



CALIFORNIA STATE SCIENCE FAIR 2006 PROJECT SUMMARY

Name(s) Jessica L. Chaisson	Project Number S0307
Project Title Influence of Art Instruction on the Academic Performance of Adolescents	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals Even though art is not one of the core and mandatory subjects, according to many different educational literature and data, art is still important in that it helps students achieve in other subjects. Being an active art student for four years at Mount Miguel High School, it hit hard when the district started to cut back the arts. According to Mount Miguel High School budget records, the Art Department budget has been cut approximately in half since the 2003 - 2004 school year. There is a general sense among those associated with the Art Department that other academic areas are being emphasized in order to raise standardized test scores. This project is designed to test whether art instruction helps students succeed academically in other subject areas, specifically biology for this experiment. In addition, this project tests the effect of previous art instruction on the effectiveness of the art instruction that is presented during this study.</p> <p>Methods/Materials There are a total of five art projects taught to biology students during three units. Three classes were used as the experimental group, which was the group that receives the art instruction, and two classes were used as the control group. Both groups then completed the same tests and lab assignments to see whether the art projects helped them understand the biology concepts better and helped their academic achievement.</p> <p>Results The results of statistical analysis showed that art instruction did indeed help the students improve their academic achievement.</p> <p>Conclusions/Discussion When comparing the control group to the experimental group, there was a significant improvement in the tests and lab scores after the art lessons when compared to their past test scores. However, the results varied when comparing students who have had previous art instruction to the ones who have not. According the statistical analysis, the differences in the test and lab scores were not significant, but when comparing raw data, the non-art students showed larger increases in their scores, which again demonstrates the positive impact of my art lessons. Finally, there was no significant difference for the students with different amounts of art experience. However, the non-art students and the advanced art students showed a large increase in scores, which again verifies the effectiveness of the art lessons.</p>	
Summary Statement To see whether art instruction helps students improve test scores in academic subjects, specifically biology, and to test the effect of previous art instruction on the effectiveness of the art lessons.	
Help Received Mr. Linke and Ms. Esquibel helped by letting me teach their classes; Mr. Linke helped edit my papers; Ms. Annicchiarico helped give me ideas for art lessons; friends helped me type and give practice lessons to them.	