TEP and The National Academy for gifted and talented youth

This summer, TEP lent its support to the first summer school to be held by the new National Academy for Gifted & Talented Youth at the University of Warwick. The new Academy is intended to develop, implement, promote and support educational opportunities for gifted and talented children and young people aged up to 19, as well as providing support for parents and educators. One of its key activities is its summer school programme. The 2002 summer school involved over 100 gifted and talented students aged between 11 and 16. During the three weeks, the TEP team led a series of design & technology sessions, culminating in a Techno Games day.

Students were given an introduction to materials, basic control systems and manufacturing techniques, supported by graphics and animations from TEP's Techno Games cdrom. They were then given their task for the day: to design and build a robot to enter one of the Games, either a swimmer or a gymnast. Then, in pairs, they began to design their robot on paper. The variety of designs was incredible, and demonstrated the range of their prior knowledge, and technical and creative abilities. As the day went on, initial designs and models were tested and refined in preparation for the competition itself.

Summer School Student Khyle Westmoreland takes up the story:

"On the first Saturday of the Summer School, most of us woke up a little later than usual, with the intent of relaxing and not having to do any academic work. Our engineering teacher had been dropping hints that something would happen during the day but we had no idea what was planned. During breakfast in the refectory, we were surprised to see the guys from the TEP setting up all their equipment - motors, batteries, wheels and IQ chips!
After the presentation given by Frank, we all got straight into the designing, making and hands-on part of the day.

Unlike school, where they strictly monitor and schedule every lesson you are attending in Design Technology, the staff took a step back to give us freedom to explore ideas in small groups. This gave us a sense of freedom we had not previously known. It also gave us the chance to test our theory that robots would float if made out of old Pepsi cans as we made our way to the swimming pool to test our robots.
At the last moment, our group decided to back out of testing it.
I, however, encouraged them to continue and while we were waiting to gain access to the pool we managed to get the other rotor working, which didn't work previously.
Unfortunately, the robot sank almost instantly on hitting the water. No amount of neoprene and glue can stop a can with a hole in it from filling up with water!

▲ Students with their finished designs and the pool test!

Still, even after a long day of building, we all had high self-esteem and were in a good mood. I think we still had the disco and the tribal activities to look forward to. In my opinion, a day well spent!"

Khyle Westmoreland

The National Academy gifted and talented youth

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