

## CALIFORNIA STATE SCIENCE FAIR 2005 PROJECT SUMMARY

Name(s)

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**Project Number** 

**J0339** 

#### **Project Title**

## Who Can Learn Music Faster, Adults or Children?

# Objectives/Goals Abstract

Adults and children learn at different rates in life. For example, adults have more life experiences; therefore they take more responsibility in their own learning. The researcher wanted to determine whether adults or children learn faster in piano music. Likewise, the researcher plans to discover the aspects or behavior of an adults' and child's understanding of music.

The researcher's hypothesis was that adults would learn 25% faster than children. Adults are also capable of knowing what to expect in a learning environment, and they are enabled adapt to the subject being taught at a faster rate.

#### Methods/Materials

To conduct this experiment, the researcher taught a sample size of 35 adults and children all together. The researcher carried on the following steps to prepare the experimentation:

- 1. The researcher set up lesson plans for a four- week term of teaching adults and children by designating a particular time and day for the students to participate in the experimentation.
- 2. The subject that was taught is basic piano theory and music performance.
- 3. Created four tests consisting of a written, verbal, visual, and music-playing test.

The researcher gathered his data in the following procedures:

- 1. After teaching each lesson, the researcher recorded the behavior and attributes of the students' learning for the day.
- 3. The researcher then graded all of the tests and recorded the scores on a bar graph.

The researcher conducted the experimentation for each student four times each. Using the data that was given, the researcher had to determine whether his hypothesis was proven correct or incorrect.

#### Results

The key results that the researcher discovered are that both adults and children performed better on their visual and verbal test. Therefore, the students did not perform well on their written and music-playing tests. To determine these results, the averages of each test were calculated and compared.

#### **Conclusions/Discussion**

From this study, the researcher showed that adults performed better than children, judging by their averages. Also, adults learn approximately 26.4% faster than children. This key information could help determine whether adults or children learn faster in learning the skill of piano music.

#### **Summary Statement**

The central focus of this project, was to determine whether adults or children learn faster than the other in the field of music.

### **Help Received**

Mother helped with supplies; Neighbors and friends helped by being test subjects; Participant in the GSDSEF