

The Beginning of the Atomic Age: Ending World War II with a Bang

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Summary

In this two-part lesson, students will act as presidential advisors to FDR and Truman and discuss in groups the potential decisions that could have been made (and were made) by the chief executive regarding the development and use of the world's first atomic bombs to end World War II. Next, students will read and discuss President Truman's press release from August 6, 1945, the day the first atomic bomb was dropped on Hiroshima.

Objectives

As a result of this lesson, students will:

- 1.) discuss potential decisions about atomic warfare faced by the US government before and during World War II;
- 2.) objectively decide whether or not the use of atomic weapons to end World War II was a military necessity, or instead was ordered for other reasons;
- 3.) read and make inferences based on President Truman's press release announcing the use of the world's first atomic weapon.

U.S. History Event

World War II

Grade Level

This lesson is designed for high-school American History students.

Materials

Overhead Transparencies #1-#3 (included with this lesson). Decisions #1-#3 worksheets (one for each student), Document Analysis Worksheets (one for each student), and President Harry S. Truman's Press Release (one for each student).

Lesson Time

This lesson should be implemented over two 50-minute periods.

Procedures

Day One

- 1.) Before class, divide students into mixed-ability groups of three. Prepare an overhead transparency that shows students how to set up their desks so that each group of three can discuss freely while still being able to see the overhead transparency images; no one's back should be facing the information. Project the seating chart transparency, and ask students to move into their correct places. Appoint a Presenter in each group.
- 2.) Explain to students that in Part I of this activity, they will learn about decisions regarding the atomic bomb faced by the US government during World War II. Use the following information to introduce students to developments in atomic physics in the years leading up to World War II:

World War II began with Nazi Germany's invasion of Poland on September 1, 1939. Within ten months, Hitler's forces had conquered most of Europe, including France, Belgium, the Netherlands, Norway, Sweden, Poland, Czechoslovakia, and Austria. At about the same time, a new threat emerged - the possibility that Germany was developing an atomic bomb. Science fiction writers had been writing about atomic weaponry and power since 1900. By the late 1930s, science had begun to catch up with fiction as experiments in atomic physics began to reap success. The threat of a German atomic bomb project necessitated some action on the part of the United States and its allies.

The decisions and actions that were taken to counter the Nazi threat are considered some of the most controversial in history. These decisions played an important role in the outcome of World War II and changed the course of world history.

- 3.) Once students have been introduced to atomic physics prior to World War II, pass out "Decision #1 – To Build, or Not to Build, an Atomic Bomb". Project Overhead Transparency #1, which shows Albert Einstein writing on a chalkboard. Have students examine the picture and read the information on Decision #1. Answer any questions students have about the decision.
- 4.) Once students understand the information about the decision of whether to develop and construct an atomic bomb, have them read "Question #1". Encourage student groups to closely examine the picture of Einstein and to use the information on "Decision #1" to discuss the options listed. Give students adequate time – about 5 to 7 minutes – to discuss Question #1 and circle their agreed-upon choice.
- 5.) When groups have finished recording their answers, appoint a Presenter for each group, and ask Presenters to share their answers with the class. Encourage Presenters to point out details in the reading or in the picture that they think strengthens their case. Then, use the Teacher's Guide to reveal what decision the commander-in-chief actually made.
- 6.) Repeat this process for "Decision #2 – To Use, or Not to Use, an Atomic Bomb" and "Decision #3 – Did President Truman Make the Right Call?". Rotate the role of presenter for each decision.
- 7.) After students have discussed all of the decisions, hold a class discussion about the decision to use atomic weapons to end World War II. Focus the discussion on the following questions: a.) Was the decision to drop atomic bombs on Japan a military necessity? If not, was it justifiable for a reason besides military necessity? b.) Why do you think that atomic weapons have not been used since World War II? What is the likelihood that they may be used in the future?

Day Two

- 1.) As a review of the previous day's lesson, ask students the following questions:
 - a.) Upon reflecting on the enormity of the Trinity test on July 16, 1945, in New Mexico, head Manhattan Project physicist J. Robert Oppenheimer remembered two lines from the **Baghavad Gita**, a sacred scripture of Hinduism and considered one of the most important religious classics of the world.

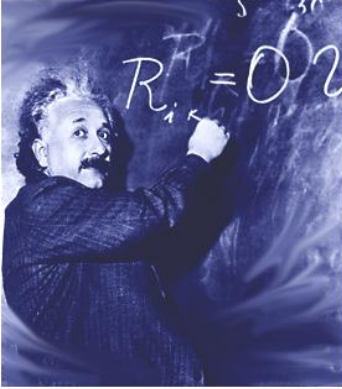
- "If the radiance of a thousand suns were to burst at once into the sky, that would be like the splendor of the mighty one."

- "Now I am become Death, the destroyer of worlds."

*What does the above tell you about the feelings of Dr. Oppenheimer on his role in the Manhattan Project?

- b.) What were the alternatives that President Truman had to choose from, not including dropping an atomic weapon on the Japanese islands?
 - c.) What were the drawbacks with these specific alternatives?
 - d.) What factor(s) do you think finally swayed President Truman to use atomic bombs on Japan?
- 2.) Give each student a copy of "President Harry S. Truman's Press Release – August 6, 1945". Also give each student a Document Analysis Worksheet.
 - 3.) Have students read President Truman's press release. You may have students work on their Document Analysis Worksheet individually, or in pairs.
 - 4.) As a wrap-up, allow students to share their answers in a discussion format. You may also wish to use the Assessment questions as a way to allow your students to understand the far-reaching implications of the use of atomic weapons in warfare. This can help to serve as an introduction to the immediate post-WWII deterioration of relations between the United States and the Soviet Union.

Teacher's Guide – Day One



Question #1 - You are part of a team of advisors reporting directly to President Franklin Delano Roosevelt. Based on the evidence/information above, which of the following courses of action will you advise the president to take? Be prepared to defend your answer.

*In 1939, President Roosevelt decided to support research leading to the development of an atomic weapon. Progress was slow at first, but in the summer of 1941, British scientists reported that an atomic bomb could be developed in two years. Their announcement convinced Roosevelt and his advisors to commit fully to the development of the new weapon. The **“Manhattan Project”** involved the efforts of over 100,000 Americans, most of whom did not know what they were working on due to the strict secrecy surrounding the project. The U.S. government set up large facilities in Hanford, Washington; Oak Ridge, Tennessee; and Alamogordo, New Mexico. The federal government also authorized the unheard-of sum of two billion dollars for research and development of the atomic bomb. For almost three years, the Dream Team of scientists worked feverishly to produce a bomb. Both Enrico Fermi and Niels Bohr, the two scientists who had doubted that an atomic bomb was feasible, played an important role in the ultimate success of the project. Although no formal decisions were made, President Roosevelt and British Prime Minister Winston Churchill assumed that any atomic weapon the scientists developed could be used to hasten the end of the war in Europe.

*Nazi Germany surrendered unconditionally on May 7, 1945, thus sparing the German people a firsthand look at atomic warfare. On July 16, 1945, more than two months later, scientists tested their completed “gadget” in a desert outside Alamogordo. Before dawn, the first atomic bomb in history was detonated. When it exploded, it caused a flash and a fireball that could be seen outside the New Mexico state line. After the blast, a mushroom-shaped cloud rose over 40,000 feet into the desert sky. The force of the explosion was so strong that a team of scientific observers seven miles from the detonation point were knocked backward. Windows were shattered over 125 miles away. In the spot on which the tower holding the “gadget” had been, a 1,200-foot-wide crater was all that remained. The blast was so hot that the desert sands around where the tower had once stood were transformed into glass. In short, the test was a success.



Question #2 - You are President Truman's most trusted advisors. Which of the following do you advise the president to do? Be prepared to defend your answer.

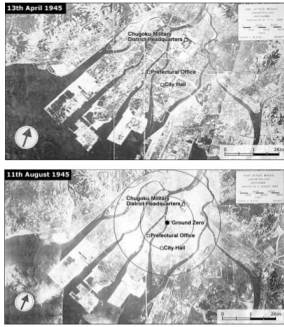
*On August 6, 1945, an American B-29 bomber, the “Enola Gay”, dropped an atomic bomb on Hiroshima, a medium-sized Japanese city. The five-ton weapon, nicknamed “Little Boy”, exploded with tremendous force 1,900 feet above the city. Looking down from the plane, American airmen viewed a scene of destruction. One airman said, “Good God, could anyone live through that down there?” The blast killed approximately 100,000 people, some instantly while others died several months later as a result of their injuries. Many thousands below the

bomb when it detonated were simply vaporized, while many more thousands were crushed to death as the shock wave toppled buildings throughout the city. After the Japanese High Command still refused to surrender unconditionally, a second atomic bomb flattened Nagasaki on August 9th, resulting in over 70,000 deaths. On the same day that “Fat Man” was dropped on Nagasaki, Soviet forces crossed into Manchuria and pushed the Japanese army back. After much debate among his closest advisors and military leaders, Emperor Hirohito ordered his government to surrender five days later. The terms of the surrender allowed Hirohito to remain as emperor, though with no more real power.

*The effects of the bombs dropped on Hiroshima and Nagasaki were horrific. The temperature at the center of the blast at the moment of detonation was 100 million degrees. People located at “ground zero” were instantly vaporized; the remains of their bodies left shadows permanently burned onto pavement and walls. People located further away from the center received deadly burns. People that initially survived the blast were seen with strips of skin peeling off or hanging from their bodies as they wandered through what had once been their home. People died weeks, and even months, later from radiation poisoning. Victims lost their hair, threw up blood, and

grew increasingly weak until they died. The bombing was arbitrary – schoolchildren, elderly hospital patients, mothers and babies, even twelve captured American navy pilots were all killed.

*President Truman was returning from the Potsdam Conference when he received the news of the Hiroshima bombing. “This is the greatest thing in history!” he shouted. When several press members raised the issue of the moral implications of the bombings in the coming weeks, Truman consistently defended his decision to use the bombs: “We have used it against those who attacked without warning at Pearl Harbor, against those who have abandoned the pretense of obeying international laws of warfare. We have used it to shorten the agony of war, in order to save the lives of thousands and thousands of young Americans.”



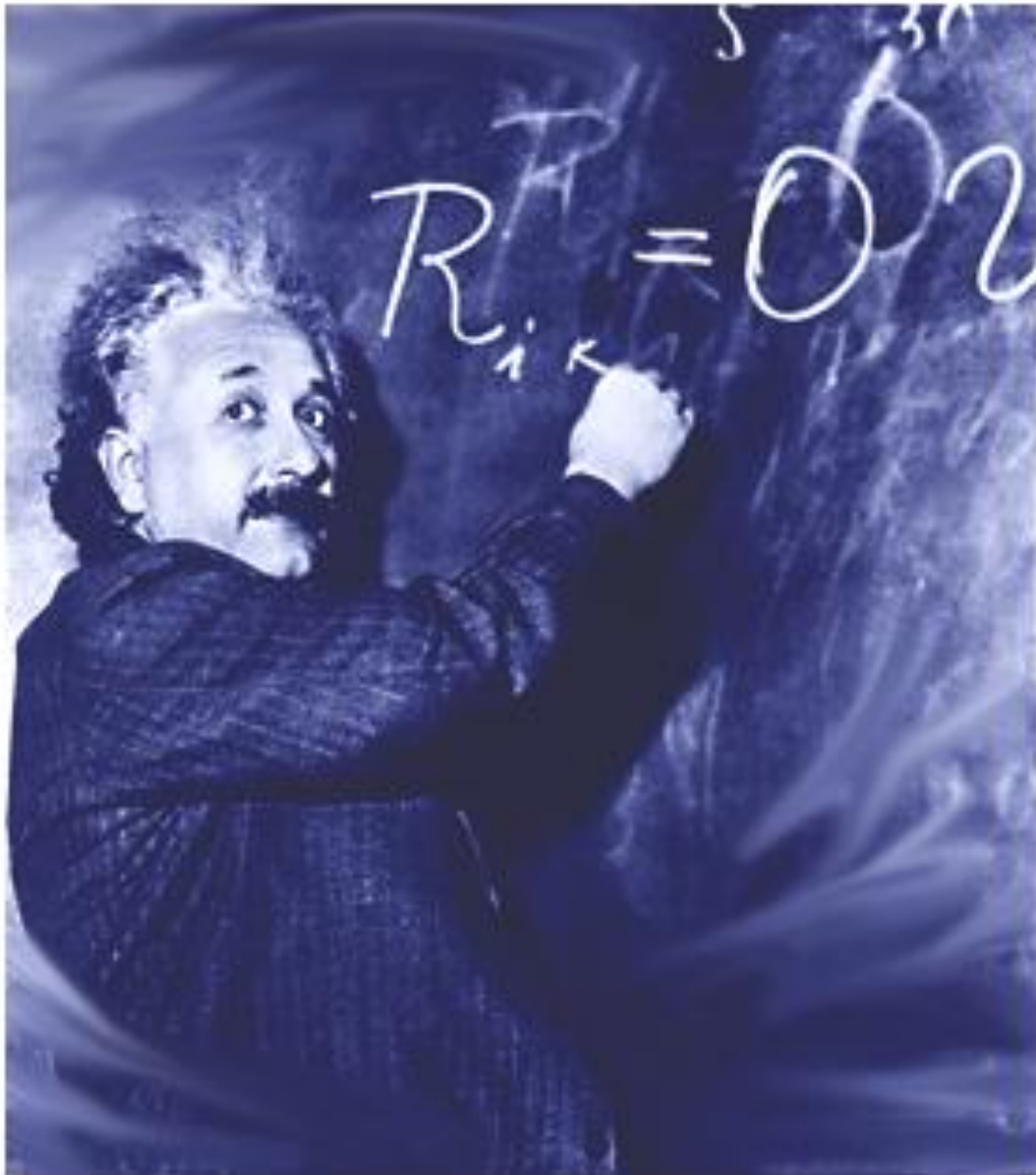
Question #3 - President Truman’s decision to use atomic weapons against Japan is one of the most controversial in history. In retrospect, do you think President Truman made the right decision in authorizing the use of atomic weapons? Be prepared to defend your answer.

*Historians and members of the public continue to debate Truman’s decision to use the atomic bomb to end World War II. Truman himself defended his decision to his death, as did his Secretary of War, Henry Stimson, and the general that oversaw the Manhattan Project, Leslie Groves. Many of the scientists that labored over the bomb felt differently, however. After the

successful test of the atomic bomb in the New Mexico desert on July 16, 1945, J. Robert Oppenheimer (the chief scientist of the project) quoted the Hindu *Baghavad Gita*: “I am become Death, the shatterer of worlds.” After World War II, Oppenheimer became active in the failed effort to place atomic weapons research and facilities under control of the United Nations. Albert Einstein, the anti-war advocate who had started it all with his letter to President Roosevelt, regretted ever having sent his letter.

*By 1990, the United States and the Soviet Union had 70,000 nuclear weapons in their collective arsenals. In today’s modern world, eight nations have nuclear capabilities, while two others (North Korea and Iran) are pursuing nuclear weapons research and deployment, much to the chagrin of the eight nuclear powers.

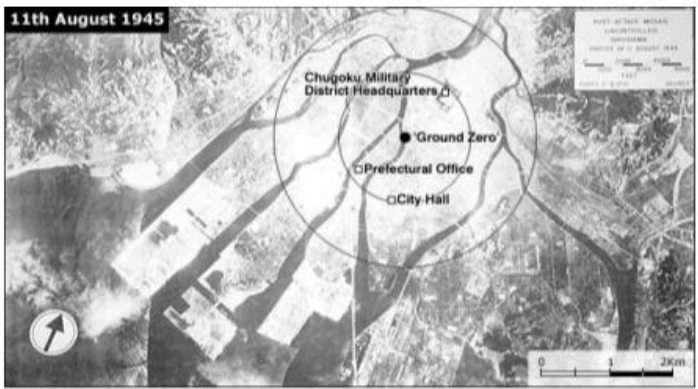
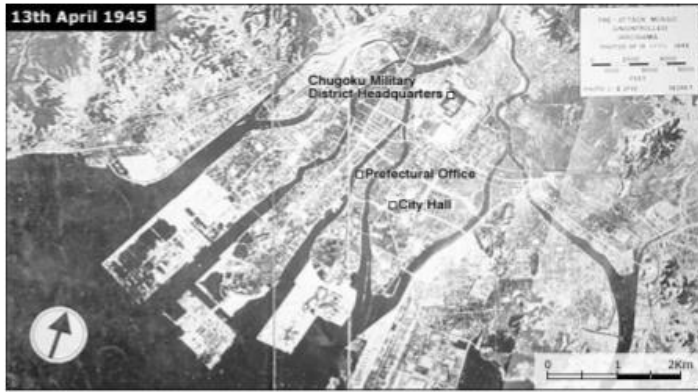
Overhead Transparency #1



Overhead Transparency #2



Overhead Transparency #3



Decision #1 – To Build, or Not to Build, an Atomic Bomb

In August 1939, less than a month before Nazi troops invaded Poland to start World War II, President Franklin D. Roosevelt received a letter from Albert Einstein, a brilliant and well-known physicist. Einstein was also a Jewish immigrant from Germany. In this letter, Einstein alerted the president that Nazi Germany might be building an atomic weapon. The following is an excerpt from Einstein's letter:

"In the course of the last four months it has been made probable – through the work of ...Fermi and Szilard in America – that it may be possible to set up a nuclear chain reaction in a large mass of uranium, by which large amounts of power and large quantities of a new radium-like element would be generated. Now it appears almost certain that this could be achieved in the immediate future.

"This new phenomenon would also lead the construction of bombs, and it is conceivable...that extremely powerful bombs of a new type may thus be constructed. A single bomb of this type, carried by boat and exploded in a port, might very well destroy the whole port together with some of the surrounding territory. However, such bombs might very well prove to be too heavy for transportation by air.

"I understand Germany has actually stopped the sale of uranium from Czechoslovakian mines, which she has taken over."

When Einstein wrote this letter to President Roosevelt, the United States was not at war with Nazi Germany. However, the president took immediate interest in the scientific developments mentioned. If such a bomb described in Einstein's letter could indeed be built, not only would it be the most powerful weapon on earth, but it would also transform warfare by making it plausible to kill greater numbers of enemy combatants, and potentially laying waste to enemy military installations and vital cities, with much less effort.

In the eighteen months following Einstein's letter, members of President Roosevelt's cabinet and his closest advisors argued over what action should be taken to counter the Nazi threat. Some government officials wondered how serious the Nazi threat really was. In addition, not all physicists agreed with Einstein's claims. In fact, two other Nobel Prize-winning nuclear scientists, Enrico Fermi and Niels Bohr, believed that the construction of an atomic weapon was a practical improbability.

Question #1: You are part of a team of advisors reporting directly to President Franklin Delano Roosevelt. Based on the evidence/information above, which of the following courses of action will you advise the president to take? Be prepared to defend your answer.

- A. Ignore scientific developments and do not build an atomic weapon; concentrate U.S. scientific efforts and military resources on building conventional weapons, such as faster planes and stronger tanks.
- B. Vigorously pursue the construction of an atomic bomb because the U.S. is in a race against Nazi Germany. Simply put, the world cannot afford for Nazi Germany to be the first to possess weapons of this magnitude.
- C. Postpone the development of atomic weapons; instead, send spies into Nazi Germany in order to determine the accuracy of Albert Einstein's initial letter.
- D. Do not develop the bomb. Instead, closely monitor the construction of any new German weapon facilities; if any are built, send American bombers to destroy them before they become fully operational.
- E. Make a moral stand and denounce the development of any atomic weapon as immoral. Only evil could come from developing a weapon that can potentially destroy an entire city.

Decision #2 – To Use, or Not to Use, an Atomic Bomb

Vice President Harry S. Truman became president after Franklin D. Roosevelt unexpectedly died in April 1945. An hour after the new president was sworn in, he still had no knowledge of the Manhattan Project. The American-led effort to develop and construct an atomic weapon was so top-secret that not even the vice-president knew about it!

Three months later, while attending an Allied conference in Potsdam, Germany, President Truman received a telegram informing him that the test detonation of the world's first atomic device had been carried out successfully somewhere in the New Mexico desert. By this time, Nazi Germany had already been defeated. However, the Empire of Japan, the only remaining Axis Power, had vowed to fight on, despite the repeated Allied demands for an unconditional surrender. The Japanese felt that an unconditional surrender would jeopardize the position of their emperor, Hirohito, whom they considered to be god-like. In addition, under the Japanese warrior code of *bushido*, surrender was considered to be dishonorable. Japanese soldiers fought with other-worldly resistance and believed that it was more honorable to commit suicide than to surrender to enemy forces. With this mindset, Japanese *kamikaze* pilots strapped themselves into planes loaded with explosives and crashed them into American naval vessels. These pilots managed to destroy 53 ships and damage 158 others in the Pacific theater.

Despite these desperate attacks, the Japanese were close to defeat by July 1945. Three factors were working against them. First, American bombing runs over the Japanese home islands were killing tens of thousands of civilians and military personnel. Second, an Allied naval blockade made it impossible for Japan to import the goods and materials necessary to continue fighting; this blockade also prevented one million Japanese troops in China from returning to their homeland. Third, the massive Soviet Red Army, having already defeated the Nazi war machine in Europe, was now poised to honor its pledge to the United States and enter the war in the Pacific.

The United States had hoped to end the Pacific War by invading the home islands of Japan, codenamed "Operation Downfall". However, in the face of Japanese fanaticism, President Truman was deeply concerned that such an invasion would cost tens, maybe hundreds, of thousands of American lives. Many soldiers involved in the invasion would be survivors of the European theater; would it be right to send these soldiers into a far bloodier invasion of Japan? In light of this concern, some of Truman's advisors recommended that he end the war quickly by dropping a new atomic bomb without warning on a large Japanese city. Other advisors disagreed: Ralph Bard, the undersecretary of the navy, told Truman that dropping any atomic bomb without warning on Japan would jeopardize "the position of the United States as a great humanitarian nation." In a post-war world, a decision to drop an atomic weapon unannounced on a large municipality, killing and maiming untold thousands of people, could cause many nations to align themselves with the Soviet Union. Fearful of a great loss of civilian lives, a group of scientists from the Manhattan Project even suggested that the United States drop another atomic weapon in a remote, unpopulated location to show the bomb's power to the Japanese High Command, which would then convince them to surrender.

Question #2: You are President Truman's most trusted advisors. Which of the following do you advise the president to do? Be prepared to defend your answer.

- A. Without warning, drop an atomic bomb on a Japanese city as soon as possible.
- B. Drop an atomic bomb on an unpopulated area of Japan to show its destructive capabilities.
- C. Through diplomatic channels, warn the Japanese that the United States possesses multiple atomic weapons and is willing to use them if they don't surrender within a specified time. If the Japanese government still hasn't surrendered within that time frame, then drop a bomb on a Japanese city.
- D. Reject the use of atomic weapons in war, and continue the naval blockade and conventional bombing. If these measures do not produce a Japanese surrender, then invade the Japanese home islands.
- E. Reject the use of atomic weapons and negotiate an end to World War II. Allowing the Japanese to surrender honorably, with their emperor playing a vital role in Japan's recovery from war and destruction, will ensure that Japan will later become a vital economic partner of the United States, and perhaps more importantly, will not become a satellite nation of the Soviet Union.

Decision #3 – Did President Truman Make the Right Call?

Immediately following the dropping of two atomic bombs on Japan, the majority of Americans felt the right decision had been made. Surveys conducted by Fortune magazine in the fall of 1945 revealed that over fifty percent of Americans believed that the United States “should have used the two bombs on cities just as we did.” Another 22.7 % felt that the United States “should have quickly used many more [bombs] before Japan had the chance to surrender.”

American soldiers also supported President Truman’s decision. One young soldier stated: “When the bombs were dropped and news began to circulate that [the invasion of the Japanese islands] would not take place after all, that we would not be obliged to run up the beaches near Tokyo assault-firing while being mortared and shelled...we cried with relief and joy. We were going to live. We were going to grow up to adulthood after all.”

Many officials in the top ranks of the military and government supported President Truman’s decision to drop the atomic bombs. However, others expressed doubts. Admiral William D. Leahy stated: “It is my opinion that the use of this barbarous weapon at Hiroshima and Nagasaki was of no material assistance in our war against Japan. The Japanese were already defeated and ready to surrender because of the effective sea blockade and the successful bombing with conventional weapons...My own feeling was that being the first to use [the atomic bomb], we adopted an ethical standard common to the barbarians of the Dark Ages.” American General Dwight D. Eisenhower, the Supreme Allied Commander in Europe during World War II, expressed the hope that the United States would never have to use such a weapon against an enemy again because he disliked seeing the country “initiate the use of anything so horrible and destructive.” When Eisenhower became president in 1953, however, he immediately increased military spending in order to develop nuclear missiles and faster jet bombers that could carry larger atomic weapons to more places in the world without the need to refuel.

Some historians have severely criticized President Truman’s decision. They argue that the Japanese were already defeated in August 1945, and that the atomic bombs were used primarily as a warning to the Soviet Union. Although they were allies during World War II, the United States and the Soviet Union had very different visions for the postwar world. The Soviets wanted to maintain control over Eastern Europe; the United States wanted the Soviets to honor its earlier pledges to provide independence to eastern European countries that had been overrun by the Nazi war machine. Historians critical of Truman’s decision argue that he authorized the use of atomic bombs mainly to scare the Soviets out of Eastern Europe and to keep them from gaining more territory out of the vacuum created as the Japanese retreated across Asia (despite current historical research that shows that Soviet premier Josef Stalin, through his network of spies, probably knew more about the Manhattan Project than even Truman did). To these historians, the citizens of Hiroshima and Nagasaki were sacrificed by Truman and his advisors in a high-stakes poker game between the world’s only remaining superpowers. They also argue that the postwar nuclear arms race can be traced back to the fear and mistrust created by President Truman’s decision. Other historians counter that the military pressures Truman was under at the end of World War II played a much more important role in his decision than the threat of Soviet aggression in Asia and elsewhere.

Despite the disagreement regarding Truman’s decision, most historians do agree that his decision to use atomic weapons for the first time (and only time) in world history undoubtedly saved many American lives. Military estimates of projected American casualties as a result of Operation Downfall numbered as high as half a million men; a few estimates ran as high as a million Americans dead and/or wounded. The invasion of the Japanese home islands was figured to last at least five years.

Question #3: President Truman's decision to use atomic weapons against Japan is one of the most controversial in history. In retrospect, do you think President Truman made the right decision in authorizing the use of atomic weapons? Be prepared to defend your answer.

- A. Truman made the right decision when he authorized the use of atomic weapons on Japan.
- B. Truman did not make the right decision when he authorized the use of atomic weapons on Japan.

President Harry S. Truman's Press Release – August 6, 1945 (Page 1 of 3)

THE WHITE HOUSE
Washington, D. C.

IMMEDIATE RELEASE

STATEMENT BY THE PRESIDENT OF THE UNITED STATES

Sixteen hours ago an American airplane dropped one bomb on and destroyed its usefulness to the enemy. That bomb had more power than 20,000 tons of T.N.T. It had more than two thousand times the blast power of the British "Grand Slam" which is the largest bomb ever yet used in the history of warfare.

The Japanese began the war from the air at Pearl Harbor. They have been repaid many fold. And the end is not yet. With this bomb we have now added a new and revolutionary increase in destruction to supplement the growing power of our armed forces. In their present form these bombs are now in production and even more powerful forms are in development.

It is an atomic bomb. It is a harnessing of the basic power of the universe. The force from which the sun draws its power has been loosed against those who brought war to the Far East.

Before 1939, it was the accepted belief of scientists that it was theoretically possible to release atomic energy. But no one knew any practical method of doing it. By 1942, however, we knew that the Germans were working feverishly to find a way to add atomic energy to the other engines of war with which they hoped to enslave the world. But they failed. We may be grateful to Providence that the Germans got the V-1's and V-2's late and in limited quantities and even more grateful that they did not get the atomic bomb at all.

The battle of the laboratories held fateful risks for us as well as the battles of the air, land and sea, and we have now won the battle of the laboratories as we have won the other battles.

Beginning in 1940, before Pearl Harbor, scientific knowledge useful in war was pooled between the United States and Great Britain, and many priceless helps to our victories

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Eben A. Ayers

President Harry S. Truman's Press Release - August 6, 1945 (Page 2 of 3)

have come from that arrangement. Under that general policy the research on the atomic bomb was begun. With American and British scientists working together we entered the race of discovery against the Germans.

The United States had available the large number of scientists of distinction in the many needed areas of knowledge. It had the tremendous industrial and financial resources necessary for the project and they could be devoted to it without undue impairment of other vital war work. In the United States the laboratory work and the production plants, on which a substantial start had already been made, would be out of reach of enemy bombing, while at that time Britain was exposed to constant air attack and was still threatened with the possibility of invasion. For these reasons Prime Minister Churchill and President Roosevelt agreed that it was wise to carry on the project here. We now have two great plants and many lesser works devoted to the production of atomic power. Employment during peak construction numbered 125,000 and over 65,000 individuals are even now engaged in operating the plants. Many have worked there for two and a half years. Few know what they have been producing. They see great quantities of material going in and they see nothing coming out of these plants, for the physical size of the explosive charge is exceedingly small. We have spent two billion dollars on the greatest scientific gamble in history -- and won.

But the greatest marvel is not the size of the enterprise, its secrecy, nor its cost, but the achievement of scientific brains in putting together infinitely complex pieces of knowledge held by many men in different fields of science into a workable plan. And hardly less marvellous has been the capacity of industry to design, and of labor to operate, the machines and methods to do things never done before so that the brain child of many minds came forth in physical shape and performed as it was supposed to do. Both science and industry worked under the direction of the United States Army, which achieved a unique success in managing so diverse a problem in the advancement of knowledge in an amazingly short time. It is doubtful if such another combination could be got together in the world. What has been done is the greatest achievement of organized science in history. It was done under high pressure and without failure.

We are now prepared to obliterate more rapidly and completely every productive enterprise the Japanese have above ground in any city. We shall destroy their docks, their factories, and their communications. Let there be no mistake; we shall completely destroy Japan's power to make war.

President Harry S. Truman's Press Release - August 6, 1945 (Page 3 of 3)

It was to spare the Japanese people from utter destruction that the ultimatum of July 26 was issued at Potsdam. Their leaders promptly rejected that ultimatum. If they do not now accept our terms they may expect a rain of ruin from the air, the like of which has never been seen on this earth. Behind this air attack will follow sea and land forces in such numbers and power as they have not yet seen and with the fighting skill of which they are already well aware.

The Secretary of War, who has kept in personal touch with all phases of the project, will immediately make public a statement giving further details.

His statement will give facts concerning the sites at Oak Ridge near Knoxville, Tennessee, and at Richland near Pasco, Washington, and an installation near Santa Fe, New Mexico. Although the workers at the sites have been making materials to be used in producing the greatest destructive force in history they have not themselves been in danger beyond that of many other occupations, for the utmost care has been taken of their safety.

The fact that we can release atomic energy ushers in a new era in man's understanding of nature's forces. Atomic energy may in the future supplement the power that now comes from coal, oil, and falling water, but at present it cannot be produced on a basis to compete with them commercially. Before that comes there must be a long period of intensive research.

It has never been the habit of the scientists of this country or the policy of this Government to withhold from the world scientific knowledge. Normally, therefore, everything about the work with atomic energy would be made public.

But under present circumstances it is not intended to divulge the technical processes of production or all the military applications, pending further examination of possible methods of protecting us and the rest of the world from the danger of sudden destruction.

I shall recommend that the Congress of the United States consider promptly the establishment of an appropriate commission to control the production and use of atomic power within the United States. I shall give further consideration and make further recommendations to the Congress as to how atomic power can become a powerful and forceful influence towards the maintenance of world peace.

Document Analysis Worksheet – President Truman’s Press Release

1. Who wrote this document?
2. What is the purpose of this document?
3. What date was this document issued?
4. Why is the name of the city left out?
5. Why does the atomic bomb's power have to be explained?
6. Look at the last paragraph of the second page of the press release. What were Truman's plans for ending the war? Did he accomplish those goals in dropping the atomic bomb on Hiroshima and Nagasaki? Why or why not?
7. On page three, Truman advocates the use of atomic power for world peace. How does he propose to fulfill this goal?
8. What reasons does President Truman use to justify dropping the bomb?

Assessment

- 1.) Armed with all of the knowledge that President Truman and his advisors had accumulated, how would you have ended the war in the Pacific?
- 2.) Make a T-chart listing the advantages and disadvantages that the atomic bomb presented to modern warfare.
- 3.) Why did the fire bombing of Tokyo (just weeks before the atomic bombing of Japan) that killed over 120,000 civilians not receive the same moral criticism that the atomic bomb received?
- 4.) One newspaper editor stated after the first atomic bomb was dropped, "Yesterday we clinched victory in the Pacific, but we sowed the whirlwind." J. Robert Oppenheimer opined that "The atomic bomb made the prospect of future war unendurable. It has led us up those last few steps to the mountain pass, and beyond there is a different country."

What did these two men mean by these statements? Are these statements polar opposites of each other, or is there common ground?

- 5.) What are the moral implications of the atomic bomb?
- 6.) Why was President Truman against sharing the secret of the atomic bomb with the world? Why would he support sharing atomic technology with Great Britain while only divulge minor details to the Soviets?
- 7.) President Theodore Roosevelt once said of U.S. foreign policy, "Speak softly and carry a big stick." How was atomic power this "big stick," and how do you think the United States would wield its "big stick" in the future?
- 8.) Is it possible that the use of the atomic bomb on Japan was meant as a warning to anyone? Explain.
- 9.) Assign your students to research the current diplomatic problems involving the world community (as represented by the United Nations) and nations such as Iran and North Korea, which are aggressively pursuing nuclear weapons. Have students answer the following question: "If I were president, this is what I would do about North Korea & Iran's pursuit of nuclear weapons..." Encourage students to consider the pros and cons of any decision made by the chief executive, from appeasement (remember Hitler and the Munich Conference?) to forceful intervention (how would China feel about the US launching an attack on North Korea's missile production facilities?).

Resources

The National Atomic Museum's "Trinity Atomic Test Site" Online Book - <http://www.fullbooks.com/Trinity-Atomic-Test-Site.html>

Albert Einstein's letter to President Franklin D. Roosevelt - <http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=17295&prog=zgp&proj=znpp>

The President Harry S. Truman Library & Museum - http://www.trumanlibrary.org/whistlestop/study_collections/bomb/small/mb10-3.htm

Reuters.com – "Who Are the World's Nuclear Powers?" - <http://www.reuters.com/article/GCA-BarackObama/idUSTRE5341MB20090405>

British Broadcasting Corporation's "World War II" – "Nuclear Power: The End of the War against Japan" - http://www.bbc.co.uk/history/worldwars/wwtwo/nuclear_01.shtml

BBCWorldWide Video Channel – on YouTube (<http://www.youtube.com/profile?user=BBCWorldwide&view=videos&query=hiroshima>) – contains fascinating primary-source footage and recreations w/ special effects of the events leading up to and immediately after the atomic bombings of Hiroshima and Nagasaki