

Initial findings show how young Alaska Native children engage in environmental science through hands-on exploration, experimentation, subsisting on the land.

[Click on the link below]

[Mud Science on the Playground](https://youtu.be/1Nf7d7dBtqQ)

**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 rural Alaska Native communities are grappling with the need to prepare for and respond to climate change. The aim of our research is to highlight young Alaska Native children’s voices and experiences on the land and build upon the successes of current environmental science and cultural programming. Our work takes an assets-based, culturally responsive approach to science education by creating community programming that helps children develop a stronger personal affinity to science while validating and celebrating their personal and cultural identities.

**New Challenges & Next Steps:** Due to COVID-19, our project was delayed by one year. The research team completed data collection for phase one of the project this fall. Over the next several months, the research team will analyze data collected from children and adults in the three partner communities, including video from wearable cameras and children’s drawings, as well as interviews and focus group discussions with key community members. Findings will build new insight on the ways in which young children from rural Alaska Native communities develop their environmental identities. These findings will be shared with GBH and inform the work of co-design teams in each community. These teams will develop, test, and revise an implementation model and set of prototype *Molly of Denali* multimedia resources that will form the basis for an intergenerational community science program.



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

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Project type: Developing and Testing Innovations

Project Overview: This two-year research-design project, undertaken in collaboration with GBH and *Molly of Denali* 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.

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