



**CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY**

Name(s) Rhea A. Kommerell	Project Number J0717
Project Title Focus: The Effect of Media Multitasking on Memory	
Abstract Objectives/Goals The objective of this project was to find out how receiving and sending text messages while studying affects a person's ability to recall the studied material. My hypothesis was that such multitasking would negatively impact memory. Methods/Materials I tested 56 elementary school students individually. I gave each student a list of 15 word pairs to memorize for 5 minutes. During this time, each student received and answered 5 text messages, half of the students at the beginning of the study session, the other half at random intervals during the session. I then gave each student a test to determine how many word pairs he or she could correctly match. Results The group that was interrupted scored significantly lower on the test than the group that was not interrupted, with a p-value lower than 0.05. Conclusions/Discussion My hypothesis was supported because multitasking, or, in effect, switching frequently between tasks, impaired a participant's memory to a significant degree. This knowledge can be applied to students struggling to balance their social lives with their academic work.	
Summary Statement I found that receiving and sending text messages impairs performance on a memorization task.	
Help Received I interviewed Prof. Barry Giesbrecht and Prof. Richard Mayer, both Psychological & Brain Sciences at UC Santa Barbara, for advice on project design and statistical analysis.	