

NOAA Education Council Meeting

Date/Time: September 15, 2010 (1:00–4:00 pm)
 Location: SSMC3, Room 14836
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 Contact: Luis Leandro - work: (202) 482-3139

AGENDA

- 1:00 Welcome/Opening Remarks
- 1:10 M&E Readiness Assessment Results and Overview of NRC Expert Evaluation Meeting – Christos Michalopoulos and Atziri Ibanez (*informational*)
 (30 min presentation/25 min discussion)
- 2:05 ELG Informal Federal Funding Announcement results – Carrie McDougall (*informational*)
 (15 min presentation/15 min discussion)
- 2:35 10 min stretch break!
- 2:45 Gulf Oil Spill Education – Marlene Kaplan (*informational*)
 (10 min presentation/10 min discussion)
- 3:05 Young Meteorologist Program Overview – Ron Gird (*informational*)
 (10 min presentation/10 min discussion)
- 3:25 Updates & Announcements

Upcoming Council Meetings:

October 20, 2010
 November 17, 2010

Attendance

In person: Louisa Koch (LK), Marlene Kaplan (MK), Ron Gird (RG), Molly Harrison (MH), Atziri Ibanez (AI), Lindsay Knippenberg (LKn), Judy Koepsell (JK), Chelsea Lowes (CL), Carrie McDougall (CMc), John McLaughlin (JMc), Christos Michalopoulos (CM), Maria Murray (MM), Dan Pisut (DP), Dana Prince (DPr), Peg Steffan (PS), Steve Storck (SSt), Kate Thompson (KT), Audrey Trotman (AT), Laura Wittman (LW).

On the phone: Amy Clark (AC), Paula Keener-Chavis (PKC), Rob Osteimer (RO), Bronwen Rice (BR), Stacey Rudolph (SR).

Announcements (MK/LK)

- Lindsay Knippenberg is the new Einstein Fellow in the Office of Education. Before coming to NOAA, Lindsay was a Biology and Environmental Science teacher at South Lake High School, MI. Lindsay taught Biology to 9th graders and aquatic biology, botany and environmental sciences to 10th-12th graders. Bringing current science into the classroom and connecting urban kids to their local outdoor environment are among her personal interests.
- The STEM Caucus briefing on the NRC review has been postponed to probably early October. The new date will be sent out. We are still working on the response to the NRC report. It will not be finished by early October.

M&E Readiness Assessment Results and Overview of NRC Expert Evaluation Meeting – Christos Michalopoulos and Atziri Ibanez (*informational*)

The major recommendations from the expert evaluation meeting. See PowerPoint slides.

- PS: I was very impressed with the panel expertise. They were a bit under misconception about how our budget is managed. We got some very good advice. While there was mixed support of a kit with common questions, they saw the value of providing helpful hints and approaches to use. They praised our training efforts. They suggested we take a few things that we can roll up from program to corporate level.
- AI: One of the take-home messages I heard was to think about accountability along with the impact of our programs. These two things might require different evaluation approaches.
- MK: Is there a PA&E or PPI perspective on this?
 - DPr: We have some groups looking at the direction the evaluation framework will take. We are trying to strengthen evaluation at NOAA, which is an emphasis of Mary Glackin. We are trying to get some standard approaches and are thinking about a logic model.
- LK: I thought the meeting was very valuable for the direct interactions with evaluators. NSF is going to hold a full-day NRC panel on evaluating their climate education programs. They will try to model our efforts. We are in a close position for collaboration with NSF.

A summary of trends found in the Readiness Assessment Results. See PowerPoint slides.

- AI: If you responded to the RAQ and left the spaces to provide examples blank, please send these to me. I would still like to know what kinds of outcomes people are collecting.
- CM: Thanks to AI for leading the RAQ analysis. This is the first time we have a snapshot of the state of evaluation at the programmatic level.
- MK: This is very interesting to see the trends. This is something to help start the conversation of where we go from here.
- PS: As we move forward to hiring an evaluator, it may be useful to have a collection point for the data we collect.
 - SSt: We have one started. There are five or six presentations we've collected from working group members that show logic models and evaluations.
 - LK: SSt also has many of the evaluations that were used in the briefing materials for the Academies. It may be useful for SSt to present on the status of these resources and follow this up with a call for information so people know what to provide.
- LK: AI, do you have any comments on to whom we are trying to demonstrate results (slide 20). Depending on the audience, we might need different data.
 - CM: The OEd packages up much of the evaluation results to answer data calls for external and internal audiences on behalf of the Ed Council.
 - AI: People only had to give one example. The goal was mostly to demonstrate strengths and weaknesses to division chiefs.
 - KT: That's what our discussion was on output measures. In general, they are about the same. We need to try to standardize our outputs.
 - CMc: Were there any external groups to which evaluation results are reported? Most of these are governmental groups. We report a lot of our evaluation results to the broader external education community. For example, we report at professional meetings, journals, and other forums for community discussion.
 - AI: I don't think so. We did not provide other options. We did ask who had published results in a journal. Three of ten respondents said yes.

ELG Informal Federal Funding Announcement results – Carrie McDougall (informational)

A snapshot of the awards made for FY10 and an overview of the FY11 current competition. See PowerPoint slides.

- AI: One suggestion is to look at the partnerships section for past years through now. Do some analysis of whether the partnerships with us actually develop into a real, productive collaboration. The reality we've seen is that we're not aware of whether our organizations are being used or whether they are just using our names. Maybe we could get at this from their evaluations or ours. It would be nice to see an analysis of the outputs and outcomes from these partnerships.
 - CMc: It is a requirement to leverage a NOAA asset, but not a requirement to have a NOAA partner. Some partners, like Dan Pisut, are very engaged.
 - DP: Some projects were just for guidance and letters of support. Others are much more involved, leveraging our infrastructure or creating day-to-day work.
- KT: How are we meeting our strategic goals through these grants? I just want to be sure that NOAA is able to check some boxes for outputs as well. We would like the announcements to be crafted so that we can meet some of our outputs through partnerships.
 - CMc: Grants are not contracts, so we are unable to specify what they will work on.
 - DP: If we could have some guidance once we have a model for NOAA, someone could report back using this evaluation framework.
 - CMc: This is difficult because it must be PRA approved. Right now, our framework has not been PRA approved.
 - CM: I understand where KT and AI are coming from. Earlier, the grants team was more reactive and success was defined as whether money was obligated. Now that the team has grown, there is more time to work more closely with the grantees to encourage in-depth collaboration and maximization of our investments. They are grants, not cooperative agreements or contracts. This means there is a limit for how much guidance/instruction we can provide. There is room to improve, but there are also limitations.
- KT: It's a newer program than say B-WET. We are getting our outputs and some outcomes from B-WET. It would be more helpful for ELG to be more like B-WET by providing training for evaluation and by saying here's what we're looking for in your projects and evaluations.
 - LK: It's different than B-WET because B-WET is more focused. Because of this, it's been able to define its outputs and outcomes. If we were collecting and publishing NOAA outputs and outcomes, announcements could encourage applicants to go down this list and figure out how to support them. I don't want to wait five years to find out from the evaluations whether the projects are producing real collaborations through partnerships. Should we go through the past awards and see if there are lessons learned?
- CM: In some applications, it is obvious when the listed partnerships are superficial. This is obvious to review panelists.
- LK: We are not going to pre-select. One reason we do not mandate NOAA partnerships is that NASA gets criticized for being heavy-handed in saying money should be fully connected to NASA.
 - PS: NASA still does it. This is our only opportunity for educational money in some cases. We have to leverage this as much as we can. Maybe we can walk a line between the past and NASA. It is grant money, with no strings attached. There may be a way to encourage deeper partnerships with us or with our partners. There also seems to be a lot of money going to museums.
 - CMc: This is partly skewed because we just finished an informal competition. It is also based on how we coded the data. We are working on developing a new categorization.
 - JMc: This has a lot to do with congressionally directed funds to AZA, particularly in FY09.

- LK: This is true for FY09-11. In FY11 the senate language is at the \$3M level.
 - CMc: We're hopeful that AZA will submit to K-12 FFO also, but we don't know if these will be viable proposals.
- CM: Remember that the Academies report was saying our grants were too NOAA-centric.
 - CMc: They are coming from an NSF academic perspective. That is a strong voice in the community that we have to recognize. We're trying to strike a balance between promoting internal needs and priorities versus allowing innovation with partners that really know their stuff. This next FFO has the strongest language.
 - PS: We are not NSF. We are trying to hit national directives, priorities, and mandates. I disagree with the committee for this reason. They don't understand how we get our money.
- LK: I'd like to ask you to ask your people what their experiences have been in partnering with past grantees. Another approach is to do some analyses of past proposals. I'm not interested in being very heavy-handed in the next RFN.
- MK: Is there a way to have the progress reports address this?
 - CMc: This is in the non-required progress report template. We ask them to talk about their partnerships, including NOAA.
- CM: Maybe we can have a resource that defines what a successful partnership is, come up with models and concrete examples.
 - CMc: We've done this, but we can do more of it.
 - LK: This is a little different: not what NOAA defines as a successful partnership, but what the NOAA education community defines as a successful project
 - JMc: The three previously funded ELG projects were some of the most successful at expanding and leveraging their NOAA partnerships. As the programs mature, the ones that have the most successful partnerships with NOAA are the ones that are able to come back for repeat funding.
 - PS: Partnerships are key to scalability.
- AT: Based on where we started in talking about metrics, this might be a time when we look at how our education programs support our Strategic Plan. Regardless of what the program is, we should have the applicants show how they address the Plan.
 - LK: This is the first time I've seen data on which outcomes different projects support. We can continue to make this crosswalk more effectively. There was also effort to identify gaps in Strategic and Implementation Plans and address them with the FFO.
 - AT: That's the front end. I'm talking about front and back ends.
 - CMc: We require in our solicitations that applicants show how they address Education Plan outcomes and use literacy principles.
- DP: There should be a list in the FFO that identifies all the potential partners.
 - CMc: This is linked in the announcement as "NOAA assets*" to send applicants to the assets webpage.
 - PS: I got cold calls about this. So it did work.
- CMc: It would help if you all talk to the external people you work with to see how you can get involved with applicants and have them see projects that are already underway.
- LK: A number of proposals have failed, but a lot of effort goes into this. Perhaps there should be a dialogue internally and with our partners about why proposals fail.
 - KT: We didn't see the feedback loop of why pre-proposals were rejected. Some got shut down because they were too Sanctuary-specific.
 - CMc: Some are; there is a fine line. We cannot fund things that are driven by NOAA program priorities. Anytime there is a question, please talk to us so we can give you a feel of that fine line.
 - MK: It cannot look like we are using our grants to fund our own programs and our own people. It must look like external grants.
- Al: It comes back to outcomes and outputs.
 - AT: We've got to look at it from the Strategic Plan perspective. As they report, they need to show what is a change/outcome that supports our goals.
 - LK: This is a good conversation and one we will need to come back to. We have a very ambitious plan. ELG is our most flexible tool to help us achieve our goals.

Gulf Oil Spill Education – Marlene Kaplan (informational)

An update on Gulf oil spill education activities. See PowerPoint slides.

- MK: There is an educator's needs assessment that Luis Leandro has posted online.
 - CL: This was Louisiana-centric. They did a top five of what teachers want related to the oil spill. They wanted information on impacts on coastal habitats and wildlife, why wetlands are fragile, impacts on open-water habitat and wildlife, how spills are cleaned up, and impacts on seafood quality and safety. The bottom five were oil technology related. Teachers are looking more for habitat related materials.
 - MK: One of the things we've heard from Diane and Lee Yokel is that materials for the Exxon Valdez spill were related to a deep-water cold environment and not all that relevant for the Gulf.
- SSt: We've put resources on the Gulf oil spill page on the education.noaa.gov site. There were two sets of resources: NOAA and non-NOAA resources. The page desperately needs an update on the text of feature articles. This is a Gulf wrapper on previously existing resources. We're working with the restorethegulf.gov website to add our resources at the interagency level. We have a reserved section for educators, but for us and other agencies there aren't materials that are specific to Deep Water Horizon. They won't accept anything that isn't. The regional Texas NSTA will have presentations on NOAA oil spill education resources. They are looking for educators and scientists to discuss. Bob Hansen is coordinating this.

- SR: The JASON Force in Motion curriculum has a unit on simple machines. They will look at simple machines being used to look at and clean up the oil spill in labs and on vessels.
- PS: There will be two webinars on the oil spill after November.
 - AC: Who will be leading these webinars on the oil spill?
 - PS: You can be involved. This is still in development.
- AC: The B-WET FY11 FFOs were already in place before the oil spill, but projects addressing this are encouraged. Awards are likely to begin July 1, 2011 (in FY11) and will run for one or two years (into FY12 and beyond).
 - MK: Are there efforts to refocus open awards or are there problems getting access to sites for their activities?
 - AC: I am not aware of any efforts to refocus or problems getting access due to oil.
- PKC: We have an online professional development offering slated for Oct. 11-29 that will focus on deep-sea ecosystems in the Gulf. It will use materials from all previous Gulf of Mexico expeditions and the geology, ecosystems, behavior of oil and water, deep-sea communities, and deep-sea coral communities.
 - LK: There may be a couple of pieces that will be useful for the oil spill websites.
- MK: We would like to call a planning meeting. PS, AC, PKC, and others are interested in participating.
 - PS: We're developing a new series of activities. We're working with AI, AC, and their folks in the Gulf.
 - KT: Sanctuaries has not had any Gulf education activities.
 - DP: I was talking to NEEF and Earth Gauge. There are opportunities to use their webinars as a venue.
 - LK: The Restore the Gulf website is heavily used. It would be very powerful for us to get things on there.
 - MK: One meeting will discuss timeline and what we can do related to the spill related to products.

Young Meteorologist Program Overview – Ron Gird (informational)

Sneak peak at the Young Meteorologist Program and its online game. See PowerPoint slides.

- RG: I hope to showcase the Young Meteorologist Program at the next national NSTA.
 - SS: You should talk to Bob for the booth plan to properly showcase this.
 - PS: The good spots are already taken.
- PS: I saw there was a section for elementary. I'm working on gathering weather and climate resources for K-5. This needs to go on the NOAA games website.
 - RG: I've talked to them. It's a no brainer to connect this to climate.
- JMc: Thanks for making the connection between Plan!t NOW and ELG. The current FFO is their first time applying.
- CMc: Is the game available for free?
 - RG: Yes.

Updates and Announcements

- RO: Paulo and I thank those who've filled out the innovative use of technology survey. You have until Oct. 1 to complete.
- AT: We still have the FFO open for the cooperative science centers for a total of \$50M over five years. We are getting ready to go on the road for the student opportunities. We've opened a new online application format for undergraduate programs. The new graduate awardees are in school and doing well.
- RG: We have the information package on upcoming Coastal America student conference. We're meeting to scope the NWS support.
- MK: NPS has an intern, who is a diver and has been out on the Channel Islands. She's in town and will speak at the library tomorrow at 10:00. She has done work in the Sanctuaries.
- CL: We will have the upcoming biannual Sea Grant week in mid-October. This will include the annual educators' business meeting. I'm also involved with the planning committee for CZ11; we're looking at incentives to bring in more graduate students. The Secretary of Education Arne Duncan stopped by MIT SG to look at their SeaPerch vehicles, which is a STEM program for engineering of ROVs.
 - LK: The CZ11 is for the first time having an education focus. I'm interested in how this goes.
 - MK: I am on their email list.
- KT: We've finalized our ten-year Sanctuaries Education Strategic Plan. There is also a five-year implementation plan. We also have developed training modules and a list of our best practices. We had a great Dive-In workshop. It was probably the most impacting teacher workshop we've done. We have our evaluations and are into the follow-up for tracking the teachers. One interesting thing is that they've banned plastic bags since we were there. We have a very big Aquarius mission in October 12-21. John Parker is our teacher, who is an African American from Morgan State. It also has a MERITO component and will be in Spanish and English. AT&T is the primary sponsor for this. Social media is a big component, too. We have an evaluator, who will be tracking Aquarius. I will send out information for you to follow online at Oceans LIVE. We also have a five lesson plan curriculum packet.
- PS: We had the first Climate Stewards telecom for the school year. We've worked out a mini-grant program with UW-Madison. We're working with an evaluator to develop instruments to get at stewardship. We had a great interagency climate meeting last month. We talked to them about how to get content on the Climate Portal. The education section will be the first section to be interagency. I am going to NSF next week to talk to them about our climate education efforts. We did a BAA to fund climate symposia, webinars, and follow-ups. The webinars will start in November with the NERRS group. We also have a lot of product development going on. The National Middle School conference will be in Baltimore in early November. We have a double-booth space. Think about coming and bringing materials. The collection point will be Jeannine by Oct. 20.
- CM: We had a three-day site visit to the GLOBE Program Office by the funding agencies. The agencies are on the same page. The program is facing significant challenges, but we have some good recommendations on how to move forward.

We also had a meeting with the Executive Director of the National Association for Interpretation, Tim Merriman. There are some opportunities to offer professional development to Education Council members and for Science On a Sphere docents.

- SSt: We have soft-launched education.noaa.gov. Every line office is represented multiple times on the site. We're getting input from various groups. We have nine collections up and two in the works. The search engines are starting to pick it up. Then we can start looking at the statistics on it.
 - CM: This is a long effort and a great step forward.
- LKn: Thanks for the welcome. I'm happy to provide help.
- JMc: Our office and NSF are cofunding a workshop on how K-12 students can be involved in meaningful climate science that will be held in Nov. 17-19. There will be about 20-25 participants.
 - LK: I wonder if there are any Climate Stewards connections.
 - CM: The PI, David Brooks has his own ideas on the participant list and is very science-focused.