

CALIFORNIA STATE SCIENCE FAIR 2002 PROJECT SUMMARY

Name(s)

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Project Number

J0328

Project Title

Pictures versus Words in Language Acquisition

Abstract

Objectives/Goals

There are several ways of teaching language. This experiment examined the use of verbal teaching versus using imagery. The hypothesis is that the use of imagery would enhance language acquisition more than verbal.

Methods/Materials

The experimenter created two study sheets for learning Latin vocabulary. One contained pictures with the Latin word for them above the pictures. The second study sheet contained those same Latin words with written translations/definitions in English. A test of ten words each with four possible answers in multiple choice format was created. A total 164 seventh grade students in 5 classes were chosen to participate in the experiment. The number who got the "picture" study sheets and the "written" study sheets were evenly divided. They were given 30 seconds to review their study sheet. Then the test was administered to them. The tests were corrected and the results were entered into a computer database. A statistical analysis was done.

Results

The results were that the average percent correct for those using the "picture" study sheets was 78.59 percent while the average percent correct for those using the "written" study sheets was 72.29 percent. This was statistically significant to 89.7 percent.

Conclusions/Discussion

Based on these results the hypothesis was accepted that imagery increased the acquisition of language a greater amount than verbal. According to this research, using images for teaching vocabulary is an improvement over verbal methods alone. In addition to studying the verbal definitions, teachers should have pictures in their study materials.

Summary Statement

This study examines the way students learn using two different visual methods.

Help Received

Father helped typing and teaching statistical analysis. Mrs. Soleway (my science teacher) helped in using the scantron machine