

# Greater Interest in Government Maryland Delta Focuses on Baltimore Students

**S**TUDENTS ATTENDING public schools in cities such as Baltimore often do not have access to the same resources as other school districts—especially in engineering and science fields. It is important to provide positive role models, while making science fun for them. Since the fall of 2000, the Maryland Delta Chapter at the University of Maryland Baltimore County has been working with students in the math, engineering, science and achievement (MESA) program at North Bend Elementary School. A program consisting of 30 fourth-, fifth-, and sixth-grade students was selected based on their performance and interest in science.

We felt that it was a good idea to introduce the students to a more technologically oriented project that presented them with challenging problems to solve. A proposal was written, and a GIG Grant was received for the introduction of a robotics project in the spring of 2002. A ROBOLAB classroom starter set was purchased from LEGO, which included plans and parts for four different robots. During the first few weeks, the students were introduced to basic concepts. They learned about the key components of robots and how they work to achieve a purpose or goal. Next, they learned about the logic behind the robot's actions and how



Dr. Wharton, MESA coordinator, with students.

flowcharts are used to develop a program. Finally, sensors and feedback control were introduced to complete their understanding of the complex behavior. For the remaining time, the students were divided into four groups, and they worked on each robot set. We assisted them in building the robots and helped them to program command routines. After the students became familiar with the robots, they were encouraged to use their creativity to experiment with new designs.

Members of our chapter, as well as other non-engineering students, participated in this project. Some students were interested in being mentors for these children, but were unable to participate because of schedule conflicts. Next year, we hope to be able to involve more members by creating a robotics after-school program and introducing another set of activities on a

separate afternoon for the MESA students.

Overall, this was a successful endeavor; mentors and students who participated enjoyed the project and learned a lot. For our effort and contribution to the community, our program was recognized as the community service program of the year by our university.



MESA students participating in a roller coaster activity

**Jason A. Sese**, President, 2001-02

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*The purpose of the Greater Interest in Government Program, established in 1969 by Frederick A. Faville, Illinois Beta '19, is to stimulate interest in civic affairs and public-policy issues among student members of Tau Beta Pi. The Executive Council awards annual grants up to \$750 each for these activities from the investment earnings of the Greater Interest in Government Fund.*