

# Research to Practice Brief

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Creating Opportunities for Youth  
With Disabilities to Achieve  
Successful Futures

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## Never too Late: Approaches to Reading Instruction for Secondary Students with Disabilities

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### The Problem

Today, too many children, including students with learning disabilities, do not learn to read proficiently in the primary grades. A recent National Assessment of Educational Progress (NAEP) report indicated that 38% of fourth grade students read below the basic level (Donahue, Voelkl, Campbell, & Mazzeo, 1999), which is defined as “partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade.” (National Assessment Governing Board, undated, para. 2). If students do not learn to read at or close to grade level by the end of elementary school, they enter the secondary grades unable to meet the demands of their content area classes (Lyon, 1997).

Policymakers have shown their concern about low levels of academic achievement by promoting and enacting reforms to assure that all students meet high standards in reading, writing, mathematics, and other subject areas. The reauthorization of the Elementary and Secondary Education Act (ESEA) calls for annual testing of reading skills in grades 3-8 and requires that states “hold districts and schools accountable for improving academic achievement” (Bush, 2001, Policy section, para. 2). This national commitment to accountability has been titled the *No Child Left Behind Act* by the current administration. (Bush, 2001, Title).

### Two Models that Help Secondary Students with Disabilities

If districts and schools are going to be held accountable for improving reading scores, then they must have a clear understanding of the factors that contribute to reading achievement, the needs of their students relative to these factors, and the various approaches that are available to meet students' needs. Peterson, Caverly, Nicholson, O'Neal, and Cusenbary (2000) reviewed the research and related literature on secondary students who have difficulty reading and identified four factors necessary for students to become proficient readers: “(a) the motivation to read, (b) the ability to decode print, (c) the ability to comprehend language, and (d) the ability to transact with text (i.e., to actively seek informa-

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Watch for coming  
*Research to Practice Briefs*  
offering further information  
about Collaborative  
Strategic Reading (CSR)  
and Strategic Instruction  
Model (SIM).

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tion and make personal responses)” (p.14). Two approaches developed to improve the reading skills of secondary students with learning disabilities are Collaborative Strategic Reading (CSR) and Strategic Instruction Model (SIM).

## Collaborative Strategic Reading (CSR)

CSR (Klingner & Vaughn, 1998) was designed specifically for students with learning disabilities and students who are at risk of reading failure. This strategy adapts reciprocal reading (Palincsar & Brown, 1984) and incorporates cooperative learning (Johnson & Johnson, 1989). CSR utilizes four strategies —

1. Preview (students brainstorm about the topic and predict what will be learned; occurs before reading);
2. Click and Clunk (students identify parts of a passage that are hard to understand, then using four “fix-up” strategies);
3. Get the Gist (students identify the most important information in a passage); and
4. Wrap Up (students ask and answer questions that demonstrate understanding; review what was learned) (Klingner & Vaughn, 1998).

Students are also taught to use the following cooperative group roles —

- Leader (determines next steps for the group);
- Clunk Expert (reminds group of steps);
- Gist Expert (guides the group through getting the gist);
- Announcer (asks group members to carry out activities); and
- Encourager (gives encouragement to group members) (Klingner & Vaughn, 1998).

In CSR, the teacher’s initial role is to teach each of the strategies and student roles to the entire class prior to reading. This activity may take place over several days and includes identifying in advance the vocabulary words from the reading materials which students will probably not be able to figure out through the group process. Once students are ready to implement the CSR process, the teacher introduces the material to be read to the entire class.

Then, taking on the role of facilitator, the teacher monitors small group process. After each day’s reading assignment is completed, the teacher leads a wrap-up involving the entire class.

Studies of CSR effectiveness found gains in reading comprehension for students with disabilities, as well as others such as English Language Learners (ELL) (Bryant, Vaughn, Linan-Thompson, Ugel, & Hougen, 2000).

## Strategic Instruction Model (SIM)

SIM consists of a package of components for use by students with learning disabilities (Deshler & Schumaker, 1988), as well as instructional tools for use by teachers (Schumaker, Deshler, & McKnight, 1991). The learning strategies portion of SIM helps students with disabilities to more effectively manage the demands of their general education courses (Deshler, Schumaker, Lenz, et al., 2001). Strategies specifically related to reading are —

- Paraphrasing (students express main idea and details in their own words);
- Self questioning (students develop questions concerning reading passages and read to find answers);
- Visual imagery (students visualize scenes in detail); and
- Word identification (students decode unfamiliar words by using context clues and word analysis).

A review of research on the effectiveness of the Learning Strategies Curriculum found that students with learning disabilities who had learned to use the strategies gained in classroom achievement (Schumaker & Deshler, 1992). According to Deshler, Schumaker, Lenz et al. (2001), “When students are taught these strategies in a systematic, intensive fashion, they demonstrate gains that enable them to perform at or near grade level in each literacy area” (p.100).

The Content Enhancement Routines in SIM help teachers manage and present the content of their classes in ways that help all students learn. Content Enhancement Routines include: organizing routines, which help students understand how information is organized; understanding routines, which help students identify the main idea and concepts in

reading material; recall routines, which help students remember key information; and application routines, which help students apply what has been learned (Deshler, Schumaker, Bulgren et al., 2001).

An example of an understanding routine that aids comprehension is the Concept Anchoring Routine (Deshler, Schumaker, Bulgren et al., 2001). This routine helps students connect what they already know to new information they are learning and involves the use of an instructional tool called the

Concept Anchoring Table (see below), which is a tool for teachers to use in displaying information. The table is constructed interactively in class during a teacher-facilitated discussion, and helps students understand new material by linking it to existing knowledge.

Research on the Content Enhancement Routines found that teachers' use of these instructional tools enhanced the achievement of students with learning disabilities (Lenz, Bulgren, & Hudson, 1990).

### Concept Anchoring Table

Name \_\_\_\_\_ Date \_\_\_\_\_ Topic \_\_\_\_\_

<b>Anchors</b> 1. Announce the New Concept 2. Name the Known Concept 3. Collect Known Information 4. Highlight Characteristics of the Known Concept 5. Observe Characteristics of the Known Concept 6. Reveal Characteristics of the New Concept 7. State Understanding of the New Concept	<b>3. Known Information</b> furnace controls heated and cooled air conditioner thermostat 72 degrees closed buidlings supermarkets	<b>2. Known Concept</b> Temperature control in modern buildings		<b>1. New Concept</b> Temperature control in warm-blooded animals
		<b>4. Characteristics of the Known Concept</b> Temperature inside stays the same (72 degrees F) A thermostat can tell if temperature starts to change When the temperature changes, the thermostat sends signals The signals start action in the furnace or air conditioner The furnace or air conditioner corrects building temperature to 72 degrees	<b>5. Characteristics Shared</b> Internal temperature stays the same There is a way to tell if the temperature starts to change When temperature changes, a sensor sends signals The signals start other systems The systems correct the temperature	<b>6. Characteristics of the New Concept</b> Body temperature must stay the same (98.6 degrees F) Nervous and endocrine systems can tell if temperature starts to change When temperature changes, the nervous and endocrine systems send signals The signals start action in circulatory system or muscles The circulatory system muscles correct body temperature to 98.6 degrees F
	<b>7. State Understanding</b> An analogy can be drawn between the temperature control in modern buildings and in warm-blooded animals, because in both the internal temperature stays the same, and there is a way to tell if the temperature starts to change. If the temperature starts to change, each has a sensor to send signals and these signals start other systems that correct the internal temperature.			

Note. From *The concept anchoring routine* (p.6) by J.A. Bulgren, J.B. Schumaker, and D.D. Deshler, 1994, Lawrence, KS: Edge Enterprises, Inc. Copyright 1994 by the authors. Reprinted with permission.

Deshler, Schumaker, Lenz et al. (2001) also noted that the performance of most students with and without learning disabilities improves when general education teachers use the Routines in academically diverse classrooms.

## Other Approaches

CSR and SIM were the only two approaches identified by Peterson et al. (2000) as having been designed and developed specifically for students with disabilities. However, Peterson et al. also identified a number of research-based reading approaches designed for use with the general population of struggling secondary readers. They classified several approaches as being well-established or established, and, of these, the following were identified as effective with students with disabilities —

- Fluency strategies: Fluent readers model oral reading for nonfluent readers; nonfluent readers repeat readings of text.
- Vocabulary strategies: Students or teachers select vocabulary words; students use words in sentences or create visual images to remember words.
- Study guide strategies: Teachers develop study guides that students use to help them identify and understand key concepts in content area reading.
- Literature-based approaches: Students read literature and then talk and write about what they've read.
- Reciprocal reading strategy: Students use four strategies to help them increase their ability to monitor and improve their own comprehension (Palincsar & Brown, 1984).
- Text mapping strategies: Students and teachers use strategies to identify key concepts and understand relationships between key concepts.
- Vocabulary and concept mapping: Students learn vocabulary words and concepts through graphic representation.
- Word analysis strategies: Students learn ways to decode unfamiliar multisyllabic words.

There is no one best way to help students with disabilities or struggling readers acquire necessary skills. Educators can use a variety of approaches to

provide meaningful and productive reading experiences for all students (Lyon, 1997; Learning Disabilities Association of America, 2001). In addition, Fisher, Schumaker, and Deshler (in press) state that in order to increase the achievement of students with learning disabilities to appropriate levels, both student-focused and teacher-focused interventions are needed.

## Suggestions

- Select reading programs or strategies based on recent research that have been shown to be effective with students with disabilities and others at risk of reading failure (see references section of this Brief for additional information).
- Use local student achievement data during IEP meetings and in daily instructional planning to guide the selection and implementation of programs and strategies to be used.
- Provide professional development opportunities to assist teachers in implementing and maintaining new reading programs or strategies.
- Provide administrative support for secondary reading programs or strategies that are implemented.
- Use sound data gathering and analysis methods to determine whether the selected programs or strategies are increasing students' reading skills.

## Conclusion

Full participation in the adult world requires the ability to read materials encountered in the home, community, and workplace. Increased emphasis on addressing the needs of struggling secondary readers can be expected to pay dividends in improved academic performance and future career success. Fortunately, there are a number of effective approaches available to help secondary students improve their reading skills. By selecting research-based approaches, providing needed resources and support to teachers, and evaluating student outcomes, educators will ensure the success of their efforts to improve secondary students' reading skills.

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## Web Resources

University of Kansas Center on Research on Learning

<http://www.ku-crl.org>

Provides information about SIM including a brochure, Spotlight newsletters, resources, and Web sites for related topics and organizations.

Southwest Educational Development Laboratory, Reading Resources

<http://www.sedl.org/pubs/reading16/7.html>

Includes resources on reading research and assessment, and a link to the document, "Building Reading Proficiency at the Secondary Level: A Guide to Resources."

Texas Center for Reading and Language Arts, University of Texas at Austin

<http://readingserver.edb.utexas.edu/cgi-bin/start.cgi>  
[newindex.html](http://readingserver.edb.utexas.edu/cgi-bin/start.cgi)

Provides information about the CSR. Focuses on professional development for educators, and research and evaluation on reading and language arts.

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