

CALIFORNIA STATE SCIENCE FAIR 2016 PROJECT SUMMARY

Name(s)

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Project Number

J0421

Project Title

Electronic Media vs. Paper: Effect on Teenagers' Reading Comprehension

Abstract

Objectives/Goals

The goal of this experiment was to determine if electronic media or paper produced better reading comprehension for current-day eighth graders.

Methods/Materials

Students were randomly assigned to one of two groups. Each group read the same two science-related articles, one on a Chromebook laptop, and the other article on paper. Statistical evaluation used normalized scores to remove any potential effect of differences in difficulty between the two articles.

Results

This study determined that there was no statistically-significant difference in students' reading comprehension scores between paper and screens, with a p value of 0.98.

Conclusions/Discussion

The students that were tested grew up with technology, and have been accustomed to reading on electronic media since they were young children. It was concluded that this familiarity with technology likely caused them to outperform adults when compared with previous research. Future experiments are recommended to confirm this conclusion.

Summary Statement

It was concluded that there was no statistically significant difference in reading comprehension between electronic media and paper for younger students.

Help Received

My father brought home his laptop, and I used his graphing software to professionally display my results. Other than this, I received no help.