

## Inquiry Project Plan

<b>Inquiry Title:</b> <u>Outdoor/nature based inquiry</u>	<b>Time Frame</b>	2 months for this particular inquiry, but outdoor/nature based learning will be year long ELA, Science, Art	<b>Inquiry Approach:</b>	Place-based & discipline-based
<b>Name:</b> <u>Gurreet Dhillon</u>	<b>Subject(s):</b>	<u>Art</u>	<b>Grade(s):</b>	<u>Kindergarten</u>

### Inquiry Project Rationale & Overview

#### Why does this topic matter to students?

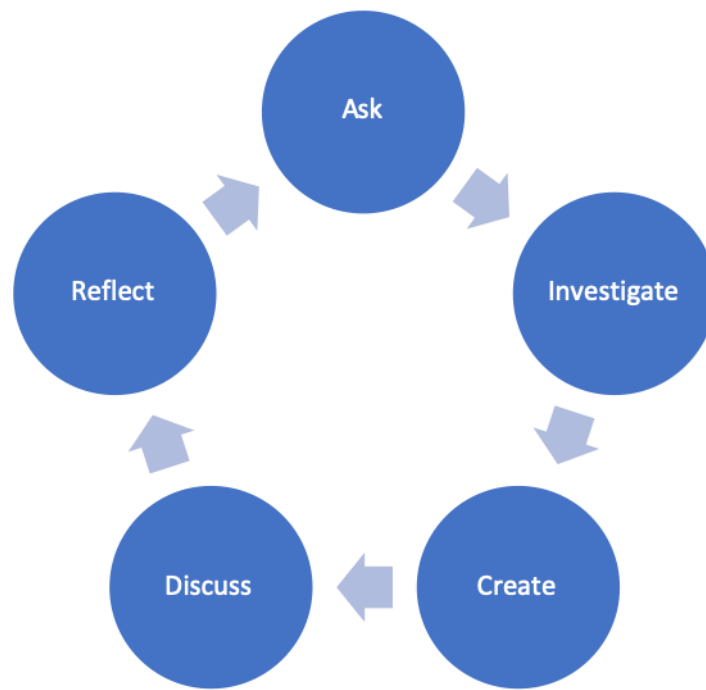
Nowadays, children are more invested in technology than anything else. Children nowadays do not have an emotional connection (sense of place) to the natural environment around them (Judson, 2018). Judson (2018) believes all educators can help children develop a sense of place by taking the learning outdoors. I want to help children build a meaningful and authentic connection to the outdoors and understand the impact our behaviours and actions have on the natural environment and community, which can affect our future. I want to help children be responsible citizens and develop an understanding of how and why to care for the natural environment and community.

#### How does this project incorporate the inquiry cycle?

Students are working on creating a deeper understanding of the natural environment through this inquiry project. Students will have the opportunity to study a living thing of their choice in this inquiry project to help them build a connection to the environment. They will also experience and show their learning in various ways, including artwork, storytelling, sound/colour walks, sharing/talking circles, and connect with field experts.

### Key Questions For Inquiry

Core Question	Supporting Questions
<ul style="list-style-type: none"> <li>How can we build a connection with the natural environment?</li> <li>What is our responsibility to the environment and community?</li> <li>What do you wonder about in the natural environment?</li> </ul>	<ul style="list-style-type: none"> <li>How does the natural environment and community help me?</li> <li>How does the natural environment and community help the world?</li> <li>How can we take care of our Earth?</li> </ul>



### **Inquiry Approach and Rationale**

This project will use a place-based and discipline-based approach of inquiry to help student build an authentic and meaningful connection to the natural environment. We will regularly and repeatedly visit the forest behind the school as “frequent encounters lead to an increased sense of belonging, and ultimately, to a sense of stewardship for that place, for the broader community, and beyond” (Forest and Nature School in Canada, 2014, p. 31). Place-based learning helps students build an on-going relationship with the land, teacher, one another, and themselves (Forest and Nature School in Canada). It also provides students with hands-on experience with a place and its surroundings. I believe if students engage in the living realities of the discipline being taught, it will help them build a more meaningful connection to the natural environment. Discipline-based inquiry also helps students develop lifelong habits, in addition to learning content (Friesen, Saar, Park, Marcotte, Hampshire, Martin, Brown, & Martin, 2015). This lesson focuses on a place-based learning approach to help students connect with the local forest and its surroundings. In this lesson, students are given the opportunity to connect with nature through art, observations, and reflection. By using a place-based and discipline-based approach for this project, I hope to help students become responsible citizens and develop an understanding of how and why to care for the natural environment and community.

### **Core Principles of Effective Teaching (Sharon Friesen)**

**Core Principle 1:** Effective teaching practice begins with the thoughtful and intentional design of

The most challenging aspect will be for students to develop questions. Students at this age have lots of

learning that engages students intellectually and academically. <i>*What aspects of the inquiry are the most challenging and meaningful for students?</i>	ideas and observations, but they usually have difficulty forming questions. I will explicitly teach students what a question is and the difference between a question and a comment or observation.
<b>Core Principle 2:</b> 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. <i>*What makes this inquiry valuable, meaningful, and “alive” for the students and teachers?</i>	This inquiry is meaningful to students because they will get to experience their local environment, study a living thing that interests them, and learn about their local environment to help them build an emotional connection to the natural environment around them.
<b>Core Principle 3:</b> Assessment practices are clearly focused on improving student learning and guiding teaching decisions and actions. <i>*How do I define learning and success in this inquiry? How is learning expressed and articulated in peer, self and teacher assessments?</i>	Students will have the opportunity to co-create criteria with the teacher for self and peer assessment. Assessment will be ongoing to ensure there is room for improvements for students. Students will learn how to give effective feedback to peers through various resources, including the youtube video Austin’s butterfly. The teacher may use Friesen’s rubric for inquiry and adapt it as needed for the students.
<b>Core Principle 4:</b> Teachers foster a variety of interdependent relationships in classrooms that promote learning and create a strong culture around learning. <i>*How do I connect students with each other, with experts in the field, with larger communities and nature, and across disciplines?</i>	Students will work individually, in partners, and small groups throughout the inquiry. Guest speakers will also be invited throughout the inquiry, such as the Surrey Nature Centre, BC Forest Association, environmental engineer, registered professional forester, and Elders. Class community building will be done at the beginning of the year and continue throughout the school year and through this inquiry.
<b>Core Principle 5:</b> Teachers improve their practice in the company of peers. <i>*How do I reflect on the inquiry together, and/or collaborate with others?</i>	I would invite my grade group teachers to take part in this inquiry with their classes too so we can work together throughout the inquiry process, reflect on the inquiry together, and give each other feedback to improve our practice. I would also ask teachers at my school that are familiar with inquiry projects for feedback, reflect on this inquiry, and collaborate with them.

#### BC Curriculum Core Competencies

Communication	Thinking	Personal & Social
<ul style="list-style-type: none"> <li>Communicating</li> <li>Collaborating</li> </ul>	<ul style="list-style-type: none"> <li>Creative Thinking</li> <li>Critical &amp; Reflective Thinking</li> </ul>	<ul style="list-style-type: none"> <li>Social Awareness &amp; Responsibility</li> </ul>

#### BC Curriculum Big Ideas (STUDENTS UNDERSTAND)

##### Subject: Science

- Plants and animals have observable features
- Daily and seasonal changes affect all living things.

##### Subject: English Language Arts

- Language and story can be a source of creativity and joy.

- Through listening and speaking, we connect with others and share our world.
- Curiosity and wonder lead us to new discoveries about ourselves and the world around us.

**Subject: Art**

- Engagement in the arts creates opportunities for inquiry through purposeful play.
- People connect to others and share ideas through the arts

**BC Curriculum Learning Standards  
(STUDENTS DO)**

**(STUDENTS KNOW)**

Learning Standards - Curricular Competencies	Learning Standards - Content
<p><b>Science</b></p> <ul style="list-style-type: none"> <li>• Questioning and Predicting <ul style="list-style-type: none"> <li>◦ Demonstrate curiosity and a sense of wonder about the world</li> <li>◦ Observe objects and events in familiar contexts</li> <li>◦ Ask simple questions about familiar objects and events</li> </ul> </li> <li>• Processing and analyzing data and information <ul style="list-style-type: none"> <li>◦ Experience and interpret the local environment</li> <li>◦ Discuss observations</li> </ul> </li> <li>• Communicating <ul style="list-style-type: none"> <li>◦ Share observations and ideas orally</li> <li>◦ Express and reflect on personal experiences of place</li> </ul> </li> </ul> <p><b>English Language Arts</b></p> <ul style="list-style-type: none"> <li>• Comprehend and connect <ul style="list-style-type: none"> <li>◦ Engage actively as listeners, viewers, and readers, as appropriate, to develop understanding of self, identity, and community</li> </ul> </li> <li>• Create and communicate <ul style="list-style-type: none"> <li>◦ Exchange ideas and perspectives to build shared understanding</li> <li>◦ Create stories and other texts to deepen awareness of self, family, and community</li> </ul> </li> </ul> <p><b>Art</b></p> <ul style="list-style-type: none"> <li>• Communicating and documenting <ul style="list-style-type: none"> <li>◦ Express feelings, ideas, stories, observations, and experiences through the arts</li> <li>◦ Experience, document and share creative works in a variety of ways</li> </ul> </li> </ul>	<p><b>Science</b></p> <p>living things make changes to accommodate daily and seasonal cycles</p> <p><b>English Language Arts</b></p> <ul style="list-style-type: none"> <li>• Story <ul style="list-style-type: none"> <li>◦ Structure of a story</li> </ul> </li> <li>• Strategies and processes <ul style="list-style-type: none"> <li>◦ Oral language strategies</li> </ul> </li> </ul> <p><b>Art</b></p> <p>personal and collective responsibility associated with creating, experiencing, or sharing in a safe learning environment</p>

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### Indigenous Connections/ First Peoples Principles of Learning

*How will I incorporate Indigenous knowledge and principles of learning?*

Throughout the project, I will incorporate Indigenous knowledge by sharing Indigenous storybooks (with permission and books for kindergarten students) related to the outdoors and inviting Elders to our outdoor learning environment to share their stories and experiences with the outdoors.

*Principles of Learning*

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

### Respectful Relations

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

All students will be given opportunities to share questions, their interests or comments related to the lessons/inquiry. Students will have the opportunity to study a living thing they are interested in to help them build a connection to the natural environment. They will have opportunities to share their work/findings and any questions and/or observations of the natural environment. Students will also have the option of working individually, in partners or small groups to invite all backgrounds and skills into the inquiry.

### Project Overview

Time Estimate		Description of Teacher and Student Activities	Assessment Activities
Ask	2-3 classes	Teacher introduces topic, uses walking curriculum activities as introduction to forest behind the school, students have opportunity to explore forest through sound/colour walks	Teacher observation, journaling (drawings and/or writing), think-pair-share
Investigate	4-5 classes	<ul style="list-style-type: none"> <li>-Students explore forest and find living things, sort into living and non-living</li> <li>-Students explore forest again and look for living thing they want to study.</li> <li>-Students experience the role of a forest expert through field labs (forest experts would come into class and lead labs).</li> <li>-Students come up with questions they have of the forest or living thing they are studying for an expert then interview expert at a later date.</li> <li>-Students learn the importance of natural objects to Indigenous culture (e.g. importance of rocks, eagle feathers, water, leaves, pinecones, sticks, etc. to Indigenous culture)</li> </ul>	Journaling (drawings and/or writing), photo documentation, teacher observation
Create	3-4 classes	<ul style="list-style-type: none"> <li>-Students create stories with objects in nature about living things (e.g. how they think the living thing they are studying came to Earth or this forest, and/or create a story in the perspective of this living thing, such as what this living thing does in a day)</li> <li>-Students find things in the forest and use them to</li> </ul>	Journaling (drawings and/or writing), photo documentation, teacher observation, self & peer evaluations

		create a piece of art (inspired by Andy Goldworthy's art). -Students compare/contrast their artwork with Andy Goldworthy's art	
Discuss	2 classes	Students work in small groups to discuss their understanding of this inquiry (e.g. discuss core/supporting questions).	Teacher observation, self & peer evaluations
Reflect	2 classes	Students will discuss the similarities and differences of the living things they studied in groups. Possible questions to discuss: How does this living thing help the environment? What would happen if this living thing went extinct? Does this living thing hurt the natural environment? How?	Teacher observation, journaling (drawing and/or writing)

### Materials

Clipboards, paper, pencils, journals, iPads or cameras, storybooks about the outdoors/nature, youtube videos (e.g. Austin's butterfly), objects in nature

### Organizational Strategies

- Materials and resources prepared before lessons
- Students working in an area that is comfortable and safe when outside
- Sharing/talking circle
- Chime or cue (e.g. hands on top) to get students' attention – have certain cue or chime when outside and practice beforehand with students

### Proactive, Positive Classroom Learning Environment Strategies

- Review outside expectations and safety before going outside
- Pair or group students up if they are having difficulty getting started
- Technology supports

### Extensions

- Create a story or skit that demonstrates understanding of core & supporting questions

### Reflections (to be completed after Project Completion)

What did I learn about Inquiry Based Pedagogy?

I have learned that inquiry is an investigation or exploration of a topic or idea that the students are interested in. The teacher is not just a guide on the side but is involved in the process with students. I have learned that inquiry is an authentic approach to learning as students have some control of what they are learning and inquiry is connected to the real world. I have also learned that inquiry is more effective when it is completed in groups rather than individually as inquiry focuses on gaining different perspectives, and seeing and understanding differently (Bai, 2005, p. 46-47).

What challenges and successes did I experience?

It was challenging at first trying to figure out which approach to inquiry I wanted to use in my project but as my project came along, I found the approaches that fit my project and my preferences. The success I experienced was understanding what inquiry really is and letting go of some of the misconceptions I had of inquiry. I also created a unit based on inquiry that I can see myself using and am excited to try with my students this upcoming school year.

What would I adapt for next time?

I'm not sure what I would adapt yet. Once I try out my unit/lesson plans with my students, I know I will for sure discover things I would adapt for next time.

What questions do I still have about Inquiry Based Pedagogy?

I do not have any questions as of right now, but I think once I incorporate inquiry based pedagogy into my teaching, there will be lots of questions that come up. Hopefully the resources we used and were provided with in this course will help answer some of those questions!

## References

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