



TRANSFORMING ENERGY EDUCATION

SCHOOL BY SCHOOL, STUDENT BY STUDENT

*THE OHIO ENERGY PROJECT FACILITATE STUDENTS' AND TEACHERS'
UNDERSTANDING OF THE SCIENCE OF ENERGY AND ITS EFFICIENT USE
TO EMPOWER THE NEXT GENERATION OF ENERGY CONSUMERS.*

LEADERSHIP: OEP STAFF



ENERGY * EFFICIENCY * EDUCATION

Goal:

Students are empowered as energy leaders to improve the energy efficiency of their own home. Teachers receive curriculum and lab materials for classroom instruction. Students receive a Home Energy Efficiency Kit with saving measures to install in their home.

Activities:

* Into to Energy * Light bulb or Heat bulb * Insulation and Air Leaks * Heating and Cooling * Saving water and Energy * Appliances and Energy * Energy Synopsiis

Evaluation:

612 educators trained

42,500 Home Energy Efficiency Kits distributed

Saving approximately 12,600,000 kWh = \$1,386,000

Indirect Impact: 127,500

Leadership: Ann Timm, Pam Addison, Shauni Nix, 600 teachers and 42,500 students



↑ Sue and Ann are measuring the temperatures of an incandescent and fluorescent lightbulb over time.

Students install efficiency measures to save:

- Electricity
- Water heating
- Cooling and heating
- Insulating against air leaks
- Improved temperature for refrigerators and freezers
- LED lighting
- CFL lighting
- Water flow



Teachers learn the load of different appliances with a watt meter



Stephanie is installing a draft stopper to help stop cold air from entering the home

Coal Chain: learning how electricity is made from coal



YOUTH ENERGY SUMMIT

STUDENT LEADERSHIP

Goal:

To facilitate hands-on energy activities aligned to the Ohio New Learning Standards. Students acquire leadership, presentation and teamwork skills. Student leaders will be fully engaged and ready to conduct Energy Workshops, Energy Fairs and programs at their school and in their community.

Activities:

* Energy Explorations * Energy Carnival * Energy Transformation * Sound * Light * Electricity * Leadership skills *

Evaluation:

- 5 Ohio trainings (NW, W, SE, Central, NE)
- 35 High Schools
- 35 Teacher Advisors
- Indirect Impact: 1,050 high student leaders

Leadership:

- * 350 High School student leaders



ENERGY WORKSHOPS / FAIRS



Brandon is helping students learn renewable resources.

Samantha, Kellie, Susie and Lori know all about electricity.



Goal: To teach students, through hands on activities about the sources and transformation of energy, energy efficiency, heat, light and students. Students are challenged to be energy leaders in their schools and homes.

Activities:

* Energy Explorations * Energy Carnival * Energy Transformation * Electricity * Light * Sound *

Evaluation:

Poll pre=47% post=88% 41%  in knowledge

Leadership:

35 high schools

350 student leaders



High School students become energy leaders in their school, their district, their community, their homes.



YOUTH ENERGY CELEBRATION



Goal:

An electrifying event to recognize Ohio's students, educators, business and corporate partners who are transforming energy education across the state.

Activities:

Awards presented and accepted, luncheon

Evaluation:

654 students, educators and partners celebrating the future generation of energy consumers.



ENERGY SOURCES TOUR/BLITZ

JUNE 2015

Goal:

A bus tour of Ohio energy sites conducted by energy professionals.

Activities:

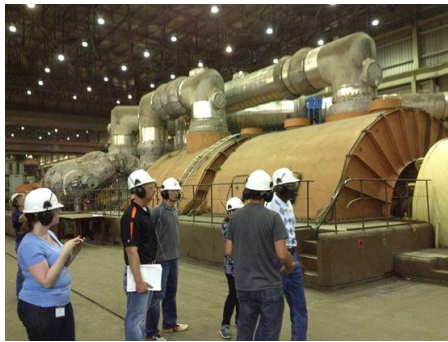
Visiting: * coal burning power plant * OSU high voltage lab * automotive research center * fuel cell research facility * solar panel array * natural gas well

Evaluation:

100% of teachers: 1) were satisfied with the program 2) would recommend the program to other educators 3) likely to use the materials in the next 12 months

Impact: 51 educators directly impacting 5,125 students indirectly impacting 3,130

Leadership: Sue Tenney, Nancy Glasgow



Visiting to a coal generated power plant



The Ohio State University Center for Automotive Research Behind the scene of the OSU's Buckeye Bullet, a battery powered land speed streamliner. Hoping to break the previous world record held by the Buckeye Bullet 1.



Solar Panels on the roof of a Worthington City School building



Rumpke Recycling Facility



AEGIS

ACTIVATING AND ENERGIZING GIRLS IN SCIENCE



Wires everywhere for these ladies!



Goal:

To bring twenty middle schools girls, five educators from five districts to bring a combination of human energy and state of the art technology build an Energy bike. A conventional bike that drives a generator to power a variety of small appliances.

Activities:

* Electricity 101 * Tool techniques 101 * Sources of Energy * Transformation of Energy * Coal Chain * Leadership skills

Evaluation:

Poll-pre/43% post/96% 53% increase in knowledge

20 Teachers rated the program- 100% satisfied

Direct Impact: 100 Indirect Impact: 15,000

Leadership:

Trevor Garretson, Debbie Pellington, Vicki Dunley



Learning to use new tools is a first for Amanda and Carrie



The Bike board when complete!

