



**CALIFORNIA STATE SCIENCE FAIR  
2012 PROJECT SUMMARY**

<b>Name(s)</b> <b>Finn Thomas</b>	<b>Project Number</b> <b>J0730</b>
<b>Project Title</b> <b>How Does Brain Dominance Correlate with Auditory Logic Processing?</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The purpose of my project was to determine how hemisphere dominance correlates with auditory processing involving logic performance.</p> <p><b>Methods/Materials</b> The experiments involved writing a program that would target right/left hemispheres while testing logic analysis involving auditory input. Headphones were used for instruction to the right ear, targeting the left hemisphere, and to the left ear, targeting the right hemisphere. The listener would then process what they had heard and make an appropriate response on the computer program. The program would then analyze their responses, calculate the time required to complete its tasks, and identify how successful each hemisphere was at those tasks. The program also looked for patterns and correlations between a person's brain dominance and logic performance. The materials that I used were: Computer Program that I wrote to conduct the test, earphones, computer, paper, and pens.</p> <p><b>Results</b> The results of my experiments showed that the right side of the brain was better at logic performance than the left. My hypothesis was that the left hemisphere would be better.</p> <p><b>Conclusions/Discussion</b> The experimental data did not support my hypothesis. Instead, the data showed that people's right side of the brain was faster than their left hemisphere. I believe that the results might have come out like this because the test that I designed required the subject to identify colors. In my research I discovered that there is a part of the brain on the right hand side that deals with colors and maybe that is why the results came out this way. I also found that girls that took my test were better and faster at logic performance than boys were. I think that this came out like the way it did because I have heard that girls can jump between their two brain hemispheres easier than boys can.</p>	
<b>Summary Statement</b> My project was to identify how brain dominance correlates with auditory logic processing by creating a computer program.	
<b>Help Received</b> Dad taught me how to make the computer program and my teacher helped me with format.	