

Teaching Reading Comprehension Through Collaborative Strategic Reading

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This article provides an overview of collaborative strategic reading (CSR) as an approach to enhancing the reading comprehension skills of students with learning disabilities. The following four strategies that encompass CSR are presented: Preview, Click and Clunk, Get the Gist, and Wrap-Up. Procedures for implementing CSR with collaborative groups and techniques for teaching reading comprehension skills to students with learning disabilities are provided. The role of the teacher in enhancing the implementation of CSR is described, and sample teaching vignettes are included.

Perhaps one of the most impressive findings from the considerable research conducted with children with learning disabilities in the last decade is the extent to which they can participate in cognitively challenging academic activities if they are provided with appropriate supports (Gersten, Baker, Pugach, Scanlon, & Chard, in press). This is particularly significant because research has documented that the children's level of performance and the positive outcomes that ensue are far beyond what would be expected based on their reading levels (Carnine, 1989; Graham & Harris, 1994; Klingner & Vaughn, 1996; Klingner, Vaughn, & Schumm, 1998; Lee & Fradd, 1998). This suggests that, in addition to the more fundamental skills frequently associated with reading instruction for children with reading disabilities (e.g., phonemic awareness, word analysis, fluency), most reading programs would

benefit from comprehension strategy instruction, which currently is rarely provided.

For example, a year-long study of the instructional practices for reading used by special education resource room teachers who taught primarily students with learning disabilities (Vaughn, Moody, & Schumm, 1998) reported an absence of instruction in reading comprehension strategies. Knowing that reading instruction has been a hotly debated topic, Vaughn et al. followed up teachers several years later to determine the extent to which their reading instruction had changed. They found converging evidence across teachers supporting the findings from the initial study. Teachers provided little or no instruction in reading comprehension (Vaughn, Moody, Hughes, & Reiss, 1998). Pressley and colleagues revealed similar findings from a cohort of fourth- and fifth-grade teachers (Pressley, Wharton-McDonald, Mistretta-Hampston, & Echevarria, 1998) and in first-grade classrooms (Wharton-McDonald, Pressley, & Hampston, 1998).

Recently, we have been interested in the extent to which we could organize successful reading comprehension strategies (e.g., main idea, prediction) in a way that would take advantage of the knowledge of how instructional conversations facilitate learning (Goldenberg, 1993) and would assist students in learning to "question the author" when they read (Beck, McKeown, Hamilton, & Kucan, 1998, p. 67) and in peer-facilitated learning (Palincsar & Brown, 1984). We were aware that a large barrier to teachers' implementing small-group instruction is the difficulty of having student groups be highly

functional without ongoing adult support. Therefore, we decided to embed these comprehension strategies in a cooperative grouping format (Johnson & Johnson, 1989) that would be organized to facilitate student learning in small groups. Hence the name collaborative strategic reading (CSR).

COLLABORATIVE STRATEGIC READING

Which Reading Comprehension Strategies Are Taught?

I am overwhelmed by how many reading comprehension strategies there are to teach. The book I used in college listed over 14 different reading comprehension skills students needed. Do students really need to learn all of these strategies?—Mrs. Rankin, middle school resource room teacher

Increasingly, reading experts are suggesting that students are better off learning a few reading comprehension strategies very well rather than being bombarded with a new strategy every month. Providing too many strategies teaches students that, if they wait long enough, this too will pass, and that it isn't really important that they learn it. Pikulski (1998) argued that sound pedagogy in reading comprehension instruction would call for teaching four or five strategies. Furthermore, the students benefit when the strategies taught are emphasized consistently throughout the grades. For example, at Flamingo Elementary School in Hialeah, Florida, most of the teachers, even across grade groupings, teach the same four comprehension strategies. Mrs. Durell, the learning disabilities specialist at this school, explained why this is so helpful: "I emphasize the same reading comprehension strategies with the students with learning disabilities. Then they can really apply them in the classroom. It really boosts their confidence."

The following four reading comprehension strategies are taught through collaborative strategic reading (CSR): previewing and predicting (Preview), monitoring for understanding and vocabulary knowledge (Click and Clunk), main idea (Get the Gist), and self-questioning and passage understanding (Wrap-Up). These reading comprehension strategies have been demonstrated to be effective in enhancing students' understanding of text, as well as in improving skills at reading for meaning for a range of learning types, including students with learning disabilities, low achievers, and students who are not native English language speakers (Klingner & Vaughn, 1996; Palincsar & Brown, 1984; Wong, 1979; Wong & Jones, 1982). Furthermore, these strategies have been effective with a range of grade levels including elementary, middle, and high school students (Alfassi, 1998; Rosenshine & Meister, 1994).

How Are Reading Comprehension Strategies Taught?

Each of the four reading comprehension strategies is taught to the class as a whole by the classroom teacher or the special education teacher. The teacher describes the strategy, models its use, role-plays the implementation of the strategy with the class, and calls on selected students to demonstrate the implementation of the strategy. The strategy is applied regularly (several times a week) with expository text (e.g., during reading and language arts, with newspapers or student papers, during social studies) until all students understand and can use the strategy with confidence. This may take 2 to 3 weeks with younger students (third-graders) or 1 week with older students (middle and high school students).

Each of the strategies is taught separately, and procedures for integrating them are provided by the teacher after the students acquire two of the four strategies. Both Click and Clunk and Get the Gist are practiced during reading. These strategies contrast with Preview, which occurs prior to reading, and Wrap-Up, which occurs after reading. The sidebar provides a visual overview of each of the strategies and when they are used. A description of how each of the four strategies are taught follows.

PREVIEW. The purpose of the Preview is to motivate the students' interest in what they are reading, to activate background knowledge, and to assist the students in generating predictions about the text to be read. Students are taught to scan the material quickly, looking for clues about the story, the context, the setting, the main characters, and the critical features of what they are going to read. Students are provided with about 2 to 3 minutes to preview the text while searching for information to assist them in formulating predictions and connecting their prior knowledge on the subject with their anticipations of reading content. Students are then provided with about 6 minutes to discuss what they have learned, to develop predictions, and to share the connections they have made between what they already know and what they are about to read. The goals of Preview are for students to (a) generate interest and enthusiasm for what they are about to read; (b) stimulate their background knowledge, previous experiences, and vocabulary related to what they are about to read; and (c) provide an opportunity for them to develop hypotheses about what they will read and predictions about what they will learn.

Mr. Ortiz taught students to Preview by asking them to think about the previews that they had seen when they went to the movies. "Tell me, when you see a preview, how long does it last? . . . That's right, it only lasts a couple of minutes. What do you learn from the preview?" He then prompted the students to consider what they learned about setting, characters, genre, history, and so forth. He asked questions such as "What do you learn

STEPS IN COLLABORATIVE STRATEGIC READING

Preview

We preview before reading. Previewing has two steps:

- **Brainstorming.** Think about what you already know about the topic
- **Predicting.** Find clues in the title, subheadings, or pictures about what you will learn. Skim the text for keywords that might give you hints.

Click and Clunk

We find clicks and clunks while we are reading. When we understand what we read, everything "clicks" along smoothly. But when we don't understand, "clunk," we stop. When we get a clunk, we use the following fix-up strategies to figure out what the clunk means:

- Reread the sentence with the clunk and the sentences before or after the clunk, looking for clues.
- Reread the sentence without the word. Think about what would make sense.
- Look for a prefix or suffix in the word.
- Break the word apart and look for smaller words.
- Use a picture.
- Ask for help.

Get the Gist

We get the gist after reading each paragraph or section of a passage. To get the gist means to summarize or restate the most important idea. Do not include the supporting details. State the gist in your own words using the following cues:

- Decide who or what the paragraph is mostly about (the topic).
- Name the most important idea about the topic.

Wrap-Up

We wrap up after finishing the day's reading assignment. Wrap-Up includes:

- Asking (teacher-like) questions about the passage.
- Reviewing by thinking about what was important that you learned from the day's reading assignment.

Compliments and Suggestions

We think of a compliment to give the person on the right about how they did in today's activity. We share compliments and give suggestions to help do better next time.

Note: From *Strategies for Teaching Students With Learning and Behavior Problems*, p. 214, Figure 5.16, by C. S. Bos and S. Vaughn, 1998, Boston: Allyn & Bacon. Copyright © 1998 by Allyn & Bacon. Reprinted with permission.

from the clothing the characters wear? What do you learn from the buildings, cars, and terrain where the movie is filmed?" He also asked students if they had ever seen a preview and made predictions about what the movie would be about or how much they might like it and turned out to be wrong. Then he told students that he was going to ask them to develop previews. He wanted them to "very quickly" scan a text and to determine

- what their reading is about;
- what they already know about the reading; and
- what they want to learn from reading the text.

Now Mr. Ortiz demonstrated how to preview. He provided all his students with a brief reading (2-3 pages; copy, book, or newspaper). He said to them, "I am going to show you the kinds of skills you need to use when you preview."

1. *First, I read the title.*
2. *Second, I look to see if there are any pictures, diagrams, figures, or tables to help me better understand what I am about to read.*
3. *Third, I read each heading and think about what it means.*
4. *Fourth, I look for key words that are either in bold, underlined, or in italics and I consider what they tell me about the reading.*
5. *If I have time, I read the first paragraph and the last paragraph.*

Now, I am going to do it.

He talked aloud to students about how he was implementing each of the components of the preview. Then he said to them, "Okay, now I am ready to tell you what I think this reading is about, what I know about it, and what I predict I will learn. I am going to write these on the board so that, when I finish reading, I can see if I was right and I can add information to my list."

On a separate day or later that same day, Mr. Ortiz asked a group of students to sit in a circle in the front of the room and to demonstrate the Preview strategy for the entire class. He provided all students with the same reading and asked them to model for the rest of the class how they would apply the Preview strategy. Mr. Ortiz provided support, feedback, and guidance as the group of students demonstrated the process for the entire class. He provided multiple opportunities over the next week to use the Preview strategy with the class as a whole and in small groups until all students were able to preview with ease.

CLICK AND CLUNK. The purpose of Click and Clunk is to teach students to monitor what they are reading and to think about information in the text that they know more about and information that is causing them diffi-

culties. Many students with learning disabilities display inactive learning styles (Torgesen, 1981) in which they appear more passive as learners and less engaged with the learning task. This inactive learning style is often a barrier for students in acquiring information from text and knowing when to use fix-up strategies to repair what they don't know. For example, Bos and Filip (1984) revealed that students with learning disabilities are less able than their nondisabled peers to monitor their comprehension while they read so that they recognize that what they are reading doesn't make sense or that there is a word they don't know. As CSR is designed to be used with expository text, learning to monitor what they read and stopping and reflecting on what they don't understand is an important strategy for students with learning disabilities to acquire. The goals of the Click and Clunk strategy include

1. Activating students' self-monitoring so that they are able to recognize when they are following the information in the text and when they are not;
2. Teaching students to identify when they know more about something they are reading;
3. Providing students with practice in identifying key words and principles that they do not understand; and
4. Teaching students to grapple with the text and to consider it an opportunity to understand what the author is communicating, what they know and can contribute, and what else they need to know.

Ms. Lang taught students to Click and Clunk by describing a *click* as something that "you really get. You know it just 'clicks.'" Simultaneously, she snapped her fingers. She continued,

When something clicks, you really understand it. It is something that you "get," and you may even know more about it than what is provided in text. For example, I was reading a newspaper article this morning about how to grow tomatoes. Well, the article really clicked for me because I've been growing tomatoes for 14 years. I really understood what the author meant when she said that you have to space the young plants at least 12 inches apart. Also, she mentioned that no matter how hard you try, some of your plants will die. I know that firsthand.

Ms. Lang then proceeded to ask students if they could remember when they read an article, magazine piece, or book in which it really clicked. After students seemed to get the idea of text clicking, she explained what a *clunk* was. "A clunk is like when you run into a brick wall. You just really don't understand the point the author is making or a word the author is using. Perhaps it is a new vocabulary word that is central to understanding the piece. That's a clunk." Then she told students that she was going to read a short piece aloud to them. She

wanted them to listen carefully and to see if any of the words or ideas in the article were clunks for them. She asked them to write down their clunks and then told the students that they would discuss their clunks with the class as a whole. In this way, she introduced the entire class to Click and Clunk. In subsequent lessons, she provided opportunities for students to identify clunks in what they read, in presentations she provided in class, and when other students were providing ideas. In Ms. Lang's class, students became real "clunk detectors"—always listening and reading carefully to determine if there were words or ideas that required clarification. In this way, Ms. Lang was continually asking students to monitor their understanding when they were reading and listening.

After students learned to recognize clunks, they also needed to learn to implement the strategies that would assist them in "de-clunking" difficult words and ideas. Ms. Lang realized that, although the dictionary can be a valuable tool, it is not the only strategy for figuring out the meaning of a difficult word or text. For this reason, she taught students to use fix-up strategies to assist them in repairing the meaning of challenging text. These fix-up strategies are effective when students are reading expository text, but significantly less effective when reading narrative text. While teaching the students the fix-up strategies, Ms. Lang had each student write the strategy on a card, which she called a "clunk card." These cards (see Figure 1) served as reminders to assist students in applying effective strategies when they read.

GET THE GIST. The purpose of Get the Gist is to teach students how to determine the main idea of a passage. Mrs. Cally, a special education teacher, noted

For many years, . . . I would ask students to tell me the main idea. What would happen is that they would then either tell me everything we had just read, or they would shrug their shoulders and say nothing.

Many teachers have had similar experiences. It seems that students either have no idea of how to begin to tell the main idea or repeat everything as though it were the main idea.

Finding the main idea is frequently touted as an important reading comprehension skill, and although many teachers may ask students to tell them the main idea, few teachers teach youngsters how to identify the main idea. With Get the Gist, students are taught to identify the most important point in the text by rephrasing the key idea in their own words. Some researchers have suggested that it is useful to limit the number of words children can use for summary statements to 10 words or less (Fuchs, Fuchs, Mathes, & Simmons, 1997). The intent is to assist students in providing the gist in as few words as possible, while conveying the most meaningful and excluding unnecessary details.

<p>Clunk Card #1 Reread the sentence with the clunk and the sentences before or after the clunk looking for clues.</p>	<p>Clunk Card #2 Reread the sentence without the word. Think about what would make sense.</p>
<p>Clunk Card #3 Look for a prefix or suffix in the word that might help.</p>	<p>Clunk Card #4 Break the word apart and look for smaller words.</p>

Figure 1. Examples of clunk cards.

Mrs. Cally taught her students to Get the Gist by focusing on a two-paragraph section of text at a time. While students read the two paragraphs, she asked them to think about what they are reading and to identify the most important *who* or *what* in the passage. Then she asked students to tell her what they selected as the most important who or what. After students provided their responses, she asked them to provide evidence from the passage to support their answer. Also, she asked other students in the room whether they agreed or disagreed and what evidence they could provide to support their view. Students were also asked to list the most important point(s) about the most important who or what. Finally, she taught students to put it all together in a sentence. She initially taught students to use this process in a large group and later by working in smaller groups. Students listened to the gists written by other groups and compared them. Mrs. Cally asked students to vote on the best gist and to discuss what made that gist so effective. She encouraged students to consider this when they composed gists in the future.

This is how Mrs. Cally demonstrated Get the Gist. She began by giving students a short passage from the Weekly Reader. She asked them to read two paragraphs from the passage and, while they were reading, to think about what the story was mostly about. After they finished reading, she wrote the following words on the board: *person, place, thing*. Then she told students to identify whether the section they just read was mostly about a person, a place, or a thing. All of the students agreed that it was mostly about a person. She then asked them to name the person it was mostly about, and the class agreed that it was Thomas Edison. Mrs. Cally continued, "Good. We all agree that it is mostly about a person and the person is Thomas Edison. Now, I want you to tell me the most important point about Thomas Edison." As students responded, she asked other students whether they agreed that the response provided

was the most important point. If they agreed, they needed to say why. If they disagreed, they needed to alter the point to improve it. Finally, she said, "Okay, we've refined the main point that we read. Now I want each of you to write one sentence that summarizes what we said. Keep your sentence as brief as possible and fewer than 12 words." Selected students then read their sentences aloud, and Mrs. Cally asked students to assist her in determining whether the sentences were good gist sentences.

WRAP-UP. Wrap-Up is like Preview in that it occurs only once during the process, but different because it is at the end of reading the text rather than at the beginning. The purpose of Wrap-Up is to give students an opportunity to review what they have read to assist with understanding and remembering what they have learned. Also, when students are reading expository text, Wrap-Up can serve as a study strategy.

Mrs. Royal initially taught her students to wrap up by learning to generate questions about what they have just read. She realized that, for many students, knowing how to ask questions about what you have read might produce fairly low-level, detail questions, so she wrote "question stems" on a bulletin board and taught her students how to use these question stems to formulate their own questions. The question stems included

- What do you think would happen if _____?
- How would you compare and contrast _____ and _____?
- How do you think _____ could have been prevented?
- How were _____ and _____ the same? Different?
- How would you interpret _____?

- Who could have made a difference in the ending?
_____ What would they have had to do? _____

After students gained confidence and skills in question asking, Mrs. Royal taught her students to ask questions that represented a range of difficulty. She taught her students that questions can be categorized as \$10.00 questions, \$20.00 questions, \$30.00 questions, or \$40.00 questions. She taught them to consider the following criteria for evaluating questions:

- \$10.00 questions are ones where the answer is right in the text and can be provided in one or two words.
- \$20.00 questions are ones where the answer is right in the text but requires more than a couple of words to give.
- \$30.00 questions are ones where the answer is in the text but you have to have read the text and to compose the answer yourself based on what you've read.
- \$40.00 questions are ones where the individual has to use his or her own previous experiences and integrate them with what they have learned from the text.

Through examples and practice, students learned to generate questions that represented a range of difficulty and to provide answers to these questions. When students began to work in a group, they were provided with colored paper the size of index cards. Each color of paper represented a question level (e.g., yellow = \$10.00 question; green = \$20.00 question). Thus, depending on the number of cards they were provided and the color of the cards, students in the group worked together to generate a question on one side of the card and the answer on the back. After the groups finished their work, Mrs. Royal called on selected groups to provide their \$10.00 question to the class. Group members called on other groups to answer their question. The process continued until the groups were asking each other \$40.00 questions.

These question and answer cards can be used for many purposes, including

- as a review activity for groups who complete their work early;
- as a source for a jeopardy game that can be played with the entire class or by a small group;
- as questions that will appear on a future test;
- as review questions for studying a large section of material; and
- as a resource for students who are learning to write good questions.

It is important for students to learn to ask questions and to anticipate the types of questions that can be asked when they read expository text. This assists them in

learning the types of study skills that will enhance their knowledge and performance in content area classes now and in the future.

How Are Collaborative Groups Used in CSR?

After students have demonstrated expertise on all of the strategies previously presented (e.g., Preview, Click and Clunk), they are ready to implement these strategies within their cooperative groups. Cooperative groups can be effective ways for students with diverse learning abilities to acquire information and improve reading comprehension. However, several features of cooperative groups must be represented: (a) students need to represent heterogeneous reading levels, (b) students need to have defined roles and need to know how to implement these roles, and (c) the groups must have both academic and social goals.

Mr. Jacobs established his cooperative groups by ensuring that each of the groups had a better reader and that the poorer readers were distributed across the groups. Then he made sure that he had a student with strong leadership skills and that there were no students in the group who continually disagreed with each other. He then taught all the students the roles in their groups for implementing CSR. Possible roles included the following:

- **Leader.** Helps the group implement the assignment by focusing on the four strategies and ensuring that each member has opportunities to participate.
- **Clunk Expert.** Reminds the students of the steps to follow for figuring out a word.
- **Gist Expert.** Reminds the students of the steps to follow to figure out the main idea.
- **Announcer.** Calls on members to read or share an idea and represents the group when the teacher calls the groups back for reporting to the class as a whole.

Also, if teachers were asking groups to submit a report as a group rather than individually, the clunk expert recorded all clunks and solutions, and the gist expert recorded their gists. The announcer recorded the Wrap-Up, and the leader recorded the Preview.

After students knew their roles, Mr. Jacobs got the groups working. All of the students in the group were given the same text to read and, at least initially, the leader selected students to read the text aloud, stopping after every two paragraphs to Click and Clunk and to Get the Gist. Initially, Mr. Jacobs asked one student in each group to record the clunks and one student to record the gists. After students became more skillful in working in their groups, implementing their roles, and applying the strategies, Mr. Jacobs introduced them to the CSR Learning Logs, in which each student recorded their learning.

CSR Learning Logs

An integral part of CSR is the CSR Learning Log. Learning Logs enable students to keep track of learning as it happens. They make great study guides when stapled together or slipped into a binder or folder designated for a specific unit of study. Some teachers create their own Learning Log forms for students, specifying the day's topic and the sections of a textbook chapter that students are expected to read. Other teachers use generic forms that can be applied to any reading assignment.

Mrs. Damon realized that CSR Learning Logs were very similar to the K-W-L charts (see Figure 2) that her students already knew how to complete (Ogle, 1986). Thus, the Learning Log form that she created for her students (see Figure 3) is similar to one developed for K-W-L. K-W-L is a strategy that connects very well with the Preview and Wrap-Up strategies of CSR. The *K* in K-W-L reminds students to think about what they already know about a topic. The *W* prompts them to think about what they *Want* to learn (or predict that they *Will* learn). After reading, the *L* assists them in thinking about what they have *Learned*. Note that the sample CSR Learning Log in Figure 3 does not include a space for students to write their gists. Mrs. Damon, like many teachers who use CSR, did not ask students to keep a written record of gists, preferring instead to limit students to a more quickly accomplished oral discussion of the main idea of each section.

<p>K. What do we already <i>Know</i> about this topic? (initials of each student go after what they know)</p> <hr/> <hr/> <hr/> <hr/>
<p>All students scan the text for 2 minutes.</p> <p>W. <i>What</i> do we want to learn? <i>What</i> do we think the reading will be about?</p> <hr/> <hr/> <hr/> <hr/>
<p>All students participate in CSR until the entire text is read.</p> <p>L. What are the most important things we <i>Learned</i>? <i>List</i> the predictions that were correct.</p> <hr/> <hr/> <hr/> <hr/>

Figure 2. Integrating K-W-L into CSR.

What Is the Teacher's Role?

The role of the teacher in implementing CSR is considerable. Initially, the teacher provides the model and the think-aloud insights that allow each student to see the strategy at work. The teacher also provides sufficient examples and opportunities for individual and group practice, so that each student becomes a proficient implementer of each of the strategies. After students become proficient in the use of each of the strategies, the teacher models how the strategies are integrated when reading text. The teacher also provides an overview of how collaborative groups work and teaches students the roles and responsibilities of each member of the group. After the groups are functioning, the teacher's role is to guide and provide feedback to groups while they work.

Many teachers find it useful to provide an overview to the class about what they are going to read prior to asking groups to implement CSR. This overview can include

- telling students the topic;
- connecting the topic to previous lessons;
- teaching proper nouns; and
- providing instructions about the number of pages to read, the amount of time for students to work in their groups, and the activity that must be completed when the time is up.

Teachers also find it useful to pull the groups together and to provide debriefing and whole-class instruction following the implementation of CSR. During this time teachers may

- ask announcers from the group to identify their clunks and to discuss clunks that several groups identified; this also provides opportunities to practice clunk strategies;
- ask announcers from each group to identify a gist from a designated passage, compare gists across groups, and discuss what makes a gist very good; and
- give groups an opportunity to ask other groups questions that they generated during Wrap-Up.

CONCLUSION

Teachers who have used CSR report that they appreciate how it gives them a strategy for implementing reading comprehension strategies and study skills with expository text. They also tell us that they like being able to include a range of students with diverse reading and learning abilities. Most of all, teachers tell us that they enjoy watching their students learn how to learn and think when they read.

Today's Topic _____

Date _____

<u>Before Reading:</u> PREVIEW	<u>During Reading:</u> CLUNKS	<u>After Reading:</u> WRAP UP
<p>What I Already Know About the Topic</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>		<p>Questions About the Important Ideas in the Passage</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>What I Want to Learn/ What I Predict I Will Learn</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>		<p>What I Learned</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

Figure 3. Example of a CSR Learning Log.

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REFERENCES

Alfassi, M. (1998). Reading for meaning: The efficacy of reciprocal teaching in fostering reading comprehension in high school students in remedial reading classes. *American Educational Research Journal*, 35, 309-332.

Beck, I. L., McKeown, M. G., Hamilton, R. L., & Kucan, I. (1998, Spring/Summer). Getting at the meaning. *American Educator*, 22(1), 66-73.

Bos, C. S., & Filip, D. (1984). Comprehension monitoring in learning disabled and average students. *Journal of Learning Disabilities*, 17(4), 229-233.

Carmine, D. (1989). Teaching complex content to learning disabled students: The role of technology. *Exceptional Children*, 55, 524-533.

Fuchs, D., Fuchs, L. S., Mathes, P. G., & Simmons, D. C. (1997). Peer-assisted learning strategies: Making classrooms more responsive to diversity. *American Education Research Journal*, 34(1), 174-206.

Gersten, R., Baker, M., Pugach, M., Scanlon, D., & Chard, D. (in press). Contemporary research on special education teaching. In

V. Richardson (Ed.), *Handbook on research on teaching* (4th ed.). New York: Macmillan.

Goldenberg, C. (1993). Instructional conversations: Promoting comprehension through discussion. *Reading Teacher*, 46, 316-326.

Graham, S., & Harris, K. R. (1994). Implications of constructivism for teaching writing to students with special needs. *The Journal of Special Education*, 28, 275-289.

Johnson, D. W., & Johnson, R. T. (1989). Cooperative learning: What special educators need to know. *The Pointer*, 33, 5-10.

Klingner, J. K., & Vaughn, S. (1996). Reciprocal teaching of reading comprehension strategies for students with learning disabilities who use English as a second language. *The Elementary School Journal*, 96, 275-293.

Klingner, J. K., Vaughn, S., & Schumm, J. S. (1998). Collaborative strategic reading during social studies in heterogeneous fourth grade classrooms. *The Elementary School Journal*, 99(1), 3-22.

Lee, O., & Fradd, S. (1998). Science for all, including students from non-English language backgrounds. *Educational Researcher*, 27(4), 12-21.

Ogle, D. M. (1986). K-W-L: A teaching model that develops active reading of expository text. *Reading Teacher*, 39, 564-570.

Palincsar, A. S., & Brown, A. L. (1984). The reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. *Cognition and Instruction*, 1, 117-175.

Pikulski, J. J. (1998, February). *Improving reading achievement: Major instructional considerations for the primary grades*. Paper presented at the Commissioner's Second Annual Reading Conference, Austin, Texas.

Pressley, M., Wharton-McDonald, R., Mistretta-Hampston, & Echevarria, M. (1998). Literacy instruction in 10 fourth- and fifth-grade classrooms in upstate New York. *Scientific Studies of Reading*, 2, 159-194.

Rosenshine, B., & Meister, C. (1994). Reciprocal teaching: A review of the research. *Review of Educational Research*, 64, 476-530.

Torgesen, J. K. (1981). The relationship between memory and attention in learning disabilities. *Exceptional Education Quarterly*, 2(4), 51-59.

- Vaughn, S., Moody, S., Hughes, M. T., & Reiss, M. (1998). *Reading instruction in the resource room: A follow-up*. Manuscript in preparation.
- Vaughn, S., Moody, S., & Schumm, J. S. (1998). Broken promises: Reading instruction in the resource room. *Exceptional Children*, 64, 211-226.
- Wharton-McDonald, R., Pressley, M., & Hampston, J. (1998). Literacy instruction in nine first-grade classrooms: Teacher characteristics and student achievement. *The Elementary School Journal*, 99(2), 101-128.
- Wong, B. Y. L. (1979). Increasing retention of main ideas through questioning strategies. *Learning Disability Quarterly*, 2, 42-47.
- Wong, B. Y. L., & Jones, W. (1982). Increasing meta-comprehension in learning disabled and normally achieving students through self-questioning training. *Learning Disability Quarterly*, 5, 228-240.

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- Rose, T. L., & Beattie, J. R. (1986). Relative effects of teacher-directed and taped previewing on oral reading. *Learning Disability Quarterly*, 9, 193-199.
- Royer, J. M. (1997). A cognitive perspective on the assessment, diagnosis, and remediation of reading skills. In G. Phye (Ed.), *Handbook of academic learning* (pp. 199-234). San Diego, CA: Academic Press.
- Royer, J. M., & Sinatra, G. M. (1994). A cognitive theoretical approach to reading diagnostics. *Educational Psychology Review*, 6, 81-113.
- Salend, S. J., & Nowak, M. R. (1988). Effects of peer-reading on LD students' oral reading skills. *Learning Disability Quarterly*, 11, 47-53.
- Samuels, S. J. (1979). The method of repeated readings. *The Reading Teacher*, 4, 403-408.
- Samuels, S. J. (1987). Information processing abilities and reading. *Journal of Learning Disabilities*, 20, 18-22.
- Scruggs, T. E., & Mastropieri, M. A. (1998). Tutoring and students with special needs. In K. Topping & S. Ehly (Eds.), *Peer-assisted learning* (pp. 165-182). Mahwah, NJ: Erlbaum.
- Simmons, D. C., Fuchs, D., Fuchs, L. S., Hodge, J. P., & Mathes, P. G. (1994). Importance of instructional complexity and role reciprocity to classwide peer tutoring. *Learning Disabilities Research & Practice*, 9, 203-212.
- Sindelar, P. T. (1987). Increasing reading fluency. *Teaching Exceptional Children*, 19, 59-60.
- Sindelar, P. T., Monda, L. E., & O'Shea, L. J. (1990). Effects of repeated readings on instructional- and mastery-level readers. *Journal of Educational Research*, 83, 220-226.

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