



PK12 INNOVATIVE STEM GRANT



**IDAHO
STEM
ACTION CENTER**



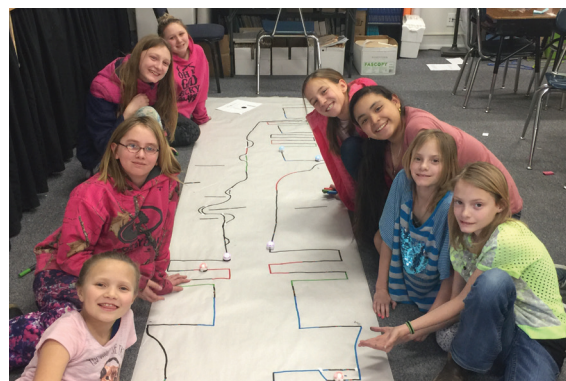
BRIGHT SPOT OZOBOTS: NEW STEM TEACHING TOOLS

Emmett Middle School Operation Ozobots: Closing gaps with a Broader Reach

Emmett Middle School has gotten STEM-savvy: through grant funding, they've furnished classrooms with small coding robots called Ozobots! These Ozobots are genius teaching tools that connect STEM with a range of real-world knowledge. Through these bots, math class is teaching coding, science class is learning the scientific method, computer science class is digging into programming, and kids are practicing reading through sequencing Ozobots with story mapping. Aside from taking learning to a whole new level of engaging and fun, this school is hardwiring students' minds to see how much of their world is connected with STEM, and the full-circle outcome is just what Idaho needs: when these students continue onto their career paths, they'll be looking for the STEM they grew up with, know, and in which they excel.

For the innovative leadership in Emmett Middle School, it doesn't stop there! They've also used robotics to pioneer a new way to run their Ozobot Dance Club, where choreography meets diagramming, coding, and programming. It's so popular that membership grows rapidly, and numerous students have improved grades as a result of participating in this learning experience. Clearly, this isn't just about students getting interested in STEM; it's about getting them interested in success through the mechanics of hard work and invention.

Historically, Idaho has struggled to raise a workforce that closes the gut-wrenching gap of unfilled STEM jobs—a projected total of 36,000 unfilled jobs by the year 2024. The way to rewrite this future is through supporting and spreading movements such as the one at Emmett Middle School. For educator Melissa Hamilton, one of the masterminds behind this school's STEM education, the work includes additional funding, outreach to other schools, and getting more educators involved. The outlook? Promising! Let students see STEM in their growing world, and there will come a day when they see themselves in STEM.



**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. With our best
efforts, Idaho can generate a strong
STEM-competent and competitive
workforce that will make us become
a prime STEM business destination.**



Emmett Middle School's Ozobots are igniting interest in STEM that will translate to future STEM industry employees.

BETTER STEM MEANS A BETTER IDAHO: WHY STEM MATTERS TO OUR ECONOMY

Did you know?...

- In 2017, Idahoans failed to recognize \$420 million in personal income due to the over 7,000 STEM jobs which went unfilled.
- STEM jobs are growing in Idaho! Idaho Department of Labor predicts:
 - 23% growth by 2024;
 - ~36,000 STEM job openings in Idaho by 2024.
- Idaho STEM workers earn double non-STEM workers at a median wage of ~\$29/hour.
- 16 of the 20 fastest growing jobs in Idaho require STEM skills.

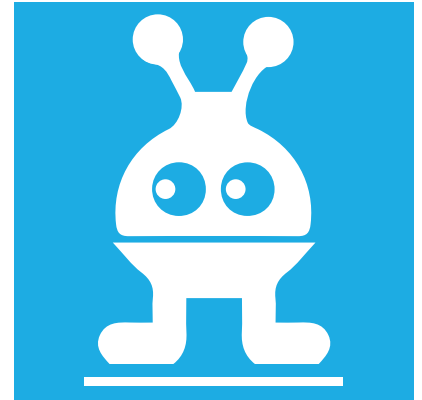
Today's students will be tomorrow's workforce, and STEM Action Center has been created to develop the STEM-skilled talent that Idaho employers need. STEM education is the key to securing Idaho's economy—today and in the generations ahead.



“In this modern era, students need innovative methods of learning that show relevance and include hands-on activities. I hope to develop a deeper interest in STEM education by using modern technology and STEM objectives through the use of Ozobots and coding...providing students access to a higher level of education and future employment with a working background in STEM activities.”

-Melissa Hamilton, Emmett Middle School

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, visit our interactive map at stem.idaho.gov/impact or email: admin@stem.idaho.gov.



IDAHO STEM ACTION CENTER

802 W. Bannock St., Suite 701
Boise, Idaho 83702

Phone: (208)-332-1729

www.stem.idaho.gov

facebook.com/IdahoSTEMAC

#IdahoSTEMAC