Communicating the Power of Reading Recovery and Literacy Lessons Instruction for Dyslexic Learners: An Ethical Response

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Recently, more and more schools with implementations of Reading Recovery® and/or Descubriendo La Lectura (DLL) and/or Intervention Préventive en Lecture Écriture (IPLÉ) and Literacy Lessons™ have faced challenges justifying their literacy interventions in light of recent policies mandated by dyslexia-specific legislation. Rachael Gabriel's article (p. 25 in this issue) provides us with understandings of the (a) origins of the most recent surge in legislated actions; (b) attributes of the dyslexia advocacy agenda and specific mandates for screening, remediation, and teacher training; and (c) suggestions for productive and ethical responses in the current policy context.

Gabriel suggests that the current legislation addressing issues of dyslexia enacted in multiple states appear, for now, to allow for a range of approaches to meet the instructional needs of dyslexic learners. However, she also highlights the necessity to clarify the potential of any alternative pedagogy for dyslexic learners in direct terms. She suggests that if "educators take up, negotiate, and engage with the specialized vocabulary and ways of understanding dyslexia" (2018, p. 33), the results may be positive for all educators striving to ensure that every child becomes a reader.

Reading Recovery and Literacy Lessons (presented in this article as Reading Recovery/Literacy Lessons) educators have demonstrated remarkable, evidence-based success teaching reading and writing to children experiencing difficulty acquiring beginning literacy in multiple languages (May, Sirinides, Gray, & Goldsworthy, 2016; What Works Clearinghouse, 2013). They have engaged with special education teachers to address the needs of learners presenting diverse challenges by forging implementations of Literacy Lessons, Clay's (2015b, 2016) recommended treatment for children in special education. They do this with success and without compromising the theory and practices of Clay's literacy intervention. It therefore appears that communicating the efficacy of Marie Clay's theory and interventions in relation to policies for dyslexic learners is an essential response given the current milieu

of policy changes. This is a responsible way to create understandings that equip teachers, schools, and parents with knowledge of and confidence in the power of Clay's intervention for any child struggling with beginning reading and writing. It confirms that Reading Recovery/Literacy Lessons teachers demonstrate the "expectation that schools will try to succeed with all children" (Clay, 2015b, p. 219).

This discussion seeks to navigate the terrain of dyslexia advocates presented by the International Dyslexia Association (IDA) and detailed by Gabriel (i.e., the specialized vocabulary, concepts, and theoretical implications) and

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present Clay's theory, interpretation, possible alignment, as well as clear differences, while reinforcing the appropriateness of her instructional and screening procedures for all struggling learners — including dyslexic learners. What are possible alignments? What are points of divergence?

Guiding Questions

Advocates of dyslexia-specific instruction state that dyslexia is treatable, that identifying dyslexic learners early in their schooling and providing early interventions are advantageous as the impacts of intervening early are better for younger children; that identification relies on screening measures; that instruction must be individualized; that there is one best method for teaching dyslexic readers and that is *Structured Literacy instruction* with its focus on

systematic phonics instruction; and that practices must be supported by evidence (Gabriel, 2018; IDA, 2017). Discussion of the following questions guides the exploration of their perspectives and agenda in relation to Reading Recovery/Literacy Lessons:

1. What is the perspective of Reading Recovery and Literacy Lessons educators regarding the inclusion of dyslexic learners in Reading Recovery or Literacy Lessons interventions?

2. Why is Clay's literacy processing theory of reading and writing acquisition advantageous for struggling readers, including dyslexic learners?

3. How might Reading Recovery and Literacy Lessons teachers communicate their pedagogy and make their instructional procedures apparent (i.e., visible) in response to the principles of dyslexia-specific instruction?

At the first-grade level, children having the most difficulty with literacy learning in their age cohort are served in Reading Recovery, DLL, or IPLÉ. Beyond first grade, children in need of individual instruction to acquire a literacy processing system in English, including English language learners and older children who may have received Reading Recovery lessons in Grade 1, are served in Literacy Lessons. (See Endnote 1 for sources describing Literacy Lessons and its effectiveness). For the purposes of this article, the term Reading Recovery will be used repeatedly to represent the theory and procedures created by Marie Clay for her early intervention in multiple languages (English, Spanish, and French) and Literacy Lessons for her instructional treatment offered special education students. (While Literacy Lessons is also available for English language learners and the suggested references provide information about their treatment, they are not the focus of this discussion.)

1. What is the perspective of Reading Recovery and Literacy Lessons educators regarding the inclusion of dyslexic learners in Reading Recovery or in Literacy Lessons?

When one asks about the appropriateness of including 'dyslexic' children in Reading Recovery/Literacy Lessons, we must offer an unequivocal, affirmative response. Indeed, we might question how this label (dyslexic) was determined and suggest that an individually designed series of lessons would provide rich diagnostic information to assist with determining the appropriateness of such a label. To be sure, Clay would have issues with both the current, consensus definition of dyslexia—as it is not defended in the research literature—and with identification of learners' needs on the basis of screening assessments alone. Additionally, she would challenge the practice of using a label that suggests all learners' difficulties are similar and mandates one path to literacy acquisition.

In contrast, Reading Recovery is a 'response to intervention' offered to the lowest-achieving children in their first-grade cohort irrespective of their personal circumstances, assigned labels, school history, or perceived deficits. In considering the appropriateness of Reading Recovery for learning disabled (LD) children, Clay states that "Reading Recovery is an intervention

- which does not depend on a discrepancy concept,

- which does not depend on a discrimination between LD children and other poor readers, and

- which does not depend upon a discrimination between organic-produced and event-produced behaviours." (Clay, 1987; 2007, pp. 62–63)

Dyslexia is defined as a specific learning disability that is naturally occurring, or neurobiological (organic-produced) (IDA, 2002). Therefore, Clay's Reading Recovery, inclusive of all the lowest struggling learners, is an appropriate intervention for dyslexic learners in the first grade. Literacy Lessons is also an appropriate treatment for dyslexic children in elementary grades who are struggling to secure an initial literacy processing system. (The grade levels of Literacy Lessons children vary; annual reports suggest that they are ordinarily in Grades 2–4).

Reading Recovery and Literacy Lessons offer individually planned and individually delivered instruction that "provides the intensive care that results in the fastest recovery of a normal trajectory of progress for any child" (Clay, 2016, p. 19). Our teachers plan lessons accounting for the learner's specific strengths and limitations in regard to literacy processing and "devise tasks which lead the particular individual with particular patterns of responding slowly and gradually from where he or she is towards the fully operative model of normal reading behaviours which is the goal" (Clay, 1987; 2007, pp. 60–61). This commitment to individual, responsive instruction for students receiving either an early intervention (Reading Recovery)

or a later treatment to establish a literacy processing system (Literacy Lessons) is shared widely by many educators addressing the special needs of struggling learners. (See IDA, 2016; Vellutino, 2010).

More importantly, Reading Recovery, with its period of up to 20 weeks of individual instruction, serves as a pre-referral for further assessment and ongoing, special support. This decision is based on documented performance collected in the context of diagnostic teaching over an extended period of time, and this is a more reliable approach to the identification of learner needs than screening measures listed on state policy documents that provide a sampling of literacy competence.

In respect to screening and instruction, Clay (2016) reports that two variables considered important in the research of children with difficulty learning to read are phonological awareness and speed of naming letters. Litt (2003) examined outcomes on such measures for children served in Reading Recovery and reports that a "large number of children entering with low scores on either phonological awareness or naming speed, or both, *did* successfully complete their series of lessons. Their performance on all measures changed significantly between entry and exit, and they retained good scores in a short-term follow-up study. Reading Recovery teachers were able to design individual lessons for the children and at exit from the intervention many of them no longer counted as having a 'deficit'" (Clay, 2016, p. 171).

The following discussions of Clay's literacy processing theory and related instructional procedures provide clarification and assurances of how powerful Reading Recovery/ Literacy Lessons are for dyslexic learners. An additional goal is elaboration of Adam's (1990) evaluation of Clay's theoretically based intervention offering instruction that "has been methodically designed to establish and secure the whole complex of lower-order skills on which reading so integrally depends" (p. 412).

2. Why is Clay's literacy processing theory of reading and writing acquisition advantageous for struggling learners, including dyslexic learners?

Clay's literacy processing theory is distinctly different from the theory of reading and instruction promoted by advocates of the dyslexia agenda. Concomitantly, Clay's theory of learning and her developmental view of learners

experiencing transformational changes over time in early reading and writing performance also differ from the apparent underlying theories of those embracing dyslexia-specific approaches to instruction. To understand the advantages of Reading Recovery/Literacy Lessons for participating children, including dyslexic learners, it is important to review and contrast the alternative theories and clarify the benefits of instruction reflecting a complex theory.

According to the consensus definitions of dyslexia and dyslexia-specific instruction that IDA has promoted and which now appear in state legislation (Gabriel, 2018, p. 28), the critical factor in labeling a reader dyslexic is a specific learning disability that is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities (IDA, 2018; Gabriel). Thus, advocates of dyslexia-specific programs seek to mandate Structured Literacy approaches, the plethora of which offer explicit, systematic, phonics instruction (letter, sound, and word learning) delivered in a standard way as the only approach to beginning reading instruction for dyslexic learners.

Structured literacy approaches reflect a critical, or single, variable theory of literacy acquisition (visual information) and a deficit model of learning and remediation, i.e., a singular focus on the perceived deficit. The curriculum— a one-fits-all curriculum—is carefully sequenced, and the expectation for the learner is mastery of content that progresses in a logical and fixed order, step by step, i.e., from simple to more challenging. This instruction aims to remediate the child's deficit in phonological processing, and new content is consistently reviewed to aid memory. Monitoring for mastery of new learning is indicative of a behaviorist's theory of learning.

In contrast, Clay's (2015b) literacy processing theory is a complex theory that includes both reading and writing. It accounts for many parts of the brain engaged in scanning print, perceiving information, integrating information from all available sources (visual, motor, auditory, verbal), and making decisions that serve reading for meaning. Clay describes this in-the-head activity as complex networks of working systems, or neural networks, or cell assemblies "which search for and pick up 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" (Clay, 2015b,

p. 1). The neural networks (perceptual and cognitive systems) for literacy do not exist before the child is introduced to beginning reading and writing. These networks are constructed by the young reader as a result of reading and writing meaningful, continuous texts with appropriate teacher support. This is the case for all literacy learners.

Clay's theories of literacy processing and instruction are based on her extensive explorations of young learners who after 1 year of school had successfully gained reading and writing proficiency. In regard to their specific reading behaviors, this research revealed that

> successful readers worked sequentially across text giving detailed attention to phrase, word, letter, cluster, and letter-sound possibilities, and used information from story, sentence, and between-sentence sources. Such research findings could not be accounted for by a theory of progress in reading which explains the behavior in terms of increasingly rapid recall of words, or increasing automaticity. No fixed top-down or bottom-up sequence was detected. When the readers switched to problem-solving mode they entered the problem from any one of several information sources. (Clay, 2015b, p. 52).

This research confirms the complexities of literacy learning, the discovery of unique, individual paths to success that dispel notions of a standard curricular plan for all learners, and the very different reasons/causes for learning difficulties. Thus, Reading Recovery instruction aims to assist all struggling learners to acquire the knowledge and processing abilities of average beginning readers. Teachers expect diverse challenges and are equipped to accommodate instruction for each individual. (See Askew, p. 5 in this issue.)

With understandings of complexity, Reading Recovery/Literacy Lessons teachers support readers in developing and strengthening processing behaviors, including how to predict, monitor, search, cross-check, confirm, and evaluate while reading. Novice readers "cannot do this within a narrow strategy of sounding out words or mere memory for known words" (Clay, 2015b, p. 198). Nor will such strategic behaviors result from the reading of contrived, controlled texts.

When reading for meaning, the learner's decision making, or processing (e.g., predicting, searching, monitoring, confirming), involves the use of multiple information sources.

As Clay (2015b) explains:

> [T]he reader can potentially draw from all his or her current understanding, and all his or her language competencies and visual information, and phonological information, and knowledge of printing conventions, in ways *which extend both the searching and linking processes as well as the item knowledge repertoires*. (p. 224)

Thus, Clay's theories of literacy processing, literacy acquisition, and instruction reflect the complex nature of literacy and give attention to multiple variables (processing variables and knowledge sources) including, but not limited to, the single variable of visual information. Clay offers an example of such processing in the following report of one young reader's thinking, analyzing, and discovery of meaning in reading about something eating 'the fresh green leaves.'

> "The child said: ' … the f- fish … fresh
>
> Now what could be fresh?'
>
> She looked at the illustration.
>
> Returning to the print and sounding out the letters she said, 'gr … ee … green leaves.'
>
> Returning to the beginning of the phrase she combined her findings:
>
> '… the fresh green leaves.'

To describe this reading as a left-to-right sounding out of the phonemes in words is to ignore how the reader used different kinds of information to get the message from that text" (Clay, 2015b, p. 121).

Visual information (i.e., knowledge of the alphabetic principle, phonological information, and decoding skills) is important, and the development of phonological awareness and acquisition of knowledge of letters, clusters, sounds, syllables, words, and decoding strategies are addressed with each learner daily in both Reading Recovery and Literacy Lessons. This instruction is offered within the decontextualized component of the lesson (the time designated for letter and word work), as well as during the writing component of the lesson, and during each text reading activity (familiar rereading, the running record book, the new text). The goals of this instruction include both the acquisition of items of knowledge (letter features, letters, chunks, clusters, syllables, words, phrases, and punctuation) that give "the reader access to all other

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sources of information" (Clay, 2015b, p. 173) as well as the integration of this new information in working, or processing, systems that support reading for meaning.

Instructional attention to the visual side of literacy extends across the series of lessons in procedures addressing: locating responses, learning to look at print, letter identification, taking words apart while reading, and breaking which sharpens perception (Clay, 2015b, 2016). The initial and essential learning for literacy development is referred to as foundational by Clay (2016) and focuses on the novice reader learning

- how to assemble stories

- that print can be written

- that attention must follow the rules of direction

- that symbols have only one orientation

- how to switch attention out to the page and back into the head

- how to work with complex information and come to decisions. (Clay, 2015b, p. 137)

Additionally, important early, perceptual learning that supports decision making involves "movement left to right across words and lines of print, and matching oral and visual patterns" (Clay, 2015b, p. 122). Thus, from the earliest reading experiences, the learner's visual perception (adjusted for the acts of reading and writing), and knowledge of the visual features of printed language (directionality, orientation, sequential presentation of letters within words, words within sentences), and one-to-one matching support proficient processing. Monitoring, confirming, self-correcting on the basis of these rudimentary understandings may be observed in the oral reading of texts at the easiest levels of beginning reading.

Extending the learner's knowledge of items is the foci of instructional procedures addressing letters of the alphabet, introducing multiple ways to break words into letters or clusters of letters, and multiple ways to analyze words in text, i.e., taking words apart while reading. More specifically, teachers

- teach letters

- develop phonemic awareness daily in writing

- attend to the sounds of individual letters (especially when they are hard-to-hear sounds)

- teach how to use known words to construct new words in writing

- encourage flexible use of letter-sound relationships, and

- celebrate the use of chunks of information. (Clay, 2016, p. 148)

The specific content and word analysis strategies taught are based on research revealing the analyses employed by competent readers during text reading (Clay, 2015b; Kaye, 2006). Clay (2016) confirms that the behaviors of proficient readers showed that "their complex neurological networks operate on word-solving in diverse ways" (p. 149) most often relying on chunks, or clusters of letters. They do not apply a narrow, letter-by-letter sounding out process to identify words; rather, proficient readers analyze words in flexible ways to identify a broad range of words, including those with sound sequences predictable from the letters, words with alternative letter-sound correspondences, and words "better described as orthographic or spelling sequences rather than sound sequences" (Clay, 2016, p. 143). To support flexible word analyses abilities needed for real reading and writing (i.e., spelling), Reading Recovery/Literacy Lessons teachers engage students in reading authentic texts and writing personal stories. These goals present a clear point of divergence with the phonological-deficit approach that reinforces students' acquisition of predictable sound-symbol relationships by controlling texts, as in contrived texts.

Reading Recovery teachers do give substantial attention to developing phonemic awareness and the process of linking sound sequences to letter sequences, defined by some as phonics instruction (Clay, 2016). They realize that this task involves coordinating two complex sets of operations — sound sequence analysis of spoken words and visual letter sequence analysis. These tasks are

addressed within the daily writing activities that provide a focus on the sounds of discrete phonemes within words and how to represent them in print. This establishes phonemic awareness.

The task of Hearing and Recording Sounds in Words supports a consistent, first-to-last analysis of words. Breaking words into letters or letter clusters contributes to "a general awareness of how to attend to words and to the understanding that words are made up of certain letters in a fixed order" (Clay, 2016, p. 169). As a result of these activities, the child learns to

- analyse the sounds of a word he needs to write

- attend to the sounds within words while he is reading them, and eventually

- link the analysis of letters and letter clusters in a word he is scanning from left to right, with a word he is hearing in his head (from beginning to end). (Clay, 2016, p. 145)

To help struggling learners acquire complex neural networks for processing text, teachers base instruction on each individual's profile of strengths, the child's competent systems, and known information, while supporting new tentative learning (Clay, 2015b). Thus, the instructional model "works on the assumption that strengths must be enlisted to support whatever is difficult and that what is difficult has to be learned" (Clay, 1997; 2007, p. 61). In regard to planning for instruction addressing visual information and word analysis skills:

- The child's current skills should determine the sequence.

- The word segments attended to should be those used by good readers at this level of learning to read.

- The sequence should be determined by psychological rather than logical factors. (Clay, 2016, p. 147)

Thus, instruction that builds new learning on the individual's existing proficiencies creates a psychological curriculum that is supportive of accelerated learning.

Teachers create opportunities for this development and learning by choosing texts carefully and scaffolding judiciously. They understand that the perceptual and cognitive systems are constructed by the learner as a result of his independent efforts in reading and writing texts of

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appropriate challenge. Thus, teachers work from a constructivist theory of learning. Knowing that they cannot teach the learner how to orchestrate the complex neural systems for processing, they serve as co-constructors who support the child's learning through their interactions and contingent teaching (Doyle, 2015). This is in stark contrast to a curriculum implied by a deficit model of the learner and the need to teach for mastery of literacy-related skills in a defined sequence, reflective of a behaviorist's theory of learning.

Reading Recovery/Literacy Lessons teachers embrace Clay's developmental view of learners and thus, the literacy processing behaviors observed on the earliest levels of text reading are acknowledged as the "foundation for later experience as the seed from which complex systems develop" (Clay, 2015b, p. 219). Over time, what appear initially in running records of oral text reading as primitive strategies for processing print become more and more effective, approximating the behaviors of a mature reader. Thus, the model of progress for the constructive learner is one of transformations, or change over time, in competencies observed in reading and writing demonstrated by more effective and more independent efforts.

This ability to read and write successfully with relative independence creates the opportunity for the learner to take "*on new competencies through his or her own efforts,*" (Clay, 2015b, p. 219), and this is the genesis of a self-extending system. Most importantly, the self-extending system leads to ongoing development following the period of individual instruction, and Clay refers to this as the "required insurance for subsequent progress" (p. 219).

In regard to development of efficient processing of visual information specifically, Schwartz & Gallant (2011) suggest that efficient visual processing is the end point of a

complex learning and development process. (See Endnote 2). What teachers expect and monitor are changes over the series of lessons in the learning of new information and items which expand the information sources (e.g., visual language information), and most critically, enhanced proficiency in

- *knowing how to use this knowledge to read and write new messages, and*

- *knowing how to expand the literacy processing system while doing this.* (Clay, 2015b, p. 219)

In summary, a direct response to the question regarding the appropriateness of instruction accounting for a complex theory of literacy for all struggling learners is offered by Clay (2015b):

> *[L]iteracy professionals across countries operate effectively using a skills-based, surface behavior approach; my argument is that a theory of literacy processing is, to date, more helpful for teachers of young children having severe difficulty learning to read and write.* (p. 235)

This is due not only to the complex, neural development that instruction reflecting her complex theory supports but also in the realization that instruction supporting a literacy processing system is both transferable to the classroom context and preventative of ongoing, learning difficulties, "not merely a temporary catch-up on items known or skills mastered" (Clay, 2015b, p. 236).

Thus, Clay's theories of literacy, literacy acquisition, learning, and instruction reflect the complex nature of literacy and instruction that gives attention to multiple aspects of proficient reading, not the single variable of visual information (learning letters, sounds, and words). Reading Recovery/Literacy Lessons interventions offer children access to

- one-to-one lessons tailored to the child's unique profile of strengths and needs;

- instruction addressing complex, in-the-head literacy processing strategies for reading and for writing;

- development of literacy processing and word analyses skills (including phonics) used by average-progress readers and transferable to classroom literacy programs;

- acceleration of learning allowing students to achieve substantial progress and for Reading Recovery students to catch-up with their first-grade peers; and

- acquisition of a self-extending system of learning that is crucial to preventing future difficulties.

These attributes not only align with the demands of Structured Literacy (e.g., individualized with attention to decoding skills) but also establish a broad-based foundation of neural processing systems, or cognitive competencies, both *"preventive of subsequent difficulties"* (Clay, 2015b, p. 217) and critical to literacy growth beyond early reading/writing. Thus, Reading Recovery/Literacy Lessons teachers offer the instruction that the National Reading Panel (2000) described as the most beneficial in their summary statement: "By emphasizing all of the processes that contribute to growth in reading, teachers will have the best chance of making every child a reader" (p. 2-97).

3. How might Reading Recovery/Literacy Lessons teachers communicate their pedagogy and make their instructional procedures apparent (i.e., visible) in response to the principles of dyslexia-specific instruction?

The following discussion presents a review of six principles of Structured Literacy detailed by IDA (2018) and Gabriel as requisite attributes of instruction for dyslexic literacy learners and suggests how Reading Recovery/Literacy Lessons teachers may consider each component in relation to Clay's literacy processing theory and instructional procedures. The goal is to make Reading Recovery/Literacy Lessons pedagogy "visible by engaging with the emerging vocabulary of dyslexia" (Gabriel, 2018, p. 33) in efforts to identify corresponding perspectives. This comparison also extends descriptions of the principles in order to account for the complexity of a literacy processing theory and Clay's alternative theories of learning and literacy acquisition. This discussion is a helpful way to demonstrate how and why our interventions meet and even exceed the intent of an instructional approach deemed critical for dyslexic learners. For the purposes of this review, the order of presentation is Comprehensive and Inclusive, Diagnostic Teaching, Direct Instruction, Systematic and Cumulative, Synthetic and Analytic, Simultaneous and Multisensory.

The components of each principle, as detailed by the IDA (2018) and presented by Gabriel (2018, p. 31), are repeated initially followed by discussion of corresponding concepts apparent in the theory and pedagogy of Reading Recovery/Literacy Lessons.

Comprehensive and Inclusive

Structured Literacy

All levels of language are addressed, often in parallel, including sounds (phonemes), symbols (graphemes), meaningful word parts (morphemes), word and phrase meanings (semantics), sentences (syntax), longer passages (discourse), and the social uses of language (pragmatics).

Reading Recovery

This definition resonates with our understandings of the language hierarchy and Rumelhart's interactive theory of reading depicting simultaneous, parallel processing of the range of information sources available to the reader (Rumelhart, 2013). As the beginning reader gains awareness and proficiency, in-the-head working systems scan and integrate information from all levels of the language hierarchy when processing text. Therefore, giving more value to any one level of the linguist's hierarchy of language information is unproductive and may be misleading. The notion of 'often in parallel' used in the definition above is unclear as "Rumelhart proposed that information from more than one source is needed to confirm and reject hypotheses arising from any single source" (Clay, 2015b, p. 122). "It is agreement across information sources that confirms a good decision and incongruity that signals the need for more searching, confirming, and perhaps correcting" (Doyle, 2013, 647).

Reading Recovery teachers provide support for learners to acquire new knowledge (i.e., letter and word knowledge, syntactic knowledge, semantic knowledge) and to "*gradually come to know how and when each kind of information can help with decisions"* (Clay, 2015b, p. 111) from the earliest lessons. Thus, instruction is intentionally comprehensive and inclusive. The growing accumulation of language knowledge and its integration in working systems to process text is evaluated daily on running records which allow for the analysis of the reader's use of semantic, structural, and visual information. Comprehensiveness, in the Reading Recovery context, is further exemplified by instruction that is "directed to a curriculum of psychological processes (perceptual and cognitive), linguistic competencies and social practices for working with written language" (Clay, 2016, p. 15).

Diagnostic Teaching

Structured Literacy

The teacher must be adept at flexible or individualized teaching. The teaching plan is based on careful and continuous assessment of the individual's needs. The content presented must be mastered step by step for the student to progress.

Reading Recovery

Reading Recovery/Literacy Lessons teachers provide individualized, one-to-one instruction in a series of lessons paced and sequenced for each child according to an initial assessment (*An Observation Survey of Early Literacy Achievement,* Clay, 2013, see Endnote 3), daily assessments (e.g., running records), records of known items (letters and words), charts depicting quantities of known items, and close observations of reading and writing behaviors recorded daily. On the basis of such information, teachers adapt instruction moment-to-moment as needed to support accelerated learning. Progress is revealed as learners move through a gradient of texts of increasing difficulty demonstrating growing proficiency in processing texts effectively and independently, and this progress is monitored and recorded daily and weekly. In regard to specific content to be mastered step by step, teachers do not rely on a set curriculum but rather build on each individual's strengths to support the development of an effective processing system for reading and for writing. This reflects a model of literacy acquisition valuing the learner's changing and developing competencies to problem solve during reading and writing, in place of a compendium of skills to be mastered in a fixed sequence.

Reading Recovery teachers consider all lessons in a child's series of lessons to be diagnostic and to provide specific records of learning and depictions of strengths and needs critical for decision making, leading to recommendations for a child following this early intervention. This includes the recommendation for ongoing specialist support. The record of performance over time is a more reliable document of a child's performance than a sampling of performance collected on a screening measure administered once. This recommendation is supported by Vellutino (2010) whose studies revealed the importance of "using an intervention-based approach to diagnostic assessment and equally strong support for the use of early intervention as a means of preventing long-term reading difficulties in children who might otherwise be classified as 'reading disabled'" (p. 7).

Direct Instruction

Structured Literacy

The inferential learning of any concept cannot be taken for granted. Multisensory language instruction requires direct teaching of all concepts with continuous student-teacher interaction.

Reading Recovery

"First, in strict definitional terms Reading Recovery is not a program of direct instruction because it aims to improve the in-the-head processing initiated by the child in reading and writing activities (on the basis of behavioral evidence) and does not begin with a set curriculum to be delivered 'directly' by the teacher" (Clay, 1994, p. 132). However, Reading Recovery teachers do not leave the child's discovery of new knowledge to chance; rather, they offer substantial assistance to support new learning. They provide explicit lessons, demonstrate tasks to avoid complex teacher talk and ensure understanding, engage learners in guided practice, observe performance, provide feedback, and scaffold as needed. This approach to instruction, performance assisted by a more knowledgeable other, reflects theoretical understanding of the child constructing his own learning through quality interactions with expert teachers (Clay, 2015b).

Moreover, there is a specific structure to each lesson. Teachers adhere to a standard framework for lessons which ensures daily attention to the subcomponent skills (e.g., letters, words, features of words, word analysis) and a broad-based range of problem-solving strategies in a literacy processing model (Clay, 2015b). Importantly, the lesson activities "accommodate the changes in teaching that are needed as the children become more competent" (p. 221). Instructional foci, text materials, specific activities, and expectations are adjusted on an ongoing basis to match the learner's increasing competencies in both reading and writing.

Systematic and Cumulative

Structured Literacy

Multisensory language instruction requires that the organization of material follows the logical order of language. The sequence must begin with the easiest and most basic concepts and progress methodically to more difficult material. Each concept must also be based on those already learned (i.e., cumulative). Concepts taught must be systematically reviewed to strengthen memory.

This description suggests that instruction is systematically planned according to a logical ordering of content reflecting the language hierarchy; and thus, the initial focus is on the smallest features of print, individual letters, i.e., their identity and their sounds. The goal is mastery of the content with the expectation that many items must be memorized by the learner.

It appears that this perspective of a systematic approach to phonics instruction is further clarified by the following details stated by Armbruster, Lehr, & Osborn (2003) in their document, *Put Reading First:*

> Effective programs offer phonics instruction that
>
> • helps teachers … instruct children in how to relate letters and sounds, how to break spoken words into sounds, and how to blend sounds to form words;
>
> • help students understand why they are learning the relationships between letters and sounds;
>
> • helps students apply their knowledge of phonics as they read words, sentences, and text; helps students apply what they learn about sounds and letters to their own writing; can be adapted to the needs of individual students, based on assessment;
>
> • includes alphabetic knowledge, phonemic awareness, vocabulary development, and the reading of text. (p. 16)

Reading Recovery

Reading Recovery/Literacy Lessons teachers are trained to be expert observers and proficient planners of appropriately sequenced instruction, and they control the specific content of daily instruction addressing letters, sounds, phonetic principles, and word analysis. They base the organization of instruction addressing visual information on each individual child's current, observed strengths and competencies. In that instruction engages the individual's strengths to introduce new learning, the sequence is ordered by psychological (i.e., within the learner) rather than logical, pre-determined factors, such as a curriculum of phonics objectives delivered in a set sequence. In this way, instruction accommodates each individual by aligning the teacher's support with the learner's specific, unique needs.

Teachers give extensive attention across the series of lessons to establishing the learner's understandings of phonemic awareness and facility with the alphabetic principle, i.e., acquiring sound-symbol relationships and applying this knowledge in reading and writing. Of paramount concern is development of visual knowledge and visual processing strategies used by good readers at this level of literacy development. This is in sharp contrast to delivering a compendium of discrete skills.

Within the various sets of procedures addressing access to and use of visual information, specific sequences of instructional foci are identified by the following labels: *Early learning, Beyond the earliest levels, Later learning, Later in the learning sequence*, or *Later as the child gains control*. A succinct presentation of changes in respect to letter and word identification and letter-sound analysis is found in Clay's outline of changes teachers might observe and address from early (I) to middle (II) to late lessons (III) summarized below.

Discriminating all the letters and developing fast recognition:

I. The child learns to identify letters by some means. He breaks up known words (from reading or writing) into letters and identifies some of these. He is also learning that letter orientation and the order of letters in words are important.

II. Fast recognition of letter-forms with fast linking to sounds is observed. The child breaks up words into single letters, letter clusters, onsets and rimes, and larger chunks. He notices that the same letters or clusters are found in different words so can begin to use analogy.

III. The child rapidly identifies letters embedded among others. He understands more about how letters and letter clusters make up words and is able to use this knowledge to take words apart in flexible ways, on the run and on his own. (Clay, 2016, pp. 45–46)

Hearing and Recording Sounds in Words; Using sound-to-letter links that becomes consistent and rapid:

I. The child gets some phonemes, at first in any position, but shifts to hearing the initial sound and searches for the first letter.

II. Most consonants are heard and the child knows most letters. Now he usually works left to right on letters and first-to-last on phonemes. He is gaining independence on regular spellings.

III. The child is able to hear most phonemes in words without help. He uses phonological analysis and demonstrates increasing awareness of regular orthographic features. He notices consistencies in the way the sounds of language are recorded. (Clay, 2016, p. 46)

Additional examples of careful sequencing of instruction are found in discussions of specific procedures for most instructional procedures. Examples are found within each of the following in the text, *Literacy Lessons Designed for Individuals* (Clay, 2016):

- Introducing new material, keeping tasks easy (p. 36)

- Establishing foundational behaviors (pp. 49–59)

- Expanding knowledge of print (pp. 59–76)

- Establishing ways of solving words for writing (pp. 86–101)

- Using known words to construct new words (pp. 105–106)

- Developing an effective processing system (pp. 133–142)

- Taking words apart while reading (pp. 146–164)

Further refinements to ensure an appropriate sequence in teaching word analyses skills, based on generalizations gleaned from the research of early literacy (Clay, 2015b), are these understandings:

- Initial letters can usually be the starting points for a child's detailed analysis of words, although final letters do capture a child's attention (the spaces between words make the first and last letters easier to see).

- Inflections added to words are easy to recognize.

- An early achievement must be to attend left to right across a word.

- Consonants are quite easy to deal with, although sometimes hard when clustered.

- It is easy to discriminate *the* from *hippopotamus* and not necessarily easy to discriminate *the* from *her*.

- There are some very hard-to-hear consonants and some rather hard vowel patterns to be learned. (Clay, 2016, p. 147)

There is one important distinction regarding any recommended sequences for Reading Recovery/Literacy Lessons teachers, and this is the important need to be responsive to each individual child, basing instruction on the observed strengths, and teaching for acceleration. "Teaching is an immediate consequence of some prior behavior of the child" (Clay, 2016, p. 24); and therefore, instruction reflects the teacher's decisions regarding the next step in an individual's path to literacy, based on behavioral evidence, and this does not entail adherence to a prescriptive curriculum.

What part does memory play in a child's journey to reading and writing proficiency during early literacy acquisition? On one hand, literacy processing is "much more complicated than identifying a word by recalling it from a memory bank" (Clay, 2015b, p. 79). Rather than relying on memory, the learner must work flexibly to solve words for reading and writing, and instruction focuses on helping learners discover ways to analyze, identify, and write words using flexible strategies. On the other hand, "[p]oor recall must be overcome, otherwise the earliest, easiest and most basic linking of oral language with print will be very difficult for the child." But, "[r]emembering is more than just recalling. … It is about decision-making on a complex task" (Clay, 2016, p. 176).

Reading Recovery/Literacy Lessons teachers have a range of procedures to support the needs of learners who find it hard to remember, and it starts by catching the attention of the learner's brain. "What it has attended to (and acted upon) is what the brain is likely to remember" (Clay, 2016, p. 176). A primary goal is helping the child establish personal approaches to learning how to learn and remember (a letter, a word), and this instruction aims not only at securing memory of specific items but also at establishing independent strategies for the child's ongoing attempts to add new content to memory.

Synthetic and Analytic

Structured Literacy
Multisensory, structured language programs include both synthetic and analytic instruction. Synthetic instruction presents the parts of the language and then teaches how the parts work together to form a whole. Analytic instruction presents the whole and teaches how this can be broken down into component parts.

Reading Recovery
Word analysis skills developed in Reading Recovery/Literacy Lessons are those used by proficient, young readers in the act of reading authentic, meaningful materials. Because this research reveals that proficient readers do not analyze words in text by sounding out letter-by-letter (Clay, 2015a, 2015b; Kaye, 2006), synthetic sounding out procedures for decoding words in text are not expected or reinforced. A sequential sound analysis of words is accomplished in writing activities using specific procedures referred to as Hearing and Recording Sounds in Words.

Further delineation of instruction strengthening the young reader's facility with the alphabetic principle is offered by Doyle and Forbes (2003) in a response to recommendations presented by the National Reading Panel. (See Endnote 4). Key points from that article helpful in considering this issue include these:

- Reading Recovery instruction accounts for the complex prerequisite learning needed for efficient visual analysis, extends the study of phonic elements beyond basic letter-sound associations, integrates the use of letter sequences and sound sequences with the full range of information sources available in text in order to develop the learner's literacy processing system, and includes attention to the power of writing. (pp. 8–9)

- Attention to letter work and word work (analysis) comprises one component of the daily lesson; however, this work is not confined to isolated, decontextualized activity. Reading and writing activities offer productive opportunities to reinforce letter identification, sound analysis, etc. (p. 10)

- Reading Recovery instruction gives direct attention to building extensive knowledge of the letters of the alphabet (e.g., visual perception, identity, sound) and focuses on use of letters and the sounds of letters in both reading and writing. (p. 12)

- In addition, instructional activities with words build extensive phonological awareness that includes phonemes (single letters or sounds), onset and rime, and syllables. As a result of explicit and systematic

word study, learners gain control of letters, diagraphs, clusters, prefixes, suffixes, root words, and multisyllabic words. (p. 12)

Analytic instruction, using analogy to analyze unfamiliar words, is introduced and supported.

> This process is initiated by using predictable letter-sound sequences, the specific letter clusters known by the child. The teacher bases instruction on analyses of the child's known words and known letter clusters revealed in both reading and writing activities and also observes the child closely to confirm what the learner is attending to and gaining from the teacher's demonstrations. Gradually, the teacher engages the child in working with harder analogies. The child continues to manipulate magnetic letters, to work with the known flexibly, and to gain important generalizations for analyzing words. (Doyle & Forbes, 2003, p. 13)

Clay (2015b) suggests that as proficient readers analyze words in larger units, recognizing clusters of letters, these units are processed as a single pattern and this allows faster visual processing.

Awareness of a wide range of phonological information is developed in Reading Recovery/Literacy Lessons in concert with growing facility with the full range of knowledge sources available in text (letter features, letters, letter clusters, words, language structure, and semantics). Instruction is based on daily assessments, accommodates for individual's previous learning and current needs, accounts for prerequisite behaviors and concepts, and shifts the instructional focus from items to strategic processing immediately.

Simultaneous and Multisensory (VAKT)

Structured Literacy
Teaching uses all learning pathways in the brain (i.e., visual auditory, kinesthetic, tactile) simultaneously or sequentially in order to enhance memory and learning.

Reading Recovery
Reading Recovery/Literacy Lessons differ from multisensory programs (e.g., Orton-Gillingham) in design; and therefore, the label multisensory is not generally associated with them. However, Reading Reading/Literacy Lessons teachers are cognizant of when and how to engage all

learning pathways to the brain via the simultaneous use of multisensory avenues. There are clear purposes supported by neuroscience and related to ensuring the learner's focus and attention by engaging in experiences that create novelty, interest, and motivation (Lyons, 2003; Rabin, 2017).

Reading Recovery/Literacy Lessons teachers approach the instruction of both items and processes using multisensory techniques (VAKT) to enhance learning and memory. The following from Doyle and Forbes (2003) provide an example of this in teaching letters of the alphabet:

- The instructional procedures allow teachers to accommodate for learners' needs by using multisensory approaches to organize and adjust the process of visual exploration. Applying research in the development of perceptual processes in early childhood, Clay (2015a) suggests that teachers provide guided practice in using movement (of the hand) and language (verbal descriptions) to learn letter formation, and this fosters remembering. (p. 10)

- Magnetic letters are used to facilitate grouping and categorizing activities, important tasks for promoting the rapid discrimination of letters needed for text reading (Clay, 2015b). A range of materials (e.g., multidimensional, multicolored, felt letters) and mediums (e.g., pens, chalk) are suggested to allow over-learning and flexibility. (p. 10)

Likewise, the engagement of multiple sensory avenues are suggested in procedures for isolating discrete phonemes to complete a sound analysis using Elkonin boxes, scanning a word in serial order supported by movement, learning new words by rehearsing their construction using multicolored magnetic letters, attending to and manipulating word parts on a vertical surface (e.g., a prefix or suffix), finding and using chunks of information on words in isolation or in text, taking words apart while reading by manipulating a masking card, and reassembling a cut-up sentence. To involve multiple pathways, Clay (2016) suggests teachers

> [c]reate varied learning opportunities that involve looking, hearing, saying, manipulating, moving, changing colours, changing pens and pencils, changing textures, changing surfaces (horizontal and vertical), and changing books. (p. 176)

A closely related concept, which also involves many regions of the brain working together, is the use of movement to support mental processing (Lyons, 2003). To

clarify, Lyons states that by directing a child's attention through movement as in the following examples, a teacher can support and speed up a child's development of literacy skills:

- taking the child's hand and pointing his finger to guide the directional behavior across a line of print;

- guiding the child's movements to write his name;

- clapping the child's hands to help her hear syllables in a word;

- guiding the child's hand while providing a verbal description of movement she is using to form a letter. (p. 38)

Reading Recovery/Literacy Lessons teachers have clear, research-based reasons for enriching many instructional procedures with multisensory techniques and understand the central role of movement in literacy learning discussed by Lyons.

Summary

This article addresses challenges raised by Gabriel resulting from recent legislative initiatives creating new state policies for the literacy education of dyslexic learners. The descriptions of theory and instructional procedures are presented to make Reading Recovery/Literacy Lessons pedagogy 'visible' to others and to communicate the efficacy of Clay's work for all struggling readers, including dyslexic learners. Since recommendations forthcoming from the IDA, which are driving policy decisions, identify phonics-based instruction as the best and only method for teaching reading to dyslexic students, this discussion has highlighted the emphasis placed on visual information within the instructional procedures applied by Reading Recovery/Literacy Lessons teachers.

In communicating the pedagogy of Reading Recovery/ Literacy Lessons in terms associated with the Structured Literacy approach, with the goal of ensuring understanding, it is ethical to delineate both corresponding aspects and clear differences. It is additionally important to confirm that Marie Clay's literacy processing theory is firmly rooted in extensive research of the reading and writing behaviors of proficient learners acquiring initial literacy. Clay's carefully planned pedagogy, which is dependent upon the observations and skills of carefully trained teachers, is designed specifically for struggling readers. Because instruction develops cognitive and perceptual systems for processing print, careful and supportive attention is given to complex aspects of literacy acquisition. Each individual's strengths and needs receive careful consideration and each child receives an individualized series of lessons. This creates the 'intensive care' that is so powerful in addressing the needs of any learner and in assuring parents and teachers.

> Dyslexia-specific programs are promoted to strengthen a perceived deficit in the learner — poor phonological coding. … Clay's complex literacy processing theory is multifaceted and accounts for complex, neural working systems for reading and writing involving all available information sources.

The initial assertion of this article is that there is no question about the appropriateness of Reading Recovery/Literacy Lessons for teaching children considered dyslexic to read and write and for meeting the demands of new policies. Reading Recovery/Literacy Lessons teachers offer profound opportunities for any child struggling to acquire initial reading and writing proficiency. Clay was very clear that labels should not deter children from early intervention irrespective of the severity of their challenges; and in fact, the substantial period of diagnostic teaching is advantageous both for preventing early failure and for identifying children at risk of ongoing literacy difficulties and in need of special education services. In regard to specific learning disabilities (and the possibility of organic, constitutional factors which the definition of dyslexia implies), Vellutino references Clay's perspective and affirms that Reading Recovery "holds promise for distinguishing between experiential and constitutional causes of reading difficulties" (Vellutino, 2010, p. 11).

Vellutino (2010) asserts that it is one-to-one tutoring that maximizes educators' decision making in regard to clarifying learners' difficulties and needs. Furthermore, compelling evidence of the success Reading Recovery teachers have experienced with children considered learning disabled is presented by Lyons (2003) and appears to be now accumulating for older readers in the data of Literacy Lessons children taught by special education teachers.

(See Briggs & Lomax, 2017). Reading Recovery/Literacy Lessons strive to establish reading, writing, word analysis, and spelling abilities commensurate with those of proficient learners of beginning reading. These instructional foci correspond directly with the foci of Structured Literacy instruction. Further comparisons of the description and components of Structured Literacy instruction with Reading Recovery/Literacy Lessons reveal a number of shared perspectives, listed in Table 1. Both advocate responsive instruction addressing the needs of individuals (and Reading Recovery/Literacy Lessons teachers offer this in one-to-one settings); a commitment to providing intervention as early as possible; and specific training for teachers delivering the instruction. Additionally, corresponding perspectives appear in surface features of the six principles of Structured Literacy instruction (e.g., comprehensive, responsive, diagnostic, systematic, and cumulative). However, critical differences are also very clear and result from the divergent theories of literacy, learning, and instruction underlying these interventions, also summarized in Table 1.

Dyslexia-specific programs are promoted to strengthen a perceived deficit in the learner — poor phonological coding. Resultantly, instruction centers on one primary objective: The mastery of phonics. The focus is thus restricted to a single variable in the intricate array of neural processing and information systems constructed by learners gaining access to literacy. While the principles identified indicate that the instruction is individualized, diagnostic, and multisensory, the curriculum is narrow and prescriptive and attention to literacy processing that creates independent problem-solving strategies and the potential for self-tutoring are not apparent.

Clay's complex literacy processing theory is multifaceted and accounts for complex, neural working systems for reading and writing involving all available information sources. Reading Recovery/Literacy Lessons teachers are able to observe and identify the idiosyncratic ways that children process information and then engage their strengths to support their construction of effective neural networks for reading and writing. This focus on multiple, complex variables (which also include all aspects of visual information and phonics) leads to the learner's construction of strategic processing systems, or working systems, which are self-tutoring, or self-extending, and ensure ongoing development and growth. Thus, the learner's competencies in reading and writing are transferable to the classroom program. To achieve such cognitive competencies, Reading Recovery/Literacy Lessons teachers apply and adapt a wide range of instructional options.

In summary, Reading Recovery/Literacy Lessons teachers offer struggling learners one-to-one instruction tailored to each child's unique profile of strengths and needs, instruction addressing complex literacy processing in reading and writing from the earliest lessons, development of decoding

Table 1. A comparison of alernative perspectives		
	Structured Literacy Instruction	**Reading Recovery/Literacy Lessons**
Similarities	Intervene Early	Intervene in First Grade (RR)
	Individualized Instruction	Individualized/One-to-One Instruction
	Responsive to the Individual	Responsive to the Individual
	Mandatory Teacher Training	Mandatory Teacher Training
Differences	Single Variable	Complex Theory
	Logical Order/Sequence	Psychological Order/Build on Strengths
	Mastery of Skills	Cognitive Competencies/Self-extending System
	Word Analysis: Phonics	Word Analysis: Skills and Integration
	Deficit View of Learners	Developmental View of Learners
	Behaviorist Theory of Learning	Constructivist Theory of Learning

skills used by average-progress readers and integrated in complex working systems for literacy, acceleration of learning, and literacy behaviors that are preventive of ongoing difficulties. Some children will be found in need of additional services following their intervention; but, their teachers, intervention specialists, school psychologists, and parents will have extensive details and data to guide and inform their decisions regarding next steps. Such results are the hallmark of best practices for learners, their parents, and our schools.

Endnotes

[1] See the following articles in *The Journal of Reading Recovery* to learn about the Literacy Lessons treatment: the design, the implementation, the research, and anecdotal case studies: Briggs & Lomax (2017); Harmon & Williams (2017); Konstantellou & Lose (2009); Lose & Konstantellou (2017).

[2] Schwartz & Gallant (2011) clarify understandings of Clay's perspective of a developmental model of the acquisition of effective word recognition skills. In referencing the ongoing debate of meaning-based versus code-based approaches to early reading, they astutely argue that Clay's change-over-time, developmental view of "initial word-recognition learning and instruction renders the debate moot and leads to more productive approaches to instruction" (p. 235). This view is especially important in determining powerful instruction for any learners struggling to acquire literacy.

[3] While this article does not discuss the Observation Survey (Clay, 2013) in detail, it is helpful to note that this instrument was reviewed by the National Center on Response to Intervention and received the highest possible ratings for validity, reliability, and classification accuracy.

[4] Doyle & Forbes (2003) and Forbes & Doyle (2004) offer a review of Reading Recovery pedagogy in response to instructional recommendations for early literacy instruction reported in two documents published by the National Institute of Child Health and Human Development (2000). Review the discussions of alphabetics (i.e., phonemic awareness instruction and phonics instruction) and related issues to learn how closely linked these are to the current discussions of dyslexia-specific instruction, e.g., explicit, systematic phonics appropriately sequenced.

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