



**CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY**

Name(s) Rhea A. Kommerell	Project Number 36290
Project Title Focus: The Effect of Media Multitasking on Memory	
<p style="text-align: center;">Abstract</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	
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.	