



LEARNING IN ACTION



**IDAHO
STEM
ACTION CENTER**



BRIGHT SPOT American Falls in 3-D

American Falls School District Planting STEM, Growing Roots

A scan of the surroundings from the small community of American Falls reveals the legacy of Idaho's most traditional industry and that of an innovative Idaho icon: acres of potatoes. Thanks to students at American Falls Intermediate, owls emerge from their modern housing to begin the evening vole patrol. Owl houses built with computer numeric controlled (CNC) routers are the latest student creation to attract a welcome and natural pest control solution. More owls mean fewer voles and more productive crops, thanks to these STEM-curious students.

American Falls School District is building a STEM foundation that will impact students at every level. The new J.R. Simplot Elementary, named to recognize an important catalyst of local innovation, will be inspiring young minds with STEM learning tools and opportunities. The focus of the new school will be centered around technology and project-based learning with a high-tech makerspace, virtual and augmented reality, robotics, video production lab, and four additional STEM Labs. A new Maker Space for District schools started as an idea after principal Chris Torgensen brought one 3-D printer into a classroom to tinker with. Curiosity took hold of students one by one, inspiring a 5th grade 3-D club. Torgensen brought in more 3-D printers for 4th graders to join the club. "This wasn't just a one-off, we were seeing a STEM movement here", said American Falls Intermediate School teacher, Nathan Lammers. District superintendent, Randy Jensen worked with industry leaders to retrofit an unused woodshop into a makerspace for an expanded STEM-based program.

Idaho STEM Action Center's i-STEM and Educurious project-based professional development programs provided American Falls School district teachers the tools and resources to build new STEM learning infrastructure and encourage a new mindset. Simplot and INL became enthusiastic supporters, helping American Falls School District gain the equipment and educator skills to connect students with equipment and instruction in 3-D printing, laser cutting, and computer-aided design (CAD) projects with an additional 2 classrooms dedicated to this effort. Idaho Community Foundation also supplied funding and Jensen's team now has plans for integrating long-term STEM project-based learning into the local curriculum. The old abandoned woodshop is now a pathway to career training with 3-D printers, engineering software, 2 laser cutter engravers, a CNC router machine, a full wood shop and 15 3-D pens for kids to work in pairs. STEM competitions are the next step with a robotics challenge in progress.

As part of a long-term STEM-inclusive strategy, American Falls Intermediate is working toward achieving Idaho STEM School Designation and educators are part of the state STEM leadership cohort. At least 150 kids have been directly impacted in just one short year with access to this growing program, connecting them to 21st century skills. With strong community support and industry investment, American Falls grew from a single STEM seed planted to a field of career possibilities. Idaho's now diverse economy is ready for the innovative students of American Falls.



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.



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

Phone: (208)-332-1729

www.stem.idaho.gov

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