Pine-Richland - Eaton Partnership

February 27, 2019
Eaton is a power management company with 2017 sales of $20.4 billion. We provide energy-efficient solutions that help our customers effectively manage electrical, hydraulic and mechanical power more efficiently, safely and sustainably. Eaton is dedicated to improving the quality of life and the environment through the use of power management technologies and services. Eaton has approximately 98,000 employees and sells products to customers in more than 175 countries. For more information, visit www.eaton.com.
Connection to Strategic Plan

Refine and strengthen each element of the model for teaching and learning with a focus on integration.

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<tbody>
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<td>Identify Course and/or Content Priorities for STEAM Integration (One Per Grade Level)</td>
<td>Design and Implement STEAM Integration Activity or Project (One Per Grade Level)</td>
<td>Refine and Improve STEAM Integration Activity or Project (One Per Grade Level)</td>
<td>Expand STEAM Integration Beyond One Per Grade Level</td>
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“Focused on learning for every student every day.”
8-Word Story

Focused on learning for every student every day.
K-12 Sustainability Theme


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In grades K-3, our goal is to establish a foundation of the engineering design process through authentic learning experiences, related to sustainability.

Authentic Learning Examples

- **Kindergarten** - How can we use recycled goods to create something new?
- **Grade 1** - How can we measure energy savings in our daily lives?
- **Grade 2** - How can we design an object to travel a set distance?
- **Grade 3** - How can we create and measure energy without electricity?

Integration

- Utilize STEAM/FAB Lab or MakerSpace resources
- Align to Pine-Richland curricular, STE, and ISTE standards
How can the Eden Hall school community reduce consumption of electricity?

Grade 4: Curricular Connection: Electricity
• Warrendale Power Systems Experience Center

All Grades (4-6): Cross Curricular Integration
• Eden Hall Energy Consumption Data Project
Grades 7-8

- **Engineering and Technology:** Redesign an enclosure to mount on the outside of houses around current electrical hardware
  - Specifications: Appealing to the eye, wire bending requirements, locking mechanism, safety measures, weather resistant, environmental impact of selected plastic

Grades 9-12

- **Computer Science (HCP and/or APCS)**
  - How can we utilize big data collected from the Eden Hall school community reduce the consumption of electricity?
  - Students use Engineering Design process and CS data structures to analyze and summarize results

- **Webpage Design**
  - As partnership evolves, WPD students create website showcasing our progress/results
Culminating Events for each Grade Span (CEW Standards)

a. Collaborative Teams (teamwork)
b. Design Guidelines (limitations)
c. Presentations (speaking, writing, engaging)
d. Feedback from Eaton and PRSD Staff
Sustaining the Partnership

- Planting the Seeds of Tomorrow (Sustainable Growth)
- Collaborative Reflection
- Continuous Improvement

“Focused on learning for every student every day.”
Questions? Discussion?