



# CALIFORNIA STATE SCIENCE FAIR 2015 PROJECT SUMMARY

<b>Name(s)</b> <b>Samuel R. LeFevre</b>	<b>Project Number</b> <b>S0410</b>
<b>Project Title</b> <b>The Effects of Video Games on Cognitive Function</b>	
<div><b>Objectives/Goals</b> My objective was to determine if video game play before a test can improve test scores.</div> <div><b>Methods/Materials</b> Nintendo Wii U console Super Smash Bros. for Wii U Mystery Case Files: The Malgrave Incident</div> <div><b>Results</b> I conducted three trials. In the first, the average score on the critical thinking (or "paper") test was greatest in the control group (58%), and lowest in the action group (40.8%). The scores on the reading quiz were highest in those who played the puzzle game beforehand (62.8%), and the reflex times were fastest in the group that played the action game (0.293 seconds). In the second trial, the highest paper test score was from those who played the puzzle game first, averaging 44.6%. Both the action and puzzle groups scored the same on the reading quiz (61.6%), which is much higher than the control. Like Trial 1, the highest average reflex time was found in the action group (0.2946 seconds). In the final trial, the control scored the highest on the paper test, with 53.2%, and on the reading quiz, with 65%. The action group once again got the fastest reflex time, with 0.3022 seconds.</div> <div><b>Conclusions/Discussion</b> My results were inconclusive. Reflex times consistently got faster in the action group, but test scores varied between trials. I have concluded that video games can be beneficial for test scores if played in moderation</div>	
<b>Summary Statement</b> I investigated the effects video games can have on logic and reading comprehension.	
<b>Help Received</b> Parents helped discipline participants	