To BP or not to BP?

Elisa Zaccheo 7th Grade

National Standard

Era 10: Contemporary United States (1968 to the present) / Standard 2

Standard 2: Economic, social, and cultural developments in contemporary United States

Washington State Standards

EALR 1.3.1: Civics - The student analyzes how international agreements have affected Washington State in past or present.

Example: The student exam9ines how the World Trade Organization has affected environmental regulations and employment opportunities in Washington State.

EALR 1.4.1: Civics - The student understands the effectiveness of different forms of civic involvement.

EALR 2.4.1: Economics - The student understands and analyzes the distribution of wealth and sustainability of resources in Washington State.

Example: The student examines the effects of economic growth in Washington State agriculture on the distribution of wealth and sustainability.

Example: The student examines the relationship between types of employment and standard of living.

EALR 3.2.1: Geography - The student understands and analyzes how the environment has affected people and how people have affected the environment in Washington State in the past or present.

EALR 4.1.2: History - The student understands how themes and developments have defined eras in Washington State and world history by explaining how the following themes and developments help to define eras in Washington State history from 1854 to the present:

- New technologies and industries (1945 1980)
- Contemporary Washington State (1980 present).

EALR 4.4.1: History - The student analyzes how an event in Washington State or world history helps us to understand a current issue.

EALR 5.1.1: Social Studies - The student understands evidence supporting a position on an issue or event.

EALR 5.1.2: Social Studies - The student evaluates the breadth of evidence supporting positions on an issue or event.

EALR 5.2.1: Social Studies - The student creates and uses research questions to guide inquiry on an issue or event.

EALR 5.2.2: Social Studies - The student evaluates the breadth of primary and secondary sources and analyzes notes to determine the need for additional information while researching an issue or event.

EALR 5.3.1: Social Studies - The student analyzes and responds to multiple viewpoints on public issues brought forth in the context of a discussion.

EALR 5.4.1: Social Studies - The student analyzes multiple factors, makes generali8zations, and interprets primary sources.

BACKGROUND

Beyond Petroleum is one of the major employers for citizens in the community of Ferndale, where Vista Middle School is located, and for many other people in Whatcom County. Historically, BP has played a significant role in the community and local schools. The oil refinery is located west of the town of Ferndale at Cherry Point (Blaine) along the Puget Sound.

The Cherry Point Refinery is reported to be one of BP's most advanced, safest, and productive refineries (on US soil?). BP is rumored to have to sell out. It is thought that the Cherry Point Refinery would be kept open.

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KEY DATES AT CHERRY POINT

- 1955: Refinery now operated by ConocoPhillips opens.
- 1966: Intalco aluminum smelter opens.
- 1972: Refinery now operated by BP opens.
- 2000: Department of Natural Resources creates "aquatic reserve" that surrounds but does not include industrial sites.
- 2010: DNR issues proposed "management plan" for reserve.

Stark, John. "Key Dates at Cherry Point" from *The Bellingham Herald*, 01 July 2010. The Bellingham Herald. ©2010. Bellingham, WA. 15 November 2010 http://www.bellinghamherald.com/2010/06/29/1503925/industries-oppose-states-new-cherry.html>. Reprinted with permission.

Anticipatory set for students:

Show images of Cherry Point Refinery, scenic northern Puget Sound, and people buying food that looks good and plentiful. Then show images of the Gulf oil spill, Exxon-Valdez oil spill, and people standing in a food ration line. Ask them how likely they think that we could go from the first set of pictures to having to face the problems of the second set of pictures? Have them write their thoughts down and collect as a "pretest."

PROBLEM

Due to the ecological and financial disaster in the Gulf of Mexico caused by the underwater oil leak, BP (Beyond Petroleum) may have to shut down the refinery at Cherry Point. There may be local, national, or global financial and ecological implications if the refinery shuts down.

SCENARIO

You are part of an independent citizen action group that advises the Ferndale City Council, and you are asked to research and make a recommendation to BP executives as to whether or not to keep the Ferndale refinery open. Your group needs to research the role BP has played in the community by providing jobs and supporting education. Your group also needs to look at the history of BP over the last 30+ years as it has changed names and missions as a company. Is having the refinery in your community safe for residents and the environment? Is it beneficial to the community? What opposition has BP faced in the past, and who is affected by the Cherry Point Refinery? Be prepared to defend your recommendation with research on the pros and cons (positives and negatives) of keeping BP in the community.

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TASK

Write a one page recommendation, based upon your group's findings, to be presented to the Ferndale City Council. They have to decide whether to attempt to persuade BP to keep the Cherry Point Refinery open or whether to express a desire for it to close. Your recommendations may greatly influence this decision.

Each group will be assigned as "experts" in ONE of the areas from this list, but everyone will still be expected to research and take notes on the overall issue:

- local economic impact
- national economic impact
- global economic impact
- local environmental impact
- national environmental impact
- global environmental impact
- BP's (Cherry Point Refinery) contributions to Ferndale School District/education
- BP's (corporate) other charitable contributions
- history of BP Cherry Point Refinery (and any other refineries in the area).

RESOURCES

Internet

<u>British Petroleum Global.</u>" ©1996 - 2010. London, England. 17 November 2010 http://www.bp.com/bodycopyarticle.do?categoryId=1&contentId=7052055.

"Cherry Point Refinery Facility Fact Sheet." <u>British Petroleum.</u>" ©1996 - 2010. London, England. 16 November 2010 http://www.bp.com/liveassets/bp_internet/globalbp/STAGING/global_assets/downloads/A/abp_wwd_us_cherry_point_fact_sheet.pdf>.

"Economy." 2010. <u>Washington State Office of Financial Management.</u> ©Office of Financial Management. Olympia, WA. 16 November 2010 http://www.ofm.wa.gov/localdata/what.asp#economy.

Etkin, Dr. Dagmar Schmidt. "Historical Overview of Oil Spills from all Sources (1960-1998)" from #169, 1999 International Oil Spill Conference." 1999. Environmental Research Consulting. 2010. Cortlandt Manor, NY. 15 November 2010 http://www.environmental-research.com/erc_papers/ERC_paper_11.pdf>

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Nelson, Tara. "BP to Begin Roundabout Construction." 8 July 2010. <u>The Northern Light (Point Roberts Press)</u>. 2010. Blaine, WA. 16 November 2010 http://www.thenorthern light.com/news/article.exm/2010-07-08_bp_to_begin_roundabout_construction.

"Pacific Northwest Regional Economic Analysis Project." 2010. <u>Washington Regional Economic Analysis Project</u> (US Department of Commerce). ©2010 Pacific Northwest Regional Economic Analysis Project. Washington, DC. 16 November 2010 http://washington.reaproject.org/>.

Stark, John. "Industries Oppose State's New Cherry Point Protection Plan" from *The Bellingham Herald*, 01 July 2010. The Bellingham Herald. ©2010. Bellingham, WA. 15 November 2010 http://www.bellinghamherald.com/2010/06/29/1503925/ industries-oppose-states-new-cherry.html>.

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ASSESSMENT

- I will check individual research notes during PBL process as a summative assessment of their learning. I will also provide note-taking sheets that include a chart for taking notes on the following: economic impact, environmental impact, community impact, national impact, global impact, and impact on education.
- Each individual will write a one page recommendation for the city council based upon the complete issue. This will have a separate grading rubric based upon Washington Essential Academic Learning Requirements in Writing.
- Each group will present their recommendation to "Ferndale City Council" (maybe a panel of teachers or the class) in a multimedia presentation that uses primary source data, graphs, and/or images to support their findings.. This will have a separate rubric based upon Washington EALRs in Communication.
- Each group will then compose a one-page recommendation, based upon the focus area assigned to their group, as part of the cooperative learning process.

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Name								
Class	_ Date							
Grading Rubric PBL Lesson:								

PBL Element	4-Excellent	3-Proficient	2-Partial	1-Minimal
	Took a leadership	Completed all portions	Remained on task	Did not distract
	role with group.	of the assignment.	some days. Completed	others. Little, if any,
T	Self-directed	Remained on task	some portions of the	contribution to group
Participation	throughout process.	daily. Completed	group assignment.	work.
and Contribution	Helped group	individual activities	Participated in group	
to Group	members who needed	0 1	work with teacher	
•	assistance while	work on some days.	intervention.	
		Helped with all parts		
	portion of	of group presentation.		
	assignment.			
	Completed all steps	Completed all steps of	Completed most notes	Very few notes taken
	of PBL listed in	the PBL, cycling back	and steps of PBL	and research
Research Notes	"Proficient." In	through steps as	process. KWL/or	incomplete.
and Problem-	addition, searching	needed. KWL chart,	evaluation sheets only	
	for information on	note sheets, and all	partially filled in.	
Solving Model	similar situations	peer/self evaluations	Some research	
	elsewhere.	for individual and	completed for	
	Researching and	group assignments	individual and group	
	evaluating both sides	were completed.	projects.	
	of the issue for			
	individual and group			
	assignments.			
	Used 5 or more		Used 3 or less different	
	different types of	different types of print	types of resources	and/or did not cite
Information Cited	resources and drafted	and online resources	and/or some	resources correctly.
Information Cited	bibliography in MLA	and recorded	bibliographic	
	format.	bibliographic	information was	
		information.	incomplete.	TT 1 1 11 11 1
	Exceeded research	Worked cooperatively	Contributed only	Helped very little
	requirements by	with group members to		with group report.
	using	complete written	the group report.	
	counterarguments in	assignment. Used		
Cwayn Danaut/	recommendation.	their own research to		
Group Report/	Took initiative in the	contribute to final		
Recommendation	writing process,	report and helped with		
	making sure that the	at least one aspect of		
	group completed all	the writing process.		
	parts of the writing			
	process. Student			
	sought outside help			
	for editing and			
	revising feedback.			

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REFERENCES/CITATIONS

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- OSPI. "Social Studies Essential Learning Requirements: Recommended Grade-by-Grade Sequence for Grade Level Expectations K-12." Office of Superintendent of Public Instruction. 2010. Olympia, WA. 28 October 2010 http://standards.ospi.k12.wa.us/ComponentListByGrade.aspx?subject=6,GLE&gl=6.
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