Why Build a Dam?

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PURPOSE
To illustrate the complex web that is affected by changing one thing. To show why projects are done despite opposition. To show special interests involved in such a project. To show cause and effect.

THEME STATEMENT
The environment is connected in a couple of complex ways, and humans can cause tremendous change in the environment.

SUGGESTED TIME:
Two sessions.

KEY VOCABULARY & CONCEPTS
Population displacement, "China's sorrow", irrigation,

INITIATION (Inquiry, Preview, Involvement)
1. Talk about a local dam project (if one exists).
2. Ask why a government would want to build a dam. Have the students determine what groups would want a dam and what groups would not. Why do these groups feel the way they do? Discuss the positives and negatives according to each group.

DEVELOPMENT (Instruction, Data Collection, Organization)
1. Give background information on the Three Gorges Dam project. Explain the idea of "China's sorrow".
2. Work with the science teacher to study the possible environmental effects associated with such a project.
3. Explore further each of the positives and negatives the students mentioned while doing Initiation Cultures, continuity, change EXTENSION/ENRICHMENT (Articulation of Ideas, Ownership, Experimentation) 1. Work with the science teacher to create an experiment demonstrating how a dam causes decreased river flow, and other environmental problems.
2. Have students determine the long-term effects of such a project by forecasting how the chain of events each problem creates affects the part of the world around the project.

SUMMARY
Adaptable Levels
7-12

Related Themes
TPDC, CCC, IPC, IGC

Values
Respect for the environment

Skills
Foresight, predicting future consequences, seeing both sides of an issue

Integration
Science
EXTENSION/ENRICHMENT (Articulation of Ideas, Ownership, Experimentation)

1. Work with the science teacher to create an experiment demonstrating how a dam causes decreased river flow, and other environmental problems.

2. Have students determine the long-term effects of such a project by forecasting how the chain of events each problem creates affects the part of the world around the project.

ASSESSMENT:

1. Have students determine which position they would take on the dam building issue, pro or con, and tell why they chose that position.

2. If time and equal numbers of pro and con, set up a debate between the two sides.

KEY QUESTIONS:

1. Why would a country build a dam?

2. Is improved business a justification for harming the environment? Defend your choice.

3. What would you decide if the decision was yours to make? Why?