

Published on DoD STARBASE (http://dodstarbase.org)

Home > About Us > Program Description

DoD STARBASE focuses on elementary students, primarily fifth graders. The goal is to motivate them to explore Science, Technology, Engineering and Math (STEM) as they continue their education. The academies serve students that are historically underrepresented in STEM. Students who live in inner cities or rural locations, those who are socio-economically disadvantaged, low in academic performance or have a disability are in the target group. The program encourages students to set goals and achieve them.

The program engages students through the inquiry-based curriculum with its "hands-on, mind-on" experiential activities. They study Newton's Laws and Bernoulli's principle; explore nanotechnology, navigation and mapping. They are captivated by engineering as they use the computer to design space stations, all-terrain vehicles, and submersibles. Math is embedded throughout the curriculum and students use metric measurement, estimation, calculation geometry and data analysis to solve

questions. Teamwork is stressed as they work together to explore, explain, elaborate and evaluate concepts.

The military volunteers apply abstract principles to real world situations by leading tours and giving lectures on the use of STEM in different settings and careers. Since the academies are located in different branches of the military this experience is highly varied. Students may discuss how chemical fires are extinguished, learn how injured are transported, explore the cockpit of an F-18 or the interior of a submarine.

The academies work with school districts to support their standards of learning objectives. A teacher whose class attended DoD STARBASE stated, "STARBASE teaches science and math in ways that we wish we had the time, resources and expertise to do in the regular classroom. It's experiential, exploratory learning with a direct tie to the standards."

Source URL: http://dodstarbase.org/program-description