

CALIFORNIA STATE SCIENCE FAIR 2013 PROJECT SUMMARY

Name(s)

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Project Number

J0719

Project Title

The Relative Effectiveness of Three Memory Techniques

Abstract

Objectives/Goals

To determine which of three memory techniques, the loci method, rote memorization, and picture flash cards, is the most effective; and to determine if longer words are harder to memorize than shorter words.

Methods/Materials

Five subjects used the three memory techniques to memorize lists of twenty words. The first three lists had one-syllable words, the second three had two-syllable words, and the last three had three-syllable words.

Results

The loci method was the most effective memory technique, with picture flash cards the second most effective, and rote memorization the least effective. When the number of syllables increased, the percentage of words memorized consistently decreased.

Conclusions/Discussion

The loci method may have succeeded because it was tailored to the individual or because it connected the unfamiliar to the familiar. It could be used to study vocabulary, spelling, and anything that needs to be memorized in a specific sequence, and teachers and students should consider using it in the place of less effective techniques.

Summary Statement

This project studies the relative effectiveness of three memory techniques: rote memorization, picture flash cards, and the loci method, as well as the effect of increasing syllable length on the ease with which words are memorized.

Help Received

None, except advice from teacher and parents.