

# CALIFORNIA STATE SCIENCE FAIR 2004 PROJECT SUMMARY

Name(s)

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**Project Number** 

**J0306** 

**Project Title** 

**Color Codes** 

#### **Abstract**

## Objectives/Goals

My objective was to determine if the color of print effects the ability to comprehend and retain the material.

#### Methods/Materials

Three passages, from the same book to ensure that each of the passages were of the same reading level were selected and printed in five different colors. The colors include black, red, blue, pink, and green. The passages were printed on white paper. Tests with the same level of difficulty were constructed for each of the three passages. Each test had five questions concerning that particular passage. Sixteen sixth graders were randomly selected to read all three passages and then complete the tests. The students had a maximum of five minutes to read the passage and complete the test.

### **Results**

When I first looked at the tests, I noticed that red had the best test scores, and green had the worst scores. I thought about my results, then looked back at the tests. When I looked over them, I noticed that the difference wasn#t caused by the color, but by the reading level of the students. That#s when I realized, that the color of ink did not effect the test scores. The students reading ability was the main factor.

### **Conclusions/Discussion**

My conclusion is that the color of ink, in which a reading test is taken does not affect the outcome. There are many possible reasons that there wasn#t a difference. One reason, could be the practice effect on black. We read black practically every time we read which could have caused the black and the colors to even out. Another possibility is that the colors irritated the eyes, causing the colors# test scores to decrease. I had a lot of fun doing my project and would definitely do another project similar to this one.

### **Summary Statement**

To determine if the color of printing effects students# reading comprehension.

### Help Received

My father helped me to come up with the topic and chart the results. My mother helped me to put the tests together and test the students. My classmates read the passages and took the tests during our lunch period.