

# STARBASE Minnesota



**STARBASE Minnesota is:** a 501(c)3 nonprofit organization, founded in 1993 whose mission is to educate and inspire youth in science, technology, engineering and math (STEM). Since 1993, STARBASE has served over 62,000 Twin Cities' youth. STARBASE is a program of the Department of Defense and Minnesota National Guard who provide a state of the art facility, access to an exciting, technology-rich environment, inkind services and volunteers. STARBASE partners with area school districts to provide STEM programming, and corporate partners that provide financial/inkind support, and volunteer scientists and engineers to programs. Fall 2017, STARBASE expanded to Duluth, MN on the 148<sup>th</sup> Fighter Wing of the MN National Guard. STARBASE has a 22-member Board of Directors and 12-member Duluth Advisory Board with backgrounds in business, education, military and government. There are 64 STARBASE locations in the U.S. in 40 states and Puerto Rico.



**STARBASE Minnesota provides:** immersive five-day, 20-25 hour STEM programs for grades 4-6, with authentic, rigorous and engaging learning aligned to standards. STARBASE also supports STEM learning long after STARBASE through the STARBASE 2.0 mentoring program, Clubhouse extensions and Student Guide to Pathways in STEM. STARBASE partners with area universities to provide field experiences for future educators increasing classroom impact exponentially.

**In FY19, STARBASE will serve over 3,600 students/year in St. Paul and over 1,100 in Duluth. In FY18, STARBASE served 3,559 students from 37 Twin Cities' schools:**

Male	Female	Low income	ELL	African Amer	Asian Amer	Caucasian	Hispanic	Native Amer	Multi-Racial
40%	50%	54%	46%	20%	20%	31%	17%	2%	10%

**FY18 Student & Teacher Results:**(measured by pre and posttests; surveys and evaluations; Wilder Study)

- 97% students increased knowledge / skills in science, math, technology and engineering
- 94% average improvement pre to posttest: 4<sup>th</sup> gr- 33 percentage point gain; 5<sup>th</sup> gr-33; summer-32
- 96% students reported STARBASE made learning fun; 88% have increased interest in STEM;
- 96% classroom teachers reported gains in own knowledge/teaching skills
- 99% teachers rated STARBASE excellent or very good; 100% want to return.
- 8-10 years later, 99% of former STARBASE students surveyed thought STARBASE was valuable learning experience; 83% felt the program helped them understand STEM better and 79% said it increased their interest in STEM; additional positive impacts on graduation and college enrollment. *See full study conducted by Wilder Research.*

**FY18 Educator and Volunteer Participation:**

- 107 military volunteered 745 hours at graduations, rocket launches, tours, and as mentors.
- 127 corporate scientists/engineers volunteered 308 hours, demoing "real world" STEM/careers.
- 265 educators participated 3,872 hours in the program, bringing STEM learning back to schools.
- 373 parents volunteered 2,355 hours assisting in the classroom, bringing STEM learning home.
- 37 board volunteers and other community members volunteered 939 hours
- 28 pre-service teachers in college participated in over 409 hours of observation/field experiences.
- 22 STARBASE Minnesota, Inc. Board of Directors members volunteered 764 hours.

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