



**CALIFORNIA STATE SCIENCE FAIR
2009 PROJECT SUMMARY**

Name(s) Alyssa C. Dougherty	Project Number S0307
Project Title The Effects of Processing Style on PSAT and GPA Scores	
Abstract Objectives/Goals My objective was to determine if students(e.g., the apostrophe) processing styles (sequential versus spatial) influence their abilities to achieve high GPAs or to earn high PSAT scores. Methods/Materials Informed consent was obtained from 77 students who voluntarily participated in a validated survey to determine each subject(e.g., the apostrophe)s neurological processing style. A school administrator collected the surveys, wrote each subject (e.g., the apostrophe)s GPA and PSAT scores on an attached paper, and then removed the name of the student. These scores were used to determine any correlation between academic achievement and a subject(e.g., the apostrophe)s processing style. Results Primary results indicate that sequential processors score higher on PSATs and achieve higher cumulative GPAs, on average, than do all tested subjects. Spatial processors score lower on PSATs and achieve lower cumulative GPAs, on average, than do all tested subjects. This suggests that spatial processors are at a disadvantage in the current educational system as measured by criteria deemed important by schools and colleges (GPAs and PSAT scores). Furthermore, data indicate that highly sequential processors saturate their GPAs more so than predicted by a GPA/PSAT trend-line for all subjects, indicating that highly sequential processors are not challenged enough in the current educational system. Conclusions/Discussion This year the National Academy set (e.g., the quotation mark)individualized education(e.g., the quotation mark) as one of their top goals for the next decade. Because processing style does seem to influence academic success, the ability to individualize education based on each student(e.g., the apostrophe)s processing style could be the key to enabling all students to excel at school.	
Summary Statement To determine if there was a correlation between neurological processing and academic achievement, my project involved a combination of surveys, subjects' grades and PSAT scores.	
Help Received Thanks to Mom who performed secretarial duties, Mrs. Pinckney as the school administrator, and Mrs. Lee for mentoring me.	