

# Climate Change Education Partnership

## CCEP

Quarterly Newsletter, Fall 2016



### From the Alliance Office

Greetings from the Alliance Office,

As we look forward to the New Year, the CCEP Alliance Office is pleased to announce the publication of [\*Climate Change Education: Effective Practices for Working with Educators, Scientists, Decision Makers and the Public.\*](#)

We offer sincere thanks to all of the contributors to the Guide, especially the contributions from each of the six projects. The Guide includes effective practices for reaching out to key influentials, formal educators, informal educators, and indigenous communities. The Alliance is pleased to provide this resource for the climate change education community.

We are also looking forward to the annual CCEP Alliance Spring meeting, which has been scheduled for May 23 - 24, 2017 at The Franklin Institute in Philadelphia.

Sincerely,  
Michelle Malouf  
CCEP Alliance Office  
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### Project Updates



On October 20th, 2016, the Climate Education Partners (CEP) hosted a panel on the transportation sector during the Association of Climate Change Officer's West Coast Climate Forum. The panel, "Developing Climate Smart Transportation Policies in the San Diego Region and Beyond: Solutions by Businesses, Transit Agencies and Cities," was designed to address the following topics:

- Help San Diego communities understand the impacts of climate change on transportation and transportation's impacts on greenhouse gas emissions;
- Surface challenges that emerge when the private and public sectors are working toward alternative transportation options;
- Identify and showcase solutions that will help achieve the goals and targets of various city climate action plans, help achieve California's greenhouse gas targets, and mitigate impacts on and from climate change.

The evaluation results from this event were similar to other Climate Education Partners' events, both in how participants understood climate change before the event, in how their understanding changed because of the event, and in how they viewed the event. For example, respondents agreed that they found "great importance in making the San Diego region a world leader in reducing energy and water use." However, while respondents agreed that leaders in the San Diego region are part of the community concerned about climate change, this item received the lowest average rating of all four items. Therefore, while respondents feel strongly about their concern about climate change, they are slightly less sure about how strongly leaders feel. To learn more about the outcomes of the event and view additional transportation resources, please check out our post-event special edition [transportation newsletter](#).

Climate Education Partners has finished post-production on its third of three videos which combine the corresponding animated climate change impact video with live video clips of Key Influential Leaders. Rollout strategies for each film were developed and the first movie, which is on wildfires, premiered in October. Check out these videos on [CEP's YouTube Page](#).



Wildfire Risk in Our Changing Climate

In other news, Climate Education Partners is gearing up for its final round of Key Influential Interviews which will begin in the next few weeks. A strategic plan, interviewer training materials, interviewer assignments and interview prep work for this last round of interviews were developed and produced this past quarter.



On November 10, The Franklin Institute joined more than 300 institutions across 55 countries, participating in the first ever International Science Center and Science Museum Day. The Climate and Urban Systems Partnership (CUSP) presented a special Speaker Series discussion on climate change, titled *Waterways of a Changing Climate*, followed by hands-on activities in the museum presented by our CUSP partners.



CUSP partners from eight organizations provided hands-on activities to engage attendees in climate change solutions.

Retired Navy Rear Admiral Dr. David Titley shared stories about the unexpected impacts of extreme storms and changing shorelines. CUSP climate scientist Dr. Radley Horton discussed the interplay between weather and climate, how climate change will impact our region and suggested innovative solutions for human adaptation.

Sarah Wu, Deputy Director of Philadelphia's Office of Sustainability, described ongoing efforts to manage the changing water scene in Philadelphia. We received many fantastic audience questions via Twitter and email, which have been answered and posted to The Franklin Institute's website [here](#).



Audience members learn about stormwater runoff and green infrastructure with the Philadelphia Water Department at The Franklin Institute.

made  
clear



### Taking climate change solutions to schools

The Town of Oxford, Maryland, is on the front lines for sea level rise impacts in the Chesapeake Bay. Oxford experiences daily pressure from Chesapeake Bay tides and is especially vulnerable to storm events since its highest elevation is only 11 feet above mean high water and much of the town is less than half that elevation. To

avoid regular and extreme damage to property and roads, Oxford has implemented many management solutions. For MADE CLEAR, Maryland and Delaware Climate Change Education Assessment and Research, the town's successful implementation of climate change-resilient adaptations is not just commendable, but it also provides a powerful teaching opportunity.

In summer 2016, the MADE CLEAR Climate Change Academy, a professional development course for teachers, included a day in Oxford. Town Administrator Cheryl Lewis presented an overview of the climate change impacts the town faces and introduced some of the creative solutions that have been adopted through years of effort, endless meetings, successful grant procurement, and community participation. The teachers then accompanied Ms. Lewis on a walking tour of the town to view the stormwater management, landscape swales, shoreline restoration, rainwater routing, and other solutions the town has implemented. The teachers learned about these actions and returned to the classroom to engage in an engineering design project based on devising solutions to regional climate change impacts. Teachers in Maryland and Delaware know that when students learn about the impacts of climate change, they are passionate to slow it down and to find solutions. As one teacher pointed out, "the examples of real-life solutions we saw in Oxford will provide valuable lessons in engineering and design, but they will also inspire my students and help them keep a hopeful outlook."

NNOCCI

The National Network for Ocean and Climate Change Interpretation (NNOCCI) is delighted to announce a new online course in effective climate interpretation: Changing the Conversation on Climate and Ocean Change. The course offers an engaging, guided tour of rigorous communications research recently conducted by the FrameWorks Institute on behalf of NNOCCI with support from the National Science Foundation. With a virtual learning journey hosted by Lindsay Jordan of the New England Aquarium, and a ton of downloadable resources that informal educators can

use to lead discussions or trainings with colleagues and volunteers, Changing the Conversation is an incredibly rich resource for taking framing back to your institution. The course is hosted in the FrameWorks Institute's new online learning platform, FrameWorks Academy. Feel free to share this information with your professional networks. The approach

to environmental communication explored in this course has the potential to shift our national discourse on climate change to be more productive, hopeful, and solution-oriented.

**Visualizing Change: a toolkit for informal educators using visual narratives on**

## climate change

Hundreds of informal science education institutions have turned to data visualizations as a tool for explaining the scientific evidence for climate change. However, most of these efforts do not address the cognitive and social psychology of either the visual medium, or the topic of environmental changes. Visual data has a limited impact if it is not well-interpreted, and the topic of climate change can be daunting or depressing if not communicated carefully. Fortunately, we now have a better understanding of learning and communication, based on advances in cognitive and social science research. The narratives in this toolkit have benefited from not only the experience of veteran science educators, but also our research partners. Researchers at the New Knowledge Organization have drawn on expertise in how to make the most of visually-enhanced interpretations. Our approach also relies on Strategic Frame Analysis®, an evidence-based approach to communications pioneered by the FrameWorks Institute, a nonprofit think tank that investigates the communications aspects of social issues, including climate change and its effects on our ocean. This method addresses conceptual, psychological, and social barriers and develops and tests specific ways of translating scientific concepts for the public.

### **Woods Hole Oceanographic Institution's Strategically Framed Climate Videos**

The NNOCCI webpage provides learners of all backgrounds with the opportunity to dive into the work of this project. Available materials include links to many of our publications, videos, solutions suite, and various other helpful resources. The site is hosted via our partner page, [ClimateInterpreter.org](http://ClimateInterpreter.org). NNOCCI is a collaborative effort led by the New England Aquarium with the Association for Zoos and Aquariums, the FrameWorks Institute, the Woods Hole Oceanographic Institution, the National Aquarium, Monterey Bay Aquarium, the New Knowledge Organization in partnership with Penn State University and the Ohio's Center for Science and Industry. With support from the National Science Foundation Climate Change Education Partnership program, NNOCCI is working to establish a national network of professionals who are skilled in communicating and translating climate and ocean science to broad public audiences. Our goal is to change the nature of public conversation about issues of climate change to be inviting, empowering and solutions-oriented.

You can read the entire report on New Knowledge Organization's [website](#).



### **Palau Science Curriculum Framework Implementation**

The Pacific Islands Climate Education Partnership (PCEP) and the Palau Ministry of Education (MOE) finalized the newly revised Palau Science Curriculum Framework for grades 1-8 last quarter. The team plans to implement the revised framework through a series of quarterly teacher professional development workshops. On July 19-22, a total of 80 elementary science teachers and 10 principals participated in the Quarter 1 training led by PCEP (co-PI Art Sussman and Destin Penland), Palau MOE, and Palau Community College. At the end of the training, teachers drafted and submitted the lessons they will teach during the first semester of this school year. Palau MOE is building a database of these teacher-developed lessons to foster peer support among teachers to ensure ongoing successful implementation of the new curriculum framework. PCEP will be supporting the Palau MOE in the Quarter 2 training for elementary teachers and principals in October 2016.

### **Pacific Storytellers Cooperative Launches**

On July 5, the Pacific Storytellers Cooperative launched at <http://storytellers.prel.org>. This initiative provides an online platform for place-based stories from the Pacific Islands to be shared with a global audience. The Cooperative, led by Daniel Lin, seeks stories of all forms - poems, prose, videos, and photos - from Pacific islanders and residents, especially youth. The launch has been covered by Hawai'i Public Radio, Marianas Variety, Saipan Tribune, Radio New Zealand, and more.

Since July, PCEP has collected over two dozen stories and developed two collaborative projects - one with the [College of Micronesia in honor of the naming of Nan Madol](#) (Pohnpei) as a UNESCO World Heritage Site and another around [a youth climate camp](#) hosted by Jo Jikum, a youth environmental organization in RMI.

### **New Additions to the Climate in the USAPI Booklet Series**

PCEP posted two new booklets as part of our Climate in the USAPI (Sea Level Rise in the U.S. Affiliated Pacific Islands) series - [Climate Change in Hawaii](#) and [Pacific Climate Variability](#) - authored by PCEP climate scientist Dr. Charles Fletcher (University of Hawai'i). The booklet series is intended for high school students, college students, and educators to help readers understand climate in the Pacific islands and how global climate change is impacting and will impact our communities and ecosystems.

The Polar Learning and Responding Climate Change Education Partnership (PoLAR) 2016 [Signs of the Land: Reaching Arctic Communities Facing Climate Change Camp](#) was held June 13-17 in Fairbanks, Alaska. Hosted by the Association of Interior Native Educators, the University of Alaska Fairbanks International Arctic Research Center, and the PoLAR Partnership, the camp brought together Alaska Native Elders, formal and



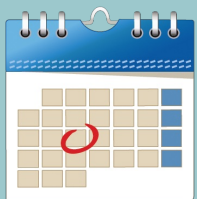
informal educators, science communicators, subsistence practitioners, and western climate scientists. Building off of the success of previous engagement events with Alaska Native community members, the camp facilitated the exchange of knowledge about climate change, from both Indigenous and western science perspectives. With the guidance of four Native Elders, the 14 camp participants spent the week sharing their observations of change to the local environment, learning about the climate system and cause of climate change, and engaging in in-depth dialogue about impacts and solutions.



A key focus of the camp was building the capacity of participants to serve as climate communicators in their communities and among their networks. Camp facilitators highlighted research on and examples of effective approaches to climate change education and engagement, including poetry, storytelling, videos, and games. Participants designed individual outreach plans tailored to their interests and communication styles, with the goal of reaching at least 20 people. Outreach plans ranged from classroom-based activities to public presentations to newspaper articles. Based on feedback, participants were very satisfied with the camp experience. They strongly agreed that Elders' knowledge can help them understand climate change, and that, in addition to affirming traditional practices and supporting connections to the land, the camp setting facilitated the sharing of knowledge held by the Elders. As one participant noted, "Learning in the context of traditional Alaska Native practices and from our Elders has been central to this experience."

## Save The Date!

May 23 - 24, 2017  
The Franklin Institute  
Philadelphia, PA  
CCEP Alliance Spring Meeting



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If a Project would like something to be featured in the CCEP newsletter, please contact the Alliance Office. Submissions and photos from the Alliance are encouraged! To receive the CCEP newsletter and other climate change education resources via e-mail, please e-mail [ccepalliance@etal.uri.edu](mailto:ccepalliance@etal.uri.edu) and include "subscribe" in the subject line. Besides those who work directly

on your Project, please encourage others to subscribe including Project partners and participants.

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