

BRIGHT SPOT STEM CAREERS IN SIGHT

Missions from Moscow Launch Student STEM Explorations



STEM ACTION CENTER GRANTS PAY IT FORWARD BY CREATING STEMazing CLASSROOMS!

STEM Action Center funding is creating STEMazing classrooms for Idaho educators. In Dr. Luella Stelck's classroom at J. Russell Elementary in Moscow, students now have access to multiple STEM projects that build their excitement about STEM. Access to STEM education opportunities increase a student's likelihood of pursuing a STEM-related profession.

Apple iPads purchased with STEM Action Center funding allow 3-5th grade students to program robots using drag-and-drop platforms like Spheros and Scratch. The iPads also make adding photos to student projects a snap.

Digital literacy gained through device support provides new opportunities at J. Russell. In 2021, students were invited to participate in a citizen science project. The results of this project will determine polymers selection for materials testing on the International Space Station. Participating students collect data at home and record their observations in a journal. Petri dishes are also stationed around their school showing bacterial growth from various locations. The iPads are being used to collect photos of each sample every school day, as well as taking some stop motion or time-lapse photos of the Petri dishes.

During the pandemic, Dr. Stelck found creative ways to use her STEM equipment. In 2020, Dr. Stelck received a grant through Idaho STEM Action Center to purchase a drone for students to use during a planned Family STEAM Event. When her district decided to stop providing in-person services, the event was cancelled. The 2020-21 school year also will not permit the event to be held. Instead, Dr. Stelck allows interested students and their parents to check out one of the less expensive drones to use. If they like flying it and want to try the more costly drone, Dr. Stelck created a series of activities that students must film with the first drone to earn their "STEAM room Drone Pilot's license". Students who obtain their "license" can check out the expensive drone.

Dr. Stelck commented, "students and parents who enter my classroom for the first time express how much they want to be in it when they see the materials they can use. Plus, students attending the STEAM class often comment on how much they enjoy STEAM. Today for example, students were working on a project and out of the blue one of them exclaims, "I love STEAM class!" This was followed with other favorable comments about the class and what they get to do in it."

Within ten years, 90% of jobs will require digital skills. Dr. Stelck's commitment to providing students with STEM learning opportunities will serve these students through their elementary and secondary education.



There are multiple opportunities each year for Idaho educators to enhance their STEM knowledge through professional development and enhance their classrooms with STEM equipment and allow students to compete in various competitions such as Jr. Botball and Idaho Science and Engineering Fair. For more information on these opportunities see <https://stem.idaho.gov/apply>

Dr. Stelck obtained additional funding for 3D printers and Jr. Botball equipment, giving her students opportunities for creativity, innovation and to pursue their passion for making.



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

22,000
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

164,000
STUDENT
INTERACTIONS

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

Our Partners



Idaho Student Researchers Shine



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.



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