

# CALIFORNIA STATE SCIENCE FAIR 2002 PROJECT SUMMARY

Name(s)

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**Project Number** 

**S0304** 

**Project Title** 

**Piaget: Children and Growth** 

### **Abstract**

## **Objectives/Goals**

By studying Piagetian psychology, an interview form was set up to test two different age groups and enable how the thinking patterns change as the child grows.

### Methods/Materials

Materials

- 1. 3 Piagetian Tasks in Question Format
- 2. Pencil/Pen
- 3. Notebook
- 4. 24 Notebooks
- 5. Different colors of m&m's (atleast 10 of each)

#### Methods

Interview each child one-on-one and ask each child, the series of three tasks. As each child answers, record all interesting occurences.

#### Results

The results proved the hypothesis correct. As children grow from one age group to another the responses given change from constructive and egocentric answers to logical and knowlege based answers. In task No. 1 of the children in age group (5-7) 82.4% is dependent on parent while only 17.6% are dependent on parent. Of the children in the (10-12) age group, 90.5% of children are independent, while only 9.5% are dependent on the parent. Task No.3 tested among both age groups varied in that, the observation of the amount of pennies was either based on a blunt guess or a thought out counting response. In the (5-7) age group children guessed, while in the (10-12) children thought about answering and counted. In Task No.5, children in (5-7) age group picked out colors and explained that this was a result of favoritism(favorite color), while the (10-12) age group explained that the colors were resluts of probability. Answers were knowlege based and thought out as a child grew.

### **Conclusions/Discussion**

This project was designed to see the different thinking skills of different age groups and how the child develops (mentally). The different results showed the change in the different age groups. As a child grows, his/her brain develops and takes on logical tasks. The project can be further extended to get more accurate results, and I plan to persue this. It was a great experience working with each child and listening to their responses. Based on Piaget's psychology, I was able to understand the mentality of children.

## **Summary Statement**

I learned about psychologist, Jean Piaget's psychology, and constructed an interview to see how children grow from one age group to the next, based on their responses.

## **Help Received**