RADIO PLAY  Miles Louison, 10, communicates with another amateur radio operator last week during the Understanding Wireless Technology class at Prairie Middle School in Aurora. The summer class was part of the Inside Out program, sponsored by the Cherry Creek Office of Gifted Education and Advanced Learning. story 45 Lindsay Pierce, YourHub
Kids learning Inside/Out

Summer program teaches students about radio technology

From left, Jack Diack, 10, Ian Pearson, 10, Aida Telford, 9, and Anjalie Kini, 9, listen to transmissions coming from their radio as they use a dual-band antennae to locate a hidden transmitter during their understanding wireless technology class last week at Prairie Middle School in Aurora. Lindsay Pierce, YourHub

By Daniel Smith

Some Cherry Creek High School students conversed with people around the globe recently — and learned to do it without a cell phone.

As part of the school district’s Inside/Out program to offer additional learning to gifted and talented students, Bob Sterner, the district’s senior telecom engineer, introduced them to amateur radio technology — ham radio.

Not just the on-air broadcast aspects, but the technical wizardry behind it.

“We’ve tried to demystify some of the magic behind wireless technology,” he said.

Sterner and volunteer Byron Paul Veal, who runs an established youth amateur radio program at Acres Green Elementary in Littleton, spent 15 hours each with 45 students in the program.

“For me it was just a natural fit — I could go in and explore with these kids that are already easy learners, excited to get into new things and not afraid to tackle something they’re not familiar with,” Sterner said.

He demonstrated some popular technology secrets, using a universal remote control, an oscilloscope and a small robot.

“They love it — they get to class early, they don’t want to leave for break, they don’t want to go home . . .” Sterner said.

Veal said out of four subject areas to choose from, surprisingly, a majority wanted to learn about Morse code.

One student, using the code’s dots and dashes, made a contact in Belgium last week from the radio in the classroom, Veal noted.

Students selected projects to complete as a presentation for their parents at week’s end.

Some students built a directional antenna built made from PVC pipe, metal measuring tape and hose clamps that was used on a “fox hunt” — locating a transmitter hidden in a nearby field with the directional antenna, in the same way biologists track collared wildlife.

“I feel obligated to pass this information on,” Sterner said. “I want to see more kids get their license and more kids on the radio.”

He said most amateur radio operators are now 60 years old or older, but have had a hand in inventions used around the globe.

He said he has a friend who actually bounces radio signals off the ion trails of meteors hurtling through the atmosphere to communicate with other operators hundreds of miles away.

He said rhetorically: “If we don’t refresh that population, who’s to say where we’re going to go?”

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