

Hamilton Experience Project Plan: Environmental Stewardship

Class Descriptions:

Class 1:

The students in class 1 are extremely enthusiastic, engaged, and diverse. There is a wide range of capability in the room, but generally speaking the grade 2s (of which there are 13) are further ahead of the grade 1s (of which there are 10) than might be expected just on the basis of age difference. The older students display strong leadership skills and are happy to help their younger counterparts when needed. The group is extremely open and friendly and their energy levels go through the roof when undertaking any activity that involves physicality – such as dancing or any activity in the Gym. They are a group that requires a quick pace and significant variety – they are still learning self-regulation skills and they grow restless easily when tasked with anything that involves sitting still for a period of time.

Class 2

Class 2 is a warm group of mature and friendly students. They are patient, receptive, and generally quite well-behaved. This is not a group that can be engaged by enthusiasm alone; their background knowledge and abilities are very strong, which means that they are prepared for challenging tasks to captivate them – they won't be "wowed" by otherwise fun activities if they are too simple or easy. That said, several students struggle with academics and self-regulation and need increased teacher attention – (ideally, significant one-on-one time) to progress effectively. It is worthwhile to note when planning that there are 10 grade 1s and 13 grade 2s; the class is culturally diverse, and there are numerous ELLs, as well as several First Nations students and students of low socio-economic status in the class.

Objective:

The Objective of this unit is to situate our communities in an interconnected web with the 'natural world' – we are a part of this world, and our interactions can have a profound effect on the species around us. To do this, we will explore resource use, conservation, appreciation of the diversity of life, sustainability, pollution, and indigenous ways of knowing when it comes to the vibrant natural world we live in.

Rationale and Strategies:

The unit is multi-modal, interdisciplinary, rooted in inquiry, and designed to address the needs and styles of all learners. There are components that involve writing, visual art, dance, athletics, verbal/interpersonal communication, and outdoor education, as well as Indigenous ways of knowing. 3 of 4 lessons involve an enactive component – participating in a nature walk, a recycling relay race, and a talking circle help develop a thorough experiential learning experience, as opposed to just learning in the abstract.

Lesson Plan 1: The Giving Tree

Objectives (based on Social Studies/Science IRPs) – students will be able to:

Science	Social Studies
<ul style="list-style-type: none">• communicate their observations, experiences, and thinking in a variety of ways (e.g., verbally, pictorially, graphically)	<ul style="list-style-type: none">• Identify how environment affects human activities
<ul style="list-style-type: none">• use their senses to interpret observations	<ul style="list-style-type: none">• identify how environment affects daily life

Materials

- The Giving Tree by Shel Silverstein
- ‘Giving Tree’ activity graphic organizer (attached)

Procedure

- Hook - “Today, we are going to read a fantastic book. It is about two things. It is about giving, and it is about a tree. It is called ‘the giving tree!’
- Initiate a class discussion – think, pair, share with these questions:
 - What does selfish mean?
 - Prediction: what do you think a giving tree is?
 - What could a tree give?
 - Who will the tree give things to?
- Read the book aloud to the class
- Interrupt the reading with discussion questions. Questions will include:
 - How does it make you feel when you give something to someone?
 - Why is the tree lonely when the boy grows up?
 - Does the boy appreciate the tree’s gifts?
 - How do you think the tree would feel if the boy didn’t take the things that the tree offered?
- Hand out the ‘Giving Tree’ activity graphic organizer, and explain that ‘we are going to do a little activity to explore what we learned from our story. I would like you to answer the questions on the sheet as best you can – you don’t have to fill up the whole page. Just write enough to answer the question. If you finish that, there is a bonus activity which I will hand out to you when you have completed part 1.
- Check for understanding – thumbs up/side/down

Assessment

4 - Exceeds expectations:	The organizer is complete, questions thoughtfully answered and colored in a particularly creative fashion
3 - Meets expectations	The organizer is complete and questions thoughtfully answered
2 - Meeting some expectations	Missing parts of the organizer – questions not fully answered
1 – Not meeting expectations	Incomplete graphic organizers, failure to complete organizer or participate in good faith

The Giving Tree

Name:

Answer the following question:

Do you think the boy in the story is selfish? Why or why not?

Name:

The Giving Tree

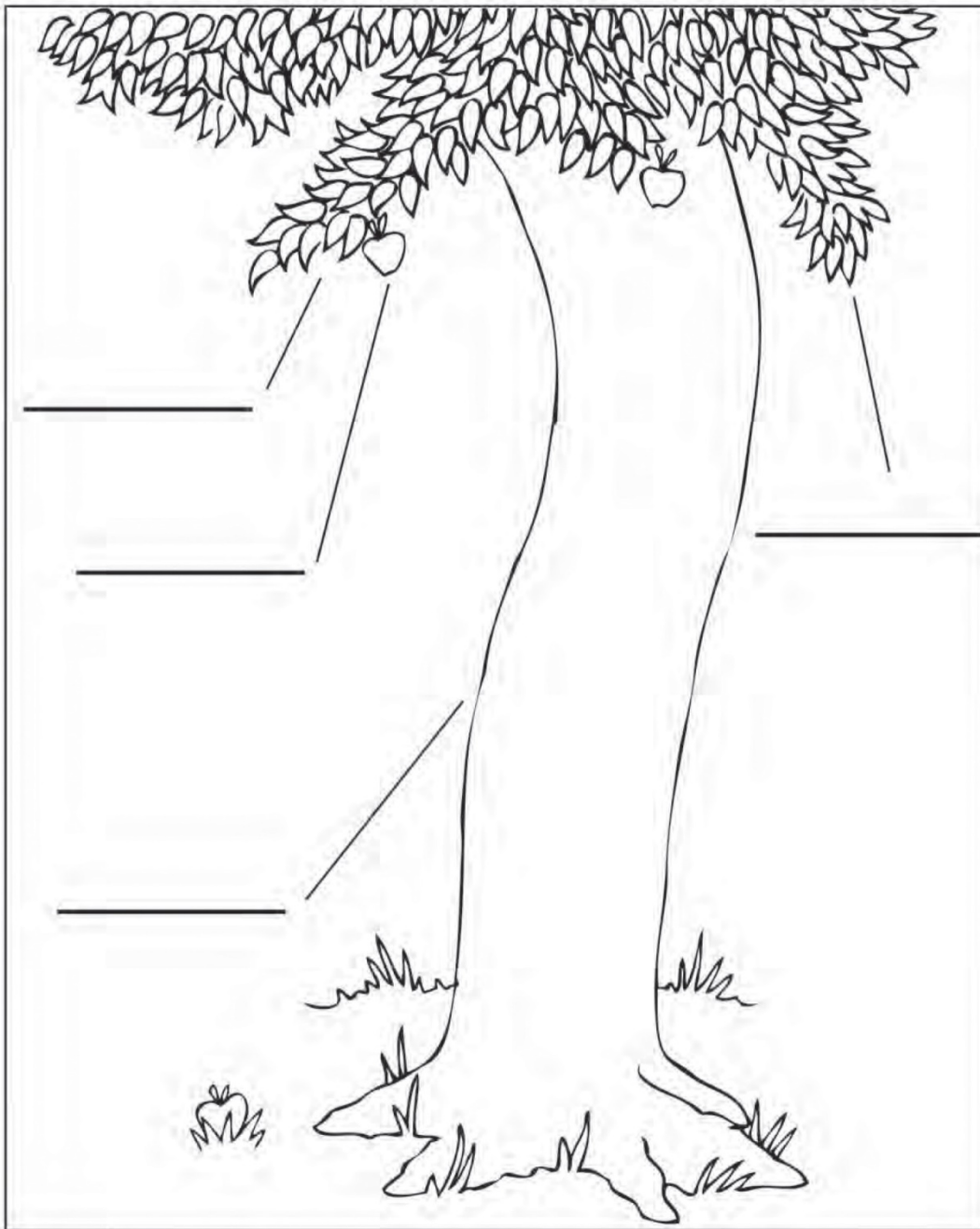
Answer the following question:

What would happen if there were no more trees on planet earth because we cut them all down?

Name: _____

The Giving Tree

BONUS activity: Can you label all the parts of the tree that the boy was given? When you are done labelling, color the tree.



(Image source: <http://www.education.com/worksheet/article/the-giving-tree-story/>)

Lesson Plan 2: Nature Walk

Objectives (based on Social Studies/Science IRPs) – students will be able to:

Science	Social Studies
<ul style="list-style-type: none">• classify living and non-living things	<ul style="list-style-type: none">• identify characteristics of different environments
<ul style="list-style-type: none">• use their senses to interpret observations	<ul style="list-style-type: none">• identify how environment affects daily life

Materials

- The students need outdoor gear; they should be prepared in case of rain.

Procedure

- Hook - “Last class we read a great story about the giving tree. We can learn so much from books, but sometimes to learn more deeply, we need to experience something in person, for ourselves, so today we are going to go on a nature walk!
- Explain that we are going to use our senses to observe the natural world like scientists – what do we hear what do we see, what do we smell? (explain that we will not touch or taste!). Explain that we are going to pay close attention to what we observe and we are going to learn about all the things that live in the natural environment behind the school. We will learn which things are living, and which things are not living. Which things belong, and which things do not (pollution).
- Explain safety procedures: use of the buddy system, staying with the group.
- Take students out along the path and discuss the various things we observe.
- On the wide space of the boardwalk, play a little game about living vs non-living: point out various items and have the students stand to one side if they think it is living, and the other side if they think it is non-living.
- Discuss the importance of certain items like trees and water to both the natural ecosystem and the human environment (as a resource).
- Discuss the garbage and water pollution (oil slick) – should that stuff be there? What would happen if it just piled up and piled up and we never cleaned it?

- Closure: discuss the need for proper disposal of items causing pollution, set up recycling lesson for next class.

Assessment

Assessment based simply on participation in activities. A ‘check, check +, check –‘ scale could be used.

Lesson Plan 3: Recycling

Objectives (based on Science IRP) – students will be able to:

<ul style="list-style-type: none"> • Develop an understanding of the social/environmental context of science 	<ul style="list-style-type: none"> • develop attitudes that support the responsible acquisition and application of scientific and technological knowledge to the mutual benefit of self, society, and the environment.
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Materials

- Clean recyclable material – provided by students
- Recycling bins
- PowerPoint slide – prepared by Justin

Procedure

- Hook - “Last class we had a wonderful nature walk – we explored many things that are living and non-living that belong in the natural world. But what about things like this?” PPT slide: show picture of litter in the woods.
- Does anybody know what it is called when you throw something like this in a place it doesn’t belong?
- Many times you hear people talk about “throwing garbage away”. Have you ever wondered where “away” really is? PPT: Show picture of a landfill.
- These big piles of garbage are called landfills, and we are learning very quickly that we had better not let the piles of garbage get too big, or we will start having to cut down forest to make room to store the garbage! To make sure landfills don’t get too out of control, we have developed 2 methods: recycling and compost.
- Who can tell me what recycling is?
- Does anyone know what things can be recycled?
- Does anyone know what cannot be recycled?
- It is very important when we recycle that we put our items in the correct place. And to do that, we are going to do a fun activity in the gym.
- Head to the gym.
- Divide class in 4 teams.

- Recycling relay race: Students will start with a mixed container of recyclable items at one end of the gym, and they will have to run to the other end and place their item in the correct bin.
- Closure: Discussion about the irony of recycling as a competitive exercise when it is about collective action and cooperation to make the world a better place.

Assessment

Assessment based simply on participation in activities. A ‘check, check +, check –’ scale could be used.

Lesson Plan 4: Sharing Our World

Objectives (based on Science IRP) – students will be able to:

<ul style="list-style-type: none"> • describe activities of Aboriginal peoples in BC in each seasonal cycle. • describe how animals are important in the lives Aboriginal peoples in BC. 	<ul style="list-style-type: none"> • describe how the basic needs of plants and animals are met in their environment. • describe ways in which animals are important to other living things and the environment.
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Materials

- Sharing Our World – Animals of the Native Northwest Coast
- Talking Stick (piece of driftwood cedar)
- Youtube Song - https://www.youtube.com/watch?v=_zH9wHWMi_k
- Blank paper/art supplies

Procedure

- “We’ve been learning all about our natural environment and how we depend on the natural world for things like air, water, paper, and wood. But WAIT! We haven’t talked about all of the animals that live in BC! OH NO!
- I wanted to share with you some knowledge of all the animals that we live together with. This knowledge comes from wonderful artists from First Nations communities around British Columbia!
- Have you heard that term, First Nations before?
- Explain or clarify FN as original inhabitants with deep knowledge of our local environment – connection to the land.
- Read book aloud, show pictures, interrupt reading with questions – making connections to the suggestions in the book IE ‘keeping our rivers and oceans clean’, scaffolding connections to habitat in the natural world IE “what is the Raven standing on? That’s right, a tree!”

- Brain break – animal dance to music from “A Tribe Called Red” – Not appropriating First Nations dances, just original expression and exposure to modern Aboriginal music.
- Talking Circle – students will sit in a circle and the idea of a talking circle will be explained – students may only share when they possess the talking stick. It will be passed to the left, and the student who possesses the stick may share their thoughts on the question that has been posed. A student may simply pass the stick on if they don’t wish to share.
- Questions: What is your favourite animal? What makes it your favourite? Where does it make its home?
- Art activity: Make a poster of your favourite animal, and write a suggestion of something we can do to protect it. Draw an example on the board – I.E. draw a salmon, write “save the salmon, keep our rivers clean!”

Assessment

4 - Exceeds expectations:	The poster is fully colored, clear, neat, and shows ‘above and beyond’ levels of effort
3 - Meets expectations	The poster has color, a favourite animal, and a suggestion – all criteria has been met
2 - Meeting some expectations	Missing parts of the poster; perhaps color is incomplete or the suggestion is unclear/missing
1 – Not meeting expectations	Incomplete - failure to complete poster or participate in good faith

Resource Critique

Silverstein, Shel. *The Giving Tree*. New York: Harper & Row. 1964. Available from the UBC education library.

The story of a boy and a tree starkly illustrates the distinction between consumers and producers and makes us ponder the quandary of infinite wants in a world of finite resources. The strong moral of the story is powerful, but the illustration is black and white, which could be less engaging for students who are constantly exposed to colorful technological mediums.

Reid, Ian et al. *Sharing Our World: Animals of the Native Northwest Coast*. Vancouver : NativeNorthwest.com, 2010. Available from the UBC Xwi7xwa Library.

A variety of artists and authors share indigenous ways of knowing about the animals in our backyard through art and short, piqued descriptions. The art is colorful and very engaging, but the format of the book is quite small, so care must be taken to ensure that students get an adequate chance to appreciate the art.