

CALIFORNIA STATE SCIENCE FAIR 2004 PROJECT SUMMARY

Name(s)

Brooke M. Hollyfield

Project Number

J0317

Project Title

Do People Know Their Learning Strengths?

Objectives/Goals

Abstract

For my science experiment, I chose to pursue the topic of studying humans# learning strengths. I wanted to see that if I asked what type of learner people thought they were and then gave a test that determined learning strengths, would their responses match or contradict.

Methods/Materials

I created a test to demonstrate peoples# learning strengths. I created random sequences of numbers starting from three to fifteen numbers. To perform the test, I took a volunteer into a quiet environment and gave them an explanation of the test. I gave each person two tests; the first one was to test for visual strength and the second to test for auditory strengths. After, I asked the volunteer the type of learner they thought they were. I compared their score with their response.

Results

Out of the fifty people I tested, 78% responded as visual learners, 12% as auditory, and 10% as equal. After the same group of people was given a test that determined learning strengths, 68% tested as visual, 12% auditory, and 20% as equal. I calculated the magnitude of error by subtracting the volunteer#s highest and lowest score. This was to determine how much their scores contradicted. Scores that had larger differences had higher magnitudes of error because they were not as close to matching their score as someone who contradicted by only a small amount. The highest magnitude of error was in the people who responded as equal and their test results contradicted. The lowest magnitude of error was people who responded as visual but test results contradicted.

Conclusions/Discussion

From my results, I conclude that more people are visual learners. I think that this is because of how our society revolves around visual things, the way we communicate, show dignity, and the world environment is visual. I was quite surprised of my findings. I realized that my hypothesis was incorrect. More of the volunteers# responses matched their test results. Also, more than half of my volunteers tested as visual learners. I found it interesting that none of the auditory learner#s responses matched their test results. I think it is a result of a visually based life that could lead them to believe this. The people I tested could have influenced my results. For further study it would be interesting to see if when given a choice for a learning style, if people would actually learn better than with the learning styles I could provide.

Summary Statement

In my project, I wanted to see if I asked people what type of learner they were if their responces would match or contradict the results of a test that determined type of learner.

Help Received

Deanna Ceballos- school psychologist who helped develop test, Elizabeth Lillia- helped interpret data.