



ENGINEERING DESIGN AND DEVELOPMENT

As many of you are aware, the end of the 2009-2010 school year is rapidly approaching. With this brings the much awaited *Project Lead the Way* Engineering Design and Development (EDD) project presentations. These students have completed all five of the *Project Lead the Way* classes offered at their respective schools and are now ready to venture forth with the abilities they have acquired.

The EDD engineering design project offers a practical approach for helping students develop skills in problem solving, communication, teamwork and the kind of thinking that leads to deeper understanding. The problem solving approach used in this class mimics the actual practice of engineering. At once highly structured and open-ended, it offers a framework for integrating several disciplines while maintaining the rigors of scientific inquiry. Like engineers in the real world, teams of students work on projects that synthesize science, mathematics, technology, economics, management, and communication. Each team applies engineering analysis and experimentation to a real-world problem by designing and constructing a prototype of a unique device. As they move through a problem-solving cycle, they consider not only the scientific and mathematical requirements of the problem, but also the social, economic, environmental and ethical effects and issues.

With the conclusion of the engineering design project, the students are prepared to present their prototypes to the public. Presentations will be held on Saturday, May 8th, 2010, at 9:00 am at Marriotts Ridge High School. During the presentations the students will present their problem and solutions to a panel of industry professionals from the engineering community. The judges will be looking at:

- Communication skills
- Professionalism
- Statement, research, and justification of the problem
- Objectives, mathematic and scientific calculation, and testing of the prototype

You are invited to attend these presentations. There will be groups from each school presenting their projects to professional engineers from the communities surrounding our schools. Each group will present using displays setup to demonstrate their problems, and their solutions. We look forward to seeing all of you at our end of program presentations and celebration. If you do plan to attend please RSVP by email by May 1st.

Sincerely,

A handwritten signature in black ink, appearing to read "Jay Morraye".

Jay Morraye
EDD Instructor
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