



NASA Kansas Space Grant Consortium

Request for Proposals

Teacher Workshop Program



Due: September 9, 2022

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 September 2022 and August 2023. 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 for 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, 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, 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 web site, for additional helpful information (<http://www.nasa.gov/offices/education/about/index.html>).

Submissions & Awards

Submit proposals to L. Scott Miller, KSGC Director (scott.miller@wichita.edu), as a single PDF document of less than 1 MB size, via email any time prior to 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 Research

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.

Additional information about ARMD can be found at <https://www.nasa.gov/aeroresearch>

Human Exploration and Operations Mission Directorate Research

The Human Exploration and Operations Mission Directorate (HEOMD) manages the International Space Station (ISS) and develops the next generation of rockets, spacecraft, and other capabilities that will extend human presence throughout the solar system. HEOMD provides management of Commercial Space Transportation, Exploration Systems Development, Human Space Flight Capabilities, Advanced Exploration Systems, and Space Life Sciences Research & Applications.

Additional information about HEOMD can be found at <https://www.nasa.gov/directorates/heo/index.html>

Science Mission Directorate Research

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.

Additional information about SMD can be found at <https://science.nasa.gov/>

Space Technology Mission Directorate Research

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 drawing on the brightest minds of the nation's aerospace industry, academic, and small business workforce.

Additional information about STMD can be found at <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.