



**CALIFORNIA STATE SCIENCE FAIR  
2017 PROJECT SUMMARY**

<b>Name(s)</b> <b>Paige R. Kieding</b>	<b>Project Number</b> <b>J0713</b>
<b>Project Title</b> <b>Typoglycemia: Fact or Fiction?</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The objective of my science experiment was to raise awareness and increase understanding of a very common learning disorder called dyslexia by simulating what reading with dyslexia is like.</p> <p><b>Methods/Materials</b> Printed an original and a scrambled version of the same paragraph. Had each of twenty test subjects read both paragraphs aloud and used a stopwatch to time how long it took them to read each paragraph. Recorded results. Found the average of all test subjects' times on the scrambled paragraph and the average of all the test subjects' times on the original paragraph. Determined the percentage increase or decrease of time the test subjects took on average between the two paragraphs. Analyzed and shared my results.</p> <p><b>Results</b> The results of this experiment proved that it took test subjects longer to read the scrambled paragraph than the normal paragraph (about 35% longer). The normal paragraph (control) took an average of 41.81 seconds for test subjects to read and the scrambled paragraph (manipulated variable) took an average of 64.13 seconds for test subjects to read.</p> <p><b>Conclusions/Discussion</b> My experiment proved that it takes roughly 35% longer to read a scrambled paragraph than a normal paragraph. It also allowed my test subjects to experience what people with dyslexia have to endure on a daily basis. Additionally, it enabled me to spread awareness for this extremely common learning disorder. My results showed that dyslexia is a difficult learning disorder to live with and people should not assume that people with dyslexia are unintelligent or just being lazy.</p>	
<b>Summary Statement</b> I simulated what reading with dyslexia is like and proved that a scrambled paragraph takes much longer to read than a normal, unscrambled paragraph.	
<b>Help Received</b> I came up with the idea of my project and created my experimental procedure by myself. I contacted Ms. Amanda Kautzman, a graduate student in the Psychological and Brain Sciences Department of UC Santa Barbara over email, who reviewed my project and provided helpful tips for my overall outline.	