

FNU instructors coach young females in Graduate Women Fiji STEM camp

Encouraging young females to develop an interest in the fields of Science, Technology, Engineering and Mathematics (STEM) and explore the potential rewarding career pathways it has to offer, was an opportunity not missed for two Fiji National University (FNU) instructors.

The duo, Vasenai Kereni and Lani Ragusuloto, were part of the recently-concluded STEM Camp for Girls in Suva, organised by Graduate Women Fiji (GWF).



Vasenai Kereni with participants at the STEM Camp.

Kereni, an Instructor at FNU's College of Engineering, Science and Technology (CEST), said the camp was a welcomed challenge as she had to apply teaching methods suitable to the girls aged 6 to 13 years old.

She holds a Trade Certificate in Fitting and Machining and two Diplomas; Plant Engineering and Mechanical Engineering, from FNU and completed her Bachelor of Engineering (Mechanical) at the University of Southern Queensland in Australia before joining the University as a staff member in 2014.

Kereni said she was honored to be part of an event that would enable her to impart knowledge to future leaders of Fiji.

"In total there were 30 girls and using simplified language to help these girls understand the basics of STEM subjects and teachings it in a way that was fun and applicable was a great experience," she said.

"I am truly grateful that I was chosen to be one of the camp instructors from FNU."

"Before the four-day camp, the other camp instructors and I were part of a train the trainers workshop that was conducted by world-renowned Bio-medical and Materials Engineer Dr Michelle Dickinson and her team from New Zealand to equip us with the skills and knowledge we needed for the camp."

Dr Michelle Dickinson said her team from Nanogirl Labs was excited to be part of the project and working with the camp instructors that were chosen locally.

"We are training women here in Fiji who are at a turning point in their careers, enabling emerging female leaders in their fields to run a STEM Camp for Girls," Dr Dickson said.

"This is very much in line with our own mission to inspire, educate and empower as many people as possible through STEM."

During the camp, participants conducted experiments such as learning how to power a small light bulb using lemon and potatoes, how rainbows and clouds are made, engineered a water hydro cycle using materials around the house and learnt about water filtration.

The youngsters also learnt about technology and robots, recycling household products such as plastic bags to weave mats and bags, crafted paper made boats and taught how and why things float on water.

FNU Namaka Campus Assistant Instructor in Occupational Health and Safety, Lani Ragusuloto added that being part of the STEM camp was a learning experience as she had the opportunity to meet other academics who were experts in the various STEM fields as well as work together with them to impart learning and teaching activities to the young girls during the camp.

Ragusuloto, who is from Lawai Village in the province of Nadroga, was part of the nursing profession for 13 years practicing in the both the clinical and public health setting.

In 2015, she secured an Australian Award Scholarship to study Health Safety and Environment (HSE) with Curtin University in Perth, Western Australia and in 2018 obtained the Bachelor Science Award – Health Safety and Environment.

She highlighted that it was important the young girls were introduced to STEM subjects at an early age so that it was not viewed as demanding and physically-challenging fields during their secondary education.

"It is important that STEM subjects point out a direction and clear pathway for these girls in terms of career opportunities and we wanted them to know that females could also be engineers, scientists, programmers and so forth."

"It only makes sense that if we wanted to instill this message that we start from an early stage so that when they get to high school, girls would have a clearer idea of which field they would venture out to."

"Being part of this camp was a great experience for me and has also added to my own professional development."

Graduate Women (Fiji) stated that the participants were selected from families living in informal settlements in the Central Division and families earning less than \$10,000.

The girls were awarded certificates at the conclusion of the camp to acknowledge their participation.

GWF President Charlotte Taylor said the organisation was grateful for the full support from FNU towards the project.

"GWF is all about empowering women and girls through education, and the GWF STEM Camp for Girls Project's aim is to increase girls' participation in STEM studies as well as inspire them to aspire to STEM careers by providing a safe, supportive and fun environment to learn about these subjects," Taylor said.

GWF plans to hold additional camps around the country so other young girls could be given a chance to participate.



Vasenai Kereni and Lani Ragusuloto at the STEM Camp.