LaBerge and Samuels (1974) have developed a theory to account for automatic processing in reading. They believe decoding words should be so automatic for readers that they can concentrate their attention on comprehending the meaning of what is read. In A Tale of Two Readers, for example, Sarah has learned to decode but has not yet learned the skill to the point where it is automatic. As a result, her reading is slow and fraught with difficulty. Rosemary, on the other hand, may decode automatically most of the time, but here faces unfamiliar information that makes her comprehension of the meaning difficult. As a result, she, like the driver in traffic, must shift from automatic to controlled processing in order to decode the unfamiliar words.

To develop automatic decoding skills in readers, researchers have explored a number of possibilities, including extended word identification practice as part of the regular text-reading curriculum (e.g., Beck, 1981, 1983). More recently, researchers have become encouraged by the potential of the computer for providing many different types of word tasks in an engaging environment (Perfetti & Curtis, 1986). It may also be useful for teachers to include read-aloud activities (such as reading and answering questions) after learners have read silently. Readers' sensitivity to different kinds of scripts can impair their comprehension, but such impairment seems to be obviated by reading aloud during rereading (Jacoby, Levy, & Steinbach, 1992).

Once reading is automatic, however, what readers will comprehend and remember from text depends upon how they allocate their attention as they read. Readers will generally allocate greater attention to important elements in a text (Anderson, 1982). They determine importance based on the purpose for which they are reading as well as features of the text that signal something is important.

As noted in the previous section, the reader's attention can be directed by typographical cues in the text (e.g., boldface print, capitalization [Glynn & Divesta, 1979]), as well as the presence of titles (Kozminsky, 1977), specific phrases (e.g., "an important cause of…" [Armbruster, 1986]), and idea unit structure (Kintsch & van Dijk, 1978). Idea unit structure refers to the placement of main ideas and supporting details within a paragraph. Ideas that appear high in the structure are more likely to be attended to and remembered than details buried deep within a paragraph. Writers of instructional texts, then, are well advised to employ these features to direct learner attention to the important, to-be-learned information.

Readers, on their own, also differentially allocate attention according to the purpose for which they are reading. Reading a novel, for example, typically involves reading for the gist of a story, and readers may be hard pressed to recount very specific details when they are finished. Reading a textbook or technical manual, on the other hand, is done with a specific purpose in mind—to locate and learn important information. Assigning instructional objectives (Klauer, 1984) or inserting questions in the text (Andre, 1979) has