

# CALIFORNIA STATE SCIENCE FAIR 2010 PROJECT SUMMARY

Name(s)

Jotthe Kannappan; Isheeta Madeka; Natasha Patel

**Project Number** 

S0312

**Project Title** 

The Six Secluded Smarts

### **Abstract**

## **Objectives/Goals**

Our objective is to discover whether the intelligence type of high school students gradually narrows into the scope of only mathematical and linguistic intelligences.

#### Methods/Materials

We used surveys as well as 240 test subjects (60 freshmen, 60 sophomores, 60 juniors, and 60 seniors)

#### Method

- 1. Contact school administration in order to obtain permission to conduct the experiment
- 2. Modify Walter Mackenzie survey
- 3. Print 240 copies of survey in order to distribute to specific teachers/ classrooms.
- 4. Hand out surveys.
- 5. Explicitly explain the execution processes for the survey.
- 6. Collect completed surveys for tabulation.
- 7. Tabulate results.

#### Results

As grade level increased, tendencies toward mathematical and linguistic intelligences decreased, while all others increased. The expression of intelligences among females and males seemed relatively equal other than in the two fields of mathematical (male inclination) and linguistic (female inclination) intelligences.

#### **Conclusions/Discussion**

Several viable interpretations stood as possible explanations for the results of our experiment. An explanation for this type of data could be concluded through the taboo-effect. It could be perceived that because mathematical and linguistic intelligences are so heavily weighted in the public school system that students are beginning to develop adverse effects.

Also, in order to correctly evaluate the data, we must understand that this experiment looks for subjective self-evaluation whereas the government evaluates through a numerical method. Through our self-evaluation we measure how much they believe they have learned. The true root of such beliefs links us back to the confidence of the students in themselves. The external factors may have played a role in deciding the results. Factors may include the No Child Left Behind Act of 2002, which promotes teachers to focus their teaching methods towards mathematical and linguistic areas.

The gender comparison graph expressed several different conclusions as well. The graphs show that the six intelligences, except mathematical and linguistic, have similar results between males and females. The

### **Summary Statement**

Our project tests whether the intelligences of high school students narrow into mathematical and linguistic as a result of environmental influence.

### Help Received

Our psychology teaches helped us edit the Walter Mackenzie survey.