

TCC Engineering Club cruised right track to victory

By Shevin Sprull
Correspondent

Several engineering students and faculty from the Virginia Beach Campus of Tidewater Community College (TCC) designed and built two cars to compete in the ASEE Battery-Powered Car Competition.

Earlier this month, the team traveled to St. Louis, Missouri and captured first and third place in the national competition. They are repeat champions, having won a similar competition last year in Charlotte, N.C.

The main students involved in the design and building of the cars were Engineering Club President Robyn Walker, Norm Doyle, Dave Gary, Scott Smith, Tony Brigantic and Krista Hernandez. Professors Paul Gordy and Steve Ezzell are the advisors.

The students met an average of eight hours per week for seven months to get the project completed. The work done by the students were done on a volunteer basis — with a budget under \$300 — and students raised funds to cover their travel expenses.

"This is the best club on campus and we are very active," said Ezzell.

According to Gordy, the most difficult part of making the competition cars was the mechanical parts because of a lack of necessary tools they needed. It's difficult to figure out why certain parts are not working.

with the club first because I didn't know anything about engineering, but everyone was helpful in explaining things to me. I began to like it so much that I became the president," Walker said.

According to Gordy, students are good with teaching each other.

"When Robyn joined the team, she did not have any electrical background. Yet was still able to deal with wiring and electrical designs. It's neat to see the students working together and teach each other," Gordy said.

Having peer instruction really helped Walker when she had to compare reports and presentations for the cars — it made explaining how the cars work easier. She was originally an art major, then switched to liberal arts. Even though she had a great liberal arts instructor, that field did not excite Walker. After meeting engineering students in her math and engineering classes, she saw her possible potential in the field of engineering and went for it.

Gordy spoke briefly about the competition they won last month against Broome University of New York. He also spoke about their last year's victory in Charlotte and full of anticipation for next year's competition in Albuquerque, N. Mex. The National Society of Professional Engineers and Tidewater Community College donated money so the club could compete in this year's competition.

"The \$300 budget was for parts only and after doing a cost analysis, we found that we only spent \$130 on each car," Ezzell said.

Most of the parts on the cars were cheap, except for the tires and parts like the gear drive. The Tidewater Chapter Virginia Society of Professional Engineers donated \$500 to the cause.

Ezzell mentioned a judge with the National Science Foundation who was impressed with how the students worked together, which could be beneficial to a website the club may build.

who has been a professor at TCC since 1992. They regularly invite guest speakers, have picnics, contests, competitions and give extra credits to make the club more appealing to students.

"Competitions seem to make students to become more involved," added Walker.

She also spoke about service projects that the club sponsors, such as the cleaning of Rosemont Road, a project which is done three times a year. The club does volunteer work with the Math Counts competition, where members of the engineering club acted as graders and examiners. The Math Counts Council is sponsored by the National Society of Professional Engineers Service, which allows students to network with future colleagues and future employees giving the students exposure to the field of engineering.

"We're also trying to gain more community involvement by having local middle schools getting involved in our national competitions as well," Walker said.

"Even though our club is not that big, it still leaves a big impact," Gordy said.

Every spring their department has 40 to 50 graduates with 200 to 230 attending classes each year.

Walker joined the TCC Engineering Club in January after changing her major.

"I was afraid of getting involved

"They're looking toward us to promote the competition, which makes the website exciting. Hopefully, this will lead to those in the freshman and sophomore programs getting interested in real-life designs," Ezzell said.

He also said that some design project only involve pen and paper, but theirs involve a complete follow through.

"Our design projects may involve a lot of work, but the rewards are definitely very high," Ezzell said.

According to Gordy, the most difficult part of making the competition cars was the mechanical parts because of a lack of necessary tools they needed. It's difficult to figure out why certain parts are not working, then fixing a problem only to find another problem. The most exciting part for her was not winning the competition, but working with other students and the two advisors to actually make the competition a reality.

"It's amazing how much work it takes just to make something work consistently," Ezzell said.

"It makes you appreciate the reliability of electronic equipment," Gordy said.

"It's hard getting recognition at two-year community colleges, and this is the important aspect, to have good students to be able to show others the things they are doing," Ezzell said.



RACING TO VICTORY. Tidewater Community College's Virginia Beach Campus Engineering Club garnered top honors in battery-powered car competition. Pictured with the winning vehicles, from left, are advisor Paul Gordy, President Robyn Walker and advisor Steve Ezzell.

Photo by Shevin Sprull