

Coding club gives girls confidence



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Huddled in groups of four or five, Desert Shadows Middle School girls leaned across their desks laughing and encouraging each other as they tried to teach a “robot” to make a sandwich after school on Tuesday.

With one group member acting as the robot, the rest of the team tried to figure out the best way to tell the robot how to spread jelly on two slices of bread. But it was harder than it looks, said Elizabeth Fuentes.

“You need to be very specific,” she said, as she and fellow seventh-graders Alessandra Vasquez and Ana Laura Anguiano tried to get Joscelyn Molina to use a knife to scoop up some raspberry jam.

“If you say lift up your hand, she just stays there because she doesn’t know which one,” Fuentes added, explaining that the activity was a way for them to learn about giving clear, detailed instructions like those they need to use when coding computers.

The students are members of TECHNOLOchicas, a club funded through an Intel She Will Connect: Technolochicas Lift Initiative grant awarded to the Santa Cruz County Superintendent of Schools Office this year to help local middle school girls learn about computer coding and technology. The clubs started this semester at DSMS as well as Wade Carpenter, Calabasas and Coatimundi middle schools.

“The main purpose is to encourage girls to get involved in technology and careers that (people) don’t think of as typical for them,” said Martha Morgan, a DSMS science teacher and the school’s TECHNOLOchicas sponsor.

Morgan said she hears a lot of girls say that they’re scared to try coding or working with technology. It’s boring; it’s for boys; it’s too hard, they tell her. But she’s hoping efforts like TECHNOLOchicas will give more young girls confidence to try something new and maybe find out that they have a passion or an aptitude for STEM (science, technology, engineering and mathematics).

The club, an initiative of the Televisa Foundation and the LULAC Institute, is focused on raising awareness among young Latinas that there are opportunities for them to become future leaders in tech industries. By learning about computers, coding and other STEM fields, the club is meant to inspire interest and teach skills that might lead them to future study and careers in well-paying sectors, Morgan said.

“When I first started teaching, most girls didn’t think they had the opportunity to go into these careers,” she said.

But that's changing. This semester 32 girls signed up to join TECHNOLOchicas, Morgan said, and they are excited and encouraged when they see that girls across the country are part of the clubs, too.

"I tell them, 'If they can do it, you can do it.' They feel more empowered," she said. "They aren't as scared, and there seems to be a big interest. They just need to have a little push, the opportunity."

'It's just fun'

Examining wires and connectors in a coding kit the DSMS club will be using in coming weeks, Yalitza Saavedra, a seventh-grader, said she wanted to join the TECHNOLOchicas to learn a skill that many others don't have, or get the opportunity to learn.

"When I saw this club, I really liked it because we get to do a lot of new stuff and I really like technology," added Arianna Alonso, a sixth-grade student. "I want to learn coding and things like that. I just think it's cool."

That was a common refrain among the TECHNOLOchicas, who not only see what they're learning as knowledge that can help them in the future, but as something they genuinely enjoy.

"I'm really into technology and everything," said Ana Paula Juarez, who is in seventh grade this year. "It's because I've always been drawn to electronics and all that stuff. I want to learn like how to code a computer. I want to know how to make an app or something."

Far from being intimidating, added seventh-grader Martha Armendariz, joining the club just sounded like a good time and an opportunity to do something new and exciting.

"We get to build robots and stuff. It's just fun," she said.

