

High School robotics program Inspires

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After months of late nights and countless hours of designing, planning and building, the students of Macdonald High School's robotics team emerged victorious at the CRC robotics competition on Feb. 10-12.

Guided by teacher Ted Duckworth and volunteer/mentor Al Dornan, 21 students of the 27member team won second place overall, beating out 15 other teams, which included public and private Montreal high schools as well as CEGEPs and technical colleges. They also took home second prize for both kiosk and robot design and first place for video presentation. Their theme, "Mac Wars," based on the Star Wars trilogy, inspired the design of their kiosk, which modelled the cockpit of the Millennium Falcon.

Needless to say, Duckworth and Dornan are proud of the students' accomplishments, considering they spend an average of 400-500 extracurricular hours a year working together as a team for the chance to demonstrate their technical skills and creativity in competition.

It's not just about the competition, however. The robotics program at Macdonald High is a student-driven, hands-on experience in science and technology, a unique opportunity for students to channel their inner scientist/engineer.

But before the start of any build, the kids are given a practical course on tool safety, how to use the various equipment, basic electronics and welding.

The kickoff took place in November, when each team was informed about the rules and the layout of the playing field, which simulated a forest where pool noodles represented trees. The job of the robots was to "cut down" the trees, carry them to a "mill" and push them through a series of holes, or "harvest" them, and sort them into the appropriate containers. The robots also planted "seeds" (cut up pool noodles) back in the original containers.

Points were awarded to the teams based on the tasks the robot completed.

The teams were also judged on kiosk design, website design, robot design and video presentation.

Macdonald is the only high school in the Lester B. Pearson School Board with a robotics program, which costs about \$10,000 to \$13,000 per year to operate.

The school pays for competition fees, but the kids are responsible for fundraising. In a pre-Christmas, 36-hour weekend marathon, the kids bagged groceries at the Pincourt Maxi store where they managed to raise \$4,500. Duckworth applies for various grants to cover program costs, however, with most of his and Dornan's time spent working closely with the students, it leaves very little time to look for sponsors.

Having witnessed first-hand the dedication and hard-work these kids and their mentors have put into this program, it's no wonder they found themselves in the top two.

"Mac Wars" may be over for now, but they're not resting on their laurels. I'm sure they're already preparing for next year's battle.

For more about the robotics program, check out these sites:

<http://vimeo.com/19930146>
<http://www.lbpsb.qc.ca/eng/main.asp>
<http://macrobotics.squarespace.com/>

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