## E2 Plan Curriculum Phases I and II

For three years, students in the after-school CHAMPS program piloted the energy audit process at the following schools: Harding, Jefferson and Pfeiffer-Burleigh Elementary Schools and Wilson Middle School. In the fall of 2011, the Erie City School Board approved Phase II as an introduction into thirteen schools throughout the district. Students were educated about energy usage from the building engineer, collected data with light and wattage meters, tracked after-hours usage patterns and benchmarked electrical and heating data on Energy Star.gov website.

Phase I was designed to provide content information as an introduction to the audit process, the students learned about life support systems, renewable and nonrenewable energy sources, and the scientific method. Reinforcement activities included cookie mining, constructing and experimenting with model solar panels and wind turbines, playing the watershed map game and learning about water usage with Enviroscape.





After one year as a result of the efforts by the students in the Erie City School District participating in the E2 Plan, the following overall results were attained:

## Overall Erie School District

11% KWH Reduction

The percentage of energy reduction for the 2011-2012 school year was calculated from September to April and compared to the 2010-2011 school year.

## All schools and Administration Building

- 959,552 KWH Reduction
- 661 tons of CO2 saved
- \$86,359 Savings





McKinley Elementary Energy Police

Wayne Elementary Green Team

Pfeiffer-Burleigh Light Switch Reminders

## E2 Plan Celebration: May 23, 2012

More than 450 elementary and middle school students participated in energy-related activities at Collegiate Academy to celebrate the successful completion of Phase I of the E2 Plan. The students performed wind turbine experiments, cleaned up oil spills, created murals, and visited the solar panels on Collegiate Academy's roof.

At the awards ceremony the following accomplishments were acknowledged:

- Edison Elementary School, Originality Award, 1% KWH Reduction
- Burton Elementary School, Achievement Award, 12% KWH Reduction
- Emerson-Gridley Elementary School, Achievement Award, 8% KWH Reduction
- Pfeiffer-Burleigh Elementary School, Activism Award, 14% KWH Reduction
- Jefferson Elementary School, Activism Award, 15% KWH Reduction
- Roosevelt Middle School, Creative Graphics Award, 10% KWH Reduction
- Wayne Elementary School, Originality Award, 12% KWH Reduction
- Lincoln Elementary School, Top Energy Saver Award, 17% KWH Reduction
- Wilson Middle School, Achievement Award, 9% KWH Reduction
- Joanna Connell Elementary School, Overall Energy Competition Winner, 14% KWH Reduction
- McKinley Elementary School, Energy Watch Award, 13% KWH Reduction
- Harding Elementary School, Engagement Specialist Award, 15% KWH Reduction
- Burton Elementary School, Achievement Award, 12% KWH Reduction
- Strong Vincent High School, Achievement Award, 9% KWH Reduction





