THOMPSON RIVERS UNIVERSITY | Education & Social Work

Inquiry Demonstration Plan

Lesson Title:	Mapmaking	**Lesson #**	5	**Date:**	July 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.

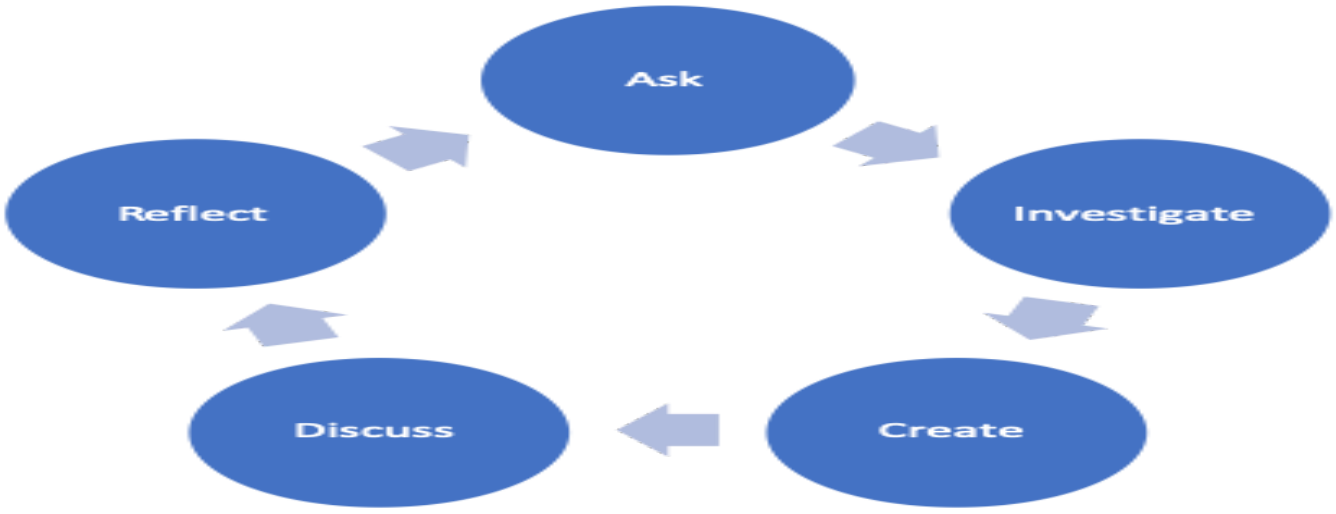
How does this project incorporate the inquiry cycle?

Students are building on knowledge that leads to deeper understanding. As well through storytelling and 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 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
Who am I? What is my place? How does the story of the universe relate to my place in the world? How did it come to be? Looking at growth, life cycles of animals, humans, the earth, the solar system, trees etc.	What can maps tell us?



Inquiry Approach and Rationale

What can maps tell us? This lesson gives students the opportunity to view the landscape of their Sit Spot and use their creativity to create a map of the area. To guide their mapwork, students will use their senses to explore the sounds, textures, colours, shapes and sizes in their Sit Spots, and will spend time outside listening, touching and seeing the complexity of the space around their Sit Spot. The maps may take different forms and include a variety of representation and techniques to show their work (e.g., clumps of grass or sticks glued, crayon rubbings, drawings etc.) (Jagger, 2015).

***Previous lessons will explore different kinds of maps. Students will have knowledge about making a map. Students can make maps of their bedrooms and playground to build on their mapmaking skills before creating a map of their Sit Spot.

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?*	Students will already have prior knowledge of mapmaking skills. They will use that knowledge to organise and draft a map of their Sit Spot. Students will know that there maps must have: - Cardinal directions - Symbols - Legend How I will assess the students will be clearly represented. The mapmaking activity will engage students in thinking about their Sit Spot more deeply and engage in ideas that will help them to make meaningful connections.
Core Principle 2: The work that students are asked to undertake is worthy of their time and	This inquiry is valuable, meaningful and alive for students because they are organizing knowledge

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?*	in a creative way to develop a deeper understanding of their Sit Spot place. They gain a curious examination of where they are, so they can discuss, analyze and interpret connections in their Sit Spots.
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?*	I define success in this inquiry process with their representations of their maps and how effective they are in revising and editing their maps based on constructive feedback. Students will have a clear idea of what a good map looks like, the features of a map and what next steps they need to make their maps better. The teacher will assess and give constructive feedback to support the students in making sure they have cardinal directions, legend and symbols for their maps.
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?*	Students can make general connections between the work, self, and others. Students are invested and involved in the work and don't want to put it down. They enjoy and are excited about sharing their maps with others. They engage in dialogue to extend learning, pose questions and provoke thinking. They spend time revising and editing their maps to improve on their skills. They find creativity in representing their maps in the form they like. (Friesen, 2009)
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?*	In our discussion the students will be able to share their map representation to the group and to one another through a pair share. They will explain their map representations and the other student will make suggestions to improve or provide deeper thinking about their maps. I can discuss my lessons with other teachers and get feedback about how best to teach mapping skills.

BC Curriculum Core Competencies

Communication	Thinking	Personal & Social
● Students often collaborate as they work in groups to analyze and critique, and design and develop. ● 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. ● Students use creative thinking to generate new ideas when solving	● As students take on diverse roles and responsibilities during collaborative activities, they learn to appreciate how their own ideas and strategies can be helpful to others. ● Students self-regulate to resolve problems.

	problems and addressing constraints that arise as they question and investigate, and design and develop.	● 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)

Learning Principle Grade 1: All living things have features and behaviours that help them survive in their environments.
Science:
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.
Learning Principle Grade 3: Learning about indigenous peoples nurtures multicultural awareness and respect for diversity.

BC Curriculum Learning Standards

(STUDENTS DO)	**(STUDENTS KNOW)**
Learning Standards - Curricular Competencies	**Learning Standards - Content**
● Use cardinal directions to identify relative locations on simple maps ● Interpret symbols and legends on maps to identify given locations in the community ● Create simple maps of a familiar location (Sit Spot) ● Draw simple interpretations from personal experiences, oral sources, and visual and written representations ● Demonstrate a willingness to consider diverse viewpoints	● Through mapping students are exploring the natural features: mountains, forests, waterways, local plants and animals. ● Students are exploring different perspectives on people, places, issues, or events in their lives (perspective) ● Students are exploring the diverse features of the environment *-landforms* *-bodies of water* *-plants and animals* *-climate* ● Exploring the relationship between humans and their environment

BC Curriculum Indigenous Connections/ First Peoples Principles of Learning

How will I incorporate Indigenous knowledge and principles of learning?

First People's Principles of Learning will be incorporated through the holistic way of learning about how everything is interconnected;

"Learning is holistic, reflexive, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place)".

"Learning recognizes the role of indigenous knowledge."

"Learning involves patience and time."

"Learning requires exploration of one's identity."

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	10 minutes	Ask: What can maps tell us? -Teacher is reviewing mapping skills and how to create a map. -Showing examples of maps -Explaining how to do a map at their Sit Spot and that there are various ways to represent their areas.	Listening and reviewing mapping skills and how to represent a map. Connecting previous lessons and information about mapping. As well, connecting to the color walk/ cards they did in Lesson 2.
Inquiry	15 minutes	Investigate: The teacher is supporting and guiding students by wandering around to their Sit Spots. Asking questions of the students about what they are representing.	Students are creating a draft map of their sit spot in their scientific journal with as many details as they can. They are also collecting materials from their Sit Spot location for their mapmaking when they are back in the classroom.
Reflection	15 minutes	Create/Reflect: Facilitate for a few students to share their maps with the other students. The teacher will model critique and descriptive and purposeful feedback based on previous lessons. -Explain that students will share with a partner their maps.	-A few students will share their maps to the group. Students will ask questions and make suggestions to improve on their maps to make them more descriptive and easier to follow. -Then students will pair up with a peer to do a pair share. They will make suggestions, give constructive feedback and support in providing deeper thinking. ***Students have knowledge about how to give effective feedback from our Austin's Butterfly lessons.

			-All the students will have 5 minutes to add more details to their maps.
Discussion	5 minutes	<u>Discuss:</u> -What they like about their maps and what they still want to improve on. - Explain that next class they will be taking their draft maps and creating a larger representation in a more creative form with loose parts, color, etc.	Students are listening to instructions about what will be next for their Sit Spot maps. -Thinking creatively about how they can represent their maps in a creative form.

Materials and Resources

-Field trip forms signed and returned by parents to go to the Sit Spot location that is 1 minute walk from the school.

-Scientific journals and pencils

-A paper bag for their materials

Organizational Strategies

Sitting in a circle to share
Think/Pair/Share
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.
-A good knowledge base of how to draw a map.
-The student knows how to give constructive feedback with a positive comment first and then something the student can work on.

Extensions

-Scientific journals
-Sound poems
-Loose natural parts story creations
-Good copy of their Sit Spot maps

Reflections (to be completed after the lesson demonstration)

References

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