

CALIFORNIA STATE SCIENCE FAIR 2005 PROJECT SUMMARY

Name(s)

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Project Number

J0326

Project Title

Is a Picture Really Worth a Thousand Words?

Objectives/Goals

Abstract

Is recall from short term memory influenced by how the information is presented? Since acces to inforantion form short-term memory depends on how well information is encoded, my hypothesis is that subjects with the most elaborate encoding of information will have the best recall. I predict that the tactile group will perform the best, followed by the visual group, and lastly, by the auditory group.

Methods/Materials

40 middle school students randomly assigned to 4 different groups: T(tactile, or copying), V1(words), V2(words and pictures), and A(auditory). All subjects are asked to study the same list of 20 words and recall as many as possible. The constant is the list of words. The variable is the way the words were presented.

Results

V2 performed the best with an average of 14 words correctly recalled, V1 had 12.4, T had 10.9, and A came in last at 10.4. V2 had an outlier of 19/20, T had an outlier of 4/20.

Conclusions/Discussion

Recall from short term memory does depend on the way information is presented. Recall is also affected by what type of learner one is, one's condition at the time of testing, and one's motivation.

Summary Statement

Recall from short term memory depends on the way information is presented.

Help Received

The subject idea was suggested to me by my oncologist. All classmates participated in my science project and my parents helped me thoroughly rehearse the material.