7. Give students an outline of a story that has been read, or elicit one from them, and then have them reconnect it into a summary (Eanet, 1983; Hayes, 1988).

The next technique provides another way for students to summarize and otherwise respond to sections of text.

**Precision Instruction for Postreading Schema Building: REAP**

Students must assimilate the information read into their own schemata to facilitate long-term memory. Isolated and unconnected pieces of information easily fade from memory, but postreading activities provide the glue to make a cohesive picture of what is read. Read-Encode-Annotate-Ponder, REAP, is one of the most basic ways to facilitate higher-order thinking through reading, writing, and thinking.

**Read-Encode-Annotate-Ponder (REAP)**

REAP is designed to improve thinking, the underlying musculature for active reading and meaningful writing. The idea for this reader-writer exchange system was proposed some time ago (Manzo, 1975) as a means of improving and supporting a national content area reading and writing project essentially for urban schools. Shortly afterwards it was collected into a teaching-learning approach called REAP—Read-Encode-Annotate-Ponder (Eanet & Manzo, 1976; Eanet, 1978, 1983). The REAP system for responding to text has been in use in elementary through college classrooms for two decades. It is based on a scaffold form of writing that invites creativity, much as does haiku, or any other disciplined form of art (Manzo, Manzo, & Albee, 2002).

REAP primarily is a cognitive-enrichment approach that teaches students to think more precisely and deeply about what they read, by following the four-step strategy symbolized by its title:

- **READ** to get the writer’s basic message;
- **ENCODE** the message into your own words while reading;
- **ANNOTATE** your analysis of the message by writing responses from several perspectives, and;
- **PONDER** what you have read and written—first by reviewing it yourself, then by sharing and discussing it with others, and finally by reading and discussing the responses of others.
At the heart of the approach is a set of annotation types that range roughly in hierarchical order from a simple summary of the author's basic message to various perspectives for higher-order critical and creative analysis. The first few REAP annotation types require “reconstructive” thinking—understanding and perceiving the essence of the author's meaning. The remaining ones require “constructive” thinking—going beyond the author's intended meaning to form the personal schema connections, applications, and variations that permit the learner to transfer information and ideas from one context to another. This hierarchy aids assessment and gives guidance to students in reaching “up” to higher levels or “down” to more basic ones that may not yet have been mastered. Descriptions and examples of some of the basic annotation types are provided in Figure 10.5. Other types can be customized and created. For example, several teachers have had rewarding results using a “Humorous” annotation (also in Figure 10.5).

### Guided Reading, Writing, and Thinking

For classroom use, the annotation types are introduced either singly or a few at a time, with the nature and pace of instruction geared to the grade level, but without aiming at “mastery” before moving to another annotation type. Children tend to learn to write best by struggling to express their own thoughts about rich literature selections, guided by mindfully-written models that scaffold reading and entice emulation. As soon as the class has the basic idea of a few annotation types, they begin to write annotations of things they have read, and to read annotations—perspectives—that others bring to response writing. They are reminded to write several annotations on a reading selection, as a means to cross-check their initial understandings and reach for higher-order insights and questions. Exemplary annotations are stored for other individuals and classes to read before reading (frontloading), during reading (as discussion points), or after reading (as a review). These also serve as models of well-composed written responses.

After students have had some practice writing various types of annotations, these can be used and reinforced in a variety of ways. A few are listed below:

1. When giving a reading assignment, specify three annotation types for students to write and turn in.
2. As students become more skilled at annotation writing, they can be given the option of selecting from three annotation types the one that they would like to write in response to a reading assignment.
3. Assign each cooperative group member to write a different annotation type in response to a reading assignment. When students have finished reading and writing, they move to their assigned groups to...
“Travelers and the Plane-Tree”

Two travelers were walking along a bare and dusty road in the heat of a midsummer’s day. Coming upon a large shade tree, they happily stopped to shelter themselves from the burning sun in the shade of its spreading branches. While they rested, looking up into the tree, one of them said to his companion, “What a useless tree this is! It makes no flowers and bears no fruit. Of what use is it to anyone?” The tree itself replied indignantly, “You ungrateful people! You take shelter under me from the scorching sun, and then, in the very act of enjoying the cool shade of my leaves, you abuse me and call me good for nothing!”

Reconstructive Annotations

SUMMARY: states the basic message in brief form

Travelers take shelter from the sun under a large tree. They criticize the tree for not making flowers or fruit. The tree speaks, and tells them that they are ungrateful people for taking shelter under her leaves and then criticizing her.

TELEGRAM: briefly states the author’s basic theme with all unnecessary words removed—a crisp, telegram-like message

Travelers stop for rest and shade under big tree. Travelers say tree is useless. Tree tells them off.

HEURISTIC: restates an attention-getting portion of the selection that makes the reader want to respond

In this story, a tree talks back to people. The tree says, “You ungrateful people! You come and take shelter under me…and then…abuse me and call me good for nothing!”

QUESTION: turns the main point into an organization question that the selection answers

What if the things we use could talk back?

I can just see that poor tree thinking, “I hope they’re about to stop here to seek shelter and not relief.”

CRITICAL: begins by stating the author’s main point, then states whether the reader agrees, disagrees, or agrees in part with the author, and then briefly explains why Not every word spoken in criticism is meant that way. The travelers were just grumpy from the trip. The tree is too sensitive.

CONTRARY: states a logical alternative position, even though it may not be the one the student supports

The travelers could be right, a better tree could produce something and also give shade.

INTENTION: states and briefly explains what the reader thinks was the author’s intention, plan, and purpose for writing the selection

The author wants us to be more sensitive to the people and things we depend on—especially those we see and use often.

MOTIVATION: states what may have caused the author to have written the selection—the author’s personal agenda

It sounds like the author may have felt used, after having a bad experience with friends or family.

DISCOVERY: states one or more practical questions that need to be answered before the selection can be judged for accuracy or worth

I wonder how many of us know when we are being “users.” We could take an anonymous poll to see how many class members secretly feel that they have been used and how many see themselves as users.

CREATIVE: suggests different and perhaps better solutions or views and/or connections and applications to prior learning and experiences

This fable made me think that teachers are sometimes used unfairly. They give us so much, and then we put them down if they make a little mistake. They’re only human.

We should put this fable on the bulletin board where it will remind us not to be ungrateful “users.”

[How would you re-title this fable if you were writing it?] I’d call it “Travelers in the Dark,” to show that we go through life without knowing how many small “gifts” come to us along our way.
share the annotations they have written and to offer constructive suggestions to one another on ways to clarify the response. Extra-credit points can be offered to the group with the best annotation of each type as judged by the teacher or the class as a whole.

4. Introduce a new reading assignment by having students read annotations written by students in previous years’ classes or from a different section at the same grade level.

5. Provide incentive to read and write reflectively by posting exemplary annotations, signed by the author, on a bulletin board or Web page, including some from different age-grade levels; in other words, raise some higher targets.

6. Use REAP annotation types as a guide for phrasing postreading discussion questions. Encourage students to do the same.

7. From time to time, use the REAP annotations to guide students’ responses to nontext learning experiences: a video, a laboratory procedure, a piece of music or art, or others.

GUIDING INDEPENDENT STUDY

Study strategies might be best thought of as the “practical” side of reading. **Study strategies** are all the activities one employs to make time spent in independent learning as efficient and effective as possible. “Study” is the self-initiated application of habits of mind that are the goal of teacher-guided content area reading. As such, they are strongly grounded in individual attitudes and habits formed over time. Acquiring a “new” study strategy often means changing an “old” study habit. It means reflecting on what one typically does, and why, then trying to do it better. The development of study strategies is an extension of metacognition. It is a personal, introspective process that can be quite difficult, given the fact that study habits and attitudes—good ones or bad ones—are formed in the earliest years of school. In general, habits are hard to form and very hard to break. The payoff, however, for undoing poor habits and forming new ones can be life altering. The next sections describe approaches and strategies that help students form good study habits early, and build on them as they grow.

Primary Grades’ Foundations for Study Strategies

In the primary grades, children begin to develop their personal response patterns to the requirements of school. The teacher has much of the responsibility for children’s learning, but even in these early years children