

## Oak Ridge and the Manhattan Project: An Ethical Debate

Lesson plans for primary sources at the Tennessee State Library & Archives

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**Grade Level:** 11th Grade US History/Geography

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Visit <http://sos.tn.gov/tsla/education> for additional curriculum materials.



### Introduction:

As part of a study on World War II, students will understand the importance of the establishment and the impact of Oak Ridge nuclear facilities, examine and evaluate the rationale behind using the atomic bomb to end the war, and analyze primary and secondary sources aimed at offering varying perspectives on the Manhattan Project, with an emphasis on the Tennessee perspective.

### Guiding Question(s):

- What role did Oak Ridge, Tennessee play in the creation, development, and use of the atomic bomb to end World War II?
- What impact did the establishment of Oak Ridge nuclear facilities have on the State of Tennessee?
- What was the rationale for using the atomic bomb to end the war?
- Was the United States decision to drop the atomic bombs on Japan justified?
- What are the key arguments for and against the use of the atomic bomb to end WWII?
- How has the use of the atomic bomb affected the worldview of the United States then and now?

**Learning Objectives:** In the course of the lesson, students will

- Analyze primary and secondary sources in order to determine the central idea
- Cite textual evidence to analyze these sources
- Understand the importance of Oak Ridge during World War II

### Curriculum Standards:

**US.55** Describe the war's impact on the home front, including: Rationing - -Bond drives - -Propaganda - -Movement to cities and industrial centers - -Bracero program - -Conversion of factories for wartime production - - Location of prisoner of war camps in Tennessee (C, E, G, H, P, T)

**US.56** Describe the Manhattan Project, and explain the rationale for using the atomic bomb to end the war. (G, H, P, T)

## Key Ideas and Details:

**CCSS.ELA-Literacy.RH.11-12.1** Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding of the text as a whole.

**CCSS.ELA-Literacy.RH.11-12.2** Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.

**CCSS.ELA-Literacy.RH.11-12.3** Evaluate various explanations for actions or events and determine which explanation best accords with textual evidence, acknowledging where the text leaves matters uncertain.

## Craft and Structure:

**CCSS.ELA-Literacy.RH.11-12.6** Evaluate authors' differing points of view on the same historical event or issue by assessing the authors' claims, reasoning, and evidence.

## Integration of Knowledge and Ideas:

**CCSS.ELA-Literacy.RH.11-12.7** Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.

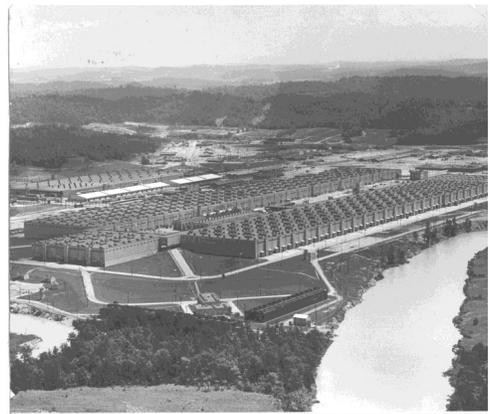
**CCSS.ELA-Literacy.RH.11-12.8** Evaluate an author's premises, claims, and evidence by corroborating or challenging them with other information.

**CCSS.ELA-Literacy.RH.11-12.9** Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources.

## Materials Needed:

1. TSLA Website, with particular emphasis on the following sources:

- [Letter to Governor Prentice Cooper from Crenshaw](#)
- [The Clinton Pile- Photograph of X-10 Pile Reactor](#)
- [Letter to Prentice from Nichols and Cornell](#)
- [Oak Ridge Gaseous Diffusion Plant Photograph](#)
- [Clinton Laboratories X-10 Photograph](#)
- [TEC Bulletin, Monday, September 3](#)
- [Letter to Guy Smith, Knoxville](#)
- [Couple Embracing in Front of Manhattan Project Photograph](#)
- [Issue of Memphis Commercial Appeal, August 7, 1945](#)
- [Electromagnetic Plant Y-12 Photograph](#)



- [Aeronautical Map](#)
- [Experimentation on Livestock Photograph](#)
- [Issue- Knoxville Sentinel- August 6, 1945](#)
- [TEC Bulletin, August 27, 1945](#)
- [TEC Bulletin, August 13, 1945](#)
- [Interview of George Parker describing Ethical Debate of A Bomb](#)
- [Son of Eve Political Cartoon](#)
- [Celebrating “Operation Crossroads” at Bikini Atoll Photograph](#)



2. [Transcript](#) and [video](#) of the Truman announcement of the dropping of the atomic bomb
3. [War Department Video](#)
4. Copies of the [Albert Einstein Letter to President Roosevelt](#)
5. Team packet/role lists (available at the end of this lesson plan)
6. Debate organizer (available at the end of this lesson plan)
7. [Debate Cards](#)- Optional- May assist in keeping order during the debate. Can be printed on varying colors and cut for each student.
8. Internet access/computer use for students/research
9. [Primary](#) and [secondary](#) source analysis sheets

## Background:

Begin by reading the following introductory pieces as a whole class. You may choose to complete this as a close read.

“[World War II](#)” by Patricia Brake

“[Oak Ridge](#)” by Charles W. Johnson

Students may also gain perspective into Oak Ridge nuclear facilities by watching this [video clip](#).



## Introductory Activity:

The teacher will show this [War Department Propaganda film](#) (roughly 12 minutes).

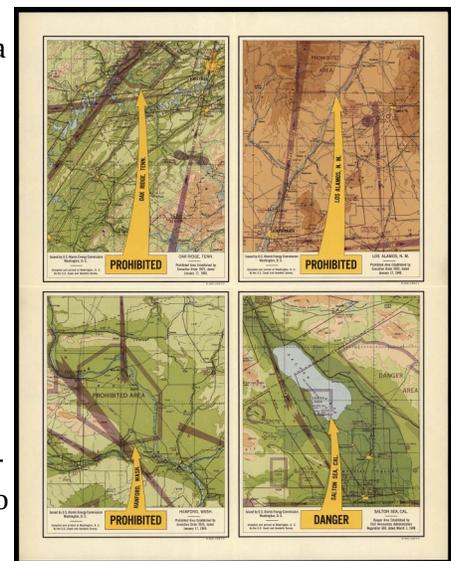
The teacher will lead students in a whole group discussion of the following questions:

- How would you describe the tone of the narrator?
- How does the film portray the bomb?
- Why do you think this film was made?
- What can you tell from this film about the way most Americans felt about Japan and the Japanese people by the war's end?
- How do you imagine this film would have been received by its audience in 1946?
- How does the film make you feel today?

## Lesson Activities:

### Activity 1: A Debate through Role Play

- **Overview:** In 1945, the decision to use the atomic bomb as a means to end the war laid ultimately in the hands of President Harry Truman. While it was ultimately his decision, Truman sought advice and counsel from a variety of experts and perspectives. In this activity, students will be assigned to key roles in the debate to use the atomic bomb, and will take on these roles, becoming experts for their side of the debate. They will come together to form an advisory committee that will present and defend their assigned positions, using both primary and secondary sources as evidence. The lesson will culminate with students writing a formal opinion piece, evaluating the Manhattan Project, including the rationale for using the atomic bomb to end the war.
- **Procedure:** Students should be split up into two key groups: *For* and *Against*. The teacher should choose these groups, and within the groups, the teacher should assign the key roles outlined in each team packet. If needed, roles can be assigned to pairs or new roles can be created. Students should be given adequate time, as determined by the teacher, to complete their team packet, complete research, and develop their defense. Upon completion of the team packet, students will come together to hold an advisory committee meeting with President Truman (the teacher can choose to play the role of Truman, or a student could be assigned to this role). While conducting the meeting, each student will need to complete a debate organizer, which will serve as a pre-write/brainstorm for their formal writing piece. Throughout the committee meeting, as students speak, they need to cite evidence from the primary and secondary sources they located as a part of their research.



**Step 1:** As a team, review and answer the following questions. Feel free to conduct research as necessary throughout the work in this packet.

- What moral/ethical issues are present within the debate to drop the atomic bombs in Japan?
- Should there be moral rules in war?
- Who gets to decide what these moral rules should be?

**Step 2:** Each member of your team has been assigned to play a role in the advisory committee debate. In preparation for your debate, each member will need to locate at least 1 secondary source and 1-2 primary sources that demonstrate their assigned role's perspective/position on the use of an atomic bomb to end the war. Students are encouraged to locate sources using the following links:

[Tennessee State Library and Archives](#)

[Library of Congress](#)

[National Archives](#)

[Truman Library](#)

[National Security Archives](#)



Upon choosing their sources, each team member will need to complete an analysis of their sources using the following documents: [Primary](#) analysis form and [secondary](#) analysis Form.

**Step 3:** Once each team member has completed their research, your team should hold a team meeting to review your findings, sources, and analysis forms. Teams must then create a formal report, detailing their recommended plan of action for the President. The plan should answer the question of, “**Should the atomic bomb be used on Japan?**” Each team member must add at least one viewpoint to the formal report, citing evidence from their sources. Teams may also decide to develop and write out alternatives to the use of the atomic bomb that they feel the President should consider.

**Step 4:** The advisory committee meeting will be held as a whole class, and each team member must participate in the meeting, working as a team to present their plan and report to the President. Opportunities will be provided to refute claims presented by the opposing side. Teams will need to adhere to debate rules set forth by the teacher. While participating in the meeting, each team member will need to complete a Debate Organizer to organize notes for their formal writing assignment at the conclusion of the meeting.

## Extending the Lesson:

### Closure/Formal Writing Assignment:

**US.69** Write an opinion piece evaluating the Manhattan Project, including the rationale for using the atomic bomb to end the war. (H)

Each student will need to write a formal opinion piece, evaluating the Manhattan Project and the rationale for using the atomic bomb to end WWII. Students should use their debate organizers to help form their writing, and they should cite evidence from sources and text throughout their writing. Finally, students should work to incorporate the Tennessee perspective into this piece.



## Team Packet: *For*

### Assigned Roles:

1. George C. Marshall, Army Chief of Staff
2. Leslie R. Groves, Commanding General of the Manhattan Project
3. J. Robert Oppenheimer, Director of the Manhattan Project's Research Laboratory
4. Dr. Vannevar Bush, Director of the Office of Scientific Research and Development
5. James F. Byrnes, U.S. Secretary of State
6. Edward Teller, Manhattan Project Physicist
7. Henry L. Stimson, Secretary of War
8. The following roles might benefit from having multiple people assigned to each, as they are not as specific and may require additional research. **Suggestion/Hint:** For Tennessee specific roles, students may want to review the resources for [Oak Ridge](#) found through the Tennessee State Library and Archives
9. A United States Soldier in Favor of the Use of the Atomic Bomb
10. A Tennessee Citizen in Favor of the Use of the Atomic Bomb
11. A Tennessee Politician in Favor of the Use of the Atomic Bomb
12. A Worker at the Oak Ridge Nuclear Facility in Favor of the Use of the Atomic Bomb

## Team Packet: *Against*

### Assigned Roles:

1. Arthur Holly Compton, Physicist and Scientific Advisor to Truman
2. James Franck, Physicist
3. William D. Leahy, Chief of Staff to Truman
4. Dwight D. Eisenhower, General of the US Army
5. Leo Szilard, Physicist
6. Henry “Hap” Arnold, Commanding General, US Army Air Force
7. Admiral William F. Halsey, Jr., Commander U.S. Third Fleet

The following roles might benefit from having multiple people assigned to each, as they are not as specific and may require additional research. **Suggestion/Hint:** For Tennessee specific roles, students may want to review the resources for Oak Ridge found through the Tennessee State Library and Archives

8. A United States Soldier in opposition to the Use of the Atomic Bomb
9. A Tennessee Citizen in opposition to the Use of the Atomic Bomb
10. A Tennessee Politician in opposition to the Use of the Atomic Bomb
11. A Worker at the Oak Ridge Nuclear Facility in opposition to the Use of the Atomic Bomb

## Debate Organizer

This debate organizer will serve as a way for you to track the arguments and viewpoints throughout the debate. It will also serve as a pre-write/brainstorm for you to use in your formal writing piece at the end of this lesson. Be sure to take notes on specific historical content, evidence, etc. to aid you in your writing and rebuttals.

### *Essential Question for the Debate:*

Was the United States decision to drop the atomic bombs on Japan justified?

For Arguments	Against Arguments

**Other questions to consider in the debate:** Were there alternative options to the use of the atomic bomb? If so, what were they? How did Tennessean's feel about the role of Oak Ridge nuclear facilities in the bombings? Was and should the decision to use nuclear weapons be a moral decision or a military decision?