Keeping it in Perspective

DIFFERENT PERSPECTIVES ON
NATURAL RESOURCE MANAGEMENT:
AN ACTIVITY PLAN
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The new BC Curriculum reflects a shift towards a concept-based, competency-driven curriculum. The new curriculum is less prescriptive than before, allowing educators to be creative and innovative in their design of learning experiences, and offering flexibility and choice for teachers and students.

The new curriculum promotes higher-order thinking and deeper learning centred on the ‘Big Ideas’ in each discipline. Core competencies related to Thinking, Communication, and Personal and Social Responsibility are explicit, and First Peoples’ Principles of Learning are integrated throughout.

This resource is a comprehensive lesson plan designed to address the learning standards and core competencies outlined in the new BC Curriculum for Grade 5 Socials and Science. It was developed by Open School BC, Ministry of Education in partnership with the provincial Curriculum and Assessment team and BC teachers.

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# Table of Contents

Rationale ................................................................................................................................. 4
Curriculum Connections ........................................................................................................ 5
Learning Standards ................................................................................................................ 5
Core Competencies ............................................................................................................... 5
Principles for Differentiated Learning ................................................................................ 5
Cross-Curricular Extensions ................................................................................................ 5
Activity Plan .......................................................................................................................... 6
  Bringing it in ......................................................................................................................... 6
  Making it Happen .................................................................................................................. 6
  Sharing Perspectives ............................................................................................................ 9
  Self-Reflection ..................................................................................................................... 9
Assessment ............................................................................................................................ 10
Resources For Student Research .......................................................................................... 11
VENN DIAGRAM 1 — Teacher Version (with examples) ..................................................... 12
VENN DIAGRAM 1 — Student Version ................................................................................ 13
VENN DIAGRAM 2 — Teacher Version (with examples) ..................................................... 14
VENN DIAGRAM 2 — Student Version ................................................................................ 15
VENN DIAGRAM 3 — Teacher Version (with examples) ..................................................... 16
VENN DIAGRAM 3 — Student Version ................................................................................ 17
VENN DIAGRAM 4 — Student Version (for Guided Inquiry) ............................................. 18
RATIONALE

About this activity plan

This activity plan outlines possible ways of using differentiation to accommodate the needs of different learners within the same classroom. The worksheets, role descriptions, Venn diagrams, and other instructional supports included in this resource represent a high level of scaffolding.

Some students require less scaffolding and may approach the activity plan through guided inquiry. For example, some students may conduct independent research to gain an understanding of different perspectives on the use of natural resources. This activity plan identifies some resources that can serve as a starting point for student research, but teachers are encouraged to locate additional resources that reflect their local community.

Why perspective-taking?

Students will understand that different perspectives influence the way local and provincial communities and economies use and conserve natural resources. Students will participate in discussions about the use of natural resources in their local community; conduct research; make inferences about the beliefs, values, and motivations of different natural resource stakeholders; and develop their communication skills through role-play, discussion, and debate. Students will also explore First Peoples concepts of land ownership and use. As students are able to articulate the judgments and biases presented by different perspectives, they are developing a basic understanding of ethics.
CURRICULUM CONNECTIONS

Big Idea
• Natural resources continue to shape the economy and identity of different regions of Canada

LEARNING STANDARDS

Curricular Competencies
• Take stakeholders’ perspectives on issues, developments, and events by making inferences about their beliefs, values, and motivations

Content
• Resources and economic development in different regions of Canada
• First Peoples land ownership and use

CORE COMPETENCIES

Communication
• Connect and engage with others (to share and develop ideas)
• Acquire, interpret, and present information

Critical Thinking
• Question and investigate

Personal-Social
• Contributing to community and caring for the environment

PRINCIPLES FOR DIFFERENTIATED LEARNING

The following principles guide the differentiation suggestions in this resource:
• Learners make meaning of new ideas through association with previous knowledge and experience.
• Learning begins from a student’s point of readiness.
• Ongoing assessment and feedback guides differentiation in the classroom.

CROSS-CURRICULURAL EXTENSIONS

Science 5
Although this activity plan does not explicitly address cross-curricular extensions, some teachers may choose to expand it to include the following elements of the Science 5 curriculum:

Big Idea
• Earth materials change as they move through the rock cycle and can be used as natural resources.

Curricular Competencies
• Identify some of the social, ethical, and environmental implications of the findings from their own and others’ investigations

Content
• First Peoples concept of interconnectedness in the environment
• Local types of earth materials
• The nature of sustainable practices around BC’s resources
ACTIVITY PLAN

Bringing it in
This activity plan is about the use of natural resources and the local economies that depend on those resources.

Activate Prior Content Knowledge
Students should KNOW and UNDERSTAND the following:
- What is a natural resource? (K)
- Renewable and non-renewable resources (U)
- Natural resources in my local community (K)
- Natural resources impact local economies (K/U)

Activate Prior Process knowledge
Students should be adequately prepared to DO the following:
- Recognize different points of view (D)
- Make judgments about a position or argument (D/U)

Making it Happen

1. Opening the discussion
Begin a discussion with students to get them thinking/communicating more deeply about the topic. Teacher-led discussion could begin with a provocative question or statement related to natural resources, such as:

- “First Nations should have total control over the use of their traditional territories.”
- “Corporations should be allowed to harvest large quantities of water for free.”
- “Humans should be allowed to use natural resources without concern for the environment.”

As you moderate the discussion, observe and assess student readiness for guided inquiry. Indicators of readiness may include:

- Students understand that different stakeholders may have different perspectives on the same issue.
- Students can identify some of the opposing and similar perspectives of different stakeholders.
- Students listen to the different perspectives that surface during the group discussion.
- Students demonstrate a curiosity about different perspectives and begin to ask questions that require deeper inquiry.

Discussion points:
Ask students, “Who benefits from the use of natural resources in our community?”
- Possible answers: workers (miners, fishers, foresters), industry (mining corporation, fish cannery, wood products company), tourism (whale-watching tours, skiing, fishing, hunting), other. Answers will differ widely from region to region.
Ask students, “Who benefits from the conservation/protection of natural resources?”
- Possible answers: First Nations communities, animals, future generations, tourism, natural resource sector, other.

Ask students, “How might these two stakeholders have different perspectives on the use of natural resources?”
- Choose any two stakeholder groups based on your local economy (e.g., CEO of a mining corporation/First Nations Elder).

Ask students, “How might these two stakeholders have similar perspectives on the use of natural resources?”
- Choose any two stakeholder groups based on your local economy (e.g., owner of a fish cannery/fisher).

2. Providing pathways for learning

You can provide more or less scaffolding for individual students depending on their readiness to participate in guided inquiry.

- Students who require more scaffolding can be assigned any of the paired stakeholder roles listed in 2a – Assign the stakeholder pairs. (Full descriptions of the roles can be found in the Venn diagram worksheets on pages 12-17).
- Students who demonstrate readiness for guided inquiry can progress to 2b – Researching the stakeholders.

2a. Assign the stakeholder pairs

Students who require more scaffolding are provided with descriptions to better understand the perspectives of their stakeholder groups (pages 12-17). The pairs are grouped as follows:

- **Role 1A:** You are a sawmill operator. Your job depends on trees from the surrounding forests.
- **Role 1B:** You are the town mayor. You are responsible for growing the local economy.

- **Role 2A:** You belong to a local First Nation. Your band wants the sustainable development of local resources and protection of the natural environment.
- **Role 2B:** You are in charge of a large mining company. You have talked with the local First Nation about starting a mining operation in their territory.

- **Role 3A:** You are a single parent with three small children. You’ve been unemployed since losing your job at the local fish cannery.
- **Role 3B:** You operate a small ecotourism business. The future of your business depends on preserving the natural environment.
2b. Students research the stakeholders

Students who demonstrated a readiness for guided inquiry and require less scaffolding will choose two stakeholder groups that came up during the discussion to research.

- Choosing two stakeholder groups with opposing perspectives (one group that supports the development/use of natural resources, and one group that supports the conservation/protection of natural resources) is often easier.
- Choosing two stakeholder groups with less polarized perspectives on the use of natural resources may present a greater challenge for those students who are ready for it.

These students will conduct research (Internet, library, interviews) to better understand the perspectives of their stakeholder groups. Students may gather information from primary and secondary sources, in order to make inferences about the perspectives of each group.

Teachers may look for evidence that students are developing their Critical Thinking Core Competency, or ask students to reflect on the following “I statements”:

- “I can evaluate the credibility of sources of information.”
- “I can tell the difference between facts and interpretations, opinions, or judgments.”

3. Mapping perspectives

All students map out the similar and different perspectives of their two stakeholder groups on natural resource management, using the Venn diagram worksheets. Students who were assigned stakeholder pairs will use one of the appropriate Venn diagrams 1–3 (pages 12–17). Students pursuing guided inquiry will use Venn diagram 4 (page 18).

4. Perspective taking

All students are given the choice of writing, dramatizing, or illustrating (a graphic story) three arguments that describe the position of each stakeholder group in relation to natural resource management.

Students may use the following questions to guide their process:

- What are your stakeholder groups’ thoughts/feelings about the use of these natural resources?
- What factors affect how each of your stakeholder groups might think about this issue (i.e., where you live/work, personal values)?
- What evidence do you have to support each of your stakeholders’ positions on this issue?
Sharing Perspectives

Students divide into small groups that represent a diverse mix of stakeholder groups across the natural resource sector.

- Students can take turns sharing their best argument on the use/conservation of natural resources in their small groups.
- Once a student has shared their argument, other members of the group can provide a counter-argument.

The sharing of perspectives provides students with an opportunity to develop their Communication Core Competency. Students may engage in self-assessments using the following "I statements":

- I ask and respond to simple, direct questions.
- I am an active listener; I support and encourage the person speaking.
- I recognize that there are different points of view and I can disagree respectfully.

Self-Reflection

Students may self-reflect on their learning through journal writing, dramatization, or illustration. Students can use the following questions to guide their reflection process:

- What were the challenges you faced in taking on the perspectives you chose/were given?
- How did your perspective change during the activity?
- In what ways do different perspectives on the use of Earth materials create conflict?
- How do economic factors affect perspectives on the use of natural resources?
- How could differences in perspective influence how we build our local economy while conserving our natural resources?
ASSESSMENT

Ongoing assessment and feedback
This activity plan provides teachers with many opportunities to observe, assess, and provide feedback to students. Here is a list of the activities used in this activity plan, showing how they align with the Curricular Competencies and Core Competencies identified in the Rationale (page 4).

<table>
<thead>
<tr>
<th>ACTIVITY / ASSESSMENT CONSIDERATION</th>
<th>COMPETENCY ADDRESSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom discussion</td>
<td>Communication</td>
</tr>
<tr>
<td>How did students contribute to the discussion?</td>
<td>Connect and engage with others (to share and develop ideas)</td>
</tr>
<tr>
<td>How did students demonstrate an appreciation for the perspectives presented by others?</td>
<td></td>
</tr>
<tr>
<td>Mapping perspectives</td>
<td>Social Studies 5 – Curricular Competency</td>
</tr>
<tr>
<td>Some students completed the Venn diagrams based on short descriptions provided by the teacher.</td>
<td>Take stakeholders’ perspectives on issues, developments, and events by making inferences about their beliefs, values, and motivations</td>
</tr>
<tr>
<td>Students were required to make inferences about the beliefs, values, and motivations of their assigned roles.</td>
<td></td>
</tr>
<tr>
<td>Conducting research</td>
<td>Critical Thinking</td>
</tr>
<tr>
<td>Some students were asked to conduct research based on two roles of their choosing.</td>
<td>Question and investigate</td>
</tr>
<tr>
<td>Students were required to make inferences about the beliefs, values, and motivations of their chosen roles.</td>
<td>Communication</td>
</tr>
<tr>
<td>Acquire, interpret, and present information</td>
<td></td>
</tr>
<tr>
<td>Perspective taking</td>
<td>Social Studies 5 – Curricular Competency</td>
</tr>
<tr>
<td>Describe how students took a position for each role and provided supporting evidence.</td>
<td>Take stakeholders’ perspectives on issues, developments, and events by making inferences about their beliefs, values, and motivations</td>
</tr>
<tr>
<td>Sharing perspectives</td>
<td>Communication</td>
</tr>
<tr>
<td>What evidence did you see that students were listening to each other?</td>
<td>“I ask and respond to simple, direct questions.”</td>
</tr>
<tr>
<td>What evidence indicated that students were demonstrating empathy and respect for the perspectives of different roles?</td>
<td>“I am an active listener; I support and encourage the person speaking.”</td>
</tr>
<tr>
<td></td>
<td>“I recognize that there are different points of view and I can disagree respectfully.”</td>
</tr>
<tr>
<td>Self-reflection</td>
<td>Thinking</td>
</tr>
<tr>
<td>Students may have a tough time deciding which perspective they most relate to. Here you may see evidence that they grappled with the complexity of the issues.</td>
<td>I can make judgments about a position or argument.</td>
</tr>
<tr>
<td></td>
<td>Social Responsibility</td>
</tr>
<tr>
<td></td>
<td>Contributing to community and caring for the environment</td>
</tr>
</tbody>
</table>
RESOURCES FOR STUDENT RESEARCH

These resources serve as a starting point for student research, but teachers are encouraged to locate additional resources that reflect the diverse perspectives of natural resource stakeholders in their local community and the interests of students.

Agriculture
http://www.metrovancouver.org/events/school-programs/K-12-resources/food-for-thought/Pages/default.aspx
http://www.aitc.ca/bc/resources/videos

Fishing
http://www.eschooltoday.com/overfishing/overfishing-information-for-children.html
https://www.youtube.com/watch?v=4U-dEKlOMpY
https://www.youtube.com/watch?v=2Nat09VVPBs

Forestry
http://eschooltoday.com/forests/forest-preservation-tips-for-kids.html
http://www.learnforestry.com/clem/clem.html

Mining
http://www.mineralsed.ca/
http://www.mineralsed.ca/s/Grade5UnitOnMining.asp
http://www.britanniaminemuseum.ca

National parks/Ecotourism

Oil spills

Renewal and non-renewable energy

Water
https://www.safewater.org
http://storyofstuff.org/movies/story-of-bottled-water/
VENN DIAGRAM 1 — Teacher Version (with examples)

**Stakeholder 1A:** You are a sawmill operator. Your job depends on trees from the surrounding forests. Some people you worked with lost their jobs in recent years. You are concerned about losing your job. A forestry company has announced plans to harvest trees from a local forest. You are concerned because this company is known for clear-cutting. This means that all the trees are removed from a section of land.

**Stakeholder 1B:** You are the town mayor. You are responsible for growing the local economy. Many people have lost their jobs in the forestry sector, which is the main industry in the region. You are currently in talks with a forestry company to harvest a large section of local forest. This promises to create new jobs for the next year.
**VENN DIAGRAM 1 — Student Version**

**Stakeholder 1A:** You are a sawmill operator. Your job depends on trees from the surrounding forests. Some people you worked with lost their jobs in recent years. You are concerned about losing your job. A forestry company has announced plans to harvest trees from a local forest. You are concerned because this company is known for clear-cutting. This means that all the trees are removed from a section of land.

**Stakeholder 1B:** You are the town mayor. You are responsible for growing the local economy. Many people have lost their jobs in the forestry sector, which is the main industry in the region. You are currently in talks with a forestry company to harvest a large section of local forest. This promises to create new jobs for the next year.
VENN DIAGRAM 2 — Teacher Version (with examples)

**Stakeholder 2A:** You belong to a local First Nation. Your ancestors have lived on this territory for thousands of years. Your band wants the sustainable development of local resources and protection of the natural environment. A mining company wants to operate a mine on your territory. You are in favour of this project if the mining company creates jobs for local people and provides job training for youth. The mining company must also protect the local salmon run.

**Stakeholder 2B:** You are in charge of a large mining company. You have talked with the local First Nation about starting a mining operation. You want to know what their needs and concerns are. The mine will create 350 new jobs. It will bring millions of dollars into the local economy.

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**Member, Local First Nation**  
- Jobs for local people and job training for youth  
- Protect natural environment  
- Must protect salmon run

**Mining Corporation CEO**  
- 350 new jobs  
- Millions of dollars for local community  
- Community consultations
VENN DIAGRAM 2 — Student Version

**Stakeholder 2A:** You belong to a local First Nation. Your ancestors have lived on this territory for thousands of years. Your band wants the sustainable development of local resources and protection of the natural environment. A mining company wants to operate a mine on your territory. You are in favour of this project if the mining company creates jobs for local people and provides job training for youth. The mining company must also protect the local salmon run.

**Stakeholder 2B:** You are in charge of a large mining company. You have talked with the local First Nation about starting a mining operation. You want to know what their needs and concerns are. The mine will create 350 new jobs. It will bring millions of dollars into the local economy.
Stakeholder 3A: You are a single parent with three small children. You’ve been unemployed since losing your job at the local fish cannery. Many jobs in your region are tied to natural resources, so you’ve applied for work in the forestry, mining, and oil and gas industries. You spend much of your free time outdoors and you would prefer to find a job that would allow you to make use of your hunting and fishing skills.

Stakeholder 3B: You operate a small ecotourism business. The future of your business depends on preserving the natural environment. Your clients come from all over the world to whale-watch, kayak near old-growth forests, hunt moose, and fish for wild salmon. Business has been so successful over the last year that you need to hire a new tour guide.
VENN DIAGRAM 3 — Student Version

Stakeholder 3A: You are a single parent with three small children. You’ve been unemployed since losing your job at the local fish cannery. Many jobs in your region are tied to natural resources, so you’ve applied for work in the forestry, mining, and oil and gas industries. You spend much of your free time outdoors and you would prefer to find a job that would allow you to make use of your hunting and fishing skills.

Stakeholder 3B: You operate a small ecotourism business. The future of your business depends on preserving the natural environment. Your clients come from all over the world to whale-watch, kayak near old-growth forests, hunt moose, and fish for wild salmon. Business has been so successful over the last year that you need to hire a new tour guide.
VENN DIAGRAM 4 — Student Version (for Guided Inquiry)

Please provide a description for each of your chosen stakeholders.

**Stakeholder A:**

**Stakeholder B:**

**Venn Diagram**
Create a Venn diagram to show how your chosen stakeholders have different and similar perspectives on the use of natural resources.