

# CALIFORNIA STATE SCIENCE FAIR 2013 PROJECT SUMMARY

Name(s)

**Kaylie N. Moropoulos** 

**Project Number** 

J0414

## **Project Title**

# Connections without Context: Is Texting Affecting Our Ability to Read Facial Expressions?

# Abstract

**Objectives/Goals** 

My objective was to explore whether the increased use of text-messaging as a means of communications by my peers might be impacting our ability to effectively read facial expressions in others.

#### Methods/Materials

My teachers and I asked a group of 6th graders to participate in a survey and subsequent test. I obtained consents and surveyed the general amount of text-messaging engaged in by individual volunteer subjects. I divided that group into three sub-groups, based on how much they reported using text-messaging (none; 1-99 texts/month; and >100 texts/month). Each volunteer then took a publicly available online test of their ability to read facial expressions developed at U.C. Berkeley. The test displays a series of facial photos and asks the test subject to select one of four possible answers best describing the emotion displayed. I recorded and analyzed the answers and scores.

#### Results

The third sub-group (the most pervasive text-messagers) scored the highest, suggesting the highest ability to read facial expressions. The first group (non-text-messagers) achieved the second-highest scores, and the middle group (moderate users of 1-99 texts/month) achieved the lowest scores. In general only relatively small variances in test scores were observable.

# Conclusions/Discussion

My study revealed that the those who most frequently text-message also demonstrated better abilities to read facial expressions. My results were surprising and did not match my hypothesis. I expected those who text more to have less experience with context in face-to-face encounters, and thus a diminished ability to read facial expressions. I believe this mismatch resulted from my implicit and false assumption that texting was a replacement for face-to-face interactions, and overlooked that more social individuals might still engage in extensive face-to-face encounters, or simply be better skilled at reading facial expressions -- while also texting more frequently than their peers.

## **Summary Statement**

Testing the impact of increased text-messaging on the ability to read facial expressions.

## Help Received

Science teachers helped gather subjects and organize my experiment; Father helped with consent forms, typing, and creating display board.