



WESTERN MICHIGAN UNIVERSITY

Engineering Design Center for Service-Learning

May 2008 Newsletter

EDCSL Continues To Educate Children in Kalamazoo about Science and Engineering

Kalamazoo children continue the opportunity to learn more about science and engineering for the fourth year in a row. These science experiments and lessons are sponsored by EDCSL (Engineering Design Center for Service Learning), a group of students at Western Michigan University at the College of Engineering and Applied Sciences. The Director of EDCSL, Dr. Andrew Kline, established this great program in the Fall of 2003, and it has been going strong ever since with after-school programs, events, and workshops.

The after-school program is held at the Boys and Girls Club (BGC) in Kalamazoo in the Lake Street neighborhood for the surrounding local public school students. The after-school program is held once every week during the academic year and usually includes anywhere from four to twenty-five Boys and Girls Club participants with one or two WMU volunteers. During the 2007-08 academic year, twenty-two sessions were put on at the Boys and Girls Club.

The kids get very excited when they see that it is "science-club" time, as the WMU volunteers walk in with a cool project in their hands. They learn science experiments about gravity, H₂O, Electricity, Height, Density, Acid/Base, copper, and many more. It is a fun project away from the regular school activities while giving them a chance to learn the things they would never think they would question.



Alyssa, EDCSL intern, helping Jake construct a marshmallow and spaghetti foundation.

Each program event usually starts with a worksheet explaining what the activity is, why we are doing it, what they think will happen and what actually does happen. Then the WMU EDCSL Intern and volunteers explain to the kids what might happen so they know what to expect. This way they get an idea of the experiment before they do it and foresee what they need to look for while they work together, in groups, trying to solve the experiment. The kids usually get to experience two projects a day, sometimes more, if time permits. After the experiment, they all talk as one big group with their questions, comments and learning experience and get to take the worksheet home to share with their families.

This program helps educate the boys and girls at the club while letting them be 100% involved. The kids and staff at BGC appreciate the WMU students taking the time to come teach and plainly be there friend for an hour a week, and to show them we care, while having some "Bill Nye the Science Guy" type of fun.

EDCSL Intern Program - Alyssa DeAngelis

Alyssa DeAngelis, the 2007-08 EDCSL Intern, is also a member of American Humanics Student Association (AHSA) here at Western Michigan University. This internship has been a great experience for her while being active with the kids at the BGC during the science projects. It was great interacting with the kids, whether it was making slime, working on the circuit boards, playing with Legos™ or creating fake volcanoes that blow up. Alyssa said that she enjoyed being able to go to the BGC once a week and seeing how happy the kids were to learn something new about science. For Alyssa, it was good to have this internship background experience, and she plans to continue a career in the nonprofit sector after graduation, this April of 2008.

Plans for Next Year

Dr. Kline is the Director and Co-Founder of the EDCSL program which has received grants from the National Science Foundation and Learn & Serve America. Planning will continue for the 2008-09 academic year of science and engineering experiments at the Kalamazoo Boys and Girls Club. The EDCSL is actively looking for student volunteers to participate and assist with this after-school program in the future.