Using Inquiry in Social Studies Lessons to Target Environmental Education and Stewardship

Geographic Inquiry Model

Introduction: Geographical Significance Surrounding the Stories of Stuff
Students explore and analyze the elaborate process of product development through sourcing, extraction, production, consumption and disposal from a geographical perspective. Knowledge building emerges as students investigate the origins of various articles of clothing through the development and final processes as documented in the online film, The Story of Stuff, directed by Louis Fox and created by Annie Leonard. Engaging collaboration results in student generated “stories” of products as well as analysis of geographical strengths and weaknesses within these “stories”.

Considerations for Planning
Prior to this lesson, students will need:
- experience working in groups;
- experience building consensus;
- experience finding the main idea and supporting details in media texts; and,
- experience using an atlas.
Resources and Materials
atlas, use of available technologies, i.e., computers, internet, projector/screen, large world map, post-it notes, word wall, reflective journal, chart paper, markers
BLM 1.1 – The Story of Stuff
BLM 1.2 – Exit Card

How does this lesson link to Environmental Education?
Standards for Environmental Education in the Curriculum (2008); suggests that students should be given the opportunity “to become environmentally literate; apply their acquired knowledge, perspectives, skills and practices in real-life situations; and, become environmentally responsible citizens who are aware of the global implications of local action”. In this lesson, students begin to analyze the processes of extraction, production, consumption and disposal of consumer products from a geographical perspective.

Curriculum Development Team:
Marci Becker, Dan Nini, James Steeves, Byron Stevenson, Lynn Wilkins
Lesson: Geographical Significance Surrounding the Stories of Stuff
Students explore and analyze the elaborate process of product development through sourcing, extraction, production, consumption and disposal from a geographical perspective.

Learning Goals:
By the end of this lesson students will understand and be able to:
• follow an inquiry-based approach (gather, organize, interpret and analyse data);
• examine the impact of human activities on waterways;
• consider multiple perspectives regarding an issue or problem; and,
• identify a few examples of sustainable practices.

Curriculum Expectations and Concepts of Geographic Thinking

Grade 7: Natural Resources Around the World: Use and Sustainability

Overall expectation:
• Demonstrate an understanding of the sources and use of different types of natural resources and some of the effects of the extraction/harvesting and use of these resources. FOCUS ON: Spatial Significance; Geographic Perspective

Big Ideas: There is a relationship between Earth’s physical features and the distribution of natural resources and how people use them. The ways in which people extract and harvest natural resources can have social, political, and environmental consequences.

Framing Questions to Guide the Lesson: Why might it be easier for some countries to extract and use natural resources in a sustainable way? Is the extractions and use of fossil fuels sustainable? What are some of the ways in which different countries are practising environmental stewardship?

Integrated Expectations across Subject Areas

Language: Media Literacy
• Demonstrate an understanding of a variety of media texts.

Language: Oral and Visual Communication
• Listen in order to understand and respond appropriately in a variety of situations and for a variety of purposes.

Relevant Terminology
manufac"
**Minds On: Connecting Background Knowledge**

**What are you wearing?**

**Small group activity (approximately 15 minutes)**
- Organize students into groups of three or four.
- Provide post-it notes to each group.
- Suggest: Examine two articles of their clothing (t-shirt, jeans, running shoes, etc.) and determine where the clothing items originated (search clothing tags).
- Using an atlas, group members locate the countries where their articles of clothing were manufactured.
- Each group member selects one country of origin and writes that country on a post-it note.
- Students place their post-it notes on a large world map (pull down map, a projection of a map on a screen) posted in the front of the class.
  (*Option: Place a large world map on a bulletin board, use push-pins to identify countries and link strings back to the originating location.)*
- Follow up discussion as a large group. Suggest students consider:
  - Are there any identifiable patterns?
  - Where are the most products produced? Why do you think they are produced there?
  - Are there noticeable relationships between countries?
  - What are some environmental impacts of consuming products from different countries?
- Record student responses on chart paper.
- Students reflect upon the group discussion and provide a written response in a reflective journal.

**Assessment Tools and Strategies:**

**Assessment for Learning** - Observation/notes during class and small group discussions, consider:
- Are students able to see a pattern between where things are made and the natural resources available in those places?
- Are students able to articulate impacts of having goods made and transported to them – environmental impact from use of oil from ships, trucks?
- Are they able to articulate the [waste of energy and resources that result from] effects of consuming products that come from far away?

**Action**

**Video Screening: The Story of Stuff**

**Large group activity (approximately 30 minutes)**
  The film is also available on YouTube at: http://www.youtube.com/watch?v=9GorqroiqgM.
- Read the following brief description of *The Story of Stuff*, excerpted from Wikipedia: “*The Story of Stuff* is a short polemical animated (online) documentary about the lifecycle of material goods. The documentary is critical of excessive consumerism and promotes sustainability.”
- Suggest: Students predict specific content within the film.
- Distribute one copy of BLM 1.1 - *The Story of Stuff* to each student.
- Suggest: While watching the film, use BLM 1.1 - *The Story of Stuff* to record three new ideas, details or insights which are significant or impressive (3Ws - Wows!).
- Suggest ahead of time that students be prepared to share their 3Ws with the large group.
- Show the documentary.
- Allow additional time for composing ideas, completing BLM 1.1 - The Story of Stuff.
- Follow up discussion as a large group. Suggest students consider:
  - What were Annie Leonard’s motives in creating this documentary? (See: http://www.storyofstuff.org/about/about-the-project for more on Annie’s motives)
  - What is some of the impact created by consumption choices?
- Students provide examples of everyday items which are made in other countries.
- Record student responses.

**The Story of My Stuff**

**Small group activity (approximately 10 - 15 minutes)**
- Students create groupings of three or four.
- Each group identifies an everyday item/consumer product that is relevant and meaningful to group members, i.e., cell phone, mp3 player, etc.
- Provide chart paper and markers to each group.
- Within groups, create a model or flow chart of the life cycle of their chosen item/product, considering the steps from extraction to production, consumption and disposal.
- When complete, groups exchange models.
- Review the new model, and analyze it for strengths and weaknesses. If possible, improve the model/flow chart by reducing negative impacts relating to product consumption.
- Return the original model to each group and encourage students to review the strengths, weaknesses and changes.
- Groups present their amended models, including explanation of the strengths and weaknesses of the first model, as well as proposed changes to lessen environmental impact by the reviewing group.

**Assessment Tools and Strategies:**

**Assessment for Learning** - observation/notes, consider:
- Are students able to articulate an understanding of the main idea with a supporting detail? (ideas: changing the cycle of consumption; impact of our consumption habits on environment and people; ways to reduce negative impacts)
- student responses to cycle of consumption drawing; Are students able to make changes to the cycle of consumption drawing and explain how changes will reduce negative impacts of consuming that product?
- prior knowledge, areas/issues of interest activated by the film

**Assessment as Learning** - BLM 1.1: The Story of Stuff

**Consolidation and Debrief**

**Wow! Moment Sharing**

**Small and large group activity (approximately 5 minutes)**
- Students share their 3Ws in groups of three or four.
- Each group chooses one Wow! to share with the larger group, with explanation of choice and significance.
- Time permitting, allow additional opportunities for sharing.
- Suggest: Briefly discuss with a peer the implications of geographical strengths/weaknesses of the process of consumption and disposal.
- Students record comments in a reflective journal.
- Distribute BLM 1.2 - Exit Card to each student.
- Students complete BLM 1.2: Exit Card.

**Assessment Tools and Strategies**

**Assessment for Learning** – observations/notes, consider:
- Are students able to articulate the main ideas of the documentary?
- Are students able to connect their 3Ws to the main ideas of the documentary?
- Are students able to link consumption to impact on others and the environment?
- student responses/understanding on BLM 1.2 - Exit Card (assess to provide re-teaching as needed)

**Assessment as Learning** – descriptive feedback, consider:
peer discussions/comments in reflective journals

**Further Opportunities for Learning**

**Using Primary Sources to Establish Local/Provincial Initiatives**
See downloadable activities related to the Story of Stuff at http://www.storyofstuff.org/category/resources/

**Related Resources and References**

**Websites**
- Ministry of Education
  http://www.edu.gov.on.ca/eng/teachers/enviroed/education.html
- Ministry of Education
  http://www.edu.gov.on.ca/eng/curriculum/elementary/sshg.html
- The Story of Stuff Project
  http://www.storyofstuff.org/

**References**


The Laboratory School at the Dr. Eric Jackman Institute of Child Study. *Natural Curiosity: Building Children’s Understanding of the World through Environmental Inquiry*. University of Toronto (2011)
1. Prediction: What is the documentary, *The Story of Stuff* really about?

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2. During the documentary, record three new ideas, details or insights which you found significant, impressive or enlightening, which surprised you, etc. (3Ws- Wows!)

**WOW #1**
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**WOW #2**
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**WOW #3**
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BLM 1.2 – Exit Card

1. Summarize the main idea of the film.

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2. Choose one item of clothing and list all the consequences you can think of that arise from consuming that piece of clothing.

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3. Explain how you could reduce some of the negative impacts/consequences of purchasing this product.

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