The Hillcrest Mining Disaster in a Global Context

Lesson Overview:

This lesson plan offers students the opportunity to investigate the 1914 Hillcrest Coal Mining Disaster, Canada’s worst mining disaster, in a global perspective.

“What was the purpose of the mine in question? How important was the mine to the people and the surrounding area? What economic benefits did the mine provide? What were the risks and costs of the mine? How well managed was the mine in question, and what were the relations like between its workers and its owners? What laws were in place to regulate mining in the area? What environmental impact did the mine have upon the surrounding area as well as globally? What lessons can be drawn from the example of this mining disaster and applied to other situations?”

Grade Level:
Social 10-1 or 10-2

Note: This lesson may be modified for non-academic students through emphasis on teacher-led presentations. Read pertinent excerpts from texts aloud, simplifying or paraphrasing difficult portions. Summarize the most important research on coal mining disasters (see suggested readings list). Rather than proceeding by means of small independent group discussions surrounding the challenging readings, directly moderate entire classroom discussions relating the readings to the larger globalized context. Diversify classroom activities by using music, art, photography, and stories that portray coal mining disasters in their global context.

Time Required:
Two classes separated by a week or so if there is to be extensive student research.

Curriculum Connection for Alberta Social Studies 10-1 or 10-2:
Alberta Social Studies 10-1 and 10-2

Link to Canadian Atlas Online:
www.canadiangeographic.ca/atlas

Additional Resources, Materials, and Equipment Required:

Student Activity Sheet (attached): List of Historic Coal Mining Disasters


Canadian Atlas Online (CAOL)
http://www.canadiangeographic.ca/atlas/


“Hillcrest Disaster.” http://www.coalking.ca/challenges/major_hillcrest.html

Hillcrest Mine Disaster (unofficial website).
http://coalminersmemorial.tripod.com/hillcrestminedisaster.html

“Honneiko colliery mining disaster”
http://www.britannica.com/EBchecked/topic/1503377/Honkeiko-colliery-mining-disaster


Keelaghan, James. “Hillcrest Mine” http://www.youtube.com/watch?v=Hf3vzeZkJlg


“Mine Disasters.” http://www.crowsnest.bc.ca/coal09.html


“One of World’s Worst Mine Disasters Gets Worse – BHP Admits Massive Environmental Damage at Ok Tedi Mine in Papua New Guinea, Says Mine Should Never Have Opened. Mining Watch Canada.”
http://www.miningwatch.ca/index.php?/BHPBilliton/Ok_Tedi_joint_rls

Main Objective:
To encourage students to think responsibly about the consequences of fuel and resource extraction.

Learning Outcomes:
By the end of the lesson, students will be able to:
1. generalize about the extent to which the human and environmental costs of coal extraction can be mitigated, and whether or not lessons learned in one area of the world/time period can be transferred to another place/time successfully. (Knowledge Objectives).
2. develop "Process Skills." Students acquire information from various sources, record and organize information in note form, analyse and evaluate research materials for bias, as well as interpret and summarize materials. Students hone their "Communication Skills," developing their ideas in written and oral form. Finally, students develop their "Participation Skills" by working at individual tasks in a group situation (Skill Objectives).
3. Through independent and cooperative work, students are encouraged to appreciate various dimensions of this inquiry. It is hoped that all students will develop a critical, respectful attitude towards both the natural and social worlds (Attitude Objectives).

The Lesson:

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<th>The Lesson</th>
<th>Teacher Activity</th>
<th>Student Activity</th>
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<tr>
<td>Introduction</td>
<td>Teacher can introduce topic using music, art, or film.</td>
<td>Students engage in classroom discussion of introductory materials.</td>
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<td>Lesson Development</td>
<td>After an initial musical/artistic/visual activity to introduce the inquiry, students should be organized into research groups that will explore various mining disasters. Work during this inquiry will culminate in a group presentation of student findings in response to these questions. Besides the Hillcrest Mining Disaster, student inquiry into other global examples ought to be included (see attached list). Teacher circulates among groups asking questions, offering guidance, and time-keeping.</td>
<td>Students work through readings independently or cooperatively.</td>
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<tr>
<td>Conclusion</td>
<td>Teachers may provide students with worksheets, or &quot;Effective Writing Templates&quot; that will help them focus and organize their research on the paper topic. Teacher will offer direction and/or editing assistance as students develop writing and presentation skills.</td>
<td>Students will present their findings to the class.</td>
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Assessment of Student Learning:
Student work may be evaluated on rubric.

Link to Canadian National Standards for Geography

Developed by the Canadian Council for Geographic Education, the Canadian National Standards for Geography are available on the Council’s website. www.ccge.org
STUDENT ACTIVITY SHEET

List of Historic Coal Mining Disasters:

- **The Honkeiko Colliery Disaster, China (April 26, 1942).** Statistically, this was the worst mining disaster in history. 1,549 miners died in a mine operated in Japanese-occupied Manchuria. China has a horrible history of mine safety. The Japanese also likely are culpable in this accident: the Chinese were treated as sub-human slave labour by the Japanese.

- **Courrières, France (March 10, 1906).** 1,100 died in a coal dust explosion.

- **Omuta, Japan (November 9, 1963).** An explosion in a coal mine killed 447.

- **Senghenydd, Wales, UK (October 14, 1913).** The worst of the Welsh coal mining disasters killed 438 men and boys.

- **Coalbrook, South Africa (January 1, 1960)** 437 casualties.

- **Wankie, Rhodesia (June 6, 1972)** A coal mine explosion killed 427.

- **Dhanbad, India (May 28, 1965)** 375 miners died in a coal mine fire.

- **Chasnala, India (December 27, 1975)** A coal mine explosion, followed by flooding killed 372.

- **Barnsley, England, UK (December 12, 1866)** 361 casualties.

- **Monongah, WV (December 6, 1907)** 362 casualties. The worst mining disaster in US history is said to have provided the origins of the first Father’s Day celebration. A woman named Grace Clayton asked her church to hold a Sunday memorial for the fathers lost in the mine. The commemoration was held in a church in Fairmont, West Virginia.

More recent mining disasters include:

- **August 1990, Bosnia** - 180 coal miners died after a gas explosion caused the main pit shaft to cave in at the colliery in Dobrma, near Tuzla.

- **April 1991, China** - A gas explosion killed 147 coal miners at the Sanjiao River mine in Shanxi province in northern China.

- **March 2000, Ukraine** - At least 80 miners are killed when a methane gas explosion rips through the Barakova coal mine in Luhansk. It was the country’s worst mining disaster since independence in 1991.

- **October 2004 China** - The Daping mine in Henan province explodes, killing 148.

- **November 2004 China** - A gas explosion tore through the state-owned Chenjiashan coal mine in Shanxi province; 166 miners are killed but more than 120 escape.

- **February 2005 China** - A gas explosion at the Sunjiawan colliery of the state-owned Fuxin Coal Industry Group killed 214.

- **November 2005 China** - A gas explosion killed 169 people at the state-owned Dongfeng coal mine in Heilongjiang province.

- **Sept 2006 China** - Fifty miners are killed after the roof of a coal mine collapses following an explosion in the eastern state of Jharkhand.

- **March 2007 Russia** - Blast rips through Siberian coal mine, killing at least 110 people.

- **May 2007 Russia** - Thirty-eight miners died in a methane explosion at the Yubileynaya mine in Siberia.

- **Sept 2007 China** - Coal mine shaft floods in the eastern province of Shandong, killing 181 miners.

- **Nov 2007 Ukraine** - A methane blast more than 1,000 metres (3,000 feet) underground at the Zasyadko mine in the Donbass coalfield's main town, Donetsk, killed at least 63 miners. Thirty-seven miners are still missing.