

CALIFORNIA STATE SCIENCE FAIR 2014 PROJECT SUMMARY

Name(s)

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Project Number

J0724

Project Title

What's Your Style? Could Font Styles Make a Difference in Your Reading Speed?

Abstract

Objectives/Goals Fonts are described in terms of their aesthetic qualities such as face style, size, and color. The objective of this investigation is to evaluate the relationship between font style and reading speed. With over 200,000 different styles available, students are exposed to a wide variety in texts and are expected to fluently read diverse fonts. Understanding the influence of font style on reading performance can provide young people with successful reading experiences that lead to good reading habits for life.

Methods/Materials

Numerous middle school students were given a passage to read multiple times, each in a different 12-point font style (Cambria - control, Chewy, Permanent Marker, Homemade Apple, Covered by Your Grace). Test subjects were timed while reading the 250 word fictional passage. Reading speed was calculated for each font style using the average reading times measured. To account for the effect of familiarity with each repeated reading, a separate "correction" passage was included as part of the testing. The final reading speed results were calculated by combining the correction passage offset with the original test passage results.

Results

The results of the data collected and analyzed showed that the control font, Cambria, which was the most common and standard of all the fonts, was the style that students read the fastest at 173 words per minute. On the other hand, the style that read the slowest was "Homemade Apple", an exaggerated cursive font, which students read at approximately 110 words per minute. All of the other font styles that were tested had reading rates in-between these high and low data points.

Conclusions/Discussion

It was evident that the simplest fonts read more easily and quickly. More complicated fonts were slowest to read. Several possible explanations support this conclusion. First, the students were more familiar with standard, simple fonts. So, students were able to read these styles faster. Another factor that appears to influence the testing results was the letter formations and spacing. Fonts with close letter and word spacing, and traditional letter formation, produced the fastest reading rates. Those with less distinct letters and greater variation in size, form and spacing, took longer to read. Ultimately, as particular font styles produce greater reading performance and success, students desire to read more and build strong lifelong reading habits.

Summary Statement

The objective of my experiment was to measure the time it took for middle school students to read a passage in different fonts and determine if font style has a significant effect on reading speed.

Help Received

I received assistance from my science teacher and parents, who helped me define the testing process and gave feedback on the written report.