

The Next Decade: Space Grant Goals and Objectives

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Actions

Major Actions

- 1) Increase funding and funding stability to also include support from entities other than NASA.
- 2) Improve relationship with NASA management and the larger NASA community.
- 3) Improve visibility of Space Grant programs.
 - Ensure that opportunities and program impact are known across NASA, with local, state and federal government, with students, educators and the public.
- 5) Increase industry involvement in space grant.
 - Build national and local partnerships to support internships, collaborative research and enhanced workforce training.
- 6) Conduct collaborative multi-state experiential higher education programs.

Strategic Activities for accomplishing Major Actions

- 1) Maintain strong National Space Grant Alliance activities.
- 2) Fulfill the intention of the National Space Grant Foundation by using its platform to build national partnerships.
- 3) Increase the effectiveness of the mission directorate working groups by inviting increased NASA participation in working group activities.
- 4) Create a communication working group.
- 5) Create an industry partnerships working group.
- 6) Capitalize on existing regional working groups to generate ideas for collaborative programs.

Goal

Contribute to the nation's science enterprise by funding education, research, and informal education projects through a national network of university-based Space Grant consortia.

Objective 1. *Establish and maintain a national network of universities with interests and capabilities in aeronautics, space and related STEM fields using strategies that emphasize jurisdiction strengths and capabilities while addressing NASA needs.* Strategies:

- a) Better advertise Space Grant through effective use of social media, NASA TV and other methods available to the extensive space grant network.
- b) Seek and utilize funding from other entities to support the space grant network and student engagement.
- c) Promote the STEM curriculum in community and technical colleges and rural campuses.
- d) Conduct undergraduate scholarship, graduate fellowship, and faculty and student research programs.
- e) Conduct high-quality student group projects and competitions that increase student skills and collaborate with technical experts from NASA, industry and other partners when possible.

Objective 2. *Engage in cooperative programs among universities, aerospace industry, and Federal, state and local governments.* Strategies:

- a) Increase the interaction between space grant consortia and industry by increasing student internships and collaborative research involving industry.
- b) Increase the number of industry affiliates in the space grant network and build strategic national and local partnerships with aerospace companies to provide enhanced workforce training.

- c) Establish direct communication with local and state governments and school systems to ensure greater inclusion of NASA resources, content, and programs.
- d) Use funds from state and local governments to expand the impact of space grant programs.
- e) Develop a closer relation to the NASA Centers and more direct role in placing students at these Centers.

Objective 3. *Engage in interdisciplinary training, research and public service programs in aeronautics, space and related STEM fields.* Strategies:

- a) Conduct multi-state, experiential higher education programs that can be cooperative and not just competitive activities and may include team-oriented interdisciplinary research or design projects.
- b) Enhance publicity and communication of space grant activities.
- c) Support fellowships, research, design programs, space and aeronautics hardware programs, and internships which engage students in interdisciplinary activities.
- d) Better communicate and support design competitions sponsored by federal agencies, professional societies and industry.

Objective 4. *Recruit and train U.S. citizens, especially women, underrepresented minorities, and persons with disabilities, for careers in aerospace science and technology using strategies that emphasize diversity and coordinate with Minority Serving Institutions (MSI), Historically Black Colleges and Universities (HBCU), Native American Tribal Schools, Schools for hearing and/or sight impaired, and other similar institutions in the jurisdiction as well as with NASA programs such as MUREP (Minority University Research and Education Program).*

Strategies:

- a) Effectively advertise wide range of STEM opportunities to students at space grant institutions.
- b) Effectively advertise space grant activities on each campus specifically targeting student and university organizations that serve under-represented populations.
- c) Develop and promote programs specifically addressing retention and recruitment issues of under-represented populations.
- d) Enhance the impact and integration of Minority Serving Institutions (MSI's) in the space grant national network.
- e) Improve efficiency of data collection processes showing student recruitment, engagement, retention, employment and diversity. Utilize this data with stakeholders to increase support for space grant.

Objective 5. *Promote a strong science, technology, engineering, and mathematics (STEM) education base from elementary through secondary levels.* Strategies:

- a) Support STEM training for pre-service, in-service, and informal educators (K-12), including teacher-training workshops involving NASA relevant classroom content and STEM curriculum support.
- b) Promote interaction of university faculty, higher-education students, and space grant affiliates with K-12 educators and students, including activities at space grant higher education campuses.
- c) Foster hands-on and team-oriented programs engaging K-12 students, educators and informal education organizations.