Metro Atlanta students partner with Jordanian kids for tech project

by Ross Williams

Swift School director of technology Donna Cherry holds a sample 3D printed keychain of the type her students in the Global Inventors Project are designing.

Students at the Swift School in Roswell huddle over their laptops working on a project. They are designing keychains with their names embossed on them, to be printed using the school's 3D printer.

Over 6,000 miles away, Jordanian students work on the same project. The two groups of students will record and send video postcards with information about their interests, hobbies and families.

Swift School teacher Jamie Bouck helps a student create a keychain in design program Tinkercad.

It's part of Global Inventors, a program from Connecticut-based Level Up Village, which combines STEAM courses — science, technology, engineering, arts and math — with a modern take on the time-honored tradition of pen pals. Similar programs are in place at The Lovett School, Pace Academy and Warren T. Jackson Elementary.

Neesha Rahim, Level Up Village's co-founder, said the students will partner one-on-one with their Jordanian counterparts to design products with real-world applications.

"Level Up Village courses are designed to develop 21st Century skills and prepare students to become compassionate global citizens," she said.

While a group of about 10 kids click away at their keychain designs, teacher Jamie Bouck takes them one by one into the hallway to record their video messages. Inside the classroom, the students have plenty of questions both about the task at hand and their video pen pals in Jordan. Those questions are tackled by director of technology Donna Cherry and IT manager Scott Greenwald.

"What language do they speak?" asked one child. "Hebrew?"

"You know what? I'm not going to tell you," Cherry said. "I will tell you that in Jordan a lot of people speak English."

"I'm going to look it up on my computer," the student said.

"I would love if you did that," said Cherry.

Their screens show a 3D model of the rectangular keychain floating in a grid. At first, all of the keychains have the boilerplate name Katie, but before long, the kids learn how to manipulate the software to carve their own names into the virtual knickknacks.

It is one of their first meetings, and the project is simple. Cherry said the goal is to get them used to the software, a program called Tinkercad, and teach them the basic skills they will need to do more complicated work.

"TinkerCad's simple interface is quickly learned by students and lives in the cloud," said Greenwald. "Being cloud-based streamlines collaboration with our partner classroom in Jordan."

Scott Greenwald, IT manager at the Swift School in Roswell, gives design pointers for the school's Global Inventors program.

As the kids begin to finish their keychains, Cherry invites them to continue tinkering with the software or delve into their study materials on Jordan.

One young girl summons a large red heart onto her screen and places a big gemstone in the middle. She deletes it and begins working on a baby bird with a wide-open beak and tiny chicken legs. A boy creates a yellow rocket ship with colorful bits and modules coming off it.

Cherry praises the boy's creativity and tells him to save the project. If the school has enough printing materials after they print everyone's projects, he may be able to print it out.

The Swift School was founded to focus on kids with dyslexia and related language-based learning problems. Cherry said this project is an extension of the school's heritage.

"Swift School is well known for its emphasis on multi-sensory, hands-on learning," she said. "Many of our students excel in visual-spatial arenas, requiring out-of-the-box thinking."

She said her hope is that the children will use that kind of thinking to find creative solutions to real-world problems. Along the way, she said she hopes they will learn to work together people around the globe.

"Our world is bigger than just these four walls," she said. "I think it's really exciting."