



**CALIFORNIA STATE SCIENCE FAIR  
2013 PROJECT SUMMARY**

<b>Name(s)</b> <b>Jon P. Wheeldin</b>	<b>Project Number</b> <b>S0424</b>
<b>Project Title</b> <b>Creating False Memories</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The objective of this experiment is to study the recollection rate of false memories using visual prompts and audio prompts as well as compare that rate between boys and girls and a variety of age groups. <b>Methods/Materials</b> I began by constructing two lists of words, each list 12 words long, each lists' words were an associate of a non-presented word. I explained to all my subjects that I would be testing audio recollection versus visual recollection since the experiment wouldn't work if they knew what I was looking for. I took each subject into a quiet room at a time, took their age and gender, and read them the first list of words. Each word was approximately 2 seconds apart. I had them repeat to me as many words as they could remember. I then showed them the second list of words with the same time interval using Microsoft Powerpoint. After reading the list back to me, I sent them out and had the next subject come in. <b>Results</b> It is necessary to understand that my experiment is ongoing. Also, I've changed certain aspects of the experiment rendering my oldest data unusable due to the change in list length. The old data showed a 40% recall rate of the non-presented word from the visual list and a 50% recall rate of the non-presented word from the audio list. My new data shows a 46% recollection rate from the visual list and a 40% recollection rate from the audio list. There was an 83% recollection rate in females and a 68% rate in males. Again, these numbers are subject to change. <b>Conclusions/Discussion</b> My current conclusion is that the recollection rate is higher if the memory was seen rather than heard and that females are more likely to have false recollections than males. However, my conclusion will change along with my results.	
<b>Summary Statement</b> My experiment tests a common phenomenon of the brain, false memories, in two scenarios and finds correlations of false memory rates between age groups and gender.	
<b>Help Received</b> None	