Evolution of the MINT Scientific Outreach Program (MINT SOUP)

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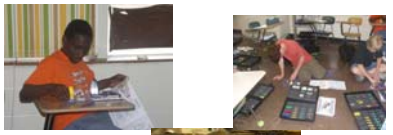
Collins Riverside Middle School Gifted Class



Snap Circuits

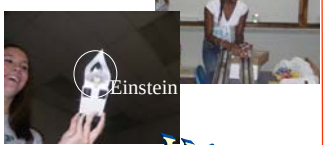
8th Grade

Faraday's LabView Experiment

Maglev Vehicles

Echols Middle School

Snap Circuit



Future Scientist

MagLev Vehicles

Past

The center has previously participated in education outreach with volunteers doing demonstrations in the classroom when asked over the years. But at the beginning of 2006 plans to put together a more structured official outreach program were developed. The first few activities were based either in the gifted elementary classes or the gifted middle school classes with volunteers going in and demonstrating different physics fundamentals of electricity and magnetism. During the summer outreach work was continued with a local Girl Scout troop. After much hard work we have a plan for an outreach program we feel will be successful in the upcoming academic year.

Present

We envision the MINT Scientific Outreach Program, (MINT SOUP) being a two component program, with one component dedicated to educating the middle school students on magnetism and other basic physics principles like Newton's law, friction, trust, force, motion, center of mass, and molecular motion. Basic activities have been chosen that allow the students to work in teams or as individuals and build cars, bridges, rockets and hot air balloons. The activities are fun, hands-on and, most importantly, educational. Also included in this component of the outreach program, is a field trip to the MINT center to spend time in the facility with researchers seeing first hand the equipment used and the type of research being done.

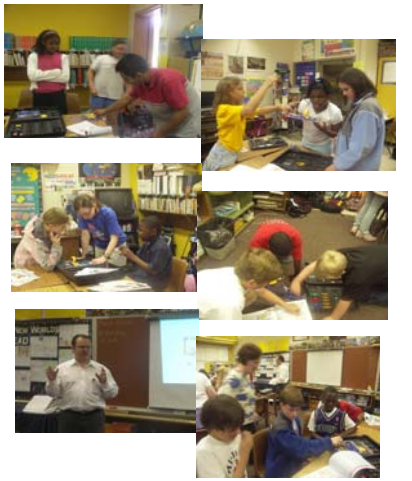
The core of this component is the emphasis on magnetism which is lead by professors and graduate students who have volunteered their time. In the final project individual students will assemble magnetic levitation vehicles that the students can race and a quiz bowl to see who has learned the most about magnetism. The students will learn about the nature of magnets, classify magnetic and nonmagnetic materials, discover how objects can be magnetized and demagnetized, and understand the differences between a permanent and a temporary magnet.

Future

Future work for MINT SOUP is to set up a display at the local Children's Hands on Museum (CHOM) with a Saturday morning demonstration once every three months that talks about the principals and the importance of magnetism. The displays will be conducted by either a professor or a graduate student along with the middle school students that are a part of the first component.

Verner Elementary

Snap Circuit



Planned Activities for 2006-2007 Academic School Year

1. Building a balsa wood bridge competition
2. Magnetic Levitation Vehicles
3. Magnetic Mouse trap Vehicles
4. Aqua Bottle Rocket Competition
5. Field Trip to view MINT Center
6. Scientific Talk about different stages of being a scientist

Volunteers Needed

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12.

Questions?? Contact author @ rhorton@mint.ua.edu