



Published on *DoD STARBASE* (<https://dodstarbase.org>)

[Home](#) > Students Blast Off with STEM Project at Peterson AFB

Students Blast Off with STEM Project at Peterson AFB

Fifth-graders launched rockets at Peterson Air Force Base on Tuesday as they learned the periodic table, engineering design processes and other useful information through STARBASE, a Department of Defense-funded STEM enrichment program.

The students choose alternative names — Ms. Galaxy, Nova, Mr. Universe, MC-square, Dr. Earth and Mr. Periodic among them — as much out of fun as to create a science-learning environment.

The free Peterson program provides 25 hours of “hands-on, minds-on learning” each year for more than 1,300 at-risk, underserved fifth-graders throughout the Pikes Peak region, said STARBASE Director Patty Smathers. They come from private schools, home schools, Harrison School District 2, Colorado Springs District 11, School District 49 in Falcon, Ellicott District 22 and Calhan District RJ-1. Five sessions address all aspects of science, technology, engineering and math, usually over five weeks.

“We also have presentations from military personnel and community members,” Smathers said. “We want the kids to see that STEM is everywhere.”

Libby Moody, fifth-grade teacher at D-49’s Imagine Classical Charter Academy, has had her classes participate for four years, scheduling their STARBASE time to serve as a review before standardized tests in April. “This way the science is fresh in their minds. We can only do so much with words and books, nothing as cool as this.”

Imagine student Madigan Wall, aka MC-square, echoed that assessment, saying: “This is a really cool way to learn how science works just using everyday things to make something. I definitely want to be an engineer when I grow up.”

Madigan even replicated at home the egg-launching experiment she learned at STARBASE. “My sister got it on video.”

Wilson Elementary School teacher Taylor Valachovic is in her third year with STARBASE. “It opens up a lot of opportunities for us with things we can’t do at our own school. It helps get the kids ready for middle school science. It’s an awesome program,” Valachovic said. “From years past, I’ve had kids tell me they like doing science here. Now one wants to be a chemist, and one wants to be an astronaut.”

The STARBASE team consists of Smathers, two full-time instructors and two part-time teaching assistants.

It's not only about science, technology, engineering and math (STEM), but also manners, safety and humor. These are augmented by the giggles, oohs and ahhs from the kids when their canisters, containing Alka-Seltzer and water, blast up through a clear, 230 centimeter-long tube.

Damani Stevenson was among the boys whose canister blew the top off the tube. The students' pride and enthusiasm were palpable as they raised their arms in triumph, cheering their success. "I've struggled with math a lot, but this is really helping me with what I'm learning in school."

STARBASE at Peterson is one of 67 sites in the U.S. and the only one in Colorado. The concept began in the early 1990s at Selfridge Air National Guard Base in Detroit. The local program started in 2015, when Smathers became director. She is an Air Force veteran and a former satellite commander control officer at Schriever Air Force Base. She's also a licensed teacher for kindergarten through sixth grade.

"This was the most fun," Haiden Teague said of the canister launch. "I wanted to do art before this, but now I want to do science."

[Full Article](#) ^[1]

Posted April 2019

Source URL: <https://dodstarbase.org/articles/students-blast-stem-project-peterson-afb>

Links:

[1] https://gazette.com/education/students-blast-off-with-stem-project-at-peterson-afb/article_e7b70cc0-4a77-11e9-aed0-7b3cf5675128.html