

# *Celebrating an Incredible Journey:* Twenty-Five Years of Reading Recovery in the United States

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*A Note from the Authors: As editors of Boundless Horizons: Marie Clay's Search for the Possible in Children's Literacy, we worked with colleagues in five countries to piece together Marie Clay's many contributions to early literacy learning. In every aspect of her life's work, in a phrase borrowed from Maxine Greene, she "broke the bonds of the ordinary" in literacy learning. This article draws on the work of the chapter authors to place Reading Recovery into an historical and international perspective, spotlighting 25 years of accomplishments in the United States.*



*Marie Clay and Barbara Watson introduced Reading Recovery to this first training class at The Ohio State University 25 years ago.*

Until Dutch explorer Abel Tasman ventured into unknown seas in 1642 and chanced upon a land later named New Zealand, Europeans were unaware of the islands of the Pacific. Three hundred years after Tasman's discovery, the New Zealand poet Allen Curnow (1960) expressed the impact of the voyage:

*Simply by sailing in a new direction  
You could enlarge the world.*

Marie Clay liked to claim Curnow's lines as a metaphor of her life's work. Like Tasman, she sailed into *nameless waters* along uncharted routes, not knowing what lay ahead. She was *keen on discoveries* and *tough enough to make them*. She, too, *took stock of the more probable conjectures about*

*the unknown to be traversed*, and like Tasman, she was not deterred.

Twenty-five years ago, Marie Clay and Barbara Watson braved unknown waters to travel to Columbus, Ohio, to introduce Reading Recovery to the United States. In 1984–1985, they trained 13 Reading Recovery teachers, 3 teacher leaders, and 1 trainer. In the 25 years that followed, more than 1.8 million children have been in Reading Recovery in the U.S., and more than 45,000 teachers have learned to work with young struggling readers and writers. Twenty-five years is extraordinary longevity for an educational interven-

tion to thrive in the U.S! How did it happen?

To comprehend the success of Reading Recovery in the United States, we will frame the intervention within the bigger picture of an international and historical perspective. While attempting to tell the story of Marie Clay's professional voyage, we will showcase the impact of the last 25 years in the U.S.

## The Story Begins

*(Ballantyne, 2009a, 2009b)*  
Teaching children in special education classes in 1946, Marie Clay



found that she was able to teach children to read despite low scores on intelligence tests. Her master's thesis in 1948 challenged the late referral of children with special needs, the scarcity of information passed on to new teachers, inadequate training for special class teachers, confusion about instructional methods, and lack of experience with graded reading materials. She concluded that reading instruction for special-class children should be largely individual and focus on prevention rather than correction, forecasting her later work with children who find literacy learning difficult.

A Fulbright Scholarship took Marie Clay to the University of Minnesota in 1950, where she studied developmental psychology and clinical child development. When she returned to New Zealand, she taught older primary children and gained a reputation for teaching 'tricky' children to read and write.

Marie Clay's pioneering research in the early 1960s challenged two assumptions prevalent at the time — that heredity set fixed limits on learning and that it was harmful to teach children to read before they were 'ready.' As the focus for her PhD research at the University of Auckland, she used observational methodologies to explore the variety and complexity of young children's responses to early literacy instruction. (Her doctoral research studies are described in the next section.)

In the early 1970s, there was a sharper focus in New Zealand on children—including minority and immigrant children—who were not succeeding in school. The work of Don Holdaway was influential and provided the impetus for the development of the innovative professional

development program, the Early Reading In-service Course (ERIC), designed to improve instruction and prevent reading failure in classrooms.

During the same period, Marie Clay was helping change attitudes toward literacy difficulties. Publications made her research and ideas available as she called for schools to take steps to prevent reading failure: (a) monitor and record children's progress in

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the first year; (b) check progress on a range of literacy tasks as they reached their sixth birthdays (New Zealand children start school at age 5); (c) provide 'reteaching' for low-progress children in their second year; and (d) give attention to the staffing of early classes (Clay, 1972). For low-progress children in their second year of school, Marie Clay called for flexible and experienced teachers, well versed in individual teaching and especially qualified in a wide variety of approaches to reading instruction based on the results of the *Diagnostic Survey* (renamed *An Observation Survey of Early Literacy Achievement*).

After becoming professor and head of department of education at the University of Auckland in 1975, Marie Clay entered into a small project that would result in the development of Reading Recovery for children struggling with literacy learning, leading to the eventual realization of one part of her life-long work.

## The Story of the Early Pioneering Research

The Reading Recovery journey would not have been possible without Marie Clay's foundational research in the 1960s because it provided a description of how *successful* children learn to read. We offer a brief description of that research before focusing on the Reading Recovery research projects.

### *Marie Clay's doctoral research (1966)*

In 1963, Marie Clay began her study of 100 New Zealand children using an *unusual lens* to explore exactly what children were learning during their first year of school (for a review of Clay's methodology see Askew, 2009). The unusual lens she used was carefully controlled *direct observation* in the natural setting of classrooms.

The phrase 'an unusual lens' refers to any observational or research methodology which gathers detailed data on changes in the literacy behaviours of young children as they learn to read and write continuous texts over a period of time (Clay, 2001, p. 42). It would be an instrument or procedure that could capture how the learner works at learning, and how those ways of working change. (Clay, 2001, p. 82)



Marie Clay's way of assessing progress during literacy acquisition was called a *literacy processing* view and focused on how children work on texts when reading or writing, regardless of how teachers teach. Her research focused uniquely on the early years of literacy learning and led to what she called a *literacy processing theory* — a complex model of interacting competencies in reading and writing in which children can draw from all their current understandings and proficiencies.

Because traditional tools for assessing individual literacy processing behaviors were not appropriate for studying emergent literacy learners, she developed an array of assessment tools to describe and report unfolding behaviors. Years of research and

refinement led to the publication of *An Observation Survey of Early Literacy Achievement* (Clay, 1993, 2002, 2006; first published in 1972 as *A Diagnostic Survey*). The Observation Survey comprises a set of assessment tasks that make it possible to detect children with difficulties before standardized tests can provide reliable information.

Marie Clay's research demonstrated the need for an early intervention designed to prevent literacy failure. She revealed the uniqueness of individual constructive learners who take different paths to common outcomes. Her work gave teachers a way to document how individual children's literacy behaviors change over time, thus informing their teaching decisions.

## *The Reading Recovery research reports (Clay, 2009a)*

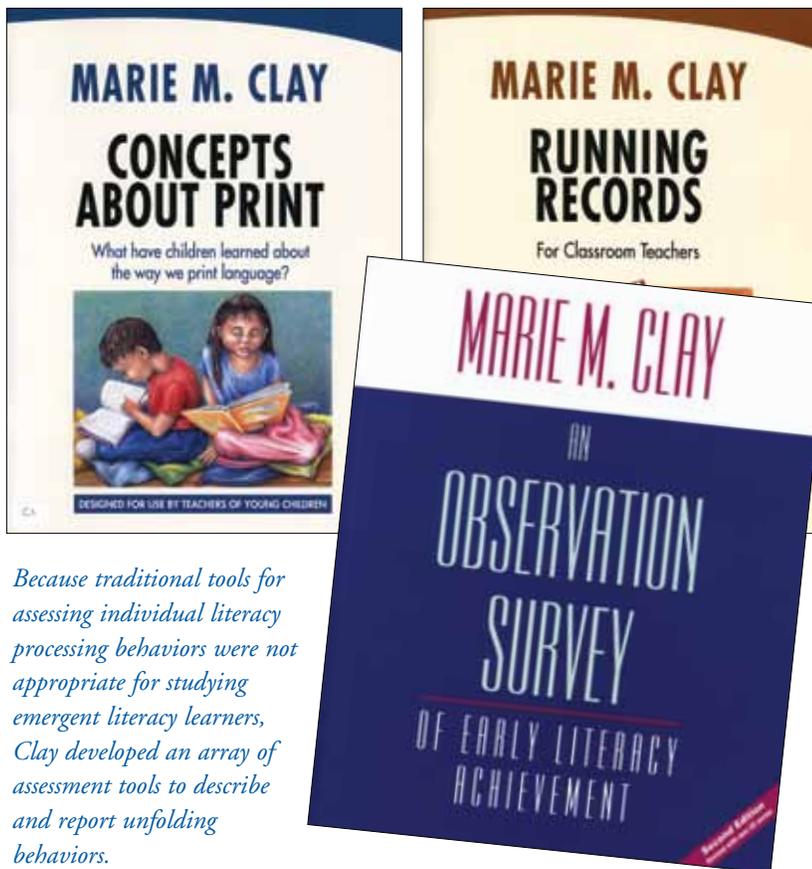
Having developed assessment tools to identify children with extreme literacy difficulties, Marie Clay began a series of studies to explore the possibilities for undercutting reading and writing failure through early intervention (Clay, 2009a). The Reading Recovery research sought to answer questions about what would be possible if instruction were delivered in a different way and how the end results would compare with ordinary classroom instruction. Table 1 on the following page gives a brief summary of the studies. (For detailed information see Clay, 2009a.)

Considered together, these studies verified important shifts in children's reading and writing performance for all subgroups studied. Children in the tail of the achievement distribution for the age group were brought to average levels of attainment in a short time and retained average placements 3 years later. No other early intervention has replicated such compelling and consistent outcomes for children.

## The Story Goes International

*(Clay, 2009b)*

It is no easy task to transplant an innovation into a new educational context and achieve similar levels of success. But since Reading Recovery began in New Zealand, it has reached out to embrace new educational settings on new continents and in new languages. Marie Clay always held attitudes of tentativeness and flexibility in new situations, encouraging collegial problem solving in order to maintain Reading Recovery's integrity in local contexts.



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**Table 1. The Reading Recovery Research Reports**

Study	Brief Description
Development Project (1976–1977)	In the first year of the project, Marie Clay worked with 1 teacher and in the second year with a team of 6 practitioners. The teachers taught 2 children individually and met biweekly to observe each other teach using a one-way screen and to discuss procedures and assumptions. The major goal was to describe the range and variability of reading behaviors shown by the children as well as the range and variability of the teaching responses made by the teachers. Teaching procedures were derived from the practice of teachers; they were discussed and analyzed in relation to current theories of the reading process.
Field Trial Research (1978)	The purpose of this exploratory study was to find out what kinds of outcomes were possible. The study reports results of the first year of working in five schools, the first year of developing teacher training, and the teaching done by teachers-in-training. A high proportion of the 122 children who received lessons met discontinuing criteria, the third intake had incomplete lesson series, and only 7 children were referred for specialist reports and continuing help.
One-Year Follow-Up Research (1979)	Progress of all children in the Field Trial Research was reassessed. Results supported the interpretation that children who were tutored until they could survive in their classrooms were scoring above predicted scores, while those whose series of lessons were incomplete scored below predicted scores. Results supported the theoretical argument that discontinuing judgments were based on evidence of strategic behavior.
Replication Study (1979)	The study was guided by this question: could the results of the first year be replicated by a large number of teachers in many schools? Results from the 48 participating schools fairly replicated field trials of 1978.
Analysis of Lesson Content (1978 — Clay & Watson)	In a study conducted to show whether the intervention was delivered as designed, records of the 122 children in the 1978 field trials were analyzed retrospectively. Attention was given to the number of lessons per week, number of books per lesson, number of new books per lesson, the measurement of text difficulty, and the number of stories written per week. Findings revealed partial implementation of the recommended intervention.
Three-Year Follow Up (1981)	The study explored the continuing progress of children in the 1978 Field Trial Research and examined the suitability of the intervention for Maori and Pacific Island children. After 3 years, children were suitably placed in appropriate class placements. European and Pacific Island children had mean test scores within the age band for class placement. Maori children had scores at or just below the lower satisfactory limit, but mean spelling scores were above this level.
National Monitoring (1984–1988)	This report was based on 5 years of national implementation in New Zealand, providing outcome status of all Reading Recovery children and a discussion of issues. The data demonstrated that national implementation was possible with schools and teachers mounting and delivering the intervention. The study also demonstrated that a high proportion of children with extreme difficulty can be brought to classroom independence in a relatively short period of time.
Reading Recovery Subgroups Study (1991 — Clay & Tuck)	Three subgroups of New Zealand Reading Recovery children taught in 1988 were studied: those meeting average classroom performance (discontinued), those with incomplete series of lessons, and those who should be referred for specialist help. Findings showed that most children met discontinuing criteria and only .5–1% of the age cohort fell into the referable group. The study found that early predictions of outcome status would likely be wrong in a significant number of cases, leading to the recommendation that children will likely need individual assistance from 12 to about 20 weeks.

Voyages to Australia and the U.S. in 1984 were followed by Canada in 1988, the United Kingdom in 1990, and Ireland in 2000. In the United States, Reading Recovery has also expanded to children whose language of instruction is Spanish (Descubriendo la Lectura) and in Canada for children whose language of instruction is French (Intervention Préventive en Lecture-Écriture).

Unlike developers of many innovations, Marie Clay attended to the implementation of Reading Recovery as a systemic intervention, including

- guidelines for delivery,
- training of teachers,
- lesson components,
- a complex theory of literacy learning, and
- theories about children's development.

Reading Recovery was conceptualized as a problem-solving approach involving three concentric circles: implementing, teaching, and learning.

In chapter 7 of *Boundless Horizons*, Barbara Watson drew on five of Marie Clay's publications to provide a comprehensive view of the implementation system within which Reading Recovery operates. Because of Clay's careful attention to implementation structures, educators can have confidence in placing Reading Recovery into existing structures.

## The Research Stories Continue

As Reading Recovery spread internationally, research efforts have built on and expanded the foundational research by Marie Clay. We now give

a brief summary of research in other parts of the world, followed by highlights of North American research efforts across the last 25 years.

### *Australia and New Zealand (McDowall, 2009)*

In New Zealand, the country where Reading Recovery was developed and started, research and evaluation data continue to support the effectiveness and efficacy of this high-quality literacy intervention. In a comprehensive review of research from Australia and New Zealand, Sue McDowall (2009) concluded that children who successfully complete Reading Recovery make greater progress than could be expected without the intervention. There is also evidence that gains are retained in the longer term.

McDowall also reported progress of particular groups of children. Evidence suggests that Reading Recovery produces a common outcome despite (a) initial differences, (b) children's school characteristics such as socioeconomic status, and (c) personal characteristics such as ethnicity and first language. Research findings do suggest that the type of instruction in the junior classes influences the number of children who need Reading Recovery, their achievement on entry, time spent in the intervention, their exit achievement, and their subsequent progress.

### *United Kingdom and Ireland (Burroughs-Lange, 2009)*

Sue Burroughs-Lange (2009) placed Reading Recovery research in the United Kingdom and Ireland within political and practical contexts and defined successes and challenges. Government funding for a successful 3-year pilot (2005–2008) in 625 London inner-city schools led

the national government to commit funds to provide Reading Recovery for 30,000 of the lowest-achieving children annually until 2011. The "Every Child a Reader" initiative was influenced by converging initiatives and research efforts.

A study of long-term cost benefits of early literacy intervention commissioned by the KPMG Foundation (2006) showed that very poor literacy is linked to costly educational special needs provision, truancy, exclusion from school, reduced employment opportunities, increased health risks, and greatly increased risk of involvement in the criminal justice system. The researchers compared the costs of those consequences with the cost of providing Reading Recovery to all children who need it. They found that if Reading Recovery were available for every child in the United Kingdom who needs it, the savings to the national economy would be at least 1.37 billion British pounds annually! Furthermore, the cost of providing Reading Recovery is similar to average costs for similar special needs children throughout their primary years. So the issue is not a cost issue but a question of when to spend the money.

A Comparison-Group Study (Burroughs-Lange & Douëttil, 2007) compared the impact of Reading Recovery on children in London schools with matched low-achieving children in similar schools offering other kinds of literacy interventions. At the end of the year, Reading Recovery children (*discontinued* and *referred*) were doing significantly better than the comparison group and, on average, had reached age-appropriate literacy levels. A year later they were achieving, on average,

within or above their chronological age band on all measures and were still about a year ahead of the comparison children in schools where Reading Recovery was not available (Burroughs-Lange, 2008). Both studies showed that having Reading Recovery in schools benefitted literacy levels of class groups as well as low achievers.

## North America

(Schwartz, 2009)

Over the last 25 years, research in North America has built on Marie Clay's foundational research. In addition to experimental research on Reading Recovery outcomes for children, evaluation research has validated the experimental studies by focusing on effectiveness, sustained

effects, and reduction of achievement gaps among subgroups.

### *Experimental studies extending Clay's Reading Recovery research*

Across the years, a number of rigorous experimental trials have been conducted and published in peer-reviewed journals. A brief review of five of those studies is provided in Table 2.

**Table 2. Selected Experimental Studies**

Study	Brief Description
Pinnell (1989)	This first large-scale study of Reading Recovery in the United States was based on a relatively new implementation. Reading Recovery children were compared with similar low-performing children randomly assigned to an alternative compensatory program within the same schools. Reading Recovery children scored significantly higher than children in the small-group compensatory program on reading and writing performance measures, including a standardized test. Children who reached average class performance continued to make progress, while the control group fell behind.
Iversen & Tunmer (1993)	The progress of three initially equivalent groups (Standard Reading Recovery, Modified Reading Recovery, and Small-Group Comparison) was compared. The Modified Reading Recovery teachers provided instruction on visual and phonological elements of words. (Interestingly, a lesson component very close to the modified method is part of the standard intervention in Clay's 1993 and 2005 guidebooks.) Both Reading Recovery groups performed similarly on most measures including phonemic measures, and closed the achievement gap with their average classmates.
Pinnell, Lyons, DeFord, Bryk, & Seltzer (1994)	Funded externally by the MacArthur Foundation, this study compared four treatment groups: standard Reading Recovery, a Reading Recovery-like intervention delivered by teachers with much less training, a Reading Recovery-like intervention in small groups taught by Reading Recovery teachers, and a basic skills intervention focusing on alphabetic principles. Reading Recovery was the only treatment with significant effects on all measures at the end of the intervention, supporting the influence of professional development, group size, and instructional approach on early intervention outcomes.
Quay, Steele, Johnson, & Hortman (2001)	A quasi-experimental procedure was used to establish two equivalent experimental groups: Reading Recovery and a comparison group without Reading Recovery. Effect sizes were large and significant, favoring the Reading Recovery group on the Observation Survey and the Gates-MacGinitie Reading Test. On the Iowa Test of Basic Skills, results were more moderate but still significant on four of the six measures. Classroom teachers rated Reading Recovery students significantly higher on scales related to achievement, work habits, and self-confidence.
Schwartz (2005)	This randomized clinical trial of Reading Recovery's effectiveness compared the progress of two groups of children identified at the beginning of the year as the lowest achievers. One group received Reading Recovery lessons during the first half of the year, and the other group entered the intervention at midyear. At midyear, students in Reading Recovery during the first half of the year performed significantly better on Observation Survey tasks and the Slosson Oral Reading Test than those whose entrance was delayed until midyear. The fall Reading Recovery children also closed the achievement gap with their average peers by midyear.

## *Validation from the What Works Clearinghouse (WWC)*

In March 2007, the What Works Clearinghouse (The U.S. Department of Education's Institute of Education Sciences) posted its intervention report on Reading Recovery and then in August 2007, its summary report on beginning reading programs. The WWC determined that Reading Recovery research showed relatively large effect sizes in each domain (alphabeticity, fluency, comprehension, and general reading achievement); Reading Recovery was the only intervention reviewed with positive or potentially positive ratings in each of these domains. The WWC report provides documentation of a substantial research base and strong support for a causal link to student achievement gains.

## *Validation from evaluation research*

Experimental studies have been validated by evaluation data demonstrating that results can be replicated on a large scale. Because data are collected for every child in Reading Recovery, replication studies are conducted annually across the world. Evaluation research in the United States has demonstrated that Reading Recovery closes or reduces the achievement gap for English language learners and across racial and socioeconomic groups. Numerous evaluation studies have documented that Reading Recovery children who reach grade-level standards continue to make progress with their class peers in subsequent years.

In addition to documenting outcomes for Reading Recovery and Descubriendo la Lectura students, numerous studies and research reviews in peer-reviewed journals

have explored factors related to the intervention. These factors include phonological awareness, self-efficacy, self-regulated behaviors, one-to-one teaching, writing strategies, and reduction of long-term services.

Because of the early research of Marie Clay and the subsequent explorations across the world, Reading Recovery has set a standard for educational research. Administrators, educators, and policymakers have scientific, research-based evidence to support their decision to implement Reading Recovery to prevent reading failure in their schools. This 25-year record of research and practice is unprecedented in the United States.

## Counting Every Child

*(Boocock, Douëttil, Gómez-Bellengé, Huggins, & Scull, 2009)*

As Reading Recovery expanded internationally, outcomes for all children have been collected and reported. To date, outcomes have been documented for over 2.5 million children around the world.

Ways of evaluating outcomes around the world are remarkably similar. All countries use information from *An Observation Survey of Early Literacy Achievement* (Clay, 2002, 2006) to identify children and monitor change over time. In most countries external measures are also systematically used. Outcome categories are similar, with variations influenced by political and educational priorities. (For specific information about data processes in each country see chapter 8 in *Boundless Horizons*.)

All countries report consistency of child outcomes across time. Process data are now available to help with

implementation decisions. And technology now expedites and enhances data collection, analysis, and reporting. In the U.S., the International Data Evaluation Center continues to demonstrate Reading Recovery's effectiveness while exploring process data to inform decision makers about implementation issues.

## Looking to the Future

*(Doyle, 2009; Askew, 2009)*

The life-long work of Marie Clay and the efforts of researchers, Reading Recovery professionals, and education decision makers and supporters have left a mark on literacy across the world. Because of Reading Recovery's continuous implementation in the United States for the past 25 years, U.S. educators have gained

- a complex theory of literacy processing (with emphasis on individual, constructive, and active learners who take different paths to common outcomes);
- valid and reliable tasks for assessing literacy processing behaviors of emergent readers and writers;
- implications for teaching based on careful observation leading to informed teaching decisions;
- an effective intervention to *prevent* literacy failure;
- an exemplar for effective professional development; and
- a planned but flexible model for implementation, dissemination, expansion, and continuation.

In all of Marie Clay's work, she looked forward to new questions and responded to ongoing change. To move us into the future, she took steps to ensure that leadership, research, implementation efforts, trademark responsibilities, and authority for her intellectual property were transferred to others. She established structures to provide sustainable leadership and to ensure ongoing research and development.

But now the story of Reading Recovery shifts to the future. In all of Marie Clay's work, she looked forward to new questions and responded to ongoing change. To move us into the future, she took steps to ensure that leadership, research, implementation efforts, trademark responsibilities, and authority for her intellectual property were transferred to others. She established structures to provide sustainable leadership and to ensure ongoing research and development. The International Reading Recovery Trainers Organization (IRRTO) is charged with maintaining the integrity of Reading Recovery and supporting implementations around the world. The Marie Clay Literacy Trust (MCLT) is the authority for her intellectual property. Future editions of her books and all international development of Reading Recovery will involve both IRRTO and the MCLT.

Taking Marie Clay's work and Reading Recovery into the future will certainly include

- international expansions of Reading Recovery in English;
- redevelopment of *An Observation Survey of Early Literacy Achievement* and

Reading Recovery in languages other than English;

- exploration of ways to individualize teaching for a wider audience of young children who present quite different personal and learning histories;
- examination of complex questions about learning, literacy, and early intervention; and
- international collaboration about research, implementation, teaching, and theoretical understandings.

Because of Marie Clay's commitment to making a difference for children who find reading and writing difficult, we can raise our eyes to boundless horizons. Clearly, in the United States her work broke the bonds of the ordinary. As we look to the future, we must stay true to her unwavering vision for children, teachers, and schools.

## References

Askew, B. (2009). An unusual lens. In B. Watson & B. Askew (Eds.), *Boundless horizons: Marie Clay's search for the possible in children's literacy* (pp. 101–130). Auckland, New Zealand: Heinemann.

- Ballantyne, A. (2009a). *Beating the odds: Causes and conditions of policy persistence in the case of Reading Recovery*. Unpublished doctoral dissertation, The University of Auckland, New Zealand.
- Ballantyne, A. (2009b). Research origins: The historical context. In B. Watson & B. Askew (Eds.), *Boundless horizons: Marie Clay's search for the possible in children's literacy* (pp. 7–34). Auckland, New Zealand: Heinemann.
- Burroughs-Lange, S. (2008). *Comparison of literacy progress of young children in London schools: A follow-up study*. London: Institute of Education.
- Burroughs-Lange, S. (2009). Reading Recovery research in the United Kingdom and Ireland. In B. Watson & B. Askew (Eds.), *Boundless horizons: Marie Clay's search for the possible in children's literacy* (pp. 190–217). Auckland, New Zealand: Heinemann.
- Burroughs-Lange, S., & Douëttil, J. (2007). Literacy progress of young children from poor urban settings: A Reading Recovery comparison study. *Literacy Teaching and Learning: An International Journal of Early Reading and Writing*, 12(1), 19–46.
- Boocock, C., Douëttil, J., Gómez-Bellengé, F. X., Huggins, I., & Scull, J. (2009). Counting every child. In B. Watson, & B. Askew (Eds.), *Boundless horizons: Marie Clay's search for the possible in children's literacy* (pp. 250–283). Auckland, New Zealand: Heinemann.
- Clay, M. M. (1966). *Emergent reading behaviour*. Unpublished doctoral thesis. Auckland, New Zealand: University of Auckland.
- Clay, M. M. (1972). *Reading: The patterning of complex behaviour* (1st ed.). Auckland, New Zealand: Heinemann.
- Clay, M. M. (1993). *An observation survey of early literacy achievement*. (1st ed.). Portsmouth, NH: Heinemann.
- Clay, M. M. (2001). *Change over time in children's literacy development*. Portsmouth, NH: Heinemann.

Clay, M. M. (2002, 2006). *An observation survey of early literacy achievement* (2nd ed., rev. 2nd ed.). Portsmouth, NH: Heinemann.

Clay, M. M. (2009a). The Reading Recovery research reports. In B. Watson & B. Askew (Eds.), *Boundless horizons: Marie Clay's search for the possible in children's literacy* (pp. 35–100). Auckland, New Zealand: Heinemann.

Clay, M. M. (2009b). Implementing Reading Recovery internationally. In B. Watson & B. Askew (Eds.), *Boundless horizons: Marie Clay's search for the possible in children's literacy* (pp. 221–249). Auckland, New Zealand: Heinemann.

Curnow, A. (1960). Landfall in unknown seas. In A. Curnow (Ed.), *The Penguin book of New Zealand verse*. London: Penguin Books.

Doyle, M. A. (2009). In B. Watson & B. Askew (Eds.), A dynamic future. In *Boundless horizons: Marie Clay's search for the possible in children's literacy* (pp. 287–308). Auckland, New Zealand: Heinemann.

Greene, M. (1986). How do we think about our craft? In A. Lieberman (Ed.), *Rethinking school improvement: Research, craft, and concept*. New York: Teachers College Press.

Iversen, S., & Tunmer, W. E. (1993). Phonological processing skills and the Reading Recovery programme. *Journal of Educational Psychology*, 85(1), 112–126.

KPMG Foundation (2006). *The long-term costs of literacy difficulties*. London: KPMG Foundation.

McDowall, S. (2009). Reading Recovery research in Australia and New Zealand. In B. Watson & B. Askew (Eds.), *Boundless horizons: Marie Clay's search for the possible in children's literacy* (pp. 133–161). Auckland, New Zealand: Heinemann.

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Barbara Watson is the former national director of Reading Recovery in New Zealand and currently serves as a trustee of the Marie Clay Literacy Trust. She has worked nationally and internationally with Reading Recovery as it was developed and spread around the world. She received the Queen's Service Medal for her contribution to the education of young children. Barbara is co-editor with Billie Askew of *Boundless Horizons: Marie Clay's Search for the Possible in Children's Literacy*.

Pinnell, G. S. (1989). Reading Recovery: Helping at-risk children learn to read. *The Elementary School Journal*, 90(2), 161–184.

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.

Quay, L. C., Steele, D. C., Johnson, C. I., & Hortman, W. (2001). Children's achievement and personal and social development in a first-year Reading Recovery programme with teachers-in-training. *Literacy Teaching and Learning: An International Journal of Early Reading and Writing*, 5(2), 7–25.

Schwartz, R. M. (2005). Literacy learning of at-risk first-grade students in the Reading Recovery early intervention. *Journal of Educational Psychology*, 97(2), 257–267.

Schwartz, R. M. (2009). Reading Recovery research in North America. In B. Watson & B. Askew (Eds.), *Boundless horizons: Marie Clay's search for the possible in children's literacy* (pp. 162–189). Auckland, New Zealand: Heinemann.