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ABSTRACT

This monograph elaborates the interactive definition of reading and illustrates how this process, along with inappropriate instruction, can reinforce poor reading behaviors. The monograph also outlines current instructional procedures and proposes new programmatic solutions. The monograph concludes with a list of premises based on recent reading research: (1) reading problems are not solely a deficit within readers; (2) teachers' instructional decisions and behaviors are powerful influences on students' learning; (3) students need to read extended text for authentic purposes in social and interactive environments; (4) school and district administrators need to support the shared communication between the specialists and the classroom teacher; and (5) public policy regulations need to allow for school districts to orchestrate and deliver an instructional plan that will provide high-quality instruction rather than meet a multitude of federal guidelines. Two figures are included; a 56-item bib. ography is attached. (RS)

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ED 320 104

## Remedial Reading

by Barbara J. Walker



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A National Education Association Publication

What Research Says to the Teacher

# Remedial Reading

by Barbara J. Walker

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## INTRODUCTION

During the last decade, reading has been defined as an active and constructive process. This means that readers construct a model of meaning using both their personal knowledge and information in the text. Reader differences, then, are attributed to types of knowledge possessed by the reader as well as situational variables such as text type and teacher-assigned tasks (51).<sup>\*</sup> Thus, understanding results from an interaction whereby readers use a multitude of factors within any given reading event (their purposes for reading, their topic knowledge, the text, and the situational context) to construct their interpretation and make sense of what they read. And reading difficulty, rather than being a static deficit within the reader, has been reconceptualized as resulting from an interaction of these factors. For example, a group of children from Montana read and understood a difficult passage about geysers because they had just returned from Yellowstone National Park where a forest ranger had discussed how geysers were formed. This same group of children had a great deal of difficulty reading an easier passage about the development of a coral reef. In these two instances, the students had not changed, the text had. In other words, their performance on the coral passage was not a result of an underlying cognitive deficit, but simply a lack of familiarity with the topic and/or understanding of the vocabulary. Both the readers' ability and the difficulty of a reading activity are seen as relative, indicating that reading difficulty is no longer considered an absolute property but dependent on an interaction among a specific reader, a text, and instruction (55). Based on this premise, then, readers who are continually placed in reading situations with difficult text develop compensatory behaviors (like wildly guessing at words using their personal knowledge). This often results in parents and teachers labeling them remedial readers.

Additionally, research indicates that remedial readers receive less quantity and quality of instruction because of being labeled remedial

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<sup>\*</sup>Numbers in parentheses appearing in the text refer to the Bibliography beginning on page 29.

readers (4). This instructional situation increases the likelihood that these readers will be placed in difficult text where they will develop the compensatory behaviors that are discussed in the following sections. Thus, classroom research taken together with the research on the reading process indicates that we have the knowledge to create appropriate programs for remedial readers.

This monograph elaborates this interactive definition of reading and illustrates how this process, along with inappropriate instruction, can reinforce poor reading behaviors. It also outlines current instructional procedures and proposes new programmatic solutions.



# PART I. RECONCEPTUALIZING READING FAILURE

## Interactive Reading Defined

Even though reading is a complex process, cognitive psychologists generally agree that it is an active thinking process. Four aspects can help define this process. First, readers use both what they know (reader-based inferencing) and information from the text (text-based inferencing) to construct meaning. Readers anticipate what the text will say by thinking about what they know. They use this hypothesis as well as the textual information to actively construct meaning (38). The process is interactive because a pattern is synthesized based on information provided simultaneously from several knowledge sources (46). These knowledge sources, such as the features and meaning of words, sentence organization, and the overall textual organization, are used in combination with readers' prior grammatical and topic knowledge to facilitate understanding (46).

A second aspect of the reading process is that readers elaborate what and how they read (28, 56). As they read they say, "Hey, I can remember this because it is like . . ." They make connections that help them remember and interpret *what* and *how* they are reading. These new connections become part of what they know. Thus, reading becomes a major tool for acquiring new information. Through extensive reading students not only allocate attention to comprehending the text but also to elaborating the strategies they use to construct meaning.

A third aspect is that readers continually monitor their understanding to see if it makes sense (9). When their interpretation does not make sense, a buzzer goes off in their heads and they vary their strategies to remove difficulties in interpreting meaning. Readers continually check their understanding through self-questions that direct the use of fix-up strategies. Then they reread to remedy their misunderstanding or check their own prior knowledge.

Likewise, a fourth aspect is that readers use the situational context to focus their purposes and frame their attitude toward the literacy event (20, 54). Different situations affect what readers perceive as important, how information sources are combined, what is elaborated, how the text is monitored, and students' perceptions about the literacy event.

Figure 1 shows these four aspects of the reading process as they continuously interact while readers construct meaning.

Effective readers coordinate sources of information (personal knowledge and the text), elaborate meaning and strategies, check their understanding (revising when necessary), and use the context to focus their reading. When readers experience difficulty, they rely on their strengths to remedy these difficulties, thus eliminating a need to use strategies interactively. However, when any one of these aspects is excluded for a period of time, students may fail to develop as effective readers.

## Reading Failure

Basically, all readers use their strengths to solve problems in text interpretation, however, sometimes these strengths result in compensatory behaviors that inhibit rather than enhance meaning construction (46). When readers encounter difficulty, they shift away from a deficit and use compensatory behaviors. If they habitually use these behaviors, their reading becomes ineffective. The interactive model of reading can form a framework for analyzing reading difficulty. Reading difficulty occurs when students (1) frequently overrely on a single information source rather than combining sources, (2) continuously read difficult text limiting elaboration of content and strategies, (3) habitually read without monitoring meaning, resulting in passive reading, and (4) define the context of reading as a failure situation. (See Figure 2.)

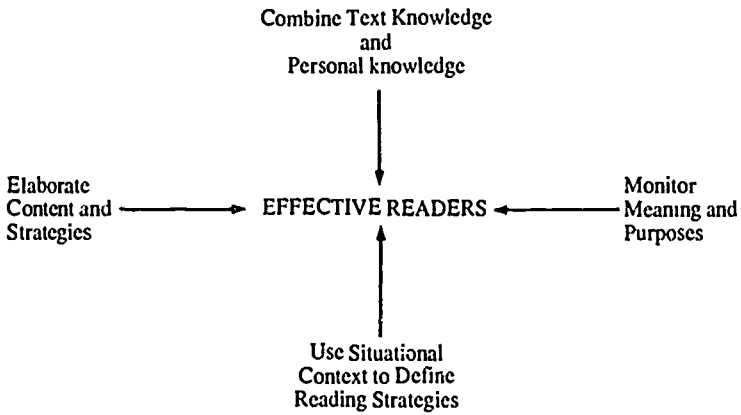
Reading difficulty occurs when one of these aspects is excluded for an extended period of time. When there is a mismatch between students' reading behaviors and reading instruction, readers use compensatory strategies to construct meaning. The problem does not lie solely within the students, but is impacted by the instruction they receive. This instruction can enhance or inhibit the reading performance of readers who have problems.

### *Failure to Coordinate Sources of Information*

At the onset of reading, students learn to coordinate sources of information. Often, however, remedial readers experience a deficit in either a skill such as phonic knowledge or an ability such as visual memory that causes them to shift away from an information source (46). "Poor beginning readers... seem to rely on one available source of information rather than integrating all available cues" (3, p.

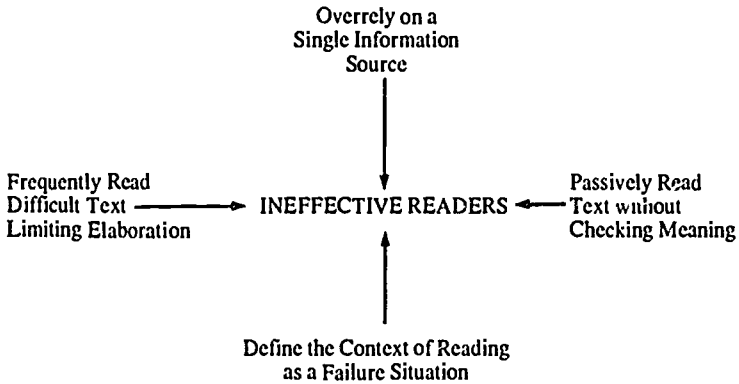
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Figure 1  
EFFECTIVE READERS



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Figure 2  
INEFFECTIVE READERS



847). These readers experience difficulty because they do not coordinate sources of information. For example, readers who have difficulty with phonic knowledge may rely on reader-based strategies rather than decoding print. Initially, the strategy of relying on reader-based inferencing is effective, particularly when readers have a wealth of knowledge about a topic. However, as these readers encounter more unfamiliar topics and avoid using text-based strategies, their text interpretation becomes increasingly muddled. Thus, their overreliance on reader inferencing (their strength) becomes a weakness.

Andy entered first grade with poor phonemic awareness, as many potential poor readers do (24). This particular weakness inhibited his understanding of the phonetic system, which affected his learning in the basal reader program that was used in the classroom. Therefore, Andy used his strength of background knowledge to figure out words. When this did not work, he made up the text as he read by looking at the pictures. This problem is not major, but if Andy continues to use his own knowledge without checking the words in the text, his reading will become less accurate and he will not progress. On the other hand, Kris, a text-based reader, learned phonics easily and, like some problem readers (3, 34), thought reading was accurately calling a string of words. She believed the meaning was found in the text, but as textual information became more complex and needed interpretation, she found that she could no longer simply repeat a string of textual facts to indicate her understanding. This problem is not major, but if she continues to read text without constructing meaning, her reading will not progress.

At this stage, the teacher begins by selecting an instructional technique that allows students to start reading using their strength (what they already know and do) and then gradually shows them how to integrate their weaker information sources. Using regular classroom materials or modifications, teachers select instructional procedures that allow students to form a model of meaning using what they already *know* and *do*. For Andy, the following sequence uses his strength while leading him to incorporate his weakness in phonics. (1) have him read many stories (primarily predictable books) with rhyming words that will develop some phonic awareness, and (2) teach a few phonic principles by showing him how to use these rhyming words (acquired strength) when decoding by analogy (substituting initial consonants in rhyming words).

In *ineffective* programs, Andy and Kris do not receive instruction that shows them how to integrate information sources. In some special programs the "whole thrust is to identify weaknesses and concen-

trate on problems instead of focusing on strengths and consciously supporting those strengths" (26). Teachers in these programs focus on isolated skills, building on a deficit in a decontextualized instructional setting. Without anyone suspecting (after all, they have reached criterion on the isolated skill assessments), Andy and Kris are asked to read texts that are too difficult. When they read such texts, their reading problems become more complex and they cease to elaborate content or strategies.

### *Failure to Elaborate Content and Strategies*

When readers are placed in difficult texts for a majority of instructional time, they expend their energy constructing a hazy model of meaning and have no experience elaborating the content or the strategies they use to construct meaning. Remedial readers are often placed in materials beyond their reading level (19, 24). When this happens, the gap widens between what readers know and what they are asked to read and they cannot elaborate either *what* or *how* they are reading. Instead, they increasingly rely on their strengths, making sense of text only infrequently.

For example, Andy does elaborate content, adding some new information to his background knowledge. But his inattention to the words on the page and the increased difficulty of the text causes Andy, like other similar readers (24), to cease thinking about words, he therefore does not elaborate a system for decoding new words. His background knowledge is the only source of information that he uses to remedy problems in text interpretation. Rather than integrating information sources and elaborating how these sources are used in combination, Andy continues using ineffective strategies, wondering how other students read with such ease. His reading becomes slower and less accurate—he reads word-by-word like other poor readers (3, 34).

For readers like Andy and Kris, the reciprocal relationship among cognitive skills that occurs for effective readers is inhibited because they allocate thinking solely to hazy meaning construction. In one study, researchers found that measures of phonological awareness, decoding speed, vocabulary, listening comprehension, and abstract problem solving were only weakly correlated to reading performance in the first grade, however, these abilities were highly correlated to reading performance by fifth grade (47). Similar trends were reported in a longitudinal study by Juel (24). With her group of poor readers, the impact of listening comprehension, phonemic awareness, and word recognition on reading performance increased during the first

four years of schooling. According to Stanovich (46), good readers process the graphic information so automatically that comprehension is enhanced because they are free to attend to higher levels of the comprehension process; poor readers who are word-bound have less attention available for higher levels of the comprehension process, such as elaborating the content or their strategies for meaning construction. As students progress through reading development, the interaction between the text and what they know becomes rapid and automatic, thus allowing them to use more of their thinking capacity to elaborate the relationships between textual meaning and personal knowledge. They also allocate attention to comprehending the topic as well as the strategies for meaning construction. In essence, fluency allows students to elaborate the relationships in textual meaning and the strategies they use to derive this meaning. When remedial readers have extended reading experiences where they cannot read fluently, they become unaware of the strategies they use and, in fact, are unable to elaborate vocabulary meaning that would, in turn, increase contextual knowledge and facilitate word identification (46). Reading problems then become more complex when the difference between what poor readers can read with comprehension and what they are asked to read in the classroom is so great they cannot make sense of their reading. These students solve this problem by overrelying on their strength and failing to integrate information sources or elaborate strategies. Therefore, they become increasingly less active because nothing makes sense.

What remedial readers, like Andy and Kris, need is to read a great many texts that are whole stories at a high success rate (10). These stories need to be read with no more errors than one word every 10 words (90% accuracy) in order that the reader can make enough sense out of the text to engage in fix-up strategies (14). Adapting instruction will not work if we do not ask students to read many stories where the text is familiar enough for them to allocate attention to thinking about their troubleshooting strategies. Teachers have suggested providing a mix of easy and challenging texts (50) as well as re-reading familiar texts (14, 18) to increase fluent, strategic reading. Re-reading text allows the student to use effective strategies for troubleshooting problems as well as to elaborate these strategies.

In the approach to classroom reading instruction that has been prevalent in the last decade, teachers have overrelied on workbook pages to reinforce reading skills at the expense of reading extended passages and whole stories (7). In fact, Allington (2) found that students in high reading groups read 10 times as many words as those in

low reading groups. In this study, first graders in low reading groups read silently a total of 60 words during the five-day sample period, or 12 words a day. No one who reads only 12 words a day can elaborate meaning and strategies. Likewise, Juel (24) found that the poor readers read less than half as many words each year as good readers. Poor readers also read text at the 80 percent accuracy rate while good readers seldom encountered words they could not read. Perfetti (39, p. 248) explains this phenomenon. "The low-achieving reader starts out behind...and falls farther behind as his reading experiences fail to build the rich and redundant network that the high achieving reader has." This problem, the need for extended practice, is coupled with an increasingly passive response to reading situations.

### *Failure to Monitor Meaning and Strategies*

When students rely on their strength and cease to elaborate their strategies, they develop a less active stance toward text. Their continual failure precludes the spontaneous use of reading strategies. Subsequently, the infrequent use of strategic reading results in a set of disorganized strategies and failure to check reading understanding (12). These students tend to lack strategies that good readers use naturally (17, 23, 34) and remain "unconvinced of the importance or necessity of using strategies" even when demonstrated (35, p. 34). When asked questions, they merely respond with, "I don't know." They are not lazy or defiant, they really do not know how to remedy the problem situation. They did read the text and a buzzer went off in their head telling them what they were reading was not making sense, but they did not know what to do. Instead, they "tend to reproduce inappropriate text segments or provide no response" (17, p. 696), change their predictions less often, relying on their initial prediction (25), and keep this prediction even when it is no longer supported by the text (9). Since these readers have little experience constructing meaning, they passively read words without actively questioning their understanding. Likewise, these passive behaviors have been reported during oral reading. Poor readers generally make fewer self-corrections than good readers (15). According to Clay (14), proficient readers typically correct the errors that change meaning but pay little attention to the oral reading errors that do not change meaning. Remedial readers, however, do not distinguish between their errors that affect meaning and those that do not because they read without checking meaning. Thus, in both comprehension and oral reading, remedial readers are less actively engaged in reading.

Often remedial programs appear to be meeting the needs of these students because instruction has been adjusted in the level of text difficulty and techniques used. Simply making the text easy and modifying a technique, however, will not change the passive stance that has developed through extensive nonfluent reading. For example, Andy and Kris knew they did not understand, but they did not know how to remedy the problem because they had used their ineffective strategies for so long. Modeling and explaining the invisible process that effective readers use when they encounter difficulty shows them "how to think." For instance, Kris needs to learn to say, "This is not making sense, I can change how I am reading to regain meaning in the text. To regain meaning, I need to reread the last paragraph and think about what I know." Cognitive strategy instruction enhances poor readers' comprehension (35, 51, 56). Modeling and coaching are powerful tools for remedial readers who do not actively construct meaning. They really do not know what the strategies are or how to apply them. For passive readers, in addition to changing the text and techniques, teachers show these remedial readers how to think.

In the skills approach that has dominated education for the last two decades, mastery of specific skills in tasks that involve small segments of language has been the norm (7). Content of the remedial program has been specific skill packets and workbooks where progress is monitored by right and wrong answers to questions requiring one-word responses that measure one skill at a time. When reading is reduced to mastering a skill that readers lack, they increasingly define the context of reading as a failure situation. Thus, their passive reading behavior increases and they cease to try when completing school tasks that require reading

### *Failure to Appropriately Interpret the Situational Context*

Continual failure during literacy events leads students to overrely on their strength, cease to elaborate the content and their strategies, become passive toward their own meaning construction and, finally, define all literacy events as failure situations, resulting in decreased effort. They attribute their failure to lack of ability, which "they believe is a fixed entity . . . and which they have little of" (23, p. 283). Because teachers have focused on skills that students did not have, students have judged themselves unable to learn to read. Generally unaware of their own strategy use, they think to themselves, "I will not try, because if I try and fail again, I am admitting I am dumb."



They are not really belligerent, but the presupposition that they will fail leaves them no alternative but to define the context of all reading as failure situations that reduce their self-confidence (12, 23). Manipulating both success and failure in reading experiences, Butkowsky and Willows (13) found that poor readers in the fifth grade were less likely to attribute success to ability and more likely to attribute it to luck or task ease than were the better readers. Thus, readers who have had prolonged difficulty seem to exhibit an eroding motivation in achievement situations that increases their probable failure. This repeated failure, coupled with criticisms from parents and teachers, contributes to the continued belief that "I'm not able to learn to read," thus decreasing their motivation.

Studies of teacher-student interactions show that teachers do treat remedial readers differently from achieving students. For instance, when listening to students read, teachers often interrupt poor readers at the point of error with word-level prompts, while letting more achieving students continue to the end of the sentence (1). Likewise, low-achieving students receive a higher percentage of literal-level questions, while the higher achieving counterparts are asked inferential and critical questions (36). Furthermore, teachers often give remedial readers the answer or ask higher-achieving students rather than giving prompts or hints as to how the student might answer the question (23). Many are excused from difficult assignments and placed in remedial or special classes where they cannot interact with achieving peers (52). These situations contribute to the remedial readers' growing feeling that, when reading, they will fail.

For example, suppose Andy and Kris still have not received the kind of instruction they need. Thus their presupposition that "I can't read," indicating that reading is a stable ability rather than a strategic process, affects all their literacy events. No longer can simply changing the text level, adjusting the technique, or adding strategy instruction change this negative attribution toward literacy, but instruction must begin with focusing on redefining the context of reading and reading ability for both Andy and Kris. Students like Andy and Kris "may never persist long enough at a task to discover that success may, in fact, be possible, . . . [they] may never spontaneously discover that they do possess the capacity to achieve outcomes that exceed their expectations" (13, p. 419).

When reading failure becomes complex, these students need to redefine reading as a problem-solving process at which they can succeed. At the same time they need to identify effective strategies and see the relationship between the strategies they use, their text inter-

pretation, and the effort they expend. A key to reversing the negative attribution for reading failure is an instructional context that values and rewards the strategies that students use to construct meaning, rather than right or wrong answers on workbook pages. For instance, when Kris and Andy interpret text successfully, they need to talk about the strategies they used to construct meaning and assess how effective these strategies were. To build an idea that reading is a problem-solving process, these students need to share interpretations in a social-interactive context where they also share how they constructed meaning using their own knowledge and information in the text. During this discussion they also help each other evaluate their strategy use. The discussion focuses attention on reading as a problem-solving process. This redefinition does not happen easily in a one-on-one instructional situation, but rather during group discussions where students can share their ideas and strategies. In other words, they already have a great deal of knowledge that they can share to help others interpret text. Through shared discussions they can learn that the strategies one uses, rather than one's ability, affect the meaning construction.

Because teachers have focused on skills that students did not have and have repeatedly evaluated these skills using criterion-referenced tests, these remedial readers have judged themselves poor readers, thus reducing their motivation. They think to themselves, "When reading is doing a skill that I don't have the ability to do, then how can I believe that reading is a situation where I can succeed?" Likewise, teachers' use of norm-referenced evaluation tends to reward students with above-average ability. Lower-ability students try hard, but they do not meet the standard created by students who learn easily and quickly. Soon students with slightly below-average ability on school-related tasks realize that a high-level effort is not a guarantee of success. Some of these students, many of whom are remedial readers, decide that if they cannot learn to read, they can avoid a sense of failure and regain their self-worth by simply not trying. They appear indifferent toward their own learning and teachers label them unmotivated. According to Raffini (42), "they are highly motivated to protect their sense of self-worth" in the face of failure. Because of these two school situations and remedial readers' continual failure, Andy and Kris develop a fuzzy notion of both success and failure. They attribute their failure to being dumb, a characteristic that cannot be changed, and they cease to expend effort. When they do succeed, they maintain that it was because of the easy materials or the teacher's effort rather than their own.

## Summary

The first part of this monograph has explained four aspects of the interactive view of reading, along with frequently observed behaviors of remedial readers. These aspects are as follows:

1. Effective readers combine sources of information, ineffective readers often rely on a single information source when reading.
2. Effective readers elaborate both the content and strategies they use; ineffective readers often read extensively in difficult text where they cannot readily elaborate information or processes.
3. Effective readers automatically monitor their text interpretation, checking their purposes; ineffective readers passively read text.
4. Effective readers use the situational context to select strategies to use while reading; ineffective readers who have had repeated failure perceive the context as a failure situation, thus decreasing their motivation.

For each of these four aspects, reasons for reading difficulty have been explained in terms of an interaction between student behaviors and classroom instruction, thus illustrating the powerful influence teachers and schooling have on remedial reading.

To promote more active constructive reading for these readers, teachers need to—

1. Be sensitive to the strengths of problem readers and plan instruction that allows them to demonstrate strengths rather than weaknesses.
2. Make sure problem readers are placed in material within their reading level that is familiar enough so they can engage in sense-making strategies.
3. Emphasize strategic reading by explaining, modeling, and coaching the interactive reading process rather than focusing on isolated skill instruction.
4. Help students identify and assess the problem-solving strategies they use so they can attribute their text interpretation to strategy use rather than abilities.

Using these guidelines, teachers can build an effective remedial program. Part II offers some instructional and programmatic solutions for remedial readers.

## PART II. INSTRUCTIONAL RESPONSE

Teachers have been bombarded with a myriad of strategies and remedial programs, therefore, it has become increasingly necessary to carefully evaluate what a particular teaching technique or remedial program is accomplishing. Rather than jumping on a bandwagon with mindless enthusiasm, teachers and administrators need to identify the key features of suggested techniques or programs and match those features with their students' strengths and needs.

### **Instructional Frameworks**

This section deals with instructional frameworks that have proved effective for remedial readers. Throughout these frameworks, several characteristics of the lesson frameworks are evident. First, the instructional focus and teacher dialogue are geared toward "making sense when reading." Supporting the constructive nature of reading, the teacher continually asks, "Does that make sense?" Second, all the frameworks use appropriate materials within the context of real reading events. Contextual material for introducing and practicing the minilessons includes content area texts and children's literature. Likewise, the material provides a mix of challenging and easy texts for extending and refining reading. Third, all the frameworks have the teacher think about what their students know and plan instruction that builds on what students know and do. Fourth, all frameworks suggest modeling and scaffolding by teachers as a way to show students how to construct meaning or read expressively. In the scaffolding or coaching, teachers phase in to provide supportive reading and phase out to let students read independently.

### *Reading Recovery*

Reading recovery is an intensive early intervention program for students who are at risk during first grade. These children receive an individual, daily, 30-minute lesson that supplements—not replaces—regular classroom instruction. Research on the program has been ongoing and shows gains both in immediate classroom performance (14) and longitudinal performance (40). The lesson plan includes five elements. reading of familiar stories chosen by both the student and the

teacher, taking a running record of a previously read book, working with letters, writing a message or story, and reading a new book for the next day's running record (41).

*Reading of Familiar Stories.* Each lesson starts with reading familiar stories that have been learned in previous sessions. This rereading encourages fluent, rhythmic reading where the children can experience the feeling of expressive reading and mentally elaborate their reading strategies.

*Taking a Running Record.* Each day students read a book that has been read only once the previous day. As they read, the teacher records miscues, noticing the students' strategic attempts to remedy miscues during reading. This information provides cues to the prompting behavior that the teacher will use during the instructional session as well as the progress toward proficient reading that is occurring.

*Working with Letters.* When children are just beginning to learn about letters, the teacher uses plastic letters and a magnetic board to write words and talk about letter form. Later, teachers have students write in their books or on the chalkboard.

*Writing a Message or Story.* Each day the children compose a one- or two-sentence message. These are often accumulated over time and become a story. On each page of the writing book, the top is used for practicing unfamiliar words and the bottom of the page is used for the story composition. On the practice section, the child often says the word slowly and predicts what letters would represent the sounds of the word. The teacher facilitates thinking about the individual letters in words by drawing boxes for each letter in a word. After the message is complete, the teacher writes it on a sentence strip and cuts it apart for the child to reassemble. From these sentences, activities are invented to encourage word learning.

*Reading a New Book.* Each day the children are introduced to a new book. The teacher carefully selects the text matching the student's knowledge with the language structures and concepts in the text. In the program, books have been arranged and leveled according to levels of difficulty based on previous children's success with the texts. The lesson, then, begins with an introduction that is followed by supportive reading. In the introduction, the teacher does not read the book; instead, teacher and child review the entire book discussing the

storyline. The teacher often explains unfamiliar concepts using the language structure of the text, thus increasing the likelihood of a successful reading. As the student reads the story, the teacher assists as necessary, using as many meaning-focused prompts as possible.

### *Diagnostic Teaching of Reading*

This approach to remedial reading shares many of the same characteristics of reading recovery, but encompasses levels of remedial readers. The focus of instruction is on adapting and adjusting the lesson based on the strengths and needs of the student (50). The lesson framework uses dynamic assessment (assessment based on instruction) to identify instructional alternatives for problem readers. The lesson framework has four major elements.

*Continuous Diagnostic Assessment.* As in reading recovery, daily assessments of the student's learning are evaluated, however, these assessments include, if needed, the assessment of silent reading comprehension and think-aloud assessments. Assessments are prior to teaching the lesson so that problem areas can be anticipated and the mediated reading level can be identified.

*Guided Contextual Reading.* Although various instructional techniques are suggested, the general instructional plan includes a daily lesson of an entire story that is guided by the teacher. Emphasis is placed on using the remedial reader's strengths and strategies while teaching a lesson that should occupy at least 60 percent of the instructional time. Adjustments before, during, and after reading the story are made to ensure successful text interpretation.

*Skill and Strategy Instruction.* Problem areas are dealt with during the skill and strategy element of the lesson, these are minilessons created specifically to remediate weaknesses. As such, these lessons are short and to the point. Strategy instruction and charting (as described below) are often part of this section of the lesson.

*Personalized Reading and Writing.* Rounding out the lesson framework, students read a self-selected text and write in their journals during every instructional session.

## *Strategy Instruction*

Strategy instruction has been shown to enhance active, strategic reading for remedial readers (16, 33, 35). In these programs, teachers assume new roles: they explain, model, and coach strategies as they shift the control of strategy deployment to students (37).

*Explaining.* Initially, teachers explain what strategic reading is and how the targeted strategies fit into the reading process. In other words, they set goals emphasizing a particular strategy like prediction. Then they explain when and where they might use this strategy.

*Modeling.* Second, teachers model the steps for performing the strategy and *explicitly* show students the strategies for actively constructing meaning. In modeling how to think, they are teaching procedural knowledge (how to apply strategies). When modeling, teachers think aloud about how they construct meaning (16), making the internal thought process visible to students.

*Coaching.* Third, teachers coach students as they “think aloud” during reading (35). Coaching this internal thought process helps students modify and elaborate their strategies. Teachers give a high degree of feedback initially, phasing in to coach thinking and phasing out to let students use strategies independently. Thus, students focus on “how they got an answer” as well as on “what they understood.”

*Shifting Control.* Finally, teachers shift the control of meaning construction to the student. To do this, the teacher encourages students to talk about how successful their comprehension was and to attribute that success to the strategies they use. Another way to shift control is to have students become discussion leaders or to have students teach other readers who have similar problems.

*Reciprocal Teaching.* One program that is based on the cognitive strategy instruction model is reciprocal teaching. Palincsar and Brown (33) trained students to pose questions, ask for clarification, make predictions, and construct summaries while reading. The strategies were initially modeled by the teachers in a small group of learning-disabled seventh-graders. After modeling by the teachers, the students took turns leading the discussion group by using the strategies. The teachers then became part of the discussion group and assisted students with leading questions and remodeling the reading strategies

when necessary. As students became more independent with the strategy use, the teachers faded their instructional focus. Students showed significant improvements in summarizing information, and they applied the strategies to other content.

In strategy instruction the process of reading—not just the skills of reading—is explained. The procedural knowledge and control knowledge that are necessary to actively construct meaning are demonstrated. Strategy instruction takes on a more explicit, direct format initially; and then control is shifted to the student.

### *Attribution Training*

If students have encountered repeated failures in reading, however, simply providing instruction at the independent reading level will not change their passive stance toward reading. And although instruction in strategic reading helps these students, they need to see a relationship between their effort, strategy use, and successful text interpretation. Attribution training has students discuss effort and attribute reading performance to strategy use and effort expended. When strategy instruction is coupled with attributional retraining, poor readers change not only their strategies, but also the attribution for their failure (11, 43). In one study, learning-disabled students received instructions about both summarization strategies and their personal beliefs about causality. The attributional training enhanced the maintenance of the summarization strategy. Furthermore, attributional beliefs seemed to focus on students' purposes, which enhanced strategic processing for these students. Schunk and Rice (43) used a similar program teaching fourth and fifth graders to find the main ideas in passages. In addition to the cognitive strategy instruction, students received information about the value of the strategies, were informed about the value of effort, and were encouraged to attribute their success to personal effort. The students improved in comprehension as well as in self-efficacy scores. These studies suggest that students' beliefs about personal causality may be altered by a combination of strategy training with attributional retraining. Using this approach, a special education teacher (53) began a process of charting comprehension progress, while concurrently attributing success to effective strategy use and appropriate effort. To discuss effective reading strategies and effort, students used a chart of the key aspects of summarization. After they completed their summary, they rated their performance.



## How I Did Today

1 = not good; 2 = OK; 3 = good; 4 = very good

	M	T	W	Th
My summary included a topic sentence that relates the information.				
My summary deleted unimportant information.				
My summary deleted repeated information.				
My summary combined details into a generalization.				

The charting facilitated self-assessment and attributed reading performance to strategy deployment and effort. According to Johnston and Winograd (23, p. 295), "self-assessment can force attention to the details of outcomes, and to the effects of the use of various strategies." The charting was supplemented with a summary sentence that included the relationship between effort and strategy use.

### *Readers' Workshop*

This approach immerses students in self-selected reading and dialogue journals for two or three days a week in middle school remedial reading programs (8, 31). The other days are spent working on strategies that students can use when reading independently. The program has several elements: minilessons, sustained silent reading, and dialogue response journals.

*Minilessons.* These are demonstration lessons in which teachers model the thinking process of effective readers. Many times the teacher reads literature selections aloud to students, modeling the thinking that occurs simultaneously as one reads.

*Sustained Silent Reading.* Each day students are given extended time to read individually selected materials. This time develops within remedial readers an interest in reading for their own purposes. Conse-

quently, they cannot fail because they control their purposes, reactions, and reasons for reading.

*Dialogue Response Journals.* These journals are an integral part of the program because they embody the thoughts, feelings, questions, and concerns that these remedial readers have about the book they are reading. The student and teacher carry on a dialogue about the text being read. Responding to the journal entries, the teacher coaches and probes the student's thinking and affective responses. Eventually, reflective entries expressing opinions based upon the text and personal knowledge begin to emerge.

### *Cooperative Learning*

Cooperative learning has students share their interpretations and strategies in small groups in the regular classroom. Teachers emphasize sense-making as the ultimate goal of reading and students begin to redefine the nature of reading as a problem-solving activity. In these classes, remedial readers can be placed in heterogeneous groupings or teams. An example of this type of program is Cooperative Integrated Reading and Composition, which uses heterogeneous teams during reading instruction. In this program, students are assigned to pairs within their reading groups and the pairs are assigned to teams composed of partnerships from two different reading groups. Mainstreamed academically handicapped and remedial reading students are distributed among the teams. During an instructional day, the students meet in their reading groups for a teacher-directed lesson, while at other times they have assignments to complete in their teams. Activities such as answering questions emphasizing story grammar, predicting how the problem will be resolved in a particular story, fluent reading with a partner, and story retelling are completed with the help of team members (45). This organizational framework is effective when students are working toward a group goal—such as a team certificate given when each group member succeeds on an individual assessment. “Students must have a reason to take one another's achievement seriously, to provide one another with the elaborated explanations that are critical. . . . If students care about the success of the team, it becomes legitimate for them to ask one another for help and to provide help to each other” (44, p. 9). Additionally, the achievement of the goals depends on each student's individual learning. In other words, one of the final assessments is the performance of each group member on individual tasks.

## Program Frameworks

Not only can remedial instruction be improved, but also the organizational structure of the public school can be modified to improve the instructional conditions for remedial readers. Within current remedial programs, students become disenchanted with school learning, barely scraping through with weak reading strategies that inhibit their school learning as well as their transition from school to productive lives.

Besides the classroom situations that have affected the reading behaviors of remedial readers, researchers have found that public policy decisions have been detrimental to the development of effective reading behaviors of problem readers (27). By creating special classes for less able readers, classroom teachers have felt less responsibility for the reading development of students who qualify for these services. For example, one observational study of 64 students assigned to either Chapter 1 services or special education programs because of reading difficulty found that schools offered different instruction to these students even though their reading problems were remarkably similar. According to Allington and McGill-Franzen (5, p. 538), the "most striking difference is in the instruction in the regular education program. The mainstreamed mildly handicapped students received 35 minutes a day less reading/language arts instruction than the Chapter 1 students in their regular education classrooms." When this data was accumulated for all reading instruction received, the mildly handicapped students received less reading instruction, as well as less active instruction than the Chapter 1 students. These findings are similar to those of other studies which found that reading instruction varies greatly among special education classrooms (21), and Chapter 1 classrooms (6), with some students receiving less quantity and less quality of instruction. Clearly, then, federal, state, and local administrators need to consider new frameworks for working with remedial readers.

### *Congruence Model*

One promising suggestion for this framework is that the public schools collapse their instructional efforts into a unified plan for all low-achieving readers regardless of categorical label (4). In this approach, teachers consider what is happening to low-achieving students in the variety of instructional situations they encounter each day. It requires that the instructional staff communicate and begin to develop a body of shared knowledge about the students, their reading instruc-

tion, and themselves. Coupled with this collaboration is a renewed focus on the core reading curriculum and instructional procedures in the regular classroom. One approach, the congruence model, seeks to ameliorate the problem of fragmented services by focusing and coordinating services among the different programs within the school. Even though students may need programs tailored and adapted for them, their plans will be compatible with the program of instruction in the regular classroom. In addition, common goals are articulated at the various levels of schooling (state, district, and local) while methods, materials, and resources are coordinated among teachers, tutors, parents, and administrators within each building.

### *Collaborative Education Model*

Another approach suggests that problem readers need to use active reading and thinking strategies along with their peers because the regular classroom offers appropriate role models and a chance to share thinking. In this approach, the goals, strategies, and content introduced in the regular classroom are supported by the specialist. This often requires that the specialist and the classroom teacher work in concert within the same classroom, combining their expertise to provide high quality instruction for every student in the school. In other words, the instruction will need to follow the *collaborative* model with specialists going into the regular classroom and working alongside the classroom teacher. Special services before and after school are open to all students rather than only to those with a label. This approach requires that specialists reconceptualize their role for one-on-one as well as group instruction, carefully considering the needs of the problem readers within the context of the regular classroom.

### *Staff Review Process*

Another approach is the staff review process. In this process, the school staff form a supportive team that brings different perspectives together to analyze a particular student's experiences within the school (26). Team members include the student's classroom teacher, the chair (a rotating responsibility), and a recorder. Before the team meeting, the chair and the student's classroom teacher (the "presenting teacher") meet to focus questions and review observational data. During the meeting, the "presenting teacher" reviews the collected observational data, including the student's stance in the world, great-

est strengths and interests, involvement in formal learning situations, emotional responses and disposition, interactions with other students, teachers, and adults; and areas of greatest concern. The team discusses the descriptive data and offers responsible solutions for the teacher and the student. This staff review process differs from the present review process in that regular classroom teachers are invested in the problem-solving process and reflectively pool their resources as well as their classroom knowledge. Furthermore, decisions are based on data from extended observations within the context of the actual classroom rather than on static test data.

### *Parents as Tutors*

Family literacy has been highlighted as an integral part of promoting lifelong literacy learning and academic school success. In the 1987 report, *What Works: Research About Teaching and Learning*, the U.S. Department of Education noted, "Parents are their children's first and most influential teachers. What parents do to help their children to learn is more important to academic success than how well-off the family is" (49). Research indicates that literacy learning is also promoted when activities take place in social settings as children interact with adults and peers and when adults serve as models for literacy behaviors (29, 48). Consequently, in homes where print activities and family interactions are minimalized, there is little chance for children to respond naturally to literacy activities. Although such activities may be a part of the home environment, many times parents who have experienced stressful learning situations themselves lack the appropriate supportive behaviors to encourage problem readers to focus on constructing meaning.

Programs that have been developed to train parents or other primary caretakers in meaning-focused prompting while listening to children read have improved low-achieving students' reading performance (30, 32). These programs trained parents or other primary caretakers in ways to assist young readers when they encountered problem words as they read orally. Encouraging self-improving reading behaviors like self-corrections was the focus of the training. First, the adults were trained to wait before assisting and to prompt at the end of a meaningful unit of instruction. They were also shown how to use meaning-focused cues such as, "Does that make sense?" and "Read that again and see if it makes sense." When these young readers engaged in self-improving behaviors, the parents and caretakers were instructed in how to give encouragement and verbal praise.

## Summary

The last decade has brought the realization that reading problems do not result solely from a deficit within the reader. Reading problems are a result of an interaction between readers and their instructional environment. In fact, research has shown that many remedial readers receive less quantity and quality of instruction, which often focuses on isolated skills rather than construction meaning. From this research, public schools are changing to meet the literacy needs of society. As we make these changes, a few premises from this research can help focus our direction.

1. Reading problems are not solely a deficit within readers. The instructional program impacts the reading behaviors both positively and negatively at each juncture in the student's academic career.
2. Teachers' instructional decisions and behaviors are powerful influences on students' learning. Their instruction needs to focus on meaning construction, always emphasizing making sense out of stories and information.
3. Students need to read extended text for authentic purposes in social and interactive environments. Problem readers need more, not less, reading that provides both familiar and challenging information. This information needs to be shared with their peer group in the regular classroom.
4. School and district administrators need to support the shared communication between the specialists and the classroom teacher. This level of administration is a key to establishing a variety of coherent contexts for problem readers.
5. Public policy regulations need to allow for school districts to orchestrate and deliver an instructional plan that will provide high-quality instruction rather than meet a multitude of federal guidelines.

# BIBLIOGRAPHY

- 1 Allington, R. L. "Teacher Interruption Behaviors During Primary Grade Oral Reading." *Journal of Educational Psychology* 72 (1980): 371-77.
- 2 \_\_\_\_\_. "Content Coverage and Contextual Reading in Reading Groups." *Journal of Reading Behavior* 16 (1984): 85-96.
3. \_\_\_\_\_. "Oral Reading." In *Handbook of Reading Research*, edited by P. D. Pearson, pp. 829-864. New York: Longman, 1984.
4. Allington, R. L., and McGill-Franzen, A. "Different Programs, Indifferent Instruction." In *Beyond Separate Education*, edited by D. Lipsky and A. Gartner. Baltimore: Paul H. Brooks Publishing Co, 1989.
- 5 \_\_\_\_\_. "School Response to Reading Failure: Instruction for Chapter 1 and Special Education Students in Grades Two, Four, and Six." *Elementary School Journal* 89 (1989): 529-42.
6. Allington, R. L., Stuetzel, H.; Shake, M., and Lamarche, S. "What Is Remedial Reading? A Descriptive Study." *Reading Research and Instruction* 26 (1986): 15-30.
7. Anderson, R. C.; Hiebert, E. H.; Scott, J. A., and Wilkinson, I. A. G. *Becoming a Nation of Readers*. Washington, D.C.: National Institute of Education, 1985.
8. Atwell, N. M. *In the Middle. Writing, Reading and Learning with Adolescents*. Upper Montclair, N.J.: Boynton/Cook, 1987.
- 9 Baker, L., and Brown, A. "Metacognitive Skills and Reading." In *Handbook of Reading Research*, edited by P. D. Pearson, pp. 353-94. New York. Longman, 1984.
10. Berliner, D. C. "Academic Learning Time and Reading Achievement." In *Comprehension and Teaching. Research Reviews*, edited by J. Guthrie, pp. 203-26. Newark, Del.: International Reading Association, 1981.
11. Borkowski, J. G., Weyhing, R. S., and Carr, M. "Effects of Attributional Retraining of Strategy Based Reading Comprehension in Learning-Disabled Students." *Journal of Educational Psychology* 80 (1988): 46-53.
- 12 Bristow, P. S. "Are Poor Readers Passive Readers? Some Evidence, Possible Explanations, and Potential Solutions." *Reading Teacher* 39 (1985): 318-29.
13. Butkowsky, I. S. and Willows, D. M. "Cognitive-Motivational Characteristics of Children Varying in Reading Ability. Evidence for Learned Helplessness in Poor Readers." *Journal of Educational Psychology* 72 (1980): 408-22.
14. Clay, M. *The Early Detection of Reading Difficulties*. Portsmouth, N.H.: Heinemann, 1985.
- 15 D'Angelo, K. "Correction Behavior Implications for Reading Instruction." *Reading Teacher* 35 (1982): 395-98.
- 16 Davey, B. "Think Aloud—Modeling the Cognitive Processes of Reading Comprehension." *Journal of Reading* 27 (1983): 44-47.

- 17 \_\_\_\_\_ "Assessing Comprehension. Selected Interactions of Task and Reading." *Reading Teacher* 42 (1989): 694-98.
- 18 Dowhower, S. "Repeated Reading. Research into Practice." *Reading Teacher* 42 (1989): 502-507.
- 19 Gambrell, L. B., Wilson, R. M., and Gantt, W. N. "Classroom Observations of Task-Attending Behaviors of Good and Poor Readers." *Journal of Educational Research* 74 (1981): 376-81.
- 20 Harste, J. C.; Woodward, V. A., and Burke, C. L. *Language Stories and Literacy Lessons*. Portsmouth, N.H.: Heinemann Educational Books, 1984.
- 21 Haynes, M. C., and Jenkins, J. R. "Reading Instruction in Special Education Resource Rooms." *American Educational Research Journal* 23 (1986): 161-90.
- 22 International Reading Association. *Literacy Development and Pre-First Grade*. Newark, Del.: International Reading Association, 1985.
- 23 Johnston, P. H., and Winograd, P. N. "Passive Failure in Reading." *Journal of Reading Behavior* 16 (1985): 270-302.
- 24 Juel, C. "Learning to Read and Write. A Longitudinal Study of 54 Children from First Through Fourth Grades." *Journal of Educational Psychology* 80 (1988): 437-47.
- 25 Maria, K., and MacGinitie, W. H. "Reading Comprehension Disabilities. Knowledge Structures and Non Accommodating Text Processing Strategies." *Annals of Dyslexia* 32 (1982): 33-59.
- 26 Martin, A. "Teachers and Teaching." *Harvard Educational Review* 58 (1988): 488-501.
- 27 McGill Franzen, A. "Failure to Learn to Read. Formulating a Policy Problem." *Reading Research Quarterly* 22 (1987): 475-90.
- 28 McNeil, J. D. *Reading Comprehension. New Directions for Classroom Practice*. 2d ed. Glenview, Ill.: Scott, Foresman, 1987.
- 29 Morrow, L. M., and Smith, J. K. Introduction. In *Assessment for Instruction in Early Literacy*, edited by L. M. Morrow, and J. K. Smith. Englewood Cliffs, N.J.: Prentice Hall, 1990.
- 30 Mudre, L. H., and McCormick, S. "Effects of Meaning-Focused Cues on Under-achieving Readers' Context Use, Self-Corrections, and Literal Comprehension." *Reading Research Quarterly* 24 (1989): 89-113.
- 31 Oberlin, K., and Shugarman, S. L. "Implementing the Reading Workshop with Middle School LD Readers." *Journal of Reading* 32 (1989): 682-87.
- 32 O'Connor, G., Glenn, T., and Tuck, B. "Contexts for Remedial Reading. Practice Reading and Fluency, Prompt and Praise Tutoring." *Educational Psychology* 7 (1987): 207-23.
- 33 Palincsar, A. S., and Brown, A. L. "Reciprocal Teaching of Comprehension-Fostering and Comprehension Monitoring Activities." *Cognition and Instruction* 1 (1984): 117-75.
- 34 Paris, S. G., and Myers, M. "Comprehension Monitoring, Memory and Study



- Strategies of Good and Poor Readers." *Journal of Reading Behavior* 13 (1981). 5-22.
35. Paris, S. G., and Oka, E. R. "Strategies for Comprehending Text and Coping with Reading Difficulties." *Learning Disability Quarterly* 12 (1989). 32-42.
  36. Pearson, P. D. "A Critique of F. J. Guszak's Study. Teacher Questioning and Reading." In *Reading Research Revisited*, edited by L. M. Gentile, M. L. Kamil, and J. Blanchard. Columbus, Ohio: Merrill, 1983.
  37. \_\_\_\_\_. "Changing the Face of Reading Comprehension Instruction." *Reading Teacher* 38 (1985): 724-38.
  38. Pearson, P. D., and Johnson, D. D. *Teaching Reading Comprehension*. New York: Holt, Rinehart and Winston, 1978.
  39. Perfetti, C. A. *Reading Ability*. New York. Oxford University Press, 1985
  40. Pinnell, G. S.; Deford, D. E., and Lyons, C. A. *Reading Recovery. Early Intervention for At-Risk First Graders*. Arlington, Va.. Educational Research Service, 1988.
  41. Pinnell, G. S., Fried, M. D., and Estice, R. M. "Reading Recovery. Learning How to Make a Difference." *Reading Teacher* 43 (1990): 282-95.
  42. Raffini, J. P. *Student Apathy. The Protection of Self-Worth*. Washington, D.C.. National Education Association, 1988.
  43. Schunk, D. J., and Rice, J. M. "Enhancing Comprehension Skill and Self-Efficacy with Strategy Value Information." *Journal of Reading Behavior* 19 (1987). 285-302.
  44. Slavin, R. E. "Cooperative Learning and the Cooperative School." *Educational Leadership* 45 (1987): 7-13.
  45. Slavin, R. E., Stevens, R. J., and Madden, N. A. "Accommodating Student Diversity in Reading and Writing Instruction. A Cooperative Learning Approach." Unpublished manuscript, Center for Research on Elementary and Middle Schools, Johns Hopkins University, Baltimore, Maryland, 1987
  46. Stanovich, K. E. "Matthew Effects in Reading. Some Consequences of Individual Differences in the Acquisition of Literacy." *Reading Research Quarterly* 21 (1986): 360-406.
  47. Stanovich, K. E., Cunningham, A. E., and Feeman, D. J. "Relation Between Early Reading Acquisition and Word Decoding with and Without Context. A Longitudinal Study of First-Grade Children." *Journal of Educational Psychology* 76 (1984): 668-77.
  48. Teale, W. "Emergent Literacy. Reading and Writing Development in Early Childhood." In *Research in Literacy. Merging Perspectives*, edited by J. Readance and R. C. Baldwin, pp. 45-74. Rochester, N.Y.. National Reading Conference, 1987.
  49. U.S. Department of Education. *What Works. Research About Teaching and Learning*. 2d ed. Washington, D.C.: U.S. Department of Education, 1987.
  50. Walker, B. J. *Diagnostic Teaching of Reading. Techniques for Instruction and Assessment*. Columbus, Ohio: Charles Merrill Co, 1988.

- 51 Weisberg, R. "1980's. A Change in Focus of Reading Comprehension Research. A Review of Reading/Learning Disabilities Research Based on an Interactive Model of Reading." *Learning Disability Quarterly* 11 (1988): 149-59.
- 52 Will, M. *Educating Students with Learning Problems. A Shared Responsibility*. Washington, D.C. Office of Special Education and Rehabilitative Services, U.S. Department of Education, 1986.
- 53 Wilson, L. M. "Deciding How to Orchestrate the Context of Learning." Paper presented at the International Reading Association meeting, New Orleans, La., May 1989.
- 54 Winograd, P., and Smith, L. A. "Improving the Climate for Reading Comprehension Instruction." *Reading Teacher* 41 (1987): 304-10.
- 55 Wixson, K. K., and Lipson, M. Y. "Reading (Dis)Abilities. An Interactionist Perspective." In *Contexts of School-Based Literacy*, edited by T. E. Raphael. New York: Random House, 1986.
- 56 Wong, B. Y. L. "Understanding the Learning-Disabled Reader. Contributions from Cognitive Psychology." *Topics in Learning and Learning Disabilities* 4 (1982): 43-50.