

CALIFORNIA STATE SCIENCE FAIR 2005 PROJECT SUMMARY

Name(s)

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Project Number

J0328

Project Title

Is A Picture Really Worth 1,000 Words?

Abstract

Objectives/Goals

Memory is an amazing aspect of the human brain that is used everyday for many different tasks. People use their ability to recall different things on a daily basis from students studying for tests, to mothers trying to remember a grocery list. But what is the best way to remember a set of items? The researcher wanted to find out just that; what the best way to remember a set of items is.

Methods/Materials

The experimenter made three different PowerPoint presentations; one with pictures of random objects, another with the corresponding words, and a third with the picture and the word together. She then showed three different classes of students the different presentations, and one week later, tested them on how much they could remember.

Results

When the combined test scores were looked at, the researcher saw that the presentation with only pictures and the presentation with both pictures and words had average percentages within 1% of each other. The presentation with only words had a much lower percentage, so further analyzing of it was not necessary, however, the experimenter wanted to further analyze the other two presentations to see if there was a difference between them. The data was analyzed with other graphs, including a pie graph comparing the scores 50% and above to below 50% for each test and a bell curve graph to look at the distribution of the test scores. Later, more testing was done and when combined with the previous data, it was found that there was a difference between the presentations with only pictures and both pictures and words.

Conclusions/Discussion

From this experiment, after both studies were completed, it can be concluded that the best way to remember a set of items is to see a picture and a corresponding word at the same time, and the second best method is in a visual context.

Summary Statement

This project tested to see what way of remembering a set of items results in the best ability to recall; pictures, words, or a combination of both pictures and words.

Help Received

Mrs. Gross helped with brainstorming for and idea; Ms. Sondreal edited all written work; Parents helped analyze the data; Students who participated made the experiment possible.