

CALIFORNIA STATE SCIENCE FAIR 2003 PROJECT SUMMARY

Name(s)

Edward B. Kang

Project Number

J1712

Project Title

Irrelevant Quotient

Abstract

Objectives/Goals

Who is more likely to get the better grade? Do students with highet IQ generally perform better in academic settings? Which factor or factors determine who we will do in school? Hypothesis:Learning theorists have proposed that memory is the most valid indicator of one's intelligence. Studies have shown that intelligence is a significant correlate of acdemic achievement. However, it is also common knowledge that the amount of time one puts into his or her studies is also an important factor in determining how successful one is academically. Therefore, I hypothesize that althoguth IQ is importnat facotr, memory capacity sets the limits to one's range of schol performance and study-tiome determines how well one will perform with those limits.

Methods/Materials

Procedure:1)Devise an IQ test to specifically measure attention/immediate memeroy and executive functiong. 2)Standardize the attention and the executive functioning subtest 3)Select subject population 4)Send consent forms to subjects' legal guardian 5)Make and send out survey to subjects 6)Administer IQ exam to all subjects 7)Translate scores into standardized, scaled scores for analysis and translation 8)Compare IQ scores, GPA, and Hours Spent Studying in a corelation analysis 9)Graph and chart findings Materials:IQ Test, Stdunt's transcript, survey, stopwatch, and calculator

Recults

I found that there were some significant correlation between GPA and IQ and Hours Studying in the making. Both IQ had Hours studying seemed to have a positive correlation with school performance. However, I also noticed during the process taht there were always exceptions. Some individuals with high intelligence and low grades and other who didn't study much at all, maintained a high GPA.

Conclusions/Discussion

Both tme and IQ had a positive correlation with GPA. Time, however, seemed to have a stronger correlation. This result suggests that time spent studying is more important than intelligence in academic achievement. However, I also did a cross comparsison between IQ and time. What I learned from this analysis was that subjects with higher IQs generally study for more hours as well. This finding in some ways confounds my experiment. I cannot conclude that time is a stronger correlation than IQ, because the subjects in my study usually had a higher IQ. Studying time is a little more predictive of how well he will do in school.

Summary Statement

My project involvesn the discovery of correlation between IQ, time spent studying, and GPA.

Help Received

Mother helped me with the purchasing of materials.