



**CALIFORNIA STATE SCIENCE FAIR  
2014 PROJECT SUMMARY**

<b>Name(s)</b> Alexis C. Duke	<b>Project Number</b> <b>J0708</b>
<b>Project Title</b> <b>Digital Dilemma: An Analysis of Print vs. Digital Text</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b></p> <ol style="list-style-type: none"><li>1) To determine the pros and cons of using iPads in the classroom</li><li>2) To study the effects on students using iPads: considering behavior, retention, and test scores</li></ol> <p><b>Methods/Materials</b></p> <p>Preparation</p> <ol style="list-style-type: none"><li>2) Receive assistance in translating the results of a benchmark test to a leveled reading program for at least 30 students each for grades 2, 4, and 6. The benchmark test used in this project was the STAR Reading Test, which yielded a recommended reading level. This specific reading level corresponded with the leveled reading program. The reading program had passages and quizzes pertaining to the passage for all reading levels, so each student had a passage/quiz corresponding to their reading level.</li><li>3) After receiving each student's reading level, type up two of each required reading level: one passage for the paper test and one for the iPad test. Print out the required number of each paper-designated passage and upload the designated iPad passages to a cloud database. Also type the corresponding quizzes and print them out separately.</li></ol> <p>Testing Protocol</p> <p>Come to a classroom prepared. Go over the following with the students: students should receive their passage, read it once, and raise their hand when finished. When the classroom finished, wait five minutes, the pass out the quizzes.</p> <p><b>Results</b></p> <p>Behavior:</p> <p>The students were disinterested when presented with the paper media, but more focused. The students were more open to learning with the iPads, but they were more distracted during the testing.</p> <p>Test Scores:</p> <p>2nd Grade: The second graders mostly did poorly on the iPads, with a few outliers. The p-values (probability values) in this category mostly showed statistical significance.</p> <p>4th Grade: The fourth graders did slightly better on the paper compared to the iPads. The p-values in this category were somewhat statistically significant. Students began to show early development of preferred reading media.</p> <p>6th Grade: The results were very mixed and the p-values showed no correlation between test scores and media.</p> <p><b>Conclusions/Discussion</b></p>	
<b>Summary Statement</b>	
<p>My project compares the overall learning experience attained using iPads in the classroom and compares it to the classical classroom experience using paper.</p>	
<b>Help Received</b>	
<p>Mother helped type passages.</p>	