



CALIFORNIA STATE SCIENCE FAIR 2015 PROJECT SUMMARY

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Project Title Pay Attention Now or Pay the High Price Later: The Most Common Distractions that Lead Students to an Unsuccessful Future	
Abstract Objectives/Goals The objective of this experiment was to determine the effect of the use of social devices on student academic achievement. Since the earning and unemployment rates are determined by educational attainment, students must not get distracted in their educational environment. To eliminate distractions, it is essential to identify what is preventing students from their complete potential. The study determined the severity of social media as a distraction among other learning distractions. Methods/Materials Informed consent was obtained from through quantitative surveys of over a thousand middle and high school students. In the survey, student performed a self-assessment of nine learning distractions on a likert scale ranging from 0 being the least frequent and 10 being the most frequent. The prefrontal cortex controls two sides of the brain, capable to multitask on two things, or more. One experiment was done manually; the student was timed for 1 minute to answer 1-20 questions, while counting the amount of colored paper squares they placed in their hand at the same time. The other experiment was done technologically; the test utilized a DSI XL and a stylus. A student completed calculations; meanwhile, the student kept count on how many figures were in a house, as shown in the multitasking game. Results The most common distraction was chatting with someone, which results with an average rate of 5.7. According to the manual experiment, students with a 4.0 GPA counted the number of squares correctly or were either off by 1-3 squares from the number of squares they counted over the average of 13 questions. In addition students with a 2.0-2.9 GPA were off by 1-15 colored squares from the number of squares they counted over the average of 16 questions. On the technological experiment, students with a 4.0 GPA missed 1-5 questions and an average time of 2 minutes and 25 seconds. Students with a 3.0-3.9 GPA missed 5-15 questions and have an average time of 2 minutes and 10 seconds. Conclusions/Discussion In conclusion, the results found that students who had higher GPA tend to multitask more efficiently than those with a lower GPA. The results for the survey did not completely support the hypothesis, being that the most common distraction was chatting with a classmate. The action plan entailed encouraging teachers to re-arrange seating charts in order to minimize distractions. As well, encouraging students to strategically focus on one classroom assignment at a time to alleviate the outperformed prefrontal cortex of the brain. This type of distraction can not only affect your academic life but also your personal life and your career in the future.	
Summary Statement Identify the most common distraction during class, how distractions affect students future, to demonstrate the effects of multitasking on grades, and how to solve the problem.	
Help Received Thanks to Salinas High School for lending internet access, and assistance during the week before the science fair. Special thanks to Ms. Merchant our chemistry teacher who offered support, time, supplies, and access to her classroom. Thanks to Ms. Chu who helped brainstorm ideas for our science fair project.	