

CALIFORNIA STATE SCIENCE FAIR 2016 PROJECT SUMMARY

Name(s) Maleah A. Sumii

Project Number

J0425

Project Title The Effects of Different Forms of Grading on Student Learning

Objectives/Goals

The objective of my project is to determine which form of grading: self, peer, or teacher, enhances students' retention most. Self-grading being that the student corrects his/her own paper using an answer key, peer-grading wherein the students correct each other's papers, or teacher-grading (the most common) in which the teacher corrects the student's paper and returns it back to he/she.

Abstract

Methods/Materials

A fifteen-word spelling test(written by my school's language arts teacher), about twenty subjects in 6th, 7th, and 8th grade, and 10 answer keys to the spelling test are needed for this experiment. Subjects were divided into four groups: self-grading, peer-grading, teacher-grading, and a control group. Each group took the same spelling test and graded it using the type of grading that their group was assigned. A week later each group retook the spelling test. This determined which group corrected the most amount of words in the second test that they missed in the first test.

Results

The peer-grading group corrected the most amount of words in test 2 that were missed in test 1. The control group was the second most effective and the self and teacher-grading groups had almost identical results.

Conclusions/Discussion

Due to the lack of subjects, my results were not completely accurate. Peer-grading, resulting in slightly better scores, is still understandable because based on my research, if you are actively involved in the correction process, then it will have a long-lasting effect on a student's memory. Nevertheless, this experiment still has merit because understanding which correction methods are the most effective would make a major difference in improving our education systems. In future studies, subjects should be tested in a real school setting and have more subjects.

Summary Statement

The purpose of this project is to find which form of grading: self, teacher, or peer, can have a long-lasting effect on a student's memory thus improving their learning capability.

Help Received

Sonja Bentley and Mr. Blanks