How Reading Recovery Teaches the Five Essential Elements of Reading Instruction and More: Second of a Two-Part Series

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This article is the second in a two-part series that provides information about how Reading Recovery instruction fits the recommendations of the National Reading Panel (NRP; NICHD, 2000a, 2000b). In the first article, published in the fall 2003 issue of the Journal of Reading Recovery, we explained how and why the NRP was created and described its recommendations. The NRP investigated research in three areas of reading competence that were identified as essential for reading instruction: alphabetics, fluency, and comprehension. In relation to these three areas, the NRP detailed the five essential elements listed below:

A. Alphabatics
   1. Phonemic Awareness Instruction
   2. Phonics Instruction
B. Fluency
   3. Fluency Instruction
C. Comprehension
   4. Vocabulary Instruction
   5. Text Comprehension Instruction

Reading Recovery teachers provide instruction in all five essential elements. In the previous article we described the NRP’s recommendations in three of the five essential elements—phonemic awareness, phonics, and fluency—and discussed Reading Recovery instruction in those three areas. In addition to a detailed description of these elements and Reading Recovery instruction, we provided a brief description of what we refer to as the sixth essential element: processing. It is through processing that readers gain control of and use the five essential elements. Teaching for processing is indeed the heart of Reading Recovery instruction.

This article will review the NRP recommendations for the essential elements of vocabulary and comprehension instruction and describe Reading Recovery teaching for these elements of the reading process. Perhaps most importantly, we will address what we are calling the sixth essential element of processing and its critical importance in the literacy development of young readers.

Note of caution: We emphasize that the purpose of the NRP’s work was to consider research related to reading instruction for use in the classroom. Although some of the studies in the NRP’s review of research were of struggling readers, the objective of the NRP was to consider research that was “relevant to instruction of reading or comprehension among normal readers” (NICHD, 2000b, p. 4-41). In addition, the NRP considered studies of vocabulary and comprehension instruction at various grade levels. In contrast to the focus of the NRP’s work, Reading Recovery procedures are designed for only the lowest-achieving readers and writers after one year of literacy instruction in the classroom (first grade only in the United States). The objective of Reading Recovery instruction is for the lowest-achieving students to accelerate their learning so that they can read and write (process text) as well as successful readers and writers do.

In addition the procedures used in Reading Recovery were developed for use in one-to-one instructional settings, not for use with groups of children in a classroom. Many of the approaches studied by the NRP are not suitable for Reading Recovery instruction because they are intended for classroom group instruction. Conversely, in this article we are not recommending the use of procedures designed for Reading Recovery instruction either in a classroom setting or for children who can learn to read and write from classroom instruction alone.

Reading Recovery teachers and teacher leaders should consider the recommendations of the NRP critically, giving attention to the age, grade, and ability level of the students in the studies and the instructional setting.
for which the recommendations are intended. Despite the differences we have noted, Reading Recovery teachers do effectively teach the essential elements of vocabulary development and comprehension, using procedures that are highly effective with the specific population of struggling students they teach.

Vocabulary Instruction

The NRP report explains that the identification of vocabulary as an essential element of reading instruction emerged from an initial analysis of reading comprehension research. The Panel’s review confirms that reading comprehension “cannot be understood without a clear description of the role that vocabulary development and vocabulary instruction play in the understanding of what has been read” (NICHD, 2000a, p. 13). The report references the seminal work of F. B. Davis (1942) and echoes the conclusions of other researchers in linking knowledge of word meanings to reading comprehension (Adams, 1990; Clay, 1991; Snow, Burns, & Griffin, 1998). Therefore, the goal of the Panel’s review was to examine the scientific evidence related to the effect of vocabulary instruction on reading performance.

In order to establish evidence-based recommendations for vocabulary instruction, the Panel searched the research literature published from 1979–2000 on vocabulary and text comprehension instruction. Even though the identification process yielded 50 vocabulary studies that met the criteria for inclusion, this was not a sufficient number to conduct a formal meta-analysis. Instead, the Panel examined the identified set to discern trends across studies. Their examination revealed a wide range of methodologies, implementations, and conceptions of vocabulary instruction. The Panel also reported that while the studies involved 73 grade-level samples, almost three-fourths of that number (53) were distributed from Grades 3 to 8. It reported finding very few studies of vocabulary instruction with pupils in Grades K, 1, and 2.

In spite of the limited amount of research evidence, the Panel reports that one trend in the data “suggests that various ability levels and age differences can significantly affect learning gains from vocabulary instruction methods” (NICHD, 2000b, p. 4-18). Therefore, the Panel suggests the importance of considering age and ability differences when planning vocabulary instruction.

The term vocabulary encompasses all the words learners understand and use in meaningful acts of communication: speaking, listening, reading, writing.

The Panel offers several possible explanations for the limited research of vocabulary instruction in the early grades. One suggestion is that vocabulary instruction at these levels is “not separate from other instruction” (NICHD, 2000b, p. 4-18) and is therefore not a specific focus of research investigations. Another observation is that “much of early reading is, at least theoretically, done with texts that do not exceed the vocabularies of most early readers” (NICHD, 2000b, p. 4-18). On the other hand, even little books contain new and interesting language and terms (e.g., vintage car, earwig), and teachers provide instruction in new or unfamiliar vocabulary in order to support comprehension.

In spite of the limited amount of research evidence, the Panel reports that interesting writing messages are built from interesting vocabulary, and growth in vocabulary knowledge may be observed over time. Writer Christopher Haskins is a Reading Recovery student at North Franklin Elementary, South-Western City Schools.
Reading Recovery instruction provides opportunities for the instruction of word meanings across the lesson.

The result of their oral language development and the unique and specific opportunities they have had to extend their language competencies. This is the vocabulary knowledge available to the learner in beginning reading. In addition to their lexicons (sets of known words), learners also have a system for expanding their vocabularies and oral language. Clay (1991) refers to this system as a self-extending or self-improving system that generates and extends the child’s control over language as a consequence of conversations with others (see also Clay, this issue). An important key to extending the young child’s vocabulary knowledge is the opportunity to engage in rich oral language experiences.

As children are introduced to beginning reading, the reading acquisition task involves gaining proficiency with word recognition in order to go from print to meaning by identifying words that are a part of the reader’s oral vocabulary. Highly proficient word analysis skills are of little value to reading with comprehension if the decoded words are unknown to the reader (NICHD, 2000b). As the reader gains proficiency with literacy processing and is able to read more extensively (in terms of both a range of familiar and less familiar content and increasing levels of text difficulty), the learner’s print vocabulary expands. The prolific reader, even at beginning levels, is able to acquire vocabulary knowledge through authentic reading experiences.

The Panel found that oral and print vocabularies are acquired through both indirect methods and direct methods. Indirect methods do not involve direct teacher planning and instruction. Oral language experiences and independent wide reading, both of which provide learners with meaningful contexts that support word learning, are examples of indirect instruction. The implicit learning resulting from such experiences accounts for the rapid and extensive vocabulary growth that exceeds the expectations of classroom instructional practices and the amount of instructional time. The Panel concurs with other researchers in concluding that indirect methods are an important component of vocabulary development.

Even though extensive research evidence confirms that much vocabulary knowledge is gained incidentally, the Panel also found that vocabulary increases with direct instruction and that explicit vocabulary instruction should be incorporated into reading instruction. The Panel states that the direct instruction of vocabulary terms required for a given text should be a part of the reading lesson. The Panel’s identification of trends that might suggest how word meanings can best be taught and related to the reading comprehension process includes the following recommended practices:

First, vocabulary should be taught both directly and indirectly. Repetition and multiple exposures to vocabulary items are important. Learning in rich contexts, incidental learning, and use of computer technology all enhance the acquisition of vocabulary. Direct instruction should include task restructuring as necessary and should actively engage the student.

Finally, dependence on a single vocabulary instruction method will not result in optimal learning (NICHD, 2000a, p. 14). These recommendations focus on instruction for extending a learner’s knowledge of word definitions so that the child’s understanding and use of words gradually grows in breadth and depth. The Panel’s review of the vocabulary research does not include components of word recognition such as development of a sight vocabulary (i.e., those words identified immediately) or development of a writing vocabulary (i.e., common words a child writes fluently). Instruction and assessment of these vocabularies are not included in the Panel’s discussion.

In summary, the Panel suggests that a variety of approaches for vocabulary instruction can be effective, and the methods must be appropriate to the age and ability of the reader. Reading Recovery instruction provides opportunities for the instruction of word meanings across the lesson. In the following discussions of indirect and direct approaches to teaching the meanings of words, we present aspects of Reading Recovery instruction that support vocabulary development for Reading Recovery children.

Vocabulary Instruction in Reading Recovery

Opportunities for Indirect Instruction in Word Meanings

In expanding on the NRP report’s conclusions that most vocabulary is acquired through indirect means, the authors of Put Reading First (Armbruster, Lehr, & Osborn, 2003) identify three important ways children
learn word meanings indirectly:
   They engage daily in oral language.
   They listen to adults read to them.
   They read extensively on their own (p. 45).

Reading Recovery teachers capitalize on oral language opportunities and extensive reading in each lesson. While there is no time for the extended listening experiences recommended by the report during the 30-minute lesson, Reading Recovery teachers strongly concur with this recommendation and rely on classroom teachers to provide frequent listening experiences as one component of their comprehensive literacy programs.

**Oral Language.** Each Reading Recovery lesson is a rich opportunity for oral language development. Because the setting is individualized, each learner is engaged in personalized conversations that allow the teacher to support and extend the child's oral expression, vocabulary, and thinking (Clay, 1998). As the teacher and child discuss story content, converse to identify writing topics, or share issues of interest beyond the content of the lesson, the teacher supports effective and meaningful communication. Children are allowed time to explain their thoughts and are valued for their attempts to construct and express their ideas. Teachers elaborate, provide models of appropriate word usage and language structures, and attempt to create connections between known concepts and terms and new ones. As a result, children hear, use, and learn new vocabulary as well as gain oral language proficiency.

Reading Recovery teachers are very attentive to the language development needs of all students, including students for whom English is a second language, children who are native English speakers with limited oral language proficiency, and children who are shy and reticent. The one-to-one setting allows teachers to personalize the communication, to listen closely, to respond appropriately, and to ensure that the learner has frequent and ongoing opportunities to converse. These are the conditions that allow for the learner's continuing development and increasing precision in the use of the sound system, the vocabulary, the sentence patterns and the rules for combining words and making them agree, and a growing richness in the way he puts his meanings into words (Clay, 1991, p. 73).

**Extensive Reading.** One of the benefits of extensive reading by beginning readers is enhancement of their print vocabulary. Research evidence confirms that the more “children read on their own, the more words they encounter and the more word meanings they learn” (Armbruster et al., 2003).

Reading Recovery children read an extensive amount of connected text daily. Within each 30-minute lesson, four to six books are read with the teacher. These include the familiar books (two to four), the running record book (one), and the newly introduced book (one). Children are also provided books to be read beyond the lesson time each day (one to three). When teachers find that this reading cannot be completed after school, they negotiate opportunities for extra reading time during the school day.

The extensive reading done by Reading Recovery children affords them opportunities to build vocabulary knowledge by encountering words, often repeatedly, in meaningful contexts. “The more meaningful reading that children do, the larger will be their repertoires of meaning, and the stronger, better defined, and more productive will be their associations between words and meanings” (Adams, 1990, p. 156).

The practice of wide reading is initiated during Reading Recovery lessons and supported after lessons are completed. Many teachers continue to provide reading selections from their Reading Recovery collections to encourage their students’ independent reading habits after completing Reading Recovery lessons. These opportunities allow for ongoing benefits of extensive reading, including the implicit learning of new vocabulary. To the extent that wide reading becomes a self-selected habit for our young readers, this practice continues to impact vocabulary development positively and importantly in subsequent years.

**Opportunities for Direct Instruction in Word Meanings**

Direct approaches to vocabulary development include providing students with specific instruction in word
meanings and teaching students procedures for defining words independently. In regard to specific word instruction, the *Put Reading First* (Armbruster et al., 2003) document lists the following evidence-based recommendations aligned with the NRP report:

- Teach specific words before reading to help both vocabulary learning and reading comprehension.
- Provide extended instruction that promotes active engagement with vocabulary.
- Provide repeated exposure to vocabulary in many contexts (p. 36).

Reading Recovery teachers respond to each child's unique vocabulary challenges and provide direct instruction in word meanings throughout the lesson as needed, i.e., before or after reading a story, while writing a personal message, or when working with words in isolation. Most often, this direct instruction is based on observed needs and the child's ability to comprehend or communicate meaningful messages. Therefore, the teacher's attention to vocabulary development is directly linked to reading with comprehension or communicating effectively in speaking and in writing.

In general, Reading Recovery teachers maintain learner engagement and plan for both echoes across lesson components, which allow for repeated exposure to new learning in many contexts, and the flexible use of new learning in a variety of reading and writing activities. Books are chosen purposefully for each learner, and this allows the teacher to mediate the reading demands, including vocabulary. Teachers are also able to link and build on familiar content across books, allowing for the repeated exposure of concepts and vocabulary through both reading and conversation. Occasionally, these book topics are suggested by the child for the daily writing activity, and the use of related vocabulary terms is a natural consequence.

The authors of *Put Reading First* also recommend three areas of instruction to develop students' abilities to define and learn words independently. They refer to these as word learning strategies and suggest the need for teachers to provide direct instruction in how to use word parts to determine word meanings, how to use context clues when reading connected text to define new words, and how to use dictionaries and other reference materials as needed (Armbruster et al., 2003). Of these, Reading Recovery instruction in word parts and in monitoring syntactic and semantic information sources have specific relevance to a reader's ability to determine and learn word meanings independently. Because these skills are more adequately developed at higher reading levels when students encounter passages with more complex writing and vocabulary, we will discuss them only briefly.

In the following sections, we discuss direct instruction in word meanings by reviewing how Reading Recovery teachers attend to vocabulary terms in new book introductions, in discussions about stories, in writing activities, in developing understanding of how words work, and in attending to syntactic and semantic information sources in text.

**New Book Introductions.** Introducing a new reading selection provides opportunities to focus on vocabulary specifically and directly. The Reading Recovery teacher's plan for the child's instruction begins with the book selection. Teachers strive to pro-
provide new reading selections that account for the child's existing knowledge and emerging competencies while also providing opportunities for new challenges. Reading Recovery: A Guidebook for Teachers in Training (Clay, 1993) directs teachers to consider meaning and book language first. Because there "should be a minimum of new things to learn" (p. 36), the new book should not present the child with many new vocabulary terms.

"Learning new concepts and the words that encode them is essential for comprehension development" (Snow et al., 1998, p. 217). Teachers must anticipate challenges resulting from the book's concept load and vocabulary, consider the learner's strengths and language competence in relation to any challenges, and determine how to weave attention to such challenges into the book introduction.

Reading Recovery teachers address concept development and related vocabulary instruction through conversation as they provide an orientation to each new book. Clay (1998) provides the following example of such instruction:

When teachers suspect that children do not have the ideas, words, or usage to read and understand a part of the text, they present the children with that new knowledge. They may use a particular phrase, explain some part of the story, or contrast a feature of the story with something the children have encountered in another book. They may help the children discriminate between things, like a school desk and a large adult-type desk. They may anticipate the problem or respond to signals from the child but they switch the child's attention from an unhelpful association to a more helpful one (p. 181).

Clay (1998) continues discussion of how teachers instruct children in new vocabulary by sharing her observation that teachers frequently "talk toward the meaning of a word, describe some relevant object or use, explain some aspect of the word, and only lastly provide the word" (p. 181). She has inferred from her observations that teachers assume "children need a mental context as preparation for receiving a new word" (p. 181). More importantly, teachers "push children to be active in linking new knowledge with things they already know" (p. 181), and they expect the learner to demonstrate understanding of new knowledge by talking about the book and story concepts and by using new vocabulary in such discussions prior to reading.

Follow-up Discussions and Rereading. Discussions of story content following the child's reading (the new book, the running record book, or a familiar book) engage the reader in personal reflection and response to story content. Such conversations also provide opportunities to revisit new learning, rehearse words and language, experiment with new vocabulary terms, hear the teacher's modeling again, and review understandings. These exchanges allow the teacher to support rich language expression and vocabulary usage, to identify and resolve confusions, and to review vocabulary terms as needed.

The rereading of stories on subsequent days helps solidify new terms and concepts as discussed previously. Repeated exposure to new concepts and related vocabulary advances the child's new learning and provides opportunities for new discoveries and new connections.

Writing. During the writing component of the lesson, teachers "help children to compose oral messages and recount simple events in their lives. To write these down children are:

• going from ideas
• to spoken words
• to printed messages” (Clay, 2001, p. 27).

Interesting messages are built from interesting vocabulary, and growth in vocabulary knowledge may be observed over time.

The child's writing topics arise from genuine conversations initiated and guided by the teacher who begins by suggesting topics of interest to the child. In conversation, the teacher may extend the child's utterances, modeling appropriate language structures and incorporating rich vocabulary. As stated previously, such interactions provide experiences that enhance oral language learning, including vocabulary knowledge. The child's messages may not incorporate new vocabulary immediately, and that is not the teacher's initial purpose. The teacher will always accept the child's language (words and usage) and aim for more complexity, variety, and richness over time. Ultimately, the teacher's interactions can encourage and support the child in writing more complex sentences, longer words, and new vocabulary terms (Clay, 2001).

While daily writing experiences provide an authentic context for vocabulary development, Reading Recovery procedures for developing writing vocabulary (Clay, 1993, p. 31) do not represent methods of direct vocabulary instruction as the NRP report...
Teaching defines it. The scope of this activity is too restricted, and the functions of this writing vocabulary are quite specific. As children record their messages, they are encouraged to write as much as they can independently. Gradually, each child acquires a fluent writing vocabulary, i.e., a core of words known in detail and written with a minimum of attention. For the most part, these are high-frequency words that the learner understands and uses in speaking and writing. Often, these are words with a spelling pattern that allows the writer to generate other similar words by analogy. While this writing vocabulary represents important and helpful items of knowledge, it is only a subset of the child's lexicon, i.e., the entire set of vocabulary terms understood and used by the child in oral and print contexts. The child's writing vocabulary supports the fluent writing of messages. In terms of the child's vocabulary development, the focus on the writing vocabulary is not intended to teach new word meanings or to deepen understandings of words.

Using Word Parts. Reading Recovery teachers develop readers' abilities to construct words and to take words apart in both contextual (reading and writing texts) and decontextualized (making and breaking) activities. The aim is "to foster the visual analysis of words" for reading texts fluently (Clay, 1993, p. 51). In the process of discovering how words work, Reading Recovery children learn to hear and attend to syllables, prefixes, suffixes, and onsets and rimes. They become facile with adding and subtracting inflections to base words (look, looks, looking, looked; book, books), with the identification of syllables in multisyllabic words (little, today), and in the manipulation of chunks of sound (see the Guidebook, Clay, 1993, Sections 10 and 11).

The ability to identify affixes, base words, and root words is a beginning step in learning how to use word parts to determine word meanings (e.g., consider happy, unhappily). Consequently, the knowledge of word structures gained in Reading Recovery becomes a foundation for later classroom instruction that provides more in-depth study of strategies for exploring word meanings.

Using Context Clues. Word meanings are occasionally presented in text as definitions, examples, descriptions, or restatements. It is recommended that the use of such context clues be taught directly (Armbruster et al., 2003).

Strategic readers are very attentive to syntactic and semantic information sources, and Reading Recovery children learn to monitor all information sources to read with meaning. Development of strategic processing is key to successful reading, and this is the focus of instruction in Reading Recovery. Because readers acquire new vocabulary through wide reading, one might infer that readers use context clues in an ongoing fashion, especially since they are given meaningful texts. In regard to direct instruction on using context clues to define words (e.g., description or restatement), it is suggested that such instruction be provided when the texts used for lessons include clear examples of such devices. It is not anticipated that this happens frequently in the early reading instruction presented to Reading Recovery children. Therefore, direct instruction in the use of context clues to determine word meanings appears more appropriate for classroom instruction in texts that present new concepts and related terms defined within the author's text (e.g., as in content materials).

Summary
The NRP report confirms that a reader's knowledge of word meanings is an essential aspect of reading with understanding and therefore an essential component of reading instruction. The panel observed that children acquire word meanings through both indirect and direct methods and that teachers should consider both the ages and ability levels of learners when planning instruction.

Reading Recovery instruction engages learners in a variety of indirect and direct approaches to vocabulary instruction across the full range of lesson activities (both reading and writing). In Reading Recovery, direct instruction in word meanings is connected to reading with comprehension and communicating effectively in speaking and writing. Therefore, Reading Recovery teachers meet the goals of the NRP recommendation that attention to vocabulary instruction must extend the child's breadth and depth of word knowledge as well as support reading with comprehension.

Reading Recovery children are provided meaningful contexts for acquiring new word meanings indirectly by

• engaging in personalized conversations that allow them to hear and say new words. These conversations occur across all lesson components.
• engaging in extensive reading of familiar, meaningful texts that give children repeated, multiple exposures to new vocabulary terms.
Reading Recovery children are also provided direct instruction by teachers

- incorporating explanations of new or unfamiliar words when introducing a new book.
- drawing the reader's attention to important words in a story, including words that convey important ideas or concepts as well as language structures.
- revisiting concepts and related terms in conversations following reading.
- supporting strategic reading for meaning and integration of all information sources.
- providing models of and support for the use of rich language and new vocabulary in writing.
- helping children learn more about how words work, including awareness of affixes, root words, and base words.

“For enhancement of children’s vocabulary growth and development, there can be no substitute for voluminous experience with rich, natural language” (Anderson & Nagy, 1991, p. 722). Reading Recovery lessons provide each child with rich, meaningful contexts for developing language, including oral language, writing, and reading. (For further discussion of theory and instructional recommendations, see Clay, in this issue.)

**Text Comprehension Instruction**

We now turn to three key issues in the discussion of how Reading Recovery instruction fits the recommendations of the NRP for comprehension instruction. First, we note a difference between the NRP’s focus and Clay’s theory of when it is appropriate to teach comprehension. The Panel concluded that the “instruction of comprehension appears to be effective on Grades 3 through 6” (NICHD, 2000b, p. 4-51). Very few of the studies reviewed by the NRP included children from Grades K–2. The Panel concluded that researchers in most of the studies “taught readers who had achieved decoding and other basic reading skills before they were taught strategies” (p. 4-51).

In contrast, Clay (1991) has stated that “children can focus on comprehension from the beginning under certain conditions” (p. 318). In Reading Recovery, children are taught to monitor their reading to see if it makes sense and to search for and use meaning, as well as other sources of information, to problem-solve unknown words. Clay explains the conditions in which beginning readers can focus on comprehension.

They read texts that are meaningful to them (such as stories). They read texts which use language that is close to things they would say or are learning to say (and not the stilted, reductionist primers of controlled vocabulary texts), and they have high levels of interaction with teachers who help them to develop a variety of strategies for working with texts. They gradually take more control and responsibility for dealing with the ‘hard bits’ in the texts they are reading (p. 318).

A second key issue we identified is ambiguity or breadth of meaning of the term comprehension in the literature. The NRP address the many views there are of comprehension.

Comprehension is a complex process. There exist as many interpretations of comprehension as there are of reading. This may be so because comprehension is often viewed as “the essence of reading” (Durkin, 1993). Reading comprehension is further defined as “intentional thinking during which meaning is constructed through interactions between text and reader” (Durkin, 1993). According to this view, meaning resides in the intentional, problem-solving, thinking processes of the reader that occur during an interchange with a text. The content of meaning is influenced by the text and by the reader’s prior knowledge and experience that are brought to bear on it (NICHD, 2000b, p. 4-5).

The NRP uses the term comprehension to refer to cognitive processes involving the use or construction of meaning while reading. “Reading comprehension was seen as the construction of meaning of a written text through a reciprocal interchange of ideas between the reader and the message in a particular text” (NICHD, 2000b, p. 4-39).

In Change Over Time in Children's
Literacy Development, Clay (2001) has addressed the various interpretations of the term comprehension. “Comprehension is involved in all reading and writing of continuous text, even a one-sentence message. It is often reserved in educational writing for the text or discourse level of understanding” (p. 107). Clay emphasizes the importance of understanding for processing at each level of language. “We probably want to reserve the terms ‘comprehension’ and ‘understanding’ for some overarching processes but at least the word-by-word decision-making (as in parsing) marks out a path towards comprehension” (p. 106).

The third key issue we note is the difference between the NRP and Clay in the definition and use of the term strategy. The NRP (NICHD, 2000b) defines comprehension strategies as “specific procedures that guide students to become aware of how well they are comprehending as they attempt to read and write” (p. 4-40). This is a common use of the term strategies in the comprehension literature (Palinscar & Brown, 1984; Pressley, Almasi, Schuder, Bergman, & Kunita, 1994; Rosenshine, Meister, & Chapman, 1996). The NRP concluded that seven particular strategies appear to be effective and most promising for classroom instruction: comprehension monitoring, cooperative learning, graphic and semantic organizers, question answering, question generation, summarization, and multiple strategies. Used in this context the term strategy is synonymous with an approach that is procedural, which the reader can describe verbally, and that the reader can apply independently to support understanding and retention of content. These procedures slow down the process of reading so that the reader can study the meaning of the text.

Clay (2001) explains the ambiguity in the use of the term strategy, in writing:

Unfortunately the term ‘strategy’ has several meanings in educational literature, and one of these refers to directing oneself verbally (which implies also verbalising about what one is doing). While this might be conceptually valid when discussing the reading of older children, my studies of proficient young readers suggest that it is not appropriate to teach for that type of meta-cognitive awareness in five- to six-year-old children. Most things we do as readers need to operate below the conscious level most of the time so that fast and effective processing of the print is achieved and attention is paid to the messages rather than to the work done to get to the message (p. 127).

Clay ascribes to Bruner’s (1957) definition of a strategy as a “decision process which involved the search for discriminatory cues that will code the stimulus into appropriate categories” (Clay, 2001, p. 127). Beginning readers are learning to search for various sources of information (cues) and to check one source with another, attempting to get a match. The search for sources of information includes visual recognition of letters, letter clusters, words, and word parts; parsing the sentence for recognizable grammatical structures and phrases; and constructing the understanding of the current word, phrase, or sentence which carries the meaning of the text forward. When reading continuous text the child is called upon to assemble a system that will allow for these various searches as needed and the integration of the information obtained. Clay (2001) refers to this type of mental process as strategic activity.

Such descriptions of strategic behaviour are close to Singer’s 1970 concept of assembling input-mediation-output systems which pick up, integrate, interpret and infer in-the-head. Behavioural records usually only capture combined behaviours and do not reveal the separate input-mediation-output systems which produce those behaviours. I have used the term ‘strategic activity’ to refer to what goes on in any of the aspects of processing which Singer proposes, when the brain:

- picks up information,
- works on it,
- makes a decision,
- and evaluates the response,

as well as to the overarching execution of that sequence (pp. 127–128).

In summary, the discussion of comprehension instruction we present in this article focuses on instruction of students who are younger than those for whom the NRP recommendations are intended. The term comprehension reflects both the processing systems that the beginning reader has developed before learning to read and those that are developing during reading acquisition. The terms strategy or strategic activity refer to the “directing of in-the-head activities which are initiated by the learner” (Clay, 2001, p. 130). The explanation of how
Reading Recovery teachers teach comprehension requires us to consider what systems the beginning reader is developing to read with meaning and processes that will eventually lead to comprehension of various texts for various purposes. The instructional procedures used in Reading Recovery are not designed for classroom instruction, group instruction, or instruction with older children, so they will not match the specific instructional recommendations of the NRP.

Comprehension Instruction In Reading Recovery

Although Clay rarely uses the term comprehension in her writings, she repeatedly refers to the role of meaning. "I regard meaning as a 'given' in all reading—the source of anticipation, the guide to being on track, and the outcome and reward of the effort. Meanings provide the purpose of reading and writing" (Clay, 1991, pp. 1-2). Clay's explanation of the role of meaning provides clearly stated objectives for Reading Recovery instruction: to teach for the use of meaning as the source of anticipation, the guide to being on track, and the outcome and reward of the effort. The following discussion of instructional procedures in Reading Recovery are organized in relation to these objectives.

Meaning As the Source of Anticipation

This anticipation of what may follow creates a pleasing tension—a puzzle to be solved. It is related to a skill that will be needed in reading as the child anticipates the structure of the sentence and the next step in the story (Clay, 1991, p. 94).

Children have learned to expect language to make sense. When they hear the beginning of a sentence, they can often anticipate the words and phrases which will follow. Clay (1991) describes a particular preschooler's ability to anticipate language with this example: "Betty aged five years was listening to her brother reading. He stumbled over 'he never makes mis...' Betty from the other side of the room muttered 'mistakes'" (p. 94). Betty could use her knowledge of oral language to anticipate a highly probable next word. The processing systems which preschoolers like Betty use to anticipate language—words and phrases—provides them with a system that can support their anticipation of language in printed text. "Oral language creates appropriate expectations which narrow the field of possible responses and make final selection quicker and more accurate... This applies to the anticipation of meanings" (Clay, 1991, p. 246).

Children have also learned how to construct their understandings of people, things, and events in their environment. They learn to negotiate and communicate their messages about and to the people in their world. Clay (1991) explains,

The child has also developed models of his own about what goes on in the world and what the steady state of that world is. He can carry out actions, or talk about carrying these out, and can make links and predictions about what will happen if... the child is actively seeking out and finding regularity in the experience he has with the world, and he is able to work out what some of the invariances are. He is able to act on this knowledge even though he cannot always describe what it is he knows (p. 27).

Seeking out regularity requires some anticipation of what might be found, receiving the feedback from the search, and evaluating the feedback to make decisions about whether further searches are necessary and how to integrate the new information into what the child already knows.

Reading Recovery teachers build on the child's ability to anticipate language and meaning (relationships and events). Teachers observe the child's knowledge of language and experiences in the world and use this information to select books for the child and to guide conversations. By providing the child with literacy experiences that capitalize on the child's...
prior experiences and the language structures the child controls, the teacher provides the child with the opportunity to anticipate language and events as the child reads books. The selection of a new book and introduction before reading provide those opportunities. Clay (1993) recommends that teachers “choose the reading book very carefully. First of all take meaning and language into account” (p. 36). Further, Clay describes what information the teacher might include in the book introduction. By providing this information, particularly the meaning and language structure, “the teacher is ensuring that the child has in his head the ideas and the language he needs to produce when prompted in sequence by print cues” (p. 37). “As the child approaches a new text he is entitled to an introduction so that when he reads, the gist of the whole or partly revealed story can provide some guide for a fluent reading” (Clay, 1991, p. 335).

When children reread familiar books, they are able to anticipate the meaning and language from their prior experience with the books. “On familiar material, anticipations can be made and checked on the basis of a few cues without the undue risk of error” (Clay, 1991, p. 311). Children are able to orchestrate all of the strategies they control and those that are in development to read for the author’s precise message. Familiar books provide the beginning reader with the opportunity to comprehend the author’s message at the word, phrase, sentence, episode, and story levels.

Teachers support anticipation in familiar books through conversation. The shared conversation in the book orientation is one way in which the teacher fosters the child’s anticipation. The teacher builds on the child’s prior knowledge while introducing the whole story. The teacher also converses with the child about the new book during and after the first reading. That conversation fosters the child’s anticipation of the meaning throughout that first reading and for the second reading of the book in the next lesson. “Understanding what you read today and the ways in which the meanings were expressed give the reader prior knowledge for reading at some other time” (Clay, 1991, pp. 335–336). Conversation before and during the rereading of a familiar book reminds the student of events and language in that book so that the meaning and language can be anticipated while reading. Conversation while the child is reading “fits comfortably into pauses as the pages are turned” (Clay, 1993, p. 38). The child has other opportunities to learn to anticipate meaning when rereading the written story or reassembling that story in the cut-up sentence. Clay (2001) explains,

I am discussing a simple level of comprehension, a word by word, sentence by sentence, and page by page understanding of a very simple story such that an ending could be anticipated by the young reader who has comprehended the strings of words for their collective meaning (p. 107).

This is a significant accomplishment for the beginning reader.

Meaning As the Guide to Being on Track

Conscious attention during successful reading can be predominantly on meaning. Teaching a child to expect reading to make sense provides him with an easy-to-learn signal that process-
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As teachers teach for strategic activity, the child is learning to search for and use all the available sources, including meaning, to construct an understanding of the author's message.

The reading acquisition task is to build the inner strategic control that allows the reader, with the greatest efficiency to relate information within these levels, and across these levels, to remembered information, on the run and without loss of meaning or fluency. When instruction directs students to conscious manipulations of letters, sounds, or single words it turns their attention away from such important developments (Clay, 1991, pp. 320–321).

Teaching for effective and efficient integration of information and orchestration of the strategic processes the child knows and is developing constitutes teaching for comprehension.

In the familiar reading component of the Reading Recovery lesson, the child's understanding of the language and meaning of the book supports self-monitoring. The familiarity with the sources of information in the book increases the possibility that the child will detect and correct errors made.

With the familiar story book the child begins with memories of the ideas that are in the book and each page triggers more memories, often of the precise language used. Some memories are already alerted before the page is turned and so the response is made more quickly (Clay, 1991, p. 341).

Familiarity with the language of the book will help the child to parse the phrases and grammatical structures, so that the child reads with appropriate phrasing and expression. Reading with phrasing and expression makes the language structures and meaning available to the child, thus supporting effective and efficient strategic activity. Teaching for phrasing in fluent reading provides the child with access to the meaning and structure of the text in familiar reading and on the new book.

In writing a message, the child's meaning and memory of the message guides the child to monitor the production of the composition, when rereading it, and when reconstructing it on the run in the cut-up sentence. "Before long the completed story is something the child can read independently, monitoring the reading against his inner knowledge of what he intended to write" (Clay, 1991, p. 31).

In a similar way the information provided in the book introduction can be used by the child to self-monitor during the first reading of the new book. If a problem is detected, the child can take action to search for the necessary information to get back on track again.

When the child is given some introduction to a story, which he then reads for meaning, then monitoring his own problem-solving could lead to extending the system because:

- success will be confirmed by meaningfulness
- the use of the problem-solving strategies will be reinforced
- new features and information are highlighted because of their contribution to the solution
- new discriminations are made
- the checking includes an outside frame of reference beyond the reading task—in the meaningfulness in the real world (Clay, 1991, p. 338).

During that first reading the teacher teaches for the use of many sources of information and strategic activity so that the child can comprehend the message of the text.

A listener can sometimes sense when the child reader is relating the current page to what has happened so far in the story. When I discover ambiguity in my own writing I have usually reread the text only to discover
it could mean more than one thing. As both reader and writer I hasten to reduce the ambiguity and reconstruct the word sequences (Clay, 2001, p. 107).

The teacher monitors how the reading sounds, what sources of information the child is using to detect and correct error and to problem-solve a new word, and the apparent understanding the child is gaining from the text. The teacher analyzes reading behaviors on running records for evidence that indicates the use of various sources of information to read with meaning. For instance, rereading is an indication that the child is searching for information to construct the author's precise message. These behaviors provide the teacher with insight into how this child is using meaning as a guide to being on track. Clay (2002) describes how the teacher monitors and records a description of the child's reading performance on the running record:

Immediately following the reading and before you begin to analyze the detail of the [running] record, write a few lines on what you just observed, your intuitive summation of the child's reading, at the end of the record. This should be an overall reaction. Comment on what the reader did well. Was the reading done at a good pace, or was it slow, or too fast? Are things in balance or out of balance in your judgment? Is he reading groups of words together in a phrased way? Attend particularly to change over previous readings (pp. 60–61).

The teacher monitors the child's reading in a similar way at all times. Monitoring the child's reading in this way, the teacher can detect when the child does not understand a particular language structure, phrase, word, or event in the story. This allows the teacher to support the child in taking action to search for the language structure and meaning. "Being sensitive to the learner's thinking allows the teacher to draw the child's attention to things overlooked, to new aspects of the task, or to other possible interpretations" (Clay, 1998, p. 13).

**Meaning As the Outcome and Reward of the Effort**

In Reading Recovery, teachers scaffold students' understandings before, during, and after reading continuous text. Teachers help students to search for and use meaning while reading. The conversation before, during, and after reading provides enjoyment and extends the child's understandings. Sometimes a child chooses to write a story related to a book just read. In Clay's (1993) suggestions of possible topics for conversation before writing, three of them relate to a book that has been read or heard.

First talk with the child. Guided by what you know of the child start up a conversation about things like:

- Something he has done
- A story he has heard or read
- A TV programme he has seen
- Something that interests him
- An experience you have had together
- A book he enjoyed reading
- The best part of a story he has just read (p. 29).

The student's familiarity with what is encountered in the book while reading enhances the child's understanding and enjoyment of the experience. "He will understand what he reads if it refers to things he knows about, or has read about previously, so that he is familiar with the topic, the vocabulary or the story itself" (Clay, 1991, p. 335). A child sometimes makes a link between one book and another or between a book and an event in the child's own life. Teachers can support the child's connections by selecting books with the same characters or similar themes and by conversing about how this new book is similar to another book the child read previously.

**Summary**

Comprehension is a broad concept that addresses using meaning at all levels of language in written text. Meaning is a source of information which the active reader and writer uses in the process of reading and writing. The concept of active processing, which is a key factor in successful reading, seems to be more clearly conveyed when discussing the use of meaning rather than the acquisition of comprehension.

We have emphasized in this discussion that beginning readers learn to search for and use meaning at all levels of strategic activity. Teachers provide access to the meaning of books before reading and teach for the use of meaning throughout the reading of continuous text. Teachers provide learning opportunities through meaningful conversations in various parts of the lesson for various purposes. The opportunities to compose, write, compose again on the run in the cut-up sentence, and reread the message written all contribute to the child's understandings of meaning at many levels.
of language use. During Reading Recovery instruction, the child develops comprehension through understanding the meanings of books, sharing a meaningful message, and developing a tapestry of meaningful communications with a particular significant adult (the teacher). In these various and integrated ways, Reading Recovery teachers do indeed teach for comprehension.

The Sixth Essential Element

In this article we have stressed the importance of the strategic activity which the reader engages to expand understanding of new and partially known vocabulary and to comprehend continuous text. While the NRP does not address the notion of processing or strategic activity as an essential element, in Reading Recovery we recognize that it is the most essential. Without strategic activity or processing, the child would not develop self-regulation and would not be able to make progress in learning the five essential elements. Any learning would be in isolation and would not be used to interact with and learn from new texts. Any instruction in the five essential elements of reading must include a consideration of strategic activity.

As a child learns how to learn new vocabulary through experiences with the words in texts and conversation, the child is developing a more complex processing system for learning and using vocabulary than was developed before learning to read. Now the child adjusts the earlier system of vocabulary development to incorporate experiences with language and meanings in texts. Likewise, the system of searching for meaning in language and environment, which the child relied upon before school, has adjusted to incorporate the understandings gained through reading and writing text.

Clay (1991, 1993, 2001) emphasizes what beginning readers must learn as they work across connected text. They must attend to several different sources of information and check one against another. They must learn to direct their attention to the most useful bits of information while learning the arbitrary rules of written language, including sequence and layout. “Sequential decision-making depends on tentative understanding of the message so far, while allowing the language user to change direction en route” (Clay, 1991, p. 106). Conversely, the processing that the reader engages in on continuous text helps the child to develop understanding of the text.

Reading Recovery teachers know the importance of teaching for the child’s inner control of the processes, skills, and items being learned. “Supported at first by social contacts the literacy learner gradually has less need of the scaffolded support of the expert, and the reader begins to perform alone but improves his or her reading and writing processing as those activities are pursued, learning more on his or her own” (Clay, 2001, pp. 102–103).

References

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About the Cover

Fidel Campuzano is a second-grade student at Darby Woods Elementary school in the South-Western City Schools in Ohio. Fidel’s Reading Recovery teacher, Vicki Burlingame, reported that Fidel was a first-round student who was reading at Level 3 in the fall and discontinued at Level 12. At the end of the school year, he was reading at Level 20. This year, Fidel’s second-grade teacher says that he is a very hard worker and enjoys reading and writing in the classroom. He likes mysteries and is writing about cowboys. In his current story, he is the cowboy hero.