



ENGINE 371

TEACHER'S GUIDE

SUMMARY

Using the logging and railway industries as examples, this animated parable explores several themes through the following continuum:

Ecosystem exploration → natural resource identification → natural resource exploitation → primary industry development → impacts on demographics, immigration, economy, environment, governance, wealth distribution, development of secondary and tertiary industries → environmental effects → realization of problems exploiting a non-renewable or very-slow-to-renew resource → impacts on demographics, immigration, economy, environment, governance, wealth distribution.

The film implores the audience to find an answer to the question, Is there a better model for natural resource exploitation?

RECOMMENDED AUDIENCE

Senior high
Post-secondary
Adult education

CURRICULUM AREAS

Economics
History and Geography
Industrial Development
Environmental Studies

Political Science
Sociology
Demographics and immigration patterns

THEMES

Natural resource exploration and exploitation
Growth of cities
Sustainable development
Industrial development
Demographics
Immigration

Transportation
Secondary and tertiary industry development
Politics and governance
Railways
Economic development
Forestry and logging industries
Urban societies





STUDY / TEACHER'S GUIDE

PRE-VIEWING ACTIVITIES

Determine the history of the railway in your community by asking the students to research the following:

- Where was the first train station built?
- Why was it built there?
- What other industries, facilities, services were present there at the time the first station was built?
- What other industries, facilities, services were built at the same time or immediately after the first station was built there?
- Create a map or a graphic representation to display this information.

Looking at the period of history in your community classified as the industrial revolution, ask the students to research the following:

- Where did people live?
- Why did they live there?
- Which groups in society lived where in the community?
- Create a map or a graphic to display this information.
- How does this map or graphic relate to the map or graphic created in question 1?

VIEWING THE FILM

This short film can be screened in one sitting. Cue the students with any of the following:

- How does the development of the logging and railway industries affect the quality of life of the people who work in and near these industries?
- At what point does the harvesting of trees become a negative exploitation of a natural resource?
- Who makes decisions about the trees, workers and the environment?

POST-VIEWING ACTIVITIES AND DISCUSSION

EXPLORERS

What is an explorer? What qualities does a successful explorer need? Why do people choose to explore? Have the students answer these questions in terms of life in:

- The 16th century
- The 17th century
- The 18th century
- The 19th century
- The 20th century
- Today





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GROWTH OF RAILWAYS

What needed to be invented to make railways possible?

How did the forestry and logging industries help the construction of the railways?

Who controlled the growth of the railways? How?

Who decided which towns and villages would have a train station?

What environmental, economic and societal impacts did the railways have on a village or town?

GROWTH OF THE FORESTRY AND LOGGING INDUSTRIES

What needed to be invented before the loggers and forestry workers could harvest the trees efficiently and economically?

How did the railways help build the forestry and logging industries?

Who controlled the growth of the logging and forestry industries? How?

Who decided which trees would be cut?

What environmental, economic and societal impacts did logging and forestry have on a village or town?

PROGRESS?

A. How do the students define progress? Think about the following categories:

A child

An adult

A family

A community

An industry

A city

A country

An ecosystem

Who defines, and how is, progress defined:

What are the criteria for evaluating progress?

What are some consequences of progress?

B. Have the students create a rubric to evaluate the “progress” – as they defined it – of an industry or a community or a city. In groups, have the students use their rubric to evaluate an industry, community or city to determine if its progress has positively or negatively affected the environment and the quality of life of the people living in or near it.

C. This can be expanded to look at the impact of the industry in terms of global warming, carbon footprints, wealth distribution, pollution, sustainable development, governance and human rights.

D. Look at other industries such as producers of gasoline, coffee, chocolate, potable water or rice.





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SOCIAL CLASSES

Traditionally, the working world has been divided between blue collar – labour – and white collar, management. In **Engine 371**, management is portrayed as being a small group of white men, wearing suits, coats and formal hats. Through their consolidation of power, finances, resources; through their decisions and back-room and front-office deals, they influenced everything from the environment, the economy and the quality of life of everyone even remotely connected to the industry. How did this consolidation of power affect the lives of people living in cities? What was the effect on social classes and access to a better quality of life for all citizens?

BEHIND CLOSED DOORS AND WINDOWS

A. Ask the class to brainstorm what they think is happening in the houses, behind the closed doors and windows, as seen at the end of the film. Could the workers be:

Passively accepting their position and lot in life?

Planning and plotting ways to take control of their working world?

Developing alternative products to save the trees and the environment?

Developing solutions to the problems created by the industry and its management and thereby undermining the financial success of the industry?

Planning strategies to diminish their dependence on the industry and its products and thereby undermining the financial success of the industry?

B. Ask the students to examine their dependence on a specific industry or product of their choosing. They should examine the effects of this product/industry on the environment, the economy, their personal finances, governments, human rights and sustainable development. In doing so they should examine their contribution to this industry or product. Are they playing an active role, passive role or neutral role in supporting positive or negative impacts of this product/industry on the environment? What could they do to lessen any negative impacts on the environment created by their dependence on the product/industry?

