

Project Spotlight: Pennsylvania Space Grant Consortium



Project Type: Evaluation Planning
Timeline: Sept. 2023 - June 2024



PennState

About the Client

The Pennsylvania Space Grant Consortium (PSGC) is one of 52 state-level consortia funded by NASA's National Space Grant College and Fellowship Project, a federal program initiated in 1989 to support aerospace-related STEM education and research opportunities for students at pre-college, college, and graduate levels. Based at Pennsylvania State University's flagship campus in State College, PA, PSGC consists of 17 university affiliates



across the state and various smaller grant recipients, including other universities, high schools, and middle schools. PSGC distributes NASA's funding in the form of sub-grants to a wide variety of programs:

- **Affiliate Institution Programming:** Includes academic research assistant positions, student-run labs and interest groups, summer internships, and funding for participation in conferences, research trips, and other activities.
- **Mini-Grants:** Supports similar activities at a smaller scale, as well as STEM-related programming for middle and high school students.

In the 2020-2024 grant cycle, PSGC distributed over \$2.5 million to 74 programs across Pennsylvania.

Project Scope

For the upcoming Space Grant cycle beginning in 2025, NASA now requires each state consortium to hire an independent evaluator to track program progress and outcomes. Anavi Strategies was selected to serve as the evaluator for PSGC. This project spotlight describes the first phase of Anavi Strategies' work with PSGC, which involved developing an evaluation plan for the 4-year grant period to support PSGC's application for renewed NASA funding. The evaluation plan needed to comply with NASA's new template and requirements. Our objective was to create a plan that met these new requirements while being as useful, minimally burdensome, and easily integrated for PSGC and its affiliate institutions. We also aimed to leverage existing processes and data collection efforts to streamline the implementation of formal evaluation into PSGC's established program.

Project Activities

PSGC Team Engagement

Conducted in-depth discussions with PSGC leadership at Penn State University to understand the program's structure, processes, and needs.

Data Management Interview

Met with the third-party manager of PSGC's current data tracking and storage system to understand the details of data currently collected by the program.

Existing Data Review

Reviewed all administrative, historical, and longitudinal data collected by PSGC to integrate these efforts into the evaluation plan, minimizing operational changes.

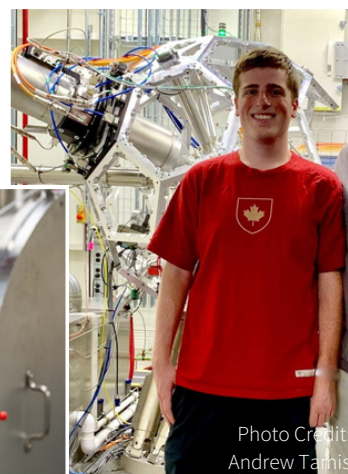
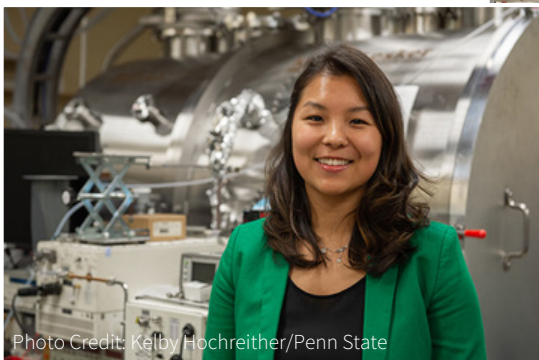
Affiliate Focus Group

Organized a virtual focus group with representatives from all 17 affiliate institutions to gather insights on capacity and how the evaluation could benefit them.

Collaborative Drafting Process

Utilized an iterative and collaborative drafting process of the evaluation plan, incorporating feedback from the focus group, data review, and conversations with PSGC. Regular feedback opportunities were provided to ensure the plan met the program's needs.

PSGC supports students like Natalia, Andrew, and Matthew as they pursue education and careers in aerospace.

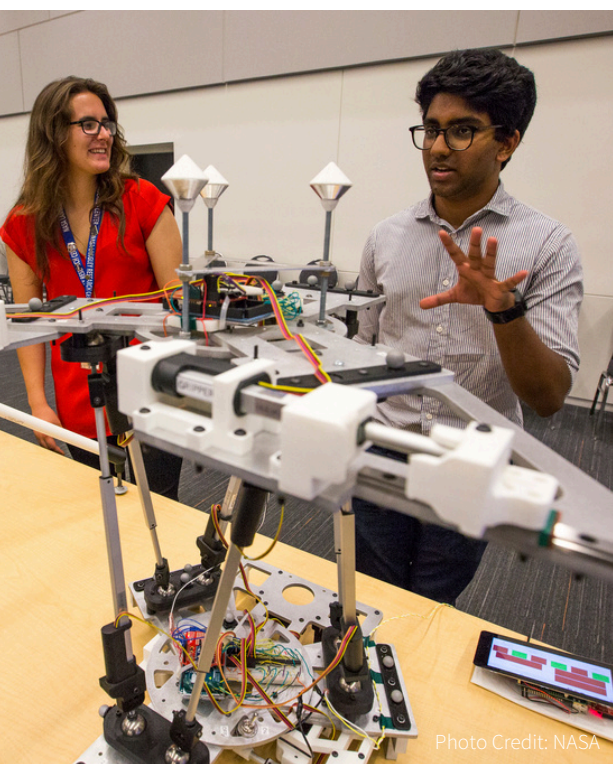


Final Evaluation Plan

Through these activities, Anavi Strategies developed an evaluation plan that adheres to NASA's requirements while meeting PSGC's needs. The plan integrates seamlessly into PSGC's existing communications, annual touchpoints with affiliates, current student surveys, and data collection efforts, ensuring effective evaluation without burdening the affiliate professors.

The final plan includes:

- SMART goals, program objectives, and performance measures to track PSGC's progress and success of PSGC over the grant cycle.
- A comprehensive logic model detailing PSGC activities and outcomes.
- Guiding evaluation questions covering five areas: general program outcomes, student diversity, student experience, student career outcomes, and mini-grants.
- Pre/post survey instruments to measure student experience, engagement, and educational benefits of participating in PSGC.
- An indicator table and analysis method table summarizing our evaluation approach.
- A detailed evaluation timeline outlining the schedule for data collection, analysis, and reporting over the grant cycle.



Looking Ahead

Anavi Strategies looks forward to continuing our partnership with PSGC into the next grant cycle. We will collaborate annually with the Penn State University team to collect administrative and evaluation data from PSGC participants, analyze that data in-house, and produce annual reports for PSGC leadership and NASA program administrators.