

Home Educators Did It



Well they really did it! Free Range Robotics — a team composed of home educated teens from Auckland — won the 2010 VEX Robotics World Championship!

This year's VEX Robotics World Championship was bigger than ever with more than 400 high school and university teams from around the world. It was held in Dallas, Texas, from 22 to 24 April. Elite VEX teams from middle schools, high schools and universities representing 14 countries competed at the Dallas Convention Center with innovative robots they designed and built using the VEX Robotics Design System.

The VEX robots were engineered to play the game "Clean Sweep" with students applying their programming skills and strategic thinking to defeat the opposition. Richard Paul, captain of the Free Range Robotics team and part of the winning alliance of three teams said, "VEX Robotics has taught us how to work together in high pressure situations. We're now better prepared to handle challenges because we've learned how to approach problems with different solutions."

The VEX Robotics Competition World Championship

included qualifying teams from Brazil, Canada, China, Colombia, India, Japan, Malaysia, Mexico, New Zealand, Puerto Rico, Saudi Arabia, Singapore, the United Kingdom and the United States competing over three days of non-stop, high-energy robotics challenges.

As one of the home educators from Auckland said, "It's really fantastic when you reach the long row of pits bearing the New Zealand flags. There were 12



New Zealand teams here this year. Last year we were just four pits together. The New Zealand presence has been much anticipated, and the word whispering around the centre is that we are to be feared. One girl said to me, 'When you go up and down the pit area, everyone is terrified of the New Zealanders.' I replied, 'For good reason.' May as well maximise the psycho-

logical advantage!”

The winning alliance was made up of two New Zealand teams – Free Range Robotics (homeschoolers) and Kristin School Doves (Auckland) — along with Shangahi Luwan Activity Center from China. They played against another alliance of three teams from the USA. One of these American teams was the Green Egg Robotics team from Oakham, Massachusetts, home educators themselves who won last year’s championship! The New Zealanders and their Chinese partner won the first game of the finals by a good margin and went on to win the second match, the winner being the best of three. It was very tense, as the competition was fierce and the score was close.

The teams were elated to win and to bring home the ultimate World Tournament Champion 1st Place Trophy. But that’s not all. Free Range Robotics were also presented awards for:

- World Champion 1st Place in Web Design (www.robotics.org.nz)
- World Champion AMAZE Award (for innovative design, engineering and programming)
- World Champion Energy Award (for team enthusiasm and dedication) and also
- World Champion 1st Place Division Tournament Champion.

In addition to *that*, another competition, the BEST (USA) National Championship was held alongside the VEX events. This was won by the Metro Homeschool team from Blue Springs, Missouri! Homeschoolers are dominating these competitions!

How is it that homeschooling teams are dominating the top positions in this highly skilled competition spanning 20 countries and over 2400 teams worldwide? Is it because these homeschooled kids have brilliant highly skilled robotic engineers as parents? Well no; accord-



ing to the parents of the Green Eggs kids, they are just a normal, down-to-earth farming family who have let their kids investigate something that they enjoy. “They are passionate about robotics and taught themselves how to do it.” A Free Range parent agrees. “As parents, we are basically facilitators; we support our kids in what they do and give them the necessary tools, but

they are driving the learning process.”



Michael Lawton, robot designer and programmer for Free Range Robotics said, “The winning robot was designed to be able to score in every possible way the game allowed, which meant that we could change our strategy depending on the situation. Max Waller, our strategy coach, watched the *other* teams to determine *their* strategy and changed ours to our advantage.” The team spent many long hours practising and refining their robots to prepare for the World Championships.

Green Eggs’ robot designer from the US said that their team really liked the Free Range team’s designs and that “we were the only team they didn’t mind losing to!” It was great to meet with other homeschoolers from another country and find there is a common bond and a similar way of looking at things.

And now, even the Universities are taking notice. Massey University in Albany have been very supportive of the team, allowing them to use their Robotics Lab as a venue to meet and construct their robots. They are looking at ways they can get these home educated young people into their courses at university, even though some of them have never sat an exam in their lives, as they obviously have got what it takes to make it in the high technology field of robotics. Chris Chitty, Massey University’s Senior Robotics tutor said, “They went over there and used the same equipment as everyone else, made something out of nothing and absolutely shredded everyone else in the competition.” Amen!

The Free Range Robotics Team, composed of home educators, was also presented with a Silver Fern Award. This award originates from the military. It is a prestigious award, given to soldiers who have given significant service to their country. The Kiwibots NZ had been granted the power to select and award this to certain students for their service to NZ as a representative (in battle) overseas. The team has certainly experienced the sweat, blood and tears of hard battle over these last couple of years! It was great to acknowledge their hard work and dedication.

