoming of the multiple cues approach is that it stresses the importance of using information from many sources in identifying unfamiliar words in text without recognising that skills and strategies involving phonological information are of primary importance in beginning literacy development.

Despite the consensus of the international scientific research community, New Zealand educators and policy-makers are very resistant to providing beginning readers with assessment and explicit instruction in the skills that are essential for reading development (e.g., phonological awareness, alphabetic coding skills), especially during the first year of schooling when instruction in these skills would be most effective. Reading Recovery is a key factor in this resistance and, because it focuses on children who have already received 12 months of instruction, this delay represents a wait-to-fail approach to early literacy instruction.

The first formal assessment of literacy skills in New Zealand occurs at the end of the child's first year of schooling with the use of the Observation Survey developed by Clay (1998). Clay (2005a) argued that this in-depth assessment should not occur until the end of the child's first year of formal instruction because "the child should be given sufficient time to adjust to the school situation and a variety of opportunities to pay attention to literacy activities" (p.12). However, research has shown that a more effective strategy for improving reading among struggling readers is to intervene at an earlier point (Lonigan & Phillips, 2012). Wagner (2008) has also argued against this "wait-to-fail" approach to reading intervention. Instead, new entrants should receive an initial evaluation consisting of measures of emergent literacy skills that are known to be important in early literacy development (e.g., phonological awareness, print awareness).

Unfortunately, New Zealand teachers are not required or encouraged to undertake systematic assessments of such emergent literacy skills at any point during the primary school years. Furthermore, the Observation Survey (Clay, 1998) administered to children after they have completed a year of formal schooling does not include measures of phonological awareness, alphabetic coding skills, or reading fluency.

#### What can be done to overcome the failure of New Zealand's national literacy strategy?

Little or no progress has been made in reducing the literacy achievement gap because the constructivist/multiple cues model of reading adopted by the Ministry of Education as the In discussions with RR teachers following formal interviews, most told the author that they "were manipulating which children they took on, so as to have a degree of success with their students..."

theoretical basis for its approach to literacy teaching and intervention is fundamentally flawed. The strategies for reducing the large inequities in achievement outcomes in New Zealand literacy education are required in order to make fundamental changes to regular classroom literacy instruction, and to replace RR with an alternative intervention program that is specifically designed to target those struggling readers who need help the most.

Classroom literacy instruction The most effective strategy for reducing the literacy achievement gap is to use differentiated instruction from the outset of formal schooling that takes into account interactions between school entry reading-related skills (high vs. low pre-literate skills) and method of teaching reading (constructivist vs. explicit approaches).

For some beginning readers, the processes of acquiring literacy skills are highly learner dependent. These children seem to grasp the idea of what is required to discover orthographic patterns after having had only a small amount of phonologically-based skills and strategies explicitly taught to them. In contrast, for other children the learning processes are more environment dependent. These children require a fairly structured and teachersupported introduction to reading that includes explicit, systematic teaching of phonological awareness and alphabetic coding skills outside the context of reading text in combination with plenty of opportunities to practice and receive feedback on using these skills during text reading (Snow & Juel, 2005).

#### **Replace Reading Recovery**

The RR program is currently overseen by the Marie Clay Literacy Trust, which is responsible for the copyright of all RR materials and the RR trademark. No changes in the materials or procedures of RR can therefore be made without approval of the trustees. This makes it virtually impossible for school systems or countries (including New Zealand) to make changes to the RR program based on recent research *or* to conduct independent studies investigating ways of modifying the program to improve outcomes and/or cost effectiveness.

In a study of RR, McDowall et al. (2005) found that RR was less beneficial for Mãori and Pasifika students than for other students. Problems associated with the benefits of RR for Mãori and Pasifika were generally attributed to implementation, resourcing, family/cultural factors, and inappropriate textual materials but not to the program itself. McDowall et al. overlooked the fundamental problem with RR, which is that it is based on the multiple cues theory of reading, a model of reading that was rejected by the scientific community over three decades ago (e.g., Stanovich, 1980). As Church (2005) noted, RR "was designed in the 1970s prior to most of the modern research into how children learn to read. Not surprisingly, therefore, it lacks a number of elements which have been found by research to be essential in teaching low achieving children how to read" (p.13). As part of the effort to overcome the failure of New Zealand's national literacy strategy, RR needs to be replaced with an intervention program that is based on contemporary theory and research on reading intervention and targets children who are most at risk of failing to learn to read.

The authors of this article are all members of Massey University Institute of Education, Palmerston North, New Zealand. Email: W.Tunmer@massey.ac.nz

#### References

- Belgrave, J.E. (2009). The characteristics of children who are referred on from Reading Recovery. Unpublished Master of Education thesis, University of Waikato, Hamilton, New Zealand.
- 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 of Reading, 5*, 141-176.

- Church, J. (2005, December). Accelerating reading development in low achieving children: A review of research. Paper presented at the annual meeting of the New Zealand Association for Research in Education, Dunedin, New Zealand.
- Clay, M. M. (1987). Learning to be learning disabled. *New Zealand Journal of Educational Studies, 22*, 155-173.
- Clay, M. M. (1991). *Becoming literate: The construction of inner control.* Auckland, New Zealand: Heinemann.
- Clay, M. M. (1998). *An observation survey of early literacy achievement*. Auckland, New Zealand: Heinemann.
- Clay, M. M. (2002). *An observation survey of early literacy achievement (2nd ed.).* Auckland, New Zealand: Heinemann.
- Clay, M. M. (2005a). *Literacy lessons designed for individuals. Part One: Why? When? And How?* Auckland, New Zealand: Heinemann.
- Clay, M. M. (2005b). Literacy lessons designed for individuals. Part Two: Teaching procedures. Auckland, New Zealand: Heinemann.
- Gilmore, A., Croft, C., & Reid, N. (1981). *Burt Word Reading Test: New Zealand revision*. Wellington, New Zealand: New Zealand Council for Educational Research.
- Greaney, K.T. (2011). The multiple cues or "searchlights" word reading theory: Implications for Reading Recovery. *Perspectives on Language and Literacy, Fall*, 15–19.
- Iversen, S., Tunmer, W. E., & Chapman, J. W. (2005). The effects of varying group size on the Reading Recovery approach to preventative early intervention. *Journal of Learning Disabilities*, 38, 456-472.
- Lee, M. (2011). Annual monitoring of Reading Recovery: The data for 2011. Wellington, New Zealand:

Ministry of Education. Retrieved from www.educationcounts.govt.nz/ publications/series/1547/111098.

- Limbrick, E. A., & Jesson, R. N. (2010, December). Are gains from early literacy interventions sustained over subsequent years of primary schooling: The case of Reading Recovery in New Zealand. Paper presented at the annual meeting of the New Zealand Association for Research in Education, Auckland, New Zealand.
- Lonigan, C. J., & Phillips, B. M. (2012). Understanding the contributions of early academic skills to children's success in school. In S. Suggate & E. Reese (Eds.), *Contemporary debates in childhood education and development* (pp. 145-158). London: Routledge.
- McDowall, S., Boyd, S., & Hodgen, E., with van Vliet, T. (2005). *Reading Recovery in New Zealand: Uptake, implementation, and outcomes, especially in relation to Mãori and Pasifika students.* Wellington, New Zealand: New Zealand Council for Educational Research.

Ministry of Education. (1999). *Report* of the Literacy Taskforce. Wellington,

New Zealand: Author.

- Ministry of Education. (2011). Briefing to the incoming Minister. Wellington, New Zealand. Author.
- Mullis, I. V. S., Martin, M. O., Foy, P., & Drucker, K. T. (2012). *PIRLS 2011 international results in reading*. Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Boston College. Retrieved from http://timss. bc.edu/pirls2011/internationalresults-pirls.html
- Phair, R. (2013). Reading Recovery is vital programme in school system. *Dominion Post, August* 13, 2013, p.A7.
- Pressley, M. (2006). *Reading instruction that works: The case for balanced teaching.* New York: The Guilford Press.
- Reynolds, M., & Wheldall, K. (2007). Reading Recovery 20 years down the track: Looking forward, looking back. *International Journal of Disability, Development, and Education, 54*, 199-223.
- Snow, C. E., & Juel, C. (2005). Teaching children to read: What do we know about how to do it? In M. J. Snowling & C. Hulme (Eds.), *The*

*science of reading: A handbook* (pp. 501-520). Oxford: Blackwell.

Stanovich, K. (1980). Toward an interactive-compensatory model of individual differences in the development of reading fluency. *Reading Research Quarterly, 16, 32-*71.

- Tunmer, W.E., Chapman, J.W., Greaney, K.T., Prochnow, J.E., & Arrow, A.W. Why the New Zealand National Literacy Strategy has Failed and What Can be Done About it: Evidence from the Progress in International Reading Literacy Study (PIRLS) 2011 and Reading Recovery Monitoring Reports. Palmerston North, New Zealand: Massey University Institute of Education. Retrievable from: www. massey.ac.nz/massey/fms/Massey%20 News/2013/8/docs/Report-National-Literacy-Strategy-2013.pdf.
- Wagner, R. K. (2008). Rediscovering dyslexia: New approaches for identification and classification. In G. Reid, A. J. Fawcett, F. Manis, & L. S. Siegel (Eds.), *The Sage handbook of dyslexia* (pp. 174-191). London: Sage.