NASA Kansas Space Grant Consortium

Request for Proposals

Teacher Workshop Program

Due: May 5, 2023

Background

The NASA Kansas Space Grant Consortium (KSGC) Teacher Workshop Program (TWP) supports the development and implementation of Science, Technology, Engineering, and Mathematics (STEM) educator workshops. NASA is especially interested in helping teachers bring NASA-relevant material and content into middle-school classrooms.

KSGC affiliate proposals are competitively awarded by peer review. Multiple awards of between $15,000-50,000 each are anticipated. Affiliates must identify a $0.50 commitment for every NASA dollar requested (use of federal matching funds is not allowed). Matching funds can be real-dollar, in-kind, or waived/reduced indirect costs provided by the institution, industry, or private sponsors.

The majority of activity should be planned to take place between June 2023 and March 2024. Follow-up activities, such as reporting and program evaluations, can take place within three months following a workshop.

Proposals & Selection

Proposals should comply with the following guidelines:

1. The cover sheet should include the proposal title, all critical contact information, and a signature from the principal investigator's financial authority (showing the commitment to matching funds)
2. A six (6) page length limit (excluding cover sheet, budget, and related institutional pages)
3. Utilize one-inch margins and a 12-point Times New Roman font
4. Student participants receiving direct support must be U.S. citizens

Workshop proposals are reviewed and considered for awards based on:

1. The objectives and responsiveness to NASA and specific mission directorate interests and goals
2. The impact on women and underrepresented minorities (both teachers and students), especially in middle schools
3. Specific metrics that demonstrate achievements (e.g., project S.M.A.R.T. goals, measurable outcomes, and milestones)

4. Plans to complete and meet all reporting and longitudinal tracking requirements, including the collection of teacher data (e.g., full name, gender, ethnicity, address, the field of study, etc.) and compliance with Personally Identifiable Information (PII) data management expectations
5. Evaluation mechanisms, which demonstrate teachers utilize the workshop's NASA relevant materials, knowledge, and experience in their classrooms
6. The proposed budget's clarity and appropriateness

Feel free to contact your Affiliate Representative or the KSGC Director, L. Scott Miller (scott.miller@wichita.edu), with any questions. Consult NASA's Education website, for additional helpful information (http://www.nasa.gov/offices/education/about/index.html).

Submissions & Awards

Submit proposals to NASA in Kansas (nasainkansas@wichita.edu), as a single PDF document of less than 1 MB size, via email any time before the deadline. Proposals will be reviewed and awards announced as quickly as possible, conditional on funding availability.

Appendix - Additional Helpful Information

NASA Mission Directorates

Aeronautics Research Mission Directorate
The Aeronautics Research Mission Directorate (ARMD) generates the innovative concepts, technologies, and capabilities needed to enable revolutionary change to both the airspace system and the aircraft that fly within it. ARMD's concepts, technologies, and capabilities will lead to a safer and more efficient national air transportation system, as well as more environmentally friendly aircraft, as ARMD focuses on green aviation. ARMD's research will continue to play a vital role in supporting NASA's human and robotic space activities.
https://www.nasa.gov/aeroresearch

Exploration Systems Development
The Exploration Systems Development Mission Directorate (ESDMD) defines and manages systems development for programs critical to the NASA's Artemis program and planning for NASA's Moon to Mars exploration approach in an integrated manner. ESDMD manages the human exploration system development for lunar orbital, lunar surface, and Mars exploration. ESDMD leads the human aspects of the Artemis activities as well as the integration of science into the human system elements.
https://www.nasa.gov/directorates/exploration-systems-development

Space Operations
NASA's Space Operations Mission Directorate (SOMD) is responsible for enabling sustained human exploration missions and operations in our solar system. SOMD manages NASA's current and future space operations in and beyond low-Earth orbit (LEO), operates and maintains exploration systems, space transportation systems, and performs broad scientific research on orbit. In addition, SOMD is responsible for the agency's space communications and navigation services supporting all NASA's space systems currently in orbit.
https://www.nasa.gov/directorates/space-operations-mission-directorate

Science Mission Directorate
The Science Mission Directorate (SMD) studies the planet with an array of Earth-observing satellites; explores the solar system with spacecraft that visit other planetary bodies; deploys robotic landers, rovers, and sample return missions; and projects humankind's vantage point into space with Earth-orbit and deep space observatories. SMD organizes its work to achieve the goals through four divisions: Earth Science, Planetary Science, Heliophysics, and Astrophysics.
https://science.nasa.gov/

Space Technology Mission Directorate
Space Technology Mission Directorate (STMD) is a dedicated technology organization within the agency responsible for identifying and developing solutions to technological challenges facing NASA missions and the nation while contributing to the nation's success at transforming discoveries into economic leadership, developing crosscutting technologies that also promote spinoffs and cultivate

new business, and utilizing the nation's aerospace industry, academic, and small business workforce.
https://www.nasa.gov/directorates/spacetech/home/index.html

S.M.A.R.T. Goals

S.M.A.R.T. goals are:

S = Specific
M = Measurable
A = Appropriate and attainable
R = Realistic and results focused
T = Timely and trackable

Specific: Be precise about what you are going to achieve.

- Specify target
- Specify intended outcome
- One outcome per objective
- Avoid vague verbs (e.g. know, understand)
- Make sure the objective is linked to the goal

Measurable: Set criteria for measuring progress toward the attainment of each goal you set.

- Use measures as indicators of program success
- If possible, establish a baseline

Appropriate: Align with the needs of the target audience.

- Meeting the objective will advance the goal
- Identify a specific target audience
- Are inclusive of diversity within your group

Realistic: Do you have the resources to make this objective happen?

- Are important to stakeholders
- Are adequately resourced
- Can be achieved (e.g. The baseline the previous year was 2%. Is a 1% increase in one year realistic?)

Timely: A goal should be carried out within a specific time frame.

- Provide timeframe indicating when objective will be met

Here is an example of a few S.M.A.R.T. goals:

- By January 2023, at least 25 middle-school STEM teachers will have participated in the program
- At least 50% and 19%, respectively, of the participants will be women and underrepresented
- Follow-up surveys, 3-months after the workshop, will verify that at least 90% of the participants are using NASA and workshop material and experiences regularly in the classroom.