

Participants

Michelle Doll, a science teacher from Manheim Township School district in Lancaster Pennsylvania, participated in the 2010 Penn State Research for Teachers Program under the supervision of Mary Shoemaker. They worked on lessons and experiments to be carried out in physics Laboratory.



Michelle E. Doll

Project overview

This project focused on the developments of a series of three lessons designed for a physics classroom. Lesson one, It establishes the idea that electrolytes conduct electricity while, lesson two establishing the idea of magnetic induction. The third lesson then combines the first twos, helping students see that an electrolyte could also conduct the magnetic eddy currents.

Relevant Results

It was possible to combine ideas of electricity and magnetism through a series of experiments to show that electrolytes do conduct the magnetic eddy currents.



ACTIVITY #1
Producing Electricity



ACTIVITY #2
Magnetism & Eddy Currents



ACTIVITY #3
Relating Electricity & Magnetism