

NOAA Education Council Meeting

Date/Time: October 21, 2015 / 1:00–4:00 pm
Location: SSMC3, Room 14836
Dial-in: 866.901.0711
Passcode: 8134683
Contact: Lisa Nakamura (202) 482-3139, Patrick Drupp (202) 482-9183

Adobe Connects Link to Meeting: <http://connectpro46305642.adobeconnect.com/edcouncil/>

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http://www.oesd.NOAA.gov/council/Audio_AdobeConnects.pdf

AGENDA

- 1:00 Welcome/Opening remarks
- 1:15 Citizen Science at NOAA: Update and Examples (*Informational*) - John McLaughlin and Lisa Hiruki-Raring (30 min presentation/15 min discussion)
- 2:00 Serious Games (*Informational*) - Peg Steffen (15 min presentation/ 15 min discussion)
- 2:30 Break (15 min)
- 2:45 PBS Learning Media Agreement (*Informational*) - Frank Niepold, Peg Steffen, Rachel Connolly (15 min presentation/ 15 min discussion)
- 3:15 Updates and announcements

ATTENDANCE

In room (15): Louisa Koch (LK), Pat Drupp (PD), Lisa Nakamura (LN), John McLaughlin (JM), Jon Lilley (JL), Jennifer Hammond (JH), Bruce Moravchik (BM), Rochelle Plutchak (RP), Jessica Cooper (JC), Frank Niepold (FN), Peg Steffen (PS), Marlene Kaplan (MK), Kristen Jabanoski (KJ), Bart Merrick (BMe), Bronwen Rice (BR)

On phone (16): John Baek (JB), Carrie McDougall (CMc), Judy Koepsell (JK), Julia Galkiewicz (JG), Lisa Hiruki-Raring (LHR), Marissa Jones (MJ), Susan Haynes (SH), Tanja Fransen (TF), Stephanie Bennett (SB), Sarah Schoedinger (SS), Christopher Nelson (CN), Amy Clark (AC), Mary Fairbanks (MF), Casey Ralston (CR), Seaberry Nachbar (SN), Rachel Connolly (RC)

SUMMARY OF ACTION ITEMS AND DECISIONS

- **ACTION:** Implementation plan was sent out for voting this morning. Council will vote green, yellow or red by Wednesday 10/28/2015.

Opening Remarks from Louisa

- ***ACTION: Implementation plan was sent out for voting this morning. Council will vote green, yellow or red by Wednesday 10/28/2015.***

Citizen Science at NOAA: Update and Examples (*Informational*) - John McLaughlin and Lisa Hiruki-Raring (30 min presentation/15 min discussion)

- FN: Looking at the Implementation Plan, did any of this vast body of work (citizen science efforts) make it into the plan for the next two years?
 - JM: It made it into the Strategic Plan. Some is covered in the distance learning part of the Implementation Plan
 - FN: We need to make sure we take credit for what we are doing well.
- BR: The map you showed of the different citizen science projects: are those all originating from federal projects?
 - JM: yes
 - BR: If we have NOAA run projects how do we get them on there?
 - JM: Most of the projects, with very few exceptions are not run exclusively in house by NOAA, but grant funding is one of the major tools for those projects. So these can be grant funded projects
- BMe: I think the brown bag effort to reach a broader audience is great. You might want to think about a brown bag specifically on the Citizen Science Toolkit. One of the potentials I see for new “business” is applying Citizen Science to geography. I’m thinking of habitat focused areas in particular (e.g., Choptank).
 - JM: Zooniverse and COASST are examples of expansion of existing communities rather than new communities.
- LK: When we talked to Dr. Spinrad about briefing the Research Council I thought we’d go in and say there are a lot of cool things happening, consider having this part of your profile. But Dr. Spinrad took it further and said we need to be serious and look for major data gaps the agency is facing and determine if Citizen Science is appropriate to fill those gaps.
 - JM: It is great for people to understand that these projects can have research and education goals.
- RP: We are hosting our 8th Science Days and Citizen Science is a potential topic for a future Science Days. You capture a bit of a different audience who might not tune in to an education presentation. But something like science days where you talk about research applications and implications is something that could be really great. I’m going to be pushing on Sandy MacDonald to make that happen. Also, our office is putting out a story on OldWeather very soon from the point of view of the people who are actually doing the project.
- FN: The US Global Change Research Program has been spending a lot of time here as well. The data does actually go directly into our analysis of a changing climate, etc

- JM: The data is used based on certain thresholds for global historical climate net.
- BMe: Some of this data is definitely getting used in the research community.
- CMc: Is NOAA at all hampered by the restrictions that people cannot volunteer to supplement federal government work?
 - JM: No, there was legal tort done by the Wilson Center that said as long as federal employees aren't being directly replaced it is not a problem.

Serious Games (*Informational*) - Peg Steffen (15 min presentation/ 15 min discussion)

- JM: A couple examples of programs that play in both realms of games and Citizen Science: the first is "Foldit". The National Institutes of Health wanted to see how proteins could fold so they made a game. People had to invent new ways to fold proteins because the brain is better at this than algorithms. People were playing a game but with real data. It was very successful and had many participants.
 - Second is EyeWire, where players mapped cells in the human brain by high resolution cuts from brain scans. People look for patterns as part of the game because people are better at recognizing patterns than computers. Once the developers utilized best practices from the gaming community (leaderboards, etc.) participation increased. People worked as a team around the world.
 - We have a lot of real world footage at NOAA. It would be great to have teams look through that imagery to identify animals.
 - PS: We know a lot more about brain based behavior and game design than ten years ago. We need to use it. It is informative when it comes to designing successful education projects
- FN: One of the things I want to put out to the Council is that there is a low entrance bar; all it required was a smartphone. Anyone in the world could contribute to the game jam. Very low footprint for a high value reward.
- PS: People come for game jams of any content. I'd love to have a weather or water game jam. People love to create games and interact.
- TF: I think it is really cool. Thanks for showing it

PBS Learning Media Agreement (*Informational*) – Rachel Connolly (PBS-WGBH), Frank Niepold, Peg Steffen (15 min presentation/ 15 min discussion)

- SSc: We fund a lot of content development and education resources in topics related to both ocean and climate. I can think of some that we could recommend to you all for climate. Once you've developed your site, are they pretty much set or do you try to continue to add to them?
 - RC: We hope to continue to add to the PBS collections or create new collections. What's most important is, 'What is strategically most valuable for NOAA and our teacher audience?' I'd like to have that conversation with anyone interested.
- FN: An important part is who does the metadata analysis of tagging, categorizing, and uploading information. That is something we are still working on figuring out.
 - RC: We do have training and support capacity for contributors/
- LK: Does it make sense to line up meet and greets so Rachel gets a feel for where some of the deeper pockets of content in NOAA may be? And also, when an opportunity comes up at WGBH, if you think that NOAA might have a contribution, how would you go about finding someone at NOAA who has or can produce the

content?

- RC: It would be good to have a conversation about what content you have or what content might be coming down the pipeline. I'd be happy to set that up over the course of the next few months. I'm committed to establishing a framework for what a broader type of partnership with NOAA looks like. The marine science collection and the work around big blue live was the beginning of that (referring to LK question). I reach out to the people I know with the opportunity and what we'd like to develop and ask who from NOAA would like to be involved.
- FN: It would be nice to have a point of contact, like Peg with NSTA. I love the idea of having a deeper, wider dive, something that keeps the line of communication open. Everyone needs to be able to "speak NOAA" to give direction to someone like Rachel and help her find the appropriate connections.
- LK: I would love to have the Ed Council listserv be a resource if there is something that is needed or a big opportunity to get it out there, because nobody can know everything that is going on.
- **DECISION: Frank will serve as the point of contact for Ed Council members and PBS Learning Media**
- **ACTION: Frank will work with the Ed Council Executive Secretary where appropriate to connect PBS Learning Media/WGBH with the broader Council.**
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 - JMc: Some members of the Council have been working with NOVA Jeff Hainstyles, on citizen science with NSF. Is there a learning media component of that project?
 - RC: That was not something I was aware of. NOVA is a big part of the learning media team. It probably has to do with NOVA labs, which is the citizen science component.
 - JMc: It is a major NSF investment to NOVA/WGBH and Sci Girls to highlight what is going on with citizen science and Jeff is working on a series of three NOVA programs, one of which is on citizen science and how it contributes to environmental studies. Skywarn and CoCoRAHS will be highlighted as well as students from the GLOBE project.
 - LK: I think the most famous site for citizen science is a CoCoRAHS site in the White House's First Lady's Garden.
 - FN: We have a working group on this now, we are exploring how does the data flow back to inform our work. How do we blend the partner data and our data to get a better picture? A big motivation was to enhance the use of our content by our target audience through a partner. Rachel is committed to helping us get data that supports the value of the partnership.
 - RC: We keep intense metrics. We have 12,800 resources in science. I'm developing some new metrics to do analytics to do a 3D look at the catalog across grades, etc. We have Google analytics and what teachers are looking for. The #1 most searched term was ionic bonding. Also, I want to mention that we do a lot of other engagements and professional development work beyond creating curriculum materials. The catalog hosts a lot of professional development resources for teachers. We are experimenting with virtual field trips, where a teacher can sign up have a professional development hangout and then go into a unit that includes an embedded "value added" virtual field trip as part of a curriculum unit. There are a lot of other engagement opportunities: newsletters, social media network, etc.
 - LK: When will the metrics on the marine science collection be available?
 - RC: We can pull metrics at any time on the collection and individual resources.

We also had a Twitter party around Big Blue Live. We just recently got a report on the metrics for that engagement.

- FN: When you have that ready we'd definitely be interested for the Council to get a sense of where we can go.
- LK: If you and Frank can set a time frame for when that is available then maybe we can set a time for when people can talk about that.
- LK: One thing I was wondering, we have NOAA view and SOS data sets. We should figure out a way to find out what Rachel might want from that content.
 - FN: I think we should set up a time for Council members to talk with Rachel.
 - LN: Maybe we find interested parties who want to talk to her.
 - FN: How about we solicit interest, and then if we see people who might be good for this we encourage them to connect.
- CMc: It seems that there is still a cost component too. It's not clear to me that we can just throw PBS a bunch of our resources and they would add them to their site.
 - FN: You are correct. If there is a new NOVA program on (for example) corals, then they are able to work with us because they know we have info on corals, etc. The other scenario is for us to do the metadata work. We are still working that out.
- LK I assume PBS is into gaming in some capacity
 - PS: they are interested. I think we should target a few topical areas to start with. They are interested in doing a climate lab. We have so much so we'd overwhelm them if we just laid it all on the table. We should ask what programs they have coming up that we can tie our content to.
 - LK: Things that are interesting are less valuable to them than things that are relevant to what is on the horizon for their programming.

Updates and announcements

- SN: I will be sitting in for Tracy for a period of time.
- SH: I wanted to share with folks that a few people were at the Transatlantic Ocean Literacy meeting and the European Marine Science Educators Association meetings. There is a movement towards emphasizing ocean literacy across the globe. I wonder if it might be interesting for Paula to update the group on what is going on with that. There is also movement towards and Asian Marine Science Educators Association.
- LHR: I was in the Pribilof Islands for Bering Sea Days put on the St. Paul Aleut Tribal government, and it is an event where scientists who work on Pribilof come to the school for a week and do events with the kids. It was a good network opportunity and chance for us to connect with the tribal governments. One of the difficulties we have always faced when reaching out to underserved communities is creating the relationship that you need to reach them. It would be helpful to talk at a national level about ways to reach out and how to maintain the relationship with those communities.
- RP: Science Days is next week on Tuesday (10/27/2015) afternoon.
- BM: NOAA Climate Stewards has opened up its application season for the stewardship community. If you go to the website you'll see a new video and slides. Applications are open until Nov 22nd. Will inform the applicants about acceptance by Dec 11. The next discussion club will be Monday Oct 26; the topic will be "Food Choices and Climate Change." The book is Diet for a Hot Planet. The next webinar is Tuesday Nov 3rd, focusing on communicating climate uncertainty and helping students become smart information consumers. We had our first meeting of partners

for our upcoming workshop series for 2016. We have six workshops: dates will be locked down in the next two weeks and the White House blog will announce them. Finally, the sea level rise module developed as part of the DLN project last year will go up on the NOS website within the week.

- JH: There is a new Fish Watch site up now and it is mobile ready also. We also received many boxes of species in the spotlight bookmarks. If you are interested in having some please let me know and I'll connect you how to get them. Jeannine will also have them in the Outreach Center. In reference to Teacher at Sea, we had a great 2015 season, and we have started with FY16 with our alumni activities. We will be at regional NSTA meetings. We will run a 2016 season, which will be a modified version of what we have done in the past.
- FN: You saw the digital forum for PBS learning media. We are excited about that opportunity and it is a testament to the convening power of the White House. One of the other commitments we had was a strong COP21 presence for climate education. So I'll be going to Paris for climate youth engagement. We are looking for case studies, so please send them to me if you have anything. My job is to highlight and elevate the work you are doing as a contribution from the US. We are also looking forward to AGU.
- PS: I will be the kickoff speaker in West Virginia for the science teachers conference. Will be able to talk to some teachers that have specific needs relating to NGSS. One of our climate stewards is going to COP21 as part of the delegation. She will be taking postcards from students that climate stewards will be submitting.
- LN: Implementation plan is open for voting, standard green, yellow, red. Yellow means move forward but you have comments. Red is no, can't move forward unless you address concern.

Upcoming Council Meetings:

All agenda items are tentative

November 18, 2015 – **in room 9836**

December 16, 2015

January 20, 2016