



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

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Project Title One Brain - Two Hemispheres	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The purpose of this project was to determine which combination of hand usage and visual field coverage would produce the best results in left-handers and right-handers.</p> <p>Methods/Materials In order to do this, right and left-handed subjects were given four separate tests to take under different scenarios, which were varied for each subject. Two of the testing scenarios were for the subject to wear RVF glasses (left visual field covered with tape) and mark the answers with his/her right or left hand. The other two scenarios were for the subject to do the same thing while wearing LVF glasses (right visual field covered with tape). The subject received forty-five seconds to complete each test.</p> <p>Results Right-handed subjects, wearing RVF (right visual field) glasses, scored an average of 8.33 using their right hand, and 7.39 using their left hand. Right-handed subjects, wearing LVF (left visual field) glasses, scored an average of 7.88 using their right hand and 7.52 using their left hand. Left-handed subjects, wearing RVF glasses, scored an average of 5.67 using their right hand, and 5.89 using their left hand. Left-handed subjects, wearing LVF glasses, scored an average of 5.7 using their right hand, and 6.74 using their left hand.</p> <p>Conclusions/Discussion These results showed that the speech and math center of right-handed people is located in their left hemispheres. The margin between the average scores in the subjects is very small, which is mainly because the corpus callosum can pass information extremely fast between the two hemispheres. The contradicting results of left-handed subjects shows that left-handers, as opposed to right-handers, do not have consistent hemispheric asymmetry.</p>	
Summary Statement The purpose of this project was to determine the different functions of the right and left hemispheres of the brain in right and left-handed individuals.	
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