

Water in the Desert: A Comparison and Contrast of Rainbow Bridge and Glen Canyon Dam to the Proposed Red Sea Dead Sea Canal

Jennifer Jenkin

Introduction:

One of the concepts that is important for students to understand is that history is not just the past; it can inform the present as well. The history that students learn in the classroom applies to the modern world. As adults, and global citizens, the students will use their historical knowledge to shape the world, and future history. In this lesson, students will work with a variety of instructional tools to create a comparison between the flooding of Rainbow Bridge, and the refilling of the Dead Sea. This comparison will involve humanitarian, governmental, cultural, religious, and environmental aspects. The student will apply all these considerations in order to pose a solution to a multi-dimensional, international problem.

Comments:

Participants:

Middle or High School Students

The lesson can be modified to fit gifted students in both the writing and critical thinking sections. It can be modified for remediation by simplifying the writing assignment, participating in the webquest as a class, and providing a note-taking guide for the PowerPoint. It also can be modified for English Language Learners by pairing them up for the webquest and possibly the writing assignment with a English speaking partner who will support and aide them.

Unit:

For World History the lesson would best apply in a unit on the Middle East, toward the end when the students have acquired the basic knowledge of the politics of the Levant.

For American History the lesson would best fit either in a unit on Native Americans, or with the post-WWII growth of the west.

For Government the lesson would best apply to a unit on congressional appeals, the appeals of the court system or international policy.

Time Frame:

The lesson is designed for three 50-minute class periods, and needs *at least* two hours to complete.

Enduring Understandings:

- To acquire an understanding of the patterns of history.
- To apply critical thinking skills to problem solving.
- To apply concepts of history to solve modern problems.

Essential Questions:

- How do governments implement international water utilization plans?
- How do cultural, religious, and environmental factors affect governmental decisions?
- How do you use American history to solve modern global problems?

Standards:

Arizona State Standards:

Seventh Grade: Strand 1 Concept 1 PO 1,4,5,6,7,8 Strand 2 Concept 1 PO 1,2,4,5,6,7,8 Concept 9 PO 1,2,3, Strand 4 Concept 1 PO 1,4 Concept 2 PO 1,3 Concept 5 PO ALL

Eighth Grade: Strand 1 Concept 1 PO 1,4,5,6,7,8 Strand 2 Concept 1 PO 1,2,4,5,6,7,8 Concept 9 PO 1,2,3 Strand 4 Concept 1 PO 1,4 Concept 2 PO 1,3 Concept 5 PO ALL Concept 6 PO 2,3

High School: (American History) Strand 1 Concept 1 PO 4,5,6,7 Concept 5 PO 4 Concept 7 PO 3 Concept 10 PO 1,2,3 (World History) Strand 2 Concept 1 PO 4,5,6,7

Concept 2 PO 2 Concept 9 PO 3,4,5 (Government) Strand 3 Concept 2 PO 7,10
Concept 3 PO 4 Concept 4 PO 5 (Geography) Strand 4 Concept 1 PO 3 Concept 2 PO
3,4,7 Concept 3 ALL, Concept 5 PO 3,4,5,6 Concept 6 PO 1,2 (Economics) Strand 5
Concept 1 PO 1,4,5

Prior Knowledge of Students:

The students should already have some basic knowledge of both Middle East politics as well as the relationship between the United States Government and the Native tribes. The students will share their knowledge of the concept in the warm up discussion on the first day. In addition, on the thinking maps, they can add additional information they may already know about the Rainbow Bridge issues and/or the Red Sea Dead Sea Canal.

Background/Preparation:

Rainbow Bridge is a natural rock bridge formed by wind erosion in Glen Canyon, located in Northern Arizona near the Utah border. It currently lies on an outcropping of Lake Powell. The Navajo and other Native American Tribes lived in this area since the time of their origins stories. In the 1860s when the United States government relocated many Navajo to internment camps at Bosque Redondo and Fort Sumner, New Mexico, a few Navajo hid in the Rainbow Bridge area. Hence, this area, already sacred to the Navajo people, became even more important to them. Rainbow Bridge provided them with protection, hope, and fresh water; a refuge from U. S. federal powers. The Navajo tribe returned to their homelands after signing a treaty with the federal government in 1868, establishing the Navajo Reservation.

By the 1950s, the Navajo's sacred land became particularly important to the Federal government as well. They wanted to reclaim the area (from the Navajo Reservation) in order to build a dam to store and manage irrigation and drinking water. In 1957, the Navajo Nation agreed to an exchange of land. Senator Barry Goldwater (Republican, Arizona) favored this decision. It is important to note that at the time, the Federal Government negotiated the land exchange; Rainbow Bridge was a National Monument, hence, protected by the government. Consequently, people like Senator Frank Moss (Democrat, Utah) wanted to remove the protection from the bridge and allow the waters to surround this natural site and sacred Navajo ground. Moss, concerned with the cost of building a secondary dam, and the limited amount of water Lake Powell would hold, concluded that boating to the Bridge would be an added bonus. Conversely, Senator Goldwater favored protection of the area, and his financial interests there. Goldwater was part owner in the Rainbow Bridge Lodge, as well as

accepting personal responsibility of the trail to Rainbow Bridge. Goldwater's attempts failed, the waters rose, and the Navajo lost much of the access to their sacred land. In 1980, a few prominent Navajos sued the government, demanding protection for the area. They, like Goldwater, were ultimately defeated.

Today, the Middle East is struggling with similar issues of sacred sites, dual state roles, and environmental degradation, with regards to the Red Sea Dead Sea Canal. Jordan, Israel, and Palestine have the opportunity to review the Rainbow Bridge situation and rectify it in their own land.

Students will be presented with this problem. The students will look to the history of Rainbow Bridge, compare and contrast the rationales and decisions in the U.S. with those of the Red Sea Dead Sea Canal Project, then propose their solution.

The Red Sea Dead Sea Canal Project is a recently proposed water plan along the Jordan River in Israel and Jordan in the 1990s and 2000s. The project leaders from all three nations, designed a canal in order to protect the sacred religious sites along the Jordan River, and keep the Dead Sea from disappearing, as well as provide water for irrigation. The proposed canal is a trilateral project between the Israelis, Palestinians, and Jordanians to 'pump' water from the Red Sea at the Gulf of Aqaba to the Dead Sea. Much like the decision to flood Rainbow Bridge, there were a variety of interested parties with different interests at stake. Additionally, many of the issues and debates that have arisen are similar to those in the Rainbow Bridge debate. These groups faced similar issues and questions regarding the preservation of preserving sacred land, the environmental impact of construction, and the cultural ethics of the project. The students will first analyze the issues and decisions in regards to Rainbow Bridge, and then seek out their own information on the canal. In conclusion, the students will apply this knowledge to propose their own solution.

Outcomes/Assessments:

The first two days the students will take the information they have acquired and modify it to fit into a thinking map (see attached or see below for the template). This will provide the teacher a chance to assess their learning throughout the lesson. The last day, the students will create their own proposal synthesizing the information they have obtained in the previous day. This writing should also contain the related and contrasting issues between the two situations. The students will be demonstrating their knowledge of how history can be used to understand the present and make difficult decisions.

Procedure:

DAY 1:

- Warm Up question: Have you ever had to choose between your own interests and someone else's culture? For example refusing food that you dislike, but not wishing to offend someone because it was part of their culture. Or snapping at someone to get their attention, and have them be disgusted at your rudeness. Share and discuss.
 - Say something along the lines of "Today we are going to be examining a conflict between the culture of the Navajos and preferences of the Federal Government. Keep in mind how you felt in that situation and all the other issues that affected that scenario".
 - Discuss the warm up question to link prior knowledge with new content.
- The teacher should give a brief lecture on the history of Rainbow Bridge and Glen Canyon Dam with the PowerPoint. Students should take some sort of notes to have as a reference later. *This gives the students an opportunity to take notes in the manner that best suits their diverse needs, and presents both linguistic and visual learning styles.*
- Complete the Bubble Map using their notes from the PowerPoint. Students should note key facts and events in the creation of Glen Canyon Dam and the flooding of Rainbow Bridge. *Note: More bubbles can be added to the map as an extension.*
- Teacher should call on a few students and ask what they learned that day (these should be items they could put on their Bubble Map). *This is a very important step to create concrete higher level knowledge.*

DAY 2:

- Discuss types of items on Bubble Map from day 1.
 - Tell students, "Today we will be investigating a modern issue regarding the building of a canal in the Middle East to reclaim sacred land and to meet the water needs of the people.
- Students will work independently (*possibly in pairs for remediation or English Learner support*) on the webquest to gain knowledge of the current issues in the Middle East.
- Complete the Double Bubble Map using their Bubble Map from day 1 and their webquest information. They should place shared information in the conjoined bubbles. They should note key facts, events, and contrasting views in the possible creation of the Red Sea Dead Sea Canal. *Note: More bubbles can be added to the map as an extension.*

- Students should pair up and review the answers they gleaned on their webquest. *This discussion is essential to their rationales in the writing process later on.*

DAY 3:

- Discuss types of items on the Double Bubble from day 2.
 - Say something along the lines of “Today you will transfer and apply your information from your double bubble map, and use it as your prewriting for today’s comparison essay. You will compare the reasons and issues for the flooding of Rainbow Bridge and the possible creation of the Red Sea Dead Sea Canal. You will also be asked to give your well informed opinion”. [Pass out the writing assignment directions, and explain your specific expectations further]. *Optional recommended activity: Lead a class discussion about what could be done to amend the issues around the Red Sea Dead Sea Canal. This will help the students to organize their opinions as a pre-writing activity.*
- Teacher should pass out the writing activity and explain it to the students. Give an example or work as a class to meet the student’s needs and understanding.
- Students should begin working on their essay. The teacher should continuously monitor and aid students who need help. The essay can be collected at the end of the class or can be extended using the writing process.
- Students can share (as a class or with a partner) what solution they will suggest in their essay and why; they will be surprisingly diverse.

Bibliography:

Brown, Brian Edward. *Religion, Law, and the Land: Native Americans and the Judicial Interdependence of Sacred Land*. Westport: Greenwood Press, 1999.

An in depth look at the legal cases surrounding Rainbow Bridge.

Farmer, Jared. *Glen Canyon Dammed: Inventing Lake Powell and the Canyon Country*. University of Arizona Press. 1999.

A political history of the creation of Glen Canyon Dam and the flooding of the sacred land.

Iverson, Peter. *Barry Goldwater: Native Arizonan.*, University of Oklahoma Press, 1997.

A complete history of Barry Goldwater, his life, and ties to the area and the Navajo community.

Ministry of Regional Cooperation. "Israel and Jordan Launch Global Campaign to Save the Dead Sea." Israel Ministry of Foreign Affairs.

http://www.mfa.gov.il/mfa/mfaarchive/2000_2009/2002/8/israel%20and%20jordan%20launch%20global%20campaign%20to%20save%20t (accessed March 26, 2009).

A complete history of the canal project, and its trilateral partnership.

Sproul, David Kent. *A Bridge Between Cultures: An Administrative History of Rainbow Bridge National Monument.* National Park Services, 2001.

<http://www.nps.gov/archive/rabr/adhi/adhit.htm>(accessed September 27, 2008).

A complete history of Rainbow Bridge and the area from the pre-Colombian period to 2001.

Handouts/Rubrics:

[Electronically attached]

Materials:

Computer lab

PowerPoint projector

Rainbow Bridge PowerPoint (included on CD)

Bubble Map (included)

Webquest instructions (included)

Double Bubble (included)

Writing instructions (included)

Writing rubric (included)

Biography:

Jennifer Jenkin currently teaches World History in Arizona. She has been teaching for two years. She is a participant in the “Learning History by Doing History Teaching American History Grant project. She is a graduate of Richmond, The American International University in London, and hopes to attend graduate school in the future.