

Energizing Energy Learning Opportunities

School: Twin Valley South Middle School

Sponsor: Catherine Ackerman assisted by Amy Pemberton



2017-18 was our second year as a team. Even though a lot of our team moved up to high school, we still managed to have a lot of growth with tons of new members joining. Energy was high as we began the process of learning the concepts at the OEP Energy Summit. Having a high school team helping made the day even better. Working together at the Dayton Energy Fair and at our own TVS Energy Fair, confidence was growing and leadership skills were emerging. At the end of the season despite having a lot of members move up a lot of growth happened thought new and old members. Even more growth is expected next year

Goal 1: Develop key leadership skills

Goal 2: Attend OEP Energy Summit for updated training

Goal 3: Participate Energy Fair hosted by Wright State as student leaders

Goal 4: Lead at the TVS Energy Fair to help increase the understanding of energy concepts by our 5th grade students prior to state testing.

Goal 1: Develop key leadership skills

Through training at the Energy Summit and assistance of High School Energy Partners, students have gained confidence in speaking, interacting with students, and increased their content knowledge about energy.



Maddox, who is seen here running sound waves, is in 8th grade. This is her first year and she has participated in many of our events such as the energy fair we hold at our school. At the beginning of the season she was not very sure about energy team and was very shy when it came to talking in large groups. But it was like magic all the guidance and help for the energy leader made her more confident, and by the end of it she now loves presenting



Goal 2: Attend OEP Energy Summit

The Energy Summit was the first chance our team was able to see the energy stations and carnival games. This was a lot of information to absorb!



Students were paired with a High School team member at each station. The peer to peer learning model was taken to the next level as our middle school team members were trained by our high school team members. Confidence was growing with both teams and learning was fun! A tour of the trash sorting facility was especially interesting.

Goal 3: Participate in the Dayton Energy Fair at WSU as student leaders

The Wright State Energy Fair was hosted by OEP. Our middle school team partnered with the high school team to run a whole room of 80 students from Dayton area schools.

Student leaders were assigned a group of 4-5 students that they helped with during the introduction of energy sources and types as well as the energy relay. The group split in half as one group learned about circuits using Snap Circuits and the other half learned about energy transfer with the Energy Bike that 3 girls on the team built at the AEGIS Bike camp 3 years ago. Then they opened the learning stations for **ENERGIZED LEARNING**. After lunch team members transformed the learning stations into carnival review games



Goal 4: Lead at the TVS Energy Fair to help increase the understanding of energy concepts by our 5th grade students prior to state testing.

10% Increase

Average Pre-poll to Post- poll

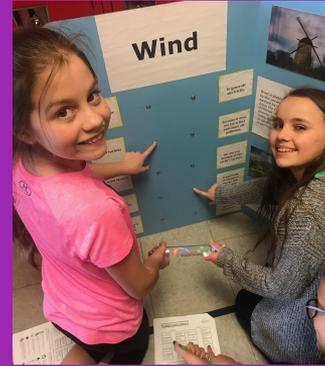
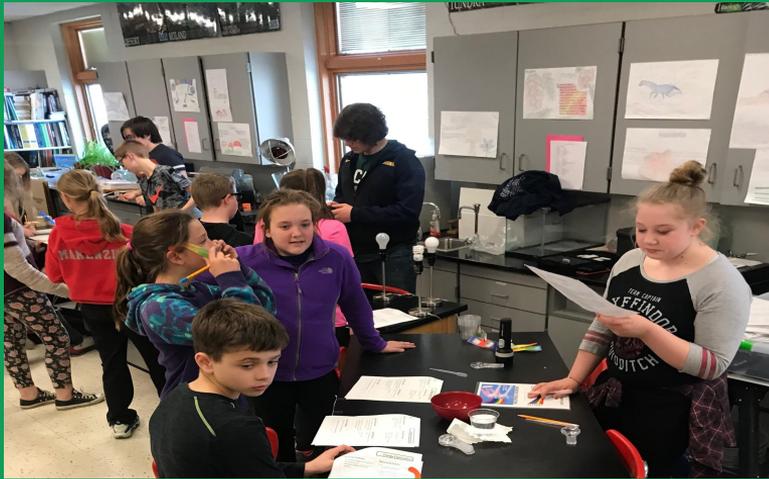
Middle school team members manned their own energy stations as many of the high school members had conflicts. The students were **ENERGIZED** and the room was **ELECTRIFIED** with all the **EXCITEMENT** while learning energy concepts. Students were stupefied at the thermal energy station when the ice melted faster on the block that “felt” cold instead of the one that “felt” warm. This discrepant event helped the students to grasp the concept of insulator and conductors in a mind boggling fashion.

#	PRE	POST	#	PRE	POST
1	69%	80%	6	76%	89%
2	39%	64%	7	91%	95%
3	61%	69%	8	50%	64%
4	31%	40%	9	89%	95%
5	28%	44%	10	87%	76%
			AVE	62%	72%

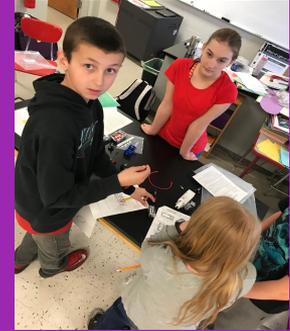
Goal 4: Lead at the TVS Energy Fair to help increase the understanding of energy concepts by our 5th grade students prior to state testing.

**A much needed break
from state testing!**

**Energy Learning Stations
They never knew learning could be so much fun!**



Conductivity!



Energy Sources Boards



Snap Circuits!



Energy Bike