

# Picture Placement

## *Testing the impact of picture placement on reading comprehension*

**Education Partner:**  
ReadWorks

**Trial Duration:**  
12/04/17-01/04/18

**Pracademic\*:**  
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### Context

Images are frequently used to facilitate reading comprehension. Little is known, however, about the possible impact of where the image appears. The purpose of the present study was to assess whether images placed earlier in the text facilitated reading completion and comprehension better than images placed near the end.

### Key Finding

Students were likelier to complete the reading comprehension assignment, and scored higher, when the image was at the beginning of the text, with effects diminishing with grade level.

\*BetaEd trains educators to become research-savvy "Pracademics" who lead trials.

### Background

Pairing images with text may benefit young readers, as images can provide context, activate prior knowledge, and serve as clues to the meaning of important words. Several factors may affect an image's impact on reading comprehension, including the student's age, the difficulty of the text, and the time spent looking at the image. The impact may be negative or positive. For example, too many images may distract readers from the text and reduce comprehension.

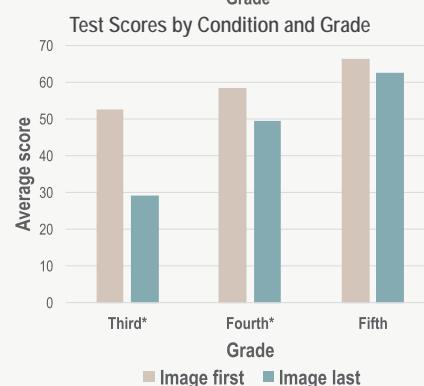
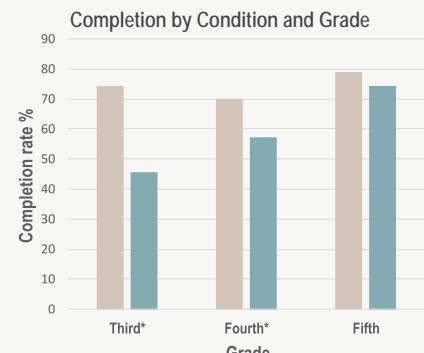
This trial tested whether image placement impacts reading comprehension.

### Trial Design

ReadWorks selected a passage from a standard reading assignment that contained a relevant image. Classrooms were randomized to receive the passage with the image either at the beginning or at the end of the text, followed by a reading comprehension assignment. The BetaEd team analyzed assignment-completion rates and scores from 100 classrooms—50 classrooms with images placed at the front of the passage and 50 classrooms with images placed at the end of the passage. A total of 1,824 students in grades three to five were included in the study. BetaEd examined whether image placement impacted assignment completion rates or scores.

### Results

Students were significantly more likely to complete the assignment, and scored higher in comprehension, if the image was placed at the beginning of the text. The effect was larger for younger students. By fifth grade, image placement had only a negligible effect on completion or score.



\*denotes statistical significance ( $p<0.05$ )

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