

Some arguments center on whether it is best for students to learn words in context or in isolation. Studies indicate that when words are considered in isolation, students may focus better on letter-sound associations and may learn words somewhat faster (Ceprano, 1981). But interest is higher when words are in context; transfer of word learning to text reading is promoted; and students gain fluency (Ceprano, 1981). According to Adams (1990), who is also an advocate of systematic, explicit phonics instruction, “repeated readings and repetitive texts set the stage for the acquisition of a broad sight vocabulary” (p. 69). It seems prudent to work with words *both* in isolation and in the context of reading and writing.

As children go beyond the early stages of learning to read, we would expect an acceleration in their word learning because they have learned *ways of learning* words. Rapid, automatic word recognition is related to competent, fluent reading with understanding (Biemiller, 1970; Blanchard, 1980; Calfee and Piontkowsky, 1981; Chall, 1989; Herman, 1985; Juel, 1988; Lesgold, Resnick, & Hammond, 1985; Stanovich, 1985). For fluent reading with understanding, readers need instant recognition of about 95% of words in the text (Adams, 1990). It also is expected that children will understand that the sequence of letters in a written word represents the sequence of sounds. Recommendations of the National Committee on the Prevention of Reading Difficulties in Young Children (Snow, Burns, & Griffin, 1998) include as kindergarten accomplishments the building of a repertoire of some conventionally spelled words. For those children who have not accumulated some known words, intervention is needed.

Word Recognition in Reading Recovery

Children who are just beginning to learn about literacy first learn what a word is; that is, when is a group of letters a word? They learn basic concepts such as the use of space to identify words in text, that the order of letters matters, that letters are linked to the sounds we speak, and “that the first letter of a word is determined by the position in relation to the space” (Clay, 1993b, p. 43). As they learn a few words, children begin to see similarities between words. They encounter the same letters and clusters of letters over and over noticing that certain letter sequences appear in words.

Letters, sounds, and words. First grade children who are having extreme difficulty in learning to read and write generally know very few words - if any. These children are just learning to look at print and to identify a few letters and sounds. It is helpful to build a small repertoire of words that the child knows in great detail. With this goal in mind, early in the children’s program, the teacher will work to extend knowledge of words by having children make words with magnetic letters, trace words, and write words. Word cards may also be used. Language like this may be used: “Write it again. And again. Now write it here. And here. Do it faster. Once more. Come and write it on the board. Use the magnetic letters” (Clay, 1993b, p. 30).

The teacher works for full control of the word and then for flexibility by having the child construct the word with different materials (magnetic letters, chalk, water and paintbrush, finger on desk, white board, marker, etc.) and in different places. These procedures help the child to develop a “program of action” for the word, one that will allow him to place the letters in sequence with a minimum of attention (Clay, 1993b, p. 30).

These high frequency words are useful in helping the child to write simple messages with the teacher's help as well as in monitoring reading in the first story books. A lesson may begin with a brief practice of words that the child has learned recently. Words are written quickly on the board with an eye to fluency. The teacher's goal is to help the child develop ways of remembering words so that this strategy can be applied to a rapidly growing reading and writing vocabulary. Once a word is learned, the teacher works for flexibility by having the child make the word in magnetic letters, jumbling and remaking it until the child is fluent. The word may also be used in the story that the child writes and it may be encountered in selected books that the child reads (Clay, 1993b, p. 56).

Writing. In each lesson, the child is helped to compose a message and to write it, word by word, in a writing notebook. There is always a story page and a "practice page," which is used to work out words and learn more about how words work. On the practice page, much of the work involves teacher-child interactions over specific word work and sounding out the word as it is written. Among the ways children work with words is writing high frequency and "high utility" words several times and developing a way of studying and remembering words by noticing the letters. In this way, the child can add to his growing knowledge of particular words. High utility words are those that are used often in reading and writing and also have value for making connections with other words. For example, a child who has learned, or even over learned, the word *it* as a high frequency word will be better able to learn *in*, *is*, and *his*. The words that the teacher selects to teach to children are (Clay, 1993b):

- words with high utility
- words which occur most often in the language
- words needed often in writing
- words the child almost knows that a little more practice will bring to overlearning. (p. 30)

Writing and reading are connected when the teacher writes the child's message on a sentence strip and then cuts it apart, possibly word by word, for the child to reassemble. This activity provides opportunity for practicing early behaviors such as word by word matching but also for noticing visual aspects of words and making beginning letter-sound analyses.

Reading. In the earliest reading books, teachers direct children's attention to words within the simple texts that they are reading. The teacher will ask the child to locate known and unknown words by making and calling for a response or by asking the child to find the word. Another way the teacher draws attention to words within text is to call for the child to notice errors and then talk about the discrepancies between the oral reading and the word in the text. Known words (or words about which the child knows something) are important in helping the child monitor his reading, notice the discrepancies, and search for more information to produce an accurate reading. Teachers help children to check their word recognition against meaning and syntax.

Principle 4: Phonics/Decoding Skills: Teach students to use simple and complex letter-sound relationships to solve words in reading and writing.

An expert reader is, among other things, an expert decoder or solver of words that are embedded in text. An expert writer is able to spell a large number of words independently and to use

both simple and complex letter-sound relationships in spelling words. In order to make relationships between letters and sounds, the learner must be able to hear the sound and distinguish letters.

The whole system works together, with learning in one area supporting learning in other areas. Phonics has been defined as “a way of teaching reading and spelling that stresses symbol-sound relationships” (Harris & Hodges, 1995, 186). Phonics is designed to teach children how to *decode* words, that is, to use the relationships between letters and sounds to solve words. There is some evidence that when letters and sounds are taught together, the learning is accelerated. For example, Bradley & Bryant (1983) found that combining phonemic awareness exercises with explicit instruction in letter-sound correspondences was effective. Word identification strategies are enhanced by providing to children both phonemic awareness exercises and letter-sound association training. For students who recognize letters and have begun noting sounds in words, associating sound cues with visual cues results in greater growth in phonemic awareness (Hohn & Ehri, 1983).

One of the early understandings is that print is, indeed, something unique. It is not like pictures in that written words are made up of letters that map to speech sounds (Snow, Burns, & Griffin, 1998, p. 45). This recognition that print is unique is foundational to visual word recognition. Research has shown that learning the relationships between print and speech facilitates learning to read. “These findings are buttressed by others showing that knowledge of word meanings, an understanding that print conveys meaning, phonological awareness, and some understanding of how printed letters code the sounds of language contribute directly to successful reading.” (Snow, Burns, & Griffin, 1998, p. 320).

In the beginning, young children will use any association at their disposal to recognize words. Gough and Juel (1991), in fact, found that children would use even a thumbprint as a tool in recognition. These researchers claim that instruction is necessary to help children use letter forms and associated speech forms so that they can learn how the system works. They also state that young writers may use phonemic awareness and letter knowledge to spell independently many words and to build a repertoire of conventionally spelled words. If children are not exhibiting these behaviors, they will need intervention.

English is an alphabetic system, meaning that it relies on sounds being represented graphically by letters of the alphabet. The literacy learner must get the idea that letters represent small sound units within words. This system makes it possible for a limited set of symbols [letters] to represent all of the sounds and words of English. So this letter-sound relationship has the advantage of efficiency.

An aspect of English that makes spelling even more difficult is that, historically, pronunciation of words has changed. But, we preserve the previous or historical spellings of some words (visually) rather than changing the spelling to represent the new pronunciations. We are even further away from “one letter, one sound” in such words. So, *domestic*, becoming a noun, is *domesticity*, preserving the *c* even though the sound changes. English also conforms to its historical roots. In spite of change in pronunciation, historical spellings like the *gh* in *light* and *neighborhood* remain in the word even though the *g* is no longer spoken. For upper elementary students, it is helpful to study these historical relationships in words, and how English has borrowed many words from other languages. But when we think about reading interventions, it is simply useful for us to recognize that students must learn how words *look*. The visual patterns are important in reading.

Decoding words requires looking at the letters and “recoding” them into their sounds, and finally matching this “recoded” word with the pronunciation of a word that is stored in memory (Daneman, 1991). Associating sounds with the letters in words assists word learning by making it easier to recall them (Mann, Liberman & Shankweiler, 1980). When some sounds and letters are known, fewer exposures to a word are needed in order to learn it (Vellutino & Denckla, 1991), so sight vocabularies expand more rapidly and students make fewer errors (Ehri, 1991).

When we consider that helping children become better word solvers helps general reading ability accelerate (Stanovich, 1991) and also assists students in becoming better spellers (Juel, Griffith, & Gough, 1985), it seems important to be sure that all students, especially those considered to be at risk of reading failure, develop decoding skills. Early in their learning, students notice and use simple letter-sound relationships to decode words, left to right. This “sequential” decoding may begin as soon as children know some letters and their related sounds and have begun to “blend” the sounds while looking at the letters.

In writing, children will have learned to say words slowly, thinking about the sequence of sounds and relating them to sequences of letters. We see evidence of this learning in children’s early spellings (Read, 1971). Even when they are first learning to read, children may notice and use more than the simple letter-sound relationships that we typically think of as “phonics.” As they work with print, they may notice larger “chunks.” Treiman (1992) has speculated that “Children may more readily learn links between groups of letters and groups of phonemes. Reading and spelling instruction that begins with larger units may be more successful than instruction that begins

at the phoneme level.” It seems important to support children in learning single letters or letter clusters and corresponding sounds but to encourage them also to notice the larger units. Pressley (1998), reporting on his observations of a group of teachers in Madison, Wisconsin, who were effectively teaching decoding, says that:

The idea of giving letter and word chunk cues priority in word recognition, and then using semantic-contextual cues to check decodings based on sounding out, is one shared by some with distinguished reputations in teaching beginning reading (e.g. Clay, 1991). Indeed, the Madison, Wisconsin, teachers I have been studying found the inspiration for their instruction in Clay’s writing. (p. 146)

Many students learn these word solving strategies incidentally as they encounter words in reading and writing; but many require explicit instruction. Readers who are having difficulty not only require instruction on letter-sound relationships within words but they need explicit instruction as to how to apply that knowledge to word solving and to do so while reading continuous text (Adams, 1990; Anderson, Hiebert, Scott, & Wilkinson, 1984; Ehri, 1991; Gough & Hillinger, 1980; Johnson & Baumann, 1984; Mason, 1980; Barr & Dreeben, 1983; Juel, 1991).

Phonics/Decoding Skills in Reading Recovery

In Reading Recovery lessons, children learn letter-sound relationships in several different ways, and they are taught to apply that knowledge in reading and writing. Word solving skills are assessed in several measures used in the Observation Survey: the word reading test, the test of hearing and recording sounds

in words, the writing vocabulary test, and the text reading assessment. The hearing and recording sounds task reveals what children need to know about letters and sounds. Analysis of students' errors while they write words and read words (both in isolation and embedded in continuous text) reveals their current skills. The teacher works from there to design lessons to teach what the child needs to know next. The explicit instruction is based on the individual's needs.

Several different components of the lesson foster the use of sounds and letter correspondence. All instruction is directed toward helping children learn how "words work" and for the automatic, rapid recognition of words while reading for meaning. Children learn how words work through explicit attention to words in isolation and through analyzing words (taking them apart) in reading and spelling them in writing. Students are also taught to use left-to-right sequential decoding while reading text. In both reading and writing, teachers use explicit instruction to demonstrate critical examples so that children develop powerful word analysis strategies that they can use on many words. This combination of approaches assures that children give direct attention to words but also have the opportunity to apply skills within the acts of reading and writing.

Letters, sounds, and words. If the child has low letter knowledge, the teacher will work intensively with letters; but when the child knows about twenty letters, the teacher will begin to do some work with words in isolation. This procedure is called "making and breaking," a title which is itself a comment on phonology and how we represent it! Using magnetic letters, the teacher works with the child each day, moving from making words that the child knows to using predictable (regular) letter-sound sequences, to simple analogies, and to less predictable letter-sound sequences. The process is systematic in that the

teacher has a precise record of the sound-letter sequences that the child already knows and can use; the expansion of knowledge moves from that place to more complex associations. There is an emphasis on flexibility and on helping children learn principles that they can apply in solving many words. Along with a call for research to evaluate Clay's ideas about word recognition, Pressley (1998) writes:

We also are taken by Clay's positions on the importance of visual processing of words and attention to word sounds and parts. Clay (1991) argues for teaching children to attend carefully to words, analyzing the words into parts that can be sounded out, but also emphasizes that the decodings that result should be cross-checked with other information (i.e., syntactic and semantic-contextual cues) to determine whether the word as decoded makes sense. (p. 177-178)

After the child has read a book, the teacher may do a little more work on word solving using a white dry erase board or on paper. This work brings the child's direct attention to an example of word solving that illustrates a principle. The teacher illustrates how words work by adding, subtracting, or substituting letters and making analogies.

Words that the child uses in writing are also examined by using the "practice page." The goal is to learn how words "work." Children articulate words slowly, listening for sounds and connecting them with letters. "Boxes" are used to help children in this process. At first, teachers use a box for every phoneme or sound; but as the child learns more about the structure of words, the teachers begin to use a box for every letter. Teachers ask questions such as "What else can you hear?" or "What can you hear at the beginning?" Children move from using simple

letter-sound combinations to more complex ones. They learn that you need to analyze the new words that you want to write and to use letters, sounds, and spelling patterns to do so. They also use analogy, making connections between words.

Reading. In one Reading Recovery lesson a child will reread familiar books (that are easy but still offer some word solving opportunities), a book read for the first time the previous day, and a new book that has been introduced by the teacher. In the process of reading, children learn to apply their skills at word solving. They learn to take words apart while reading, to use initial letters and final letters as starting points, to connect sounds with letters and clusters of letters, and to notice the inflections that, added to words, change the word and make it easy to recognize. They learn not only to use the relationships of sounds and letters or letter clusters, but also to attend to large chunks or groups of letters within words; thus, they learn to use all of their developing knowledge of spelling patterns.

The teacher works to achieve rapid acceleration for the child; the sequence of instruction is determined by the child's skills and the knowledge of word segments that good readers use at a given level of learning to read. The teacher reinforces the child for self-monitoring using the letter-sound relationships he currently has. The teacher also encourages the use of letter sequences in recognition of new words. The goal is to teach the child to coordinate two complex sets of operations—sound sequence analysis and letter sequence analysis (Clay, 1993b, p. 44). In the introduction to the new text, for example, the teacher will ask the child to find one or two “new and important words” after he has said what letters to expect at the beginning. This activity directs the child's attention to the sequence of print cues that he will need to connect with meaning and language.

Teachers also provide explicit instruction in making left-to-right sound analyses of words. If a child has mastered sound-to-letter analysis but is not yet independently analyzing words in text, the teacher may write the words letter by letter on a chalkboard, asking the child to articulate the accumulating letters (for example, *c cr- cr-ash*) (Clay, 1993b, p. 47).

Books are selected so that the child will encounter words that require analysis. The goal is to learn to quickly take words apart without slowing down the reading too much. During the reading, the teacher quickly assists the child, when necessary, in problem-solving by using questioning techniques or pointing out a vital piece of information [such as a word ending]. As mentioned previously, a closer look at words using a white board or chalk board may be used after reading.

Writing. During the writing component of the Reading Recovery lesson, “the teacher calls attention to the sounds of words and spelling patterns by urging the student to listen carefully to words that will be written, prompting the child to write out a new word several times so that it will be memorable, praising progress, and so on.” (Pressley, 1998, p. 177). Words are constructed in the context of producing a continuous message. The message is written on the “story page.” Standard spelling is used on the words written in Reading Recovery lessons so that children can work with and later read the words to notice the structures and make connections between them. Writing their own messages helps children to see how text is composed and then written, letter by letter. Children have to keep the message in mind while attending to the details of print. Some words they learn to write quickly and automatically but others are used to rehearse a problem-solving process in which they use known words or parts of words to construct new words. They also form strong connections between sounds and letters or let-

ter clusters. Often, children will be observed to quickly write down a “chunk” of a word, showing the awareness of structural elements.

Principle 5: Phonics/ Structural Analysis: Teach students to use structural analysis of words and learn spelling patterns.

As students read more challenging texts, they need to learn sophisticated decoding skills. Students may have learned some letter-sound combinations and can decode simple words; but they need to go further so that they can analyze the structure of words (Nagy, Anderson, Schommer, Scott, & Stallman, 1989). More complicated understandings about how words work are developed as students learn about common spelling patterns. For example, through building and connecting words, students may learn that when a word or syllable ends with an e, the preceding vowel is usually long (*make*). When the word or syllable is “closed” with a consonant, the vowel is usually short (*hot*). Another important understanding to develop is that sounds attached to letters are affected by the letters that surround them. For example, vowels are affected by the consonants around them. We even talk about “r controlled vowels” in words like *fur*, *car*, and *sir*. It is useful for learners to see words in parts or “chunks” such as the “onset” or first part - *str* in *strike* - and the “rime” or last part - *ike* in *strike* (Adams, 1990).

In structural analysis, readers use letter sound relationships in combination with attention to larger word parts and spelling patterns. Structural analysis helps students recognize words more efficiently and rapidly in reading. In fact, this ability is a major element in skilled reading (Nagy, et. al, 1989). Readers are fully aware of the orthographic features of words as they begin to see common sequences and spelling patterns. These spelling patterns help them to read words (Ehri & McCormick, 1998).

Students need to learn to recognize words when their spellings have changed because of added endings; they learn about prefixes, compound words, and contractions. For skilled readers, word identification is based on rapid use of visual and phonemic information within the words, coordinated and checked with the meaning of the word in the context of the text (Adams, 1990, Daneman, 1991; Ehri, 1991; Juel, 1991; Stanovich, 1991). Context cues do provide support but can not be the primary word recognition strategy, as it is for some poor readers (Allington & Fleming, 1978; Gough, 1983; Stanovich, 1993-94; Stanovich & West, 1981). The process of recognizing words becomes more and more automatic; word learning is rapid. Readers can figure out words that they have never seen or heard before and come close to accurate pronunciation (Pressley, 1998).

Phonics/Structural Analysis Skills in Reading Recovery

In Reading Recovery, word analysis is integral to the reading and writing of continuous texts, but that does not mean that there is no explicit instruction in structural analysis of words. Words are considered in isolation to illustrate principles that help children gain control of the principles that underlie English spelling. There is a strong link to reading and writing, with the goal of helping children quickly use knowledge of word structure to take words apart and to spell words.

Letters, sounds, and words. The work on words becomes more and more sophisticated as the child learns more about reading and word structure. Work with magnetic letters (making and breaking) continues but at increasingly sophisticated levels. Words may be the focus of attention - taking them apart and/or linking them to other words - in any part of the lesson. There is particular attention to words in reading at these times (Clay, 1993b):

- when making and breaking words in the letter identification section of the lesson
- after familiar book reading
- during the work on the new book
- after the new book. (p. 48)

Some activities that contribute to the child's growing knowledge of word structures are adding inflections to known words, taking letters away from known words, substituting initial consonants, and making analogies. The teacher watches carefully to see what the child is actually attending to as they work together with easier analogies (words that rhyme and have the same spelling patterns). They then move to working out new words by analogy; for example, using *to* and *ball* as a basis for decoding *tall*. Harder analogies might involve spelling patterns (*night, light*). Teachers first provide explicit, clear demonstrations of concepts, and then students practice using magnetic letters, working for flexibility and fluency.

Once concepts are understood, teachers may prompt students, for example (Clay, 1993b):

- Make another word that sounds like that.
- Make another word that looks like that.
- Make another word that ends like that.
- Make another word that starts like that. (p. 51)

Reading. Children in Reading Recovery have many opportunities to take words apart while reading continuous text. During the reading of familiar texts, the child has opportunities to work in an independent way. Even though these texts have been read once or twice before, and they are relatively easy for the child, there is usually some opportunity for word solving. Rereading provides the opportunity for rapid word solving "on the run." The reading of a new text is carefully selected to provide chal-

lenge yet be easy enough for the child to engage in productive problem-solving. This “reading work” builds the self-extending system, defined as a system of strategies that enable the learner to learn from successful processing in reading. The self-extending system is one that enables the reader to keep on learning more.

As the child reads either familiar or new text, the teacher prompts and encourages the behaviors that will help the child improve the way he processes information while reading continuous text. The child, while reading, is orchestrating everything that he knows about the visual analysis of words, decoding skills, language syntax, and meaning. The teacher will prompt to encourage children to monitor reading, with language like “Does it look right?” or “Does that make sense?”

Specific prompts may support word solving by reminding the child to use behaviors that have been previously taught. For example, when a child is searching to solve a new word, the teacher may say something like “Do you know a word like that?” That prompt is a “call to action,” meaning that the understanding and behavior of connecting words has been previously taught and the child has practiced it. Now, during reading, the teacher is reminding the child to use what he knows. This “teaching for strategies” process is powerful because it helps children use their strategies while reading text. As the texts grow more challenging, the child will be expected to take apart multi-syllable words and to use sophisticated word analysis strategies. There is a direct relationship between what the teacher is teaching in the “making and breaking” component of the lesson and what the teacher prompts the child to do during reading.

Writing. As the child learns more about writing, develops a core of words that he can write fluently and with ease, and is secure in the ability to use letters and sounds to spell simple words,

the texts he can write will increase in length and sophistication. More complicated words will be used, requiring a range of strategies. The child learns that (Clay, 1993b):

- Sometimes you can analyse new words you want to write.
- Sometimes you have to know how to spell a particular word.
- Sometimes you have to 'make it like another word you know' which means you solve it by analogy with a common spelling pattern used in English. (p. 35)

The teacher moves from asking the child about “what he hears” in a word to “what letters he expects to see.” When “boxes” are used to work out words on the practice page, a box is used for each letter. This process allows the teacher to introduce the child to the more complex relationships between the sounds of the language and the way words are written. More complex spelling patterns such as *igh* for *i* are explored. As the child becomes even more adept at analyzing words in spelling, the work proceeds without boxes, although the teacher will continue to use explicit examples when needed.

Principle 6: Fluency/Automaticity: Develop speed and fluency in reading and writing.

Not only must children learn to read words, but also they must do so rapidly. Speed and fluency in reading are strongly related to comprehension. Slow, labored reading results in lowered comprehension because children can neither remember what has been read nor relate ideas to their knowledge base. The opportunity to read extended text is critical for fluency (and also for comprehension). Teachers should be watchful in providing many reading opportunities for students who are making

progress but not fast enough to keep up with most of the others in the class. Even though these students need more time reading and more instruction to build skills, they tend to receive less time reading and writing (Allington, 1991; Juel, 1988).

Teachers have long known that oral reading fluency was among the many abilities exhibited by good readers. Results of research provide evidence of the interrelationships between oral reading fluency and comprehension. It seems that good readers not only read quickly but they use phrasing patterns that reflect their understanding of the text's message (Zutell & Rasinski, 1991). Reading fluency may be directly related to the quality of students' reading comprehension (Reutzel, Hollingsworth, & Eldredge, 1994).

Becoming a fluent reader has to do with rapid, automatic word recognition as well as meaning construction. Most of the research into oral reading proficiency has centered around the ease, rapidity, and accuracy of reading performance. Rate and accuracy of oral reading are relatively straightforward characteristics to observe and measure; there are strong correlations between rate, accuracy, and scores on tests of reading comprehension (Pinnell, Pikulski, Wixson, Campbell, Gough, & Beatty, 1995). The theory suggests that if readers are automatically recognizing almost all of the words and rapidly figuring out a few that they do not know, then they have more attention for interpreting and understanding what they read.

When students are reading fluently, they are probably processing larger idea units or phrases. The meaning that they understand goes beyond individual words and it allows them to interpret the text. It is harder to measure what teachers call "phrasing," "ease," "smoothness," and "effortlessness" than it is to measure and quantitatively describe rate and accuracy, but these

aspects of oral reading may be related to how well students understand what they are reading (Snyder & Traver, 1987; Torgesen, 1986). A reader who is comprehending a text is likely to recognize sentence and phrase structure and is better able to reproduce the author's intended use of sentence and phrase structure. And, there are important factors beyond sentences. For example, understandings of text elements, such as story events, characterizations, or connections between text concept also influence expressiveness (Schreiber, 1991). Students who know what the text is "all about" and how it "works" will find it easier to read with fluency and phrasing.

Dysfluent reading becomes a concern because excessively slow and halting oral or silent reading limits the amount of reading that can be accomplished, discourages students so that they do not want to read, and interferes with comprehension because too much attention has to be given to word solving. Some researchers have recommended direct and concentrated instruction in fluency for delayed readers (Torgesen, Wagner, & Rashotte, 1997). For example, a program was designed and implemented for one year for second graders in a low economic area school (Stahl, Heubach, & Crammond, 1997). The program included fluency practice through rereading texts individually and with partners. Children's individual reading of books of their choice was also increased. Although about 10% of students were still reading below grade level, the results of the study indicated average growth of 1.88 and 1.77 grade levels for the 4 (year 1) and 10 (year 2) classrooms participating. The results of this research support the idea of using rereading as a deliberate approach to teaching for fluency. The National Research Council Committee on the Prevention of Reading Difficulties in Young Children (Snow, Burns, & Griffin, 1998) recommends that students have "sufficient practice in reading to achieve fluency with different kinds of texts written for different purposes" (p. 223).

Fluency/Automaticity in Reading Recovery

In Reading Recovery, there is a strong emphasis on teaching for fluency and phrasing in oral reading. In the 30-minute Reading Recovery lesson, the majority of time is devoted to students' reading of continuous text.⁵ While it is important for children to read and use problem-solving skills on new, challenging text every day, Reading Recovery teachers also make extensive use of the technique of rereading texts.

Beginning readers tend to read slowly because they are encountering and coordinating many new understandings, such as new language ("book language"), the directional movement of print and word recognition, as well as new concepts and ideas (Lomax & McGee, 1987). When children are first learning to match up all of this information, reading slows down. We would not expect children who are just beginning to gain control of one-to-one matching and using visual information to read rapidly. But when control is established, teachers encourage flexibility, which means "to vary the speed of reading to suit the difficulty of the text." (Clay, 1993b, p. 52).

Teachers select texts carefully to encourage fluency. For example, previously read texts may be selected because the language will "move the reader forward." While children are reading, teachers use language like "Can you read this quickly?" or "Put them all together so that it sounds like talking" (Clay, 1993b, p. 52).

Specific techniques are also used such as masking the text and asking the child to read a phrase all at once, sliding a card underneath the text to discourage finger pointing and word by

⁵A detailed study of Reading Recovery lessons indicated that an average of 60.2% of time was spent reading continuous text (Pinnell, Lyons, DeFord, Bryk & Seltzer, 1994).

word reading, sliding a card over the text to force the eyes ahead, or calling attention to the punctuation. The cut-up sentence, too, can be arranged to teach the child how to read in phrases.

According to Clay (1993b), “Fluent reading will arise from teacher attention to the role of oral language, and thinking and meaning, and increasing experience with the visual information in print, and practice in orchestrating complex processing on just-difficult-enough texts...It has quite as much to do with looking as it has to do with language.” (p. 53)

Principle 7: Comprehension: Teach students to construct meaning from print.

The goal of all reading instruction is the comprehension of written language. “The ultimate goal of reading instruction is to enable children to understand what they read. Again, the development of phoneme awareness, decoding skills, and the ability to read words fluently and automatically are NECESSARY but NOT SUFFICIENT for the construction of meaning from text” (Lyon, April 28, 1998, p. 6). Reading comprehension is an active process in which the reader and print interact. The reader is recognizing words quickly and automatically and using this skill in combination with other linguistic knowledge.

According to Pressley (1998), “Clay (1991) argues for teaching children to attend carefully to words, analyzing the words into parts that can be sounded out, but also emphasizes that the decodings that result should be cross-checked with other information (i.e., syntactic and semantic-contextual cues) to determine whether the word as decoded makes sense” (p. 177-178).

During reading, the brain is making amazing connections. Comprehension is the outcome of the reader's orchestration of many different kinds of information. Instruction in intervention programs must assure that students read and comprehend connected text. Many students will need support in order to orchestrate the complex behaviors needed. Lyon & Moats (1997) advise:

It is naive to expect that children with reading difficulties who eventually master phonological and phonics concepts will automatically transfer these concepts when attempting to read connected text. Instead, systematic instruction that links reading skills to foster the development of componential skills and their relationship to one another, and the development of fluency, should increase the probability that a youngster with reading difficulties will construct meaning from text. (p. 582)

Comprehension in Reading Recovery

The issues specific to the generalization of componential reading skills to the development of reading fluency and reading comprehension is addressed in the context of Reading Recovery lessons. Teachers work toward helping the child develop a self-extending system (Clay, 1993b):

The child:

- *monitors* his own reading and writing
- *searches* for cues in word sequences, in meaning, in letter sequences
- *discovers* new things for himself

- *cross-checks* one source of cues with another
- *repeats* as if to *confirm* his reading or writing so far
- *self-corrects* taking the initiative for making cues match or getting words right
- *solves* new words by these means. (p. 43)

All of the strategies described above, including word analysis, are directed toward the search for meaning. In Reading Recovery lessons there is a strong emphasis on teaching the relationship of skills to one another and to real reading and writing. Children are taught that what they know in one place can help them elsewhere. They are shown how analogies work to help them in figuring out new words and that those words must “fit” with what would make sense. For example, language like: “Does it make sense?” or “Can we say it that way?” might follow word solving while reading text.

The story introduction is especially directed toward giving the child an orientation to the story that will support the continual construction of meaning while he engages in the problem solving necessary to decode words. The orientation also prompts the child to use what he knows to meet the challenges of the new text. The idea of the introduction, early in the child’s program, is to create explicit understanding of how to use what the child has learned and to ensure successful processing. As the child becomes more competent in reading, the introduction moves toward more of a summary overview that supports meaning but leaves much work for the child to do (Clay, 1993b, p. 17).

Sometimes people ask whether Reading Recovery teachers have a list of prescribed “comprehension questions” to ask the child after the reading of each story. The answer is that there are no such lists of questions. Reading Recovery teachers are working

individually with children that they know very well. Meaningful conversation surrounds every component of the lesson. In the introduction of a book, during reading, and after a book is read, teachers are constantly searching for evidence in the child's behavior, especially his language, of comprehension. Detailed analysis of reading behavior provides concrete evidence not only of word solving abilities but of the fact that the child is constructing meaning. Meaning is always paramount in Reading Recovery lessons; if there is any doubt that the child understands, the teacher can always ask "on the spot" questions to check.

Principle 8: Balanced, Structured Approach: Provide a balanced approach so that literacy develops along a broad front and students can apply skills in reading and writing.

There is evidence that a balance of word identification strategy instruction with reading continuous text leads to accelerated progress for poor readers. Also, combining reading and writing, so that learning in one area supports the other, has been shown to be effective in providing for accelerated progress (Adams, 1990). Fletcher & Lyon (1998) believe that the most credible solution to reducing reading failure lies in a balance between meaning oriented instruction and word recognition instruction through teaching phonological awareness, decoding skills, and other processes.

In the article "Critical Conceptual and Methodological Considerations in Reading Intervention Research" by Lyon & Moats (1997), the authors say that an important dimension along which reading interventions are distributed is the "extent to which all components of a complete, balanced approach are included in each lesson, regardless of the student's reading level" (p. 581). They criticize intervention studies that "overemphasize one component to the detriment of others" (p. 581) and

use as an example the emphasis placed on phonological awareness and decoding with insufficient attention toward applying these skills in text reading (p. 581). Balance is related to the transfer of skills from one area to another, especially “explicitly integrating learned phonological concepts into word- and text-reading tasks.” (p. 581).

Balance is desirable; however, balance does not simply mean a “little of this and a little of that.” Structure, organization, and teaching must be part of the equation. Lyon & Moats (1997) indicate that the “explicitness and detail with which spoken and written language structures are taught” is an important dimension (p. 581). They go on to define explicit teaching of language structure as characterized by the following:

- a. deliberate organization of lesson format and content,
- b. calibration of concept difficulty along both linguistic and developmental continua,
- c. corrective feedback designed to foster linguistic insight and self-reliance in the student,
- d. careful choice of reading material for practice, and
- e. a conscious interplay between spoken and written language during teaching. (p. 581)

Longitudinal research provides strong evidence in support of a balanced approach, not only for “safety net” programs like Reading Recovery (Rowe, 1995).

Balance and Organization in Reading Recovery

I began this paper by stressing the comprehensive and integrated nature of the instructional actions incorporated in Reading Recovery. I have listed and referred to specific teaching procedures and lesson elements, but it must be noted that it is the