



**CALIFORNIA STATE SCIENCE FAIR  
2002 PROJECT SUMMARY**

<b>Name(s)</b> <b>Brianna J. Hogg</b>	<b>Project Number</b>  22374
<b>Project Title</b> <b>E-World versus Real World, Reading Comprehension</b>	
<b>Objectives/Goals</b> The objective of this project was to determine if a person's reading comprehension is greater when reading written material on paper or from a computer screen. I believe that the majority of people tested will have better comprehension when reading from paper than a computer screen. <b>Abstract</b> <b>Methods/Materials</b> Twenty people were given ninety seconds to read a short paragraph printed on a piece of paper. They were then given sixty second to take a test written on paper to measure their comprehension of what they read. The same twenty people were given ninety seconds to read a different short paragraph from a laptop computer screen. They were then given sixty seconds to take a test written on paper to measure their comprehension of what they read on the computer screen. Half of the test group read test "One" from the paper and test "Two" from the computer. The other half of the test group read test "Two" from the paper and test "One" from the computer screen. The tests were graded to determine the number of correct answers. <b>Results</b> The data obtained supported my hypothesis that the majority of people tested have better comprehension when reading from paper than a computer screen. The average number of correct answers of the test of comprehension when reading from the computer screen was 6.5. The average number of correct answers of the test of comprehension when reading from the paper was 8.0. The majority of people tested had better comprehension when reading from paper than a computer screen. Eighty percent of the subjects tested, scored higher on the test related to the passage printed on paper than the passage read from the computer screen. <b>Conclusions/Discussion</b> As technology continues to develop, more of our daily tasks are completed using the computer and it appears from this experiment that reading comprehension is negatively affected by reading from a computer screen. Therefore, it is important for people designing things, such as, software or web sites to incorporate techniques to assist in communicating with their audience. This may include things like proper font style and color selection, as well as, size. This experiment also demonstrated that if a thorough understanding of a piece of written material is of great importance, that paper is a better medium for presenting the information than the computer screen.	
<b>Summary Statement</b> This experiment was done to determine if people have find it more difficult to comprehend material read from the computer than from paper.	
<b>Help Received</b> Father assisted with proofreading of my material and reviewed the assembly of my board.	