

# CALIFORNIA SCIENCE & ENGINEERING FAIR 2019 PROJECT SUMMARY

Name(s)

# Anna Chang

**Project Number** 

# **S0409**

### **Project Title**

# Study Jams: The Effect of Words in Music on Reading Comprehension

#### Abstract

**Objectives** The objective of this study is to determine the effect of music, including the presence of words in music, on reading comprehension in high school students.

#### Methods

3 short reading comprehension quizzes of similar difficulty, 30 test subjects (high school students), 2 audio files. 3 quiz trials per test subject -- each tested while listening to music without words, music with words, or no music. Time per quiz determined by length of audio file (4 minutes) or 4 minute timer for trial without music. Grade quiz questions to measure comprehension.

#### Results

Listening to music with words results in the worst reading comprehension. Listening to no music results in the best reading comprehension.

#### Conclusions

Multiple trials with different test subjects prove that listening to music with words has a negative effect on reading comprehension. It is concluded that studying with music, especially music with words, is not ideal for the majority of high school students.

#### **Summary Statement**

I proved that listening to music with words negatively affects reading comprehension.

#### **Help Received**

None. I designed and performed the experiment independently.