CLIMATE CHANGE EDUCATION: SCIENCE, SOLUTIONS, INSPIRATION, AND EMPOWERMENT

AGENDA

NAAEE October 12, 2011

8:30 - 8:50 **Introduction** Linda Morris

8:50 – 9:00 NASA "Global Temperature" Quiz Louise Huffman

Quizzes can be accessed at: http://climate.nasa.gov/quizzes/index.cfm

9:00 – 9:40 **US Ice Drilling Program** Mary Albert, Linda Morris

Linda briefly introduced the US Ice Drilling Program, its goals and resources. Mary provided an overview of ice core research and share key findings that have impacted our knowledge of climate through the past 800,000 years.

9:40 – 9:50 **Group Activity: Weather vs. Climate** Louise Huffman

9:50 - 10:00 Break How Does Melting Ice Affect Sea Level? Voting...

10:00 – 10:45 Misconceptions and Hurdles

Emily Kellagher

This session provided an overview of how to identify misconceptions in climate change and what common misconceptions to look for in students. Strategies for handling misconceptions based in controversy or misinformation were addressed. Download Powerpoint Download Activity

10:45 - 12:00 Transferring Climate Science to the Classroom:

Louise Huffman

Environmental Literacy with a Focus on Climate Change

Carbon Journey, Biodiversity and Habitat Loss, Phenology: Step Together Step

Hands-on activities from Environmental Literacy Framework (ELF) Activity Book: Carbon Journey, Biodiversity and Habitat Loss, Phenology: Step Together Step

<u>Download</u>

<u>Powerpoint</u>

12:00 – 12:50 LUNCH Meet Informally With Ice Core Scientist Mary Albert 302ABC

12:50 - 1:00 NASA Quiz: Sea Level Rise Louise Huffman

Quizzes can be accessed at: http://climate.nasa.gov/quizzes/index.cfm

1:00 – 1:45 **Making Sense of Graphic Data** Roberta Burnes, Kristen Poppleton Activity: Hands-on Materials for Teaching about Global Climate Change through Graph

[&]quot;Decoding Clues from the Past; Empowering Decisions for the Future"

Activity based on <u>article 1</u> by Dr. Audrey Rule and <u>article 2</u>

1:45 – 2:15 **CLEAN Pathway Project**

Nick Haddad, Sarah Hill

In this session we reviewed the CLEAN Pathway project, and site to help identify the resources that will be useful in the classroom, and to look at specific examples of activities in the collection. http://cleanet.org/ Download Powerpoint

2:15–2:25 Break How Does Melting Ice Affect Sea Level? Conclusions...

2:25 – 3:10 **Speed Dating: Meet Your Dream Activity** Presentation Team

Stacking Up the Atmosphere
Polar Detectives
Energy Choices
Biome Meet and Greet

The Incredible Carbon Cycle
Drivers Start Your Engines
Young People's Projects
Climate Misconceptions

Participants were introduced to a variety of educational materials addressing different aspects of climate change education.

3:10 – 3:40 **Climate Change Solutions and Civic Engagement** Kristen Poppleton Participants were introduced to the importance of including solutions in any climate change education program.

Download Powerpoint

3:40 - 4:00 Films to Introduce Climate Science, Adventure Learning, and Citizen-Science

Lynne Cherry, Ryan Vachon

Lynne Cherry introduced films from her Young Voices on Climate Change Project and Ryan Vachon described his "Doctor Ryan" film project and classroom-ready lesson plan supplements.

4:00 - 4:30 **Wrap-Up**

Presentation Team

Web Resources Shared

For an alternative to the iclickers used for anonymous quizzes.

http://www.polleverywhere.com/

Information on Climate Literacy and activities http://cleanet.org/

Regionally based background on climate change science

http://www.globalchange.gov/

Local/Place Based Climate Change Education Efforts

http://learnmoreaboutclimate.colorado.edu/

http://classroom.willstegerfoundation.org

http://climatewisconsin.org http://parksclimatechallenge.org

Other Websites to visit:

http://icedrill.org

www.climate-expeditions.org

http://climateexplorer.multigraph.org

 $\underline{http://cires.colorado.edu/education/outreach/}$

http://www.andrill.education.org/education/elf

Information on the Presenters

Mary Albert is the Executive Director of the Ice Drilling Program Office and a Professor of Engineering at Dartmouth College.

More information at: http://engineering.dartmouth.edu/people/faculty/mary-albert/

Roberta M. Burnes is the Environmental Education Specialist, Kentucky Division for Air Quality.

Lynne Cherry is the author and illustrator of over thirty award-winning books for children including The Great Kapok Tree and A River Ran Wild. She is the producer of the Young Voices on Climate Change project and film series.

More information at: http://youngvoicesonclimatechange.com/

Nick Haddad is a Project Director at TERC. Led by a group of experienced, forward-thinking math and science professionals, TERC is an independent, research-based organization dedicated to engaging and inspiring all students through stimulating curricula and programs designed to develop the knowledge and skills they need to ask questions, solve problems, and expand their opportunities.

More information at: http://www.terc.edu/

Louise Huffman is ANDRILL's Coordinator of Education and Public Outreach. ANDRILL is a multinational collaboration comprised of more than 200 scientists, students, and educators from four nations (Germany, Italy, New Zealand, and the United States) to recover stratigraphic records from the Antarctic margin using drilling technology.

More information at: http://www.andrill.org/education

Emily Kellagher is Education Outreach Faculty at CIRES at CU Boulder. CIRES researchers explore all aspects of the earth system and search for ways to better understand how natural and human-made disturbances impact our dynamic planet. Our focus on innovation and collaboration has made us a world leader in interdisciplinary research and teaching.

More information at: http://cires.colorado.edu/education/outreach/

Linda Morris is the Education Program Manager at the Ice Drilling Program Office (IDPO) at Dartmouth College. The IDPO was established to articulate and maintain long term and short term goals and plans in conjunction with the ice coring and drilling research community,

enhance communication and information exchange within the research community and beyond to the public, and oversee the IDDO. More information at: http://www.icedrill.org/index.shtml

Kristen Poppleton is the Director of Education at Climate Generation: A Will Steger Legacy, an environmental non-profit established by Polar explorer Will Steger and focused on climate change education, policy and outreach.

More information at: http://www.climategen.org

Ryan Vachon is a professor at University of Colorado who has traveled worldwide to produce a series of educational adventure science videos documenting climate scientists.

More information at: http://vimeo.com/user6201773