Engineers Make a World of Difference

NHA 2009 Education Roundtable:
Taking Hydro into the Classroom
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What is National Engineers Week?

- National Engineers Week or E-Week, takes place each year around the time of George Washington's birthday (mid-February). Sponsored by the National Society of Professional Engineers (NSPE).

- E-Week is a volunteer program to increase public awareness of engineers' contributions to society by celebrating innovation and technology. (You do not have to be an engineer to volunteer!!!)

- Specifically promotes science & mathematic fields through in-school presentations and hands-on demonstrations. Targets middle school students and also promotes staying in school.

- A great opportunity to talk about hydro and hydro careers since the volunteers usually choose presentation topics based on their own personal careers!!!
Getting Started in your Organization

- Eweek Leadership Team and Executive Sponsor.

- Develop volunteer solicitation process and communications with schools.

- Develop volunteer training packages and rollout.

- Develop resource materials and giveaways.
Soliciting Volunteers by Explaining the Importance

- Educational research shows that middle school is the time when many students withdraw from math and science.

- We want to put somebody in front of students that has been successful in a technical area as an example of the importance & benefits of studying math and science.

- An early recruiting tool to help develop new engineers and technical people that may one day replace us!
Helping Volunteers Gain Confidence

• Offer training sessions where experienced classroom speakers share tips
  – Hands-on projects work well at all Grade Levels
  – Grab the attention at the start, avoid long lectures (7 minute rule), be interactive!
  – The teachers LOVE real life examples that connect to the subjects that they are teaching!!! (See standard course of study) And teachers can learn too!!!
Helping Volunteers Gain Confidence
(aka what is an extroverted engineer?)

• Preparing volunteers for the “tough” questions
  – Elementary School – Will hang onto your every word. No worries.
  – Middle School – Do we have a sub teacher today? (aka Why is that old guy here?)
  – High School – How much do you make? I’m going to be an NBA superstar!!

• Share a “how-to” classroom plan template that has worked well

• Provide web links, interesting video clips, handouts, brochures, trinkets, etc.

• Be prepared, be enthusiastic, and have FUN!!!
Helpful Websites

• www.eweek.org (National Engineers Week Foundation of National Society of Professional Engineers)

• www.hydro.org (National Hydropower Association)

• www.hydrofoundation.org/hydropower/links.html (Hydro Research Foundation)

• www.fwee.org/hotlinks.html (Foundation for Water and Energy Education)

• www.need.org (National Energy Education Development Program)
Making a Difference

- In 2008, over 130 Duke Energy volunteers gave presentations to more than 11,000 students in the Carolinas.
- Duke Energy’s Eweek program has grown steadily reaching over 50,000 students in the first eight years.
- Teachers call back year after year with many volunteers presenting to multiple classes and hundreds of students sometimes at different schools.
- Paying forward - a full-circle testimonial.
YOU Can Make a World of Difference

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