



Intermountain Climate Education Network March 2012 Newsletter

Vol. 2.1

Adventure Learning

Adventure Learning (AL) is an approach to delivering curriculum and designing learning experiences. AL is not a curriculum in itself. An "adventure" in AL focuses around an "expedition." An expedition could be seeking to answer a question, which progresses around the activities and experience around that question; the timeframe could be limited or open-ended. The main feature of AL is the technological capabilities that enable delivery of a content rich learning experience. These electronic features include written, audio and video journals, real-time chats with expedition team members, and other ways to interact with the expedition such as blogs and Facebook. These web-based features always go through an Education Base-camp coordinator, assuring fidelity of the information disseminated.

AL offers an inexpensive way for students to learn about a place, people, the environment, and activities happening around the world. The possibilities are endless!

Summer Workshop

The 2012 ICE Net summer workshop will be held June 19-21 at the UI main campus in Moscow. For three full days, UI science and education faculty will work with teachers to develop a better understanding of climate science, learn how to find and use awesome NASA satellite images and data in classrooms, and develop lesson plans that incorporate both the new ICE-Net activity kits (*see below*) and climate science.

We are partnering with the REACCH project at UI for this workshop and will be inviting an additional 30 teachers. We will also be inviting community college instructors, giving teachers an opportunity to collaborate with CSI, CWI, LCSC, and NIC. If there is an Ag teacher in your school that you would like to invite, please email Justin (rhougham@uidaho.edu).

We will have on-campus housing available (single rooms in the UI Living and Learning Center) and all meals provided by UI Residential Services.



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Upcoming ICE-Net Activities

Monthly Teacher check-in:

- *Tuesday, April 10*, 3:00-4:00pm PDT, 4:00-5:00pm MDT
- *Tuesday, May 8*, 3:00-4:00pm PDT, 4:00-5:00pm MDT

Summer Workshop
UI-Moscow
June 19-21, 2012

Activities Coming Soon

This spring, each school will receive its own 'ICE Net Activity Kit'. This kit will be a product of both the ICE Net project and the partner project 'Summer of Innovation,' which is also being funded by NASA at UI in Moscow. The kit will be delivered in late spring (we'll be contacting teachers about delivery dates in April), and will include four primary thematic activities, each of which can be broken down into several smaller lessons. Lessons and activities are linked to the Climate Science Matrix so you can relate them back to both larger science concepts and the state science standards. They include:

1. *Carbon in the Forest*: make a connection between the trees outside and the larger forests
2. *SNOW!*: not every teacher can take their class to McCall, but every teacher can use this kit
3. *Phenology of Plants*: this activity can be used for Physics, Biology, or Earth Science
4. *Fish Harmony*: connect fishery health to local and global stream conditions



Adventure Learning@Latitude: Equator

On March 21, 2012 Justin Hougham, Joseph Jones, and Mark Reed will sail out of Cabo San Lucas, Baja headed for Nuku Hiva in French Polynesia. Through a satellite connection to Education Basecamp based in Moscow, ID headed up by Brant Miller, there will be daily uplinks to the expedition website for science classes regarding the natural and cultural history of the Pacific via an Iridium SAT phone and BGAN. Classes that follow the trip across the Pacific will find value in tracking a variety of physical and biological ocean and atmospheric conditions: wildlife sightings of all types, air temperature, water and air clarity, particulates, wind speeds and directions, ocean currents, sea state (swell and wind waves), clarity, color, plankton counts and variety (day/night variations, plus latitudinal/location changes) etc.

This journey will kick off a series of expeditions focused on climate change across the world, directly looking at climate data from Northern Hemisphere latitudes and connecting with classrooms investigating the same ideas. This will provide invaluable cause and content for NASA ICE Net Teachers to follow an expedition, take measurements in their classrooms, and start their own Adventure Learning journey connected to the MATRIX of climate science principles. We expect that this will inspire students to engage in science and to ask the question, "Where will you AL@?"

Development site for this project:

<http://alatlatequator.wordpress.com/>

Full site launch will be March 1, 2012

Example of a completed expedition:

<http://alatuimainsalmon.wordpress.com/>

including many examples of the excitement that this approach elicits from students, teachers, and community members.

In the Field Spotlight: Jamie Esler & Lake City High School

This spring, I have been working at Lake City High School to enroll our school for the Cool School Challenge. This program aims to motivate students, teachers, and school districts across the globe to reduce carbon dioxide and other greenhouse gas emissions associated with their schools. As the Teacher Leader of the challenge, I have worked with a group of volunteer students, as well as my physics classes, to enroll nearly 50 teachers across our school to "take the challenge". We are the very first school in the state of Idaho to take on the Cool School Challenge, and when our work concludes in May, we are hoping to reduce the carbon footprint of building by over 100,000 lbs. of carbon dioxide!



This project has not only provided my physics students with an awesome project-based assessment for our Work/Energy/Power Unit, but more importantly, has provided our entire staff and student body the opportunity to become directly involved with the environmental impact of their daily lives in this building. The Cool School Challenge has given us a way to communicate to our community that there **are** people at Lake City that care about the negative effects of a changing climate, and that we are willing to take those important small steps that help to conquer a much larger cause. For more information on the Cool School Challenge, visit www.coolschoolchallenge.com

Teacher Web Corner

Project Website:

http://www.uidaho.edu/ed/research/signature_areas/nasaqce

Adventure Learning at UI (AL@UI):

<http://www.uidaho.edu/ed/handsonexperience/alatui/framework-of-al-at-ui>

AL@Brundage

<http://alatbrundage.wordpress.com/>

John Abotzoglou's blog post on "How did the extra day last month influence our climate in the interior NW?"

<http://climateinw.wordpress.com/>