



**CALIFORNIA STATE SCIENCE FAIR  
2004 PROJECT SUMMARY**

<b>Name(s)</b> <b>Krystal L. Tran</b>	<b>Project Number</b> <b>J0336</b>
<b>Project Title</b> <b>Does Bigger Mean Better When You Read?</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> Reading and writing is an important part of daily life, especially for a student. It is unclear whether difference in font size affects readability and comprehension. This experiment examined the effect, if any, that a certain size font would have in improving the comprehension of text. Three groups of size texts were tested under the exact same conditions.</p> <p><b>Methods/Materials</b> The materials used in this project included 109 random middle level grade participants, 545 sheets of 8 1/2 x 11 white copy paper, 1 middle level skimming and scanning testing booklet: Middle Level Skimming and Scanning by Dr. Edward B. Fry, and 1 Stopwatch. The procedures used in this experiment included: 1) administering 3 reading comprehension tests with different font sizes to 100 randomly selected middle level grade students. The Middle Level Skimming and Scanning booklet by Dr. Edward B. Fry was used with the publishers permission. 2) The testing hours were from 9:00 AM to 10:30 AM, when students are most alert during the day. 3) The limit for each test was 7 minutes.</p> <p><b>Results</b> The results showed that the most readable and comprehensible font was size 10. The subjects# average score on this test was 88.2%. The second most comprehensible font was size 12 with an average score of 87.6%. Size 14 was difficult for most of the participants to comprehend because the average score was 75.5%. Further research changed the order the tests were given: firstly font 14, then font 12, and lastly font 10. The results showed that the most readable and comprehensible font was point 12 with 79.9%. The second most comprehensible font was size 10, having 74.1%. Point size 14 appeared to be difficult for most of the participants to comprehend because the average score for this group was 61.4%.</p> <p><b>Conclusions/Discussion</b> The outcome of Experiment 1 indicated that participants performed better on both the smaller font and the medium size font. Although there was a slightly higher score when the smaller size font was used, the difference in scores was not significant. Experiment 2, which tested if the order mattered, proved that students performed better on font 12. In both experiments, the scores for fonts 10 and 12 were very similar. The experimentation supports the idea that the larger size font 14 was least comprehended. Therefore, Bigger size font is not better when you read.</p>	
<b>Summary Statement</b> This experiment examined the relationship, if any, between font size and reading comprehension.	
<b>Help Received</b> Glencoe/McGraw-Hill Publishing Company permitted the use of 3 passages from Middle Level Skimming and Scanning by Dr. Edward B. Fry; Teachers allowed the participation of students from class; Teacher aided in use of Microsoft Excel.	