THOMPSON RIVERS UNIVERSITY | Education & Social Work

Inquiry Demonstration Plan

Lesson Title:	Sit Spots and Scientific Journals	**Lesson #**	1	**Date:**	July 23, 2020
Name:	Angelina Thomson	**Subject(s):**	Science/ Socials	**Grade(s):**	1-2-3

Rationale & Overview

Why does this topic matter to students?

Learning about the world around them and their place in the world is an important part of developing stewardship and curiosity about the universe. They build on who they are, what their responsibility is to the earth, and humble themselves to the learning that surrounds them. When students can understand and appreciate their world they will build more empathy and kindness towards all living things.

How does this lesson fit within the larger inquiry project?

This lesson fits in the inquiry process because it is a process where students pose new questions and problems about their world by interacting with the naturalistic environment. The outdoor inquiry gets students thinking about their world and the part they play within it. They begin to wonder and ask questions that develop deeper thinking and understanding of who they are and what is around them.

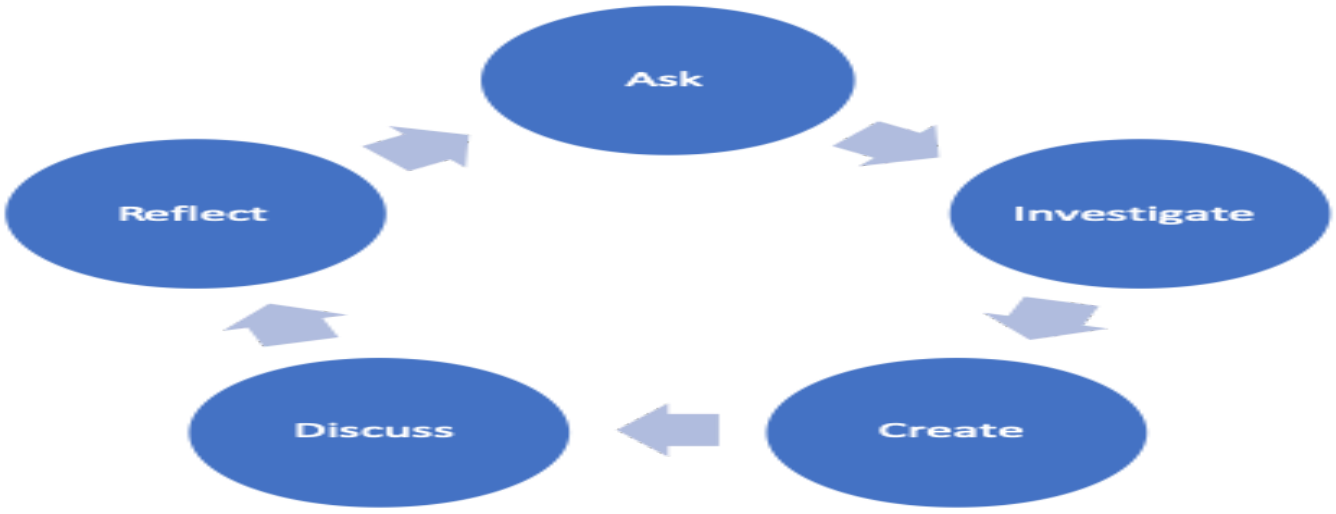
How does this project incorporate the inquiry cycle?

Students are building on knowledge that leads to deeper understanding. Through storytelling and a place-based approach to learning students develop habits of mind that encourage them to ask questions of evidence, and determine viewpoints, patterns and connections.

This project incorporates the inquiry cycle because students are building on their communication by experiencing and showing their learning in various ways through Sit Spots, scientific journals, mapmaking, sound/color walks, sound poems and talking circles. The students are moving beyond the borders of the school to connect with the natural environment. In their Sit Spots and through the story of the universe they are building on their imagination and curiosity to actively explore the world around them.

Key Questions For Inquiry

Core Question & Supporting Questions for Inquiry Project	Question(s) Addressed in This Lesson
How did it come to be? Looking at growth, life cycles of animals, humans, the earth, the solar system, trees etc. Who am I? What is my place? How does the story of the universe relate to my place in the world? How do we influence our community?	What do you connect with in nature? What is your relationship to the earth? What are you curious about in nature? How did it come to be?



Inquiry Approach and Rationale

This lesson gives students an opportunity to examine and connect to the natural world through observation and reflection. As students expand their awareness of local plants, animals, and trees they are building on their observational skills. Students use their Sit Spots to discover how learning is all around them and the environment is the tool. By sitting in one place it helps the student to see what is relevant and real and how they can transfer and apply that to the real world. When we watch and listen in certain places we gain wisdom. By sitting still and watching we are learning from the life that is all around us and what it can teach us of how we want to relate to everything in our world. Students are gaining respect and gratitude for life that has come before us. The environmental and place-based learning approach is a starting point for their social emotional health of who they are and how they can best contribute respectfully to the world.

Core Principles of Effective Teaching (Sharon Friesen) Focus on one or more core principles in the lesson

Core Principle 1: Effective teaching practice begins with the thoughtful and intentional design of learning that engages students intellectually and academically. **What aspects of the inquiry are the most challenging and meaningful for students?*	With students prior knowledge of the natural world the teacher and students will make connections between existing and new ideas to build understanding of the world around them. The students will engage in doing work that requires distinct ways of thinking about and acting in the world, so that they can engage with ideas and core concepts in the same ways as botanists and photographers to make meaningful connections and build deep understanding. (Friesen, 2009)
Core Principle 2: The work that students are asked to undertake is worthy of their time and attention, is personally relevant, and deeply connected to the world in which they live. **What makes this inquiry valuable, meaningful, and "alive" for the students and teachers?*	This inquiry is valuable, meaningful and alive for students because the work students do has connection to the world outside of the classroom. The work students undertake requires that they demonstrate conclusions relative to each other, with simplistic solutions, curiosity and examination

	of what is around them. As students explore the world around them in their Sit Spots they build "strong habits of mind, innovation and creativity" (Friesen, 2009, p. 8). They will need to formulate solutions, make connections between and among concepts,make assumptions, reasoned judgements and conclusions based on their observations (Friesen, 2009).
Core Principle 3: Assessment practices are clearly focused on improving student learning and guiding teaching decisions and actions. **How do I define learning and success in this inquiry? How is learning expressed and articulated in peer, self and teacher assessments?*	The proof of the students learning will be in how they document their observations. I will support and guide them to identify the gap between current achievement and expected achievement by helping them with guiding questions to provide more details and specific information in their scientific journals (Friesen, 2009). At the end of the lesson, the teacher and students will review and reflect on their learning and share an important "a-ha" moment with the group about their experience. Students will share what they know, what they discovered and what they want to know in the Talking Circle.
Core Principle 4: Teachers foster a variety of interdependent relationships in classrooms that promote learning and create a strong culture around learning. **How do I connect students with each other, with experts in the field, with larger communities and nature, and across disciplines?*	The students will make connections between the real world, self, and the work. Students will share what really matters to them and build on interesting observations about the world around them. Students should be excited about their learning and put effort into doing their best work. The teacher will "engage students in dialogue as they work to extend learning, stimulate discussion, pose questions, provoke thinking, suggest resources and help students determine their next learning steps" (Friesen, 2009, p. 11). As the learning expands and builds students will communicate and collaborate with each other about their ideas.
Core Principle 5: Teachers improve their practice in the company of peers. **How do I reflect on the inquiry together, and/or collaborate with others?*	As I learn more and gain knowledge I will question and investigate alongside the students, this will invite students to become part of the instructional process (Friesen, 2009). I will share what worked and what could be improved upon and get feedback from other teachers to improve on my practices. I will also continue to learn about current research and incorporate it into teaching and learning practices through the text by David Sobel called "Place Based Classrooms: Connecting Classrooms and Communities".

BC Curriculum Core Competencies

Communication	Thinking	Personal & Social
-Recognizing and appreciating different perspectives is key to both interpreting and creating communications.	-Students apply critical and reflective thinking to acquire and interpret information, and to make choices about how to communicate their ideas. -Reflection is a key part of all aspects of developing goals and monitoring and assessing progress toward them.	-Students identify their personal values and strengths and abilities to determine ways they can contribute to their communities and care for the environment. -Students bring their understanding of how relationships and cultural contexts shape who they are to building relationships with others.

BC Curriculum Big Ideas (STUDENTS UNDERSTAND)

Science
Learning Principle Grade 1: All living things have features and behaviours that help them survive in their environments.
Learning Principle Grade 2: All living things have life cycles
Learning Principle Grade 3: Living things are diverse, can be grouped, and interact with their ecosystems
Learning Principle Grade 3: Energy is needed for life.
Social Studies
Learning Principle 1-2-3: We shape the local environment, and the local environment shapes who we are and how we live.
Physical and Health Education
Learning Principle Grade 1:
Learning about ourselves and others helps us develop a positive attitude and caring behaviours, which helps us build healthy relationships.
Learning Principle Grade 2 and 3:
Having good communication skills and managing our emotions enables us to develop and maintain healthy relationships.
Our physical, emotional, and mental health are interconnected.

BC Curriculum Learning Standards

(STUDENTS DO)	**(STUDENTS KNOW)**
Learning Standards - Curricular Competencies	**Learning Standards - Content**
-Demonstrate curiosity and a sense of wonder about the world. -Observe objects and events in familiar contexts -Experience and interpret the local environment -Represent and communicate ideas and findings in a variety of ways, such as diagrams and simple reports in their scientific journals -Express and reflect on personal experiences of place in our Talking Circle	-Is it living or nonliving? Is it a plant, animal or something else? -Differences between conventional scientific and indigenous ways of classifying -Characteristics of local plants, animals, and fungi in the local environment -Structural features: How do stems, roots, leaves, skeleton or no skeleton or exoskeleton, lots of legs, few legs, eyes, etc. help us understand

(How does what you know about place affect your observations, questions, and predictions?) -Students are identifying practices that promote mental well-being.	organisms or living things in the local environment -Behavioural adaptations: dormancy, hibernation, nesting, migration, catching food, camouflage (stick bug), mimicry (fly that looks like a bee), territorialism (squirrels fighting), etc. of animals in the local environment -Biodiversity: the variety of different types of living things in an ecosystem

BC Curriculum Indigenous Connections/ First Peoples Principles of Learning

How will I incorporate Indigenous knowledge and principles of learning?

In the new BC curriculum they describe place as; “Place is any environment, locality, or context with which people interact to learn, create memory, reflect on history, connect with culture, and establish identity. The connection between people and place is foundational to First Peoples perspectives of the world.” (BC’s New Curriculum, 2018). First People's Principles of Learning is incorporated through the holistic way of learning about how everything is interconnected; “Learning is holistic, reflexive, experiential, and relational.”

Respectful Relations

How will I invite students of all backgrounds, interests and skills into the inquiry?

Students will be given opportunities to participate in sharing their wonders, questions and interests about the world. They may share previous knowledge, something new or exciting that they discovered. Every student will be able to share something that is meaningful to them.

Lesson Activities

Time Allotted		Teacher	Students
Invitation	15 minutes	(Lesson will begin outside in a circle) <u>Ask-</u> Essential questions: What do you connect with in nature? What is your relationship to the earth? What are you curious about in nature? How did it come to be? Book: Our Big Home: An Earth Poem by Linda Glasier -Explain the Sit Spot: We are going to go outside and find a place to sit down. Practice opening your senses	Students are listening to the story. They are reflecting and connecting to their own sights about the earth and the place that surrounds them. Students are listening to instructions and asking questions. They are learning about the Sit Spot, what their scientific journals are used for and how to set up their page.

		and observing nature.	
Inquiry	15 minutes	Investigate: Guide the students to find their Sit Spots and observe for 10 minutes. *Teacher will rolemodel the Sit Spot with the students.	Finding their individual sit spots in the field near the school to observe through their senses for 10 minutes.
Reflection	10 minutes	Create/Reflect: Using a chime to get the students attention the teacher will redirect the students to their scientific journals to draw or write for 10 minutes. Remind the students they can document anything they wonder, question, or are curious about. -Explain Scientific Journals, what they are used for, and how to set up a page. *Teacher is role modelling the Sit Spot and Scientific Journal exercise and doing it alongside the students.	The students are writing or drawing things that they wonder, question, or are curious about in their scientific journals for 10 minutes. Students will write the date and the weather at the top of the page.
Discussion	5 minutes	Discuss: Talking/Sharing Circle- The teacher will facilitate the talking circle. What did you see while outside today? How does what you know about place affect your observations, questions, and predictions?	Using a talking stick students will share a meaningful observation, question, or wondering about their experiences in their Sit Spots. They may share something from their scientific journal.

Materials and Resources

-Scientific journals
-Pencils
-Field trip forms signed and returned by parents to go to the Sit Spot location that is 1 minute walk from the school.
-Talking stick
-Timer/Phone to time the 10 minutes for the Sit Spot and 10 minutes for the Scientific journals.

Organizational Strategies

-Sitting in a circle to share:
***A sharing/talking circle reflection on the field of the school to share their observations and what they noticed. Circles are a traditional First Nations format for discussion. The Talking Circle is used to demonstrate that everyone is connected and that every person in the circle has an equal voice. We will usually pass around a stick to ensure that the one with the stick is the only one who should be speaking and the rest of the students are listening.
-Chime to get the students attention and redirect them back to the group.
-Think/Pair/Share
-Clear expectations of what it looks like to be in their Sit Spots and how to use their scientific journals.
-Know/Wonder/Learn

Proactive, Positive Classroom Learning Environment Strategies

-Review outside expectations and safety while just off of school grounds in their Sit Spots.
-Make sure students are properly distanced from one another.

Extensions Lessons

-Read the story "Born with a Bang: The Story of the Universe”
-Sit Spots and Scientific journals continued
-Sound walk and sound poem
-Loose natural parts story creations
-Mapmaking of their sit spots

Reflections (to be completed after the lesson demonstration)

When examining this lesson more closely it was brought to my attention to expand on my definition of a Sit Spot being outside in nature. This could be difficult for some students and they may feel less than because they do not have a backyard space or deck area to complete the activities. It would be helpful to talk about places we feel comfortable in and how we can zone in with our senses in any spot to improve overall mindfulness and give students a chance to disconnect from technology. In order to engage all the students in the outside activities of the Sit Spot I would give this lesson to the students to do on their own time and then have the students complete a talking circle with me to reflect on their experiences. This would give the students a chance to complete the Sit Spot in any outdoor space they would like. Ideally, I would do this lesson in the school atmosphere and take advantage of the outdoor space we have near our school. Overall, I believe the earth has a lot to teach us and that by sitting as close to it as we can energize the body while seeing the interconnectedness of all things. I believe this lesson is best done outside where students can learn to calm and center their minds while energizing their bodies by sitting on the earth.

References

BC's New Curriculum-Building Student Success (2018). Retrieved

from https://curriculum.gov.bc.ca/

"Complete Guide To Using A Sit Spot In Nature." (June 2020) *Nature Mentoring* nature-mentor.com/sit-spot/#:~:text=

Dvornich, Karen, Diane Petersen and Ken Clarkson (2011). Fostering Outdoor Observational Skills. Pacific Education Institute https://pacificeducationinstitute.org/wp-content/uploads/2017/03/Fostering-Outdoor-Observation_Guide.pdf

Friesen, Sharon (2009) What Did You Do in School Today? Teaching Effectiveness: A Framework for Learning. https://moodle.tru.ca/pluginfile.php/1366969/mod_resource/content/1/Friesen%20What%20Did%20you%20do%20in%20School%20Today%3F.pdf