Overview of Symposium

New Zealand has a relatively uniform approach to literacy instruction and intervention. The central government sets national reading standards, produces beginning reading materials and instructional guides for teachers, and funds and monitors two intervention programs for struggling readers: Reading Recovery for children struggling to learn to read after a year of schooling, and Resource Teachers: Literacy for children with persistent reading problems. In this symposium, which is divided into three parts, we examine the effectiveness of New Zealand's three-tiered system. Analyses of three data sets are presented: PIRLS studies, Reading Recovery monitoring reports, and international adult literacy surveys. Contemporary theory and research on reading and the results of our analyses indicate that major changes in New Zealand's approach to preventing and remediating reading difficulties are needed.

The symposium is divided into three parts:

**Part 1:** Findings from New Zealand's Participation in the Progress in International Reading Literacy Study (PIRLS) in 2001, 2006, and 2011.

**Part 2:** Is Reading Recovery an Effective Intervention for Children Most at Risk of Reading Failure?

**Part 3:** Literacy Performances of Young Adults in New Zealand: Outcomes of a Three-tiered system of literacy education.
Summary of Part 1

Findings from New Zealand’s Participation in the Progress in International Reading Literacy Study (PIRLS) in 2001, 2006, and 2011

For the past 15 years the New Zealand government has initiated major efforts to reduce relatively large inequities in reading achievement outcomes. A national literacy strategy was implemented in 1999 to achieve these goals. The Reading Recovery and Resource Teachers: Literacy intervention programs were major components of the strategy. But despite these costly efforts, an examination of New Zealand's performance in the PIRLS over the past decade revealed that virtually no changes in educational outcomes have occurred.

The PIRLS focuses on the reading achievement and literacy learning experiences of 9-year-old children from countries throughout the world. It is a 5-year cycle of assessments that was first administered in 2001 (Mullis, Martin, Gonzalez, & Kennedy, 2003), then in 2006 (Mullis, Martin, Kennedy, & Foy, 2007), and again in 2011 (Mullis, Martin, Foy, & Drucker, 2012). The PIRLS includes a test of reading comprehension that was designed to assess two aspects of reading literacy: purposes of reading and processes of comprehension. The PIRLS also includes a series of questionnaires, given to principals, teachers, parents, and students, to obtain information on reading behaviors, reading attitudes, and home and school contexts for reading.

Our examination of the PIRLS 2001, 2006, and 2011 results revealed that virtually no changes in educational outcomes have occurred despite the increasing amount of government expenditure for literacy-related initiatives during this period. The mean reading achievement for New Zealand in the PIRLS 2011 study was not significantly different from the PIRLS 2001 or 2006 studies, and the number of countries that significantly outperformed New Zealand exceeded the number of countries that New Zealand significantly outperformed. Of six English-speaking comparison countries that are more similar to New Zealand in respect of economic development, language of instruction, linguistic homogeneity, and complexity of orthography, all but one significantly outperformed New Zealand. Trend data revealed that, although there were more increases than decreases in mean reading scores across countries from 2001 to 2011, New Zealand showed no significant increases in reading performance.

In view of ongoing concerns regarding large inequities in outcomes in literacy education, the relative spread of New Zealand’s reading achievement scores in the PIRLS 2011 assessment was of particular interest. 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 English-speaking comparison countries. The large differences in reading achievement scores between Pakeha/European and Māori/Pasifika students have not changed over the past decade. The PIRLS also includes international benchmarks (low, intermediate, high, advanced) based on the type of questions students were able to answer correctly (from locating and reproducing explicitly stated information in text to integrating complex information from different parts of text). There were no significant changes from the PIRLS 2001 or 2006 studies in the relatively high percentage of NZ
students who failed to reach the low international benchmark (i.e., reading failures), despite general improvement across countries in the percentages of students reaching the benchmarks from 2001 to 2011.

These findings suggest that New Zealand’s national literacy strategy has had little or no impact on improving reading achievement outcomes over the past 15 years, especially for struggling readers.

References


Summary of Part 2

Is Reading Recovery an Effective Intervention for Children Most at Risk of Reading Failure?

Reading Recovery (RR) is a nationally implemented intervention program for children struggling to learn to read after a year of schooling. The goal of RR is to accelerate students' reading achievement to the average level of their peers within a 20-week period. RR was introduced in the late 1980s and has been the government's major strategy for reducing New Zealand's relatively high rate of reading failures. Annual monitoring of RR data and research on maintenance effects over the past decade indicate that RR has been of marginal benefit in general, and of virtually no benefit to struggling readers most at risk of failing to learn to read, including children from Māori, Pasifika, and low-income backgrounds.

The fact that no progress has been made in reducing New Zealand's relatively high rate of reading failures over the past decade raises questions about the effectiveness of RR, as the stated aim of the program is to accelerate the reading achievement of students struggling to learn to read after a year of schooling to the average level of their peers within a 20-week period. The program involves one-to-one withdrawal instruction for 30-40 minutes per day for 12-20 weeks by a specially trained RR teacher. RR was designed to complement regular classroom literacy instruction in New Zealand and is based on the multiple cues (or “searchlights”) theory of reading. Particular emphasis is therefore placed on developing the flexible use of multiple cues (syntactic, semantic, visual, graphophonic) to detect and correct errors while reading text (Clay, 2005a, 2005b).

The annual monitoring reports of RR data (Lee, 2011) indicate that of the total 6-year-old population, 14% entered RR in 2011 (18% in schools that offered RR). Of the total 6-year-old population of Māori (the indigenous people of New Zealand) and Pasifika (Polynesian descendants from Pacific Islands), 24% were involved in RR, compared with 17% of New Zealand European/Pakeha students. Māori and Pasifika made up 44% of the students involved in RR. The higher participation rate for Māori/Pasifika indicates that they were already more likely to fall behind in reading after only one year in school. Home language was not considered a major issue as only a small number of these children learn to speak Māori or a Polynesian language as a first language.

In New Zealand, schools are rated from a decile of 1 (low) to 10 (high) according to the socio-economic community the school serves. RR is more likely to be implemented in high-decile (8-10) schools (71%) than in low-decile (1-3) schools (56%), due largely to RR's perceived ineffectiveness for students attending low-decile schools. Data from the monitoring reports further indicated that Māori/Pasifika children and children from low-income backgrounds were less likely to be successfully discontinued despite having received more lessons and extra time in RR (a pattern that has been stable over the past decade). Of the total number of children “referred on” (not successfully discontinued), 49% were Māori or Pasifika.

Data from three assessments taken before and after RR for successfully discontinued and referred on students strongly indicate that RR is differentially
effective. The entry and exit scores for the successfully discontinued children were much higher than those for the referred on children, which indicates that RR is not effective for those struggling readers who need help the most. A related finding is that RR children in high decile schools were more likely to enter and exit from RR with higher scores than children from low decile schools. Research further indicates that many of the lowest-performing 6-year-olds are excluded from RR because they are considered not ready or less likely to benefit from the program or are withdrawn early from RR because they failed to make expected rates of progress (Chapman, Greaney, & Tunmer, 2007). The children who are more likely to derive benefit from RR are further along the developmental progression from prereader to skilled reader (Tunmer & Nicholson, 2011).

The major aim of RR is to help struggling readers to develop a “self-extending system” of reading strategies so that they can learn effectively in the regular classroom without additional support. However, New Zealand research indicates that positive maintenance effects for the majority of successfully discontinued children are modest or non-existent. A recent study by Limbrick and Jesson (2010) showed that the mean scores on standardized tests two, three, and four years following successful completion of RR were on average one standard deviation below that of same-age cohorts.

Based on these findings we conclude that RR fails to adequately meet the needs of children who are most at risk of failing to learn to read and that a different approach, based on contemporary theory and research on reading intervention, is required to ensure more beneficial and equitable literacy learning outcomes.

References


Summary of Part 3

Literacy Performances of Young Adults in New Zealand: Outcomes of a Three-tiered system of literacy education.

Data for young adults (16-24 years) from the Adult Literacy and Life Skills Survey (ALLS, 2006) were examined in relation to responses to the question “Have you ever received remedial help or special classes with reading at school—regardless of the level of schooling?” Respondents who answered Yes performed significantly less well than those who answered No on measures of prose and document literacy, numeracy, and problem solving. Yes responders generally had lower educational qualifications and lower status occupations than the No responders. Literacy practices that were in place while these adults were in primary school, including remedial and special class interventions for children with reading disabilities, are presented as contributing factors to the relatively poor literacy levels.

Literacy skills learned in school have the greatest impact on adult literacy, especially for young adults (Pressley, 2006; Spear-Swerling & Sternberg, 1996). The New Zealand Ministry of Education (MoE) described adult literacy as largely a function of the “output of an education system” (1997, p. 2). Culligan, Arnold, Noble and Sligo (2004), in their analyses of data from the 1996 International Adult Literacy Survey (IALS), found that the strongest predictor of adult literacy was “overwhelmingly” educational attainment (p.5).

Following the low levels of adult literacy shown in the IALS results for New Zealanders, the MoE implemented strategies to improve adult literacy (MoE, 2001), and to improve literacy achievement levels of school children. The MoE predicted that the literacy achievement of New Zealanders in subsequent adult literacy surveys would “be better than they were in 1996” because of the investment in children’s literacy in schools that had occurred during the 1990s and new strategies planned for the 2000s (MoE, 2001, p.7).

In 2006 the Adult Literacy and Life Skills survey (ALLS: Satherley & Lawes, 2007) was undertaken. The current study examined whether the results of the ALLS survey were better than those from the 1996 IALS survey for young adults, and focused on the literacy performance and lifestyle factors of young adults who indicated in the ALLS survey that they had received remedial assistance for reading while in school.

Adults between 16 and 24 years in the ALLS survey who received their formal education in New Zealand commenced school at 5 years of age between 1986 and 1995. Just prior to this period significant innovations in literacy instruction were introduced throughout schools in New Zealand. These innovations included the strongly whole language instructional approach, as promoted in Reading in the Junior Classes (New Zealand Department of Education, 1985), and the Reading Recovery programme for children at risk of developing reading difficulties after one year of schooling (Clay, 1987). Further, literacy support programmes for struggling readers, such as Pause, Prompt and Praise (Glynn & Wheldall, 1992), and specialist literacy teachers (Resource Teachers of Reading) were also introduced during this decade.

Within the 16-24 year old sample in the ALLS survey of 854 who received their schooling in English in New Zealand, 23.5% (201) responded yes to the question regarding having had remedial assistance for reading during their schooling. They formed the Reading Disabled (RD) group. The non-Reading Disabled (NRD) group comprised 653 young adults who responded No to the remedial assistance question.

Data for measures of Prose Literacy, Document Literacy, Numeracy and Problem Solving were analyzed in terms of level scores. Scores in the Level 1 range indicate very poor
literacy skills, Level 3 scores indicate average skills and are considered to be the minimum level for adequate functioning in a knowledge-based society (Lane, 2011), and Level 5 scores are indicative of sophisticated literacy skills. For Prose literacy, 69% of the young RD adults performed at levels one and two, compared to 49% of the NRD adults. For Document literacy 64% of RD adults and 46% of NRD adults performed at levels 1 and 2. The comparisons for Numeracy at Levels 1 and 2 was 74% for RD adults and 56% for NRD adults. Finally, 85% of RD adults performed at Levels 1 and 2 for Problem Solving skills compared to 70% of NRD adults.

Regarding life skills factors, RD adults had lower educational qualifications and lower status occupations. Differences in employment and income levels, work-related literacy skills, health, and emotional well-being were small to negligible. The relationship between income, health and emotional well-being may not become apparent until later as careers progress.

While a variety of factors can influence adult literacy levels, for young adults most recently in school, educational achievement is the dominant influence on literacy performance. Literacy skills underpin academic achievement. The strongly whole language orientated literacy instruction introduced into New Zealand schools during the 1980s, including the Reading Recovery programme, does not appear to have had a positive impact on the cohort of 16-24 year old RD adults who participated in the ALLS survey and who began their schooling as 5-year olds between 1986 and 1995. Considered together with the two other presentations in this symposium on New Zealand results from the PIRLS surveys and a decade of data for Reading Recovery, the outcomes of New Zealand’s three-tiered system are disappointing for those who struggle with reading.

References


