

Program gives girls hands-on look at STEM careers

Denice Johnson, 14, took one look at the battery pack, the motherboard, the wires and assembled gadgetry, and knew it was going to be a good day.

"I love science," said Denice, who recently traveled from Miami to Lauderdale Lakes to attend a summit designed to introduce teen girls to careers in technology.

She and her workshop partner, 15-year-old Daija O'Harrow, built an airplane from an electrical snap circuit kit. "I love working with wires, and I love trying to build things. When the propeller started spinning, it was amazing."

Denice is one of 70 girls who came to the Lauderdale Lakes Library & Education and Cultural Center for the day-long workshop sponsored by The Dennis Project Inc., a foundation created to expose African-American children to careers in the sciences.

They were introduced to science, technology, engineering and math (STEM) occupations through hands-on learning labs. Many of the teens came through programs such as the Girl Scouts of SE Florida, Memorial Regional Hospital's summer camp, Broward Sheriff's Office programs, Covenant House and ARC Broward.

"I know we need more girls in science," said Johnson, a sophomore at The New Testament Church of the Transfiguration Christian School, in Miami. "Girls want to be teachers and nurses, and there is nothing wrong with that. But we can also be car engineers and scientists, and we should be."

According to the U.S. Bureau of Labor Statistics, STEM fields are expected to add 2.7 million new jobs by 2018, yet women and minorities are greatly under-represented. A recent survey reported female scientists saying the problem starts when women and minorities are not identified or encouraged to pursue STEM studies early on.

"And that's our mission," said Auntaria Johnson, the Dennis

Project founder who holds a master's degree in education from Barry University. "My goal is to introduce these career options to children – to girls – who might not otherwise know about them."

Johnson founded The Dennis Project four years ago after working as a program coordinator for The Museum of Discovery and Science in Fort Lauderdale, and noticing the dearth of black students in its summer camp.

"That program is phenomenal, and I realized black students were missing out," said Johnson, who landed a grant and used it to invite 100 low-income Girl Scouts to an overnight STEM session at the museum.

"That night, I realized that the girls never even knew that science was an option for them," said Johnson, who stayed up all that night showing them how to create an AM radio signal using the snap circuit electrical engineering kits. "They thought science was for boys, that girls don't do things like that. But by the time the sun rose the next morning, they were totally into it."

That first year, Johnson, who now works as a social services coordinator for the Housing Authority of Fort Lauderdale, introduced about 500 girls to careers in the sciences. Today, she has initiated more than 1,000 South Florida girls to the idea that they, too, can be engineers and mathematicians.

In addition to emphasizing academic success through science for minority youth, The Dennis Project – named after Johnson's late grandmother, educator Amelia Dennis – encourages self-esteem, nutrition, wellness and improved 21st-century skills, such as critical thinking, problem solving, leadership and team building.

For the Lauderdale Lakes summit, Johnson got backing from supporters throughout the community: Broward College, Publix, Fresh Market, Target, Walmart, Whole Foods, Jazzercise and such businesses as Global Team, JOI Events and KB



TECHY TEENS Above, Pembroke Pines residents Shaniya Weave, 11, center; and Shaian Miles, 13, right; show their electrical engineering project to Auntaria Johnson, left, who organized this summit to foster in teen girls an interest in STEM careers. Also attending the event at the Lauderdale Lakes Library are Anniya Smith, 12, of Sunrise, middle left; and Judy Tug, 16, of Pembroke Pines, bottom. STAFF PHOTOS/ORIT BEN-EZZER



Designs.

"At first, I thought, 'This sounds kind of hard. Can I do this?' But it was great," said Deerfield Beach High School junior Jalissa Neal. She described how mentors from Ultimate Software, headquartered in Weston, explained what engineers do and then led the girls to build a small robot and program it using computer coding.

"It gave me the opportunity to realize maybe I do want to consider a career in a science field," she said.

VisitDennisProject.org.