



EEDW EVENT Spotlight – ARROWHEAD ECHS Tech Day



Raspberry Pi Tract Workshop

Instructor, Dr. Timothy Chappell, Dona Ana Community College

. “Tech Day” at [Arrowhead Early College High School](#) was an effort between the high school and the [Dona Ana Community College Computer and Information Technology Department](#). In the Raspberry Pi tract, we had 24 Raspberry Pi kits for students to use. We showed the students the components of a single-board computer (*Raspberry Pi*), the terminal command line interface, Python programs, and computer system terminology. With these students, they were able to run Python programs that:

- **Turned LEDs on and off.**
- **Detected motion with a motion sensor.**
- **Displayed the current room temperature and humidity.**
- **Displayed on a message on an LCD display.**

- **Activated a vibration device.**
- **Detect when the device is tilted.**
- **Display date on seven-segment LCDs.**
- **Display a message in an LED matrix.**



We had students in six different sections, with between 15 and 24 students, and all seemed engaged and interested in this Internet of Things (IoT) demonstration. We also have the opportunity to explain options that would be available to them after they graduate from [Arrowhead Early College High School](#).

Cybersecurity Workshop

Instructor, Gustavo Pina, Dona Ana Community College



An introduction to cybersecurity was covered, including information on careers in the field and the [Dona Ana Community College](#) courses in the program. With that, six sessions, with about 20 sophomore students in each session, were held, aiming to introduce them to opportunities at [Dona Ana Community College](#) and New Mexico State University as they make their selections while at Arrowhead Early College. The [RING](#) Curriculum was utilized for 45-minute sessions. In addition, the students were introduced to the materials and lessons available on [CYBERSEEK](#), [Dona Ana Community College's Computer Information Technology](#) page, and [INDEED](#). Using the RING curriculum, the session ended with a Kahoot, and the students loved the gamification of knowledge! Lastly, the [RING](#) curriculum will be utilized in instruction for the fall Dona Ana courses.