

Going Green in 2018!



Brought to you by the 2018 Hawken Middle School Energy team

Hawken School

“Going Green in 2018!”



Project led by the Hawken Energy Team

Advisor: Peter Thomas

This year’s project was led by Hawken middle school students, the self-styled “Energy Team”. They began by attending a Youth Summit leadership workshop in October, 2107, at the Exploration Gateway, Canton, Ohio. They then put these skills to work at the December 2017 energy workshop at Malone University, leading students from several other area schools through the workshop, along with Sue Tenney from OEP.

Back at school, the team helped conduct a community science night for several hundred visitors in February, 2018, complete with speakers, energy demos, the energy bike and numerous hands-on energy activities. They also conducted an energy carnival for all our fourth grade students in that same month. Finally, we conducted a day-long energy workshop for the 5th grade students from a local school, Citizens’ Academy, in April of 2018.

This year we also tried something different, putting together some videos advocating the use of renewable energy, featuring our team members. We posted one on youtube, which focused on wind energy and was shot at one of our local wind turbines.

All our Hawken 8th grade students conducted the NEED pre and post polls for energy use. We all studied energy for 8 weeks, culminating in a wind turbine challenge at our school. Four winning teams will go on to showcase their turbines at a Kent State University KidWind challenge in May, 2018. The energy team will also present a Tedtalk on their work this year at that same event.

GOAL #1: To establish and train this year's team at Hawken middle school, teaching our community about energy issues



To establish a team of students that learned leadership, teamwork, presentation skills and energy concepts in order to facilitate a series of energy education events.

ENERGY CONTENT ACTIVITIES: Our team volunteered to travel to the Exploration Gateway Center in Canton, Ohio, on Wednesday, October 18, 2017 to attend an energy summit with students from other area schools

STUDENT LEADERSHIP: Fifteen students volunteered to meet in our “energy team” club. This team made the commitment to raise awareness of energy issues at our middle school throughout this school year. Twelve middle school students on this team volunteered to attend the Energy Leadership Workshop in Canton

RESOURCES: Willing students, Ohio Energy Project materials, NEED curriculum materials, Energy bike

EVALUATION: All fifteen team members continued their work throughout this school year, taking part in our activities inside and outside school. The students who attended the Malone College workshop also completed pre and post energy polls, showing positive gains.



Energy Leadership Workshop, Canton, Ohio

GOAL #2: To promote energy awareness in our school community



To make lower and middle school students at Hawken School more knowledgeable and aware of energy issues

ENERGY CONTENT ACTIVITIES: The green team helped lead a science evening at Hawken middle school, where lower and middle school students and their families attended to learn more about energy transformations through hands-on activities. The team also hosted an energy carnival at Hawken school for all our fourth grade students.

STUDENT LEADERSHIP: All students in the energy team volunteered their time to help plan and lead these events

RESOURCES: NEED energy materials, especially the energy transformation lab activities, energy carnival games plus the energy bike and several other NEED activities

EVALUATION: Feedback from visitors and students was overwhelmingly positive, so this looks like it will be an annual event



Community science night at Hawken School



Energy carnival at Hawken School

GOAL #3: To promote energy awareness outside our own school and take the show on the road



To reach out to others outside our own school and community to help them understand energy issues

ENERGY CONTENT ACTIVITIES: Our energy team helped to host two energy workshops, one at Malone University in December, 2017, with the OEP staff, and the second in Cleveland in April, 2018, which we conducted on our own. The team also worked to produce some video pieces promoting renewable energy.

STUDENT LEADERSHIP: Workshops were student-run – the Malone University workshop was also hosted by Sue Tenney and the OEP, but the Cleveland workshop was entirely planned and run by our energy team. The video pieces were written and edited by our students, and one was posted on youtube.

RESOURCES: Ohio Energy Project materials, NEED curriculum materials, Energy bike

EVALUATION: The students who attended both workshop also completed pre and post energy polls. Feedback from teachers at both events was excellent. **The students from Citizens' Academy improved their score from 34% (3.4/10) on their pre-poll average to 52% (5.2/10) on their post-polls on our program day, which is a significant improvement.**



Malone University energy workshop



Citizens Academy energy workshop at Hawken School

GOAL #4: To increase our knowledge of renewable sources and to promote their use



To promote the use of renewable energy in our community

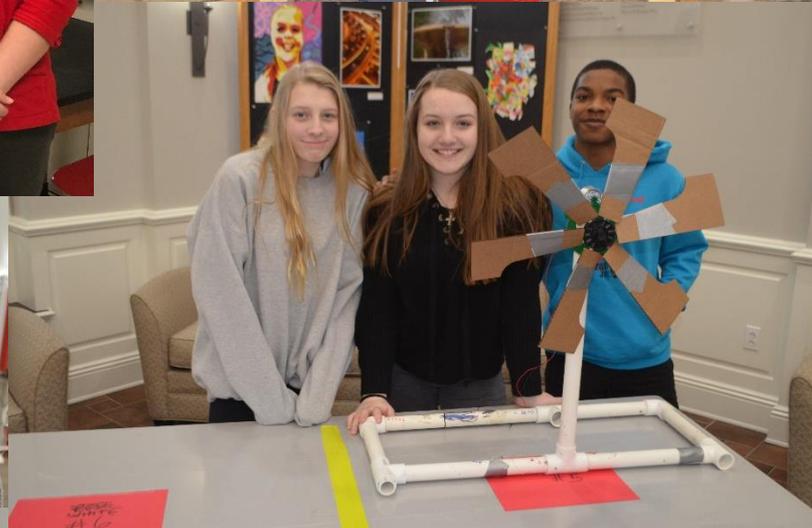
ENERGY CONTENT ACTIVITIES: All 8th grade students studied energy for a quarter of the year, ending it with the KidWind Challenge – a program that has teams of students design and build small scale working wind turbines. This year’s energy team also produced some informational videos promoting the use of renewable energies. Their wind energy piece is posted on youtube.

STUDENT LEADERSHIP: All teams were student-led, and 4 teams will continue to compete at the next level at the Kent University KidWind Challenge in May, 2018

RESOURCES: NEED curriculum materials on renewable energies, plus KidWind and Vernier materials

EVALUATION: The 69 students in our 8th grade improved their performance on the Secondary Energy poll from a 44% pre-poll average (8.8/20) to a 64% (12.8/20) post-poll average score. Each wind turbine team was also given a comprehensive judges’ evaluation as part of our wind turbine symposium

Wind turbines at Hawken



Wind energy – we are all big fans!



See the youtube clip we posted: https://youtu.be/T5t52aJlW_k

Poll results

69 Hawken 8th grade students took the NEED energy poll (20 questions).

Their score increased from a 44% pre-poll average to a 64% post-poll score

66 fifth graders from Cleveland's Citizens' Academy took our own 10 question poll

Their score increased from a 34% average to a 52% average score



**Way to go, Hawken
2018 Energy team!**

