



OREGON
DEPARTMENT OF
EDUCATION



Organization

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

By the Numbers

School Districts	42
Students	29,906
Educators Participating in PD	48
Educator Hours in PD	1,052
Students Participated in Programs	15,375
Hours of Programming Offered	305
Student Hours in STEM Programs	53,911

Building STEM Engagement Through Consistent Regional Presence

GO STEM staff are witnessing the cumulative impact of consistent regional engagement across Eastern Oregon communities. During a recent visit to a second-grade classroom in Baker City, students eagerly shared their previous experiences with GO STEM programming. One student recalled attending Summer Camp, another remembered the Aerospace Lab visit to his school, and a third had encountered the Mobile Maker Lab trailer at their County Fair.

These responses demonstrate that the organization's multi-touchpoint strategy is effectively building positive STEM foundations for students across the region. By maintaining consistent presence in communities through diverse programming, GO STEM is creating meaningful opportunities for repeated engagement.

This impact was further evidenced during recent planetarium shows in Burns. A boy around 10 years old attended an evening community showing with his family. While initially appearing unengaged, his genuine fascination with space and stars became increasingly apparent throughout the program.

The following day, staff observed the same student returning for another showing—this time bringing a friend. He was overheard telling his companion, "This is going to be so awesome!"

These moments illustrate how sustained, accessible STEM programming creates lasting impact. By meeting students where they are—in schools, at fairs, and through community events—GO STEM staff are building curiosity and confidence that extends far beyond single experiences, reaching students across Eastern Oregon's rural communities.



Empowering Future Educators Through Hands-On STEM Learning

GO STEM collaborated with Eastern Oregon University's Master of Arts in Teaching (MAT) program during its summer Residency Week, providing 90 educators with firsthand experience in hands-on, engaging STEM instruction. MAT candidates explored the Mobile Maker Lab, navigated design challenges requiring creativity and problem-solving, examined artificial intelligence applications in regional agriculture and classroom settings, and learned the complete instructional methodology underpinning GO STEM's lab designs.



The experience showcased GO STEM's transdisciplinary approach emphasizing real-world application, authentic learning, and cross-disciplinary connections. Teachers practiced shifting from the traditional "sage on the stage" role to becoming guides supporting student agency, curiosity, and deeper understanding. By engaging with frameworks such as G.R.A.S.P.S. (McTighe & Wiggins, 2010), MAT students discovered how thoughtfully-designed STEM learning empowers young people to solve meaningful problems and shape their own learning pathways.

This collaboration exemplifies GO STEM's commitment to building educator capacity throughout Eastern Oregon. By partnering with teacher preparation programs, GO STEM ensures future educators enter classrooms equipped with innovative instructional strategies that foster curiosity and purpose-driven learning. Through these partnerships, GO STEM continues supporting the development of future-ready classrooms where students become active participants in their education, preparing them for success in an increasingly complex, interconnected world.

Engaging Students Through Hands-On STEM Experiences



GO STEM staff recently delivered the Basic Drones Lab to students from 6th through 12th grade, addressing teacher concerns about adolescent engagement. While the classroom teacher worried students might be hesitant to take risks or show vulnerability, those concerns quickly dissolved once the drones lifted off. Students enthusiastically dove into the learning experience, eagerly experimenting and mastering obstacle course challenges. Their excitement and engagement demonstrated that well-designed, hands-on STEM activities can breakthrough typical teenage reluctance, creating an environment where every student embraced the opportunity to try something new.

In another recent session, GO STEM's Magnetics Lab created a breakthrough moment for a first-grade special education student. Staff worked with the special education teacher to demonstrate the lesson on magnets and polarity, then provided materials for her to teach independently. Later that day, when the student observed magnets hovering due to opposing polarity, his amazement was immediate and profound. He excitedly ran throughout the school to share his "magic trick" with every class and helper he encountered.

These experiences illustrate GO STEM's dual impact: delivering engaging programming that sparks student curiosity while simultaneously building educator capacity to continue STEM instruction independently. By providing both direct student experiences and teacher support, GO STEM staff are creating sustainable pathways for STEM learning across Eastern Oregon's diverse student populations.