

CALIFORNIA STATE SCIENCE FAIR 2003 PROJECT SUMMARY

Name(s)

Kyra I. Davis

Project Number

S1204

Project Title

Is Money the Answer to Improving Education?

Abstract

Objectives/Goals

To determine if there is a correlation between money spent on middle school students and their performance in high school, using a microcosm of Tamalpais High and it's three "feeder" middle schools: Mill Valley Middle School, Bolinas/Stinson Middle School, and Martin Luther King Middle School.

Methods/Materials

To make this determination, I first collected and organized all of the students into each grade level (freshmen-senior); and the students of each grade level into the middle school they attended. I averaged the GPA for each category. I used the Chi Square Test (statistical analysis) to determine if there was a relationship between the middle school a student attended and their success (with regard to GPA) in high school. Once I determined that there was a relationship, I compared the average amount of money spent on a child without special needs at a particular school to how thr student from that school performed in high school in terms of GPA.

Results

Through the Chi-Square Test, the probability that there was NOT a relationship between money spent on students in middle school and their GPA in high school was under 1.5%, therefore it could be determined that there was a relationship between the two categorical variables. I discovered that MVMS spent \$4,200 per student each year without special need, and Bolinas spent \$6,915 while MLK spent \$9,000. Freshmen through senior year, the average GPA of a student who attended MLK is a 2.25, the average of student who attended Bolinas was 3.01, while students who attended MVMS average GPA was a 3.25.

Conclusions/Discussion

The results were the inverse of what would be expected. These results taken to the extreme would mean that the best school would be a school without money. This is obviously false. While money is imperative to education in the US for things as basic as classrooms, desk, books and teacher; these results indicate that there may be a factor greater than money in determining a student's success. This factor may be the education of the guardians of the child; at what age the parents began reading to their child, or possibly the family's income. Further research would need to be done to determine what this factor is, but according to my results there is a factor greater than money.

Summary Statement

Analysis of stastical data regarding the relationship between money spent on students in middle and their sucess in high school.

Help Received

none.