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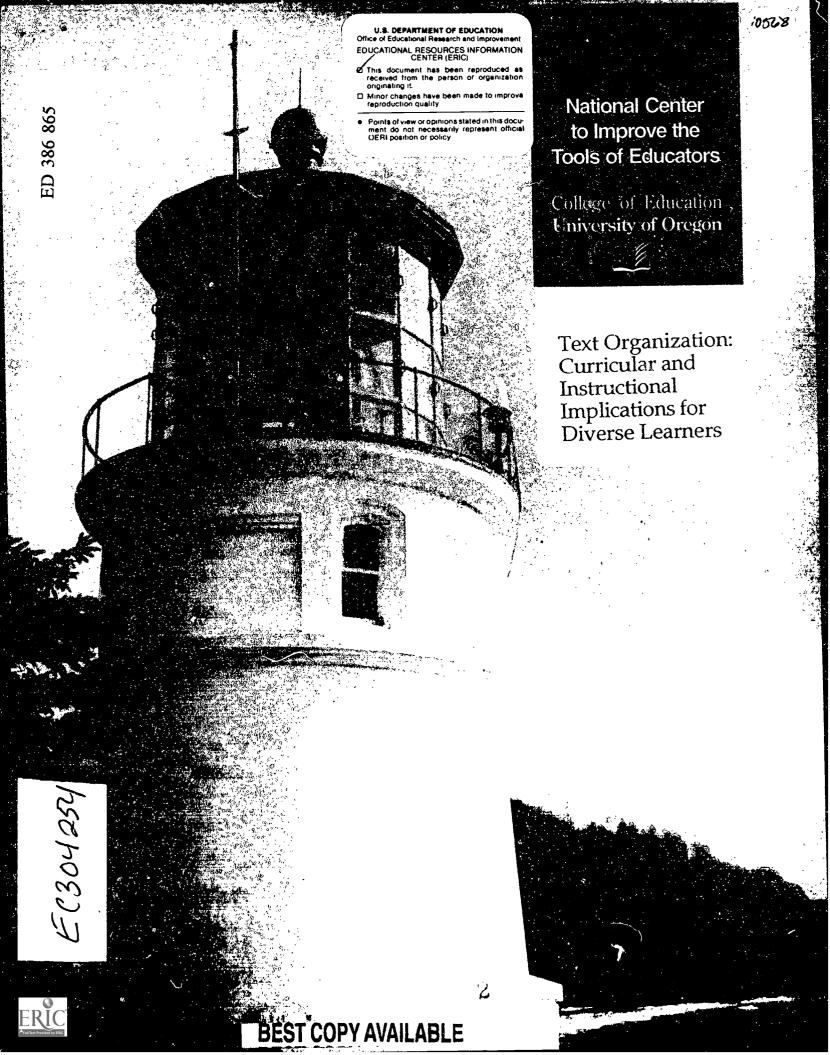   Design; Instructional Materials; *Reader Text
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ABSTRACT
        Research-based instructional priorities for text
organization and curriculum design are reviewed, with special
attention to the needs of diverse learners. Research indicates that
the physical presentation of text and text structure help students
learn information in textbooks and reading materials. Students can
apply their awareness of well-presented text and text structure to
reading and writing tasks. Since diverse learners have difficulties
identifying main ideas and their interrelations, they may require
explicit instruction to increase their sensitivity to important
textual information and text organizational patterns. Diverse
learners have difficulty integrating and organizing what they read
and require well-designed instruction. Examples of instructional
approaches are provided that support the following instructional
design principles: conspicuous strategies, strategic integration,
mediated scaffolding, primed background knowledge, and judicious
review. These principles can be applied to explicit instruction in
which teachers identify important concepts and skills and can provide
guided and independent practice in text materials. These steps enable
diverse learners to experience success in their performance on
mainstream curricular materials, which are predominantly textbooks.
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Text Organization:
Curricular and
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Text Organization: Curricular and Instructional Implications for Diverse Learners

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Text Organization: Curricular and

Instructional Implications for Diverse Learners

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Text Organization: Curricular and Instructional Implications for

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Review of Converging Evidence

In their review of the literature on reading comprehension, Pearson and
Fielding (1991) concluded that "just about any approach to text structure
instruction for expository text" (p. 832) facilitates reac ing comprehension. In a
similar view, Englert and Thomas (1987) posited that 'eachers who did not
direct attention to" expository text structures may be "depriving LD students
of important opportunities to develop self-sufficiency in communication
skills essential to their independence as adults" (p. 103). However, any
approach to instruction or attention directing is insufficient for benefiting
diverse learners. Diverse learners typically lag behind their peers in reading
comprehension and demonstrate difficulty recognizing patterns in text,
discerning relevant information, and recalling information. As a result, they
require instruction that enables them to independently access text for
comprehension and narrow the gap between themselves and their normally
achieving peers.

In their research synthesis, Dickson, Simmons, and Kameenui (1995)
reviewed secondary and primary research on text structure and the physical
presentation of text and their relations to reading comprehension. Their
review resulted in three convergent areas of evidence:

- Well-presented physical text facilitates reading comprehension.

- Text structure and student awareness of text structure are highly
  related to reading comprehension.

- Explicit instruction in the physical presentation of text and/or text
  structure facilitates reading comprehension.

Two instructional priorities or "big ideas" emerged from the three areas of convergence. First, well-presented texts that explicitly reveal main ideas and relations between main ideas facilitate reading comprehension. Because teachers cannot control how texts are written, we address the second instructional implication: reading comprehension is facilitated by explicit instruction in (a) the conventions of well-presented text and the organizational patterns of text structures, and (b) the uses of the conventions of well-presented text and the organizational patterns of text structures to identify main ideas and relations between relevant information.

Seidenberg (1989) proposed that the foundation for the design of more effective instructional programs for students with learning disabilities can be derived from research. With this in mind, the studies reviewed by Dickson, Simmons, and Kameenui (1995) for their research synthesis of text organization and its relation to reading comprehension were scrutinized for convergence of teaching techniques. These techniques were then reconceptualized according to six instructional principles developed by Dixon, Carnine, and Kameenui (1992).

In the following section, we identify two instructional priorities, or big ideas, for instruction. To make these big ideas more explicit and employable, we discuss the principles of conspicuous strategies, mediated scaffolding, strategic integration, primed background knowledge, and judicious review and present examples of how they apply to instruction of text presentation and text structure. The procedural principles, in combination with the content of the big ideas, illustrate how to translate research into practice. The following section should not be viewed as a prescription, but rather as an application of principles that can be used to make tangible the details of

instruction for students with diverse learning needs. To connect research and practice, we respond to two focal questions:

1. What are the research-based instructional priorities or big ideas in text organization?

2. For the instructional priorities or big ideas in text organization, what is the existing research evidence regarding curriculum design?

In the studies reviewed by Dickson, Simmons, and Kameenui (1995), instruction was predominantly explicit. That is, it consisted of the teacher (a) identifying concepts, skills, or strategies to teach; (b) demonstrating or modeling the concepts, skills, or strategies; (c) engaging students in guided practice; (d) providing students with independent practice; and (e) having students independently apply the new concept, skill, or strategy while reading their regular textbooks. The instructional principles presented in this synthesis of instructional implications for diverse learners provide guidelines for an explicit instructional format.

Research-Based Instructional Priorities
in Text Organization: Big Ideas

Dixon et al. (1992) defined big ideas as concepts or principles within or across content areas that have the greatest potential for enabling students to apply what they learn in varied situations. Big ideas have also been addressed by Prawat (1989) and Brophy (cited in Kinder & Bursuck, 1990). For example, Prawat (1989) suggested that instruction in key concepts that are rich in relationships and applicable across a wide array of phenomena may facilitate students' access to knowledge. Brophy (cited in Kinder & Bursuck, 1990) posited that students be taught networks of information that stress relations between concepts and facts. Each of these authors stressed the importance of concepts and interrelations to knowledge acquisition.

In the area of text organization, two big ideas are the physical presentation of text and text structures. Although the physical presentation of text and text structures (e.g., narrative, persuasive, descriptive, compare/contrast) are not big ideas in the same sense as content area concepts (e.g., convection cells in science, supply/demand in economics), they are, nevertheless, concepts or "big ideas" that demonstrate great potential for application in varied situations. Thus, they enable readers to identify main ideas and relations between main ideas or concepts and independently access and comprehend the texts they read in a variety of content areas (e.g., history, science, health).

Physical Presentation of Text

Text that is well presented explicitly reveals the interrelations between concepts and facts. Moreover, well-presented text helps students identify main ideas (a skill central to comprehension), summarize, and outline (Seidenberg, 1989). In a review of text-processing research, Seidenberg (1989) concluded that instruction in how to recognize the physical textual presentation of important information and relations between important information benefits the reading comprehension of students with learning disabilities (LD). Instruction should include (a) headings and subheadings and an explanation of their purposes, (b) signal words, and (c) topic sentences and a description of where they usually occur in well-organized paragraphs.

Text Structure

Text structures (e.g., narrative, persuasive, descriptive, compare/contrast) establish the interrelations between ideas through well-organized patterns such as those associated with narrative, persuasive, explanatory, or compare/contrast text structures. Research indicates that awareness of text structure facilitates comprehension of concepts or main

ideas, not of facts (e.g., Gurney, Gersten, Dimino, & Carnine, 1990; Newby, Caldwell, & Recht, 1989; Pearson & Fielding, 1991). Specifically, awareness of text structure enables readers to identify, summarize, and recall main ideas and supporting information (Seidenberg, 1989). A goal of text structure instruction is that students apply what they have learned about text structures when they read other texts.

A major benefit of big ideas is their application to varied situations. For text structure, this includes application to varied comprehension skills and composition. While this synthesis focused on reading comprehension, ample evidence supports application of text structure to student generation of written compositions. Thus, text structure provides a framework for generating, organizing, and editing information in compositions (Englert & Thomas, 1987). Knowledge of the general organizational patterns of text structure is important in both the reading comprehension and composition process (Scardamalia & Paris, cited in Seidenberg, 1989). Consequently, instruction in recognizing and using text structures is valid for improving both reading and writing performance (Slater, Graves, Scott, & Redd, cited in Seidenberg, 1989).

In summary, the physical presentation of text and text structure are "big ideas" that facilitate identifying and learning the key concepts and networks of information in textbooks and other materials students read. Furthermore, students can apply their knowledge or awareness of well-presented text and text structure to various content areas, reading comprehension tasks, and written composition.

The remaining five instructional principles (i.e., conspicuous strategies, mediated scaffolding, strategic integration, primed background knowledge, and judicious review) provide guidelines for instruction. The examples for

each principle were taken from the procedures within the primary and secondary studies reviewed by Dickson, Simmons, and Kameenui (1995) on text organization and its relation to reading comprehension. While the instructional guidelines are presented separately here for clarity, in actual lesson plans they are thoughtfully interwoven to frame effective instruction for diverse learners.

Evidence of Curriculum Design in Text Organization

Conspicuous Strategies

Strategies are an organized set of actions designed to accomplish a task. To be optimally effective, strategies must be neither too broad, nor too narrow and prescriptive (Dixon et al., 1992). Narrow, prescriptive strategies are more powerful in ensuring success but do not readily transfer to new situations. Broad, general strategies, on the other hand, are appropriate in many situations but are vague and difficult to teach (Prawat, 1989). Therefore, a middle-range strategy that is taught in a content-specific context may enable students to master the strategy, while seeing the strategy's purpose and effect (Prawat, 1989).

Use of the (a) conventions of physical presentation of tex. and (b) organizational patterns of text structures to identify main ideas and the relations between ideas has been translated into middle-range conspicuous strategies. Both are narrow enough to be teachable and useful in facilitating identification of main ideas and relations between relevant information, yet broad enough to be applied to new and varied texts and tasks. In order to make the strategic use of the conventions of text presentation and organizational patterns of text structures conspicuous to students, teachers must provide a great deal of specific information. Across the primary and

secondary sources reviewed by Dickson, Simmons, and Kameenui (1995),
common instructional features for making strategies conspicuous included:

- Define and explain the strategy components;
- Inform students when and why the strategies are helpful;
- Inform students of the impact the strategies have on evaluation, regulation, and memory;
- Model use of the strategy;
- Teach the students to self-verbalize the strategy; and
- Provide feedback at key points in the learning process.

Physical presentation of text. Seidenberg (1989) discussed instruction in
the conventions of the physical presentation of text in her review of text-
processing research and the reading instruction of students with LD. The
conventions of text presentation become strategies for identifying main ideas
and the relations between relevant information. Such strategies include
specific attention to (a) topic sentences and where they are usually located in
well-organized paragraphs, (b) headings and subheadings and their purposes,
and (c) signal words and their purposes. A strategy to create a hierarchical
summary of passages, for example, includes using the passage's headings,
subheadings, and paragraph topics.

Because many textbooks do not follow the conventions of well-presented
physical text, frequently the main idea of a paragraph is stated late in the
paragraph or is missing. Late or missing main ideas and the subsequent
invention of main idea statements are problematic for both normally
achieving and diverse learners (Seidenberg, 1989). Seidenberg concluded that
a strategy to invent main idea statements facilitates identification of
important information in reading passages. While Seidenberg (1989) did not
specifically identify the component steps of how to invent a main idea, she

outlined the steps followed by most readers to identify a main idea (Kieras, cited in Seidenberg, 1989). The strategy steps apply when the main idea is (a) explicitly stated in the first sentence of the paragraph, (b) embedded in the paragraph, or (c) missing. Kieras identified the following strategy steps:

1. Test the first sentence as a main idea sentence.

2. Test the sentences following the first sentence to see if they are relevant to the probable main idea.

3. If the sentences do not fit the probable main idea, revise the main idea to one the sentences will fit.

Text structure. In addition to being useful for identifying main ideas and relations between relevant information, knowledge of text-structure types translates into a middle-range comprehension strategy to (a) summarize passages, (b) adjust reading speed, (c) determine the need to reread, (d) assess readiness for recall, and (e) frame the appropriate organizational pattern for compositions. To improve the reading comprehension of narrative text for diverse learners, Gurney et al. (1990) and Newby et al. (1989) taught a story-grammar strategy.

To make the strategy conspicuous, instruction in the two studies included (a) explicitly teaching the story-grammar elements (e.g., setting, main character, problem, character clues, attempts to solve the problem, and resolution); (b) telling how the story-grammar elements help understand and answer questions about stories; (c) modeling how to use the strategy to identify story parts (explained in the discussion of mediated scaffolding); and (d) providing written prompts to help the students use the strategy and recall information (e.g., pictographs, list of story-grammar elements, explained in the discussion of scaffolding).

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Gurney et al. (1990) defined story-grammar elements as follows: (a) the main character is the character the story is primarily about; (b) the problem revolves around the main character; (c) character clues include the character's actions, dialogue, thoughts, physical attributes, and reactions to other characters and events; and (d) resolution is how the character solves or fails to solve the problem. Additionally, Gurney et al. (1990) included theme as a story-grammar element. Theme was the most difficult story-grammar element to teach, mainly because stories may have more than one theme. The strategy to identify the theme included (a) naming the main character and the major problem, (b) reviewing the resolution and conclusion, (c) determining the character clues that were related to the problem, and (e) using this information to generate a statement about what the author tried to say.

Similar to narrative text structure, expository text structures form the basis of strategies for identifying important information and relations between important information (Seidenberg, 1989) and for summarizing and building macrostructures of passages (Pearson & Fielding, 1991). One strategy involves teaching a visual representation of six types of links or relations between information in texts: (a) A is part of B, (b) A is an example of B, (c) A leads to B, (d) A is like B, (e) A has a feature of B, and (f) A provides evidence or support of B (Holley et al., cited in Pearson & Fielding, 1991).

Another strategy involves the repetitive top-level organization of text structures such as problem-solution, description, and explanation. Instruction includes teaching visual frames designed around a text structure pattern (Armbruster and colleagues, cited in Pearson & Fielding, 1991); identifying a particular text structure pattern and using it to organize reading and studying (Bartlett, cited in Pearson & Fielding, 1991); teaching the components unique

to the different text structure types (Raphael et al.; Seidenberg; cited in Seidenberg, 1989); and providing students with top-level information before they read (Samuels et al., cited in Pearson & Fielding, 1991).

A strategy for problem-solution-effect text structure strategy involves asking four questions (a) What is the problem? (b) Why is it a problem? (c) What was the solution? and (d) What was the effect? Students divide their paper into three columns for note taking, one each for problems, solutions, and effects. This strategy transfers to social studies text, for example, not written explicitly in problem-solution-effect text structure (Kinder, cited in Kinder & Bursuck, 1991).

Mediated Scaffolding

Mediated scaffolding is the external support provided by teacher/peers, content, tasks, and materials during initial instruction in the conventions of text presentation and organizational patterns of text structures. Scaffolding occurs across and within lessons (Duffy & Roehler, 1989) as teachers weave together the various types of scaffolding to facilitate student learning and independent performance. Among the four types of mediated scaffolding discussed here, teacher/peer scaffolding occurs across a continuum, with more support occurring when new concepts, tasks, or strategies are introduced. Support is then faded as students gain fluency and assume more responsibility. Content and task scaffolding occur by proceeding from easier to more difficult content or tasks. However, at times, content and tasks are held constant as students learn and practice new strategies or procedures. Finally, material scaffolding guides students' thinking as they acquire new concepts, skills, or strategies. Students maintain access to scaffolded materials until they are able to apply the new knowledge independently.

Physical presentation of text. Teacher/peer scaffolding occurs during instruction in the conventions of the physical presentation of text primarily through modeling. For example, when teaching how to build hierarchical summaries, the teacher first shows students how to apply the strategy using headings, subheadings, and paragraph topics by thinking out loud. In the guided practice phase, peers and the teacher provide scaffolds by thinking aloud and sharing completed summaries with each other (Taylor et al., cited in Pearson & Fielding, 1991).

The literature reviewed by Dickson, Simmons, and Kameenui (1995) did not provide examples of content, task, or material scaffolding for instruction in the conventions of text presentation. However, examples from mediated scaffolding of instruction in text structures can be adapted. For example, instruction in identifying main ideas using the location of main idea statements in text can start by using paragraphs that begin with the main idea statement (content and task scaffolding). Next, students learn to identify main idea statements that are embedded in paragraphs by asking themselves if each sentence is relevant to the first sentence. If not, they revise the main idea statement. Finally, students practice the strategy using paragraphs that infer the main idea. Again, students ask themselves if each sentence is relevant to the first sentence. If not, they revise the main idea statement, continuing in this manner until they have generated a main idea statement that incorporates the sentences in the paragraph. Thus, content and tasks increase in difficulty as students gain proficiency in a preceding phase. Material scaffolding can consist of providing students with a list of the procedures to generate a main idea statement.

Text structure. One type of mediated scaffolding that occurs in the instruction of text structure is teacher/peer scaffolding. When teaching story

grammar, the teacher models how to identify the story-grammar elements in a story. That is, the teacher thinks aloud (i.e., "I don't see a problem yet." "This is a problem, but I need to read on to see if this is the main problem in the story.") and models how to write the information on a notesheet (Gurney et al., 1990). As the instruction progresses, teachers gradually shift the responsibility for identification of story-grammar elements to the students (Gurney et al., 1990; Newby et al., 1989). However, if students experience difficulty identifying an element, the teacher can resume more responsibility and model how to identify the element. For example, if students have difficulty making problem-solution statements, the teacher models identifying and making problem-solution statements until students demonstrate proficiency (Gurney et al., 1990). Peers may also model strategy steps.

For expository text structures, the same procedure is followed. For example, for problem-solution text structure, the teacher models the procedure for identifying the problem, solution, and effect by asking and answering the following questions: (a) What is the problem? (b) Why was it a problem? (c) What was the solution? and (d) What was the effect? (Kinder, cited in Kinder & Bursuck, 1991).

Another form of teacher scaffolding is questioning. After teaching students to identify story-grammar elements in a story, the teacher asks specific story-grammar questions. If students answer incorrectly, the teacher models how to use story-grammar elements and the information in the story to answer the questions. If students' responses are partially correct, the teacher asks questions that guide students to more complete responses. As students gain proficiency, the teacher provides less guidance (Gurney et al., 1990). As students assume more responsibility for identifying the problem in expository

text structure such as problem-solution, for example, the teacher asks probing questions and leads a discussion that facilitates identifying the problem (Kinder, cited in Kinder & Bursuck, 1991).

A second method for scaffolding, content scaffolding, occurs as teachers present easier content, concepts, or skills before introducing more difficult material[1] For example, in narrative text structure the easier story-grammar elements such as setting, main character, and problem are taught before the more difficult element "theme" (Gurney et al., 1990). New elements of story grammar are introduced using examples from stories students have previously read, allowing students to learn new story-grammar elements in content with which they are already familiar (Gurney et al., 1990).

Text structure instruction proceeds from easier to more difficult text structures. For example, narrative text structure instruction occurs before the more difficult expository text structures. Of the expository text structures, sequence appears the easiest to teach, enumeration and description appear moderately difficult, and comparison/contrast appears to be more difficult (Englert & Thomas, 1987). When introducing an expository text structure that is new to students, the teacher uses a "pure" text structure model (i.e., contains easily identifiable components of an expository text structure type such as signal words "first" or "finally" to signal sequence text structure) for initial instruction and practice, before having students apply their new knowledge to more complex text or to their textbooks (Kinder, cited in Kinder & Bursuck, 1991; Seidenberg, 1989).

A third method for scaffolding instruction is to control tasks. One example of task control comes from research in story grammar. Tasks begin with simple recall and advance to identification and reading comprehension. When students first learn story grammar, they simply recall the names of the

story-grammar elements. After students can fluently verbalize the elements, they apply story grammar by identifying the various elements in stories and answering comprehension questions based on story grammar (Gurney et al., 1990). For expository text structures, students first learn to recognize different text structure types and then apply this knowledge to reading and writing tasks (Seidenberg, 1989).

Finally, a fourth form of scaffolded instruction, <u>material scaffolding,</u> occurs when students are provided with materials to guide their thinking. One example of scaffolded material for narrative text is a prompted notesheet that lists the story-grammar elements and a brief definition of each. Students use the notesheet to record story grammar and other pertinent information about a story (Gurney et al., 1990). An example of material scaffolding for expository text structures is a visual representation (e.g., network, graphic organizer, frame) patterned after one of the text structures (e.g., problem-solution, description, cause-effect) (Pearson & Fielding, 1991).

<u>Strategic Integration</u>

<u>Strategic integration</u> refers to the integrating of content, skills, or concepts that (a) mutually support each other, (b) communicate generalizations, or (c) transfer to areas further and further removed from the original area of instruction (Dixon et al., 1992). Examples of strategic integration can be found in the investigations of instruction in physical text presentation and text structure involving diverse students reviewed by Dickson, Simmons, and Kameenui (1995).

<u>Physical presentation of text</u>. Integrating instruction in summarization of passages with the use of textual clues (e.g., headings, subheadings, signal words, and location of main idea statements) to identify main ideas and relations between main ideas is an example of integration that uses the

conventions of physical presentation of text. In a study by Taylor and colleagues (cited in Pearson & Fielding, 1991), the integration of summarization and the conventions of physical text presentation transferred to uninstructed texts on the same topics and facilitated recall better than answering questions on the passage or additional study.

Text structure. Several studies provide evidence that instruction in text structure does not occur in isolation or with adapted text, but takes place integrated with the actual texts students use in school. For example, instruction in narrative text structure is integrated with reading stories from literature, basals, and high-school literature anthologies (Gurney et al., 1990; Pearson & Fielding, 1991). For expository text, after students learn a problem-solution-effect text structure, they apply this knowledge to identify problem-solution-effect information in poorly written passages from an eighth-grade American history textbook (Kinder, cited in Kinder & Bursuck, 1991).

Text structure skills that mutually support each other can also be integrated. For example, instruction in the story-grammar elements of main character and problem can be integrated because the story problem typically centers around the main character. Thus, identification of either the problem or the main character facilitates identification of the other (Gurney et al., 1990). For example, instruction in text structure is also integrated with other comprehension skills. Instruction in a problem-solution-effect text structure can be integrated with writing cohesive notes based on the text structure, studying vocabulary, and creating a timeline, using an eighth-grade American history text (Kinder, cited in Kinder & Bursuck, 1991).

Finally, instruction in text structure can be transferred from reading to composing. Thus, knowledge of the organizational patterns of text structures provides diverse learners with a plan for generating, organizing, and editing

expository text. Additionally, reading and writing are mutually supportive. Attention to text structure patterns and reading expository text helps students organize their writing. Further, writing about passages helps students improve their recall of content in passages (Seidenberg, 1989).

Primed Background Knowledge

In general, theorists agree on the importance of primed background knowledge to reading comprehension. The structure of a reader's preexisting knowledge affects how the new knowledge is remembered or understood (Weaver, 1991). Reading comprehension, particularly inferential comprehension, improves when relations are drawn between students' background knowledge and experiences and the content in the reading passage (Pearson & Fielding, 1991). Background knowledge is usually linked to knowledge of topics, themes, and concepts (Pearson & Fielding, 1991). However, the research reviewed by Dickson, Simmons, and Kameenui (1995) supports the importance of priming or activating knowledge of the conventions of well-presented text and organizational patterns of text structures. When students lack pertinent background knowledge, it is important that teachers build that background knowledge for them. Any instruction in physical text presentation or text structures can be viewed as building background knowledge that will later form the frame for helping students organize and integrate new knowledge.

Physical presentation of text. Knowledge of the purpose of headings, subheadings, and signal words, and of the location of main ideas in paragraphs serves as background knowledge for reading and has been linked with identification of important ideas and their interrelations (Seidenberg, 1989). When students lack this knowledge, teachers can provide it by teaching

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students how the physical presentation of text indicates the main ideas and interrelations between them (Seidenberg, 1989).

Text structure. Knowledge of text structure also serves as background knowledge to be primed in order to facilitate reading comprehension. Some ways teachers help students attend to text structure before reading include using graphic organizers, summarizing the macrostructure (i.e., hierarchical relations between main ideas), or focusing on story-grammar elements (Horton, Lovitt, & Bergerud, 1990; Pearson & Fielding, 1991).

For expository text structure, research evidence suggests that students who have preexisting awareness, knowledge, or sensitivity of text structure types demonstrate more recall of passages that they read than students who do not possess such background knowledge. When teachers or researchers prime or activate background knowledge, they need to consider background knowledge not only of concepts, but also of text structures. If students lack knowledge of text structures, the teacher needs to provide instruction in text structure to build background knowledge (Pearson & Fielding, 1991).

Judicious Review

Judicious review refers to the sequence and schedule of opportunities students receive to apply and develop facility with the conventions of well-presented text and the organizational patterns of text structures. Closely-spaced, shorter reviews are more effective than single, longer reviews (Dempster, 1991). Effective review is also cumulative, that is, skills and strategies are integrated over longer periods of time (Dixon et al., 1992). Finally, review includes a "firming" cycle in which students practice newly taught skills and strategies (Kameenui & Simmons, 1990).

Physical presentation of text. The primary and secondary studies reviewed by Dickson, Simmons, and Kameenui (1995) offered no specific

examples for judicious review of instruction in the physical presentation of text. However, review of the physical presentation of text can flow from simple recall about where main ideas are located and the purpose of headings, subheadings, and signal words in text, to application to well-organized, and finally, poorly organized texts. Students could also review by "repairing" poorly presented texts, writing summaries, and inventing main idea statements and inserting them at the beginning of poorly presented paragraphs.

Text structure. An example of varying and increasingly difficult review activities is found in story-grammar research. As students are taught story-grammar elements, they first practice by verbalizing the names of the elements. They then practice by identifying the story-grammar elements in stories they have not previously read.

Though composition was not part of the research synthesis of text organization and its relation to reading comprehension (Dickson, Simmons, & Kameenui, 1995), a varied and more difficult review task for text structure consists of having students generate a composition in a recently learned text structure (Seidenberg, 1989).

Conclusion

In summary, diverse learners have demonstrated difficulties identifying main ideas and their interrelations, and therefore, may require explicit instruction to increase their sensitivity to important textual information and text-structure organizational patterns. Additionally, diverse learners select information of interest to themselves rather than relevant information to include in summaries, and have difficulty integrating information and organizing what they read. To help narrow the gap between diverse learners and their normally achieving peers, diverse learners require well-designed

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instruction, based on instructional guidelines found in effective research procedures.

After our scrutiny of the primary and secondary studies reviewed by Dickson, Simmons, and Kameenui (1995), we identified examples of instruction that support six instructional design principles--big idea, conspicuous strategies, mediated scaffolding, strategic integration, primed background knowledge, and judicious review. These six principles can be interwoven and applied to explicit instruction in which teachers identify the concepts, skills, or strategies to be taught; model; and provide guided practice, independent practice, and practice in text materials. These steps enable diverse learners to experience success in their performance on mainstream curricular materials, which are predominantly textbooks.

The conventions of well-presented text and the repetitive organizational patterns of text structure are big ideas that enable diverse learners to better identify main ideas and the interrelations between relevant information in text. The ability to identify main ideas and interrelations between relevant information is central to the comprehension process. Furthermore, being able to identify nterrelations between relevant information helps students form the networks of information important to comprehension.

The research reviewed by Dickson, Simmons, and Kameenui (1995) provided examples of how the conventions of well-presented text and the organizational patterns of text structures can be transformed into conspicuous strategies that can be taught to students. Additionally, these studies provided examples of how strategic use of the conventions of well-presented text and the organizational patterns of text structure can be taught using mediated scaffolding by teachers/peers, content, tasks, and materials. Teachers provide scaffolds by (a) thinking aloud as they model use of the strategy; (b) presenting

easier content before more difficult content; (c) assigning increasingly more difficult tasks—starting by asking students to recall components of well-presented text or a particular text structure, then asking students to identify components in well-written and then poorly written text, and finally by writing compositions or summaries in a particular text structure; and (d) making available graphic organizers or notesheets that remind students of strategic steps until they can perform tasks independently.

Instruction in the conventions of well-presented text and organizational patterns of text structures is integrated with reading processes such as summarizing texts, or with writing instruction. The conventions of well-presented texts and organizational patterns of text structures is taught, not in isolation, but with the actual textbooks students use in school. The conventions of well-presented texts and organizational patterns of text structures become background knowledge to be primed or activated, similar to the way teachers prime background knowledge of concepts, themes, and topics. Ways of priming background knowledge include advance frames or organizers of the reading text. Finally, it is important to use judicious review of the conventions of well-presented texts and organizational patterns of text structures through short, frequent reviews, varying tasks, and incorporating previously taught information.

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