



2022

## North Cascades Institute Internship

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# COLLEGE OF THE ENVIRONMENT



**Internship Title:** North Cascades Institute Mountain School Instructor

**Student Name:** Ellysen McFarland

**Internship Dates:** August-December 2022

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**STUDENT SIGNATURE** \_\_\_\_\_

**DATE:** 12/24/2022

North Cascades Institute  
Mountain School Instructor

Fall 2022

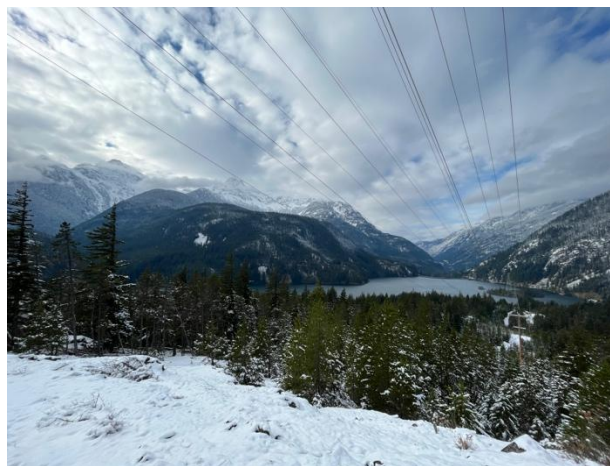
Ellysen McFarland

## Introduction

This fall I worked as a Mountain School Instructor at the North Cascades Institute, a nonprofit organization with an Environmental Learning Center near Lake Diablo. The season began in late August and ran through mid-December. The responsibilities as a mountain school instructor include designing and delivering lessons about natural and cultural history, interconnectedness, social emotional learning, art, and natural science topics including fluvial/alluvial valleys, watersheds, decomposition, web of life, geology, and stream ecology. This season had unforeseen challenges due to an extremely long wildfire season with fires near the Environmental Learning Center. As a result, I was not able to teach as many sessions of mountain school as I was expecting. My team and I ran the first overnight Mountain School program since March 2020 and tested out new curriculum. This season was about overcoming challenges, working with my team, problem solving, and making the most out of the experience when students were able to safely come up to our campus.

## About the Organization

The North Cascades Institute's learning center is located next to Lake Diablo, a reservoir of the Skagit river created by Diablo Dam. The mission of North Cascade Institute is to "inspire environmental stewardship through transformative learning experiences in nature." (North Cascades Institute, 2022).



*Left: A group of Mountain School Students out on Diablo Dam. I taught lessons about salmon, the Skagit Watershed, and how humans can impact the environment while looking over Lake Diablo and the surrounding peaks.  
Right: Looking downriver from Buster Brown Lookout, a trail students hike up to that has a great view of Lake Diablo, Colonial Peak and Pyramid Peak.*

## About Mountain School

The Mountain School program takes place during the school year in the fall and spring. It is a three-day overnight program designed for 5<sup>th</sup> graders. Their time at mountain school consists of hiking trails around the campus, learning about the local ecosystems, building community, and finding connections to the North Cascades.

At Mountain School Students spend most of their time learning outdoors. This makes a unique learning experience for students. The curriculum ties in multiple elements of earth science, natural history, and indigenous knowledge. The driving question of the Mountain School curriculum is, “what content can we provide that is unique to the Upper Skagit, and therefore less accessible for those in a traditional classroom setting?” The core lessons set the tone of student’s time at Mountain School and these core lessons were constructed to teach about earth systems in a place-based way and build on students’ prior knowledge

There are five specific curriculum goals. It was not expected that all of these will be reached each session but used as building blocks when planning a session of mountain school. The classroom teachers are sent a pre-trip survey that outlines each of these goals and asks each teacher to rank them by order of importance so at Mountain School the Students can build on what they are working on in the classroom.

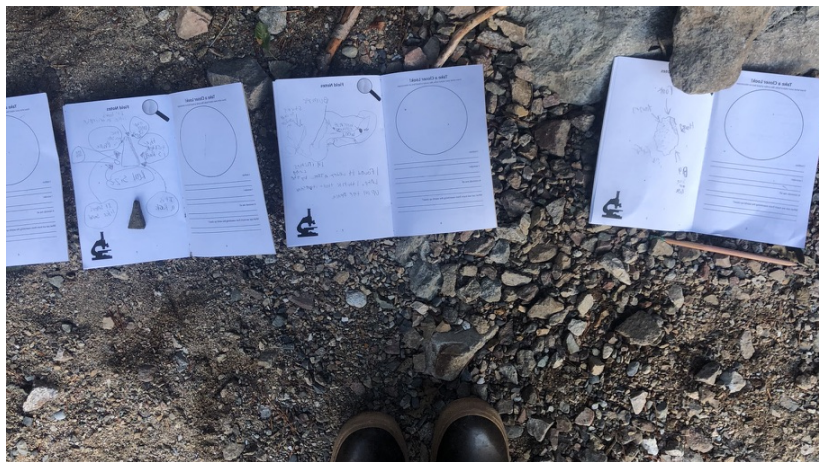
1. Develop a model demonstrating interactions between multiple factors in an environment using two or more of the Earth's systems.
2. Ask questions and identify climate-related challenges for local and global communities and problem solve ways to mitigate and/or adapt to those challenges.
3. Identify a personal connection to a community and explain how that perspective impacts our relationship to people, resources, flora, fauna.
4. Identify two learnings or areas of growth and describe how those experiences will influence students to engage in stewardship of their natural and human communities.

The goals are important because they set the tone for the experience as an educator by being the framework for the place-based curriculum we taught as instructors. These goals were important for establishing the material in the core curriculum.

This experience for students extends beyond learning the material in the lessons or hitting the curriculum goals. Mountain School inspires finding connection to the North Cascades by spending quality time with peers and spending time outdoors.

In the time between core lessons there is a lot of time for students to explore and play teamwork games facilitated by instructors. During this time, I observed students make thoughtful and interesting observations. For example I had a student share his observations about the moss he was looking at while in his hiding spot during a round of Camouflage, (a game similar to hide-n-seek) making connections to the moss was like a tiny forest on the log. These moments of curiosity are what make outdoor education so exciting for me. Students have the freedom to explore the things they are interested in and are empowered to share and show others what they notice about the natural world. Other times students had “aha” moments when we would observe deer or squirrels in the forest and connect the behavior to concepts we learned during core lessons about animal adaptations or interconnectedness of ecosystems.

Mountain School inspires students’ creativity and wonder by allowing the experience to be student led. As an instructor it was a fun challenge to let the student interest guide the trajectory of my lessons and plans throughout a mountain school session. If students saw something they thought was interesting while walking down the trail, we would stop and talk about it as a group. These unplanned learning moments sparked by student observation are what seem to stick with students after a long day and hopefully into the future.



*Above: Example of student's nature journals*

## Learning Intentions

My goal was to learn how to lead a learning experience that gives students an opportunity to connect and gain understanding of the ecosystems and landscapes that have inspired me. The position as a Mountain School Instructor at the North Cascade Institute specifically would allow me to further develop skills to create a safe, inclusive, and transformative learning environment for students that uplifts curiosity and develops connection and community. I chose to work with NCI because I wanted to cultivate connection to my local community in the Skagit and Nooksack River watersheds through education and shared outdoor experiences with students in the North Cascades.



*Teaching a group of Mountain School Students after one of the first snowstorms of the season on trails adjacent to the Environmental Learning Center. We spend most of our time teaching outdoors even when the weather starts to turn. This is one of the challenges as an instructor but also something that makes Mountain School a unique and important experience for students.*

## Experiential Learning

I can break up my four month experience as an instructor at North Cascade institute into the three day Mountain School sessions. This experience for me as an WWU student is easily compared to one of a Mountain School student because both are rooted in direct experience, participation, and reflection of those experiences. This allows students (myself and mountain schoolers) to build on our prior knowledge, prepare for future experiences, and to become inspired.

### **Day 1: Invitation to Learning/ Building curiosity and wonder**

My first four weeks as a Mountain School instructor would be comparable to day one at Mountain School. The first day at Mountain School for students is the time where students get to know the area around the Learning Center, develop a sense of community, and we set expectations as a group. We play team building games, have conversations about communities, and begin to explore and learn about the environment around us.

Training to be a Mountain School instructor was outlined to be three weeks but was extended due to an extended wildfire season which resulted in poor air quality at the Learning Center. For the four weeks we had a deep dive into the curriculum and logistics of Mountain School. We also had guest speakers from Seattle City Light, PFLAG, and North Cascades National Park. I began to gain a deeper understanding of the North Cascades and the Skagit River Watershed. Through shared experience with my coworkers hiking, teaching and participating in lessons we developed a sense of community among the Mountain School team.

### **Day 2: Exploration, Concept Invention, Application**

My next six weeks of work can represent the second day of Mountain School. The second day at Mountain school is a busy day spent almost entirely outside on the trails surrounding the Learning Center. Instructors are with students hiking, teaching lessons, exploring, and playing games. This can be a challenging day but is ultimately very rewarding for students who don't usually spend extended amounts of time outdoors. Our goal as educators is to build on students' prior knowledge and experience with exploration, observations, and conversation. Some things students particularly enjoyed learning about was how animals adapt to the environment through a game called Camouflage and looking at frozen bird specimens in the lab. Students also enjoyed learning about geology through observations of rocks on the beaches around Lake Diablo and looking at the surrounding peaks.

These six weeks as an educator were full of challenges, most notably multiple weeks of the program being canceled due to smoke. After training, my coworkers and I had a lot of anticipation built up around the first few weeks of Mountain School. I felt like I had created a lot of momentum. I was anxious and excited to teach for the first time. Once the smoke started to roll in and programs began to get canceled, it was a challenge to keep that momentum moving forward. I was disappointed I was not getting the experience I wanted with students and discouraged prepping for programs that kept getting canceled. Eventually it rained in late October, and I finally got a session or two of teaching experience after almost 6 weeks.

Every 'normal' week of mountain school felt like a huge win after weeks of canceled or disrupted programs due to smoke. As the smoke cleared from the valley the weather turned and by mid-November snow was on the ground at the Learning Center.

Each week with students was challenging and rewarding as an instructor. Each week the group of students would have different energy levels, prior knowledge, and experience outdoors. As an instructor, being adaptable each week and being ready for anything was crucial. One of the biggest challenges was adapting the curriculum to students with a huge range of reading abilities, as well as students behind on social emotional learning due to covid. I learned that teambuilding and talking about mindful communication was helpful for students. Creating a sense of community within our trail group made the

overall experience better for students and the students were more likely to be engaged in the lessons throughout the day.

Being a first-time educator, I was consistently challenged by my own doubt that I was doing a good job. I had a lot of support from my coworkers and supervisors, they gave constructive feedback about my teaching as well as tips and ideas to help lessons move more smoothly. Something about the climate being safe and supportive to learn from mistakes? etc? The importance of cultivating community is huge at NCI specifically among the Mountain School team. This made me a better educator and created a safe and welcoming space for students, schoolteachers, and chaperones.

### **Day 3: Reflection of Learning and Continued Invitation**

The last day of Mountain School for students flies by. It is a short day on the trail then students load the buses and head back downriver. I would compare the last day of mountain school to my last two weeks as an instructor.

The last week of the program I was scheduled to be a ‘switch instructor’. This means I didn’t have a trail group and helped the kitchen staff. Due to being short staffed as an organization Mountain School instructors rotated through taking on the switch role to support housekeeping and kitchen staff. Each instructor was scheduled to work one switch week throughout the whole Mountain School season. One of the other instructors got sick that week and I was pulled in to take over their trail group with limited time to prep. This seemed like an appropriate culminating experience at NCI. This last week tied together my main takeaways of being an environmental educator, to be prepared for just about anything and to take teaching moments when they happen naturally. The last week with students was snowy and cold but the students and staff made the best of the conditions. I only taught the first day and then co-taught for the final two days. With two trail instructors, the students were engaged and excited to make connections between the lessons I taught the day before to what my co-worker was teaching.

The last week was time for debrief and reflection on the entire season. This week was particularly challenging. I was experiencing burnout from a season of sessions being very touch and go. We did some deep dives into the challenges of our job and working for NCI. Out of all eleven of the Mountain School instructors only two decided to stay with NCI. This turnover made the long sessions of fixing problems challenging because we wouldn’t see any of these changes happen in their entirety or be able to hold leadership accountable to follow through with the solutions we brainstormed.

During this time the mountain school team was able to take time to reflect and share about our favorite memories from the season. People shared similar stories about students’ “aha moments” and our time off work when we had time to canoe on Lake Diablo and Ross Lake.

## Application of my Knowledge



The core lessons are structured around understanding earth systems and ecosystems. Teaching this material drew from my knowledge from courses at WWU such as Biology, Natural History of the Pacific Northwest, Physical Geography, American Indian Perspective, and Introduction to Geology.

Through my courses at WWU, I have become more interested in better understanding the relationship of people with the ecosystems of the Salish Sea. As a Mountain School instructor, I shared my own wonder and created a space for students that fostered their own connection to a place by spending quality time with peers and having fun outdoors.

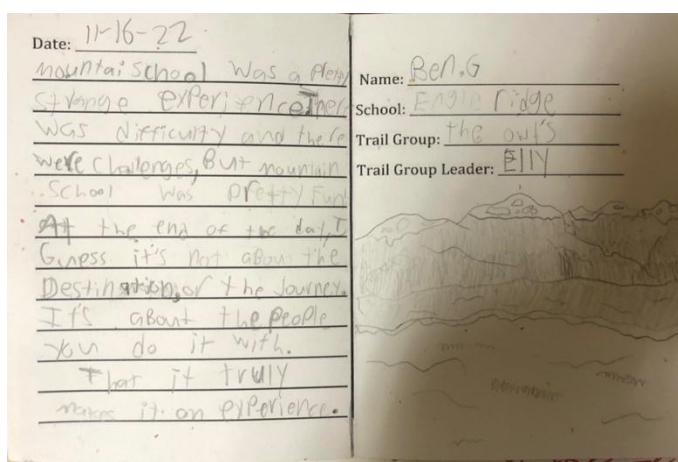
## In conclusion

This program is important to me because it gives students an opportunity to experience the outdoors in a new way. Many of the students I taught had never been in an environment like this before or spent much time exploring outside. Students would express their nervousness and excitement to me and the other instructors as soon as they got off the bus. As instructors it was inspiring to see a shift happen in students over the three days when students would be more comfortable navigating trails and exploring the outdoors.

Mountain School was an important space for students to establish community with their peers. I enjoyed being a part of creating an atmosphere that was welcoming and uplifted student voices. Demonstrating to students that all the adults at Mountain School are there to support them was important to ensure that every student could have a positive community building experience. It was important that all the adults at Mountain School were there to support students to ensure they had a positive, community building experience.

As an instructor I shifted my perspective throughout the season from trying to get students to learn as much as they can about the North Cascades to focusing on building connections to the North Cascades and the outdoors. When students made connections to what they already know to what they observed at mountain school those things seemed to stick with the students best.

I enjoyed my time working at North Cascades Institute as a Mountain School Instructor. It gave me experiences in environmental education that would have not been possible at WWU. It expanded on my previous coursework and my own experiences outdoors. I look forward to carrying this experience with me as I return back to school and in future jobs.



Above: Students would write postcards to their future selves about mountain school. Here is what one student had to say. "Mountain school was a pretty strange experience. There was difficulty and there were challenges, But mountain school was pretty fun! At the end of the day, I guess it's not about the destination or the journey. It's about the people you do it with. That it truly makes it an experience." -Ben, Eagle Ridge



*Above: Students sit at Canoe Beach and reflect on their experience at Mountain School during their last day of program.*