

Title: The Manhattan Project and the Second World War

Historical Background:

The Manhattan Project was the secret United States Government effort to design and build the first atomic bombs. With the discovery of fission in 1939, it became clear to scientists that certain radioactive materials could be used to make a bomb of unprecedented power. U.S. President Franklin Delano Roosevelt responded by creating the Uranium Committee to investigate this possibility. Progress was slow until August 1942, when the project was placed under U.S. Army control and reorganized. The Manhattan Engineer District (MED) was the official name of the project. The MED's commanding officer, Gen. Leslie R. Groves, was given almost unlimited powers to call upon the military, industrial, and scientific resources of the nation.

Correlation to New York State Grade 7/8 Social Studies Core Curriculum:

Unit 10: The United States Assumes Worldwide Responsibilities
I. World War II

Suggested Timeframe: 90 minutes

Materials/Resources:

- The Manhattan Project and WWII Project Sheet (attached)
- Computers with Internet access

Student Objectives: Students will be able to:

- Describe the beginning of the Nuclear Age and the arms race
- Examine how science, government/military and business interests work together to impact world events.
- Do research through guided readings and questions.

Teaching Strategies, Procedures, and Methodologies

1. Essential Question: Why did the United States develop the atomic bomb and what are the consequences of this technological success? Introduce the topic with this essential question and write it on the board so students will clearly understand the objective of this lesson.
2. Begin the lesson by surveying student knowledge on this topic. Provide a brief introduction building upon what students have already discussed.
3. Each student should have a computer and a project sheet. They should be directed to the U.S. Department of Energy's Office of History and Heritage Resources website, *The Manhattan Project: An Interactive History*, at <http://www.cfo.doe.gov/me70/manhattan/retrospect.htm>.
4. At each section of the project sheet is a website they can click on and go to. Following the hypertext is the actual page they will be looking at. By clicking on the hypertext students will be brought to the correct page. They are to read the instructions directing them on the reading and then answer questions that correspond to that particular section.
5. Allow students to spend a few minutes looking at the site; the teacher introducing this site should follow this; for example the creator of the site is the Department of Energy. As a

class check out the People and Places tabs on this main page. The teacher might ask students to pick out names of people they recognize on the people list.

6. For each section, follow the instructions on the project sheet. Each section will require students to read specific topics and answer questions on that reading. It is suggested that the teacher have students read the questions for each section prior to reading. When students have completed the research, the teacher should review responses as a class.

Evaluation/Assessment: Students should write a “secret” government memo detailing important points about the Manhattan project and include possible targets to use this bomb.

About the Author: Patricia Munsey has taught Grade 8 Social Studies at O’Rourke Middle School in the Burnt Hills-Ballston Lake Central School District for the past three years.

Section D http://www.cfo.doe.gov/me70/manhattan/establishing_los_alamos.htm
(Events, 1942-45: *Bringing it all Together, Establishing Los Alamos*).

Instructions: Read First Paragraph and answer the questions below.

5. What facility related to the Manhattan Project was located at Los Alamos and why was it established?

6. Describe the geography of Los Alamos.

Section E <http://www.cfo.doe.gov/me70/manhattan/espionage.htm> (Espionage and the Manhattan Project 1940-45).

Instructions: Read first three paragraphs and answer the questions below.

7. In regard to security what was the goal for the Manhattan Project?

8. What allied country did the US want to also keep from learning about the Manhattan Project and why?

9. How successful were security officials regarding secrecy in regard to their goals?

10. How did the Soviet Union acquire information about the Manhattan Project?

Section F http://www.cfo.doe.gov/me70/manhattan/war_1945.htm (Events Page, 1945: Dawn of the Atomic Era, Select The War Enters its Final Phase).

Instructions: Read and answer questions below.

11. What happened on the following dates?

April 12, 1945 –

May 7, 1945 –

April 25, 1945 –

12. When Truman took office Japan was near defeat. Describe how the involvement of the US Air force and Navy brought about this situation.

13. Despite Japan being near defeat what did government and military officials believe about Japan's surrender?

Section G <http://www.cfo.doe.gov/me70/manhattan/debate.htm> (Events, Select Debate over How to Use the Bomb).

Instructions: Read and answer question below.

14. On May 31, 1945 Lawrence suggested the use of a public demonstration of the effects of an atomic blast. What reasons did others give for rejecting this idea?

15. Read the last paragraph. What criteria would be used to select a target for dropping the bomb in Japan?

Section H <http://www.cfo.doe.gov/me70/manhattan/hiroshima.htm> (Events, The Atomic Bombing of Hiroshima).

Instructions: Read and answer question below.

16. What happened to the city of Hiroshima after it was bombed?