

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 66,000 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 148th Fighter Wing of the MN National Guard. STARBASE has a 23-member Board of Directors and 11-member Duluth Advisory Board with backgrounds in business, education, military and government. There are 66 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 served **3,623 students from 43 Twin Cities schools and 1,674 from Duluth. STARBASE will serve 3,500-3,600 students/year-St. Paul and over 1,600-Duluth this coming year:**

STARBASE St. Paul Student Demographics

Male	Female	Low income	ELL	African Amer	Asian Amer	Caucasian	Hispanic	Native Amer	Multi-Racial
51%	49%	57%	23%	27%	18%	31%	13%	2%	9%

FY19 Student & Teacher Results:(measured by pre and posttests; surveys and evaluations; Wilder Study)

- 95% students increased knowledge / skills in science, math, technology and engineering
- 80% average improvement pre to posttest: 4th gr- 30 percentage point gain; 5th gr-31 percentage point gain
- 98% students reported STARBASE made learning fun; 88% have increased interest in STEM;
- Additional pre/post student survey data reflected exceeding targets for positive change in attitude toward STEM, confidence in their STEM abilities, a broader view of themselves in STEM and the STEM careers they have interest in pursuing.
- 96% classroom teachers reported gains in own knowledge/teaching skills
- 99% teachers rated STARBASE excellent (91%) or very good (8%); 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.*

FY19 Educator and Volunteer Participation:

- 91 military volunteered 704 hours at graduations, rocket launches, tours, and as mentors.
- 113 corporate scientists/engineers volunteered 288 hours, demoing “real world” STEM/careers.
- 325 educators participated 4,145 hours in the program, bringing STEM learning back to schools.
- 448 parents and community volunteers contributed 2,752 hours supporting student learning
- 73 pre-service teachers in college participated 556 hours in observation and field experiences.
- 23 STARBASE Minnesota, Inc. Board of Directors members volunteered 553 hours.

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