

## Neilburg Students Win Robot Design Competition

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Two grade 11 students, Christine Watson and Lauren Evanger, from Neilburg Composite School recently won the SIAST SUMObot Challenge to design and build a robot. The pair's entry, a 'Sumobot', placed first out of 62 entries in the competition that was hosted by the Saskatchewan Institute of Applied Science and Technology. Two other entries from the school, one from partners Colin Weinkauff and Bryn Makaroff, and another by David Nass, also finished impressively, placing between fifth and eighth.

"Sumobot?" A Sumobot is a small, autonomous, motorized robot, that must be designed and built so that it can sense objects and movement within a ring just under a meter wide, and then move toward whatever it has detected and push it out of the area. The robot must be programmed and built in such a way that it can do all of these things without any human control whatsoever beyond turning the thing on.

Students are provided with a basic kit by SIAST and simple programming instructions, and after that they are able to modify the design and program however they see fit (while staying within some basic rules). Under the supervision of teachers Jeff Walso and Wade Worman the Neilburg teams began to build and modify their robots back in December, and over 30 hours of work was required before they were ready for the competition.

When asked about their successful design the girls said that they felt the addition of weight and, more importantly side sensors contributed to the success of their prototypes. "It had to see things and move towards them," the girls said, "so we added sensors to the side in addition to the ones looking forward so that the robot had a much wider field of view than the others."

And the highlight of the day? "Not just winning," said Christine, "It was very sweet beating all those guys!"

Each girl won an iPod touch and a \$1500 scholarship to SIAST for placing first in the competition.