

DEVELOPMENT ARTICLE



A teacher technology tango shows strong results on 5th graders persuasive writing

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Abstract

A central goal of upper elementary schools is improving students' skills to write persuasively using source materials. This study focused on three important areas of writing at the upper elementary grade levels. First, the web-based intelligent tutoring system for the text structure strategy (ITSS) was used to teach children how to read source materials, select important ideas in the text, generate main ideas, and write summaries. Second, instruction about planning and writing persuasive essays was delivered using the self-regulated strategies development (SRSD) model. Third, We Write web-based tools were used to facilitate the learning and mastery of the persuasive writing strategies taught to upper elementary grade children. The We Write computer tool is a teacher-led system choreographing the roles of the teacher and technology to achieve maximum instructional impact. Teachers received practice-based professional development with coaching and modeling to implement the intervention. In a cluster randomized trial with 12 fifth grade classrooms, this approach was effective in improving students' writing. Results show that after 6 weeks of text structure instruction on the web using ITSS, effect sizes on writing quality and planning were 0.30 and 0.77. After an additional 12 weeks of SRSD-based writing instruction effect size on planning quality was 1.60 and writing quality 2.29. These strong results can inform the design of technology supported writing interventions for elementary grade students.

Keywords Web-based learning · Writing · Elementary grade students