



Investigating environmental identity development among children in rural Alaska Native communities through intergenerational, culturally responsive community science programming

Jessica Andrews (GBH), Mary Haggerty (GBH), Malinda Chase (Association of Interior Native Educators)

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Project type: Developing and Testing Innovations

Project Overview: This two-year research-design project, undertaken in collaboration with South Dakota State University and the University of Alaska Southeast, is: (1) building new knowledge about the ways in which children from rural Alaska Native communities, ages 6-8, develop “environmental identity” (defined as the empathy, knowledge, and skills that children need to act responsibly for the environment) and (2) investigating how environmental identity can be nurtured via an intergenerational, community-based environmental science program that is supported by appropriate technologies and incorporates culturally responsive ways of understanding and doing science.

Rural Alaska Native communities are implementing a wide variety of environmental science and cultural programming for children and families, but still see opportunities to leverage a popular children’s television series to further their work.

Lessons Learned & Insights Gained: Through initial visits to our three partner communities – Bethel, Hoonah, and Northway – we are learning about how children relate to their place and environment, documenting what adults think is important for children to learn about living on the Land, investigating the science and cultural programming already in place in communities, and identifying opportunities to leverage the popular Molly of Denali PBS KIDS series to strengthen or expand existing community programming.

Equity: Alaska Native communities possess a vast amount of environmental science knowledge and skills, yet are underrepresented in the STEM workforce. This is especially critical at a time when communities are grappling with the need to prepare for and respond to climate change. Building on research that shows a strong association between environmental identity and pursuit of environmental science careers, our project takes an assets-based, culturally responsive approach to science education in order to create community programming that helps children develop a stronger personal affinity to science while validating and celebrating their personal and ethnic identities.

New Challenges & Next Steps: Because of delays due to COVID-19, our project has only recently launched. Over the next year, we will be creating co-design teams in each of our three partner communities, and will work with these teams to develop, test, and revise an implementation model and set of prototype multimedia resources that could form the basis for an intergenerational community science program that supports young children’s environmental identity development.