



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

Name(s) E. Andrew Whittington	Project Number J0343
Project Title The Led Zeppelin Effect	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective of this project was to determine how different types of background music affect memorization skills of high school students. A prior study involving only classical music (#The Mozart Effect#) suggested that classical background music helps memorization skills. I wanted to expand this study and try to draw conclusions that might apply to normal studying habits.</p> <p>Methods/Materials Five memory tests, using the placement of cards, were done on ten high school students, ages fifteen to seventeen. The tests were identical with the exception of different types of background music playing on the second, third, and fourth tests. No background music played during the first and fifth tests. Mozart (classical) was played during the second test, The Eagles (easy listening) during the third, and Led Zeppelin (hard rock) during the fourth. The subjects tried to memorize the placement of fifteen playing cards mounted on boards during each test, and their correct scores were recorded.</p> <p>Results When the high school students listened to Led Zeppelin, their memorization skills were best. When listening to Mozart their memorization skills were second best. When they listened to The Eagles they scored third best. Interestingly, when the subjects did not listen to any background music, their memorization skills were the worst.</p> <p>Conclusions/Discussion My conclusion is that the hard rock music of Led Zeppelin appeared to increase the memorization skills of high school students over other types of music, and no background music at all. I call this conclusion #The Led Zeppelin Effect#.</p>	
Summary Statement This project examined how different types of background music affect memorization skills of high school students.	
Help Received My Dad assisted me in conducting the tests by keeping the timer and helping count the correct scores.	