

ARNG Energy Lab

What is it? In response to President Obama's "Educate to Innovate" campaign, the Army National Guard launched the Mobile Learning Center (MLC) program to promote science, technology, engineering, and math (STEM) literacy to high school students across the nation. In the tour vehicle, The Energy Lab, students explore the math and science behind energy efficiency, and the renewable and non-renewable resources that drive many current and future STEM career fields.

What has the National Guard done?

The National Guard Education Division successfully launched The Energy Lab tour on 30 September 2010 in Washington DC. The Energy Lab executed a nationwide tour during the 2010-2011 school year, visiting schools, science fairs and events at no cost to the students, serving as a resource to promote STEM education.

The program made 26 site visits in 20 states, including high schools, science centers, and other event locations. Over 16,000 students participated in the program along with 1,858 educators and 2,561 other community members. Participants were encouraged to follow the Energy Lab on Facebook and utilize the educational materials available for students, educators, and parents.

Why is this important to the National Guard?

While the United States boasts great schools, excellent teachers, and successful students, there are also troubling signs that, overall, our students should be doing better in math and science. In the [2006 Programme for International Student Assessment \(PISA\) comparison](#), American students ranked 21st out of 30 in science literacy among students from developed countries, and 25th out of 30 in math literacy. On the [2009 National Assessment of Educational Progress \(NAEP\) math tests](#), 4th graders showed no signs of progress for the first time in years, and 8th graders tallied only modest evidence of progress. The MLC program addresses this lackluster situation by engaging students in math and science and inspiring students to pursue careers in the STEM fields that are currently driving the global economy. The goals and objectives of the MLC align with the mission of the Department of Defense's 2010 STEM Education Outreach Plan, which recognizes that STEM talent is essential to meeting DoD's workforce needs and strengthening the Nation's security and ability to compete in the current globalized workforce.

What continued efforts does the National Guard have planned for the future?

Currently, program operations are pending a potential shift to non-DoD funding sources. Collaborations with the Department of Education and other agencies are ongoing to reinstate program operations. Program pictures, videos and curriculum are available online at www.facebook.com/ngenergylab.