

NOAA Education Council Meeting

Date/Time: April 15, 2009 (1:00–4:00 pm)
 Location: SSMC3, Room 14836
 Dial-in: 866.901.0711
 Passcode: 8134683
 Contact: Luis Leandro - work: (202) 482-3139, cell: (843) 696-9572

AGENDA

- 1:00 Welcome/Opening Remarks
- 1:10 Informal Learning and Assessment – Alan Friedman (*informational*)
 (30 minutes presentation/60 minutes facilitated discussion)
- 2:40 NSTA Learning Center – Al Byers (*informational*)
 (20 minutes presentation/10 minutes discussion & questions)
- 3:10 Education Implementation Plan/Matrix Update – L. Brown/S. Storck (*input requested*)
 (discussion and Q&As)
- 3:40 Updates & Announcements

Upcoming Council Meetings:

May 20, 2009
 June 17, 2009

Attendance

In person: Louisa Koch (Chair – LK), Kirk Beckendorf (KB), Lexie Brown (LB), Elizabeth Bullock (EB), Al Byers (AL), Gene Cope (GC), Karen Eason (KE), Alan Friedman (AF), Ron Gird (RG), Jennifer Hammond (JH), Bob Hansen (BH), Chantell Haskins (CH), Atziri Ibanez (AI), Nina Jackson (NJ), Susan Abbott-Jamieson (SAJ), Niel Kaske (NK), Judy Koepsell (JK), Luis Leandro (LL), Michiko Martin (MM), Paulo Maurin (PM), Carrie McDougall (CMc), John McLaughlin (JMc), Liz McMahon (LMc), Jeannine Montgomery (JM), Bruce Moravchik (BMo), Frank Niepold (FN), Dan Pisuit (DP), Bronwen Rice (BR), Irelene Ricks (IR), Stacey Rudolph (SR), Steve Storck (SSt), Sarah Schoedinger (SS), Peg Steffen (PS), Kate Thompson (KT), Sharon Walker (SW)

On the phone: Jonathan Bucki (JB), Paula Keener-Chavis (PKC), Marlene Kaplan (MK)

Announcements

- **Introduce Jonathan Bucki (Dendros Group, St. Paul, Minnesota):** Jonathan will be facilitating our Implementation Planning Workshop in June and will be speaking with each Education Council member over the next few weeks to gather some additional information to assist in the planning of the retreat. He will be joining us on today's meeting over the phone.
- **Future Ed Council meetings:** Please note that for next month's Ed Council meeting (May 20th) we will be in our old conference room (SSMC3, 10836). All other meetings this calendar year, except the May meeting, will be held in this room (fisheries conference room # 14836).

Informal Learning and Assessment – Alan Friedman (*informational*)

AF: I spent the last 35 years of my career communicating science to several audiences. I am a scientist by nature. SSt: Alan will be joining us during the retreat to provide assistance. He has vast experience in formal and informal science education. This will be a very open seminar to get a dialogue of the background on informal science education in preparation for our implementation plan.

- MM: It would be interesting to also see what discouraged students from science. AF: I agree, and I am not familiar with any studies that have done this.
- IR: The top three recommendations for informal education can certainly be incorporated into a formal education setting. For example, if science toys are a successful way of engaging students, there is no reason why a good teacher couldn't use these in the classroom.
- NK: I don't see diagnostics as being part of this. What am I missing? AF: Diagnostic is person by person. It's to help the individual person at any point in time. Formative is much broader.
- LMc: Does it matter who does these evaluations? AF: I believe firmly that the persons who are directly involved with the process should be doing the evaluation. Especially in an agency like NOAA, it is very important that you

all are involved with evaluating yourselves. When this is done by an outsider, it's easier to find flaws with the evaluation design.

- LK: So what is the role of external evaluators? AF: To help you design the evaluation and evaluate it. Take your proposed questions or surveys and enhance them or guide you toward the right direction. Outside evaluators need to be there at the very beginning to help you, but you need to take ownership of the results and make the decisions.
- SS: You had many different program tracks simultaneously. At the corporate level, did you roll those together or have each program track and do its individual reporting? AF: I felt strongly we would not have an inside evaluator. Every program got to choose their outside evaluator. So they would own the evaluator that was going to help them. Some programs evaluated everything, while others only did bits and pieces, so there was a wide range of results from different programs. We had no overall educational evaluation.
- FN: Many of the goals were given to us. How do we dance the line between the overall NOAA mission and all the various education mandates we have? AF: If you read the statutory language you will find that you can rephrase that language to something that is in line with what you do. I suspect you can find a percentage of what you are doing in the overall mandate or mission. Priorities change often with new administrations, and that is a challenge, but there are also strategies to deal with this.
- AI: How did you choose the categories for the NSF report? AF: I got these as a given. When we started writing the framework we were told that these were the categories we needed to use. It was an Intergovernmental Council that came up with these categories in response to the ACC. This was lead by NSF, but I thought NOAA was involved in putting these together.
- CMD: Can you talk about adult-learner evaluations? AF: It's really beneficial to ask how much they felt they learned, and in a non-threatening way, find out how much they did learn. It's important to not use threatening words. It's also important for people to feel that they learned something, even if this isn't the case, because it motivates them to continue to learn. Reinforcement is also important.
- JMc: Do you think there is enough capacity for external evaluation? AF: There are a few very well known external evaluators. For example, The Institute for Learning Innovation, a group at Lesley College in Massachusetts, Inverness Research Associates in California. There are several programs producing new evaluators as well. There is a really good group in Australia at the Australian National University turning about 6 PhDs/ year in evaluating formal learning experiences. Most people are happy with the evaluation they are getting. There is a free list available. There is a group called "Care" in the Committee on Audience Research and Evaluation that have posted on the internet names of several hundred evaluators. There is a group called "The Museum Group" that has a website with 30 highly experienced people and evaluators.
- MK: Does NSF have any plans for some follow-up activities as NOAA, NASA and other federal agencies move forward to try to design their own programs? Is there an opportunity here for collaboration? AF: I know that NSF has project directors meetings, the next one will be in 2010, in which they do follow-ups on all of this. I know they invite people from other agencies to participate. I would talk to folks in NSF. David Ucko is the program officer that started all of this. I think he is now the assistant director for education and human resources. He would be the person to talk to.
- CMD: We have had this meeting with David Ucko and other informal education program offices in NSF. In fact, Sue Allen and David were invited to brief the Council, but were unfortunately unavailable. We have formally engaged NSF and even gone as far as to inquire about potentially adopting the database they created for their framework to use primarily in our granting programs, but also for the consideration of a broader adoption by NOAA. We are actively pursuing interagency dialogue on this.

NSTA Learning Center – Al Byers (informational)

PS: This is a great transition to formal education. It's perfect timing for the NSTA to join us today and give us an overview of how we can take NOAA content and move it into the professional development arena, in this case, with the primary audience being teachers.

- PS: We are in the process of developing an implementation plan. NOAA has a finite amount of resources and we are trying to find out where to invest these limited resources. I think that your time in here today is key in preparing us for the implementation plan.
- CMD: The Department of Energy was mandated by the America Competes Act to create a science education portal for K12 and other grades. They have a very interesting approach that you may want to talk to them about. They are at the very early stage, and thus it would be perfect timing for engagement between your team and the DOE.

Education Implementation Plan/Matrix Update – L. Brown/S. Storck (input requested)

- LB: May 14th is the deadline for receiving matrix updates from all of you.
- SW: I appreciate Lexie and Steve working with me on all the regional Sea Grant network programs.
- LK: Sharon, how have the Sea Grant local directors reacted to this data call? Are there any concerns there?
- SW: It is a major data call and many hours have been spent to fill out these matrices. Some directors expressed concern, but we are making progress. We also have collapsed a few of our programs in order to capture them in the matrix. Many of our programs are below the 50K mark.
- LB: And we are working with Sharon to make this work for her.
- AI: I am getting some pushback from our educators to get all the data in time to meet the deadline. But, we are trying our best.
- SW: This is also true for Sea Grant.

- PCK: Do we have a proposed distribution list? I don't remember seeing the National Educators Association Board of Directors there? How about the COSEE council, the IWG-OE and ORRAP. Are they on this list?
- SS: We will add these groups to the list.
- SS: There is some duplication of individuals in these groups, so we should look at that as well.
- SS: Bob will be coordinating the distribution to these groups. Let Bob know of groups that you think should receive copies that are not on the list.
- FN: Should we ask if folks want to receive a hard copy or should we only send electronic copies?
- PKC: I would prefer to see some of these people that we work with closely receive hard copies.

Updates and Announcements

- LK: I want to do a brief check on this room (referring to the Fisheries Conference room # 14836). Do people like this room? Is it easier to hear people over the phone?
- PKC: Yes, this is much better, thanks Louisa.
- SS: The announcement for the AZA competitive grants has been submitted to lawyers for review. We are trying to get this out ASAP. It could happen as late as the end of next week. We are also trying to avoid publishing a federal register notice. Once it's published, the idea is to have this out on the street for 45 days. We will be asking help from some of you for looking for reviewers and do some of these reviews.
- CMc: Please let us know if you have any questions. We are happy to assist you.
- DP: I really dislike these printouts (referring to the folders provided by NSTA). I think as a green agency we should be doing a better job at not supporting this.
- KT: We are doing a large partnership with AZA at their September conference in Portland, Oregon. Our entire education team will be in Portland for this meeting. The Sunday before we are going to host an Ocean Literacy Summit. This will be hosted primarily by the Oregon Coast Aquarium and the agenda will focus on ocean literacy. At the end of the summit there will be an evening event at the aquarium. We wanted to encourage your participation. We are in the middle of our strategic plan. The planning that we are doing now for the NOAA-wide Education Implementation Plan is helping us a lot with this. I also asked Frank Niepold to participate in order to bring more the climate theme to our plan. Climate literacy has been added to our strategic process.
- PS: Last month we launched the "games.noaa.gov" website. We think the games are a good way to reach the younger audience without their parents and teachers. We are getting ready to order the prints for the Year of Science DVD. If you are interested in any of those, you can write a print order so we make sure we have enough for all the conferences for the rest of the year. Please let us know. We are planning on sending the order sometime next week. The Strategic Plan, both black and white and color versions, will be added to that as well.
- RG: We did another successful Boy Scout camp down at Nauticus using Science On a Sphere as part of the training. Approximately 60 boys attended. We had a TV meteorologist from ABC there, who was a former tornado chaser, and the kids loved it. The bad news is that we got several emails from the Sally Ride group asking the Weather Service to have an exhibit at George Mason University this weekend, but the notice was too short and we couldn't make it happen.
- NJ: We had to reschedule our teacher conference. We will hopefully have it on May 20th.
- SW: We are all heavily involved in our own state strategic plans.
- LMc: We gave 5,000 copies of the new fisheries book at NSTA last month. If you are interested in having a copy, please let Jennifer or me know. The 2009 season starts tomorrow. We have 33 teachers to send out. We are also working on placing teachers at various labs to work with scientists.
- PM: Last month we had the coral symposium with NSTA. A few weeks ago we had a web seminar on Ocean Acidification that was well participated. We have a second web seminar on the 30th of April on coral bleaching. These were well received from teachers. The entire session is available and I can provide you with the links.
- FN: I just got confirmation that an NSF grant we were working on was submitted. We hope this is competitive. NSF has said that climate is the number 1 priority. We also had a web seminar with 68 teachers being involved, which is great. We have another one coming up - we partnered with Sally Ride and US Forestry Service to run a symposium. The BAA NSTA collaborative grant that started last summer finally got awarded. NESDIS, Fisheries and Climate have two web seminars that will be moved to the fall. ASTEC is coming up and we have several sessions there. Another activity called H209, which is a big event between New York and Amsterdam, is coming up as well.
- AI: The estuary live broadcast is coming live in May 1st and May 15th. We are getting teachers registered and prepared for this through webinars. We are setting up a Wiki space to have teachers share what kids are doing. In celebration for earth day next week, we are having Dr. Lubchenco at the Chesapeake Bay reserve. I just got back from an education section meeting in Corpus Christy, Texas. They just opened the center there and it's fantastic. It's a partnership with the university. We brought an economist to talk to us from a social science perspective to help us understand how we can use social science in what we do.
- BMo: NOS Education has been partnering with the Sanctuaries educator from the monitor sanctuary and NASA. We have a 1.5h distance learning network program going on tomorrow from 4 – 5.30pm. I believe we have over 100 teachers registered right now. This will be on tides and ocean currents.
- CMc: The IOOS has been signed by the President. There is a fairly extensive education component on this bill. "Support for outreach education". This is an additional mandate for Education in NOAA. As soon as the aquarium competition slows down a bit, I will be working on this. This bill does make it easier for congress to bring funding to NOAA.

- PKC: I would like to thank Luis for sending the materials out for this meeting almost one week before. This was really nice and allowed us to review these ahead of time.
- JMc: Yesterday we ran a review panel for a funding opportunity to support the Science On a Sphere users network.
- BR: B-WET updates. All of our 6 regions are actively working on their new funding opportunities for 2010. They should all be in the June Omnibus this year, so we are finally on the regular schedule. We are planning our grantees conference that will be taking place in Silver Spring (NOAA) in July 14-16 this year. That is something for all B-WET grantees to come here and learn about NOAA. I will send more information about this later on as well as seek assistance from all of you.
- SSt: DOC has signed an agreement with Flicker and Facebook so that we may post things on these programs. These should be available to you all now "legally".
- LK: I briefed the ORRAP on behalf of the IWG-OE and we presented 2008 accomplishments and 2009/2010 plans. We got very positive feedback. They also heard a briefing from COSEE. We have a lot of support from the external advisory panel for ocean education. I apologize for running over.