

# What's the DAM Project?

## Social Studies Grade Levels 6-8

**Objectives:** In order to understand the essential question of, “Why are dams built and what purpose do they serve?” students describe different types of dams and identify dam features on historic photographs. In small groups, students sort and categorize dam types and features, research further a specific dam, and present their findings to the class. *Time Needed: 3-4 hours*

### Vermont’s Framework of Standards and Learning Opportunities:

1.16 Artistic Dimensions (students use a variety of dimensions to communicate ideas)  
3.10 Teamwork

### Grade Level Expectations:

History and Social Studies 3-4, 5-6, 7-8:12 Geography (human interaction with the environment)

**Interdisciplinary Connections:** Language Arts

### Materials & Resources:

*Landscape Change Program* Archive, [www.uvm.edu/perkins/landscape](http://www.uvm.edu/perkins/landscape)

Images: For example, LS02284, LS00731, LS00433, LS00966, LS00277, and LS04004, (printed and laminated)

In-school computer lab

Library access

### Activities:

<p><b>1. Hook Your Students</b></p> <p>Students use laminated dam photos to sort and identify dam features (construction material, age, dimension, use, purpose, etc.)</p>	<p><b>4. Culminating Activity</b></p> <p>Students create a final presentation using downloaded dam photographs and submit a written report about their dam findings. Photographs and reports are displayed for a public celebration.</p>
<p><b>2. Introduce Concepts</b></p> <p>Discuss photographs of earthen, wood, mill, stone, power, and concrete dams. Assign a dam type to each “expedition team.” Demonstrate skills to access the <i>Landscape Change Project</i> web page.</p>	<p><b>5. Assessment</b></p> <p>Rubric that identifies specific dam features; Self and group reflections; Teacher observation.</p>
<p><b>3. Apply Skills</b></p> <p>Student teams explore dam types on-line at the <i>Landscape Change Program</i> web page and research dams in the school library. <i>Add-on:</i> Teams work to correctly identify dam features in a “competition” game.</p>	<p><b>6. Extensions</b></p> <p>Make physical models of dams; Create large, multi-image murals; Field trip to local dam; Research on waterpower, diversion of water, impacts of dams on surroundings, etc.</p>

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## Lesson Plan Details

*Detailed summary of curricular format:*

D A Y 1

- 1) "HOOK" students by handing them laminated photographs of various types of dams.
- 2) Working in groups of 2-3, students will organize photos into categories.
- 3) Guiding question: "Can you categorize photos into the following?"  
What they are made of, age, features, height/width, use, purpose
- 4) Assign each student group one of the categories (Earthen Dams, Wood Dams, Mill Dams, Stone Dams, Power Dams, Concrete Dams).

D A Y 2

- 5) Provide students with access to *Landscape Change Project* Web site for purpose of "exploring" varied types of dams.
- 6) Students will research specific DAM to provide descriptions of their type of dam and its features.

D A Y 3

- 7) Following research and exploring of web site, students will present as their culminating activity their photographs and a report of their findings.
- 8) Photos and reports will publicly displayed to celebrate the completion of the DAM project.

*Additional instructional materials*

- 1) Summaries of dams, their features and characteristics (larger font size with illustrations)
- 2) "White boards" or access to handheld chalkboards to allow students to quickly "show" knowledge through written responses.

*Modifications for students with behavioral, physical and/or learning needs*

These students should typically have pre-arranged assigned seats. The arrangement of desks or tables should allow for all students to feel as contributors to the classroom activities, and does not allow for students to hide or blend into the "back" of the room. Collaboration with Instructional Assistants is essential in order to breakdown difficult concepts with each feature and aspect of "Dams," in order to meet the needs of special and diverse learners.

*Accommodations for different levels of learners and different approaches to learning*

Several students in need of accommodations should be given the opportunity to modify their writing portion of the class (providing partial responses, or being allowed to give 1-2 word answers instead of "complete sentences"). With regard to readings (large font size and illustrations, and use of visual imagery), changing font, and providing visuals are selected to specifically allow for easier accessibility among the different levels of learners in the classroom. Students that are having a hard time visualizing the basic features of a dam from text, will find the *Landscape Change Project* imagery to be extremely useful. Students who have difficulty processing small font will find the larger fonts combined with still photography more user-friendly and easier to comprehend.