Earth & Space Project-Based Professional Learning Community



Engaging Indigenous Youth and Adults in Community-Focused Efforts Around Climate Change



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Recorded in April 2022 as part of the Earth & Space Project-Based Professional Learning Community Convening

Plenary Keynote

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Elena Sparrow, PhD

Research Professor / Education Outreach Director University of Alaska, Fairbanks Fairbanks, AK Engaging Indigenous Youth and Adults in Community-Focused Efforts Around Climate Change

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UNIVERSITY OF ALASKA FAIRBANKS

Elena B. Sparrow, Ph. D. The International Arctic Research Institute University of Alaska Fairbanks



International Arctic Research Center Credit: M. E. Krauss (2013). Alaska Native Language Center

Land Acknowledgement

 I am in Fairbanks, Alaska, on the traditional and unceded homelands of the Lower Tanana Dene People. I gratefully acknowledge and honor them, their past and current relationship to and care of the land. I am committed to building long term reciprocal partnerships with Indigenous individuals and organizations in my work in support of their sovereignty and self-determination.



Why engage Indigenous Youth and Adults in community-focused climate change work?





Climate change affects us all. We need diverse

people

talent and skill sets

knowledge systems

For intergenerational climate learning and action- for climate adaptation



Why engage Indigenous Youth and Adults in community-focused climate change work?

Indigenous peoples bring many strengths :

community values

Indigenous knowledge and practices

What is Indigenous Knowledge?

"Indigenous knowledge is a systematic way of thinking applied to phenomena across biological, physical, cultural and spiritual systems. It includes insights based on evidence acquired through direct and long-term experiences and extensive and multigenerational observations, lessons and skills. It has developed over millennia and is still developing in a living process, including knowledge acquired today and in the future, and it is passed on from generation to generation." – Inuit Circumpolar Council Why engage Indigenous Youth and Adults in communityfocused climate change work?

Climate Change disproportionately impacts Indigenous populations who are deeply connected to the land

Permafrost warming over past fifty years in Alaska









Climate Change Impacts





from G. Juday







Impacts – Alaskan communities



Shishmaref bluff retreat

... severe erosion caused by

David E. Atkinson IARC/Atm. Sci., University of Alaska Fairbanks





Key Findings from Signs of the Land Camp

Reaching Arctic Communities Facing Climate Change Project



Figure 1. Participants' Knowledge of Climate Change Before and After Camp:





Indigenous Knowledge & Ways valued

"I felt well educated on the Western science and perspectives of climate change, but the real value of the camp was in teaching to the heart and spirit. The elders taught so many lessons and we all brought powerful stories. The success of the story telling and values-based experience at this camp was invaluable."





Why engage Indigenous Youth and Adults in climate change work?

- Indigenous adults want their youth to learn STEM and gain skills and tools for climate change adaptation plans and action in their communities
- Indigenous youth want to contribute to their community





Kwethluk River Bank Erosion Study

- Alaska Native students at their study site and at a GLOBE international conference in Ireland
- They shared who they are and real life climate change experience through the science session and the cultural session.











Native Village of Kongiganak

- Edward David Elder
- Cassius Brown Assistant Principal, Teacher
- Joseph Mute Tribal Administrator





Credit: Association of Village Council Presidents

Other benefits of engaging Indigenous and other adults in community focused efforts on climate change

OUTCOMES FOR SCIENCE AND INDIGENOUS CULTURE EXPERTS



95% of experts reflected about building relationships with scientists or Indigenous culture experts and practicing cultural responsivity



70% of the experts involved believed A&E provided opportunities for mutual learning amongthe participants and the partnering scientists, Indigenous content experts, and educators.

2019 Arctic and Earth SIGNs Evaluation Highlights, Goldstream Group Report

Thank you

Acknowledgements: Dr. Katie Spellman, Malinda Chase, Christina Buffington



Thank You





This material is based upon work supported by NASA under cooperative agreement award numbers NNX16AC67A and 80NSSC18M0061. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the view of the National Aeronautics and Space Administration (NASA).