



**CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY**

Name(s) Kelly L. Luo	Project Number J0619
Project Title Warped Words and the Stroop Effect	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The purpose of my project was to reduce or eliminate the Stroop Effect. My hypothesis was if there are manipulations of words, then it would reduce or eliminate the Stroop Effect.</p> <p>Methods/Materials Cards containing words of matching colored ink, words of non-matching colored ink, words printed clockwise in matching colored ink, words printed clockwise in non-matching colored ink, words printed counterclockwise in matching colored ink, words printed in counterclockwise in non-matching colored ink, and solid colored circles were created. 30 volunteers were asked to name the colors presented on each card as quickly as possible. Half of the volunteers were introduced the non-matching color cards first, and the other half were introduced the matching color cards first. Time was recorded and statistical analysis was executed.</p> <p>Results On average, the matching word set generated the quickest response, while the non-matching word set took twice as long to read through. The more the words were manipulated, the faster it took for my participants to read through. The time difference between matching and matching word sets progressively decreased as the words were manipulated. The time difference for the manipulated matching word sets took about the same time as the color only set (1 second difference) while the manipulated non-matching word sets took about 3 to 5 seconds longer than the color only set. Lastly, the time comparison between the first and last fifteen participants had about a second difference, and you can see a boredom effect taking place.</p> <p>Conclusions/Discussion My results supported my hypothesis in the sense that the Stroop Effect was significantly reduced; however it was not completely eliminated.</p>	
Summary Statement I attempted to eliminate or reduce the Stroop Effect, proving to have important implications in the fields of psychology and neurology.	
Help Received Mr. Cornell, my science teacher, helped me work out some of the details in my project; My parents bought the materials that were needed for my project.	