



**CALIFORNIA STATE SCIENCE FAIR
2011 PROJECT SUMMARY**

| | |
|---|---------------------------------------|
| Name(s) Ami U. Thakrar | Project Number J0722 |
| Project Title Picture This! | |
| <p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective of this experiment was to discover if pictorial illustrations assist children in reading comprehension, and if so, which reading proficiency (below-proficient, proficient, or advanced) most benefits from these illustrations.</p> <p>Methods/Materials The materials I used in my experiment were two grade level readings - one with illustrations and the other without. Each reading came with 10 cohesive reading comprehension questions. My sample size was 55 fourth-grade students. I had the teacher categorize the pupils into three categories based on the reading proficiency listed in their state testing scores from the previous year. The students were not told which category they belonged too. Each child took both tests independently in a quiet setting. The tests were not timed. Half of the students in each reading proficiency were administered the test without illustrations first, and the other half were administered the test containing illustrations first.</p> <p>Results I found that for below-proficiency readers, there was a mean test score improvement of 8.57% when illustrations were used. For proficient readers, there was a meant test score improvement of 6.84% when illustrations were used. For advanced readers, there was a mean test score improvement of 8.67% when illustrations were used.</p> <p>Conclusions/Discussion My hypothesis was proved partially correct. I had hypothesized that pictorial illustrations, when added to a grade-level reading, would improve reading comprehension in all reading proficiencies, which was proved true. I had also hypothesized that these illustrations would most benefit below-proficiency readers because they tend to have more difficulty with visualization; however, it was the advanced readers that most benefited from the added illustrations. The results from this experiment can be used worldwide. With these results, teachers can help their pupils learn reading and reading comprehension in the most beneficial and effective manner.</p> | |
| Summary Statement The purpose of my experiment was to discover if pictorial illustrations improve reading comprehension. | |
| Help Received None | |