

CALIFORNIA STATE SCIENCE FAIR 2004 PROJECT SUMMARY

Name(s)

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Project Number

S0325

Project Title

Do Illustrations Make a Difference in Comprehension?

Objectives/Goals Abstract

The objective of this experiment is to determine if illustrations improve listening comprehension of children in Kindergarten through Fifth grade. My hypothesis is that illustrations will improve the listening comprehension of elementary age children.

Methods/Materials

An excerpt of approximately 20 pages from a story, appropriate for the grade level, was first read to the class with illustrations shown to the students, and a ten question test given to the students afterwards. Then another excerpt by the same author, from a different book, was read to the class without showing illustrations, and a similar ten question test was given to the students. Testing without illustrations last would weight the test against my hypothesis. I used two classes of each grade level from Kindergarten through Fifth grade at a local elementary school. Class size is about 20 per class in grades Kindergarten-third and 30 per class in grades fourth and fifth. In all 258 students were tested, once with illustrations and once without illustrations.

Results

In grades first through fourth, illustrations improved test scores, the lower the grade level the larger the difference in comprehension. In fifth grade, the difference was not large enough to be noticed. Further breakdown of the results in fifth grade did show that illustrations helped the students that the teachers felt were the lower achievers. In Kindergarten, I had problems with getting the students to take the test properly, so I felt it was best to throw out the results.

Conclusions/Discussion

Illustrations do help children#s listening comprehension. The younger the child is, the more the illustrations help with comprehension. By the time a child reaches fifth grade illustrations help only the lower achievers. I feel that this is true because by fifth grade the average student has already learned to visualize well without illustrations.

Summary Statement

This project investigates whether illustrations help comprehension of stories read to grade school children.

Help Received

Brother read stories. Gateway School let me test students. Advisor helped with data reduction.