Greater Oregon STEM Hub

Organization

Backbone Organization: Eastern Oregon University
Counties in Region: Baker, Grant, Harney, Morrow, Umatilla, Union & Wallowa
Sq. Miles in Region: 28,312
STEM Hub Director: David Melville
Email: dmelville@eou.edu
 Website: go-stem.org

By the Numbers

\# School Districts: 42
\# Students: 29,134
\# Educators participated in Professional Development: 538
\# Educator Hours in Hub PD: 3,382
\# Students participated in STEM Hub Programs: 14,860
\# Student hours in STEM Hub Supported Programs: 63,943

GOSTEM Maker Van

GO STEM's Mobile Maker Lab Effort has been in full swing, visiting schools and community sites across all seven of GO STEM's counties. In its first year, more than 45 school visits and community events have been held. The Mobile Maker Lab Effort has an accompanying curricular menu of which staff members can select from and then GO STEM adapts and provides the learning experience aligned with that selection. Danika Bond, a third-grade teacher from Union County, expressed her appreciation for the Mobile Maker Magnetic Lab after her class participation: "GO STEM did a great job by meeting the kids where they are and getting them excited about magnets! They are still talking about our fun labs." In Grant County, during an Aerospace Lab, high school students followed the Engineering Design Process to build air-powered rockets. One junior student exclaimed: "This is the most fun I've had all day." GO STEM is excited to continue the Mobile Maker Lab Effort into this new year and be able to visit new school sites and community events across their seven-county region.

Computer Science

Thanks to the Governor's Emergency Education Relief funds from the state of Oregon, GO STEM has been able to provide Computer Science equipment to over 70 rural schools across the Greater Oregon STEM Hub region as well as use Computer Science products in Early Learning kits and in the Mobile Maker Lab effort. GO STEM dispersed Computer Science products that could be engaging for teaching students and also developed asynchronous professional development to accompany each item. Teachers have shared feedback on these Computer Science items, including the CODrone, which students use Blockly coding to program to fly drones and complete obstacle courses. A participating educator shared: "This has been a HUGE asset to our STEAM Class. The students are already programming drones and developing competitive games with the other students. It was really effective for my students who weren't passionate about coding games and prefer a mechanical project. They LOVED this and it gave them a purpose for their coding skills. Thank you so much for this opportunity!!!" Another computer science item, BeeBots, are self-contained robots that students program to move by pressing arrows located on the device. A participating educator shared that, "Students are hungry for more and are begging to come up with creative ways of using the BeeBots (challenging each other, obstacle courses, etc.); VERY engaging!" Finally, the Makey Makey kits teach students about coding and circuitry and provide many possibilities for students to build, innovate, and create. One educator shared that, "Students really enjoyed using the Makey Makey kits. The kits were well organized and easy to pass out and collect from students. We tried a few of the projects that came on the instructions in the little boxes. Students were already asking when we can use them again to explore more."

Connected Learning

GO STEM also partnered with the Eastern Oregon Workforce Board to offer career-connected internships for students with industry partners at local businesses. The goal has been for students to have the opportunity to "try out" career paths and see what it is like to work in different industries, thus gaining workforce experience. As one student shared, "This program really helped me to explore a career that, if not for the program, I would have never got to experience. I would recommend this to anyone looking for work experience, a summer job, or if you are just curious about a career." GO STEM has also hosted multiple interns though this program, thus providing experiences to students in STEM education and the work of the STEM Hub Network. As one GO STEM intern shared, "I believe I gained many skills that will help me in my future as well as having experiences over this internship that showed me how important showing up and giving your all is necessary when being asked to complete a task. I feel my leadership skills have grown through interning at GO STEM and am excited to use this newfound leadership in the real world and in my work life.