# **Financial Literacy & SSHG**

Integrated lessons that connect to the Revised (2013) Ontario Curriculum Social Studies - History - Geography - Grade 7-Lesson 1

Development Team: Ramandeep Sarai, Louise Robitaille, Byron Stevenson, Marci Becker Ontario Elementary Social Studies Teachers Association (OESSTA)

# Lesson 1 Overview:

This lesson will introduce students to an exploration of where materials (products) are made throughout the world. Students will examine common items (clothes, personal items) in the classroom and map where those items are made. Students will be guided through the life story of an item and be introduced to the idea of the harvesting, manufacturing and distribution of natural resources. Students will begin to discuss the economic and environmental impacts of this process and start to discuss other issues around financial literacy, such as exploring the consequences of production, and, wants and needs in the extension. (Focus on: Patterns and Trends)

## How does this lesson target Financial Literacy?

The financial literacy focus is needs and wants and the examination of the consequences of financial decisions. Students explore how needs and wants relates to environmental and economic impacts from different perspectives, including their own.

## Lesson 1: The Impact of Resources

## **Learning Goals**

We are learning to:

- describe ways people use the natural environment to meet their wants and needs;
- identify short- and long-term effects of natural resource extraction/harvesting and use on people and the environment;
- apply Geographic Thinking Concept, Patterns and Trends.

## **Success Criteria**

Co-construct with students, but could look like:

- I can identify the ways natural resources are used to meet the demands of peoples' wants and needs.
- I can identify the short and long term impacts of the harvest, extraction and manufacturing of natural resources.
- I can create deep thinking questions around the harvesting and extraction of natural resources and the effects it has on the people who use them and the land.

Success Criteria for a Deep-thinking Question:

- My questions start with a how or why.
- The answer to my question is not yes or no.
- I can't find the answer to my question from one source.
- My question makes me think of more questions about that topic.

#### **Guiding Question:**

How does the production system impact our quality of life, our physical environment and our world?

## **Curriculum Expectations: Grade 7**

## Geography - B: Natural Resources Around the World: Use and Sustainability

## **Specific Expectations**

**B2.2** Gather and organize data and information from a variety of sources on the impact of resource extraction/harvesting and/or use, ensuring that their sources reflect more than one perspective .

**B3.2** Describe ways in which people use the natural environment, including specific elements within it, to meet their needs and wants.

**B3.3** Identify significant short- and long-term effects of natural resource extraction/harvesting and use on people and the environment.

## **Prior Knowledge and Skills**

- Students will need to be introduced to the concept of Natural Resources and what they are.
- Students will need to know the difference between non-renewable and renewable resources and where these come from and how we could use them. If students are familiar with using Google Apps for Education, mapping skills can be done on the My Map App with activity one.
- Students will need to understand the disciplinary thinking concept: pattern and trends. Possible ideas to connect patterns and trends previous to this lesson could include exploring weather patterns, and/or patterns of natural disasters (where earthquakes and tornadoes take place and why).

## **Materials and Resources**

- item from home, (such as a shirt, shoes, or cellphone) with a label of where it is made.
- world map or a digital world map (that students can work on)

\* Google Apps for Education - Map App can be prepped ahead of time and shared with students so they can work on the map together. Example

map: https://www.google.com/maps/d/u/1/edit?authuser=1&mid=1R61x\_riTeB\_aKNSzKr-bCoIBwKc

- Using Google Apps for Education: https://www.google.com/edu/training/
- digital projector
- speakers
- computers for students if using a digital map.

• picture book for extension activity: Boelts, Maribeth, and Jones. Noah. <u>Those Shoes</u>. Cambridge, MA: Candlewick, 2007. Print.

#### **Optional:**

Teachers may access lessons and supports related to Geographical Thinking through the following Google Drive: http://tinyurl.com/geo-thinking

## Minds On

• Ask students to consider how money and environment are connected? Have students think-pair-share their ideas.

• You may need to prompt them with other questions such as asking where a product came from? For example: Ask students how a pencil got into their pencil case from scratch. \*(You are welcome to choose any item in your classroom. Have students think-pair-share how they think the classroom item got there.

• Afterwards, have students share their ideas on a chart paper or the board that you may want to refer to later in the lesson. Teachers and students can consider the organizer that is used to convey this information, i.e., chart, sentences, etc. (look fors: factories, retail stores, trucks, planes)

## Action

#### Part A:

• Have a discussion with students about common items that we use from different places around the world. Show them a world map, (large laminated map, paper copy or you can use Google My Maps).

• Give students multiple sticky notes, and instruct them to find items in the class, record the names of the item, determine its place of origin, identify some of its natural resources. In addition students can rank the impact on the environment (high - low) and place it on the appropriate country on the map. Have students find 3-5 items. This process is called creating a spatial Journal.

• As an alternative students can create digital maps using My Maps. (teachers can created shared Maps or students can share in small groups). Check out the video links under resources about using Google My Maps and see classroom examples.

#### **Analyzing Data Collection**

• On chart paper record the title *Patterns and Trends*. Ask students to add examples of patterns and trends to the chart as they are found. This connects to the disciplinary thinking: Patterns and Trends as a way of analyzing information.

# Assessment for Learning opportunity:

Apply Geographic Thinking. Can students find evidence to support their decisions regarding patterns and trends.? Provide descriptive feedback on data gathering and/or analysis. • As a class or in small group explore the annotated maps or Spatial Journals. Have students share ideas that they come up and have a discussion around this. Each pattern can be noted on the anchor chart for Patterns and Trends.

## Part B:

• Pick one item from the map and model with students the story of that item. For example, a T-shirt that a student is wearing. Work with the whole class and figure out where it started and how it got to its final destination. Guide students to where it started from and what natural resource is involved - you can introduce the term harvesting. Many students can use the term factory - this leads to opportunity to discuss manufacturing and distribution and what the differences are.

• The following resource is a very detailed map of the life cycle of a phone. These resources can be used as a reference before you start the activity.

#### Visit the EPA- Life Cycle

Student sample with coloured markers:



• Record the life story of the item on chart paper to refer back to. Now give students different colour dots or sticky notes. Red is money and green is environment. Tell them to look at the life story and to put a red dot or green dot where they think money is impacted and where environment is impacted.

• As a class ask students to explain why they placed certain dots where they did. Some ideas that may come up is the cost of paying employees in factories, the pilot or truck driver, cost of oil to move the product, the actual cost of the product, the cost of running the store where the product is sold. Environment could include the emissions from trucks, planes, boats.

• Create a Venn diagram on chart paper noting where green dots and red dots are located and where they overlap. This final activity will have students consolidate the relationship between money and environment and how they are interconnected.

• The final question that could be asked is that is the shirt worth what it cost? Why or why not? Note, this can lead to discussions about how people are paid along the way and a discussion about wants and needs.\*

#### Assessment for Learning opportunity:

Monitor the accuracy of student descriptions regarding the natural resources and wants and needs and how they are interconnected.

#### Part C:

Exploring Wants versus Needs:

Based on the previous two activities, ask students if the product they brought in is something they would spend a lot of money on. Why or why not? Ask students if the product is a want or a need? How do they know? Use a chart paper for students to define what a want is and what a need is and to give examples.

## **Consolidation and Debrief**

• Introduce the Geography Journal and have students record an entry. Rank the impact of the extraction and harvesting process in regards to a particular item (people and environment).

• Use the sentence starter : "We should care..."

# These can be prompts or possible topics that connect to the "We should care..."

- 1. We should care about the way ....people use the natural environment to meet their wants and needs.
- 2. We should should care about the short- and long-term effects of natural resource extraction/harvesting and use on people and the environment.

Assessment for Learning opportunity: Apply Geographic Thinking: Can students find evidence to support their decisions regarding patterns and trends? Provide descriptive feedback on data gathering and/or analysis.

3. We should care about .... the difference between wants and needs and reflect on the map of items they did in activity one and categorize items as wants and needs and why.

## References

## Geography

- Grade 7 Natural Resources
   <u>http://oessta-teachers.ca/environmental-education/</u>
- English linked with Geography http://oessta-teachers.ca/language-arts/
- Math Linked with Geography <u>http://oessta-teachers.ca/math/</u>
- Resources to Support Student Inquiry
   <u>http://oessta-teachers.ca/primary-secondary/</u>
- Spatial skills Lessons
   <u>http://oessta-teachers.ca/spatial-skills/</u>
- Spatial Skills Strategies Using The Geographic Definition http://oessta-teachers.ca/geographic-definition/
- Spatial Skills Templates and Organizers http://oessta-teachers.ca/spatial-skills-templates-and-organizers/

## Extension

An extension language activity: Read the picture book - Those Shoes by Maribeth Boelts. Students can discuss the issues around wants and needs and people in different economic situations.

# **Financial Literacy & SSHG**

Integrated lessons that connect to the Revised (2013) Ontario Curriculum Social Studies - History - Geography - Grade 7-Lesson 2

Development Team: Ramandeep Sarai, Louise Robitaille, Byron Stevenson, Marci Becker Ontario Elementary Social Studies Teachers Association (OESSTA)

# Lesson 2 Overview:

In this lesson students will continue to explore and build knowledge and understanding on how natural resources are extracted, harvested, manufactured and distributed. Students will watch the video, <u>The Story of Stuff</u> to help them understand wants and needs and consumer awareness, advertising and the impact the process of making stuff has on the environment and economy. Students will interpret, analyze and evaluate photographs and advertisements, and reflect on the impacts and influence they have. (Focus on: Geographic Perspective)

## How does this lesson target Financial Literacy?

The financial literacy focus is needs and wants, and the examination of the consequences of financial decisions. Students explore how needs and wants relates to environmental and economic impacts from different perspectives, including their own.

## Lesson 2: The Impact of Manufacturing Goods

## **Learning Goals**

We are learning to:

- interpret, analyze and evaluate the short term and long term economic, environmental and social effects of a product and its creation on the world;
- deconstruct conventions and techniques are used in advertising to persuade consumers to purchase products;
- determine how advertising can affect choices as a consumer;
- use the Geographic Thinking Concept, Geographic Perspective.

## **Success Criteria**

Co-construct with students, but could look like:

- I can interpret, analyze and evaluate the short term and long term economic, environmental and social effects of a product and its creation on the world.
- I understand how conventions and techniques are used in advertising to get me to want and buy a product.\*
- I can explain how advertising can affect my choices as a consumer.\*
- I can apply geographic thinking by looking at Geographic Perspective.

Sample Success Criteria: Analyzing/Interpreting/Evaluating:

- I can use 2-3 pieces of evidence from my sources to make predictions and inferences about the impact of using natural resources on the environment and economy.
- I can make informed decisions and judgements based on the sources (video and photographs) to determine the impact on the environment and economy.
- I can determine if any voices are missing and who voices are present in the information.

Success Criteria: Media Techniques and Conventions:

- Bold colours are used to get your attention.
- Celebrity images are used to get your attention.
- Branding and catchy slogans are used.

\* Language-based Learning Goal and Success Criteria.

#### **Guiding Question:**

How does the production system impact our quality of life, our physical environment and our world?

## **Curriculum Expectations: Grade 7**

## Geography - B: Natural Resources Around the World: Use and Sustainability

## **Specific Expectations**

**B2.4** Interpret and analyse data and information relevant to their investigations, using various tools and spatial technologies.

**B2.5** Evaluate evidence and draw conclusions about issues related to the impact of natural resource extraction/harvesting and/or use around the world.

**B3.3** Identify significant short- and long-term effects of natural resource extraction/harvesting and use on people and the environment.

## Language: Media

**2.2** Identify the conventions and techniques used in a variety of media forms and explain how they help convey meaning and influence or engage the audience.

## **Prior Knowledge and Skills**

- Students should have an understanding of the terms economic and environmental systems.
- Students should know about different types of natural resources and an idea of what products are made with those natural resources.

## Materials

• a few products either at home or in the classroom

• access to the internet and computer, LCD projector and speakers for students to watch the video: <a href="http://storyofstuff.org/movies/story-of-stuff/">http://storyofstuff.org/movies/story-of-stuff/</a>

• pictures of harvesting, extraction, manufacturing and distribution of different products/natural resources and print advertisements (pictures of mining, logging tree, cutting down trees, paper mills, and stores selling paper), enough images for students to be in groups or pairs

#### **Optional:**

• The following link shows other movies and resources that may support this unit: <a href="http://storvofstuff.org/movies/">http://storvofstuff.org/movies/</a>

• The documentary, "Manufactured Landscapes", by Jennifer Baichwal will also have images and clips you could use with students. You are encouraged to pre-watch the documentary if you choose to use it with your class.

Advertising and Consumer Awareness Resources:

Media Smarts:

http://mediasmarts.ca/digital-media-literacy/media-issues/marketing-consumerism

- Marketplace- CBC <u>http://www.cbc.ca/marketplace/</u>
- Manufactured Landscapes Trailer and Photos and ordering information: <u>https://zeitgeistfilms.com/film/manufacturedlandscapes</u>

• Teachers may access lessons and supports related to Geographical Thinking through the following Google Drive http://tinyurl.com/geo-thinking.

## BLM

BLM 2.0 The Story of Stuff - Mind Map

BLM 2.1 Impact on the Economy and Environment

BLM 2.2 Advertising Techniques and Conventions

## Minds On

• Remind students of the guiding question. Explain to students that we will be taking a closer look at how the products in our life affect our lives and more.

• **Guiding Question:** How does the production system impact our quality of life, our physical environment and our world?

• Bring a few objects to class. Split the class into groups and give each group an object. Give each group chart paper and have them record and discuss the following:

- 1. Product
- 2. Purpose and Want/Need
- 3. Natural Resources used to create it
- 4. What influences me to buy this product (what it does, the brand, colour, if my friends are using it)

• Give students 5-10 minutes to share ideas in their groups and then share with the class. This leads into talking about advertising techniques that are used to get you to keep buying and discussions arounds wants versus needs. How do advertising techniques convince you that you want/need a product.

## Action

#### Part A: (Cross-Curricular Focus)

• From the Minds On Activity have students share what advertising techniques they discussed, and from their responses co-construct Success Criteria for media awareness. (This is integrated into Language-Media and can be done in that separate lesson or integrated in.)

## Part B:

• Refer to the journal responses in lesson one. Have students share their ideas. As a group develop question or wonders related to harvesting, extraction and manufacturing. Use the Geographic Definition as a tool for developing questions. Mention that the class will watch a video that responds to some of their questions. Discuss an organizer that students can use to record responses to their questions and new questions or wonders that might arise during the viewing. (BLM2.0)

#### Possible questions:

- What is where?
- Why there?
- Why care?
- Using the video as evidence, what are the impacts of harvesting, extraction, manufacturing and distribution of a natural resource?
- What patterns did you see with how we harvest, extract, manufacture and use things?
- How do you think we could have a more sustainable approach to making 'stuff'?
- How does the media impact consumerism?

• Show the video the Story of Stuff to students (preview the video to determine the extent you want to watch) Also pause the video at sections and have students record points that are significant in their eyes.

• Break the class into three groups and have each group explore one aspect of the geographic definition: What is where? Why there? Why care?

- Have 3 chart papers labeled with one of the following:
  - 1. What is where?
  - 2. Why there?
  - 3. Why care?

## Assessment for Learning opportunity:

Provide feedback on students' ability to able to interpret and analyze content. Are students able to make inferences from the information? Monitor how students are using the graphic organizer.

• Get students to use their notes and learning from the video to record their ideas and thinking.

• Hand out multiple sticky notes to students. Have students try to define what their section means and record any ideas and connections they made from the video, Story of Stuff on the sticky notes. If possible have two different coloured sticky notes: one for the definition and one for ideas that connect to that geographic thinking.

• Make sure to include the following under each appropriate chart paper:

**1. What is where?** (Where are natural resource sand raw materials found? Where are natural resources harvested and extracted?) Use maps to locate places or identify the different locations mentioned in the video.

**2. Why there?** Describe the characteristics of the area that help support the natural resources and the extraction and manufacturing of them. \*Get students to use maps to look for physical characteristics that will support their findings.

**3. Why care?** Who is invested in the process of the extraction of the natural resource? Who is impacted by the extraction and harvest of natural resources? How is the natural environment impacted?

- Afterwards debrief what each group has come up and record on a separate chart paper a definition for each: What is where?
  - Who cares?

Why there?

Post this in the class for students to be able to refer back to.

#### Part C:

Assessment for Learning opportunity: Provide feedback to assist students to use Geographic Perspective. Are students finding evidence to support their opinions? Can students determine events that relate to impact?

• On chart paper record the concept Geographic review the elements that comprise Geographic the lesson progresses students can identify particular Geographic Perspective related to this issue.

• Then students will look at various photographs of manufacturing, extraction and harvesting. You can look at various Geography textbooks and find images online through searching for 'manufacturing of cars' or 'extracting of oil'.

• Students will look at the photographs and interpret, analyze the impact that process has on the economy and the environment using Geographic Perspective. Students will do this in partners or in small groups and record their information on BLM 2.1.

• Teacher notes: You can look up each process online for images. For example look up extraction mines and find images that will support you with this activity. Another resource is the documentary: <u>Manufactured</u> <u>Landscapes</u> that shows the connection between the environment and the manufacturing of products. You may choose to show a clip from this documentary or divide the viewing over different days.. You are encouraged to pre-watch to make sure the scene is appropriate for your class.

• Have each group or pair share 1-2 of their findings focusing on content and an aspect of Geographic Perspective.

• Refer back to the guiding question and discuss how Geographic Perspective impacts your understanding of the issues.

• Now have each student repeat the activity but instead they are looking at a magazine advertisement and students will look at the co-constructed success criteria to determine what advertising techniques were used to influence people to buy the product. Have students record their ideas on BLM 2.2. Afterwards, have each group or pair share 1-2 of their findings and take it up as class discussion.

Assessment as Learning opportunity (Language): Have students use the co-constructed success criteria re-advertising as they assess their efforts. Provide descriptive feedback.

## **Consolidation and Debrief**

• Using all the ideas and discussions, have students work on a geography journal entry that answers the following two questions. Students can answer in words, diagrams or images.

- 1. Geographic Perspective: Why might different groups or individuals have different points of views on the extraction, production process?
- 2. Using evidence from the videos and images we have discussed, and any personal connections, how is the process of making products related to the environment?
- 3. Knowing what you know about advertisers, how do you think you will be more aware as a consumer when buying products?

## Assessment for Learning opportunity:

Can students determine the short term and long term economic, environmental and social effects of a product and its creation? Peer/Teacher Feedback: Give students an opportunity to trade their journal with another student to receive feedback about their response(s). Afterwards, give each student teacher feedback on their journal. Have students make any changes or modifications to their journal entry based on feedback.

## References

#### Geography

- Grade 7 Natural Resources
   <u>http://oessta-teachers.ca/environmental-education/</u>
- English linked with Geography
   <u>http://oessta-teachers.ca/language-arts/</u>
- Math Linked with Geography <u>http://oessta-teachers.ca/math/</u>
- Resources to Support Student Inquiry
   <u>http://oessta-teachers.ca/primary-secondary/</u>
- Spatial skills Lessons
   <u>http://oessta-teachers.ca/spatial-skills/</u>
- Spatial Skills Strategies Using The Geographic Definition http://oessta-teachers.ca/geographic-definition/
- Spatial Skills Templates and Organizers
   <u>http://oessta-teachers.ca/spatial-skills-templates-and-organizers/</u>

# BLM 2.0 - The Story of Stuff Mind Map

Using the video as evidence, what are the impacts of harvesting, extraction, manufacturing and distribution of a natural resource?



What patterns did you see with how we harvest, extract, manufacture and use things? How do you think we could have a more sustainable approach to making 'stuff'?





## BLM 2.1 - Impact on the Economy & Environment

## Questions to consider when analyzing:

What is the purpose of the activity? Who or what benefits and how? Who is involved?

What are the environmental impacts of this process in the photograph? Make sure you use evidence from the photograph to back up your ideas.

What are the economic impacts of this process in the photograph? Make sure you use evidence from the photograph to back up your ideas.

# **BLM 2.2 - Advertising Techniques and Conventions**

Using the Success Criteria, what techniques and conventions were used to influence the consumer to buy the product?

Where the techniques and conventions successful? Why or why not?

# **Financial Literacy & SSHG**

Integrated lessons that connect to the Revised (2013) Ontario Curriculum Social Studies • History • Geography - Grade 7- lesson 3

Development Team: Ramandeep Sarai, Louise Robitaille, Byron Stevenson, Marci Becker Ontario Elementary Social Studies Teachers Association (OESSTA)

# **Lesson 3 Overview:**

This lesson is a guided inquiry on a product (how it is made and its impact on the environment, economy and our social interactions). Teachers are encouraged to select a common product based on class interest (needs and wants) and access to technology. (Focus on: Geographic Perspective)

## How does this lesson target Financial Literacy?

This lesson focuses on needs and wants and the future consequences of economic choices.

## Lesson 3: Guided Inquiry: The Product and the Impact

## Learning Goals

We are learning to:

- gather and organize information (written texts, images and maps) to support my learning about natural resources and how they are used to make products;
- describe and communicate the impacts a product has on the economy, environment and social systems, using appropriate media forms;
- apply Geographic Thinking to our inquiries.

## **Success Criteria**

Co-construct with students, but could look like: **Geography** 

- I can analyse aspects of the extraction/harvesting and use of natural resources in different regions of the world using research and maps.
- I can use maps to determine the interrelationships between humans and places of extraction and harvesting (What is there?).
- I can connect the social, environmental, financial impacts of the making of this product have on the world (give 2-3 examples with evidence from your research).
- I can share multiple viewpoints of the social, environmental and financial impact of this product (Why care?).

#### Media:

- I can organize the layout of my websites and consider where visual and text look best on my website.
- I included heading, subheadings to organize my ideas.
- I have a balance of visuals, videos and text in my website to capture my audience's attention.

#### Writing:

- I can write structured paragraphs with a topic sentence, supporting sentences and a concluding sentence.
- I can use correct spelling and grammar in my writing to share my ideas.
- I can use a variety of sentence structure and descriptive language to enhance my writing and capture the audience.

#### **Guiding Question:**

How does the production system impact our quality of life, our physical environment and our world?

## **Curriculum Expectations: Grade 7**

## Geography - B: Natural Resources Around the World: Use and Sustainability

## **Specific Expectations**

**B2.2** Gather and organize data and information from a variety of sources on the impact of resource extraction/harvesting and/or use, ensuring that their sources reflect more than one perspective.

**B2.4** Interpret and analyse data and information relevant to their investigations, using various tools and spatial technologies.

**B2.5** Evaluate evidence and draw conclusions about issues related to the impact of natural resource extraction/harvesting and/or use around the world.

B2.6 Communicate the results of their inquiries using appropriate vocabulary.

#### Language: Writing

**1.5** Identify and order main ideas and supporting details and group them into units that could be used to develop a multi-paragraph piece of writing, using a variety of strategies (e.g., making jot notes; grouping according to key words; making charts; drawing webs) and organizational patterns (e.g., combined/ multiple orders such as comparison and cause and effect).

**1.6** Determine whether the ideas and information they have gathered are relevant, appropriate, and sufficiently specific for the purpose, and do more research if necessary.

**2.1** Write complex texts of different lengths using a wide range of forms.

#### Language: Media

3.3 Identify conventions and techniques appropriate to the form chosen for a media text they plan to create, and explain how they will use the conventions and techniques to help communicate their message.
3.4 Produce a variety of media texts of some technical complexity for specific purposes and audiences, using appropriate forms, conventions, and techniques.

## **Prior Knowledge and Skills**

- Students should have an understanding of the terms economic, environmental, and social systems.
- Students should know about different types of natural resources and an idea of what products are made with those natural resources.
- Students should have knowledge about researching online. Depending on where students are, you make want to conduct lessons around reliable sources and citing sources. The economic impacts will look at what students have discussed in lessons 1 and 2.
- Students will look at spending and budgeting and how financial decisions have consequences.
- Students will also explore the costs of making cellphones and how much they are sold for and furthermore, issues around fair labour may come up.

## Materials

- access to technology and the internet to research the guided inquiry
- resources that may help support with researching the story of the cell phone:
- http://www.mass.gov/eea/docs/dep/recycle/reduce/06-thru-l/life-cell.pdf

http://www2.monroecounty.gov/files/DES/education/life-soccer[1].pdf

- students samples: Students showcased their learning through a one page of a group website:
- https://sites.google.com/a/tdsb.on.ca/geography---where-does-our-stuff-come-from/
- Brisson, Pat (2014) Before We Eat: From Farm to Table. Tilbury House, Publisher

## **Optional:**

• Teachers may access lessons and supports related to Geographical Thinking through the following Google Drive: http://tinyurl.com/geo-thinking.

## BLM

BLM 3.0 From Farm to Table organizer BLM 3.1 The Story of My \_\_\_\_\_ BLM 3.2 Life Cycle of a Product

## Minds On

• Read the book: <u>Before We Eat: From Farm</u> to Table by Pat Brisson and Mary Azarian. As you read the book have students predict what the book will be about and how it could relation to Geographic Disciplinary Thinking - specifically around geographical perspectives.

• Have students fill out the graphic organizer BLM 3.0 as you read the book for students to determine raw materials and where harvesting and manufacturing processes take place.

• After reading the book, have students share with a partner their 'map' (BLM 3.0) from the book. Have students use a different colour pen or pencil to add more information based on their partner's feedback.

• As a class discuss the following:

What are the raw materials and where do they start? Where is the food grown? Who is involved? Where is the food harvested and extracted? Who is involved? Who, what and where is impacted?

• Record on a chart paper or project the BLM 3.0 to go over with the class the 'map' of food and have them add details to their own based on the discussion.

• End by asking the question 'Why Care?' and have student post their responses on a sticky note and post it on a chart paper as they move to the action piece of the lesson.

## Action

• Ask: How does the production system impact our quality of life, our physical environment and our world? Show the class a product i.e. cell phone, piece of food, laptop a house or other building or some other item of your choice where you can discuss with students the raw materials of that item. Note that geographers think in a certain way when looking at information and solving problems. We will think like geographers to determine how the production system impacts our quality of life, our physical environment and our world? Our focus is the selected product. (Use an item that is relevant to your class.)

#### \*\* Teacher Resources to show different perspectives and natural resources:

- Paleja, S. N., and Glenda Tse. Power Up!: a Visual Exploration of Energy. Richmond Hill, ON: Annick Press, 2015. Print.
- Tomljanovic, Tatiana. Manufacturing. Calgary: Weigl Educational Publishers, 2008. Print.
- World Resources Institute. World Resources Institute. Web. 21 May 2015. http://www.wri.org/
- "Earth : DNews." DNews. Discovery Network. Web. 21 May 2015. http://news.discovery.com/earth
- "Story Map Journal." ArcGIS.com. ESRI. Web. 21 May 2015.
- http://story.maps.arcgis.com/apps/MapJournal/?appid=4533fec4fbb 148f289bf81f9cc8adbd6 \*\* Resources about cellphones:
  - https://www.washingtonpost.com/news/the-switch/wp/2014/09/09/the-history-of-the-mobile-phone/
  - <u>http://www.explainthatstuff.com/cellphones.html</u> (This site has further resources)
  - http://www.cnbc.com/2014/04/15/this-is-how-much-samsungs-galaxy-s5-costs-to-build.html

• Introduce each concept and divide the class into three groups.

#### 1) Add the concept : Spatial Significance to chart paper.

- Describe the natural resource. (What?)
- As a class generate questions related to Spatial Significance.
- Where does the natural resource originate? (Use a map to indicate, Where?)
- Students are encouraged to use spatial technologies (My Maps, ArcGIS Online) and produce a spatial journal.
- Describe the characteristics of the area that help support the natural resources and the extraction and manufacturing of them. (Why there?)

#### 2) Add the concept : Interrelationships to chart paper.

- Identify and describe where human and/or natural resources and processes interact or connect within and between each other to form a system. (What Is Where?)
- As a class generate questions related Interrelationships.

## 3) Add the concept : "Geographic Perspective" to chart paper.

- As a class record the stakeholders that are involved in the extraction-production process.
- (What is where and who cares?) What do these stakeholders believe about the issue?

• See BLM 3.1 for assignment template as a resource to help understand the assignment and to co-construct the Success Criteria with students. You may consider using the first part of the BLM 3.1 as the assignment and then co-construct the Success Criteria with students.

• Explain the task to students. Students will:

- Research and find out one part of the life cycle of a product and the impact it has on the environment, the economy and people. They will show their understanding of geographical thinking to tackle this issue of natural resources and human impacts.
- Discuss research techniques that students will use to respond to the Geographic Thinking concept. Students will also need to determine what questions they need to research. Once students determine what product they will be researching, have them use BLM 3.2 questioning organizer to record questions they need to research.
  - Research tips to consider:
    - What keywords should we use to research.
    - Using jot-notes.
    - Recording sources
    - Using maps to locate patterns and trends and spatial significance (why there)
    - Using maps to determine interrelationships between humans and places (What is there?)
    - Credible sources
    - Does it make sense
    - Determine a type of organizer

• As a class construct a success criteria for inquiry (Gather and Organize) You should also consider coconstructing other aspects of the assignment as you continue working on the inquiry.

## **Consolidation and Debrief**

Since this is the first lesson in the guided inquiry, you can have students come together and write three tips or keywords they found useful while they conducted their inquiry. Have students share their ideas in their small groups noting 2 stars and a wish, Students will also select and record a concept or content that surprised them or raised concerns about the impact of the production and use of materials.

## References

## Geography

- Grade 7 Natural Resources
   <u>http://oessta-teachers.ca/environmental-education/</u>
- English linked with Geography <u>http://oessta-teachers.ca/language-arts/</u>
- Math Linked with Geography <u>http://oessta-teachers.ca/math/</u>
- Resources to Support Student Inquiry
   <u>http://oessta-teachers.ca/primary-secondary/</u>
- Spatial skills Lessons
   <u>http://oessta-teachers.ca/spatial-skills/</u>
- Spatial Skills Strategies Using The Geographic Definition http://oessta-teachers.ca/geographic-definition/
- Spatial Skills Templates and Organizers

http://oessta-teachers.ca/spatial-skills-templates-and-organizers/

Possible lesson ideas to support the inquiry:

#### Lesson on analyzing information:

Students need to look at their notes and determine if they have enough information to analyze. Analyzing questions that students should work on based on their notes include:

- Who are the major stakeholders and why? (Why care?)
- Explain the multiple points of view on this issue? (Why care?)
- How does where the natural resource is found connect to how humans use them? (Why there?)
- How are the physical characteristics of the land impacted by human extraction and harvesting? (Why care?)
- How could the process be changed to be more sustainable? (Why care?)

Students should be able to answer these questions based on their notes. IF they cannot, they need to research more.

#### Lessons on sharing information:

Based on their analyzing of data, students will need or organize their ideas and interpretations to work on the choice of the communicating their findings.

- 1. Have students choose any product they like and find out the life cycle of that product and what impact it has on to the environment and economy.
- 2. Have students map where 3 major natural resources are harvested and extracted and determine the why there based on their study of map and the physical characteristics of that location.
- 3. Based on their cellphone research, have students look at ways that negative impact could be changed through altering a part of the process that harms the environment or economy. Ideally, students are looking for more sustainable ways of extracting and harvesting natural resources. (B1.4 create a personal plan of action outlining how they can contribute to more sustainable natural resource extraction/harvesting and/or use (e.g., a plan to use FSC-certified wood or reclaimed lumber in a construction project, to reduce energy use in their home or school, to publicize more sustainable approaches to extraction/harvesting, or to reduce personal consumption of consumer goods)
- 4. Write from the perspective of a miner, the cellphone company CEO, factory worker, the cellphone user, person living in an area where resources are extracted and how the creation of the cellphone impacts the environment, economy and social system. (B3.4 describe the perspectives of different groups (e.g., a traditional indigenous community, an environmental organization, a multinational mining or forestry company, the residents of a resource town) regarding the use of the natural environment to meet human needs). You can use BLM 3.1.

# **BLM 3.0 - From Farm to Table**



Who are the stakeholders?

Impacts Table

#### <u>Task:</u>

Research and find out one part of the life cycle of a product and the impact it has on the environment, the economy and people. You will show your understanding of geographical thinking to tackle this issue of natural resources and human impacts. You will take your research and inform people about the life cycle of a product through your own website.

You must consider and include the following:

- Take jot notes and write down your sources (they will need to be included on your website). You should also include maps and explain any trends or pattern you noticed in your map.
- Find images and pictures that you may want to use on your website (you will need to source them too).

Depending on which group you are, you will do one of the following:

- When figuring out the life cycle of your product think about where the raw materials started, where the parts were made (this might be in different countries, where it was assembled, where it was distributed, shipping, getting to the store and finally to you). Describe the characteristics of the areas that help support that natural resource extraction and harvesting. (Why there) **(Spatial Significance)**
- Show how humans and natural resources and the processes interact or connect with each other to form a system. (What is there) (Interrelationships)
- Think about 3 different aspects as you write the story of your product (How does the creation of your product affect the environment, economics (financially) and socially (how we treat people, how we use the product). You may write a paragraph about each one. Show multiple points of view about this issue. (What is where and who cares?) **(Geographic Perspective)**

#### Possible Success Criteria:

Media: Website

- Design and layout well organized
- Includes heading, subheadings
- A balance of visuals, videos and text

#### Writing

- Properly structured paragraphs
- Correct spelling and grammar
- Variety of sentence structure and descriptive language

#### Geography

I can:

- Analyse aspects of the extraction/harvesting and use of natural resources in different regions of the world using research and maps. **Spatial Significance**
- Use maps to determine the interrelationships between humans and places of extraction and harvesting (What is there?) **Spatial Significance**
- Connect the social, environmental, financial impacts of the making of this product have on the world (give 2-3 examples with evidence from your research) **Interrelationships**
- Share multiple viewpoints of the social, environmental and financial impact of this product. (Why care?) **Geographic Perspective**

Inquiry Question:

Questions to help you answer your Inquiry Question: