



**CALIFORNIA STATE SCIENCE FAIR  
2013 PROJECT SUMMARY**

<b>Name(s)</b> <b>Kellen J. Anielski</b>	<b>Project Number</b>  33444
<b>Project Title</b> <b>Are 88 Keys the Key to Dexterity? Playing the Piano and Its Effects on Manual Dexterity</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The objective of this experiment was to find out whether playing the piano increases one's manual dexterity and if so, to find a numerical percentage of increase. <b>Methods/Materials</b> The experiment consisted of 25 piano players and 25 non-piano players who performed 3 timed tests involving the placement of screws in holes on a wooden board with their dominant and non-dominant hands. <b>Results</b> The averages of all times on the tests showed that on the first test, subjects who played piano completed the test 9.07% faster than those who did not play piano. On the second test, subjects who played piano completed the test 6.16% faster than those who did not. On the 3rd test however, it was found that those who did not play piano completed the test .62% faster than those who did. Using an average of all 3 tests, subjects who played piano exhibited an increase in dexterity of 5.25%. <b>Conclusions/Discussion</b> The results found from the data found showed that playing piano does increase manual dexterity. However the increase depends on the number of years a subject has played piano.	
<b>Summary Statement</b> This project was designed to find a difference in the manual dexterity of middle school students who did and did not play piano, and it was found that there was a 5.25% increase in the dexterity of piano players.	
<b>Help Received</b> Mrs. Elaine Gillum helped me gather test subjects and guided me through my project. My parents helped and supported me with editing, building the testing board and gathering testing materials. Mrs. Rachel Afualo mentored me for this project.	