

# Tell Me a Story: The Effects of Storytelling vs. Story-Reading on the Executive Functions of Fourth Graders

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Executive functions (EFs) are key skills linked to academic and life-long success, helping individuals respond appropriately to different situations. They include paying attention, maintaining self-control, and working memory (WM). Finding ways to improve EFs is critical and many possible approaches, including storytelling, have yet to be explored. This study investigated the impact of a storytelling intervention for fourth graders through weekly interactive video sessions over 6 weeks. Five pairs of students read or told stories to one another. In the storytelling condition, they prioritized looking at the listener and never showed the pictures accompanying a story; thus the listener had to work to hold the story details in mind and sustain attention without illustrations to aid them. In the story-reading condition, the same stories were used but the student reading the story showed the accompanying illustration to the listener as each page was read. WM, inhibitory control, and language skills were assessed before and after the intervention. Each session, both members of every pair took turns sharing one story and listening to their partner. The storytelling group showed a trend of greater improvement in tasks requiring auditory sustained attention and comprehension while the story-reading group demonstrated greater improvement in WM, visual sustained attention, and vocabulary. On one WM task, story-readers made significantly fewer errors (Mann-Whitney U = 1.500,  $p < 0.05$ ). This study is a fundamental step toward providing educators with the tools and necessary knowledge to create students prepared for success in the classroom and the world beyond.

## Awards Won:

Third Award of \$1,000