What’s So Important About Theory?

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When you trained in Reading Recovery®, did you have some struggles with taking on a different theoretical stance to literacy learning? I know I did! When I trained in 1987, this theory was revolutionary. We were still using basal readers—lock step—perhaps with little thought to the implications for the learners. Teachers may have felt secure with a program that basically said what to do and when, but we had little information about the ways in which children were learning.

When we talk about theory, a variety of ideas may come to our minds. We often associate the term with scientific theories. Yet we all have theories about everyday life. For example, if you are suffering from insomnia, you may consider such theoretical possibilities as drinking too much coffee at night, working at the computer until bedtime, worrying about things you can’t control, and so on. Those are theories based on your observed behaviors.

So why does literacy processing theory matter to Reading Recovery teachers? Do we sometimes focus on the teaching procedures (the what or the how) more than the theory behind the procedures (the why)? Do we feel more comfortable with faithfully following procedures than considering why a certain procedure may be appropriate at this particular time for this particular child? All of us have likely faced this struggle as we work with children in Reading Recovery.

In all my years of studying Marie Clay’s work, I found new insights when working on this article. I didn’t realize how many times she explicitly challenged us to keep theory at the center of all our decisions.

For example, in *Change Over Time*, she directed this message to us all.

> Early intervention professionals need to ask more questions and get to even better theory in order to be more effective in their work. (Clay, 2001, 2015, p. 4)

And in *By Different Paths to Common Outcomes*, she explained her commitment to the reciprocal relationship between theory and practice.

> I espouse a reciprocal relationship between theory on the one hand and teaching practice on the other. Practice informs theory and theory informs practice in a circular, continuing set of relationships. I have never seen much value in talking to teachers only about ideas that confirm their present practice. I have never believed in offering teachers watered-down versions of theories, because in my experience teachers like to get their teeth into the writings of those who challenge their expectations. (Clay, 2014, p. 210 or Clay, 1998, p. 196)
And for those of you who are teacher leaders, this is Clay’s charge to you.

Those professionals who train RR teachers are called tutors or teacher leaders. They need to be able to lead teachers into discussions of the ‘why’ questions but their personal challenge is to become more articulate about what they understand by the term ‘literacy processing,’ the theory of reading and writing with which they work. Their discussions should be about the kinds of processing which might be developed in each of the components of the lesson. …For them to understand why current practices are recommended, and to decide whether variants threaten or might potentially increase the effectiveness of a learner’s learning, such topics must be part of professional discussions. (Clay, 2001, 2015, p. 232)

The Development of Clay’s Theory of Literacy Processing

The following historical summary is based largely on Marie Clay’s dissertation (1966) and on book chapters by Ann Ballantyne (2009) and by Noel Jones and Trika Smith-Burke (1999). When Marie Clay joined the faculty at the University of Auckland in the early 1960s, she began to think about a focus for her Ph.D. research. She was especially interested in children who were achieving poorly at school despite average intelligence and opportunity.

Reading methods in New Zealand in the early 1960s basically followed a word approach based on look-and-say methods which had replaced a predominantly phonics approach. In 1963, the New Zealand Ministry of Education introduced a new reading method focused on books reflecting interests of New Zealand children, using language similar to speech of New Zealand children, including both high-interest and basic vocabulary, discouraging teaching of words singly or in lists, and advocating that teaching need not precede reading. Does that sound like our transition in the 1980s in the U.S. — with the advent of Reading Recovery?

This new reading method in New Zealand coincided with Marie’s dissertation research. She looked closely at the reading behaviors of children during their first year of instruction and recorded precisely what features of the mature reading process were being developed. Because of her developmental perspective, she expected variety and complexity in young children’s responses to early literacy instruction and she decided to explore this diversity using observational methodologies.

Her major aim was “over the period of one year to record in detail the emergent reading behavior of a representative group of urban children who enter school and begin reading instruction at five years” (Clay, 1966, p. 9). Other aims included these very ambitious goals:

- to devise ways of recording in detail the reading behaviors of these children,
- to describe the variety of behavior found in and between individuals,
- to describe patterning in the complexity of the reading process,
- to describe the sequence of learning,
- to hypothesize the process of change in progress in reading,
- to see if reading failure can be detected before age six, and
- to see whether better ways of observing and diagnosing inadequate learning could be described for teachers. (Clay, 1966)

Many refer to Marie Clay’s theory of literacy processing as grounded theory. In fact, Jones and Smith-Burke (1999), suggested that “a more apt characteristic of her research, and perhaps the greater impact of her findings, concerns the concept of a grounded theory” (p. 265).

A grounded theory is one that is inductively derived from the study of the phenomenon it represents. … It is discovered, developed, and provisionally verified through systematic data collection and analysis of data pertaining to that phenomenon. Therefore, data collection, analysis, and theory stand in reciprocal relationship with each other. One does not begin with a theory, then prove it. Rather one begins with an area of study and what is relevant is that area is allowed to emerge. (Strauss & Corbin, 1990) (Cited in Jones & Smith Burke, 1999, p. 265.)

Clay’s research design allowed for observation of emerging tentative behaviors that progressed over time to become controlled secure knowledge. Using open tasks and making frequent observations made it possible to reveal the variability of individuals on their paths to literacy develop-
ment. Clay’s design was thoroughly grounded in the data from children who were systematically observed during the formative development of literacy acquisition (Jones & Smith-Burke, 1999).

You can see how her methodology of grounded theory played out. She started with questions, moved to collecting data, to coding the data, to translating the codes into concepts and those concepts into theory — then continuing the cycle with a variety of children and across multiple studies. Marie Clay was well aware of the significance of her findings; her research challenged assumptions about readiness and yielded observation tools and tasks that made possible the early detection of children having difficulties with literacy learning.

It wasn’t until the early 1970s that changes were seen in the educational environment in New Zealand. The Early Literacy Project (later known as the Early Reading In-service Course) was initiated and was an important precursor of the Reading Recovery project. Marie Clay was a member of the development committee and a consultant for the project. Her research was the source for several course components and the Diagnostic Survey was used to observe young readers more closely. Teachers then asked for help with children who were struggling, leading to the Reading Recovery Research Project, the field trials, and replication (see Clay, 2009).

Aspects of a Theory of Literacy Processing
Because this theory is complex, there are many overlapping aspects. Some are selected for attention in this section:

1. Observing processing behaviors
2. Marie Clay’s definition of reading
3. Complexity of a literacy processing theory
4. The learner’s strategic control over processing
5. Reading and writing continuous text
6. Reciprocity of reading and writing
7. Change over time
8. By different paths to common outcomes
9. Necessary features of instruction

1. Observing processing behaviors
Marie Clay’s theory of literacy processing is built on her rigorous observational methodology. And we are the beneficiaries of her unusual lens for observing the development of a literacy processing system in the children we teach (see Askew, 2009).

Observation is a hallmark of Reading Recovery — and has influenced educators around the world in thinking about an unusual lens to observe literacy behaviors in order to inform teaching. Think about the observation tools Reading Recovery teachers use and what they reveal about change over time in literacy processing behaviors. Observation of the learner tells us if instructional materials are at an appropriate level; if the child is building a meaning-based system, demonstrating strategic activity such as control of monitoring and problem solving; and if the child’s literacy learning is changing over time.

It is theory that decides what can be observed.
— Albert Einstein —

In a recent presentation by Peter Johnston (RRCNA, 2017), he quoted Einstein to make the point that whether you can observe a thing depends on the theory you use. In order to be effective in assessment, teachers need to have a strong theory of literacy development, held together by the big picture so they can attend appropriately to the various details of development. Marie confirmed in her research that we are able to observe these processes.

2. Marie Clay’s definition of reading
You are all familiar with Marie’s definition of reading. But were you aware that this definition was explored during her research in the early 1960s and was a core part of her original study?

While preparing this article, I reread Marie’s dissertation and was once again amazed by the genius of her thinking and research methodology more than 50 years ago. It was truly revolutionary. She demonstrated that literacy processing behaviors can be observed early on — she described how her data supported this definition. Think about how you can observe the literacy processing behaviors listed in her definition below:
Reading is a message-getting, problem-solving activity, which increases in power and flexibility the more it is practised. It is complex because:

- within the directional constraints of written language
- verbal and perceptual behaviours
- are purposefully directed
- in some integrated way
- to the problems of extracting sequences of information from texts

Clay’s research yielded evidence of the first three bullets above in emergent behaviors. Behaviors in the last four bullets are beginning to develop and are critical for reading progress; it is in these aspects that the child becomes a reader by reading (Clay, 1966). This is a conceptually loaded definition — worthy of careful discussion with your colleagues. Be sure to consider how assessment in Reading Recovery is tied to Clay’s literacy processing theory.

3. Complexity of a literacy processing theory

Marie Clay argued that her definition of reading was complex. The following quotes from Clay present a clear picture of the complexity of her theory of literacy processing.

In contrast to a simple theory of learning, such as one which rates the learning of phonemic awareness or some other single variable as the first significant thing to learn about literacy, RR’s complex theory of literacy learning supports the view that there are many parts of literacy processing which can be difficult for children. Different children have different strengths and weaknesses, and there may be many causes of difficulty varying from child to child. (Clay, 2001, 2015, pp. 300–301)

Even though a simpler theory may suffice for most children, I am certain that a view of complexity is the kind of understanding required to deliver results in an early intervention programme aiming to prevent subsequent literacy difficulties in as many children as possible. (Clay, 2001, 2015, p. 138)

We are all familiar with ‘simple theories of literacy acquisition.’ They continue to persist. In fact, across my 30 years in Reading Recovery, some literacy folks continue to challenge Clay’s complex theory without evidence. Although their challenges are frustrating to us, we are armed with evidence of complexity.

Think about what the reader can potentially draw from a complex model that aren’t available in a simple theory:

- current knowledge and understanding
- language competencies
- visual information
- phonological information
- knowledge of printing conventions

And the reader does this “in ways which extend both the searching and linking processes as well as the item knowledge repertoires” (Clay, 2001, 2015, p. 224).

In addition to what the reader can potentially draw from, Clay made the argument that many working systems work together to make literacy processing possible.

Theoretical arguments can be made for many working systems in the brain which:

- search for and use verbal and perceptual information governed by directional rules;
- other systems which work on that information and make decisions;
- other systems which monitor and verify those decisions; and
- systems which produce responses.

Working in complex networks these systems make literacy processing possible. (Clay, 2001, 2015, p. 1; format altered for emphasis)

That’s quite a contrast to learning the sounds of letters in a prescribed order or a ‘Letter of the Week’ focus! Marie Clay had faith in teachers’ ability to work with a complex theory — and in their desire to do so.

If the reader thinks that a complex theory of literacy learning is too difficult for the classroom teacher, it gives pause for thought that classroom teachers across the world have become RR teachers who work with such a complex theory because it helps them to accelerate the progress of the children who are being left behind by their classmates for any number of reasons. (Clay, 2001, 2015, p. 138)
4. The learner’s strategic control over processing

Many of our conversations in Reading Recovery focus on the evidence of a learner’s strategic activity while reading and writing. We’re all familiar with terms Reading Recovery teachers use to describe child’s in-the-head behaviors such as strategic activity, strategic behaviors, reading work, processing, etc. In the general literacy field, however, often the term strategy is only relegated to the teacher, but our relegation to the child is crucial.

We know these are in-the-head activities initiated by the learner and we know that it is the learner who needs to pick up information, work on it, make a decision, and evaluate the result. And we know that the teacher can only tentatively infer the processes used by the child.

Early on, Marie wrote that it was surprising to many educators that there was no apparent emphasis on skill training in Reading Recovery. Her response revealed the theory behind the procedures.

The theory behind the procedures assumes that the big discovery task for the young reader is to find out what kinds of information exist in texts and what the reader has to attend to in order to extract that information (Clay, 1990b). … So the beginning reader has to learn

- to get meaning (another word for information) from texts;
- to discover how his or her oral language knowledge relates to texts;
- to work out how available syntactic awareness is relevant to reading tasks;
- to learn that existing phonological awareness can be applied to reading;
- to find out how visual information provides cues and facilitates processing of letters, clusters, words, phrases, and various print conventions, including tracking information, spacings, and punctuation; and
- to discover how many other things about books and the way they are presented help the reader. (Clay, 1991, pp. 67–68, format altered for emphasis)

That revelation was eye-opening to many educators. The emphasis was on the learner!

5. Reading and writing continuous text

Those who accept a simple theory of reading and writing generally focus on the items of language such as letters, words, and sounds before expecting children to read and write actual text. Yet the following quotes support Clay’s theoretical position of reading and writing continuous text.

Most written language occurs as continuous text, so the focal task for the learner is to problem-solve the messages of continuous text. That is another one of my assumptions. Teaching many words and letters in isolation before you allow the child to read or write a text does not seem like the appropriate learning context for laying down the foundational neural networks. (Clay, 2016, p. 6)

A theory of reading continuous texts cannot arise from a theory of word reading. It involves problem-solving and the integration of behaviours not studied in a theory about analyzing words. It must, however, explain the role of word reading and letter recognition within the theory of reading continuous text. (Clay, 2016, p. 16)

In addition, whenever possible the child will read and write continuous texts. He will not be diverted from printed texts to pictorial material or puzzles but will be taught what he needs to learn in the context of continuous texts. (Clay, 2016, p. 20)

Engage in a discussion with your colleagues about the following questions posed by Marie Clay:

- What is it about continuous text that challenges a reader or writer?
- What does a child have to do when reading or writing continuous text?
- What is the child likely to miss out on when the instruction places a heavy emphasis on letters, sounds, and words in reading or spelling, which steals all the child’s attention? (Clay, 2001, 2015, p. 5, format altered for emphasis)

6. Reciprocity of reading and writing

An important element in Marie Clay’s theory is her understanding that reading and writing yield reciprocal benefits.

Reading seems to help writing and writing seems to help reading, especially in the first year of literacy instruction. They work together reciprocally, one boosting the other. How? We may never explain how, in the brain, one activity boosts the effectiveness of another, but we can think how good car drivers
monitor the world through the windscreen and take in information from rear vision and side mirrors, using several sets of information to take appropriate action. The ways in which children explore print as they write and as they read somehow seem to give the young learner a better overview of the complexity of language in print. Some detail that has caught the child’s attention turns up again in a different kind of situation. (Clay, 2013, p. 102)

Clay summarized the benefits of learning to read and write simultaneously.

- In short, writing allows a slow analysis of detail in print;
- both reading and writing draw on the same sources of knowledge about letters, sounds, chunks, clusters, words, syntax (or grammar and sentence construction), the rules of discourse, and narrative structures and genre differences;
- gains in reading may enrich writing and vice versa; and
- dipping into a large pool of both reading and writing knowledge will help those with limited knowledge of the language, and may have cognitive advantages. (Clay, 2014, p. 154; 1998, p. 139; format altered for emphasis)

Clay, however, cautions that “this reciprocity does not occur spontaneously. The teacher must remember to direct the child to use what he knows in reading when he is writing and vice versa” (Clay, 2016, p. 23).

7. Change over time

How do most American educators measure a child’s literacy progress — with tests, book levels, benchmarks, measures of isolated reading/writing skills? Marie Clay argued for an alternative view of change over time in literacy achievement.

It is referred to as the ‘literacy processing’ view of progress during literacy acquisition. When we study how children work on texts as they read and write irrespective of how teachers are teaching, we arrive at a description of progress which is different. (Clay, 2001, 2015, p. 42)

We know that in Reading Recovery our view of children’s progress in reading and writing calls for us to observe on a daily basis the changes taking place as they engage with language in print. Take time to consider what your daily observations and records reveal about each child’s movement toward an effective literacy processing system. “The significant question at any stage of progress is not ‘How much does he know?’ but rather ‘What operations does he carry out and what kinds of operations has he neglected to use?’” (Clay, 1991, 2015, p. 313). It would be interesting to have a discussion with your colleagues about these two very different approaches to determining the progress of a young reader and writer.

No one knows better than Reading Recovery teachers that children get to common outcomes by taking different paths. Diversity among learners includes much more than cultural, ethnic, and linguistic diversity.

8. By different paths to common outcomes

Marie Clay knew that children take on literacy knowledge in very different ways, recognizing that the explanations for difficulties are diverse (see Clay, 2014 and 1998). For example, consider the differences among children in language development, experiences with print and books, understanding of concepts about print, and the list goes on and on. Yet many instructional programs assume that all children acquire literacy in much the same way (Jones & Smith-Burke, 1999).

No one knows better than Reading Recovery teachers that children get to common outcomes by taking different paths. Diversity among learners includes much more than cultural, ethnic, and linguistic diversity. Too often we fail to acknowledge diversity in ways of learning. Just as in life, children take different paths to learning — especially when learning complex processes like reading and writing. Understanding the benefits and challenges of diversity among learners calls for a teacher who tunes in to the individual nature of the process of learning. This is especially vital when working with children experiencing difficulties in learning to read and write.
9. Necessary features of instruction
A significant difference between our complex theory of literacy learning and a simpler theory is the role of the learner and the role of the teacher. How often have we said in our past lives, “Well, I taught that” without asking “Did the child learn that?”

As we consider our teaching as it relates to our theory, this quote may be helpful:

The art of teaching is the art of assisting discovery.
— Mark Van Doren —

Isn’t that what a skilled Reading Recovery teacher does? And her assistance must be directly tied to the child’s development of a literacy processing system.

If we are going to operate under a theory of literacy processing, shouldn’t we work from Marie Clay’s list of necessary features of instruction? Rather than risk summarizing these features, I will quote her words while modifying the format somewhat.

- The teacher would make maximum use of the existing response repertoire of each child, and hence every child’s lessons would be different.

- The teacher would support the development of literacy processing by
  - astute selection of tasks,
  - judicious sharing of tasks,
  - and by varying
    - the time, difficulty, content, interest and method of instruction, and
    - type and amount of conversation within the standard lesson activities.

- The teacher would foster and support
  - active constructive problem-solving,
  - self-monitoring and
  - self-correction from the first lesson,
  - helping learners to understand that they must take over the expansion of their own competencies.

To do this the teacher
  - would focus on process variables (how to get and use information) rather than on mere correctness and habitual responses, and
  - would temporarily value responses that were partially correct for whatever they contributed toward correctness.

- The teacher would set the level of task difficulty to ensure
  - high rates of correct responding
  - plus appropriate challenge so that the active processing system could learn from its own attempts to go beyond current knowledge.

(Clay, 2001, 2015, p. 225; format altered for emphasis)

This list is a virtual treasure trove for Reading Recovery teachers, offering an amazing discussion opportunity for professional development. Talk with colleagues about each necessary feature and what each one means for teaching moves. As you discuss each feature, talk about WHY each one is necessary.

To accommodate all of these necessary features of instruction, you will need to know each child very well and use all of the tools available to you in order to discover change over time in his literacy processing behaviors. And it will also be important to explore the ways you can facilitate the learning of each child in all parts of the lesson. So, there is a lot of in-the-head processing necessary for us as teachers!

And you are all familiar with Marie’s caution about our teaching remaining flexible and tentative. As we grow in our understandings of why our decisions may be helpful for a particular child at a given time, we will grow in our own independence to make tentative decisions and will be flexible in monitoring or evaluating our own decisions. Again, the theory should guide our actions as in this quote:

In whatever way we conceptualize the processing systems … they must be infinitely flexible and temporarily tentative during the acquisition of literacy. Such flexibility must be important for young learners because they do not yet understand the nature of the problems (see Spiro et al., 1987). Anything set in stone could become an impediment. (Clay, 2001, 2015, p. 103)

A discussion of what it means to be flexible and tentative is a must for Reading Recovery teachers.
A Final Challenge

In Mary Anne Doyle’s 2013 seminal chapter about Marie Clay’s theoretical perspective, she offered this important link to Reading Recovery:

Clay was astute in transitioning her theory to practice, making a remarkable difference for children, teachers, and schools. … The success of her Reading Recovery early intervention, substantiated internationally by ongoing analyses of student data, attests to the robustness of her theoretical perspectives of literacy acquisition, children’s learning, professional development, and systems design. (Doyle, 2013, p. 654)

As Reading Recovery professionals, we must continue to explore Clay’s theory — and look for answers to the ‘why’ questions. It’s what makes Reading Recovery so stimulating to us as learners. So, what are some of those questions?

• Why is each lesson component included in the framework? That’s a good beginning discussion.

• Then, for each teaching move ask, “Why am I making that decision?”

• What was the impact of that decision? Evaluate your decision.

• Challenge your colleagues by asking ‘why’ questions.

• Encourage your colleagues to challenge you with the ‘why’ questions.

Reading Recovery teachers need to know why they make the decisions they do — and be able to monitor and evaluate the impact of their decisions. Consider this quote with Marie Clay’s theory of literacy processing in mind:

The final test of a theory is its capacity to solve the problems which originated it.
— George Dantzig —

Marie Clay’s tireless inquiry and search for a theory to explain children’s literacy learning certainly has given us direction in our work with children and has the capacity to take us into the future.

I close with the words of Marie Clay about the role of the theory underlying Reading Recovery to prevent subsequent literacy failure.

When we search for early interventions which have sound theoretical arguments for claiming to prevent subsequent failure we are taking a developmental point of view. They must place importance on early experience as a foundation for later experience, as the seed from which complex systems develop, and they must pay close attention to the rapid day-to-day changes over time in children’s ways of processing information in print. …

Learners would need to be able to read and write texts relatively independently in ways that could lead to the learner taking on new competencies through his or her own efforts in the classroom. …

The aim is to enable eight-year old readers to develop the strategic base for the complex literacy processing with which they will need to engage as ten-, twelve-, or sixteen-year old readers. To avoid subsequent limitations an early intervention … must ensure that readers and writers become competent independent processors of new information and that they have ways of going beyond the known when necessary. A treatment programme must create a broad-based foundation of cognitive competencies with the potential to be self-extending at some later time. (Clay, 2001, 2015, pp. 219–220)

References


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**About the Author**

Billie Askew is professor emerita at Texas Woman’s University where she served as a trainer and director of the Reading Recovery Center. Billie worked for more than 20 years in public schools as a classroom teacher, reading teacher, Reading Recovery teacher leader, and administrator. She continues to actively support Reading Recovery as a trainer consultant to the Reading Recovery Council of North America and in many other roles.

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**About the Cover**

When Legend Stevenson entered Reading Recovery, he was a very reluctant reader who lacked confidence and skills needed to be successful. By the time his lessons were discontinued in the fall, however, he was very different. His Reading Recovery teacher, Johnie Cooke, remembers that he could read fluently and actually enjoyed reading, and that he extended his early gains and ended the year above grade level! His mother is grateful for Reading Recovery and continues to thank his teacher. Now a third grader at Adlai Stevenson Elementary School in Cleveland, Legend loves reading and wrestling, and he would like to be an artist when he grows up.