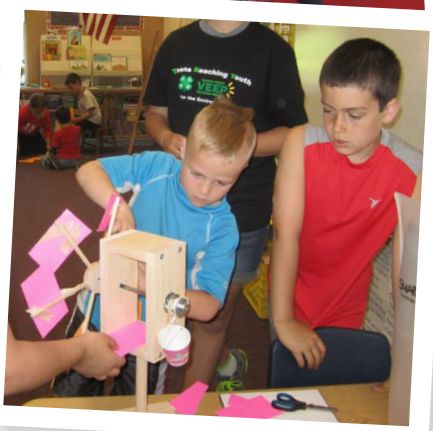
CURRICULUM SUMMARY | GRADES K–3

VERMONT ENERGY VEEP EDUCATION PROGRAM

Wind & Solar FUNdamentals



Introduce your youngest students to wind and solar energy!
VEEP has designed an introductory unit on wind and solar energy for K–3 that incorporates engineering principals in engaging, hands-on lessons, using NGSS and Common Core as frameworks.

These engineering lessons focus on design with an emphasis on students sharing their ideas and methods. In a lab style environment, students simulate the sharing community between engineers and scientists to create a community of learners.

These lessons give K–3 students the opportunity to design a sail for a boat and blades for a windmill. They create structures to cast shadows and compare their size in winter and summer, at noon and afternoon. The students make predictions, conduct experiments, make observations, discuss the pros and cons of their designs, and redesign them. These lessons celebrate the student as explorer, tinkerer and collaborator and they lay the foundation for deeper understandings of energy in higher grades.

Strategies such as asking and answering questions to demonstrate understanding, recalling information from experiences, identifying main purpose of a text, and actively engaging students in group reading activities integrate the Common Core Literacy expectations within this unit. Common Core Mathematics skills include describing and comparing measurable attributes, timing and counting, and classifying objects into given categories.

VEEP offers professional development trainings for teachers and others teaching in formal and non-formal educational settings and lends kits of all necessary materials to run the unit. In partnership with UVM Extension 4-H's Teens Reaching Youth program, we also train teens to run these lessons.

Contact us at info@veep.org or 802-552-8450 for more information on bringing this curriculum into your classroom.