



PROJECT PROPOSAL

Important: To avoid disqualification, do not include the name of your campus or mascot, or any other means of identification, from this point forward in your application.

Project Title: Sol or Wind: Powering Tomorrow's Engineers Through Green Energy

Summary:

True innovation happens without restraint, without the confines of many traditional school days. In order to provide the best situation for innovation, a day is set aside for student creation. This day we call "Engineering Olympics" is designed to allow students to experience the thrill of the Olympics by giving them the freedom to design, investigate, experiment, and present without any assistance from typical "teaching" methods. Students' passions will be brought forth while working in collaborative groups to create a model wind turbine which actually powers an electronic device used by the student. Students will collect data as they test their product, then present their graphs to their classmates.

Grade(s) for Implementation	Subject area(s) related to proposed project/program	Number of Student(s) affected by proposal	Number of Teacher(s)	Number of Administrators(s)
6 th Grade	Science, Engineering, Math, Social Studies, Language Arts	220	8	3

Is this program/project:

New to Classroom	New to Campus	New to Vertical Team	New to Department	New to District
Yes or No	Yes or No	Yes or No	Yes or No	Yes or No

Have you received funds for this project from CCISD previously?	<input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No If yes, please explain.
Have you ever received a grant from CCEF before? If yes, give the name of the project(s).	<input checked="" type="checkbox"/> Yes or <input type="checkbox"/> No If yes, what year? <u>2011-2012</u> Where in the World... <u>2010-2011</u> Probing Further into Science and Math <u>2009-2010</u> What's the Density-O <u>2008-2009</u> Physics

DIRECTIONS: Please provide a summary for each area listed below.

Need: (Describe the area of student achievement you wish to address and give any data that supports the need. Please include how this proposal addresses district and campus goals.)

Our students often lack the motivation to understand why they must learn varied content matter when their parents lack this knowledge. As teachers we strive to allow the students opportunities to want to learn, to want to know. Having a day outside the constraints of a "normal" classroom provides students a desire to learn. When these students are placed in an open, creative environment they learn that they can create things that can change the world. They can achieve goals and dream, becoming productive member of their communities.

Objectives: (State measurable objectives in terms of student behavior or performance.)

Students will design and test wind turbines which will power a personal electronic device. They will then design a solar energy device and compare the energy from the two devices. They will then present this information to their peers and welcomed members of the community. Students will



continue to increase their state test scores as we work on areas of weakness through innovative projects. Students will be benchmarked before and after this project to identify its strengths for following years.

Description of Proposed Project/Activity: *(Describe what you want to do with the grant funds. List activities and timeline. How does this relate to the funding priorities?)*

Students will have a day where they will meet in a central location as a whole group. This day the students will be presented with two tasks: To design, build, and test a working wind turbine and a working solar energy collector. The students will work in peer groups and be provided with necessary materials. They will work without assistance from their teachers. Collaboratively, students will problem solve, unlike they have ever done before. Students will finish the day with presentations set up for their parents and other community members to learn of their findings after school.

Evaluation Strategy: *(Describe how you will know if your objectives are met. How will you share your program's success with your peers?)*

The students will be administrated a benchmark previous to this day focusing on both the content TEKS as well the process TEKS for each subject level. Community members who are engineers will be enlisted to evaluate the work that is presented by the students.

Partners: *(Identify any school and /or community partners involved in the project and their respective roles, if applicable.)*

It is proposed that AEP Engineers and others with experience in solar and wind energy will be enlisted to speak to students by video prior to the event and give a brief overview of the state of technology regarding wind and solar energy today. They would talk about blade design for wind energy and advancements in the area of solar energy. They would also be asked to return to judge the final presentations.

Sustainability: *(If funded, how will you continue the program/project in the future? What will be the recurring costs? How will this program/project be funded in the future?)*

The Wind Energy Kits have consumable blade items that would need to be replenished. They could be replenished out of local budgets with materials from area stores. Parts of the solar kits might need to be replaced as well and those would be replaced from local budgets also. How this project continues in the future will depend in part on the success in doing this as a large group. Possibilities include future all day large group engineering days or work in classrooms through science labs or some combination thereof as students make discoveries that they would like to explore further.

DIRECTIONS: Note the budget distribution for each category. Be specific. Be sure to include postage/S&H charges.

Budget Items	Requested Funds	Matching Funds <i>(Please include all funds)</i>	Vendor	Budget
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		<i>available to you from other sources.)</i>		Code
Supplies (please list)				
Display Boards (60)	\$159.00		Showboard.com	
Various Supplies (colored paper, markers, glue sticks, decorative scissors, voltage meters, etc.)	\$250.00		Local merchants	
Equipment				
Solar Kits (25)	\$623.75		Picoturbine.com	
KidWind Advanced Experiment Kits (4)	\$1396.00		Kidwind.org	
Contracted Services (list consultants)				
Volunteers from AEP and/or other wind or solar energy organizations		Volunteers' time and energy		
Other				
Postage/SH charges	\$50.00			
Total	\$2,478.75			

GRANT APPLICATION SUBMISSION INSTRUCTIONS:

1. Prior to submission, consult the "Checklist to Avoid Disqualification" and other guidelines against your completed application.
2. E-mail your application to grants@ccef-ccisd.org by **11:30 p.m. on Friday, September 21, 2012.**
3. Mail a hardcopy with original signatures on the cover sheet postmarked by **September 21, 2012** to:

Corpus Christi Education Foundation
ATTN: Programs Committee
P.O. Box 2822
Corpus Christi, TX 78403

