

students learning with communities

RoboSumo Wrestling

DIT Electrical Engineering

students work with children

on a robotics project

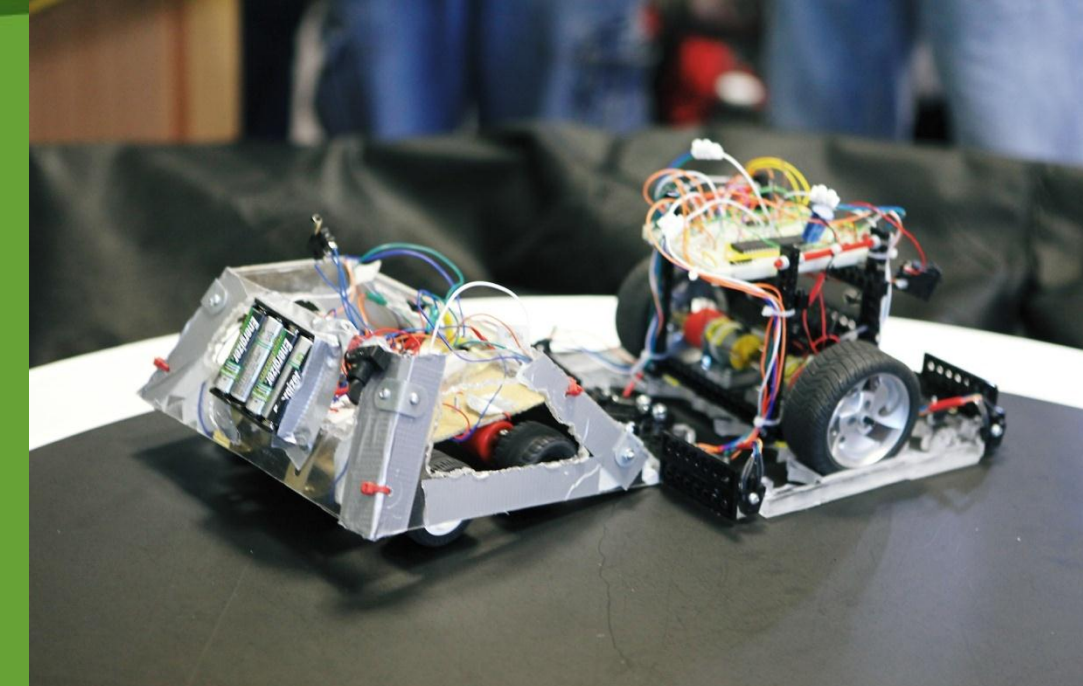


Students Learning with Communities



DIT Access & Civic Engagement

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What's involved?

Electrical engineering students from DIT teach children how to build and program a Lego Mindstorms robot to enter The DIT RoboSumo Challenge: *find* the other robot and *push* it off the pitch! Running since 2008, this has proven to be a sustainable community learning project. Students develop many professional skills and learn about society. The children get to see that Engineering is fun, challenging and rewarding and visit Engineering at DIT for the RoboSumo challenge.

The Children

To date, over 140 children from various youth groups in Dublin have participated. The Aisling centres in Ballymun, located near the local primary schools, have been involved every year. Children, aged 9-12, attend an Aisling centre after school where they get a hot meal, complete homework in a stable environment and participate in a range of activities similar to a youth club. Lego Mindstorms robot building is one of those activities. St Michael's Parish Youth Project have also participated and have produced some excellent robots. The children get to meet young adults who enjoy learning subjects like maths, are in third level education and aspire to have a career in the engineering profession. This gives the children a perspective they may not otherwise experience. And they have fun engaging with and learning about science, engineering and technology. Engineers love programming robots and the children love to play and learn.

The Partnership

The Electrical Engineering students travel to the youth centres once a week during the semester to work with the children on the project. They develop their own learning and teaching activities and quickly realise the challenge of keeping the children engaged.

Students and children become very familiar with each other, barriers are broken, the children get advice and help with the Lego Mindstorms kits and the students benefit by developing a range of personal skills. Cross contamination of ideas occurs between the Lego environment and the students robotics modules fostering extra creativity. Those who volunteer for this community learning activity gain course credit for their work. Each year, about 20 students participate.

The project is easily scalable with extra students and other youth groups. All we need are children, engineering students and some Lego Mindstorms kits! Fun, learning and development naturally follow.

RoboSumo Day

Each year, DIT Engineering hosts a RoboSumo competition day when students enter their own robots to battle against each other. The children travel to DIT for this event and get to watch the students' robots before taking the stage themselves with their own robots. Who will win? Everyone's a winner in this project.



Living Knowledge
The International Science Shop Network



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