



**CALIFORNIA STATE SCIENCE FAIR
2012 PROJECT SUMMARY**

Name(s) Jazmin Jones	Project Number S0413
Project Title The Effects of Different Learning Modalities on Reading Comprehension	
Abstract Objectives/Goals This experiment, based on the Dual-Coding theory, was designed to investigate the effects of different learning modalities such as auditory, visual, and visual with auditory on reading comprehension as measured by the mean score received on a comprehension test. Methods/Materials The experiment was a between design, and was carried out during three class periods. The control group was asked to silently read a passage from The Prince by Niccolo Machiavelli and take a comprehension test based on the passage. Experimental group 1 was asked to listen to the audio recording of the passage and take the same comprehension test. Lastly, experimental group 2 was asked to silently read and listen to the audio recording of the passage simultaneously and take the same comprehension test. The dependent variable was the mean scores on a comprehension test. Independent variable was the modalities of learning the participants received. Results A one-tailed ANOVA demonstrated that at the $p < .05$ level, there was no significance. Thus, the different modalities of learning had no influence on the scores of the comprehension tests at the 95% level of confidence. Conclusions/Discussion This implies that dually coding different modalities of learning will not make a difference on reading comprehension. Students do not need both modalities present to acquire reading comprehension.	
Summary Statement The Effects of Different Learning Modalities on Reading Comprehension	
Help Received My high school IB psychology instructor	