

**Greater San Diego Science and Engineering Fair  
2015 PROJECT SUMMARY**

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**Project Title:** If You Give A Kid An iPad

**Abstract**

**Objectives/Goals** The purpose of this experiment was to determine the effect of technology in early childhood education. The focus of this experiment was to evaluate if the amount of technology a child uses at home affects how they learn.

**Hypothesis** It was hypothesized that children aged 2-4 who use technology for 30 min – 1 hour on a non-school day will score with a 70% success on the electronic test and 40% success on the verbal test. Children aged 2-4 who use technology for 1 hour- 2 hours on a non-school day will score with a 60% success on the electronic test and 50% success on the verbal test. Children aged 2-4 who use technology for 2 hours- 3 hours on a non-school day will score with a 50% success on the electronic test and 60% success on the verbal test. Children aged 2-4 who use technology for 3 or more hours a non-school day will score with a 40% success on the electronic test and 70% success on the verbal test.

**Methods/Materials** Test 75 children between the ages of two and four. Divide them into groups based on technology usage at home. Each child is given one electronic test and one verbal test. In the electronic test the children were asked 5 questions using an app called EduPaint on a mini iPad or a Samsung smart phone. The verbal test consisted of five questions and asked similar questions to those of the electronic test, but the questions were verbally asked by the tester. Materials needed: Electronic products where the app is available, 5 question verbal test worksheet based on child's age.

**Results** There was no correlation found between the technology group's results. However, the 2 year olds had the highest overall average and the 4 year olds had the lowest. The four year olds also had the highest range of electronic and verbal results, which were 59 and 73, respectively.

**Conclusions/Discussion** The results of the experiment did not support the hypothesis. The test scores did not show any relation between technology usage at home and test scores.

**Summary Statement** The data showed that at a young age there is no direct correlation of amount of technology used at home and the effect it has on the test scores. However, the majority of the children scored higher on the verbal test.

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