

Web-Based Text Structure Strategy Instruction Improves Seventh Graders' Content Area Reading Comprehension

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Reading comprehension in the content areas is a challenge for many middle grade students. Text structure-based instruction has yielded positive outcomes in reading comprehension at all grade levels in small and large studies. The text structure strategy delivered via the web, called Intelligent Tutoring System for the Text Structure Strategy (ITSS), has proven successful in large-scale studies at 4th and 5th grades and a smaller study at 7th grade. Text structure-based instruction focuses on selection and encoding of strategic memory. This strategic memory proves to be an effective springboard for many comprehension-based activities such as summarizing, inferring, elaborating, and applying. This was the first large-scale randomized controlled efficacy study on the web-based delivery of the text structure strategy to 7th-grade students. 108 classrooms from rural and suburban schools were randomly assigned to ITSS or control and pretests and posttests were administered at the beginning and end of the school year. Multilevel data analyses were conducted on standardized and researcher designed measures of reading comprehension. Results showed that ITSS classrooms outperformed the control classrooms on all measures with the highest effects reported for number of ideas included in the main idea. Results have practical implications for classroom practices.

Keywords: reading comprehension, intelligent tutoring systems, metacognition, text structure