



# CALIFORNIA STATE SCIENCE FAIR 2017 PROJECT SUMMARY

<b>Name(s)</b> <b>Jasmine T. Gates</b>	<b>Project Number</b> <b>J0409</b>
<b>Project Title</b> <b>The Misinformation Effect: Can the Way a Question Is Framed Alter a Subject's Recollection of an Event?</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The object of this experiment is to determine whether a subject's memory of an event can be altered by framing questions given after the event has occurred. The specific goal is to determine whether it is easier to influence a subject's memory of an event after more time has passed.</p> <p><b>Methods/Materials</b> In this study, I used 2 classrooms (21 students in each) and staged a #mistaken delivery# to create an event for the students. I administered 2 questionnaires to each group. Half the students were given #neutral# questionnaires that were designed to see what they remembered, but not influence those memories. The other half of the class were given #manipulative# questionnaires that were designed to influence their memory of the event. For the first group I gave them the questions 20 minutes after the event, for the second group, I gave them the questions 5 days after the event.</p> <p><b>Results</b> The students who were given the manipulative questionnaires 5 days after the event did not demonstrate a consistent change in their memories of the event over the students who were given manipulative questionnaires 20 minutes after the event. However, in both classes, 50% of the students (manipulated and neutral groups included) recalled seeing an object that was 'suggested' but not actually present at the event. 100% of the students given the manipulative questionnaire 5 days after the event listed the incorrect name of the teacher based on the way the question was asked.</p> <p><b>Conclusions/Discussion</b> Though there were instances of subjects in the study remembering pieces of the 'misinformation' given, there is not a consistent pattern of memory alteration in the group given the manipulative questionnaires 5 days after the event to determine whether the questions influenced the subjects' recall of the event. While the results are inconclusive, the study does raise more questions regarding the complex ways in which we can be influenced. There is room for further study of how suggestive questioning can alter a subject's memory.</p>	
<b>Summary Statement</b> I examined how a subject's memory of an event can be altered through framing questions and whether time plays a significant role in how easily a memory can be influenced.	
<b>Help Received</b> I designed the experiment myself and enlisted support from the 'Parent Volunteer' and the Classroom Teacher to stage the 'event.'	