

CALIFORNIA STATE SCIENCE FAIR 2011 PROJECT SUMMARY

Name(s)

Devon S. Hubert

Project Number

S0415

Project Title

It's Stuck in My Head! The Effects of a Repetitive Tune on Memory

Abstract

Objectives/Goals

The purpose of this project is to investigate whether or not facts are easier for children to remember if they are presented through a repetitive tune. It was hypothesized that if a group of children, grades 5-8, listened to a list of ten, randomly selected words, numbers and letters being sung along to a tune twice, then they would be able to remember more of the list than an identical group in which the list was spoken to the children twice.

Methods/Materials

This hypothesis was tested by dividing four grades, 5-8, each into two groups, and testing them separately. In one group from each grade, a list of ten randomly selected words, numbers, and letters was read twice to the children, and in the other group, the same list was sung to the children using the tune of #Six Little Ducks#. In both groups the children were asked to write all the words they could remember, and then the results were collected.

Results

The no tune group recalled an average of 36.7% more correct words than the tune group overall.

Conclusions/Discussion

These results express a contradiction to the previously stated hypothesis, and therefore, according to the experiment the hypothesis is incorrect. There was, however a 6% greater increase of correctly recalled words in the tune group between the fifth and eighth grades, than in the no tune group. A project that investigates the relationship between age and memory for music or text could be done, since there is a possibility that the memory of facts increases more with age than the memory of facts without a tune.

Summary Statement

This project will investigate whether or not facts are easier for children to remember if they are presented through a repetitive tune.

Help Received

Test subjects were 5th-8th grade students at the Monterey Bay Charter School. Step-father created a computer program to generate lists of random words (2nd through 5th grade vocabulary), numbers, and letters per Devon's guidelines.