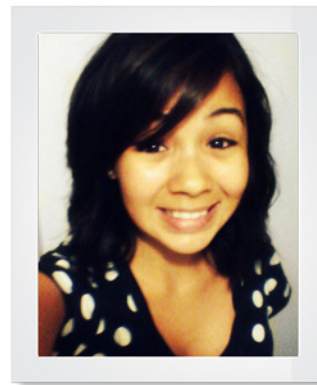


**Student**

Juliana Rico
St. Petersburg, FL

**Summary**

Science Buddies' Topic Selection Wizard guides a budding engineer with an interest in alternative energy to a wind power project—and 1st place!

Science Buddies Helps Student Breeze Through Aerodynamics Engineering Project

Before starting her 9th grade science class project, Juliana Rico's most recent experience with a science project was one she describes as "stressful because I had to grow many plants." Luckily, when faced with her 9th grade project, she followed a teacher's advice and turned to Science Buddies in search of ideas for a science investigation she might enjoy.

Juliana is interested in wind power, likes to figure out how things work, and hopes to be an engineer someday. Using Science Buddies' [Topic Selection Wizard](#) for recommendations, she selected a project from the [aerodynamics](#) area of science—"[Make the Wind Work for You!](#)" The project was "impressive and unique," says Juliana, and with its focus on wind as a possible alternative energy source, she had discovered a project that fit her interests *and* tied in with larger environmental science issues.

Following the experimental procedure in the "Make the Wind Work for You!" Project Idea, Juliana built her own small wind turbines and experimented with different blade shapes to see which ones produce the most energy. Her testing gave her a hands-on look at the relationship between design efficiency and energy output. "I saw how the wind's kinetic energy can change into actual mechanical energy," says Juliana.

Although she initially had some trouble getting the turbine blades to spin, in the end, her experiments were a success. "I thought it was going to be difficult, but it was surprisingly easy," says Juliana.

With the help of Science Buddies resources and an exciting, scientist-authored Project Idea that was appropriate for her grade, her interests, and her class assignment, Juliana had a much more positive experience with her wind turbine project than when she had tried growing plants. Plus, she earned first place out of all of the projects submitted in the scholars' classes at her school. Her project was also displayed in the media center for other students to see!