

K-12 STEM Education Rural STEM

he mission of the Idaho
National Laboratory's
K-12 Rural STEM program
is to inspire students in rural
communities to pursue
education and careers in
STEM fields. The initiative
recognizes that rural students
often lack access to STEM
resources and provides
engaging programs to
introduce them to potential
futures they may not have
previously considered.

Rural STEM uses various methods, programs, and personnel to benefit students and their communities while enhancing Idaho's future workforce. INL leaders believe STEM resources should be accessible to all, offering free learning tools for students, teachers and parents.

The program sends educators and STEM Ambassadors to present lessons that engage students and raise awareness of STEM careers and hands-on trades crucial to scientific research. These ambassadors, who are INL employee volunteers, serve as mentors, speakers and activity leaders, sharing their expertise across the state.

INVENTION CONVENTION

Idaho National Laboratory partners with Idaho Invention Convention, the premier student invention program in the U.S. Northwest, to host the eastern Idaho Regional Invention Convention. Elementary and middle school students from eastern Idaho are eligible to enter their creations individually or in teams in five invention categories, while high school students can enter their inventions in the high school division. Winning projects from the regional convention are eligible for the state competition in Moscow, ID in

March. State winners exhibit nationally in Dearborn, Michigan, in June. In addition to encouraging creativity and innovation, the Invent Idaho program addresses state science standards and emphasizes the hands-on application of STEM principles in students' inventions.

SCIENCE BOWL

Since 1991, INL has hosted the Eastern Idaho Science Bowl in partnership with the Department of Energy Office of Science Workforce **Development for Teachers** and Scientists. This annual tournament encourages middle and high school students to excel in science and math and pursue careers in those fields. The winners of these competitions go on to compete in a national competition in Washington D.C.





IETA conference STEM booth at STEM Action Center in Boise, ID



High School Science Bowl at University Place

MY AMAZING FUTURE

Each year, INL gathers nearly 300 eighth grade students to see what their future could hold: potential careers in STEM. At a time when rural students lack the exposure their urban counterparts receive, interaction with researchers, engineers and scientists at INL inspires them to pursue a STEM education and career pathway.

INL grants over \$300,000 annually to Idaho educators through Battelle Energy Alliance, offering funding for classroom materials across five grant categories. A letter of intent with the Fremont **County School District** ensures rural students can participate in STEM activities and lab tours. Additionally, INL collaborates with the **Feedstock Conversion** Interface Consortium on a competition to design biomass processing hoppers, with prizes for participating schools.



High School Science Bowl at University Place



My Amazing Future

The goal of the program is to provide rural students with the same STEM opportunities as their urban counterparts, leveraging their unique skills and experiences to foster interest and competence in STEM fields.

Battelle Energy Alliance manages INL for the U.S. Department of Energy's Office of Nuclear Energy.



FOR MORE INFORMATION

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