



# CALIFORNIA SCIENCE & ENGINEERING FAIR 2019 PROJECT SUMMARY

<b>Name(s)</b> <b>Adriana Quezada</b>	<b>Project Number</b> <b>J0417</b>
<b>Project Title</b> <b>The Science of Stuttering</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives</b> This science project is all about stuttering, a speech impediment in which sounds or words in speech are repeated unintentionally. As a stutterer myself, I wanted to raise awareness and inform people about this disability that I have, all through a science project. My hypothesis was that if the average reading speed of thirteen girls is faster than that of thirteen boys, then boys are more likely to experience and develop stuttering at an early age because of their potentially slower reading speeds. I predicted that the boys would be more prone to doing this, and that this could probably be linked to stuttering.</p> <p><b>Methods</b> Thirteen girls and thirteen boys were used for this project, with twenty-six trials in total. These test subjects were all children, ranging from eight to thirteen years old. I timed the test subjects separately while they read a selected passage from Harry Potter and the Sorcerer's Stone by J.K. Rowling out loud. During the testing process, I made some observations, like stumbles or guesses on the pronunciation of some words. After timing them, I found out the average times of the group of girls and the group of boys.</p> <p><b>Results</b> These were how the results turned out: Eight girls read in under one minute, four girls read in over one minute, and one girl read in over two minutes. Six boys read in under one minute and seven boys read in over one minute. The girls got an average time of 64.8 seconds. The boys averaged up to 65 seconds.</p> <p><b>Conclusions</b> Because of the small time difference, it was not enough to draw a strong conclusion. After doing later research, I found out that a reading test is not a diagnostic test for stuttering. A person can have reading disabilities or difficulty reading, but it is not enough to prove if they will experience stuttering. Therefore, my hypothesis is neither correct nor incorrect. With further research and results, there could be a set conclusion to my hypothesis.</p>	
<b>Summary Statement</b> My project is about stuttering, a rare speech impediment, and how it can be developed and controlled.	
<b>Help Received</b> Mrs. Gena Heins, Jessy and Jennifer Quezada	