

Lesson #6

Lesson designed by Stefan Superina

Grades: 11-12

Content Focus:

- a) World patterns of resource distribution and utilization.
- b) Critical issues and problems of places and regions.

Lesson Plan:

In this lesson, students will be required to explain and evaluate the geographic consequences of the development and use of various forms of energy. Students will have an opportunity to explore present day economic development in the Northwest Territories and Nunavut, gaining an understanding for how it may come into conflict with environmental preservation and sustainability of the land.

The goal of this project is to have students critically analyze an issue that has had a polarizing effect on the Canadian population. Considering the fact that the Canadian north will be important to this country's continued economic health moving forward, this project will give students an appreciation for the complexity of issues to be debated and resolved in order to achieve some kind of balance between environmental sustainability and economic growth.

Lesson Instructions:

1. Resource development in the north is fundamentally important to the Canadian economy, as it provides a means for employment to thousands of residents. This lesson plan will focus on two components:
 - a) A class discussion on the issues. A reading list attached to this lesson plan will help facilitate the discussion.
 - b) An analytical essay whereby students will be asked to present the pros and cons regarding economic development in the Northwest Territories and Nunavut as it pertains to the extraction of resources.

Opening Activity:

1. Direct the attention of your students to a map of Canada. This can be found by opening the following link: <http://www.worldatlas.com/webimage/countrys/namerica/ca.htm>.
2. Ask them what they know about the Canadian economy. Sample questions can include.
 - What are some of Canada's main exports?
 - Are we a net importer or exporter of goods?
 - Where is most of our economic growth taking place? In urban or rural centers?
3. What do your students know about the economy of the Northwest Territories and Nunavut?
4. Do your students know of any environmental issues taking place over any economic development in Canada?
5. Ask your students why there is a debate in Canada over how to progress with the development of our natural resource base.
6. Pull up a map of our trip on the website: www.coppermine2012.com. Direct the attention of your students to the **Lac De Gras** area with the pop-up bubble of the **Ekati** and **Diavik** diamond mines.
7. Ask your students if they've ever heard of these mines before. If so, what kind of effects, positive or negative, may they have on the Canadian economy and environment. Students may answer with job creation for northern residents, overall economic growth for Canada, negative effects on watersheds, noise pollution, adverse effects on animal migration routes (caribou), etc.
8. Ask your students what they know of economic growth in their own area. Do they live in a service based or resource based economy? What are most of the immediate jobs in their neighbourhood? Is there a difference in job markets between urban and rural areas, local and remote regions, etc? If so, explain.
9. On the following pages are links to a series of articles pertaining to resource development in the Northwest Territories and Nunavut. The articles examine the economic and environmental impacts of proposed development projects involving hydraulic fracturing, or "fracking," a new method of extracting oil and natural gas from the land that could potentially lead to job creation and continued economic growth in the territory. However, there are many environmental concerns that have to be taken into account with project developments of this magnitude.

10. Have students read over each article in class, discussing with each other the merits of both sides. Their summative task will be to write a persuasive essay on such resource development projects, whether they agree with them for job creation, or whether they should be stopped for fear of the unknown environmental risk involved with such activities.

Article Links:

1. **“Debate about environmental reviews heats up in the N.W.T.”**

<http://www.cbc.ca/news/canada/north/story/2012/11/13/north-debate-environmental-review-nwt.html>

2. **“N.W.T. oil prospect raises economic hopes, environmental concerns”**

<http://www.ctvnews.ca/business/n-w-t-oil-prospect-raises-economic-hopes-environmental-concerns-1.911206#ixzz2Ygis3jG2>

3. **“Fracking stands between NWT and shale oil boom.”**

<http://aptn.ca/pages/news/2012/10/10/fracking-stands-between-nwt-and-shale-oil-boom/>

4. **“Fracking plan gets green light”**

http://nnsf.com/northern-news-services/stories/papers/aug18_12fraT.html

5. **“Politicians Keep Close Eye On Potential Boom From Shale Development.”**

http://www.huffingtonpost.ca/2012/08/25/nwt-politicians-keepin_n_1829753.html

6. **“Northern Canadians react to fracking approval.”**

<http://www.alaskadispatch.com/article/20130614/northern-canadians-react-fracking-approval>

7. **“Fracking fears gripping some in NWT as shale oil boom tempts.”**

<http://aptn.ca/pages/news/2012/10/11/fracking-fears-gripping-some-in-nwt-as-shale-oil-boom-tempts/>

8. **“New N.W.T oil prospect raises economic hopes.”**

<http://www.cbc.ca/news/canada/north/story/2012/08/12/north-nwt-oil-canol-prospect.html>