



Creating a Sustainable Future: **Designing and Exploring What Our Learning Looks Like**

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Grade/Subject(s): 4 Integrated Studies (Social Studies/Science focus)

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Inquiry/Project/Activity Title: We are the Earth: Connecting to Earth



Brief Description of Inquiry/Project/Activity:

Every Tuesday afternoon the grade 4 students from Glenbow School went outside for two hours or more to explore, connect and make meaning from our Earth. This time was sacred and valued as a classroom community. Students were immersed in a combination of planned activities and free exploration time, spending time in what is pertinent to our environment. This reflective time was a catalyst for classroom learning and a chance to connect with the natural areas of the students' community. Students learned that not only are they a vital part of our ecosystem but comprised of the very same water, air, soil and energy as things around us. Students also reflect heavily on their emotions and how they felt when they are out in the natural world. They understand that to care about a sustainable future, we must first love and care about our planet. And that love can only be cultivated if through meaningful first-hand experience.



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Big Ideas (Key Concepts and Learning Outcomes)

The big ideas (Concepts/Learning Outcomes) in our learning are...

WELLNESS

- **Key Concept: Direct experiences with nature develop emotional, mental, psychological, behavioral, physical well-being, a sense of wonder, and appreciation for beauty:**
 - I explore a natural environment and illustrate the senses I use
 - I describe what I notice and feel when I am in nature
 - I express my view on the beauty and importance of nature
 - I demonstrate the skills necessary to have a safe and enjoyable experience in nature in various kinds of weather conditions.
 - I reflect upon the importance of the natural environment and outdoor living to my personal well-being and a healthy lifestyle.
- **Key Concept: Human life is reliant upon the health of our natural environment and this requires an ethic of respect, care, and stewardship for the natural environment**
 - I demonstrate actions that reflect care, respect, and stewardship for the

environment

SCIENCE

- **Key Concept: Humans are part of nature: we depend on ecosystems and on the network of interactions among organisms and within and among ecosystems for sustenance.**
 - I demonstrate care and respect towards all living things.
 - I discover the components of local habitats that provide essential elements for all life.
 - I understand that healthy ecosystems provide basic requirements that are essential to all life, such as fresh air, clean water and fertile land.
- **Key Concept: Exploration, Discovery and knowledge of the natural and built environment where we live develops a sense of place and supports locally-based stewardship and citizenship.**



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- I discover and document the features of my local natural and built environment that make it special to me.
- I explore and assess how the local environment to which I belong adds value to my life.



Driving Questions

The questions that drive our learning are...

- What do I see/hear/feel/notice? (and the millions of subsequent questions that naturally arise)
- What emotion does this make me feel?
- Why is this noticeable?
- How am I connected to this? What is my role in this?
- What/who else is at play in this ecosystem? What is their perspective?
- What impact am I having on the other elements of this ecosystem?

Cross-Curricular Competencies (RVS Competencies)

The competencies emphasized in our learning are...

- Know how to learn... to gain knowledge, understanding or skills, through experience, study, and interaction with others



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- Think critically...conceptualize, apply, analyze, synthesize and evaluate to construct knowledge
- Identify and solve complex problems...have the capacity to solve a range of problems, from simple to complex
- Create opportunities...through play, imagination, reflection- creativity and innovation
- Demonstrate good communication skills and ability to work cooperatively with others - collaboration and leadership
- Demonstrate global and cultural understanding...considering the economy and sustainable development

Inquiry/ Project/ Activity

Description of the project with respect to real life, authentic knowledge building opportunities; experiential learning; integrating learning (what subjects); working with experts; ethical citizenship (stewardship) etc...

Our experience is different each and every time we step outside. And yet much is said for the common and familiar experiences we undergo.

- Authentic experiential learning is obviously at the forefront of our Weekly Walk time. We hope to create strong connection with our Earth by being physically, mentally and emotionally present. Students regularly build forts, cross creeks, slide on ice, climb up and come down hillsides etc... These tangible experiences can lead to unlimited learning experiences related to a vast number of science and social studies concepts. Each curriculum contains a number of areas which regularly present themselves during our time in natural spaces. For instance, in grade one we truly experienced our seasons, watched the life cycle of plants and animals, used our senses to actually define and describe our surroundings, we saw our community change and the impact that different developments had on each other. In grade four we experience the natural regions of Alberta (standing on Cochrane Ranche's bluff we are able to see the grasslands, parkland, foothills and Rocky Mountains regions all interact), see the environmental impact that waste has on our world, observe firsthand the land-use decisions occurring in our community and be truly present to native species growing and changing with the



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seasons. These concepts mean very little on a textbook page but mean absolutely everything when present with them. Our physical and emotional connection is far stronger when we are out in our natural community. Allowing inquiry to emerge on Weekly Walks leads to unlimited authentic knowledge building opportunities. The questions we ask and investigations we are lead into through our time outside has lead to numerous experts visiting our classroom and several powerful ethical citizenship projects. Our time outside has lead to inquiry investigations in many things including analyzing the state of Alberta's watershed, the grassland/feral horse cull debate of last year, and collection of native species for use in traditional ways etc...





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Demonstrating our Learning (Assessment)

This is how we have demonstrated, documented and reflected upon our learning

- Observation and Conversation are the strongest areas of triangulated assessment in this type of work. As a teacher I am constantly listening to inquiries of children and guiding them to connect understandings and further their wonderings. Eavesdropping on students' conversations are often the best way to assess their thinking and knowledge. Products are also collected on and after time outside. Samples and photographs are excellent ways for kids to bring home their observations. As a class we often reflect verbally as we walk and orally and in written form upon our return. Our science sketchbooks are one method that we often record our observations, wondering and personal reflections. Reflections are sometimes very scientific in nature and speak directly to elements of the curriculum, while others may be very personal and speak to an emotion stirred while sitting quiet by a creekbed.



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Success for all Students

This is how we have differentiated, provided supports, etc. to make it for everyone...

- Compared to learning in the classroom, learning outside in nature has required very little differentiation as the students are highly engaged and with student choosing and directing own learning
- Scaffolding in personalized as challenge themselves and take risks to further their own development
- Various differentiation occurs as students document and represent their learning ie. journal, create videos, write poetry. mind mapping etc.

Resources

The resources we utilized to support our learning are...

- Last Child in the Woods, Richard Louv
- Nature Principle, Richard Louv
- Various works of David Sobel
- We Are the Earth, David Suzuki

What changed for the Students

- The consciousness they had regarding their connection to the land.
- The awareness they had to the physical, mental and physical benefits of connecting with nature.
- Increased knowledge of interconnectedness and biodiversity, as well as other major natural science understandings.
- Increased ability to be silent and still in nature.
- Increased ability to reflect.
- Increased wonder/inquiry and questioning.
- Increased cooperation.
- Increased collaboration.
- Increased ability to determine problems and methods for solving them.
- Increased playfulness.



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- Increase risk-taking.
- Increased desire to be outside.
- When given choice, increased tendency to choose outdoor experiences over indoor experiences such as technology.
- Increased self-reflection.
- Decreased anxiety.
- Decreased stress.