

# Final Report UEF 25-044

## STEM Pathways for Indigenous Youth: Going Further Together

The Society of American Military Engineers continues to collaborate with Indigenous people across the United States. This year we supported local STEM activities in conjunction with the Seminole Nation of Oklahoma, Pueblo of Santa Ana, Pueblo of San Felipe, Navajo Nation, and a variety of Alaska Native communities. In addition, we went to where Indigenous adults were present including parents, teachers, and tribal leaders. This provided us an opportunity to promote STEM careers, scholarships, and the willingness of SAME to partner with Indigenous communities.

### Local Partnerships

SAME continues to partner Posts (local chapters) with Indigenous communities in their vicinity to provide STEM support to youth and families. As previously noted, trust grows by maintaining programs over the long-term, not just a single year. In 2025 we supported three local STEM partnerships.

**Alaska:** the SAME Post collaborated with school districts, Alaska Native Corporations, and Tribal Councils to provide mini grants.

- Mertarvik Pioneer School, Mertarvik, Alaska received purchased a hydroponic garden program which will address food insecurity as well as STEM
- Copper River School District: Denali Borough School District & Gateway School District in the Ahtna Native Corporation used funds to:
  - Purchase and provide science equipment and Expand the Emerging Robotic Program to two additional schools
  - Purchase microscopes for elementary and high school students
  - Purchase egg incubators
- Kusilvak Career Academy (KCA) continued the development of an indoor drone racing curriculum
- Alaska Native Cultural Charter School was able to purchase essential supplies, materials, and guest speakers for full curriculum implementation of the Math in a Cultural Context curriculum in all its Kindergarten (K)-eighth grade classrooms
- Campbell Elementary STEM School was able to implement a robotics program

**Florida:** SAME continues to collaborate with the Seminole Tribe, which is split between Florida and Oklahoma. For 2025, the team decided to provide a 3-day STEM camp focused on STEM experiences that the students would not normally have in Oklahoma. Twenty students came from Oklahoma for STEM experiences at Kennedy Space Center, the St. John's River, and Universal Studios.

**New Mexico:** SAME worked with the Pueblo of Santa Ana, the Pueblo of San Felipe, NM MESA, and American Indian Services Prep to host a middle and high school STEAM Day on

November 14, 2025. Almost one hundred participants registered although not as many attended. Six hands-on stations included hydrology & hydraulics; bridge building: building Da Vinci bridges; conducting surveys with drones; building with LEGOs; sound engineering: and taking core samples from simulated soil layers.

## Outreach to Indigenous Youth, Elders, Business Partners

It is not enough to reach out to students. Research shows that parents are still the primary career influencer in a child's life. Parents as well as other key influencers such as teachers and leaders within the Indigenous community need to know about the value of engineering careers and how these careers can positively impact the lives of the students and the welfare of the Indigenous community.

To do this, SAME decided to exhibit at events where large numbers of Indigenous influencers and/or businesses would be present.

To prepare for the conferences, the STEM Pathways team developed a logo based on the Indigenous medicine wheel colors representing the four directions. They also designed banners and a table covering that can be used at a variety of locations. In 2025 these materials were used at the American Indian Science and Engineering Society's National Conference, the Alaska Federation of Natives convention, the SAME STEAM Day in Albuquerque NM, and the SAME Small Business Conference.

The AISES Conference had 4,000 attendees, the AFN Convention 6,000 attendees, and the SAME SBC had 5,000 attendees.

	Final Expenditures
<b>TOTAL BUDGET</b>	<b>\$90,687.94*</b>
UEF Portion	\$68,250 (75% of the cost)
SAME Foundation Portion	\$22,437.94 (25% of the cost)
Budget Breakdown	
	3 sites to conduct activities with youth: \$66,790.08 <ul style="list-style-type: none"> <li>Albuquerque NM \$5,557.81*</li> <li>Anchorage AK \$25,855.82</li> <li>Florida: \$35,376.45</li> </ul>
	Direct outreach at conferences such as AFN to parents/ educators/ AEC partners \$30,000 <ul style="list-style-type: none"> <li>AISES Convention \$15,798.13</li> <li>AFN Conference \$2,750.00</li> <li>SBC Conference \$5,349.73</li> </ul>
	Symposium dropped in favor of attendance at two additional direct outreach events (see above)