



**CALIFORNIA STATE SCIENCE FAIR
2004 PROJECT SUMMARY**

Name(s) Neriyah S. Ritblatt	Project Number J1716
Project Title How Does Classical Music Affect Cognitive Tasks in K-1st Grade Children?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The purpose of this project was to study if classical music affects a child's performance doing cognitive tasks.</p> <p>Methods/Materials Materials included: CD with Mozart sonata and Albinoni Adagio in G minor, CD player, Stop watch, worksheets included tasks in three areas: literacy/reading, math, and spatial problems. Six groups of students (3 kindergarten and 3 1st grade classes) were tested twice (no-music and music). Out of the 6 groups, three started with the music condition followed by the no-music condition and three started with reversed order. Each condition lasted 10 minutes. In the music condition, the signal to start was accompanied with the playing of the music; for the no-music condition the signal to start was given verbally.</p> <p>Results Ninety-three SDJA students participated. Out of the 93 children, 82 participated in the no-music condition and 87 in the music condition (76 children participated in both conditions). Fifty two children (56%) were kindergarten students and 41 (44%) were 1st grade students. Out of the 93 participants, 44 (47%) were boys and 49 (53%) were girls. The number of mistakes in both conditions (music and no-music) was marked on each sheet. If a child did not have any mistake the score was 0. If there was 1 mistake- a child score was 1 (and so on). Percentages and Means were calculated in order to compare how children. Results showed children finished the tasks faster and had fewer mistakes when listening to classical music. They especially did better in math and spatial problems when listening to classical music vs. no-music. More children (92% vs. 66%) chose to color when listening to classical music and used more colors than when they did not. Boys did fewer mistakes in the music condition than in the no-music condition in math and spatial problems than girls. Boys finished their tasks faster when listening to classical music than not listening to it in comparison to girls.</p> <p>Conclusions/Discussion Children did better on the three tasks when listening to the music. All hypotheses were correct.</p>	
Summary Statement The effects of classical music on the cognitive performance of K-1st grade students	
Help Received Mother guided me in the project by showing me how to research the topic	