

# Challis students participate in STEAM program

## THE MESSENGER

Challis middle and high school students learned about electricity during a STEAM day program put on by Steve Dahl, owner of Computer Zen in Salmon.

“The kids had a great time,” Dahl said. After explaining to students how electricity is created, he had them “explore how our nervous system uses chemical and electrical energy to communicate.”

A student was connected to a Backyard Brain device, which captured the electrical activity created when the student opened and closed a hand, Dahl said. Other students could watch the nerves fire on a graph generated on a computer tablet. Next, Dahl connected the Backyard Brain to computer servo motor and a pair of pliers, which allowed students to open the pliers using their mind, not their hands.

He chose to go one step farther and connected a TENS unit, which stimulates nerves, to himself and the Backyard Brain, and allowed a student to control his hand.

After the demonstrations, Dahl and the students discussed practical applications for the technology, which include using it in robotics and for prosthetic limbs.

Students used a Makey Makey system to create a circuit which played music via their bodies. “They were experimenting to see how many students it would take before the signal was too weak,” Dahl said. “They ran out of students to finish the experiment.”

Students also created musical instruments and other things that could conduct electricity via the Makey Makeys.

As part of the program, Computer Zen donated 10 Makey Makey systems to the Challis schools.



STEVE DAHL PHOTO

Challis students created a circuit using their bodies to transmit a signal that played music through a Makey Makey during a STEAM day experiment last month.