Overview of 2001 NASA Rural

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Overview of 2001 NASA Rural Memo

To: Dr. Lisa Forenz
From: Dr. Hank Lehrer; Professor UNO Aviation Institute (UNOAI) and NASA Researcher
Date: March 23, 2001
Subject: Possible Nebraska NASA Summer Team to Ames

It was great to talk to you on the phone and thanks for the referral to Dave Friedley. I will be in the area on the 4th, 5th, or 6th of April; I'll work out a time and date at your convenience so I can stop and chat with you and/or Bob.

As far as the project, we want to sponsor a 4 person team again this year, one elementary teacher from each of the NE reservation schools. NASA will pay the travel, housing, and food expenses for team members. The NE NASA Space will give each team member a $500 stipend and award a $500 travel grant for attendance at a conference where a paper is presented for a total of $1,000 per person. The dates for the workshop are June 24 to July 7, 2001 and I believe the housing is on the campus of Stanford University.

I have committed to NASA to sending a team so if you could name a teacher in the next few weeks and a possible alternate, I'd get the application process started. Do not worry about any of the dates contained in the attachment as NASA has not gotten the applications to me as yet and they have told me that things are backed up a little.

Concerning contacting me, as I mentioned, I retired from full-time teaching and have moved to Ohio. However, I am still running the UNOAI Native American Outreach program. I can be reached at 419-662-1926 at any time.

Looking forward to seeing you in a week and hopefully meeting the Omaha Nation team member.

Here are the details

NEW (Rural) Program Overview: The NASA Educational Workshop (NEW) is a two-week, residential, professional development experience for educators, which provides them the opportunity to: visit research and applied science facilities; examine topics relating to Earth Science, Aerospace Technology, Human Exploration and Development of Space, Biological and Physical Research, and Space Science; collect and review educational materials in NASA's Educator Resource Center; share their teaching experiences and ideas with other participants; practice a "hands on/minds on" instructional approach integrating science, mathematics, technology, and
geography; work cooperatively in groups and plan for use of new knowledge and skills in their own classrooms and communities; work with their colleagues to model teaching, learning, assessment, and professional development strategies called for in the science, mathematics, technology, and geography education standards. Graduate credit is available.

The dates for this NEW 2001 workshop are **June 24 to July 7, 2001**. At NASA Ames, NEW participants see wind tunnels, simulators, aircraft, and laboratories up close. Experts explain their work and related scientific principles at a level appropriate for K-12 educators. Also, throughout the workshop, participants receive NASA mission-related materials and activities that can be used in their classrooms and shared with other educators.

In addition to the fascinating array of facilities at NASA Ames, the workshop typically includes field trips to the U.S. Geological Survey to study a variety of earth phenomena, Asilomar State Beach and the Monterey Bay Aquarium to study marine ecosystems, and the Lick Observatory to view the heavens. Of course, these are subject to availability and scheduling, but there are other excellent options in our area if these cannot be booked.

A Web site for this Rural Initiative workshop at NASA Ames can be found at: <http://amesnewrural.arc.nasa.gov> Please note that it contains information pertinent to the previous year's workshop, and some instructions may not apply to the coming year's workshop. The Web site will be updated throughout the coming months as information becomes available.

**History:** This workshop began at Ames in 1997 with a one-week pilot program that was so successful it was expanded into a full, two-week NASA Educational Workshop (NEW) for subsequent years. The workshop was born out of a desire to reach rural populations and to focus on partnerships with American Indian communities and schools. NASA’s Jet Propulsion Laboratory (JPL) in Pasadena, California, has also established a workshop with this focus. While these two workshops are still evolving at this point, the ultimate plan is to have participants attend the workshop located nearest them to save on travel costs and logistics, as well as follow-on activities.

**Goals:** The primary goal of NASA Educational Workshops is to provide educators with an opportunity to observe NASA’s state-of-the-art research and development through direct interaction with NASA scientists, engineers, technicians, and educational specialists. In addition to the goal of teacher education, the NEW (Rural Initiative) seeks to promote and encourage systemic change within the education process of the focus populations. We encourage participants to use what they have learned during the workshop to establish and support science initiatives in their areas. Participants also become part of a network of all previous and future NEW participants at every
NASA center. NASA hopes to develop and foster long-term relationships with the educators, their schools, and communities.

**Objectives:** Objectives of the NEW (Rural Initiative) include: sharing information about NASA resources, programs, and services with teams from traditionally underrepresented populations; 2. providing an opportunity for the teams to exchange ideas with one another; 3. providing an opportunity for the teams to develop and implement Action Plans that will support standards-based teaching and learning of science, mathematics, technology, and geography; 4. strengthening partnerships by sustaining interaction and collaboration after the conclusion of the workshop.

**Teams:** Four-member teams from a state/region/district will be selected by your organization. Team members may be of American Indian or non-Indian descent; however, all team members must perform their roles as educators in an environment where the majority of recipients are American Indian/Alaska Native/Hawaiian Native.

Each team should include: 1. a decision maker administrator, or other person of authority who serves as a change agent within the system and will work with and empower the team; 2. classroom teachers, with consideration to having representation from science, mathematics, technology, or geography programs, as well as a diversity of grade levels; 3. resource teachers/educators determined by overall team needs. For example, a district elementary science, mathematics, and/or technology resource teacher, a media specialist, a guidance counselor, etc. Also, it is recommended that one or two "contingency" team members be prepared to attend the workshop, in the event a designated team member must drop out. Individuals who have previously attended a NASA Educational Workshop are not eligible.

**Applications to NEW (Rural Initiative):** Participation in this workshop begins through an invitation to apply. NASA partners with organizations such as the American Indian Science and Engineering Society (AISES), the NASA Space Grant Programs of various states, and the Bureau of Indian Affairs (BIA) to identify prospective teams for each summer's workshop. Once team members are identified, a team leader must be designated from that group, and all participants will complete an official application (forms to follow by mail). The form requests also supplementary information about their current assignment, formal education, experience, and professional activities. Specific instructions about this are on the application form.

The application forms should be sent to me by **March 16, 2001**. In advance of the workshop, this individual will contact team members to develop a concise narrative report that addresses the following topics: 1. Educational reform goals and plans, including current connections to National Science Foundation Systemic Initiatives (if applicable) or other state or regional groups; 2. Needs assessment, including general background information on the needs of their educational community with regard to science, mathematics, technology, and geography, and any special issues/concerns.
for the population to be served; 3. Role of the team, including how the skills and knowledge gained by the team attending the workshop will be utilized in addressing their system wide needs, and how the team's outreach activities will be empowered and supported following the workshop: 4. expectations of the NASA Educational Workshop—what the team envisions will be gained from the workshop experience. During the workshop, the team leader provides leadership for the team and serves as a central point for ideas that will form the team's action plan—a document that identifies actions for addressing their system wide needs and how the skills and knowledge gained by the team will be shared with others in their area.

**Financial information and logistics:** NASA provides the funds for travel, housing, food, and related workshop expenses for selected teams. Participants are responsible for any souvenirs, snacks, or other items they wish to buy. If they wish to apply for graduate credit for the workshop, participants are responsible for paying the course fees. Funding for follow-on activities and action plan implementation is not covered by the NEW program. The organization which selects the team must assist the team in securing funding to be used in implementing the action plan developed by the team. Much of the implementation of NASA Educational Workshops is accomplished through a contract with the National Science Teachers Association (NSTA). Thus, travel and other arrangements being paid by NASA will be made through the contractor. Participants will be provided detailed instructions on logistics following notification that their application is approved (usually in early May).