Lesson #3: Project Introduction

Time required: Two 60-75 minute class periods

Setting the Stage	
Topic:	WebQuest Introduction and Explanation
Program of Study Information	Program of Study: Career and Technology Studies Natural Resources Environmental Stewardship Strand Relevant Course(s): ENS 3040: Energy and the Environment Curricular Outcomes: *Students will:* 1. *Describe the social, economic and environmental significance of energy development (Outcomes 1.1-1.4)* 3. *Plan and implement a group action campaign that fosters environmental awareness, energy conservation and energy efficiency; e.g., class, school, community (Outcomes 3.1-3.5)* 4. *Demonstrate basic competencies (Outcomes 4.1-4.3)* ENS 3050: Environmental Politics Curricular Outcomes: *Students will:* 2. *analyze challenges in developing, influencing and implementing environmental policies* ENS 3910: Project D
Required Materials	• Computer with Internet Access and Projector for Teacher • WebQuest link: https://seedsconnections.org/webquest-student-information • Computers for Student Research
Type of lesson	Discussion Research
Word Wall	WebQuest Action Project Legislation Govern

Getting Started	
Topic opener "hooks"	Intro/ Hook ideas: Hydrologist Job: https://www.youtube.com/watch?v=Uvp2AOMYWPM This video is about a forest hydrologist. Show students the video and then discuss what a Hydrologist might do to gather information on your study site and what they could do with that information. Consider how their data may be used by the government and industry to make decisions about water. Then introduce the project.
Lesson Sketch	

Outline	1. Teacher led project introduction:
	    a. Open up the WebQuest (https://seedsconnections.org/webquest-student-information) for students and walk them through the website as a class, explaining what their role is and what is expected of them for their project including completion of the scavenger hunt and a presentation (PowerPoint, Prezi, video, etc.).
	
	    b. Pay particular attention to the resources that are available to them to assist with their task and explain what the final product will be. Resources and links can be found throughout the WebQuest but particularly under the following pages: Agricultural Impacts, Energy Projects and Resource Extraction, Urban and Suburban Development, Resources
	
	    c. Once the project has been explained, have students divide into smaller groups and login to computers.
	
	2. Group/ Independent introductory research:
	
	    a. Before students begin the WebQuest, have all groups complete the following questions to the best of their ability. Students will first need to research the significant impacts of the actions that the group has chosen before they can determine what needs to be done to reduce or maintain the current level of impact this action is having. It is important to discuss with the students that they will not know the answers to some, many, or all of the questions and inform them that this is some of the information that they will be researching and gathering over the course of the project. The purpose of looking at the questions now is to acknowledge or learn what it is that students already know before they begin.
	      i. What are the actions, policies and practices that can reduce the harmful impacts of these activities?
	
	      ii. How are these actions, policies and practices addressed by the government?
	
	      iii. Specifically, what legislation governs the industry or activity in question at both the provincial and federal level? How current is this legislation? How effective is it?

    iv. What are some of the criticisms of the governments' approach to this issue?

     v. How has government legislation supported the responsible development of this activity or industry?

    vi. How are these actions, policies and practices addressed by the companies that are operating in your watershed?

   vii. How effective have companies been at recognizing and minimizing the effects of their industry on the surrounding environment?

    b. This chart will be revisited once students have the opportunity to do some more research:

3.   As a class, in a group or independently, students will then consider what each of the following groups does/can do to manage the impact of their chosen activity (they can use the links provided under the following pages: Agricultural Impacts, Energy Projects and Resource Extraction, Urban and Suburban Development, Resources to help them; and/or find some resources of their own)

Group	What to do to manage impact of activity (list as many as you can think of for each group)
You and your community	
Industry (name company applicable) http://www.capp.ca /responsible-development/water	
Federal government	
Provincial government	

4.   Students will share their findings thus far with the class including what they are considering for project ideas.

Closing Ideas	
Closing ideas	1. At the end of the two class periods, have groups share their research and project ideas through an informal class discussion or by having each group speak for 2-3 minutes to the class. 2. Restate the project requirements and expectations including the project rubric.

Notes: