

CALIFORNIA STATE SCIENCE FAIR 2006 PROJECT SUMMARY

Name(s)
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Project Number

\$\mathbf{S0320}\$

Project Title

See This!

Abstract

Objectives/Goals

The objective of this experiment is to see if illustrations enhance a child#s comprehension of a reading passage, and if so which type of child, (struggling reader, average reader or advance reader), as categorized by the teacher, will benefit the most from the illustrations.

Methods/Materials

I first gave each child a passage without illustrations and they had 8 min. to read it. The child was then asked to answer 8 questions on what they just read and they had 6 min to complete the test. Next the child was given 8 min. to read a passage with accompanying illustrations. After the child finished they were asked to answer 8 questions on what they just read and had 6 min to complete the test. I tested 259 students in all from third, sixth and seventh grade.

Results

The struggling students, in third grade, had test scores that were improved by approximately 19% when provided illustrations, sixth grade by approximately 18% and seventh grade by 25%. The average students, in third grade, had test scores that were improved by approximately 17% when provided illustrations, sixth grade by approximately 13% and seventh grade by 20%. The advanced students, in third grade, had test scores that were improved by approximately 8% when provided illustrations, sixth grade by approximately 9% and seventh grade by 10%. The differences in test scores in each grade and category of students were larger than the variance in test scores.

Conclusions/Discussion

My hypothesis was correct, illustration do enhance children#s test scores. Illustrations consistently improved all children#s comprehension. The illustrations improved the struggling students comprehension the most. The illustrations also improved the average student#s comprehension but not as greatly. Advanced students comprehension was only improved modestly. The illustrations helped the struggling students comprehend at the same level as the average students without illustrations. The advanced students have developed the skill to visualize which the struggling students have not. By providing illustrations all children might have a better opportunity to succeed.

Summary Statement

The purpose of this experiment is to determine if illustrations improve reading comprehension.

Help Received

none