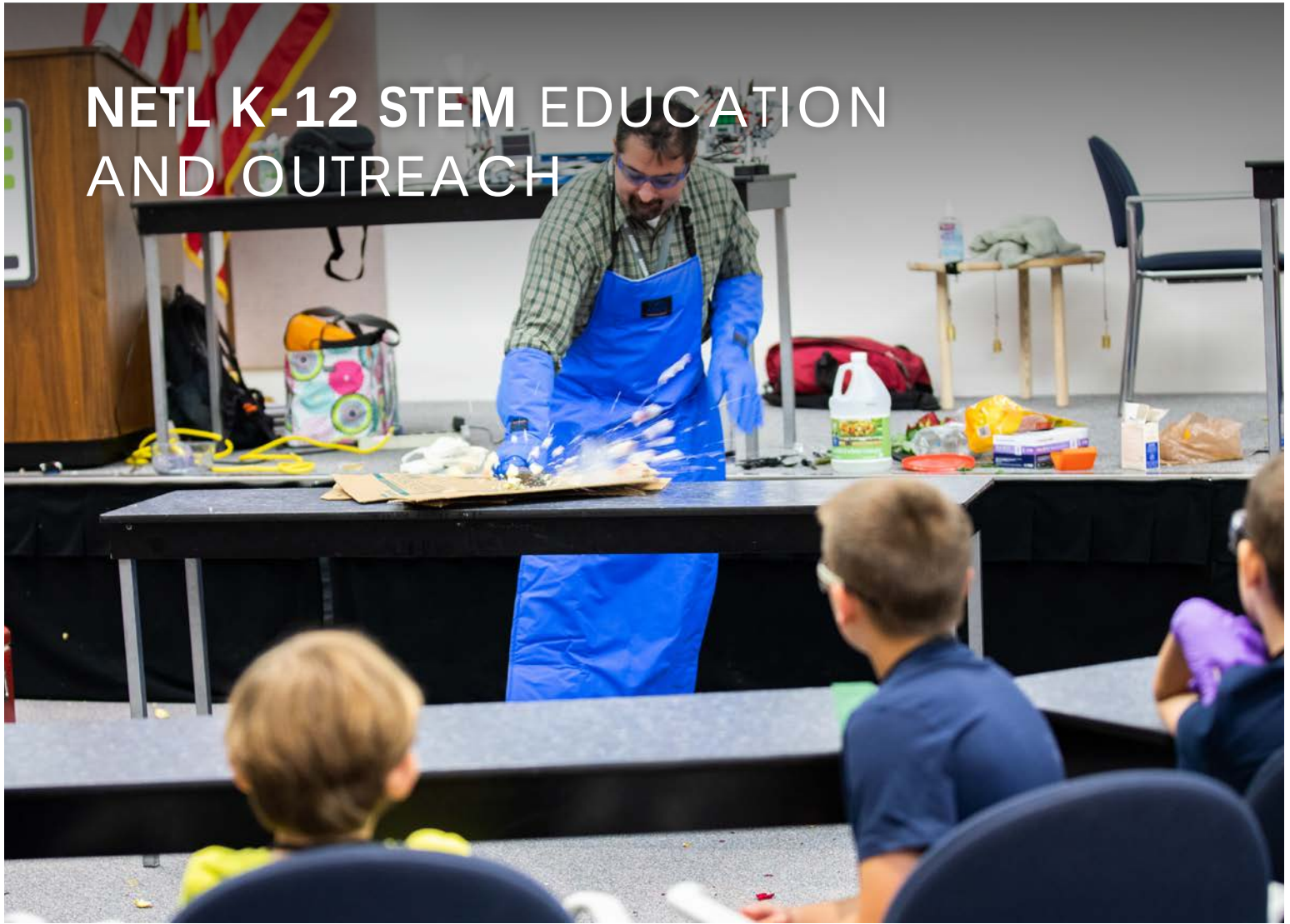


NETL K-12 STEM EDUCATION AND OUTREACH



August 2026



BACKGROUND

The U.S. Department of Energy's (DOE) mission is to ensure America's security and prosperity by addressing its energy, environmental, and nuclear challenges through transformative science and technology solutions. Ensuring a future workforce that is well-trained in science, technology, engineering, and mathematics (STEM) is a core value of DOE and central to the Department's current and future mission. NETL supports this effort in many ways, including the implementation of a robust STEM Education and Outreach program.



PROGRAM OVERVIEW

NETL's K-12 STEM Education and Outreach program supports DOE's efforts to improve energy literacy and train the next generation of American scientists, engineers, and energy researchers. The initiative sparks interest in and increases the public's awareness of STEM education. The program engages students at all levels, the public, program volunteers, and faculty and staff at regional institutions of higher learning.

NETL K-12 STEM EDUCATION AND OUTREACH ACTIVITIES

NETL's STEM Ambassador Program

The program enables students to meet and interact with NETL scientists and engineers during visits to regional schools and at local STEM events. The program shows students the multiple, dynamic pathways to STEM-related occupations and careers. To request a K-12 STEM engagement opportunity, visit the [NETL K-12 STEM Education Outreach page](#).

NETL Laboratory Tours

The K-12 STEM Education and Outreach Team facilitates [laboratory tours](#) for K-12 youth groups at NETL sites in Albany, Oregon; Morgantown, West Virginia; and Pittsburgh, Pennsylvania. Tour stops provide insight into scientific investigation and inquiry in action, including research at NETL, and may include demonstrations, hands-on activities, and career awareness presentations, depending on tour group age and interest.

STEM Teacher Workshops and Seminars

NETL collaborates with school districts, universities, and other stakeholders to deliver or assist in the delivery of in-person and virtual professional development opportunities for area teachers. These include workshops, seminars, and other support programs to aid teachers in their professional development. To find out more about these offerings, please reach out to Education.Outreach@netl.doe.gov.

STEM Education Digital Media

NETL provides [STEM Education and Outreach webpages](#), digital content, and virtual event collaboration. The digital platforms will promote STEM content, events, and competitions, and showcase STEM Ambassadors, providing a way for NETL to connect with students, teachers, and the regional STEM education community. STEM Education Digital Media may include:

- Meet a Scientist and Career Showcase events
- YouTube, Facebook, Instagram, and LinkedIn highlights and promotion of competitions and events
- Virtual tours of NETL

Regional Science Bowl Competitions

NETL's K-12 STEM Education and Outreach Team plans and executes the [Western Pennsylvania](#) and [West Virginia](#) Regional Middle and High School Science Bowl competitions.

- Teams compete in fast-paced, 16-minute matches covering a range of STEM disciplines.
- The top teams from each state then advance to the National Science Bowl in Washington, D.C.



Middle school students compete in an NETL-sponsored regional Science Bowl competition.



High school students compete in the West Virginia Regional Science Bowl at West Virginia University in Morgantown, WV.

NETL Energy Zone Exhibit

NETL supports the Energy Zone Exhibit at Pittsburgh's Kamin Science Center, which includes the Energy Challenge game.

- The Energy Challenge is a fun, quiz-style exhibit presented in a game show format.
- The Energy Zone Exhibit and the Energy Challenge Game are located on the fourth floor of the Kamin Science Center, which attracts 1,500 students daily in peak season.
- For more information, visit: <https://kaminsciencecenter.org/exhibits/netl-energy-zone/>

Community Special Events

NETL also participates in special [community events](#). If you or your organization is interested in partnering with NETL on STEM educational opportunities in which NETL staff might participate, please email Education.Outreach@netl.doe.gov.





NETL is a U.S. Department of Energy (DOE) national laboratory dedicated to innovating and accelerating the nation's energy solutions in hydrocarbon, geothermal energy and critical minerals production. With research sites in Albany, Oregon; Morgantown, West Virginia; and Pittsburgh, Pennsylvania, NETL operates as one laboratory to apply its expertise in subsurface materials and processes, materials engineering, energy conversion, systems analysis, computational science and program deployment to implement DOE programs across the nation and advance energy technologies. Through its collaborations and world-class research, NETL is strengthening national energy security and contributing to an America that leads the world with affordable, reliable and secure energy to fuel human prosperity.

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