



LEARNING IN ACTION



**IDAHO
STEM
ACTION CENTER**



BRIGHT SPOT STEM Careers in Sight

Bear Lake Middle School

Scores Rising with STEM Career Focus

In remote and rural Montpelier, middle schoolers are building robots, creating music and conducting science experiments. Two years ago, principal Steve Heeder asked his middle school staff: How can we get students talking about college before going to high school? The answer was to expose students to a variety of science, technology, engineering and math careers. The 280 students at Bear Lake Middle School have seven new STEM-based elective classes to choose from and standardized test scores are on the rise.

Eighth-grader Audrey Probst is building a table size LEGO robot and will program and make the robot move in robotics class. She is learning how to code, build and problem solve. Seventh-grader Andrew Quintero is creating music using the sound of drums, guitar and a bass with the GarageBand app on an iPad. He's learning math and engineering skills while piecing together the beats. "I found a passion I never knew I had, maybe I can do this as a job," he said. Heeder's goal is for students to take control of their learning and showcase their work. Students are required to take two elective classes each year out of 18 class options. To give students the opportunity to explore interests and career pathways, Heeder added seven STEM elective classes two years ago.

Since administrators added electives such as robotics and digital composing, 20 percent more students are proficient on the science standardized test. "This is learning in action," says Steve Heeder, the principal at Bear Lake Middle School. In 2016-17, 50 percent of students met or exceeded the state science standards. Just one year later, 60 percent met or exceeded standards a nearly 9% leap beyond the state seventh grade average. Heeder was surprised when science scores jumped. "We aren't doing STEM learning for a STEM sake, it's a tool," he said. "Things are happening."

Heeder believes the purpose is beyond standardize test scores and that educators want to prepare students for the world. STEM is a vehicle for developing these learning characteristics in students. "I want to create even more opportunities for our kids", he said.

Grants through the Idaho STEM Action Center encouraged the staff to think differently. "The culture is changing," said science educator Heidi Northover. "Students are excited about learning." (Originally reported by Idaho Education News)



STEM stands for Science, Technology, Engineering and Math. It's in these subjects that students learn the skills of critical thinking, problem-solving and collaboration— skills that translate to success in many fields. The STEM Action Center is here to support this development and provide Idaho with the talent pipeline it needs for its economy to thrive. Idaho can generate a strong, STEM-competent and competitive workforce that will make us become a prime STEM business destination.



We build STEM through:

EDUCATOR ACCESS

to STEM professional development
THROUGHOUT IDAHO

17,000
EDUCATOR
INTERACTIONS

WORKFORCE

development-focused
partnerships with **INDUSTRY**
and **UNIVERSITIES**

8,000
STEM EDUCATION
interactions through
communities and
businesses

Student
STEM
Competitions
and camp support

500,000
STUDENT
INTERACTIONS

*Today's students will be
tomorrow's workforce,
and STEM AC
has been created
to develop the
STEM-skilled talent that
Idaho employers need.*

INDUSTRY PARTNERS



TODAY'S EFFORTS. TOMORROW'S SUCCESSES.

Industry participation is essential for success, and we're here to help make that participation easier. We've created many ways for Idaho businesses to engage with STEM education. From mentoring and volunteering to donating and partnering, you can help move the economy forward by closing the gaps in Idaho's workforce. Let us help you help Idaho!

LEARN MORE

To learn more about the STEM Action Center's strategies, success stories, and positive impacts in your community, email: admin@stem.idaho.gov.



IDAHO STEM ACTION CENTER

802 W. Bannock St., Suite 900
Boise, Idaho 83702

Phone: (208)-332-1729

www.stem.idaho.gov

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