

CMMAP Summer Education and Diversity Retreat
Tamasag Retreat Center
August 5, 2013

Meeting Minutes

Attendees:

Len Albright, Rodger Ames, Michele Betsill, Melissa Burt, John Calderazzo, SueEllen Campbell, Colleen Cope, Marcia Donnelson, Howard Drossman, Sheila Ferguson, Claire Fleming, Brian Jones, Jan Lanting, Heather Michalak, Indira Nair, Mary Ontiveros, Adam Pearlstein, Hannah Pechan, Dave Randall, Randy Russell, Laura Sample-McMeeking, Dave Swartz, Barbara Whitten, Tom Windham

9:00 Welcome and Highlight Reel Melissa Burt

Melissa gave a brief presentation focusing on Education and Diversity highlights since we last met in January. Activities highlighted included: the LSOP open house (7000 visitors, 150 volunteers); Weather and Science Day at Coors Field (LSOP in collaboration with Channel 9 News and Rockies, 10,000 visitors including teachers and students); CMMAP 2013 Summer Interns; Pre-College Sustainability Camp (Stratis Giannakouros from SOGES – LSOP and CMMAP participated); Summer Teacher Training Course (2 courses, 57 teachers, and 9 graduate students involved); the Student Colloquium (research presentations by interns and grad students and a trip to the Snowy Range Mountains led by US Forest Service Scientist); and first SPCEM Workshop (led by Mark Branson).

9:45 Transitioning CMMAP E & D Activities to Reach Rodger Ames, Hannah Pechan, Marcia Donnelson

A business plan has been developed for Reach. The business plan describes which Education and Diversity programs will be transitioned from CMMAP along with sustainable business models for these activities.

The discussion mainly focused on the Summer Teacher Course. Hannah Pechan mentioned that market research has been done regarding other organizations providing a similar course. Teacher training is being offered by Steve Spangler: <https://www.stevespanglerscience.com/training/science-in-the-rockies>, <https://www.stevespanglerscience.com/training/science-at-sea>.

Based on market research, Reach has a long-term goal of charging \$675 for the course. Feedback from CMMAP teachers at this summer's course said that they would be willing to pay about \$150 for the training (typically costs roughly \$50 per day for professional development training).

Potential funding to help support educational programs:

- The Bohemian Foundation

- Anthem
- Morgridge Family Foundation
(<https://online.foundationsource.com/public/home/morgridge>)
- Otterbox
- Front Range energy companies
- Honda
- GE

One way to approach corporations (for example) would be to ask them to sponsor a teacher for the course in the form of scholarships, which will provide advertising for the company.

There was considerable discussion on the transportation and lodging costs, content knowledge, inquiry based learning and resources required to run the teacher course. Integrating the course with literacy, social studies, language arts and math, potentially could lead to greater school district buy-in.

10:40 Connections and Partnerships with Minority Serving Institutions Melissa Burt and Thomas Windham

Over the last few years we have developed relationships with MSIs (e.g. St. Augustine's University, Florida International University, etc.), but this has mainly focused on student recruitment for the internship program.

We would like to develop long-term, mutually beneficial relationships. We need to truly think about the vision for these partnerships? How do we sustain these relationships after CMMAP sunsets? Can we piggyback on what CSU is doing in other areas?

Potential ideas:

- Summer Research experience for faculty of MSIs (This could be a transformative process which would include faculty and undergraduate students).
- Community Colleges
- Undergraduates and faculty come together as a research team

11:30 Developing a Climate Change Workshop for Arts, Humanities, and Social Sciences Michele Betsill

Michele, John, and SueEllen are planning to apply for a Bimson Seminar through CSU. Bimson seminars focus on advanced studies in arts, humanities and social sciences and bringing together K-12 teachers and University faculty. They would like to develop a week long climate change workshop for the humanities. Discussions centered around the scientific content that people need to know about climate change and how it should

be delivered. Potential ideas: how science works, phenology, paleoclimate, the nature of science.

1:00 Choose your own adventure: Little Shop's 2013-2014 Tour and Activities Sheila Ferguson, Brian Jones, Heather Michalak, and Adam Pearlstein

Brian and LSOP shared “a play in 4 acts” around some of their new activities. We did a lot of brainstorming for future videos/podcasts, the 2013 tour theme around exploration, and new material for Tie Dye Fridays.

Podcasts

Ten things you should know about the atmosphere. What are the 10 new things everyone should know about climate change?

New theme

2013 Theme - Exploration

Tie-dye Friday

New material on the web every Friday.

Everyday Science

Science at Home - Experiments at home.

Science Stations - Highlighting an experiment that's on the road.

Show Me Some Science - Resources for teachers. Videos will demonstrate something that is difficult to perform in their classrooms.

2:30 Future Grant Topics and Collaborations

Numerous suggestions were made for possible funding opportunities as follows:

- Bringing together our suite of education materials - We have a lot of materials for different audiences - 100 Views of Climate Change, Spark Education Resources, -- How can we keep high quality materials going? -- Multiscale Education
- Seek out community based research – Build on Relationships we've developed via SOARS and may extend to the Alliance Schools
- Develop explicit curricula around the LSOP activities for K-12 audiences.
- Reach could making effort to bring the Peace Corps up to speed on climate change education, create workshops for them or onsite. As part of a Peace Corp preparation academy.
- Ideas for areas that we should focus on for a training center
 - Cater the message to Local stakeholders

- Develop training materials based on the audience(s) (e.g. Teachers, Students, General Public, Corporations)
- Develop activities for communication training for scientists

3:10 Online extension of teacher workshop
Randy Russell

We'd like to extend the course beyond the 1 week face to face course to provide more opportunities for teachers. We would like to take the structure of the summer course to develop materials for the online extension. Kick-off online extension in October.

Potential themes for online extension:

Resource Collection (by us, by others)
Community (Peer to Peer chat, bulletin board)
Monthly themes (match summer course topics)
Q&A with experts
Presentations/Webinars

Meeting adjourned at 4:00pm.