

July 19, 2010

NASA/Jet Propulsion Laboratory

Von Karman Auditorium
4800 Oak Grove Drive
LaCanada-Flintridge, CA 91011

NASA Advisory Council
Education and Public Outreach Committee

Meeting Notes (Revised Aug 2, 2010)

Regulations that Constrain Public Engagement, Mr. Alan Ladwig

Alan: Mr. David Weaver was recently named the new Associate Administrator for NASA's Office of Communications. The Office of Communications has been having meetings with OMB to better understand their concerns that NASA is "marketing." The issue seems to be more with centers and programs that their outreach stretches beyond disseminating info. The Communications Coordinating Committee (CCC) is looking into this and formulating NASA's response. The CCC has agreed to the NASA Communication Plan that was approved by NASA Deputy Administrator/Lori Garver. The plan will be vetted with the White House/OMB and Congress before finalizing for Agency use. What the military does is considered recruiting versus marketing. Doing a better job with NASA TV is constrained by resources; we're looking into non-exclusive partnerships but that may be de-motivating.

Debbie: Anything precluding partnerships for content on NASA TV? Richard thinks this is a good idea.

Action Alan Ladwig: Will look into this.

Scott would like to see the Communication Plan. Recruitment should be ok. Alan: Not sure what we're recruiting them for.

Alan: I think the issue is a lack of coordination, maybe need to include Participatory Exploration as a member of the CCC e.g. Ares promoted by different centers and programs. I think the CCC will help get everyone on the same page. Miles: Everyone uses their E/PO budget how they want.

Peter: NASA needs to keep up with how information is being consumed and be prepared to feed that.

Alan: The Office of Communications is working with the White House/OMB WH to identify approved messages and means for communicating them. NASA can use the E/PO Committee's help to identify the best venues and most innovative means. **Action Alan Ladwig: The social media policy is on David Weaver's desk; we'll share that with the committee when appropriate.** Scott: NASA should push the envelope beyond the White House for messaging.

Peter: NASA should leverage communities e.g. Lance Armstrong t-shirt. Get others to advertise for you.

Alan: 1) Want to benchmark against other like organizations. Don't have the flexibility of commercial entities. 2) Evaluation component. NASA can use committee expertise to advise which orgs to look at.

Action Alan Ladwig: Need to provide opportunity for committee to meet with new AA/David Weaver.

Post-meeting submission from Scott: With all due respect to Alan, I think we need additional briefers on this critical topic as soon as practical. The subcommittee needs to understand what the true written policies are with regards engagement (aka "the M word" - marketing) --- not just standard operating procedure ("we've always done it this way"). If we're limited by the original NACA/NASA charter, then we should review this verbiage, or perhaps there is other legislation that formally restricts us. That said, NASA and the country need to recruit the finest minds into engineering careers to support our technological advancement, and to meet the challenges of BEO exploration. A meeting with the new AA and/or Bob Jacobs, plus an OMB rep or perhaps a relevant Congressional staffer would help us bound the problem, and identify ways in which we can expand the envelope of our messaging (via traditional and social media). This needs to be a top priority for the subcommittee.

FACA Training, Ms. Diane Rausch

Debbie noticed that the public may submit documents/written statements to the committee which the committee is free to use as it sees fit. She asked via what mechanism(s) the public can submit input.

Action Erika Vick: Will look into this and report back.

Ethics Training, Mr. Mike Monahan

Scott: Do standards of conduct apply when committee members are conducting business? Mike: No.

Leslie: Howard University applies for NASA grants. Mike: I'll need to understand your involvement better. What is the committee related history of grants around teacher training? Have to look at cause and effect.

Action to E/PO Committee: Contact Mike at 202-358-1166 if you have concerns about potential ethics issues.

Work Plan

Education provided to the Committee a seven point work plan (attached). The committee discussed each of the items on the plan with representatives from the Office of Education. During the discussion, Committee members expressed some concern that proposed items might be too broad (STEM is such a large content area it would be hard for the committee to provide "information that will strengthen NASA's contribution to Federal STEM initiatives" while other work plan points were discussed as perhaps too specific, such as "Monitor, review, and make recommendations concerning evaluation

strategies, and performance metrics”. Dr. Ken Ford noted the Committee does not have to make recommendations, observations or findings on all work plan items. It was also noted that partnerships are not specifically in the list of work plan items and that the committee could probably make contributions in the partnership area.

Action Alan Ladwig/Sheree Stovall-Alexander: Develop the Office of Communications portion of the Work Plan.

Minority Serving Institutions (MSI), Dr. Carl Person

Dr. Carl Person provided a presentation on education efforts with MUREP program. Key points of the presentation included:

- A description of Executive Orders pertaining to Minority Serving Institutions
- A history of NASA’s education activity with MSI’s, including the historical budget
- The key objectives of the MSI program
- A list of each of the projects within the MUREP portfolio and highlights from each project
- The MUREP Communication Strategy

Key discussion points included:

- The MUREP budget decreased from \$70.7M in FY05 to \$28.4M in FY10.
- Inquiries about sharing of content with other Federal agencies; response was yes, hands-on and curricular are distributed to other programs; this is a NASA MSI program requirement to sustain the effort.
- A discussion of the Primary goal of MUREP projects: Response was the primary goal for MSI programs is recruitment for NASA, contractors, and academia.
- A suggestion that NASA should increase minority K-12 STEM teachers via partnerships: Global Climate Change Education Program, NSF, NOAA, Department of Education partnerships. Response was MUREP Pre-service teacher program is funded by the centers and mission directorates. There are teacher pipeline programs.

Also a suggestion on leveraging Government resources: Howard University has a grant from the Department of Education. There’s a desire for teachers in urban settings but not enough financial resources to support i.e. there are more applications than positions. It was also noted that NASA is currently holding discussions with the Department of Education, NSF, and other Federal Agencies on a range of action

NASA Elementary and Secondary Education Programs, Dr. Shelley Canright, Dovie Lacy and Rob LaSalvia

Dr. Canright provided an introduction to NASA’s education components, processes and projects. This was followed by two specific examples of project development, the revised NASA Explorer Schools and the Summer of Innovation Project. Key points presented:

- Logic model philosophy, life cycle considerations and use of research-based approaches were described

- A brief Program overview listing each project was provided with detailed information in the appendix
- A discussion of the process NASA is going through to redesign the NASA Explorer Schools Program
- A discussion of the current ongoing Summer of Innovation project and all its components was provided

Key discussion points included:

- The scalability of the new NES project was identified as much greater than the initial project. For the same budget, there can be much greater participation. NASA is leveraging strategic partnerships and social media to get the word out.
- There was a question on NES and whether, since teachers have to “teach to the test” if the project materials would be useful. The response was part of the pilot project is to evaluate this – so far so good.
- On Summer of Innovation, while the initial efforts did not reach the stated 100,000 student goal, additional components have been added to support reaching this goal.
- Partnerships were suggested for upcoming years, such as the Challenger Centers. The response was that partnerships are an important part of the plan, including this year: SOI partners include FAA, NOAA, the Conrad Foundation, and other nontraditional partners. Also mentioned were additional NASA resources such as NASA’s Distance Learning Network (DLN), online communities, Second Life, virtual gaming, and Moonbase Alpha. NASA didn’t engage media – they came to us. We’re leveraging the communities of strategic partners.
- There was also a question about engaging the participatory exploration community. The response was we’re working with the Education Flight Projects Office (EFPO), Teaching from Space Program (TFSP), the ISS National Education Lab, and consulting with the mission directorates.
- Additional comments: 1) The E/PO committee recently submitted a recommendation to the NASA Administrator that the Office of Education and the Office of Communications should be “included in reviews during all phases of development to ensure that missions serve NASA’s educational and public outreach goals.” It was suggested this should be a focus of a future meeting. 2) NASA should pursue partnership development more aggressively. Response: We’re looking into a partnership with the NFL and Raytheon and identifying viable partnership candidates. August 2: opportunity to partner/collaborate/Space Act Agreement call. 3) What about efforts to partner with Minority Serving Institutions (MSI)? Response included yes we are, examples, Mary J. Blige, musicians, HBCUs, 8 MSI’s at KSC event, and the Black and Hispanic Caucuses via the Office of Legislative and Interagency Affairs (OLIA).

Education Design Team, Ms. Trish Pengra and Mr. Leland Melvin

Leland: The team will present initial recommendations to the NASA Administrator and Deputy Administrator in mid August in time to influence the FY12 Agency budget with final recommendations due in October.

Trish: The formation of the Education Design Team was prompted by the Administrator’s observation that NASA has a lot of education programs but it isn’t obvious what the impact is. The programs need to be designed deliberately to meet NASA education goals and to survive from one Administration to the

next. NASA Explorer Schools and the Summer of Innovation are examples of deliberately designed programs.

Committee members asked questions about NASA's education program, its goals, activities to reach underserved and underrepresented students (with a specific action to the Office of Education – see below), collaborations with other federal agencies (i.e., NOAA, NSF). A member observed that two astronauts who are now university faculty have difficulty balancing their public appearance demands with their faculty responsibilities.

Pengra and Melvin requested the committee members consider the questions posed in the Education Design Team powerpoint presentation (see below).

Action to the E/PO Committee: Feedback regarding the questions posed on the last page of the presentation to support the mid August presentation to the NASA Administrator and Deputy Administrator:

- How do you view NASA's role in STEM education?
- Should NASA use the media (television, film, video games) to build interest in STEM discipline? How?
- Should NASA harness the power of Web 2.0 and social media to inspire students? How?
- How can NASA partner more effectively to increase program impact?
- How can NASA help STEM educators capture and maintain student interest in STEM?
- What are the Critical Success Factors for STEM education programs?

Action to the Office of Education: Report on your interactions with the Black and Hispanic Caucuses, NAACP, Mary J. Blige Foundation for the Advancement of Women Now, and the National Urban League.

NASA and Social Media, Ms. Veronica McGregor

Veronica: JPL doesn't have astronauts so have learned to convey human emotion other ways. The Mars video shown at the meeting is used for recruitment but slick videos don't get the most attention. "High Touch" is conversation that began with the Mars Phoenix twitter account. Questions from the public are better than those received from the media who tend to ask the same six questions. JPL news releases have changed in response to questions received from the public. It is more work intense to maintain an official NASA Twitter account.

Peter: Thinks people are following less on Twitter and searching for content more.

Veronica: Videos that teach are more watched than the slick ones; people want to learn.

Veronica: ITAR restrictions are something that must be taken into account when developing and executing NASA communications strategies.

JPL Education Site Upgrades, Ms. Susan Watanabe

Susan: The goal is to make the Education web site more interactive and fun. People/organizations can post the “Explore with Us” site on their personal web site. The upgraded site includes how-to videos, News You Can Use, and expands the Distance Learning Network (DLN) to webcasts.

Eyes on the Earth/Solar System, Mr. Kevin Hussey

Lars: Could broker a conversation between Google and NASA-JPL regarding the upcoming Eyes on the Solar System site.

Kevin: The site received a lot of attention from Rep. Rohrabacher at the recent NASA Day on the Hill when a staffer saw the simulation of a predicted asteroid approaching Earth. Eyes on the Solar System is due for release in September.

NGO Education Efforts, Ms. Nancy Conrad

Nancy: Working with NASA for an NGO is rewarding but can also be challenging as it is often difficult to find out which opportunities are available and when e.g. NASA HQ versus Mission Directorate versus Program versus Center opportunities. Thinks it would be beneficial for NASA to focus on education programs that produce the “biggest bang for the buck” including those that are available via other organizations. NASA’s Office of Education needs to update their strategic plan then consider bringing stakeholders together, both government agencies and NGO's (such as Challenger Center, Conrad Foundation and others), to drive a collaborative and systemic change in the way education happens. Suggests that NASA, with Congressional support, could take the lead in this effort.