

Sample NASA Explorer Schools Teacher Recognition Application

The following questions are on the Teacher Recognition Application. NES teachers will be eligible to apply for recognition opportunities after completing the minimum project requirements:

- Use one Curriculum Support Resource and complete the survey.
- Participate in the associated live or on-demand e-PD and complete the survey.
- View one NASA Now event and complete the survey.

Once you have completed the surveys, you will be notified via email how to access the online application on the Virtual Campus. The questions are provided now so you understand the criteria and can begin crafting your answers offline in a word processor. You can then easily copy and paste your answers into the online form. **If you have any questions please refer to FAQ section of the Virtual Campus or email us at nasa-explorer-schools@mail.nasa.gov.**

NES Objectives:

- Engage students with inspirational experiences developed around NASA's unique mission content
- Build teacher content and pedagogical knowledge around NASA-themed student engagement activities
- Provide grade-appropriate NASA-themed content related to identified stakeholder needs

Curriculum Integration

Demonstrate how you integrated NASA Explorer Schools project materials and activities into your established classroom curricula.

- Which NES materials did you use to support your classroom curriculum? Explain how you implemented these materials and the impact. What was the student response to these materials?

Explain how you used NES materials and activities to support your educational and professional goals.

- What are your professional and educational goals? How do they align with the NES objectives? Did your participation in NES impact your teaching style or strategies? How so?

Explain how you used NES electronic professional development (e-PD) activities to support your use of NES curriculum support modules in your classroom.

- Which e-PDs did you participate in (including additional external professional development opportunities)? How did the e-PDs support your implementation of the NES activities? Did they impact your teaching style?

Demonstrate how you integrated NES content into your student knowledge assessments (i.e., curriculum, tests, quizzes, achievement test preparation, etc.).

- What was the impact of integrating NES materials or topics in quizzes, tests, or in a lab setting? Did you align NES material to state standards or achievement tests?

Student Engagement

Describe how your implementation of NES project materials in the classroom encouraged use of 21st century skills (e.g., Partnership for 21st Century Skills) and how your students demonstrated these skills in their work and in the classroom.

- What NES project materials were used in the classroom to develop 21st Century Skills? Which skills were developed or emphasized, and how did the students demonstrate these skills?

Explain how you used NES project materials to support extracurricular activities and how your students interacted with the materials in this experience.

- What NES project materials were used in extracurricular activities? Did these support existing science, technology, engineering or mathematics, or STEM, programs, or did you develop a new one designed around NES? Did the use of the NES project material increase attendance or participation?

Describe how you used NES and NASA materials to promote student interest in, and awareness of, STEM careers.

- What STEM careers were highlighted? Did you see a demonstrated impact from your efforts?

Technology Usage

Describe how you used technology in the classroom to augment NES project materials and how your students' interactions with the NES project were enhanced by this technology.

- What types of technology did you use to enhance NES project materials? How did your students interact with these?

Describe how you promoted technology to facilitate student collaboration and participation in the broader NES community and how students and/or the NES community demonstrated this collaboration.

- What technology tools did you use to promote student collaboration with NASA, NES or other students in the NES community (examples could include Live Chats, Student Symposium, etc.)? Please describe the effects of these tools on student learning.

Describe how you used technology to collaborate with other teachers on best use of NES classroom activities and other NASA opportunities.

- What technology tools did you use (examples could include NASA Educators Online Network, or NEON, Teachers Corner, Facebook, etc.) to share best practices and get implementation ideas from other teachers? How did these tools enhance your participation in the project?

Community Outreach

Describe how you leveraged community partners to support opportunities developed around NASA content and student interest in STEM within your school community.

- What community opportunities in your area did you take advantage of inside and outside the classroom that align to NES project materials? What impact did these opportunities have on your students?

Explain your efforts to build awareness of NES and NASA opportunities within your school, district, professional network and community, etc.

- What steps have you taken to inform and recruit other educators in your school or district about NES and NASA opportunities?

Family Involvement

Describe your efforts to promote and share NASA-related activities with parents and caregivers within your school.

- How have you shared NASA related activities with parents and caregivers? Have you seen a demonstrated impact of your efforts?

Discuss how you promoted or increased awareness of NASA and STEM internship and scholarship opportunities among students, and provide examples of the success of these efforts.

- What steps did you take to increase awareness? Have you seen a demonstrated impact as a result of your efforts?

Recognition Opportunities:

Please Rank your Top Three Choices by Title.

1. _____
2. _____
3. _____

Sample Opportunities

Opportunity Title: NASA Coastal Ocean Research Opportunity for Educators

Target Audience: Teachers, grades 4-12

Dates: July 11-15, 2011

Topics Covered: Earth science, oceans, global climate

Description: The coastal oceans are one of the most biologically productive regions on our planet and serve as a major research area of climate change indicators. By using satellite data, hands-on shipboard measurements, and laboratory analysis, you will better understand why our coastal oceans are so important in understanding global climate. The five-day NASA Coastal Ocean Education Teacher Workshop 2011 familiarizes teachers with the science and research techniques used by NASA to study the coastal oceans, ocean color and Earth's biosphere from space. You will get the opportunity to board research vessels and perform some of the same research techniques used by NASA scientists.

Opportunity Title: Water Filtration Research: Water, Earth's Most Precious Resource

Target Audience: Teachers, grades 4-12

Dates: July 20-23, 2011

Topics Covered: Earth science, physical science, water cycle, recycle

Description: Water is important as NASA sends humans into space. During this four-day hands-on research opportunity, you'll learn how NASA uses and recycles water on the International Space System. You'll also learn about hydroponics and plant growth and how a nearby national park studies water.

Opportunity Title: Goldstone Apple Valley Radio Telescope (GAVRT) Project

Target Audience: Teachers, grades 4-12

Dates: July 18-22, 2011

Topics Covered: Space science, astronomy, solar system, and telescope

Description: The Goldstone Apple Valley Radio Telescope, or GAVRT, project is an exciting venture that brings hands-on scientific discovery to America's classrooms. The GAVRT project uses a series of dedicated 34-meter (110-foot) radio astronomy telescopes at NASA's Deep Space Network Goldstone Complex connected to classrooms via the Internet. This five-day opportunity provides teachers with the curricular, operational and scientific knowledge to implement GAVRT within the framework of the general classroom experience with cross-curricular lessons. Participants learn how to use the software during the workshop and are given access to the telescope for student use during the school year. Students point the massive dishes

-- located in California's Mojave Desert -- at targets in space and record their findings. With each pass of a planet or quasar, students join the ancient family of explorers who have gazed into the night sky since the beginning of time to understand their place in the universe.

Opportunity Title: Forces and Motion: Physics of Freefall Research -- What if No Gravity?

Target Audience: Teachers, grades 4-9

Dates: Aug. 1-5, 2011

Topics Covered: Physical science, gravity, microgravity, design process

Description: Perform your own research on the properties of objects in a microgravity environment and then go through a design process to create and build a research experiment of your own. Then test your project in a NASA drop tower. Use this authentic research experience to support your students as they participate in WING (What if No Gravity), an opportunity for them to work in teams to design and construct an experiment to be tested NASA's drop tower.

Opportunity Title: The Solar System -- Inside and Out

Target Audience: Teachers, grades 4-12

Dates: July 19-22, 2011

Topics Covered: Space science, astronomy, solar system, Hubble Space Telescope

Description: The theme of this workshop is what is happening within our solar system and beyond. Join us for a two-day professional development experience to learn about our solar system, exoplanets, and the Hubble Space Telescope's contributions to the study of these new worlds orbiting other stars. This workshop will feature science content presentations and hands-on activities that use real-world astronomical data and the Hubble Legacy Archive to bring the wonders of the universe to students. These activities can be implemented in the classroom to encourage students to generate relevant and meaningful research questions and search for new insights about the solar system. The "Solar System -- Inside and Out" workshop will be held July 20-21, 2011, at the Space Telescope Science Institute, located on the Johns Hopkins University Homewood Campus in Baltimore, Md.