



**CALIFORNIA STATE SCIENCE FAIR  
2009 PROJECT SUMMARY**

<b>Name(s)</b> <b>Joshua S. Bertey</b>	<b>Project Number</b> <b>J0604</b>
<b>Project Title</b> <b>Does Font Size Affect Fluency?</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> Reading fluency is the ability to read phrases and sentences smoothly and quickly. Young readers need to develop their fluency so they can become better readers. Fluency also helps readers with their comprehension. Studies have stated that some students preferred reading a book with large print. Large print is defined as a 14 point or larger font.</p> <p><b>Methods/Materials</b></p> <ol style="list-style-type: none"><li>1) Reading fluency tests were collected from second, third and fourth grade teachers.</li><li>2) For each grade level tested, fluency tests were typed using both 12 and 16 point font sizes.</li><li>3) Twenty copies of each test were made.</li><li>4) Teacher permission was received to test average readers from their respective classes.</li><li>5) For each student, the 12 point font size fluency test was administered first followed by the 16 point font size test.</li><li>6) Students were instructed to read as much as they could for one minute. Students were also permitted to use their finger to track their reading.</li><li>7) Word counts and mistakes were tracked for each student and a word per minute total was calculated.</li></ol> <p><b>Results</b> The results for the second grade readers showed they read more words per minute on the 16 point font size test. Each of the 20 students improved on the larger font size test. The hypothesis was correct for this grade level. The results for the third grade readers showed that 12 out of the 20 readers actually did better on the 12 point font fluency test. The results for the fourth grade readers showed that 15 out of the 20 readers did better on the 12 point font fluency test. Therefore, the hypothesis was not correct for the third and fourth grade readers.</p> <p><b>Conclusions/Discussion</b> Research has found that larger typed words similar to those found in picture books for younger children is preferred by children in the late primary grades and by some intermediate grade children. Studies have also stated that with larger print it means there are fewer words on a page making it easier for readers to decode. Progress is noted with comprehension, tracking and fluency and also make fewer mistakes are made. Research also shows that larger font sizes force the eye to move slower than with standard-sized fonts. Students are able to track their reading easier with the larger fonts. Testing struggling readers rather than average readers in the fourth, fifth, and sixth grades would be a consideration for future experimentation.</p>	
<b>Summary Statement</b> The project is to find if there is a direct correlation between print font size and reading fluency in grade school students.	
<b>Help Received</b> Mom typed the fluency tests.	