## **Exploring robotics | Barbados Today**

Barbados Today

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". . . to assist with the diversification of the economies of the Caribbean Region by harnessing science and technology for economic development, and to help raise the standard of living".

That's the mission of the Caribbean Science Foundation (CSF), an independent non-governmental organization that was established back in 2010 by the Caribbean Diaspora for Science.

With this mission in mind, volunteers for the Barbados arm of the CSF decided there was a need to undertake a STEM (science, technology, engineering, and mathematics) project that specifically targeted children between the ages of eight and thirteen.

One of the volunteers, David Thorpe, a Barbadian who currently lives in the United States, wanted to see greater local involvement in robotics. Fast forward three years later, and the Barbados Junior Robotics Camp is still running strong on the grounds of the Cave Hill Campus of the University of the West Indies (UWI).



David Thorpe

**Barbados TODAY** visited the camp recently and had a chance to see the children in action, learning from the basic theory behind robotics to the exciting parts, such as building small scale robots. Some of the campers including Eric Ridley and Dominic Toppin eagerly shared their experiences and what they hoped to accomplish before the end of the camp.



Camp Assistant Anik Niles with camper Dominic Clarke.

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Camper Eric Ridley

Asked how long it took him to build a small motorized car made of lego, Ridley replied: "... just about 15 minutes . . . the hardest part comes when you have to change around the motors, or change stuff in the code to get it to work." He and a few other campers are aiming by the end of the camp to make a dinosaur.

Toppin started around the age of four with coding because of influences from home. "I got into coding because of my father, it's sort of his job . . . . In the future, I hope to get into programming for robots". He stated that his future robotic endeavours will be in creating robots to help around the home, and save lives.

During the visit, Barbados TODAY chatted with one of the camp's staff, Dr Cathy-Ann Radix, a lecturer in the Department of Electrical and Computer Engineering at the UWI's St Augustine, Trinidad campus who is an avid lover of Robotics in Education. This term, which is also referred to as Educational Robotics, involves multiple global initiatives. She gave a brief history on robotic research in the last two decades.



Camp Assitant Anik Niles helping with the robot test phase.



Camp coach Dr Cathy-Ann Radix looks on as the robot is being tested.

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"... When you look at the history of where robots are used ..., you would recognize that robots are not a thing of themselves, they were created to address a need. In Japan, there was a labour force shortage, they wanted to increase their export market, so there was a defined investment from the government and the private sector side, to push the forward in the research of robotic technologies,"

she explained. What can Barbadians do to interest the next generation to invest in STEM research? Dr Radix made it clear there would need to be a conscious effort to support initiatives currently being done, and new ones in the pipe line.

"I think there is no simple approach, because one thing that would interest one child, would not affect the other," she said. "We need a coordinated suite of approaches, there is a need to look at the social issues associated with why people do not have a common view of what STEM is. There are people who have preconceived notions about the technology, and the applications with it."

Education, therefore, is needed to assure citizens that robotics and autonomous technologies ought not to be feared, and to demonstrate how they can be used to support the competitiveness of manufacturing, for example.

The aim of the summer camp is to open the minds of youngsters to the exciting field of STEM research. From the evidence, the campers seem definitely keen on the possibilities which this branch of science has to offer.

Source: (Shamar Blunt)

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