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# Enhancing Reading Mastery Programs Using Explicit "Reading to Learn" Formats

Abstract: Vocabulary and text comprehension strategies are acknowledged as critical components of any comprehensive reading program. This article highlights the scientifically-based research on effective reading instruction related to vocabulary and comprehension development. Specifically, the article provides explicit formats integrating these important "reading to learn" strategies into Reading Mastery lessons. These explicit instructional formats coupled with Direct Instruction programs can result in even richer vocabulary and comprehension instruction in comprehensive literacy programs. Further, this combination can help meet important state standards and gradelevel guidelines.

Reading skills are the foundation of academic success and are a focal point for instruction in the elementary grades. Students who do not acquire adequate reading skills early in their academic careers experience a myriad of problems (see Torgesen, 2004 on the importance of "avoiding the devastating downward spiral of reading failure"). Fortunately, positive trends in the teaching of reading are evident. In fact, according to the editors of the *American Educator* ("Preventing Early," 2004a):

Today, hundreds of studies later, it is possible to screen all children for weaknesses in reading development, diagnose reading problems as early as kindergarten, and deliver intensive, data-driven treatments such that 94 to 98 percent of early elementary children can reach reading levels in the average range for their grade, creating the foundation for more advanced reading. (p. 5)

Best practices in the teaching of reading were derived from an exhaustive review of the reading research conducted by the National Institute of Child Health and Human Development (NICHD, 2000). The National Reading Panel (NRP) Report was the response to a Congressional mandate to help educators identify key methods and skills central to reading achievement. The NRP reviewed more than 100,000 research studies published since 1966 and another 15,000 appearing before that time. Panel members examined research that met several important criteria including: (a) achievement in one or more skills in reading, (b) studies that were generalizable to the larger population, (c) exclusion of case studies with small numbers of students, (d) effectiveness of approaches with an emphasis on experimental research, and (e) studies regarded as high quality.

The NICHD (2000) identified five areas of effective reading instruction including phone-

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mic awareness, phonics, fluency, vocabulary, and text comprehension. Phonemic awareness, phonics, and fluency building comprise "learning to read" skills critical for beginning readers to acquire. "Reading to learn" instruction emphasizes reading for understanding; a focus is placed on vocabulary and text comprehension. According to Hirsch (2003), while we have made good progress in teaching children to decode (learning to read), we still have not overcome the "fourth-grade slump" in reading to learn (comprehension). The term "fourthgrade slump" was coined by Jeanne Chall to describe the apparent drop off in reading scores experienced by third and fourth graders. "Inadequate time and attention to comprehension instruction is a factor that contributes to the state of poor comprehension among our students" (Carnine, Silbert, Kame'enui, & Tarver, 2004, p. 201).

Interestingly, the RAND Reading Study Group (RRSG, 2002) called for increased attention in reading to learn skills for middle and high school students. This call was further described in the Reading Next Report prepared for the Carnegie Corporation by Biancarosa and Snow (2004). This report presents research on the state of middle school and high school literacy and sets a course for the development of middle school and high school reading intervention programs. According to the Reading Next Report, about 70% of older readers are in need of some type of remediation; most can decode, but they can't comprehend what they decode. Having content-area reading skills including comprehension, vocabulary, and fluency at the middle school/high school level is essential for academic success. Biancarosa and Snow recommended nine instructional elements for improving middle school and high school literacy achievement. These elements included: (a) direct, explicit comprehension instruction; (b) effective instructional principles embedded in content; (c) motivation and self-directed learning; (d) text-based collaborative learning; (e) strategic tutoring; (f) diverse texts; (g) intensive writing; (h) a technology component; and (i) ongoing formative assessment. Again, an emphasis was placed on improving reading to learn skills so students could better tackle the demands of challenging narrative text and content area materials.

To help ensure that the five elements of effective reading instruction advocated by the NICHD (2000) and Armbruster, Lehr, and Osborn (2003) are included in instruction for our children, core reading curricula are advocated within and across grades. According to the editors of American Educator ("Best Bets," 2004b), "a strong, core reading curriculum is essential for all students" (p. 18). Further, tying the five elements of effective reading instruction together is quite complex; however, teachers do not have to build such programs from scratch. Programs such as Reading Mastery exist and have a wealth of research to back them up (see Marchand-Martella, Slocum, & Martella, 2004 and Schieffer, Marchand-Martella, Martella, Simonsen., & Waldron-Soler, 2002 for details). To enhance Reading Mastery and to have it align with NICHD (2000) recommendations, further attention should be placed on reading to learn strategies; that is, students can benefit from an increased focus on vocabulary words and text comprehension strategies to advance their skills beyond basic levels. A natural focus should be on reading to gather meaning.

Reading for understanding includes knowledge of vocabulary words and text comprehension strategies. Vocabulary pertains to words we must know to understand spoken and written language. Vocabulary is learned in two ways. First, students can learn vocabulary indirectly. Indirect vocabulary learning pertains to learning vocabulary primarily through exposure—through conversations with others, being read to, or reading on your own. Thus, the more students participate in rich oral language experiences, the better their own language will be. Further, the more adults read to children and have conversations about books with them, the

better children's comprehension will be (Stahl, 1999). Finally, the more children read on their own, the more words they will encounter and the more word meanings they will learn—thus vocabulary and comprehension skills are enhanced (Cunningham & Stanovich, 1998).

Second, students can learn vocabulary directly when teachers provide explicit instruction to students (Armbruster et al., 2003). This direct instruction approach teaches words to students that are not part of their vocabularies. It includes specific word instruction and word learning strategies. Specific word instruction involves teaching individual words to students. Word learning strategies are helpful because we cannot teach the definition of every word students will encounter. Thus, they must learn a strategy for tackling words they do not know. These strategies must be taught explicitly so that students know how to use them. Armbruster et al. (2003) recommend teaching students (a) how to use dictionaries or other reference materials to learn word meanings, (b) how to use information from word parts (e.g., affixes, root words) to figure out meanings, and (c) how to use the context to determine what words mean.

Comprehension strategies are "specific procedures that guide students to become aware of how well they are comprehending as they attempt to read and write" (NICHD, 2000, p. 4-40). Explicit instruction in the use of comprehension strategies leads to improvements in understanding what is read. In this type of instruction, the teacher actively models the use of these strategies for students, then guides and provides feedback to students on their use. "Readers who are not explicitly taught these procedures are unlikely to learn, develop, or use them spontaneously" (NICHD, p. 4-40).

Armbruster et al. (2003) specified four steps in explicit instruction that promote effective comprehensive strategy instruction. These include: (a) direct explanation where teachers explain the strategy to students and show them how to apply it to their reading; (b) modeling where teachers demonstrate how to apply the strategy, often using a "think aloud" where they describe what they are doing along with showing students how to do it; (c) guided practice where students actively participate and teachers provide assistance and feedback in how to use the strategy; and (d) application (often called independent practice) where students are provided opportunities to use the strategy on their own.

Based on an analysis of research, the NICHD (2000) found seven areas of instruction with a firm scientific basis for improving comprehension in typical readers. These include the following: (a) comprehension monitoring where students actively ask themselves if they understand what they read or do not understand what they read using "fix up" strategies to resolve problems in gathering meaning from text; (b) cooperative learning where students interact with one another in the use of learning strategies, discussing information about what was read, and drawing conclusions; (c) use of graphic and semantic organizers that illustrate concepts and common relationships among concepts in text; (d) question answering where teachers ask questions to guide and monitor students' understanding of text; (e) question generation that has students ask their own questions as they read text; (f) summarization where students condense what they read into only the most important information; and (g) multiple strategy instruction that involves teaching students to use various types of strategies to assist in their comprehension of text with one such strategy being reciprocal teaching (students ask questions about what they are reading, summarize parts of the text, clarify parts they do not understand, and predict what might happen next).

Other comprehension strategies noted as promising by the NICHD (2000) include (a) activating prior knowledge, where students learn to draw upon prior knowledge and

experience to help them understand what they are reading, and (b) mental imagery, where students learn to form mental pictures of what is read.

The purpose of this article is to highlight important aspects of reading to learn instruction and how teachers can incorporate these ideas into Direct Instruction reading programs. Specifically, *Reading Mastery Plus* lessons are included along with example formats illustrating how critical strategies can be taught. It is important to note that *Reading Mastery* programs should be conducted with fidelity; the purpose of this article is to share additional explicit formats that teachers can include to further enrich and enhance students' reading to learn skills. Skills should be chosen based on state standards and grade-level guidelines for maximum benefit.

## Vocabulary Formats

Recommendations to enhance vocabulary development were derived from the following sources of scientifically-based vocabulary research: Armbruster et al. (2003); Baumann and Kame'enui (2004); Beck, McKeown, and Kucan (2002); Biemiller (1999, 2001, 2004); Carnine et al. (2004); Lehr, Osborn, and Hiebert (2003); Marchand-Martella et al. (2004); NICHD (2000); and Stahl (1999). Recommendations are noted below with sample formats written using *Reading Mastery Plus* exercises and examples. Formats involving indirect and direct vocabulary development are shared.

#### **Indirect Vocabulary Development**

Children learn vocabulary indirectly in three important ways. They engage in daily oral language experiences, they listen to adults read to them, and they read extensively on their own.

Engage in daily oral language. Children learn word meanings through conversations with others, particularly adults in their lives. Hart and Risley (2003) addressed the importance of

rich oral language experiences based on earlier work they conducted (see Hart & Risley, 1995 for details). In their earlier work conducted with young children through age 3, "86% to 98% of the words recorded in each child's vocabulary consisted of words also recorded in their parents' vocabularies" (p. 6). Improving oral language development is beyond the scope of this paper. However, Direct Instruction language programs are available. Programs such as Language for Learning and Language for Thinking are especially designed to enhance the oral language skills of children who may not have experienced rich language skills previously.

Listen to adults read. According to Stahl (1999), "another way of providing that exposure to new vocabulary might be to read to children even older children who are not traditionally read to. Several studies have found that children can learn words as efficiently from having stories read to them as they can from reading stories themselves" (p. 13). We need to build in time for students to hear us read rich literature. Reading to children is not only important for building background knowledge (see Hirsch, 2003 for details) but it is also important to build fluency. "By listening to good models of fluent reading, students learn how a reader's voice can help written text make sense. Read aloud daily to your students. By reading effortlessly and with expression, you are modeling for your students how a fluent reader sounds during reading" (Armbruster et al., 2003, p. 26).

Read extensively. Stanovich (1986) described the Matthew Effect with regard to reading. Poor readers tend to read less than skilled readers. Thus, "the rich get richer and the poor get poorer." Further, "children who are good readers become better readers because they read more and also more challenging texts, but poor readers get relatively worse because they read less and also less challenging texts. Indeed, researchers have found large differences in the amount of free reading that good and poor readers do in and

out of the school" (Stahl, 1999, p. 12). Cunningham and Stanovich (1998) found large differences in student vocabulary based solely on how much independent reading they participated in outside of school. During this study, the authors analyzed how many rare words per 1,000 appeared in selections of major sources of spoken and written language such as newspapers, textbooks, television, and adult speech. They then compared students' exposure to rare words to their vocabulary repertoire. Exposure to rare words was found to be an indicator for vocabulary growth and development. They found that reading volume accounted for substantial differences in vocabulary development (i.e., the more children read, the more vocabulary they were exposed to).

#### **Direct Vocabulary Development**

Although a great deal of vocabulary is learned through indirect ways, some vocabulary should be taught directly. "A substantially greater teacher-centered effort is needed to promote vocabulary development, especially in kindergarten and early primary years" (Biemiller, 2001, p. 27). The following guidelines illustrate how direct vocabulary instruction can occur.

Teach specific words explicitly. To enhance vocabulary development, teachers should target any unknown vocabulary words starting in Reading Mastery Plus Level 1. These words should come from text the students are reading. These words should be characteristic of mature language and appear frequently across a variety of domains. In addition, these words should have instructional potential meaning that they can be used in a variety of ways. Beck et al. (2002) noted three tiers of words when considering what words to teach. Tier 1 words rarely require instruction in school. They are words like baby, car, walk, tree. Tier 2 words are high frequency words for mature readers. They are words like benevolent, jovial, rambunctious, merchant, absurd. Tier 3 words are specific to certain domains and appear with low frequency in text. They are words like isotope,

*lathe, peninsula.* They are best learned in content area instruction before being encountered in text (e.g., preview key words before reading a chapter).

When words are defined, student-friendly definitions should be used. Saying that a *merchant* is "a person who buys and sells commodities for profit" (Random House College Dictionary, 1980) might not be very useful (or understandable) to elementary-age children. Saying that a *merchant* is "a person who buys and sells lots of things" is easier to understand. Thus, the rule of thumb is to define Tier 2 words with Tier 1 words (see Beck et al., 2002 for details). Doing so helps to ensure that students will understand word meanings. An explicit format for teaching these words is illustrated in Tables 1 and 2.

Other words that could be targeted for increased vocabulary work using the above format include those listed in Tables 3 and 4. (Note: The second author is a first-grade teacher and has experienced these words needing increased explanation during/after lessons to help with comprehension. She recommends pre-teaching the words after teacher presentation work is completed and before story reading, taking no more than 2 minutes of lesson time.)

Given the nature of the decodable text found in *Reading Mastery* programs there are almost no Tier 2 words, particularly in *Plus Level 1*; thus, the source of vocabulary development must come from read alouds (see Text Talk strategy described later).

Beck et al. (2002) advocated the use of a knowledge-rating checklist to prompt discussion (and self-evaluation) of targeted vocabulary words. A sample checklist is provided in Table 5. This checklist could be used before and after vocabulary instruction on specific words. In the primary grades this might be done as a group activity, conducted on the board or chart paper. The teacher would tally the number of students who fit into each category.

# Table 1 Reading Mastery Plus Level 1, Lesson 8

What teacher says/does:	What students say/do:
(Show word <i>rack.</i> ) Here's a new word. <b>Rack.</b> What word?	Rack
A rack is a shelf with bars or hooks. What is a rack?	A shelf with bars or hooks
What is a shelf with bars or hooks?	A rack
(Show picture of a rack.) This is a <b>rack</b> . What is this?	A rack
Listen. Dan hung his coat on <b>a shelf with bars or hooks</b> . I can say it another way. Dan hung his coat on <b>a rack</b> . Say it with me. Dan hung his coat on a rack.	Dan hung his coat on a rack.
What's another way of saying Dan hung his coat on a shelf with bars or hooks?	Dan hung his coat on a rack.
Who can find a <b>rack</b> in the classroom? How do you know it's a <b>rack</b> ?	Because it's a shelf with bars (hooks)
(Point to word rack.) What word is this?	Rack
What is a rack?	A shelf with bars or hooks
(example/nonexample) Listen. I am going to show you some pictures. If it is a <b>rack</b> , say <b>yes</b> . If it is not a <b>rack</b> , say <b>no</b> . (Hold up a picture of a rack.) Is this a <b>rack</b> ?	Yes
How do you know?	It's a shelf with bars or hooks.
(Intersperse examples/nonexamples [e.g., shelf, picture, rack, etc.]. Ask students if this is a rack and how do you know. Obtain six consecutive correct responses.)	Students respond <i>yes</i> or <i>no</i> depending upon example/nonexample and answer question, "How do you know?"
(Have students draw or build a rack during independent seatwork time.)	(Draw picture of rack or build rack.)

# Table 2 Reading Mastery Plus Level 2, Lesson 1

What teacher says/does:	What students say/do:
(Show word <i>wade</i> .) Here's a new word. <b>Wade</b> . What word?	Wade
Wade means to walk through water. What does wade mean?	To walk through water
What's another word for to walk through water?	Wade
Listen. Sam can <b>walk through</b> the puddle. I can say it another way. Sam can <b>wade</b> through the puddle. Say it with me. Sam can wade through the puddle.	Sam can wade through the puddle.
What's another way of saying Sam can <b>walk through</b> the puddle?	Sam can wade through the puddle.
Listen. Dominic can <b>walk through</b> the water at the swimming pool. Say it another way.	Dominic can wade through the water at the swimming pool.
Raise your hand if you like to <b>wade</b> .	Students raise hand
Where do you <b>wade</b> ?	Students respond individually
(Point to word wade.) What word is this?	Wade
(Put a large sheet of blue butcher paper on the floor for water. Tell students to pretend this is water.) Listen. I'll say a sentence and then call on a student to show me what is happening in the sentence. Maddy will walk through the puddle. Everybody, did Maddy wade in the puddle?	(Maddy walks on the butcher paper.) Yes
How do you know?	Call on student
Sam can walk through the stream. Did Sam <b>wade</b> in the stream?	(Sam walks on the butcher paper.) Yes
How do you know?	Call on student
Devin swam in the pool. Everybody, did Devin wade in the pool?	(Devin "swims" in the butcher paper.) <i>No</i>
How do you know?	Call on student
(Have students write and illustrate sentences using the word <b>wade</b> during independent work time. Potential sentence stem: "I had to wade through the puddle because" or "My cat/dog had to wade in the water because")	(Write and illustrate sentences using wade.)

If there are not enough words to teach given the controlled nature of the text, teachers can bring in words whose concepts fit with the story. After Lesson 130 in *Reading Mastery Plus Level 1*, teachers may want to establish a goal of one word per week. In *Level 2*, the goal can increase from one to two words per week. The format in Table 6 illustrates how this might be accomplished. (Note: The same format could be used for *Level 2*.)

Typically words are defined and practiced before students encounter them in reading, especially independent reading. Doing so sets a foundation for better comprehension. However, if teachers read outside materials to students, they can stop and discuss words as they arise to enhance their understanding. When reading text to students, teachers

should not interrupt more than 8 to 10 times to explain words that might affect comprehension (no more than 1 every 75-100 words or once per page) (Biemiller, 2004).

Beck et al. (2002) provided an example of Text Talk to enhance vocabulary development. Text Talk is especially important to use when a program includes decodable text, thereby limiting the number of Tier 2 words encountered by students. Text Talk is used when teachers use read alouds and want to incorporate direct instruction for Tier 2 words that appear in these stories (e.g., trade books, Reading Mastery Plus Language Activities book). For example, to introduce the concept of relative size (Reading Mastery Plus Level 2, Owen, Fizz and Liz stories, Lessons 129-134) teachers can read The Incredible Shrinking Teacher by Lisa

Table 3Reading Mastery Plus Level 1

Lesson:	Word	Definition
16	fade	lose color
25	ill	sick
25	mill	place where grain is crushed into flour
25	sag	bend downward
27	tame	not wild
58	tar	black, sticky stuff used on roads or rooftops
90	chore	job
95	tart	sour
129	mole	small animal that lives underground
145	pouch	small bag
147	charm	something worn for good luck
149	cross	angry
152	pane	piece of glass in a window
152	pane	piece of glass in a window

Passen (Scholastic, 2002). Several steps are used in this procedure:

1. The teacher selects three words from *The Incredible Shrinking Teacher* for direct instruction (e.g., *incredible, predicament, budge*). Most

teachers would probably consider these Tier 2 words.

2. The teacher reads the story, offering a quick explanation of the words if comprehension would be hindered without it.

Table 4Reading Mastery Plus Level 2

Lesson:	Word	Definition
1	wade	walk through water
5	shed	small building to put things
15	sly	sneaky
16	mope	act sad
24	diner	small restaurant; person who eats in a restaurant
57	dare	try to get someone to do something
69	gape	look at with surprise
69	gap	empty space between two things
95	dart	move quickly
96	brag	talk about oneself all the time
109	expert	person with a special talent

Т	able 5
Target Word	
How well do I know this word?	
Beginning of Week	End of Week
1. I never saw it before	I never saw it before
2. I've heard it but I'm not sure what it means	2. I've heard it but I'm not sure what it means
3. I think I know what it means	3. I think I know what it means
4. I know what the word means	4. I know what the word means

- 3. The teacher says each word and has the students repeat the words (e.g., "The first word is *incredible*. What word?" [*Incredible*]).
- 4. Student-friendly definitions are provided (e.g., "Incredible means hard to believe. When I read, 'This is incredible! I'm shrinking!' the author could have written, 'This is hard to believe! I'm shrinking!' What word means hard to believe?" [Incredible.]) with follow-up links to the story to enhance comprehension. (Note: This story helps students understand the Owen, Fizz and Liz stories in Reading Mastery Plus Level 2 where Fizz and Liz are so tiny that beetles are the same size as they are! [Lesson 131, p. 191].)
- 5. Students are asked to make choices (e.g., "Tell me if the examples I give are *incredible* or *not incredible*"). Liz said, "That note is as big as my front yard." (*Incredible*). Miss Irma Birmbaum said that the library shelves were as tall as skyscrapers. (*Incredible*). Dan read his story once. (*Not incredible*). The puppy was playing. (*Not incredible*).

- 6. Students can enter their new word into a word log (the log notes the word and its definition; students can write the word in a sentence and even illustrate the word. See Table 7 for a sample word log with sample sentences.
- 7. Students are asked to respond with actions (e.g., "Tell me something that is *incredible*").
- 8. Students repeat the word and the definition (e.g., "What is the word we are learning? [Incredible.] What does incredible mean? [Hard to believe.]"). This procedure is repeated for all three words and they are talked about together.
- 9. The teacher reads the story aloud in a readdiscuss, read-discuss format, being sure to stop and discuss the targeted words as they appear. Students can even be asked to put their thumbs up when they hear their targeted vocabulary words.
- 10. After the story is read, the story cover and the three words are posted on the wall. Students can earn points by using these words

# Table 6 Reading Mastery Plus Level 1, Lesson 136

What teacher says/does:	What students say/do:
After completing the story and looking at the picture, explain that another way to say that Walter felt very sad and said, "I don't want to eat. I must sit here and think," is to say that Walter <b>moped</b> .  Mope means to feel sad and pout. What does mope mean?	Feel sad and pout
What's another word for feel sad and pout?	Море
Here's another way to say Walter felt sad and pouted instead of eating dinner. Walter <b>moped</b> instead of eating dinner. What's another way of saying Walter <b>felt sad and pouted</b> instead of eating dinner?	Walter moped instead of eating dinner:
What's the new vocabulary word that means to feel sad and pout? (Add mope to vocabulary word chart in class. Reward students who use mope in independent writing or when speaking in class.)	Mope

in their everyday language (record in their student word logs). Word logs could begin in the last quarter of first grade as a group activity after teachers have explained take-home work and before students leave the reading group.

Provide multiple exposures to targeted words. Teachers should have students practice using the targeted vocabulary words over the course of the week; subsequently, they should be presented as review items. The format in Table 8 shows sample activities for students to practice using their newly acquired vocabulary words. These activities should align with grade level expectations in your district/state.

Word learning strategies. "Of course, it is not possible for teachers to provide specific instruction for all the words their students do not know. Therefore, students also need to be able to determine the meaning of words that are new to them but not taught directly to them. They need to develop effective word-learning strategies" (Armbruster et al., 2003, p. 37). Word-learning strategies include the use of a dictionary and other reference aids, defined word parts, and the use of context clues.

Students must learn to use dictionaries or other reference aids to assist them in under-

Table 7
Student Word Log

Word	Student Definition	Sentence(s)	Picture
1. incredible	hard to believe	Adam made a basket in the last seconds of the game. "That was really incredible," said the announcer.	5:39 03
2. predicament	hard problem	Sara was in a predicament when her computer stopped working.	
3. budge	move	I could not budge my father's suitcase because it was too heavy	

# **Table 8** *Vocabulary Activities*

Strategy	Reading Mastery Plus Level 1	Reading Mastery Plus Level 2
Word Association	Lesson 146: First paragraph: What word means the same as difficult to climb? ( <i>steep</i> )	Lesson 15: What word means the same as sneaky? (sly) What word means the same as trick? (con)
Have you ever?	Lesson 146: Describe a time when you climbed something steep. Tell what it was and how you felt after climbing it.	Lesson 17: Describe a time when you moped. Tell when it was and how you felt. What did others around you say when you moped?
Applause, Applause	Lesson 141: After reading, "Walter is the star of the game," have students clap to show how much they'd like to be "the star of the game." (Not at all, a little bit, a lot.)	Lesson 26: At end of story: "Do you think the boss will be proud of Sid?" Have students clap to show how proud they think the boss would be. (Not at all, a little bit, a lot.)  Then have them clap to show how proud the teacher is of their own reading skills. (Not at all, a little bit, a lot.)
Idea Completion	Lesson 141: Jenna is the star of the game because	Lesson 15: The puppy was sly because
Examples	Lesson 112: When you come to the edge of a creek you are at the bank of the creek. What other things have a bank? ( <i>stream, lake, river</i> )	Lesson 117: When you want to keep your dog from running away you put it in a kennel. Name other things that could be put in a kennel. ( <i>cats, rabbits</i> )
Making choices	Lesson 146: Tell me if the thing I describe is steep or not steep.  A soccer field ( <i>not steep</i> )  A tall roller coaster ( <i>steep</i> )  A high mountain ( <i>steep</i> )  A merry-go-round ( <i>not steep</i> )	Lesson 130: Tell me if the thing I describe can drift or not drift.  A boat on the lake (drift)  A leaf in the air (drift)  A chair (not drift)

Table 8, continued			
Strategy	Reading Mastery Plus Level 1	Reading Mastery Plus Level 2	
Matching word/definition	Vocabulary Review after Lesson 160: steep = difficult to climb; mope = to feel sad and pout (from Lesson 136 as a preteach for Level 2); sly = sneaky	Vocabulary Review after Lesson 130 drift = move slowly; sly = sneaky; mope = to feel sad and pout; con = trick	
Fill in blanks	Vocabulary Review after Lesson 106: Dan climbed a very high mountain. The mountain was (steep). Jen acted sad and pouted after Mom said to go clean her room. Jen (moped).	Vocabulary Review after Lesson 160 Dominic looked with surprise at the snowboarder jumping off the cliff. He (gaped) at the snowboarder's tricks. The dog ran quickly in front of the car. The dog (darted) in front of the car.	

standing what words mean. Good dictionaries that provide student-friendly definitions include COBUILD: New Student's Dictionary (2002) or Longman Handy Learner's Dictionary of American English (2000). When teachers model dictionary use, have students practice under close supervision of the teacher (with careful teacher feedback provided), and then have opportunities to practice on their own over time, dictionary use (along with other reference aids) can be mastered. Teachers can also utilize on-line dictionaries or reference aids as well. The aforementioned dictionaries may prove to be too difficult for early readers. A student-friendly glossary for Reading Mastery Plus Levels 1 and 2 would assist students in learning dictionary skills with words from their lessons as suggested below. Words that students could look up in their glossary could be chosen from Table 9.

Word parts are also important to know. Knowing common prefixes and suffixes (affixes), base words, and root words can help students learn the meanings of many more new words and can promote word generalization. The format in Table 10 illustrates how word parts can be taught. However, given the controlled nature of the text, there are not enough prefixes or suffixes used in *Reading Mastery Plus Levels 1* and 2 to make this instruction meaningful. The word parts *dis* and *re* do appear in *Reading Mastery Plus Level 2* and may serve as an important introduction to word parts instruction appearing in later levels.

Context clues help students derive meaning. However, they should not be used as a decoding technique. Therefore, students should sound out words and then continue reading "past" and "around" these words to help determine their meaning. This strategy can be modeled using a teacher think aloud—"I am not sure what this word means. I will keep reading to see if I can find clues that will help me find out what the word means." Table 11 shows how students can be

taught to use context clues to help with text comprehension. Use of context clues is more complex and may be targeted for later lessons in *Reading Mastery Plus Level 2*.

Teachers can reinforce word knowledge using a variety of activities. They can post words on the wall, thereby developing a word wall, and post names when students use these words

# Table 9 Glossary

Reading Mastery Plus Level 1	Reading Mastery Plus Level 2
Lesson 106—shark	Lesson 2—scare
Lesson 112—stream	Lesson 11—kit, kite
Lesson 127—barn, farm, park	Lesson 15—con
Lesson 129—mole	Lesson 17—mope
Lesson 136—mope (pre-teaching for <i>Level 2</i>	Lesson 30—smart
at Lesson 17)	Lesson 39—cast
Lesson 143—moo, teacher	Lesson 51—Rome
Lesson 146—pouch, mountain, clouds, steep	Lesson 58—human
Lesson 148—pouch	Lesson 63—truck, trunk
Lesson 153—lies	Lesson 64—rental car, dental care
Lesson 154—sly (preteaching for <i>Level 2</i> at Lesson 45)	Lesson 81—peevish
103011 10)	Lesson 86—disappeared
	Lesson 97—darted
	Lesson 106—boomed
	Lesson 113—odor
	Lesson 126—expert
	Lesson 130—drifted
	Lesson 132—island
	Lesson 134—campground, sunlight, spoil, wander, flood
	Lesson 141—hero, raccoon, rushed
	Lesson 152—fake, state
	Lesson 157—gaped (staring with wide eyes)

(e.g., labeled Word Wizards by Beck et al., 2002). Teachers can award "word wise" certificates when students use their vocabulary words in class. Further, they can play word games (based on games such as *Apples to Apples™* or *Taboo™*). Teachers can write each new vocabulary word on a card, and on the word wall. Then they can write the definition and/or meaning sentence on another card. Teachers can draw a word card or meaning card from the box and students can give the definition or meaning. This game can be played as a team with each team getting points for the correct definition, word, or meaning sentence.

## Comprehension Formats

Recommendations to enhance text comprehension development were derived from the following sources of scientifically based reading research and/or popular comprehension texts: Armbruster et al. (2003); Carnine et al. (2004); Duffy (2003); Hirsch (2003); Miller (2002); NICHD (2000); and Tovani (2000). Recommendations are noted below with sample formats written using *Reading Mastery Plus* exercises. Formats on comprehension monitoring, graphic/semantic organizers, answering questions, generating questions, summarizing, multiple strategy

## Table 10

Word Parts

#### Reading Mastery Plus Level 2

Dis:

Lesson 53, 87 – *disappear*. When *dis* is at the beginning of a word, it makes the word mean its opposite. If I do not like broccoli I say I *dislike* broccoli. What's another way to say you don't like broccoli? (*I dislike broccoli*.) If something goes away I can say it *disappears*. What's another way of saying my cat goes away? (*My cat disappears*.)

Lesson 145 – *disorderly*. When *dis* is at the beginning of a word, it makes the word mean its opposite. If something is not orderly, I say it is disorderly. Here's a way of saying the students were loud and rude at the assembly. The students were *disorderly* at the assembly. What's another way of saying the students were rude at the assembly? (*The students were disorderly at the assembly.*)

Lesson 151 – dislike. (Repeat format above using dislike.)

Re:

Lesson 147 - recharge, replay, reprint

Lesson 148 - resend. revisit

Lesson 151 - replant

When re is at the beginning of a word it means do again. What does re mean? (Do again.)

Dad had to charge the battery again. I can say it another way. Dad had to *recharge* the battery. What's another way of saying Dad had to charge the battery again? (*Dad had to recharge the battery*.)

instruction, activating prior knowledge, and mental imagery are shared.

#### **Comprehension Monitoring**

Comprehension monitoring teaches students to be aware of what they do understand and what they *don't* understand. When problems arise, students use appropriate "fix up" strategies. These fix-up strategies include identifying where the problem occurs (e.g., "I don't understand the first paragraph on page 40."), identifying what the problem is (e.g., "I am not sure what 'he looked mad enough to spit ink' means."), restating the problem in one's own words (e.g., "It means he was really mad."), rereading the text, stopping and thinking about what was read, and slowing down when reading (Armbruster et al., 2003; Tovani, 2000). One approach for teaching these fix-up strategies is to model their use through teacher think alouds (Armbruster et al., 2003). Adding think alouds to the parts of the script where teachers are directed to reread the passage for the students provides an optimal time to model these strategies. This modeling should be followed by guided and independent practice activities for students taking place within their own reading materials. The formats in Table 12 illustrate how a think aloud could be used for two of these fix-up strategies.

#### **Graphic/Semantic Organizers**

Graphic and semantic organizers illustrate concepts and interrelationships among concepts in students' reading materials through the use of diagrams or other pictorial devices; they are also known as story maps or webs (Armbruster et al., 2003; Marchand-Martella, Miller, & MacQueen, 1998; NICHD, 2000). Graphic organizers help students focus on the most important aspects of what they are reading. They also help students write more organized summaries of text (Armbruster et al.). Along these lines, the NICHD recommended a specific focus on story structure. Students should be immersed in identifying main characters, setting, plot, and outcomes, for example. They should incorporate these terms into their own verbal repertoires. The lessons in Table 13 could incorporate graphic/semantic organizers to help organize text. Example graphic organizers are shown and could be used weekly in either Reading Mastery Plus or read aloud text.

# Table 11

Context Clues

#### Reading Mastery Plus Level 1, Lesson 141

#### Walter is the Star of the Game

Have students reread the previous two paragraphs and find clues to what "star of the game" means (i.e., "The boys on Walter's team picked him up and yelled, 'Walter kicked for a score.' The boys from the other team said, 'You are some football player").

## ${\it Reading\,Mastery\,Plus\,Level\,2,\,Lesson\,96}$

Tubby the Tugboat

Have student reread the story to find sentences that explain what a tugboat is (i.e., "That boat was as dumpy as Red Cat was sleek. That boat was a smoky old tug named Tubby. Most of the other boats were fun boats, but Tubby was a workboat. Tubby was ten times slower than Red Cat, but she was ten times stronger. Tubby's job was to pull and push the biggest ships...Tubby was almost as strong as those large ships").

Graphic organizers could be used as a group activity on the board; later, students could copy information on their own graphic organizers.

#### **Answering Questions**

Questions strategically placed in text help guide and monitor students' learning. Reading *Mastery* includes well-placed questions; these are typically text explicit (stated explicitly in the text). Carnine et al. (2004) refers to these questions as literal comprehension. These questions include: who, what, where, when, and why questions. Students should be encouraged to remember what they have read to help answer these questions but that they can refer back to passages if need be. Again, this process should be demonstrated to students. Text implicit questions (also noted as inferential questions) are those in which information is implied based on what is found in the story (Armbruster et al., 2003; Carnine et al.). Increased inferential questions can be strategically added to the Reading Mastery formats. After Lesson 60 in *Reading Mastery Plus Level 1*, teachers can add one to two inferential questions per week. The format in Table 14 illustrates how this can be accomplished.

#### **Generating Questions**

Students should not only answer questions posed by the teacher but should also learn to frame their own questions based on what they have read. Question generation helps students monitor their own comprehension, engaging them with text at even higher levels (Tovani, 2000). A sample format with prompts to help students generate their own questions is provided in Table 15. These question prompts (e.g., "Who is the story about?") can be faded over time to one word prompts (e.g., "Who?"). This narrative plan should be completed when students have read the story or after a teacher read aloud.

In addition to literal questions noted above in the narrative plan, students should also learn

#### Table 12

Comprehension Monitoring

#### Reading Mastery Plus Level 1, Lesson 160 | Reading Mastery Plus Level 2, Lesson 157

Read the text and model how to stop and think about what was read. "Now the fire was all around the two deer. The cloud said, 'I am the only one who can help those deer. So I will try to rain.'"

Say, "It looks like the cloud is the only one who can help the deer. I wonder what the cloud will do. I will keep reading to find out."

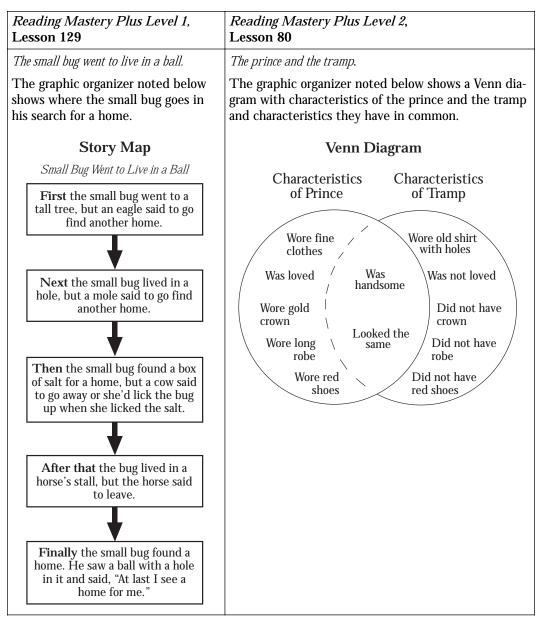
Read the text too quickly. "The people in the tent shook their heads. Some of them were saying, 'Super Mustard couldn't do that.' But a moment later, people were staring with wide eyes."

Model the problem by saying, "I'm not sure what I just read. I must slow down and think about what I am reading so I can remember important details of the story." Reread text at a slower pace. Ask yourself a question to show you can now answer it (e.g., "How did people look when Super Mustard performed the trick? [They were staring with wide eyes.] I can now answer the question because I slowed down and thought about what I was reading.").

to generate inferential questions (later lessons of *Reading Mastery Plus Level 2* with more emphasis in later levels—*Levels 3* and beyond).

Questions that pertain to feelings (e.g., "How do you think Roy/his father felt?") or their own lives (e.g., "Have you ever done anything like

**Table 13** *Example Lessons for Use With Graphic Organizers* 



Roy did? Tell us about it. How did it make you/others feel?") can help students make connections to real world experiences.

#### Summarizing

Summarization is an important skill in that it not only helps students identify key concepts found in text, but it also reduces information into key ideas that students can remember (Carnine et al., 2004). Determining main idea is an important skill for students. Carnine et al. note the usefulness of the "paragraph shrinking strategy" advocated by Fuchs, Fuchs, Mathes, and Simmons (1996). In this procedure, students learn to name who or what the paragraph is about, tell the most important

thing about the who or what, and say (write) the main idea using this information in 10 words or less (thus, paragraph shrinking).

A sample format using a summarizing (story retell) technique is illustrated in Table 16. This format may be utilized when students have read a story or after a teacher read aloud as a language arts activity.

#### **Multiple Strategy Instruction**

One approach that incorporates four text comprehension and monitoring strategies is reciprocal teaching (Palincsar & Brown, 1986). In reciprocal teaching, the teacher and students take turns assuming the role of the teacher. The

**Table 14** *Inferential Questions* 

Reading Mastery Plus Level 1	Read

Lesson 61—Lots of Cars

At the end of the story direct students to look at the picture and ask what you would do if you had all those cop cars.

Lesson 96—Bill Went Fishing

At the end of the first page ask what you think Bill could do to catch fish.

Lesson 101—The Red Toothbrush

At the end of the story ask how you know that their teeth were really white. Have students read the sentence(s) from the text that makes them think the teeth were white.

Lesson 136—Walter Wanted to Play Football

At the end of the story ask if Walter's team treated him the right way. Ask what they read that made them think this way.

#### Reading Mastery Plus Level 2

Lesson 38—Boo the Ghost

At the end of the story ask why the people in the town were afraid of Boo when he liked to do things that made everybody happy. Ask what they read in the story that made them think this way.

Lesson 102—Molly and Bleep - Part Two

At the end of the first page ask why Mrs. Anderson thought she was talking to Molly.

Lesson 130—Owen. Fizz and Liz - Part Two

At the end of Owen's letter (Textbook, p. 184) ask why Owen thought his island was very small, the animals were small, and the bugs were so tiny you could hardly see them.

Lesson 131—Owen, Fizz and Liz - Part Three

At the end of Fizz and Liz's letter (Textbook, p. 191) ask why Fizz and Liz thought their island was very big, the animals were big, and the bugs were big and easy to see.

"teacher" is responsible for leading a discussion about a passage. Students learn to make predictions (i.e., hypothesize what will happen next in the text), generate questions, summarize what was read, and clarify difficult parts of the text. A sample format for using reciprocal teaching is illustrated in Table 17. (Note: This sample was adapted from a reciprocal teaching worksheet found at www.interventioncentral. org.) Teachers can model filling out the form and incorporate guided and independent practice using the form. Ultimately, students complete the form by themselves as part of a cooperative group activity. Given the complex nature of reciprocal teaching, it is better incorporated into higher levels of Reading Mastery Plus.

#### **Activating Prior Knowledge**

Good readers make connections with text (Tovani, 2000). That is, they learn to ask how

what they are reading relates to something that has happened to them (text to self), something they have read before (text to text), or the world around them (text to world). Activating prior knowledge involves previewing text and asking students what they already know about the content. This activity is easy to conduct as soon as stories have a title in *Reading Mastery Plus Level* 1. For instance, in the story *The Red Toothbrush*, the script directs teachers to ask what the story is about. To activate prior knowledge, teachers could ask, "Raise your hand if your toothbrush is red." More complex sample formats are shown in Table 18.

#### **Mental Imagery**

Armbruster et al. (2003) noted that "readers (especially younger readers) who visualize during reading understand and remember what

#### Table 15

Narrative Plan

Reading Mastery Plus Level 1 Independent Reader: The Boy Who Yelled Wolf (after Lesson 135)

Who?	Where?	When?	What?
Who is the story about?	Where did the story take place?	When did the story take place?	What is the story about?
Roy	farm	summer	a boy who yells wolf
sheep	field		
townspeople father	town		

Beginning?		Problem?	End?	
	How does the story begin?	What is the problem?	How does the story end?	
	His dad sent him to watch the sheep.	Roy is bored and keeps saying wolf when there is no wolf. He tries to fool the townspeople.	Roy learned a lesson not to fool people yelling wolf when there is no wolf.	

#### Table 16

#### Summarizing/Story Retell Technique

#### Reading Mastery Plus Level 1, Lesson 76 Reading Mastery Plus Level 2, Lesson 156 After students read the story as a group, Model paragraph shrinking technique. Use model a story retell. prompts: who/what; most important thing; main idea. Remember to use 10 words or less The Talking Cat in the main idea. "This story begins with a girl going for a Begin with passages of one to two paragraphs walk. Then she met something. What did she to teach the paragraph shrinking strategy. meet? (a cat) She asks the cat something. Then move to longer passages as students What did she ask? (Can you talk to me?) The demonstrate mastery. cat said, "I can talk but I don't talk to girls. I talk to \_\_\_\_\_." Who does the cat talk to? Tree Rings (girls) Paragraph 1: In the middle of the story, the girl didn't like Who/what: (tall trees) the cat if it wouldn't talk to her so she said she wouldn't give to cats she didn't like. Most important thing: (Look at the rings in a What was that? (fish) The cat liked fish so he tree to tell how old it is.) decided to \_\_ to the girl. What did the cat Main idea: (The rings in a tree tell its age.) do? (talk) Paragraph 2: At the end of the story, the girl and the cat Who/what: (one ring each year) (ate) fish together. Most important thing: (Rings have a dark and Call on student(s) to retell the story. light part.) Main idea: (Fall and winter make dark rings, Writing extension: Do a summary format as a spring and summer light.) writing lesson after completing the reading lesson. Paragraph 3: The Talking Cat Who/what: (rings of tree) One day a \_\_\_\_went for a walk. She met a Most important thing: (Count rings to tell how . She asked, "Can you \_\_\_\_?" The cat old.) said, "Yes, I can talk but I don't talk to The girl said, "I don't give \_\_\_\_ to cats I don't Main idea: (Counting the rings in a tree trunk tells like." The cat liked so he to the its age.) girl. Then the cat and the girl\_ After modeling and practicing story retells for several lessons, have students retell stories orally at end of each story. To involve more students have one student tell the beginning, another student tell the middle, and another student tell the end.

#### Table 17

### Reciprocal Teaching

tep 2.	List <b>Main Idea</b> of each paragraph or key selection: As you finish reading each paragraph or key selection of the passage, summarize the main idea in 10 words or less.	Step 3.	Generate <b>Questions</b> of each main idea: For each main idea listed, write down at least one question that the main idea will answer. Good questions should include the following: who, where, when, why, and what.
	Main Idea 1:	<del></del>	Question 1:
	·		
	Main Idea 2:	<b></b>	Question 2:
	·		
	Main Idea 3:	<b></b>	Question 3:

they read better than readers who do not visualize" (p. 56). Teachers should urge students to picture a setting, character, or event described in the text before they show students actual pictures. Students should be questioned on what they "see." This activity takes only a few minutes. A sample format is illustrated in Tables 19 and 20.

#### **Building Background Knowledge**

Hirsch (2003) emphasizes the need to build rich and varied "domain" knowledge to enhance comprehension. This domain knowledge relates to information all around us. Rich and varied knowledge can be added by the teacher across the school day: during

center activities, story reading done by the teacher, film, art, music, science, social studies, etc. Building background knowledge comes from introducing students to the world around them. As Hirsch notes, "start early to build word and world knowledge" (p. 21). Hirsch advocates "core knowledge" sequences (see www.coreknowledge.org/ Ckproto2/bkstr/seqnc.htm for details). A sample format is illustrated in Table 21 on how teachers can incorporate activities to build background knowledge aligned with text from *Reading Mastery Plus*. Teachers should use Reading Mastery Plus teacher planning pages or their school library to choose read alouds to build background knowledge.

 Table 18

 Activating Prior Knowledge

Reading Mastery Plus Level 1, Lesson 159	Reading Mastery Plus Level 2, Lesson 150
The Little Cloud	Birds
Divide butcher paper into two columns. After reading title ask students what they know about clouds. Write "What we know about clouds" as left column heading. Record ideas under this heading. ( <i>Clouds are in the sky. Clouds can make rain.</i> )	Divide butcher paper into two columns. After reading title ask students what they know about birds. Write "What we know about birds" as left column heading. Record ideas under this heading ( <i>Birds fly. Birds have two legs and feathers.</i> )
Read Story 159 following teacher script with story questions. At end of questions ask students what they learned about clouds from this story. Write "What we learned about clouds" as right column heading. Record responses under this heading. (Clouds are different in size. Bigger clouds can make rain. Smaller clouds can't make rain.)	Read story following teacher script with story questions. At end of questions ask students what they learned about birds from this story. Write "What we learned about birds" as right column heading. Record responses under this heading. (Birds are different in size. Birds come in all colors. Bluebirds are small birds. Finches are smaller than bluebirds.)
Compare what students know about clouds to what they learned about clouds from the story. Discuss.	Compare what students know about birds to what they learned about birds from the story. Discuss.
Add to chart on subsequent stories.	Add to chart on subsequent stories.

## Summary

In order to succeed academically, students need to develop reading skills and deepen their reading comprehension. While systematic and intensive instruction in phonemic awareness, phonics, and fluency for "learning to read" has received a great deal of attention in recent years, the skills essential for "reading to learn" or reading for understanding, including vocabulary and text comprehension, also have been recognized as equally important targets for instruction (RRSG, 2002). Reading for understanding involves developing a working

knowledge of vocabulary and enhancing text comprehension skills. Using scientifically-based research recommendations, instructional approaches for teaching vocabulary and comprehension were highlighted with examples of strategies for integrating these approaches into *Reading Mastery* lessons.

As discussed, vocabulary knowledge is developed through indirect and direct learning. Indirect vocabulary learning occurs through daily oral language experiences, listening to others read, and reading extensively. These learning activities can occur in multiple set-

#### Table 19

Mental Imagery

#### Reading Mastery Plus Level 1, Lesson 146

Model thinking to students by saying aloud what the words, passage, or story makes you see or think about.

The Magic Pouch

After students read the first paragraph, have students close their eyes. Reread the paragraph. Direct students to imagine where the girl lives and what she sees from her house. Then relate a personal experience about wanting to see what's on a mountain and have children share their experiences.

"That paragraph reminds me of what I see out my window. I see Mt. Spokane. I notice that the clouds like to cover the top of the mountain lots of the time and it makes me wonder what's on the top."

After reading the second paragraph explain what mental images you had as they read.

"I thought her mom said not to climb the mountain and now she's going to do it anyway. That makes me worried. Why am I feeling worried?" (*She's not obeying her mom. She's too little to go into the mountains alone.*)

Continue with each paragraph noting what you are visualizing as students read the paragraph. Ask students what they are visualizing and continue reading the story.

**Independent Activity:** 

Students draw what they think is on the other side of the clouds at the top of the mountain.

Before the next lesson, have students share their mental images that they drew; have the group discuss why the pictures look different.

tings—at home with older siblings or parents as well as at school. These indirect methods of learning vocabulary can be incorporated into daily language arts activities. Encouraging collaborative discussions between and among students and teachers can enrich vocabulary knowledge. Learning the importance of engaging students in discussions and introducing new concepts and words through interactive conversations, teachers can systematically integrate these experiences into the day-today classroom schedule. Similarly, teachers can read to students, exposing them not only to fluent and expressive models of reading but to a wide range of new vocabulary. And finally, teachers can encourage students to read extensively, across varied disciplines, to enhance vocabulary development.

In addition to indirect vocabulary development, several effective direct vocabulary development strategies were highlighted and examples offered for the integration of these strategies into *Reading Mastery* programs. The strategies of teaching words explicitly, providing multiple exposures to words, and instruction in word learning strategies have been shown to improve students' vocabulary and comprehension skills. We noted that when teaching words explicitly, teachers need to be cognizant of the three tiers of words—those that require little instruction in school (Tier 1), those that are high frequency words for mature readers (Tier 2), and those that are used in content-specific disciplines (Tier 3) (Beck et al., 2002). A framework was provided for learning new vocabulary by using Tier 1 words (more fre-

#### Table 20

Mental Imagery

#### Reading Mastery Plus Level 2, Lessons 11-13

Students revise their imagery based on new learning. Chapter stories work well to teach this concept.

Sam Gets a Kite Kit

Use the mental imagery worksheet below to have students draw what they think Sam's kite looked like after each chapter of the story.

Chapter 1: Sam gets a kite kit.	Chapter 2: Sam makes a funny kite.	Chapter 3: Can Sam's kite really fly?
What I see:	What I now see:	What I now see:

quent, more familiar) to describe/define Tier 2 words. Using the example of Text Talk (Beck et al.), a format of vocabulary enhancement was provided that included varied instructional activities (e.g., student rehearsal, student word log) that directly focused on new words embedded within a story. Providing multiple exposures to new

words through the use of word associations, making connections to background knowledge through questioning, providing examples, and matching words to definitions also were discussed as ways to enhance vocabulary development. Providing explicit instruction in word learning strategies using dictionaries, references, word parts, and con-

#### Table 21

Building Background Knowledge

#### Reading Mastery Plus Level 2, Lessons 138-143

Noser

Before students reach the stories build background knowledge on search and rescue dogs by reading non-fiction selections as read alouds, by having students read library books about dogs, and by incorporating the facts learned through reading into student writing. Sources include read aloud books such as *Search and Rescue Dogs* by Charles George (Scholastic, 1998); children's books such as *Brave Norman: A True Story* by Andrew Clements (Scholastic, 2001); *Police Dogs* by Charles and Linda George (Scholastic, 1998); and websites such as www.canismajor.com/dog/srchresc.html (a reference site for teachers giving facts about search and rescue dogs) and www.fbi.gov/kids/dogs/search.htm (a student-friendly site showing FBI search and rescue dogs by picture and name).

"We're going to be reading a chapter story on search and rescue dogs soon. Today we are going to learn about search and rescue dogs. A dog's sense of smell is more powerful than ours. Everybody say that fact." (A dog's sense of smell is more powerful than ours.) "A dog can find one odor hidden by many others. Say that fact." (A dog can find one odor hidden by many others.) "When a dog is trailing a person, it follows the odor of skin cells that flake off the person as the person moves about. What does a dog follow when trailing a person?" (Skin cells that flake off the person as the person moves about.)

Ask students what they know about search and rescue dogs. Record this information on a chart labeled, "What We Know About Search and Rescue Dogs." Read books *Search and Rescue Dogs* and *Police Dogs* by Charles George and have students add facts to butcher paper labeled, "What We Learned About Search and Rescue Dogs."

Review the butcher paper chart each day and add new facts from *Noser* stories after each day's lesson.

After completing the *Noser* stories have students use facts about search and rescue dogs to write their own story about a search and rescue dog. Have students edit and share stories with the class.

Culminating project: Contact local animal shelter or search and rescue division of local law enforcement for a handler and dog to come into the classroom for a demonstration.

text clues can also assist students in understanding unknown words they encounter as they read narrative, expository, or content area texts (i.e., history, science). Word play, or having fun with words, is an engaging approach to vocabulary development that can involve "word wise" certificates, games, and competitions, and can be integrated into *Reading Mastery* programs.

Explicit instructional approaches for increasing comprehension skills including comprehension monitoring, answering and generating questions, summarizing, multiple strategies, activating prior knowledge, and mental imagery have not only been shown to be effective in increasing comprehension but also can become a powerful segment of Reading Mastery programs. Several commonalities or themes are apparent across these explicit instructional approaches. First, teaching students to monitor their own learning and to take an active role in understanding are evident in each approach discussed. For example, in the comprehension monitoring approaches outlined, students are explicitly taught to question their own understanding of the text and are provided strategies that enable them to decipher the meaning of the text including such strategies as "fix up" and problem identification. By using well placed questions throughout a story, students are encouraged to interact with the text: ask themselves who, what, when, and where questions; and remember the details in the story. In multiple strategy instruction, students learn to make predictions, summarize, and clarify as well as to generate questions. Activating prior knowledge provides students with the opportunity to connect their backgrounds and experiences with the text. Thus, with student engagement in the comprehension process as a focus of these strategies, active learning of comprehension skills occurs.

A second theme that runs throughout all of the instructional approaches involves the demystification of comprehension skills. By modeling comprehension skills and using teacher think alouds, teachers make the comprehension process overt as opposed to having comprehension remain a covert, secret skill—one that prevents understanding of text. In each approach discussed, students are explicitly "guided" through a comprehension strategy, shown how to respond to or generate questions, given opportunities to rehearse and practice skills, and provided corrective feedback on their use of the strategy. As seen in the use of graphic organizers, teachers can translate the abstract nature of a story into concrete, clearly visible features, which increases comprehension. The "paragraph shrinking strategy" is another example of clarifying comprehension by making the main idea and the important details transparent. By using these explicit instructional strategies to increase comprehension, teachers can clarify a complex comprehension process, making it "real" and "do-able" to the students.

The third commonality these explicit instructional strategies share is that they are flexible and relatively easy to integrate into *Reading Mastery* programs. Instructing students in "fix up" strategies, how to answer/generate questions, in the skills of summarization and mental imagery, or providing a graphic organizer are all flexible enough that these can be incorporated into any lesson or program. Systematically designing lessons around these strategies and strategically placing them within a program takes time and thought but the actual strategies themselves are adaptable to *Reading Mastery* programs.

As Biancarosa and Snow (2004) noted, the majority of our older readers are critically in need of explicit instruction in vocabulary and comprehension. When integrated into *Reading Mastery* programs, the scientifically-based strategies described here are highly effective tools for improving vocabulary and comprehension skills early in a child's academic career, thereby promoting rich learning, future academic success, and decreased efforts placed on remediating the skills of older readers.

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