



**CALIFORNIA STATE SCIENCE FAIR
2014 PROJECT SUMMARY**

Name(s) Andrew E. O'Rourke	Project Number 34158
Project Title Do You See What I See? Testing the Peripheral Vision of People with and without Dyslexia	
Objectives/Goals My initial investigative question was to ask "Do people with dyslexia have better peripheral vision than people without this learning difference?" I wanted to test the peripheral vision of people to determine if there is a difference between the peripheral vision of those with or without dyslexia. I hypothesized that people with dyslexia have better peripheral vision than those without this learning difference. Abstract Methods/Materials The first part of my research was to find out how to set up my test with subjects. It's important to do an accurate peripheral vision test to assure proper results. After a couple of different ideas, I found out the proper method to do this test was to use a visual protractor. The materials I used were a piece of foam core, Popsicle# sticks, glue, a push pin, a cup, pen, paper to record your data, scissors, protractor, and construction paper. These are the items needed to create my visual protractor and everything that I used in performing my experiment. The second part of my research was to see if professionals in the scientific fields have studied dyslexics and peripheral vision. I determined two cognitive scientists, Gadi Geiger and Jerome Lettvin, had done research and found that dyslexic readers could read on the far edges of their visual field more so then those of typical readers. This helped frame my thoughts on peripheral vision Results My data shows that most dyslexics have better peripheral vision than non-dyslexics. I did however, find cases where a non-dyslexic individual had better peripheral vision than a dyslexic. Overall dyslexics had better peripheral vision. Conclusions/Discussion In conclusion my hypothesis was correct. Testing showed that dyslexics tended to have better peripheral vision than non-dyslexic individuals. Just like in most aspects of life and science, there are exceptions; not all of the dyslexics tested had better peripheral vision. It was difficult to find dyslexic participants. Some of them feel bad as there is a negative perception associated with the word "dyslexic".	
Summary Statement Testing to see if people with dyslexia have better peripheral vision than people who don't.	
Help Received My tutor, Linda Diamantopoulos, helped arrange some of the testing subjects. Family Friend Chris Donohoe helped make my graphs. Teacher Paul Brown provided encouragement and organizational help. Dad & Mom helped make the testing equipment	