



## In Search of Story Structure: Teaching Readers Cognitive Strategies for Story Comprehension

Teaching readers cognitive strategies for using graphic organizers, answering questions, and analyzing story structure produces gains in text understanding. Though there are a number of derivations of these strategies that can be used in various disciplines to gain content learning, story structure in particular contains some uniquely “language arts/literature” attributes that make it a fitting instructional focus for reading teachers. As good fortune would have it, the use of graphic organizers and question answering support and enrich the strategies we employ in teaching and learning story structure.

### Teaching and learning with graphic organizers and question answering strategies

We use *graphic organizers* and *answer questions* in order to achieve another result such as learning domain-specific (e.g., subject- or content-specific) concepts, making sense of processes and procedures, clarifying meanings and connections in literature and text passages, and so forth. Though a reader must recognize a type of question or know what a “graphic organizer” *is* (i.e., know one when he sees one)—a form of *declarative* knowledge—the real value results from being able to skillfully organize information and construct meaning in a graphic format or locate answers or inferential clues to questions posed about a text. These abilities constitute *procedural* understandings. Through proper instruction in using cognitive strategies that involve graphic organizers and question answering, readers become proficient at independently selecting and employing these strategies in order to better understand text—one of the [cornerstones of reading comprehension](#). We commonly see these strategies used with content-specific text or concepts (e.g., science or history), and this makes good sense. In fact, teaching reading in the content areas is not new—it was the prevalent manner in which text comprehension was actively taught (and researched) prior to

A **graphic organizer** is a diagrammatic or pictorial representation of ideas or concepts and their interrelationships. They may organize information in any number of ways, be either general or task-specific (e.g., serve a specific purpose), and be linear (e.g., arranging according to chronology or some other ordered sequence) or non-linear (e.g., semantic maps that show relationships between concepts, events, or words in a text being read).

See our Research Précis (Edition 02-3) [Contextualized Learning: Graphic Organizers and Reading to Learn](#) for a brief synopsis of related information.

For a detailed analysis of the mutually supportive goals of reading comprehension and domain-specific history learning, read our article [Reading Comprehension and Historical Thinking: Classroom Realities in Building a Context Connection](#).

1980. These content-specific applications still constitute a high percentage of the findings indicating improved text comprehension due to instruction in cognitive strategies. The use of the cognitive strategies involving graphical organizers and question answering are no exception to that general rule—they usually represent efforts in “reading to learn.” These strategies *can*, however, contribute a great deal to the realm of “learning to read.”

### **Story structure as literature-focused instruction in cognitive strategies**

Story structure—how stories and plots are organized—involves a unique set of understandings and abilities that are conducive to understanding and deriving meaning from literature. These understandings and abilities, as the terms connote, are both declarative and procedural. To really benefit from reading Shakespeare’s *Hamlet*, for instance, the reader must *understand* the setting of the story and the purpose and reasons for the storyteller’s viewpoints and attitudes (among other things), and she must also *be able* to go about dissecting and analyzing the story in order to form a basis for these understandings. This

appears to be a vast undertaking (and it is apparent to many that a serious dissection of *Hamlet* is a fitting enterprise at the college level). However, instruction in story structure, and the learning a reader derives as a result, is highly adaptable and transferable—a worthy goal. While it is important that the text chosen for learning story structure be developmentally appropriate (it doesn’t have to be *Hamlet*, but neither does it have to be *Little Red Riding Hood*), the cognitive strategies involved in learning story structure have nevertheless proven themselves effective with below level readers in grades ranging from 3 through 6 (National Reading Panel [NRP], 2000) (see the synopsis of findings in [Just the Data](#) at the bottom of page 5). Two of these studies in story structure accepted for NRP-review even reported a transfer of success to standardized achievement tests, something very few studies overall could report with any scientific veracity. In addition to offering a set of cognitive challenges that are at once within reach of average and below average readers, other keys to the success of story structure instruction seem to lie in the nature of the engagement of the teacher and readers together with the story, and in its unique affinity to integration with other successful forms of text comprehension instruction (e.g., use of graphic organizers, question answering) involving teaching and learning of cognitive strategies.

A **story** is shorter than a novel, but involved enough to have structural elements (e.g., setting, plot, characters).

**Story structure instruction** is a method for teaching a reader strategies for identifying episodic content (e.g., setting, initiating events, rising action, character reactions and goals, results or resolution) and organization (plot) of a story so that he can understand who, what, where, and when, and be able to infer causal and dependent relationships between events, characters, or other story components.

### **Interaction and engagement with stories spells motivation and interest**

When selected with care, stories provide an exceptional context for engaging readers with the types of problems that are faced by real people, and with the problem solving that naturally follows. Through stories, readers can vicariously experience situations in which they could not hope, or wish, to be personally involved. Through these experiences, readers are drawn into asking and seeking answers to questions of who, what, when, where, and why. The situation is conducive to interaction between teachers and students—there are necessary discussions, and the opportunities for lively

conversation that provides teachers with a multitude of openings through which to teach cognitive strategies. The teacher or parent facilitating instruction is essential to the success of story structure instruction, as she is with most successful reading comprehension strategies. The instructor assists students in acquiring the knowledge and in learning the procedures needed to understand and identify the story content and the manner in which the story is organized. Understanding of the episodic content—setting, events, characters, outcomes—helps students to understand the who, what, where, when, and why of stories, as well as what happened in the story. So, how do we get from here to there?

### **An evidence-based rationale for integrating instruction in cognitive reading strategies**

Research findings suggest that successful instruction in the organization and content of a story—story structure instruction—is largely driven by two other categories of instruction: question answering, and graphic organizers. Of the studies included in the National Reading Panel’s review (2000), studies indicated a high success rate for both categories of text comprehension when used as an independent intervention or in conjunction with another strategy. Two other results of the data analyses were noteworthy: first, graphic organizers, question answering strategies, or both, were used in almost every case where story structure instruction resulted in significant learning gains; and second, the most resoundingly successful strategy was the integrated use of multiple strategies. By the evidence, we can assume that the most effective approach for teaching readers to analyze and understand the stories they read is one that integrates use of graphic organizers and question answering strategies.

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### **Three important considerations:**

1. Cognitive strategies instruction involving use of graphic organizers and question answering were successful individually and in tandem.
  2. Graphic organizers and/or question answering were employed in almost every case where story structure instruction proved successful.
  3. Instruction involving use of multiple cognitive strategies was the most successful of all approaches reviewed.
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### **A symphony of strategies: Teaching and learning story structure through use of graphic organizers and question answering**

As you teach reader(s) to explore story structure, instruction in the use of graphic organizers and question answering strategies both provide an invaluable benefit. In addition to helping students acquire tools they will use for years to come, using graphic organizers directly involves students in examining story ideas and relationships among those ideas that are both linear and nonlinear (e.g., timeline and semantic story maps, respectively). Certain *task-specific organizers* that lend themselves precisely to improved understanding of story structure also serve a distinct purpose. Main-idea, rising action, and problem-action-result maps are all examples of effective task-specific organizers. Question answering strategies serve as the natural accompaniment to graphic organizers, helping readers learn to identify story components and glean important story content which in turn informs the details that are organized in a graphic.

An integrated instructional approach requires that the cognitive strategies we teach readers for using graphic organizers and for answering questions support our instruction toward learning story structure. The following diagram represents cognitive strategies

teachers can model that are effective with students and that enhance and align with the objectives of story structure instruction.

**Figure 1.** Strategies for using graphic organizers and question answering in support of learning story structure.

**Effective strategies for using graphic organizers:**

- Show students how to arrange hierarchical ideas (e.g., outlines, main idea “umbrella” with supporting details listed beneath, etc.).
- Help students understand “cause-and-effect” & “if-then” dependencies (e.g., if an event occurs then another naturally follows, etc.).
- Practice surveying text selections for main ideas and cause-and-effect relationships.
- Demonstrate construction of main idea and assorted story maps. Don’t assume that diagramming with boxes, circles, lines, and arrows will come naturally.

**Effective strategies for using question answering:**

- Ask questions in a variety of ways (e.g., orally, in handouts, etc.) before, during, and after reading text passages.
- Teach students to search and survey text selections to find answers to questions they are unable to answer following one reading.
- When literal information is not available, practice “inference” by cuing into clues and surrounding context in a text passage.
- Use questions in conjunction with other strategies (e.g., graphic organizers, story structure, thinking aloud, etc.).

**Teaching so that readers learn strategies, staying focused on the goal, and the benefits of comprehension monitoring**

Strategies for teaching strategies... It’s easy to become confused, or at least tongue-tied. With a little thought the good instructor grasps the idea, but the reality of transferring that to a real classroom with young readers can abruptly bring us face-to-face with the stark contrast between what is known and what can be easily done instructionally with children. Yet, the learning objectives call for the young reader to understand the appropriate cognitive strategies that work for her and use those strategies effectively. Anything less and the central learning objectives are not being met. When the whirlwind hits (i.e., the bell ringing to send the kids to class), it helps to work with an additional set of approaches that keeps the rest in proper instructional focus. As luck would have it, another category of cognitive strategy instruction serves that role nicely. Comprehension monitoring focuses directly on meta-cognition—the self-awareness of the reader. We have alluded to it throughout. Often referred to meta-cognitive awareness, it is evidenced when readers indicate that they are aware of the strategies and story understandings with which they are experiencing difficulty, and that they have developed or adopted and know how to use procedures that help them to overcome these problems. It does not happen overnight, and the lack of attention it is given in standards and learning expectations across states, provinces, and nations does not make it any easier. However, with time and quality instruction, students *can* and *do*

learn to select and employ the best strategy at the right time, for their own needs and according to their own learning style. And, evidence indicates it happens—in isolation and as yet another piece to a multiple strategies approach—and *is transferable* to other situations with students as early as third grade. The following figure provides a synthesized set of proven strategies for keeping focus with the end objective of independent text comprehension.

**Figure 2.** Effective procedures for implementing comprehension monitoring instruction.

Effective procedures for implementing instruction focused on **comprehension monitoring**:

- Regularly determine and reassess what is causing students to experience comprehension difficulties.
- Help students learn to clarify where misunderstandings occur by using “think aloud” strategies.
- Practice looking back, watching, and looking forward in reading passages in order to develop familiarity and awareness.
- Actively restate/rephrase difficult sections in a passage, using students’ words and text structure.

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## Just the Data

The following summarizes experimenter test results of NRP-reviewed studies (2000) focusing on use of graphic organizers, question answering strategies, and story structure instruction. The type of learning gain that resulted is in parentheses.

### Story structure

Experimenter tests required readers to retell (recall) the story and/or give short-answer responses to questions. Research selected - grades 3-6, mostly 4-5 with poor readers. Results:  
- recall (10 successes, 1 failure), answering questions on the stories (8 successes, 1 failure), identifying story structure elements (5 successes, 2 failures). All studies with poor readers showed improvement.

### Graphic organizers

Experimenter tests required readers to write summaries and/or recall text. Research selected - grades 2-8, mostly 4-6. Results:  
- recall (6 successes, 1 null), content gains (4 successes, 0 failures).

### Question answering

Experimenter tests required readers to recall text, give short-answer responses to question, and look back in text to answer questions. Research selected - grades 3-8, mostly 3-5. Results:  
- answering questions (9 successes), looking back in text (3 successes), generating questions (1 success), recall (1 success). No failures “reported.”

**Note:** It is important to realize that the data can only be derived if a study is completed and meets review criteria for inclusion. The NRP findings were no exception. Therefore, the presence of data is meaningful, but its absence *may* or *may not* be meaningful.

You may be interested in [The Cornerstones of Reading Comprehension: Teaching for Vocabulary and Text Understanding](http://www.designedinstruction.com/learningleads/reading-vocabulary-text.html).  
<http://www.designedinstruction.com/learningleads/reading-vocabulary-text.html>

Check out **Research Précis** related to the cognitive strategies discussed in this article:

[Edition 02-3](#) Contextualized Learning: Graphic Organizers and “Reading to Learn”

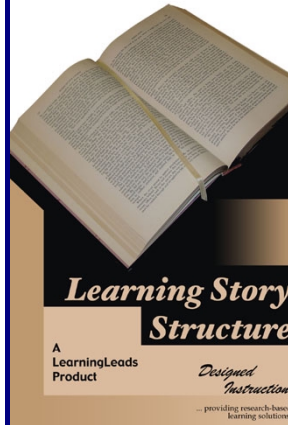
[Edition 03-1](#) Reading Comprehension: Question Generation

[Edition 03-2](#) Reading Comprehension: Combining Question Generation and Multiple Strategies

Visit [LearningLeads™](http://www.designedinstruction.com/learningleads/index.html) at:  
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**Bring the bench to your classroom.** Put what is known about cognitive strategy instruction to work producing gains for your young readers.



Find out about **Learning Story Structure: An Instructional Guide for Improving Reading Comprehension**.

You get the detailed teacher's guide, instructional masters, student handouts, and assessment tools and rubrics. All you need is a good story!

Go to (no spaces):  
<http://www.designedinstruction.com/learningleads/learning-story-structure.html>

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