



# CALIFORNIA STATE SCIENCE FAIR 2002 PROJECT SUMMARY

<b>Name(s)</b> <b>Michael Walston</b>	<b>Project Number</b> <b>J1721</b>
<b>Project Title</b> <b>Whole, Left, and Right Brain Dominance</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> Do students that receive high grades (A's) in math or science in school test more "Whole" (can use both sides of the brain fairly equally), "Left" (uses predominately the left academic side of the brain), or "Right" (uses predominately the right creative, intuitive side of the brain) brain dominant and are they older/younger/male/female?</p> <p><b>Methods/Materials</b> Three published brain dominance tests were given to a total of (85) individuals. (11) were in a trial group and (74) in the actual test group for data. There were (48) 7th grade math students and (26) 8th grade science students tested in their classroom environment. The data was collected, scored, and charted. "Whole" was grouped with "Left" due to a small number testing "whole brain" and similar academic performance. I then ran a statistical Z= test with P= values with data.</p> <p><b>Results</b> Results showed in grade 7 math, 48% tested whole/left with 70% "A" grade. 52% were identified Right with 44% "A" grade. 91% "older" students tested Whole/Left with A's compared to 42% of Rights. The differences between the percentages are statistically significant (<math>Z=9.8, P=.00</math>) Subgroups were consistent with the above. Grade 8 science presents similar results. W/L have higher performance. Subgroups were not consistent due to a smaller number of students tested in grade 8.</p> <p><b>Conclusions/Discussion</b> The data supported the evidence for these hypotheses. Students that tested Whole/Left brain dominant performed better than those testing Right brain. The "Older" Whole/Lefts performed better than "Older" Rights. The "Younger" Whole/Lefts performed better than "Younger" Rights and both male and female Whole/Left brain dominant students obtained more "A Grades" than the male and female Right brain dominant students.</p>	
<b>Summary Statement</b> My project is about brain dominance as compared to grades, age, and gender.	
<b>Help Received</b> Mother and father took me to numerous libraries, renewed books many times, and got supplies.	