

# Five Foundational Ideas: Still at the Cutting Edge

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Why is Reading Recovery® so special? How has it worked for so many children, in so many different countries and educational contexts — for so long! What enables it to stay up-to-date and relevant — still at the cutting edge? There are many things we could point to: a clearly articulated design and implementation strategy; an infrastructure that supports replication and continuous updating; knowledgeable and committed practitioners, administrators and leaders, to name just a few. This article focuses on the set of compelling ideas that attract, support, and guide participation and practice in Reading Recovery. The first section highlights some general features of the research and theoretical base of the intervention; the second explores five ideas or principles that are central to the design and practice of Reading Recovery.

## A Rich Knowledge Base

Marie Clay was a respected researcher, theorist, university teacher, and administrator well before she started to work on an early literacy intervention. In all of these roles she pursued questions at the boundaries and intersections of different disciplines. She was interested in regular and special education, typical and atypical devel-

opment, oral language and literacy, infants and adolescents, clinical and school-based intervention, and more. Her graduate students were preparing to be educational psychologists, university professors, and teachers; they conducted research using a range of methodologies and theoretical frameworks and this research contributed to the knowledge base for Reading Recovery (Clay, 2001).

Clay was committed to scientific method and evidence, and at the same time had a high regard for practitioners' knowledge. She participated in "talks, workshops, consultations with study groups [and] dialogue between different types of professionals" (Clay, 1979, p. 169). Addressing the familiar problem of how educational research can contribute to the solution of practical problems, Clay suggested that observation could provide a common frame of reference for academics, practitioners, and policymakers that might lead to more useful, practical, and policy-oriented questions (Clay, 1976). In line with this thinking she deliberately created spaces for productive interaction between teachers and researchers focusing on observed behavior.

The development of Reading Recovery began in just such a space—at the intersection of research, practice, and policy concerns—using collegial discussion of observed lessons to provide a common frame of reference. Researchers, teachers, and literacy

leaders observed each other teaching and talked about what they could see, drawing on their different experiences and theories. Everyone was invested in the children's learning and was able to bring his or her knowledge and insights to bear on the shared problems. This collegial problem-solving approach remains at the heart of teacher preparation and ongoing

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professional development in Reading Recovery. It also represents the cutting edge of contemporary research on school improvement and teacher development where the evidence suggests that some combination of lesson observation and guided collaborative inquiry is the most-powerful, perhaps the only way, of achieving continuous improvement in teaching and learning (City, Elmore, Fiarman, & Teitel, 2009; Gallimore, Ermeling, Saunders & Goldenberg, 2009).

Reading Recovery was grounded in a rich mix of academic knowledge and practical expertise. It was up-to-date (ahead of its time really!) and Marie Clay was keen that it should remain so. Throughout her life she continued to read widely from the research literature in developmental psychology, neuropsychology, and education, and to revise, update, and publish new material. She urged Reading Recovery practitioners, and especially university-based trainers, to stay in touch with relevant research and helped to create avenues and forums to facilitate this.

## Theoretical Complexity

We often refer to the theory of literacy learning that we work with in Reading Recovery as a ‘complex’ theory and contrast this with simple or single-variable theories that emphasize one particular skill or deficit as key to success or failure in literacy learning. Our critique of simple theories, and of the advocacies that arise from them, is grounded in theory, but it is also deeply practical. We know from research and experience that texts and teaching programs designed on the basis of simple theories offer a limited range of access points for diverse learners (McNaughton, Phillips, & McDonald, 2000). Students who are challenged or confused by early literacy instruction are the most likely to be disadvantaged when the paths to progress are constrained in this way.

But it is not easy to explain what we mean by complexity in ways that are clear and helpful, rather than off-putting. Perhaps this is why Marie Clay (2005b, 2010b) invites us to think about literacy processing from the

child’s point of view. This helps us to see that literacy learning is complex because it requires the learner to work with different bits of information, to pull these pieces together and make decisions, even when the information is limited and incomplete. In order to progress, it seems that children have to be actively working with more than one kind of knowledge, making links, forming hypotheses, and testing to see if they work (Clay, 2001, 2005a, 2005b). This crossreferencing and decision making is very simple and approximate at first (“Are there enough words?”) but becomes more detailed and exacting over time (“What letters do I expect to see in the middle of that word?”). Teachers sometimes talk about children needing to be ‘risk-takers’ and this seems to conflict with our responsibility to make literacy learning less risky for students who are struggling. But if we think of risk-taking as being prepared to make tentative decisions on the basis of partial information and to monitor and correct mismatches (Clay 2001, 2005b) it is easier to see how risk taking is involved and why it is helpful.

Clay’s account of literacy learning is a psychological one. It is grounded in sensitive observation of behavior and elaborated with reference to perceptual and cognitive processing; it also fits well with the rapidly growing body of scientific knowledge about how the brain works (Lyons, 2003; Zull, 2002, 2011).

## Behavior, Cognition, and Biology

When children learn to read and write, both *what* they are learning (literacy processing), and the paths

to learning, are complex. But there is another sense in which the theories we work with in Reading Recovery are complex. When Clay began to study language and literacy learning in young children, she adopted a pragmatic, nonreductionist approach to data collection and theory building (Jones & Smith-Burke, 1999). Systematic and sensitive observation of behavior provided the grounds for hypotheses about cognitive processes and the behavioral data were interpreted in terms of a range of current theories about information processing. Clay also had a very real interest in the expanding body of scientific knowledge about how the brain works. Quite early on she identified parallels between “the patterning of complex behavior” (Clay, 1972b) and the model of ‘functional circuits in the brain’ advanced by Russian neuropsychologist, Alexander Luria (Lyons, 2007), and increasingly, over time, linked her developing theories to current knowledge about how neuronal networks are formed in the brain (Clay, 2005b).

Clay’s commitment to scientific evidence, along with her openness to new knowledge and a flexible approach to theory-building, have provided Reading Recovery with a sound base from which to make considered judgments about how the neurosciences can contribute to our understanding of literacy processing. Her insistence on the need to be tentative, to expect diversity and multivariate explanations, and to check theories against behavior records of “what occurs,” alerts us to guard against oversimplistic expectations about the contribution of neuroscience to understanding literacy learning (Geake, 2008).



## Five Foundational Ideas

If you were asked to identify the five most-important ideas or principles of Reading Recovery, what would you say? Collectively we would probably offer a range of different ideas and formulations, but there would be a considerable overlap. I explore these principles:

1. Sensitive Observation
2. Building on Strengths
3. The Contribution of Writing
4. Self-Correction
5. Independence

These are all very familiar ideas for us and at first glance they seem quite straightforward and relatively distinct from one another. But as we look more closely they begin to seem more complex, and more interconnected.

### Sensitive Observation

The principle of sensitive observation is so fundamental to Reading Recovery that it permeates every aspect of our practice. Only three elements are considered here, all of them closely linked to the idea of *prevention*: Clay's 1960s study of emergent literacy established the need for close observation of young children as they begin to engage with complex learning; measurement tools and protocols developed in the course of her research provided teachers with a guide to observing literacy behaviors and a way of identifying children needing supplementary support; and continuing sensitive observation is a critical ingredient of intervention teaching.

#### *A research methodology*

As a developmental psychologist, Marie Clay was interested in optimiz-

ing development as well as explaining it (McNaughton, 2007). In order to be helpful to children having difficulty with literacy learning, she thought we would have to know what good progress looked like, so her research questions were twofold: What changes occur, in what sequences, as children learn in their classroom programs? And, How early can we see the process of learning moving off-course? (Clay, 1967, 1982). She was not convinced that the test-retest methodologies of educational research would capture the variation in children's learning or accurately identify children having difficulty.

A research design used only at one point of time, or even a two-point predictive or retrospective study, cannot map the process of change in individual children, or the different ways in which different children change from different initial states of awareness. (Clay, 2014, p. 58)

Developmental psychology provided an alternative research approach that uses frequent systematic observation of individual learners to capture changes in behavior across a critical phase of development. The researcher uses specially designed behavior codes and protocols to record and quantify naturally occurring behavior in a form that is suitable for scientific analysis (Clay, 2001). The Running Record of Text Reading is one of many protocols that Clay developed so that she could record emergent reading and writing behaviors in a reliable way for later analysis.

Clay reminds us that this kind of research is not casual; it is resource intensive and demanding. "Observations are useless if carried out in a slipshod way exercising little control

over what is being studied" (Clay, 2001, p. 269). To be productive, the analysis has to uncover "sequential patterns of behavior" that can provide insights into literacy processing (p. 269). Although Clay is talking here about observation for research purposes, the warning also applies to the daily recording and analysis of behavior in Reading Recovery. If our observations are casual and episodic, if we are not looking for *patterns* of behavior and expecting them to change as a result of our teaching, the analyses are probably not very powerful. The requirement to look for *patterns of change* also creates an interesting challenge in relation to our model professional development. How can we use these sessions to create and sustain a sense of urgency about patterns of change when we typically observe only one lesson with each child, at one moment of time?

#### *Preventing reading failure*

In her 1960s study of emergent reading behavior, Clay observed 100 children every week for 12 months after they entered school on their fifth birthday. When the behavioral records were analyzed at the end of the observation period, approximately 25 percent of the cohort was still at an emergent or preparation level of text reading. Clay's observations did not support the prevailing theory that the children were not ready for literacy learning; the children were learning, but they were learning unhelpful things. The low-progress children were "confused by early literacy instruction" (Clay, 2004; 2007, p. 16) and their confusion was overlooked by busy classroom teachers. Clay was optimistic that reading difficulties could be prevented if classroom teachers learned to observe their

students' progress more closely and schools carried out a formal check of progress of lower-progress students after 1 year at school.

Teachers are less likely to make gross averaging judgments when they work alongside individual children, observing their responses and using techniques which increase the sensitivity of their observation. Under these circumstances teachers will arrive at more insightful assumptions and make fewer naïve or superficial ones. (Clay, 1982, p. xi)

Clay wanted to provide helpful information for teachers as quickly as possible. In published papers (Clay 1970a, 1970b) and teacher workshops she described behaviors that were associated with high-progress readers and urged the teachers to observe the direction and pace of change in these behaviors so that children did not form inappropriate habits that would block later progress. A set of "investigatory techniques" that teachers could use to observe children's progress were published as *A Diagnostic Survey of Early Reading Behaviour* (Clay, 1972c). A concerted effort was made to prepare all junior class teachers to use the observation techniques, and schools were encouraged to use experienced teachers to provide supplementary help for children having difficulty after a year at school.

#### ***Observation to guide instruction***

Clay was optimistic about the role that sensitive observation could play in preventing literacy difficulties but also realistic about what was possible for classroom teachers. When it became apparent that schools were struggling to provide the kind of accelerative teaching that was needed for children who were falling behind,

she began to develop protocols for one-to-one teaching. Observation guided the development of Reading Recovery; it is probably also the single-most critical ingredient of successful intervention teaching. One-to-one teaching, informed by careful analysis of patterns of behavior captured in daily records, provides the optimal learning opportunity for children who have become confused by classroom instruction. In order to make the most of this ideal teaching situ-

of one-to-one teaching. Concurrent discussion of live lessons provides regular opportunities to practice the fast observation and decision making we need for effective teaching. One of the ongoing challenges in Reading Recovery is to develop ways of checking on ourselves and monitoring how effective these sessions are for supporting our practice. How good are we at seeing what children are doing, articulating what we see, checking our hypotheses against the continu-

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ation, the Reading Recovery teacher has to be a very expert observer. And, as Clay reminded us above, this is not about casual observation and anecdotal record-taking. Accelerative teaching calls for sustained thoughtful observation leading to tentative hypotheses about in-the-head processing which guide moment-by-moment teaching decisions. Brisk, incisive teaching moves are checked out by further careful observation of the learner.

We practice this cycle of observation, hypothesis forming, testing, and decision making in the public space of training and continuing support sessions. Interaction with colleagues challenges us to refine our observation skills so that we can apply them effectively in the more-private space

ing stream of evidence from the lesson, and challenging one another's observations and suggestions?

#### ***An idea in good standing?***

The idea of sensitive observation leading to early, preventative intervention is such a powerful and coherent educational idea that is hard to believe it is not a universal requirement for education systems. Sadly, many systems seem to be moving steadily in the opposite direction; high-stakes testing leads to 'gross averaging judgments' about teachers and schools, as well as children, and incentives to label and blame the child persist alongside an increase in teacher-blaming. Stage-wise descriptions of literacy learning continue to be the norm despite a sophisticated critique of this approach (Paris, 2005).



But sensitive observation remains a potent research methodology in the field of developmental psychology. Many contemporary researchers in this field use a microgenetic research method which requires frequent, high-density sampling of behavior across an entire period of developmental change (Lee & Karmiloff-Smith, 2002). The detailed quantitative and qualitative data gathered from these observations lead to inferences about processes that bring about change (Siegle & Crowley, 1991). While this approach is not widely used to study literacy development at present, it seems to offer a direction for future research that is well suited to Reading Recovery theory and practice (Clay, 2001). In the meantime, studies using this approach offer some tantalizing insights about learning. A fairly consistent finding from a broad range of studies, for example, indicates that change is gradual rather than episodic; that less-effective cognitive strategies coexist with more-effective ones; and more-effective strategies gradually become more dominant, rather than the less-effective being erased. Overall, microgenetic studies offer little support for stagewise models of development and learning.

## Building on Strengths

There has been longstanding tendency, in the field of reading difficulties, to focus on deficits in the learner both as the causes of difficulty, and as the target of remedial efforts. It is probably fair to say that the deficit thinking is the default position in the educational response to literacy difficulties. Perhaps we slip into this way of thinking ourselves sometimes when we have been working with a child we find particularly challenging. But Reading Recovery training

provides us with two kinds of defense against deficit thinking: a strong critique of deficit theories and clear guidance about how to observe and teach to student strengths. A third source of resistance to deficit thinking comes from the growing body of knowledge about how the brain builds new knowledge through neuronal connections to what is already known (Zull, 2002, 2011). These accounts mesh well with the understandings we work with in Reading Recovery.

### *A critique of deficit theories*

The traditional approach to research and remediation in the field of reading difficulties has been the subject of extended critiques by Clay (1972a, 1982, 1987) and others (see for example Johnston, 2011; Lipson & Wixson, 1986; McDermott & Varenne, 1995; Trent, Artiles & Englert, 1998).

Children who are having difficulty with literacy learning are typically identified using standardized measures of progress that are not reliable until students have fallen well behind their peers, that is after they have been engaged with literacy instruction for several years. Batteries of tests administered at this time allow researchers to identify sets of behaviors, cognitive attributes, or even patterns of brain imaging, which seem to distinguish the failing students from their more-successful classmates. The problem is that the children have been building these ineffective patterns of responding for several years before they are identified; they have been “learning to be learning disabled” (Clay, 2004; 2007, p. 57). Without detailed observational records we have no way of knowing how a particular student came to be left behind or what the path to suc-

cessful learning might have looked like for that child.

Most importantly, when the learning profile of the student or group of students is composed of the things they have *not* learned, rather than what they know, we have no idea where to begin remedial instruction. Not surprisingly a focus on the causes of reading difficulties (writing is rarely considered!), and on deficits in the learner, leads to programs that attempt to remedy the problem by teaching to the absent skills.

### *Developmental and biological perspectives*

The perspective of developmental psychology is very different. It recognizes that all learning builds on previous learning, and that learning can only occur when we find some way of connecting a new experience with something we already know. In *Change Over Time in Children’s Literacy Development*, Clay provides us with a wonderful metaphor for this: “New learning at any one time must depend on the nature of the landscape formed by the past experiences of the learner up until this moment in time” (Clay, 2001, p. 292).

Along similar lines, biologist James Zull quotes a contemporary of Clay’s, American psychologist David Ausubel, as saying “The single most-important factor influencing learning is what the learner already knows. Ascertain this and teach accordingly” (Zull, 2002, p. 91). Zull points out that from a biological point of view, what the learner already knows is made up of “existing networks of neurons in the learner’s brain” (p. 93); prior knowledge is something concrete and physical, constructed in the brain, and held in place by physical (neuronal) connections (p. 94).

How helpful are these ideas for our teaching? After all, we cannot open a child's brain and look inside to find out what she has already learned. Zull argues that the ideas are very helpful and important; acknowledging the physical nature of knowledge reminds us that all children learn, and that they learn what fits with their experience and emotions. Thinking of knowledge as real and concrete helps us to see that it cannot be ignored and is not easily erased. Understanding the biology of learning, Zull says, helps us to recognize the boundaries between teacher and learner (our separateness) and to appreciate the uniqueness of the individual learner. And, he suggests, thinking about the physical nature of knowledge might encourage us to “*put more energy into understanding the learner*” [emphasis added], her prior knowledge and experience (Zull, 2002, p. 248–249).

### ***Implications for teaching***

We create optimal learning conditions for children when we arrange material and experiences that provide them with opportunities to grow new knowledge by making links to what they already know. We have to know a great deal about what children know, feel, think, and experience to do this well. To this end, we might think of the Observation Survey as a kind of treasure hunt where we search for clues that tell us about the links and connections that make up a child's networks of knowledge about reading and writing. Roaming Around the Known provides an opportunity to continue the treasure hunt, and especially to learn more about a child's thoughts, experience, and emotions. But it is also the time when we start learning *how to work*

*with what the child knows* — or, from a biological perspective, how to arrange for neurons in this child's brain to fire in helpful ways!

The principle of building on the known is established in the first 2 weeks of lessons, but it permeates all of our teaching. When we think about selecting a new book for a child, we probably think about what will be challenging for her, but the most-important questions are about what she already knows: How will she connect to the characters and story? How familiar will the words and letters be? Will she be able to read the text fluently with natural phrasing so she can access the support of her oral language? We are reviewing the child's strengths in relation to the supports and challenges in the text; and we have to get it right so that the neurons in her brain will fire in the right sequences!

Perceptual learning is especially hard for us to think about because our own perception of print is so fast and accurate, and because what the child is doing and seeing is hidden from our sight (Clay, 2001). If we think of learning to look at print as building neuronal networks from scratch, this might help us to appreciate the amount of practice that is needed, how much of the perceptual array needs to be familiar to avoid overload, and why it is crucially important for children not to practice perceptual error.

### ***When children are finding it hard to accelerate***

Research suggests that well-intentioned teachers respond differently to high- and low-progress readers. Without meaning to, they attend more often to error, intervene more

quickly, and give different kinds of feedback to lower-progress students (McNaughton, 1981; Allington, 1983). Perhaps we have experienced this ourselves! When we are anxious about a child who is making slow progress, we might start to focus on things that seem to be beyond our control; on gaps in the child's experience for example, or oral language, or knowledge about print. If we let this happen it will be hard for us to support the child's learning because we have lost sight of his strengths and of our own strengths as well—the things that are within our control as a teacher. We need to recreate an optimal learning environment for the child as quickly as possible, and to do this we need really good records of what he knows and cares about; we need to know what success looks and feels like for this child so we can get her back on track. Sensitive observation is essential for building on the known!

## **Contributions of Writing**

Including writing as a central element in Reading Recovery is one of the many ways that Clay elected to ‘sail in a different direction’ (Clay, 2004, 2007). The title ‘Reading Recovery’ reflects local and historical exigencies; ‘Reading and Writing Recovery’ would have provided us with a useful counter to the poor relation status of writing in curriculum and research. Would it have made a difference to our teaching? Two early studies of the New Zealand implementation found that the number of stories the children wrote was significantly less than the number of Reading Recovery lessons; it seems that the teachers were not giving writing the same priority as reading (Clay & Watson, 1982;

Glynn, Bethune, Crooks, Ballard, & Smith, 1992).<sup>1</sup>

We probably do a much better job with this today, not least because of the strong emphasis that Clay continued to place on writing in many publications. A theoretical argument about the importance of writing in early literacy learning has been part of Clay's work since 1966; many more-extended accounts have appeared in publications dating from 1998. Clay was still making the case for early writing when she died in 2007, and several texts were published posthumously.

1988 *By Different Paths to Common Outcomes*  
(chapter 1)

2001 *Change Over Time in Children's Literacy Development*  
(chapter 1)

2005 *Literacy Lessons Designed for Individuals Part One and Part Two*

2010 *How Young Children Explore Writing*

2010 *The Puzzling Code*

2010 *What Changes in Writing Can I See?*

2014 *By Different Paths to Common Outcomes*  
(chapter 8)

Clay's work provides us with a sustained argument about the essential contribution of writing to young children's literacy learning, and a strong imperative to optimize the writing activities in Reading Recovery lessons, but the teaching itself is challenging. A possible source of challenge is a kind of tension between the developmental perspec-

tive that emphasizes children's independent exploration and discovery, and an intervention perspective that emphasizes accelerated learning and "carefully determined and astutely delivered teaching" (Clay, 2001, p. 31). Exploring these two aspects of children's writing might help us to appreciate why teaching for accelerated shifts in writing is particularly challenging.

#### *A developmental perspective*

A developmental perspective encourages us to see children's early literacy learning as 'a whole cloth' composed of crisscrossing threads drawn from every kind of reading and writing experience. The focus is on what children can learn for themselves, from acting on the world, and how they can use what they know to extend their own learning. A wide range of reading and writing experiences provides multiple points of access to literacy. For many children, "exploring with a pencil" (Clay, 1977; 1982, p. 202) may precede any kind of reading behaviors.

Clay began to collect samples of children's writing in 1962 as part of a pilot study for PhD research. She made contact with the families of preschool children who kept diaries and samples of children's writing and drawing during the period of transition to school. Throughout the PhD study she collected everything that the children drew, wrote, and said about their own writing. At the end of the study she had an amazing database of writing samples but "it took some years of searching to find order" in the samples (1977; 1982, p. 201). It is interesting to think why this would be; perhaps the same things that make early writing powerful from a development

perspective also make it difficult to record and analyze. Child-initiated writing is powerful because the child is in charge, controlling the 'message' and the action, and deciding what to attend to. Intention and movement give rise to a product that the child can monitor and think about, sometimes asking, "What did I write?" (Clay, 1979). But the writing comes from 'inside'; there is no external criteria of correctness (unless it is a copying task); and without a little book to provide a common point of reference, the child's thinking and problem-solving behaviors are hard to interpret.

The difficulty of recording writing behavior (as compared with reading) has implications for Reading Recovery teaching, but it also points to a wider instructional challenge. Clay's argument about the critical role of writing in early childhood and school entry programs is sustained and passionate; it is accompanied by a clear message for the classroom teacher:

I am impressed by the potential of early writing as a highly satisfying experience for young children. The more this is organized by the child the greater value it will have. *The more the teacher feels compelled to direct, sequence, correct and oversee this learning the less value for reading it will have,* [emphasis added] although it might produce children with excellent letter formation." (Clay, 1977; 1982, p. 209)

The early intervention teacher operates in a quite different timeframe and educational context from the early years' teacher. How do we marry the need to foster independent learning with the urgent demands of accelerative teaching?

## *Developing an early literacy intervention*

During the development of Reading Recovery, Clay conducted an extensive review of research on writing (Clay, 1977, 1982). Her own research and observations led to the conclusion that early writing provides a powerful way for children to acquire early concepts about print, spatial and directional learning, and visual perception of print features. She was also particularly impressed by the findings of a 1973 study of the progress of 5.5- to 6.5-year-old children in New Zealand classrooms. Sue Robinson<sup>2</sup> demonstrated with rigorous statistical analyses that the main predictor of early reading progress across all groups was the number of words a child could generate and write correctly in 10 minutes (Clay, 2001). It seemed that for students making good progress with literacy learning, writing was both resource and beneficiary; early literacy intervention aimed to make this path available for low progress learners as well.

The development team also found that many young children who were making slow progress with literacy learning had great difficulty hearing the sounds in words. They recognized that daily story writing could be used to develop awareness of the sound sequences in words, and that this, in turn, would provide a resource for crosschecking on information in reading and later solving of new words. Clay's familiarity with the work of Russian psychologist Daniel Elkonin (1973) equipped Reading Recovery with a powerful tool for fostering children's phonemic awareness and their understanding of the alphabetic principle.

So Reading Recovery lessons were designed to include a short writing

segment that would provide opportunities for (a) composing and compiling messages, (b) linking meaning and experience, (c) articulating and extending oral language (syntax and vocabulary), (d) sharpening attention to visual detail, (e) increasing control over the formation of letters and words, and (f) linking sound sequences with letter sequences. Along with this came an expectation that children would make accelerated progress in writing as well as reading. At the end of her lesson series, the child who began Reading Recovery able to write her name and one or two words would be expected to be able to compose and record two or three complex sentences, with most of the words recorded accurately and fast, and new words attempted by independent analysis.

## *An economy of teaching time*

"There is a lot to be learned about how to write down a language" (Clay, 2001, p. 31). Clay suggests that if we had a better understanding of the reciprocity of reading and writing, this "could lead to more effective teaching interactions in both activities ... allowing the busy teacher some economy in teaching time" (Clay, 2001, p. 11).

In *Literacy Lessons Designed for Individuals* Clay writes:

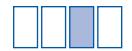
Reading and writing are interwoven throughout the Reading Recovery lesson series and teaching proceeds on the assumption that both provide learned responses that facilitate new responding in either area. The reciprocity of learning in reading and writing is something the children learn to utilize in some implicit way. (Clay, 2005a, p. 27)

When I read Clay's account of reciprocity it seems very clear and compelling, but *teaching* for reciprocal gains is challenging. Why is this? Perhaps it is the linear sequence of the lesson — first we do reading, then we do writing, then a new book. It is easy to think of the child 'learning things about reading' and then 'learning things about writing' rather than 'learning literacy.'

## *What would a more-integrated approach to reading and writing look like?*

A full discussion of this question is beyond the scope of this article, but it would be a great question to explore at professional development sessions. One place to start might be thinking about how to get a lot more writing going early on. The open format of Roaming Around the Known provides an opportunity to explore what it really means to have reading and writing interwoven throughout the lesson. We might also think *more* about how to select books that relate quite specifically to some recent personal experience of the child, and about how to invite the child to write about that connected experience. If the new book we choose today is about something that really interests the child it will create an opening for genuine conversation and richer composition in tomorrow's story writing. We can also expect some overlap between the vocabulary and syntax of the text and the child's story that will lead to more familiarity with the sounds, letters, and printed words in both texts — creating more opportunities for the child to build a network of linkages between saying and seeing.

Daily processes of talking, reading, and writing (Clay, 2014) about things that interest the child (and



teacher) create a shared landscape of experiences that the teacher and child traverse each day, talking about the reading and writing as it occurs. There will be echoes across and through the lesson series because the content is relevant to the child and builds incrementally on her repertoire of knowledge and experience. “The teacher’s goal is to increase initiation by the child and to avoid participating in ways which make the child pull back” (Clay, 2001, p. 27). This kind of teaching is very skillful and demanding; it requires sensitive observation, commitment, and deep respect for children’s learning and experience.

#### *The tutoring challenge*

Early in this section I mentioned some challenges that are specific to the teaching of writing in Reading Recovery. Reading Recovery lessons provide extended opportunities for independent processing of the information in little books, and for the teacher to observe and record a child’s responses to reading tasks. The child has opportunities to work independently at different levels of challenge and the teacher has time to think about her teaching responses. Books are selected to provide a gradient of difficulty within and across the lessons, and the texts themselves scaffold and support the child’s processing. In the *writing* however, the interactions occur in a much tighter timeframe; teacher-child talk provides the stimulus for story writing and there are typically many more teaching moves relative to the length of the message. Without the external scaffold of a published text, the teaching moves have to be highly contingent and focused. At the same time, the child must have opportunities to

initiate trials and problem solving and to orchestrate writing processes for herself, pulling together knowledge from different sources, searching, monitoring, and problem solving. The teacher has to provide support and teach new things but avoid micromanaging the activity. Perhaps for these reasons, the story writing activities in Reading Recovery lessons have provided a fruitful setting for studies of tutoring and scaffolded instruction (Clay & Cazden, 2007; Hobsbaum, Peters, & Sylva, 1996; Matczuk & Straw, 2005).

#### **Self-Correction**

The concept of *self-correction* or *self-repair* was an ‘unlooked for’ variable in a study of emergent readers in 1963–64. Clay was intrigued to find evidence of self-correction in the behavior records of school entrants within their first few weeks of school. It was even more surprising, perhaps, to discover that the instructional decisions of five new entrant teachers were rather consistently influenced by the appearance of self-correction behavior in the children’s responses to text, although self-correction was not something the teachers could have talked about at that time (Clay, 2001).

In five different schools with from average to disadvantaged populations, all the children were working on some simple books by their seventh week of school. The teachers made decisions about whether children were ready to be promoted from preparatory reading material to the first steps of the instructional reading series on the basis of their responses to classroom reading activities. Clay found that behavioral records of the children’s responses quite consistently showed evidence of self-correction

“about three weeks prior to their promotion to the [instructional texts] of the reading series” (2001, p. 184). The children’s responses might have arisen from awareness of letter or word forms, or directional or spatial considerations, or something to do with matching speech sounds with print. Clay concluded that the teachers must have had “a tacit awareness of some change in children’s responses to texts” (p. 184), perhaps noticing “some movement towards a ‘willingness to choose between alternatives’ in response to print” (p. 184).

#### *Why is self-correction important?*

In extended discussion of self-correction in the 2001 theoretical text, *Change Over Time in Children’s Literacy Development*, Clay identifies a number of different ways that self-correction behavior is informative and important. In short, it has proved to be a useful variable for both descriptive and instructional research; it is easily observed and recorded in the classroom setting and provides useful information for classroom teachers concerned with reading groups and levels of reading material. Of particular interest here is the discussion of how self-correction contributes to the development of literacy processing systems and of the ways that self-correction behavior can inform early intervention teaching.

#### *Building effective literacy processing systems*

In self-correction, by definition, the child failed to use some information, noticed some mismatch, picked up and put together some additional information and achieved a correct response. (Clay, 1991, p. 303)

Whether we think of this as a sequence of mental operations (though physical movement is also involved), or strategic activities, or an assembly of working systems put together to solve a particular problem, there is clearly “much more to self-correction than the successful reading of a word” (Clay, 1991, p. 303). As in Bruner’s example of the baby reaching for an apple (Bruner, 1974 quoted in Clay, 1991), the strengthening of in-the-head strategies (strategic activities, assemblies or neural networks) is

*Importance for early intervention teaching: A window on processing*  
Self-correction has a demonstrable relationship with progress for young literacy learners during a period when the behavior is overt and easy to observe. It is not possible to establish a causal relationship because text difficulty level and error rate confound the analysis. But when we have the privilege of sitting beside young learners and observing their independent problem-solving behaviors, we feel certain that self-correction

that we are optimizing the pace of progress we need to look more closely at our records and particularly at the pattern of self-correction behavior. Records of self-correction behavior can tell us a lot; they allow us to recreate the context for the behavior; we can see what was ignored in the initial response and what additional information was used to correct the error. But the pattern of self-corrections should change, quite fast, across the lesson series, towards better-quality initial responses, faster correction of error, and with less need for rereading. We should be concerned if we don’t see the kinds of changes that indicated more-effective processing of information.

It would be useful, from time to time, to share longitudinal records of behavior change with colleagues at professional development sessions. We could draw up a set of questions to ask ourselves, as for example: When does the behavior occur (in what part of the lesson)? Under what conditions? What kinds of information are used, initially and in the self-correction? What is being neglected? And if we want to change the pattern of behavior, how would we go about that?

the powerful outcome of self-correction, rather than the correct reading response. The self-correcting child has learned something more about how to initiate and manage complex sequences for picking up, monitoring, and searching for information and coming to a decision. New information previously neglected is noticed and becomes more familiar. The child is reinforced for adopting a tentative and flexible approach to problem solving.

And of course the correct response, like the apple, does matter! The child has taken a risk, acted independently and been successful. The ‘clues’ fit, so the action sequence is complete and the child gains a sense of satisfaction and control. As Clay says, “The activity of making all the clues fit, which is the challenge of the task, and eliminating any misfit, is rewarding to the child who succeeds” (Clay, 1991, p. 253–254).

contributes to “the forward thrust of reading competency” (Clay, 2001, p. 195). At the same time we are deeply concerned about children who do not show signs of self-correction and are passive in the face of error and difficulty. As David Wood suggests, these children “...are offering mute testimony to the fact that they do not know what they are doing or where they are supposed to be going” (Wood, 1988, p. 199).

So, when the child’s records show a healthy correction rate, we are reassured about their progress and processing and about our teaching decisions — our choice of texts, ways of introducing texts, and teaching moves. We might even feel that we do not need to concern ourselves too much with the detailed analysis of this child’s behavior because the child seems to be doing okay. But perhaps she could move faster, read more-challenging texts? In order to be sure

## Independence

From her background in special education and familiarity with the literature on remediation, Clay was aware that individual tutoring can create dependent learners. On the other hand, she had seen older struggling students make “alarming” progress when they learned how to problem solve independently (Clay, 2004; 2007, p. 18). From the outset, the goal of Reading Recovery would be to produce independent readers and writers who continue to learn,



from their own efforts at reading and writing back in the classroom.

But the principle of independence also delineated the process by which the goal would be achieved:

A Reading Recovery perspective on independent activity would be an activity that the child initiates and carries out on his own. This is encouraged from the very beginning of lessons in that the teacher never does anything for the child that he could do for himself ... the child is expected to carry out whatever he can do independently and he knows this is expected of him. (Clay, 2005b, p. 61)

The idea of independence sits at the very heart of Reading Recovery. It places child-initiated action and decision making at the core of learning. Whether we think of this at a cognitive/processing level as picking up, working on, and making decisions about information (Clay, 2001, 2005b) or in biological terms as changes occurring in the neuronal networks of the brain, it is clear that the child's brain has to be active and engaged. The teacher cannot pick up, pull together and act on the information for the child (though we are probably tempted to try this sometimes). Our role is to arrange optimal conditions for the engagement to occur. Peter Johnston describes Clay's perspective on the respective roles of teacher and learner very aptly:

Teaching in Marie's view, is not just about following the child's lead, but arranging for the child to lead productively — to be in control of reading, writing and learning processes and to have a sense, whether or not it is conscious, that they are in control. (Johnston, 2007, p. 68)

### *Organizing for independence*

In order to foster independent, child-initiated activity from the very beginning, we prepare very carefully before we start to teach the child:

- First we carry out a comprehensive survey of what the child knows about literacy and analyze the behavioral records thoroughly, looking both within and across tasks for responses that indicate knowledge, partial knowledge, possible links and confusions.
- Then, drawing on our analysis of the survey data, we describe what this child will be doing as an independent reader and writer at the end of the intervention. And we tentatively sketch a path of progress for the child marking in some of the things that we know he or she will learn to do on the way. By writing these *predictions for progress* we are formalizing the expectation that the child will become an independent literacy learner and committing ourselves to this outcome.
- As we start working with the child, for the first 10 or so lessons, we do not try to teach the child anything new. While Roaming Around the Known, we practice letting go of our preconceived ideas (about this child perhaps, or other children we've taught, or how we 'do' Reading Recovery) and learn how to interact with the child (Clay, 2005a). As we learn more about what the child knows, about how she responds to literacy tasks, about how we respond to her, and about how to calibrate our responses to

foster and support independent learning, we are learning how to be an effective teacher for this child.

- And as the daily lessons continue there is an absolute requirement that our teaching is guided by up-to-date, accurate knowledge about what the children know and can do for themselves. Otherwise we cannot be sure that we are not getting in the way of their learning.

### *On being helpful*

Speaking to a Reading Recovery audience in Boston in 2002, British psychologist David Wood described the tension in a room full of students poised on the edge of their seats as they watched a film of infants trying to reach for a toy.

When you see someone trying to do something that you can do and they're struggling, there is a real desire to get in there and help. The students in Bruner's class wanted to get in there and give the object to that baby.  
(Wood, 2003, p. 3)

Wood argued that tutoring is an outgrowth of an innate human propensity for helping, and that a large part of the tutoring challenge is learning how to inhibit our natural responses so that we don't get in the learner's way. Clay also reminds us, frequently and with emphasis, to avoid getting in the way of the learner — by talking too much, or supporting too much. For both theorists, effective tutoring is well informed, carefully timed and aimed at helping the child learn how to learn. This ideal of effective tutoring is captured in a passage

from one of Clay's most-recent books, *The Puzzling Code*:

When the child gets into difficulty help him re-use something you saw him succeed with recently. Enlist the child's own effort to find an answer if possible. ... Think of some recent happening, an image, saying, song, poem story, personal experience or yesterday's lesson to link to your teaching point. Be absolutely sure however that your link is something that the child knows. Anything else could confuse him more. (Clay, 2010b, p. 28)

It is not surprising that scholars who are interested in studying the specific kinds of expertise that are necessary to optimize learning in a one-to-one instructional setting have looked to Reading Recovery both as an exemplar and as a research setting. David Wood's theory of contingent tutoring offers useful insights to Reading Recovery practitioners, as do instructional theories developed by Peter Johnston (2004, 2012) Courtney Cazden (1999), and James Zull (2002, 2011). Within Reading Recovery, a number of researchers have used the concepts of scaffolding and contingent support to investigate effective teaching (Lose, 2007; Rodgers, 2004) and this seems certain to be a fruitful field for ongoing research.

## Conclusion

In the last 30 years, Reading Recovery has assisted more than 2 million children around the world to be successful with early literacy learning. The innovation remains fresh and exciting because the issues that Reading Recovery addresses are

as important as any educational questions can be. Questions about how to prevent children from failing at school, how to optimize learning, how to develop teacher expertise, how to scale up innovation and to improve schooling are, if anything, more central and more urgent than ever. Reading Recovery engages with intriguing and challenging educational questions at all levels — research, theory, practice, and implementation. It draws on and contributes to discoveries and insights in each of these fields, and so remains at the cutting edge.

### End notes:

1. An early study in the U.S. found that the more-effective teachers spent more time on writing, especially early in the lesson series (Lyons, Pinnell, & DeFord, 1993).
2. Sue (now Sarah) Robinson was a founding member of the development team for Reading Recovery and designed the Writing Vocabulary task for the Observation Survey.

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# Celebrating 30 Years

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## About the Author



Ann Ballantyne recently retired from a position as trainer and director of the Reading Recovery Project at New York University. Ann trained in New Zealand and has worked as a Reading Recovery trainer in several different education systems, including some time in Canada later this year. She has a particular interest in the development, dissemination and persistence of Reading Recovery from an education policy perspective. Ann can be reached at [ann.ballantyne@gmail.com](mailto:ann.ballantyne@gmail.com).

## About the Cover

### A Party 30 Years in the Making!

As part of Reading Recovery's 30th Anniversary celebration, RRCNA visited the Columbus Public Schools where Marie Clay first trained Reading Recovery teachers 30 years ago. In recent years, the district has again been training Reading Recovery teachers with funds available through a USDE Investing in Innovation (i3) grant. Besides demonstrating their literacy skills during our photo shoot, students were happy to

don party hats and eat cake! Thanks to all the adults who helped make this photo shoot a success — including (left to right in this photo) Ohio State University Trainer Mary Fried; Reading Recovery Teachers Robyn Gray and Sandra Harris, and Reading Recovery Teacher Leader Lisa Chappel.

