

A BRIDGE ACROSS UTAH LAKE

This lesson plan has been created as a resource for seventh grade teachers to teach the new core standards to their students. It integrates language arts and social studies standards in a meaningful and fun way. To see which specific standards are addressed, please refer to them below.

OBJECTIVE:

1. Students will use newspaper opinion articles to learn about building a bridge across Utah Lake.
2. They will then debate both sides of the Utah Lake bridge issue to show their understanding.

STANDARDS ADDRESSED:

7th Grade Language Arts

7.W.1 Writing Standard 1:

Write arguments to support claims with clear reasons and relevant evidence.

7.W.4 Writing Standard 4:

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)

7.W.6 Writing Standard 6:

Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.

7.SL.1 Speaking and Listening Standard 1:

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.

7.SL.2 Speaking and Listening Standard 2:

Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, and orally) and explain how the ideas clarify a topic, text, or issue under study.

7.SL.3 Speaking and Listening Standard 3:

Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.

A BRIDGE ACROSS UTAH LAKE

7.SL.4 Speaking and Listening Standard 4:

Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.

7.RI.1 Reading Informational Text Standard 1:

Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

7.RI.8 Reading Informational Text Standard 8:

Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims.

7th Grade Social Studies: Utah Studies

Standard 1: Students will understand the interaction between Utah's geography and its inhabitants.

Objective 1: Investigate the relationship between physical geography and Utah's settlement, land use, and economy. Read and interpret a variety of maps.

b. Compare and contrast the relationship between physical features and regions to settlement, land use, and the economy.

Objective 2: Examine the interrelationship between Utah's climate, location, landforms, and life. Describe how latitude, elevation, and distance from the ocean influence Utah's climate.

e. Predict how natural forces affect environments; e.g., earthquakes, volcanic action, mudslides, flooding, erosion.

Objective 3: Assess how natural resources sustain and enhance people's lives.

c. Analyze how natural resources improve the quality of life.

d. Assess the importance of protecting and preserving natural resources.

Objective 4: Examine how people affect the geography of Utah. Identify Utah's counties and cities.

a. Assess how people change the landscape.

b. Examine how altered landscapes affect people.

Standard 3: Students will understand the relationship between government and the people of Utah.

Objective 1: Examine Utah's struggle for statehood. Compare and contrast territorial and state government organization.

d. Investigate how government services affect the residents of the state.

Objective 2: Examine the structure and function of city, county, and state governments.

A BRIDGE ACROSS UTAH LAKE

- c. Research services that are provided by each level of government; i.e., city, county, township.

Objective 3: Assess the rights and responsibilities of citizenship.

- a. Explain the rights and responsibilities of good citizens.
- b. Investigate how individuals can be involved in the political process.

Standard 4: Students will understand the diverse ways people make a living in Utah.

Objective 1: Explore the components of Utah's economy. Identify the multiple components of Utah's economy; e.g., government, agriculture, mining, tourism, high tech industry.

- c. Assess factors that attract people and businesses to locate in Utah.

Objective 4: Investigate the current status of Utah's economy.

- c. Explain the effects of private, state, and federal land ownership on land use; i.e., parks, forests, trust lands, etc.

Standard 6: Students will understand the impact of major contemporary events that concern the land and people of Utah.

Objective 1: Identify and investigate major contemporary events that affect individuals, institutions, and society.

- a. Examine different points of view on important events; e.g., land, politics.
- b. Identify the impact each point of view may have on the state.
- c. Investigate the avenues available for individual or community involvement.

TEACHER BACKGROUND:

A proposal has been submitted by a private company to construct a commuter bridge across Utah Lake from 800 North in Vineyard/Orem to Pelican Point in Saratoga Springs. The privately financed bridge will cost somewhere between \$300 and \$600 million and will charge a toll (approximately \$3 or the cost of a gallon of gas) for crossing. Here are structural aspects provided by the company, Utah Crossing, Inc.:

- 5.8 mile toll bridge.
- Crossing Utah Lake with the intention of connecting to State Rd. 68, north of Pelican Point (Saratoga Springs City) to 800 North at Geneva Road (Orem/Vineyard).
- 35 feet in height except for the center four spans, which are designed at 50 feet in height to allow sailboats to go under the bridge.
- Total of 202 spans.
- Spans designed 150 feet wide.
- Width designed at 54 feet.
- 9 foot super structure depth.

A BRIDGE ACROSS UTAH LAKE

Opposition to the bridge is spearheaded by The Utah Valley Earth Forum, Sierra Club, Friends of Great Salt Lake, Bonneville School of Seamanship, and Utah Waterfowl Association. They recommend a "Do Nothing" plan. Legislation House Bill 137 (HB137) sponsored by Utah State Representative Ken Sumsion gave the Utah Transportation Commission and UDOT responsibility to oversee issues related to the financing, design, and construction of the bridge. The ultimate decision on the fate of the bridge will be made by the Utah Division of Forestry, Fire, and State Lands after input and a yes/no recommendation from UDOT and others.

The main arguments in support of the Utah Lake Bridge are:

- Create an additional east-west corridor.
- This is a private development willing to invest millions--not government (taxpayers) funds.
- Building the bridge will stimulate other Utah Valley growth.
- It is inevitable a bridge will eventually cross the lake--why not now with cheaper costs.
- The population of Utah Valley will double from 600,000 to 1.2 million by 2040.
- The population west of Utah Lake will go from 40,000 to at least 250,000 by 2040.
- Time and fuel will be saved.
- Pay now or pay later.
- New roads such as Pioneer Crossing and MVC have helped in the short-term but will not handle the traffic 1,200,000 residents will create in the future.
- At least 300 new jobs will be created by the building of the Utah Lake Bridge.
- A shorter drive, thus a decrease in vehicle emissions.
- Predicted ridership will be 56,000 vehicles a day bringing in \$1.2 billion over the life of the bridge.

The main arguments against the Utah Lake bridge are:

- By-products from snow/ice removal will pollute Utah Lake water.
- Boater safety will be compromised.
- This is another plan in a long line of Utah Lake abuse projects.
- Who will be responsible if something catastrophic happens (earthquake, unstable structure, major accidents, hazardous spills, etc.)?
- Open space is not being preserved on the lake.
- Migratory waterfowl will be disrupted.
- The bridge is being proposed prematurely - the anticipated need is 30 years out.
- The cost (\$300-\$600 million depending on the estimates) is prohibitive.
- Invasive species (like phragmites and quagga mussels) will be introduced by the construction project.
- The Utah Lake Bridge should be part of a larger plan for Utah Valley growth.
- The bridge will inhibit ongoing efforts to aid in the recovery of the June sucker.
- The bridge will impact the scenic aesthetic beauty of Utah Lake.

A BRIDGE ACROSS UTAH LAKE

- The only benefit will be to land developers on the west side of Utah Lake.
- The bridge will impair sailing on Utah Lake.
- Predicted ridership will only be 6,095 vehicles a day taking between 58 and 87 years to pay off.
- The floor of Utah Lake is sediment -- not bedrock.
- If the project goes bankrupt, what will happen to an incomplete bridge, or control over ongoing bridge maintenance costs?
- The bridge will be worn out in 40 years--it is at that time when we will need it.
- Earthquake fault lines run down both sides of the lake. The bridge will fail during an earthquake.

TEACHER MATERIALS:

- Review several of the provided newspaper opinion articles. (Found on the Utah Lake Bridge Debate Links page). Students will be asked to research similar articles for the assignment.

STUDENT MATERIALS:

- Internet access
- Debate procedures

PROCEDURE:

1. Ask the students what they know about Utah Lake.
2. Ask the students whether they think we need a bridge across Utah Lake.
3. Discuss the pros and cons of having a bridge.
4. Introduce them to the newspaper articles and provide additional time for internet research for similar articles.
5. Consider one or both of the following activities.
 - a. Use the traditional Middle School Debate Format in supplemental materials to conduct a debate.
 - b. Have students write an argumentative paper, citing sources, defending their position on whether a bridge should be constructed.

Debate Format

1. **First Proposition Constructive:**

The speaker makes a case for the motion of the debater, providing proof for the topic with three or four major points.
2. **First Opposition Constructive:**

This speaker makes several arguments against the proposition team's case, and refutes the proposition's major points.

A BRIDGE ACROSS UTAH LAKE

3. **Second Proposition Constructive:**

This speaker should rebuild and extend the proposition's case. This means that this speaker must extend and amplify the original proposition points and refute the opposition's major arguments against the proposition case.

4. **Second Opposition Constructive:**

This speaker amplifies the opposition arguments against the proposition case, providing new information about why the opposition team should win the debate. This speaker should respond to the proposition's answers to the opposition team's original arguments.

5. **Opposition Rebuttal:**

The speaker must pull the debate together and explain why, given all of the arguments in the debate; the opposition team should still win the debate. This speaker should finalize refutation of the proposition's major points.

6. **Proposition Rebuttal:**

This speaker should summarize the issues in the debate and explain why, despite the opposition's arguments; the proposition team should win the debate. This speaker should refute the opposition's major points.

Argumentative Paper

Students need to introduce and support their claims using credible sources that are cited, acknowledge alternate or opposing claims, maintain a formal style, and provide a concluding statement that supports their argument.

ASSESSMENT:

- Rubric for Middle School Debate Format.
- Argumentative paper

A BRIDGE ACROSS UTAH LAKE DEBATE

Internet Links for Utah Lake Bridge Debate Information

Here is the link for Utah Crossing--the group who is seeking approval to build the bridge:
<http://www.utahcrossing.info/>

Here is the link to Utah Division of Forestry, Fire, and State Lands:
<http://www.ffsl.utah.gov/sovlands/utahlake/bridgecrossing.php>

Here is the link to UDOT:
<http://www.udot.utah.gov/main/f?p=100:6:0::::V,T:,1>

The following links are to stories that the teacher should print out to provide information for the debate:

http://www.heraldextra.com/news/opinion/article_64a3fcec-d11a-5c0d-a4c6-2f03f7a03ecc.html

http://www.heraldextra.com/news/local/article_2c44d936-1e87-5c0a-bcc1-df12d9ef2bdb.html

<http://archive.sltrib.com/article.php?id=14233053&itype=storyID&keyword=utah+lake+bridge&sdate=2010-07-20&edate=2011-07-20&qtype=all>

<http://bayoucane.blogspot.com/2011/03/utah-lake-bridge-controversy.html>

http://www.abc4.com/content/news/top_stories/story/EXCLUSIVE-A-Utah-Lake-Bridge-bill-may-surface-at/BC71fzK_6k-yRhIUok2fHQ.csp

http://www.heraldextra.com/news/opinion/utah-valley/article_7c4caa03-cf39-5237-a6e5-824c6652ea05.html

http://www.emcity.org/index.asp?Type=B_BASIC&SEC={5EC6A171-DB26-4E34-94F1-B9E06E64593C}&DE={3C88A445-161E-42BF-B6A8-2491CD576D6D}

http://www.emcity.org/index.asp?Type=B_BASIC&SEC={9700632D-B599-4D25-80BB-4574CC3E983B}&DE={AAF0029D-7ABE-4371-B356-4968BAB65FAE}

<http://universe2.byu.edu/node/12487>

<http://www.deseretnews.com/article/700083465/45-day-comment-period-on-Utah-Lake-bridge-has-started.html>

http://www.heraldextra.com/news/local/article_99a93abc-e643-578a-9b4f-2844b466eed3.html

<http://www.sltrib.com/sltrib/home/50705559-76/bridge-lake-utah-state.html.csp>

<http://archive.sltrib.com/article.php?id=11581411&itype=storyID&keyword=state+to+furthur+study+utah+lake+bridge+plan&sdate=2010-07-20&edate=2011-07-20&qtype=all>

<http://universe2.byu.edu/node/11890>

http://www.heraldextra.com/news/local/article_96d55299-b7cf-5e89-8d96-e06056696731.html

A BRIDGE ACROSS UTAH LAKE DEBATE

Internet Links for Utah Lake Bridge Debate Information

<http://www.deseretnews.com/article/700074648/Utah-Lake-bridge-application-moves-forward.html>

<http://www.sltrib.com/sltrib/home/49333012-76/lake-utah-state-bridge.html.csp>

http://www.heraldextra.com/news/local/article_b9711f4c-9eba-507e-b8ad-2dc877130a19.html

http://www.heraldextra.com/news/opinion/utah-valley/article_032b6c83-6fa0-5ac1-9d0f-3d218c4c6340.html

http://www.heraldextra.com/news/opinion/utah-valley/article_57ecb7f4-00ef-51b4-8f80-41874085eaa9.html

http://www.heraldextra.com/news/local/article_d7b68dd1-7b8c-568a-a281-44c2775f5d48.html

<http://www.deseretnews.com/article/700027619/Opponents-say-proposed-Utah-Lake-bridge-not-financially-viable-smells-of-a-scam.html>

<http://archive.sltrib.com/article.php?id=8907848&itype=storyID&keyword=bridging+utah+lake&sdate=2010-01-20&edate=2011-07-20&qtype=all>

<http://archive.sltrib.com/article.php?id=8848729&itype=storyID&keyword=utah+lake+bridge+will+lose+money&sdate=2010-01-20&edate=2011-07-20&qtype=all>

<http://universe2.byu.edu/node/6216>

<http://www.deseretnews.com/article/700019316/Group-questions-Utah-Lake-bridge-decision-process.html>

http://www.heraldextra.com/news/local/article_e46edbf6-391f-11df-8e3d-001cc4c03286.html

http://www.heraldextra.com/news/local/article_f9dc226f-3b53-5a8c-96c9-5def7801096d.html

<http://www.deseretnews.com/article/700022536/Environmental-group-Utah-Valley-Earth-Forum-submits-no-build-proposal-for-Utah-Lake-bridge.html>

<http://archive.sltrib.com/article.php?id=13862390&itype=NGPSID&keyword=fears+grow&sdate=2009-07-20&edate=2011-07-20&qtype=all>

<http://archive.sltrib.com/article.php?id=13903305&itype=NGPSID&keyword=didn%27t+endorse&sdate=2009-07-20&edate=2011-07-20&qtype=all>

A BRIDGE ACROSS UTAH LAKE DEBATE

MIDDLE SCHOOL DEBATE RUBIC

Middle School Debate Rubric				
	Poor 1 pt	Fair 2 pts	Good 3 pts	Excellent 4 pts
Used Research	No facts were used and the research was done on opinion.	Only a few facts were used and it was mostly based upon opinion.	Stats and information was cited, but some sources were missed.	Stats were used and sources were cited for all stats.
Understanding of Topic	Research and speech show little or no topic understanding.	Research and speech show a moderate level of topic understanding.	Research and speech show a good level of topic understanding.	Research and speech show a high level of topic understanding.
Organization & Teamwork	Some group members complete their role. Teacher must redirect team frequently.	Most group members complete their role. Team works together with some teacher redirection.	Each group member completes his/her role. Team works together with little teacher redirection.	Each group member completes his/her role. Team works together with no teacher redirection.
Debate Expectations	Does not meet debate expectations or must be reminded 5 or more times.	Meets most debate expectations with 3-4 reminders.	Meets all debate expectations with 1-2 reminders.	Speaks only when directed by moderator. Listens carefully to all others speaking. Is polite and respectful to opposing team. Is supportive to teammates.
Speech	Voice is not loud, clear, confident, or expressive. Makes no eye-contact with audience.	Voice is sometimes loud, clear, confident, and expressive. Makes little eye contact with audience.	Voice is mostly loud, clear, confident, and expressive. Makes some eye contact with audience.	Voice is loud, clear, confident, and expressive. Makes eye contact with audience.