Western Consortium of Idaho, Nevada, and New Mexico

Cyberlearning Year 2

Provides many collaboration opportunities!

NV: Kent Crippen, Darko Koracin

NM: Mary Jo Daniel, Lorie Liebrock, Nico Marrero, Gina Tanner

ID: Nancy Glenn, Sarah Penney

Year 2 Action Plan

Activity	Task	Progress to Date
Offer and support CI training in computation and climate change	1. Develop catalog and calendar of CI training to be posted on Track 2 webpage. Update web page and materials throughout year. 2. Communicate training opportunities & participants for higher education 3. Develop and offer training in Climate Modeling 4. Offer and support CI training in computation and climate change	EPSCoR Hosted Trainings • 2010 Tri-State, HIS for 6 (ID); 10 (NM); 14(NV) • Interdisciplinary Modeling Course (UNR), Summer 2010; 24 students • 2011 Tri-State, HIS for 20 participants; Intro to Climate Modeling for 20 participants Requested / Specific Training • NCAR Weather Research and Forecasting Model Workshop; CI Summer Institute for Geoscientists; Process-Based Analysis of LiDAR Topographic Data Workshop • 15+ (faculty, post-docs, grad students)

Training Experiences

- Interdisciplinary Modeling: Water-Related Issues and Changing Climate:

  "..is excellent and provides a meaningful opportunity for exchange across the tri-state EPSCoR programs" (student via Track 1 AAAS Site Review Panel)

  "Amazing opportunity for students to learn from a diverse group of experts that none would be able to get at any of their home institutions" (student)

- HIS Workshop:

  "…great effort at integrating whatever datasets we have currently…" (student)

Training Experiences

- “This training will definitely enhance my ability to conduct research in my scientific field. I gained more knowledge on the mechanism of high performance computing, petascale computing, grid computing, and cloud computing. The training was a good opportunity for me to share my ideas with other researchers and to learn the novel techniques on these topics.” (faculty, CI summer institute training)

Year 2 Action Plan

Activity	Task	Progress to Date
Develop and disseminate educational materials for MS/HS {for in class use}	1. Develop educational materials 2. Update & use portal 3. Compiling data to develop an evaluation of education materials 4. Dissemination of education materials	Idaho: • MOSS – HIS database interface, curriculum development, teacher workshop (http://mossi.tfhsbruins.com/index/index/) • ISU:Blackfoot, ID charter school climate change seminar for IEN New Mexico: • 6 MST teachers developing educational materials • 4 ug students updating materials, compiling links for cybereducation (http://cs.nmt.edu/~epscor/) • Developing website framework for teachers to use in classroom (google app engine django) Nevada: • Partnered with Clark County School District (CCSD) to develop materials for a summer professional development project for middle school and high school teachers related to climate change. • PD funded through CCSD. Topics include specific case studies of climate impacts in Nevada. Currently in the process of identifying participants and establishing a work plan (http://climatechange.education.unlv.edu/?q=node/9)

McCall Outdoor Science School

Cyberlearning

University of Idaho

HOME | CLIMATE CHANGE | WATER RESOURCES | CITIZEN SCIENCE | LESSON PLANS | CAREERS IN SCIENCE

GET INVOLVED

Need a User Account?
Request a user account to upload and share hydrologic data.

Share Lesson Plans
Share your ideas with others.

Giving
Invest in MOSS's future by giving online.

Questions?
Have a question? We are here to help you.

IN THE SPOTLIGHT

1st Annual Hydrologic Information System Event

McCall Outdoor Science School
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phone:(888) 634-3918
fax: (866) 540-4833
P.O. Box 1025
1800 University Lane
McCall, ID 83638

MOSS Cyberlearning Project

Our mission at the McCall Outdoor Science School (MOSS) is to use the outdoors as an integrating context for learning about science, place, and community.

McCall Outdoor Science School
The MOSS Cyber Learning project is a collaborative effort between...and our purpose is to...

» **Discover a New Approach**

NSF EPSCoR IN IDAHO

EPSCoR represents a federal-state partnership to enhance the science and engineering research, education, and technology capabilities of states that traditionally have received smaller amounts of federal research and development funds.

» **EPSCoR Website**

» **Idaho STEM Pileline**

University of Idaho
College of Natural Resources

» **Visit CNR**

PONDEROSA STATE PARK
McCALL, IDAHO

» **Ponderosa State Park**

CITIZEN SCIENCE | LESSON PLANS

- CUAHSI HIS DATABASE
- DATA COLLECTION
- GET INVOLVED

LESSON PLANS

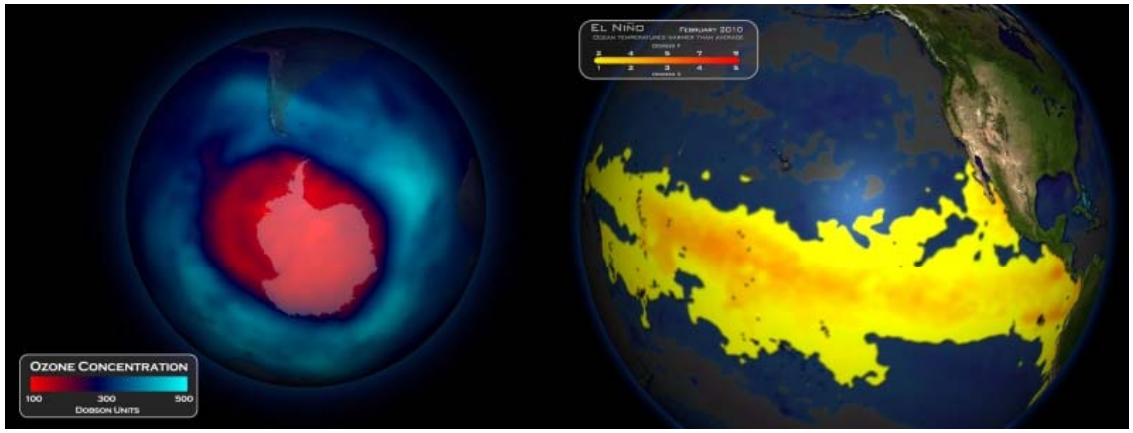
- IN THE CLASSROOM
- IN THE FIELD

Western Consortium of Idaho, Nevada, and New Mexico


VAIO

Example Curriculum

- "Climate Change and Consequences for Man: …students can explore possible ways in which they can become more efficient users of our most valuable resource, water. We seek to educate our students (who are the future leaders and decision makers) about the importance of incorporating educated choices regarding water." (NM MST Participant)



http://cs.nmt.edu/~epscor/

Climate Change Education @ UNLV

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- Request new password

Home

C4D Curriculum Development Institue, August, 2010

Submitted by kent.crippen on Wed, 07/14/2010 - 11:45

August 9-13, 2010

General Schedule

Time	Monday	Tuesday	Wednesday	Thursday	Friday
9:00am	Daily Agenda, Planning, & Review				
10:00am	Large Group Work Time				
11:00am	Morning PD Session				
Noon	Lunch				
1:00pm	Large or Small Group Work Time				
2:00pm	Afternoon PD Session				
3:00pm	Small Group Work Time				

Detailed Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
9:00am	Welcome Report and Synthesis of Resource Review	Daily Agenda, Planning, & Review **Climate Literacy (HS)**	Daily Agenda, Planning, & Review	Daily Agenda, Planning, & Review	Daily Agenda, Planning, & Review
10:00am		**Dissecting a**	Large Group	Large	Large

Popular Items

All time:

- Welcome to the Climate Change Learning Portal
- Teacher Participant Meeting July 20, 2010
- C4D Curriculum Development Institue, August, 2010
- David McCandless: The beauty of data visualization
- How will climate change affect my dream house in LV +30?
- About this Site
- Climate Change and Principles of Science
- Overview of Curriculum Work in Nevada
- Just Zero
- Chapter 6
- Zero
- KQED QUEST - Climate Watch
- Chapter 2
- Which of the following Big Questions do you prefer for Unit ZERO?
- Where will your food come from in LV + 30?

Recent blog posts

- LV + 30, 1.3, and 2.4
- Nat Geo Article
- How will climate change affect my dream house in LV +30?
- ZERO looks great!
- Where have all the otters gone?
- Where will your food come from in LV + 30?

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Home » Blogs » cindy.kern's blog

LV + 30, 1.3, and 2.4

Submitted by cindy.kern on Mon, 11/15/2010 - 14:25

Hey All,

Life been really busy over the past ten weeks but I wanted to take a minute to let you all know that my kids have had a great learning experience with each of the developed modules! I am so happy with the outcomes and thier level of engagement! I am looking forward to implementing the 5DIE for chapter 7 & 8 for sure (running a bit behind but it has been worth it) and still hoping to pull it together for chapter 6. I am quickly running out of time to get that one ready for kids. Anyway, Jake, Nya and I are very appreciative of this model and look forward to developing more of them!

Have a great day!

Cindy

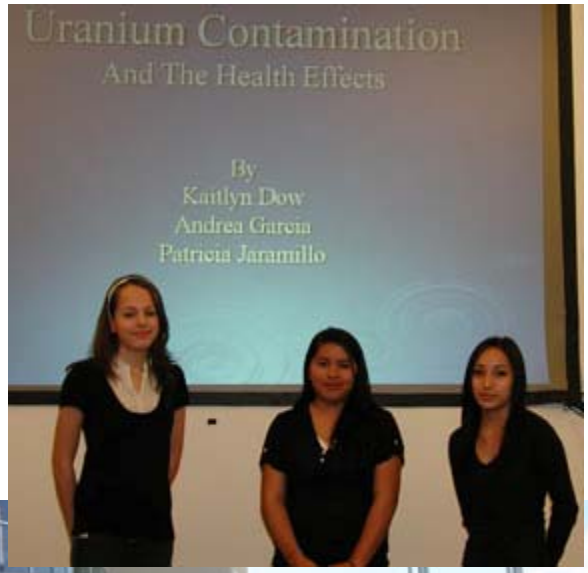
cindy.kern's blog Login to post comments

Tags: energy transfer, human impact, sustainability, Climate Change, 1.1, 1.3, 2.4

Year 2 Action Plan

Activity	Task	Progress to Date
Develop and support extracurricular CI activities	1. Develop and disseminate materials as part of GUTS and Supercomputing Challenge (SCC)	• GUTS and SCC - developed a number of water resources and climate change modules for 2010-2011 • Sustainability: 2/3 clubs from last year continued with teams this year with local business funding in both Supercomputing Challenge and GUTS; teacher from 1 disbanded club continuing with new team
Design/coordinate/advertise/deliver Industry CI Days Program	1. Develop mechanism for use of CI in rural start-up businesses	• Established contract with FastForward NM to offer computer training for small business entrepreneurs in 3 rural NM communities.

New Mexico Supercomputing Challenge



Kickoff in October 2010 - April 2011 Finals!

Demographics similar to 2010 (N=40 with over half URM)

http://www.challenge.nm.org/

Update to EAC Response

- Pedagogical models?
  - 5E (Bybee, 2002): **Engage, Explore, Explain, Extend, Evaluation**, address National Science Education Standards for contents and inquiry-based instruction
  - NV: scaffolded knowledge integration framework (Linn, 2000; Linn, Bell, & Davis, 2005) including guidelines for designing electronic science learning environments from four meta principles: **making science accessible, making thinking visible, providing social supports, and promoting lifelong science learning**.

Update to EAC Response

- Driving Questions/Topic Areas?
  - "**Big Questions**": discussions at 2010 Tri-state; Climate Literacy Framework: http://climateliteracynow.org:

    "**Climate varies over space and time through both natural and man-made processes" (e.g. climate ≠ weather)**
- How to Convey Deficiencies of Climate Models?
  - Modeling/simulations through GUTS, SCC, MOSS (HIS) provide foundation

    "Field data collections, exploring relationship between snowpack and streamflow" (MOSS)