

Education Outreach and Communication

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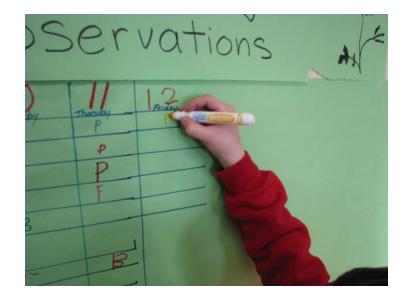
Science Integration with the Arts and Humanities

- In Times of Change (ITOC) Mary Beth Leigh
- One Tree K-20 STEAM Education Jan Dawe, Zachary Meyer, Glenn Juday

One Tree K-20 STEAM Education Janice Dawe, Glenn Juday



Learning is broader and deeper with **STEAM** Art acts as a bridge or "hook" in to OneTree's STEM (science, technology, engineering, and math) activities





- Science Fair/Symposiums –Coordination and judging, mentoring
- Videos
- Courses- Radiocarbon in Ecology and Earth System Science; Methods in Interdisciplinary Research
- High School Summer Research Internship
- GK-12 Changing Alaska Science Education
- Permafrost/Active Layer Monitoring Project



- Research Experience for Undergraduates
- Research Experience for Teachers
- Permafrost/Active Layer Monitoring Project
- Citizen Science
- **IGERT graduate program** in Regional Resilience and Adaptation (RAP)



 Professional development Workshops- for teachers

GLOBE: educators from Anchorage,
Fairbanks, Juneau, Nenana and Nuiqsut;
Trained teachers from Anchorage
subsequently trained other teachers from the
Anchorage School District, in the
atmosphere/weather measurement protocols.



 Dangerous Ice: Changing ice conditions on the Tanana River, Fairbanks. Schneider, W.S., K. Brewster, K. Kielland and Chas Jones. 2013. Oral History Program, Rasmuson Library and the Institute of Arctic Biology, University of Alaska Fairbanks, 66 pages.

EO Activities

Signs of the Land Climate Change Education
Summer Camp



International EO Activities

- Professional development follow-up
 - Meeting with 30 educators from different regions of the Philippines.
 - visits to schools in Luzon province
- CGAIN Workshop in India GLOBE Alumni from Benin, Czech Republic, Egypt, Thailand, and U.S



EO Outcomes

- Development of Teacher Leaders/Trainers
 - multiplier effect
 - Teacher awards
- Student Projects
- School Projects
- Student Leaders



EO Opportunities

- Summer Research Experience/Internship-Upward Bound High School Students
- LTER Children's Book
- Emerging Leaders Institute

Future Directions