



CALIFORNIA STATE SCIENCE FAIR 2007 PROJECT SUMMARY

Name(s) Jordan M. Harris	Project Number J0312
Project Title Reviewing Peer Review: Is Peer Review Valid?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My science class discussed an article regarding scientists who judged abstracts based on authors' names and affiliations rather than the actual quality of abstracts. This made me wonder if students would judge an essay based on an author's name and school rather than the quality of the essay itself. I decided to test the objectiveness of peer review in grades 5-8. My hypotheses were that children and adolescents would tend to give essays higher ratings if they believed the essays had been written by students from their own school and by students whom they regarded as talented writers.</p> <p>Methods/Materials I tested 104 fifth through eighth grade students. I first discreetly distributed questionnaires to the test subjects. These questionnaires helped me choose a talented writer for each class. I referred to these authors as the class writer. Next, I wrote two paragraphs: Benjamin Franklin and George Washington. Half of each class was given the Benjamin Franklin paragraph with the name of our school and a respected class writer as the author. They were also given the George Washington paragraph with the name of another school and unknown writer as the author. The other half of the class was given the Benjamin Franklin paragraph with the name of another school and an unknown writer as the author, and the George Washington paragraph with the name of our school and a respected class writer as the author. The students were then asked to read the paragraphs and rank the quality of the writing fairly, according to a rating scale of 1-10. This scale corresponded to word descriptions, such as fair and good.</p> <p>Results According to my results, the average rating for the paragraphs when written by unknown writers was 6.1, meaning a paragraph of good quality. The average rating for the same paragraphs when written by a class writer was 8.1, meaning excellent.</p> <p>Conclusions/Discussion The results showed students gave a paragraph a 20% higher rating when they believed it was written by a student from their own school and by a student they regarded as a talented writer. It seemed both the halo effect, and a sense of loyalty, interfered with the students' abilities to objectively evaluate paragraph quality. The results of this experiment mirrored the problems observed in the adult peer review process.</p>	
Summary Statement This project tested the objectiveness of peer review in elementary and middle school classrooms, it was seen that the results mirrored the problems observed in adult peer review processes.	
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