



**CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY**

Name(s) Gillian S. Weatherford	Project Number J0327
Project Title Ballet Angles: It's Not All Tutus	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My goal was to discover if the angles professional dancers demonstrate with their legs in a grande jete leap correlate with their esteem within the dance community.</p> <p>Methods/Materials Three photos of each dancer (Hee Seo, Gillian Murphy, Patricia Neary, Irina Dvoroenko, Margot Fonteyn) were measured with a protractor to determine the angle of the dancer's grande jete leap. The measured angle was compared to the ideal angle of 180 degrees. Each dancer's esteem was defined by the number of professional lead roles they danced.</p> <p>Results Hee Seo, who danced in 15 professional roles, displayed an average angle of 177.25 degrees in her grande jete leaps. Irina Dvoroenko danced in 19 professional roles with an average angle in her grande jete leaps of 178.25 degrees. Gillian Murphy had an average angle in her grande jete leaps of 176 degrees and a background of 17 professional roles. Patricia Neary danced 21 professional roles and had an average grande jete leap angle of 176.75 degrees. Margot Fonteyn had an average grande jete leap angle of 174 degrees and danced 24 professional roles.</p> <p>Conclusions/Discussion The ideal angle for a grande jete leap is 180 degrees. Therefore, the goal for any professional ballerina is to achieve a 180 degree angle in her grande jete leap. In conclusion, my results did not show a significant relationship between the measured angle of 5 professional ballet dancers' grande jete leaps and their esteem, as defined by the number of professional roles they have danced.</p>	
Summary Statement My project is about the angles a dancer creates in a grande jete leap and how those angles correlate with the dancer's esteem.	
Help Received No help received.	