

MINING LESSON PLAN:

Mining the West: Before and After

by Kate Sherrill

During this lesson, we will explore how artists have used photography to document the impacts of mining and natural resource extraction on the American Southwest and the people who live there. Students will then create their own photographic collage to document changes to their environment by combining historic images with current drawings or photos of the student's making.

Objectives:

Using artworks from the UMFA collection as inspiration, students will:

- Participate in collaborative conversations about age-appropriate topics and texts with peers and adults.
- Compare and contrast photographs of ghost towns in the American Southwest.
- Understand how communities and civilizations grow, boom, and decline by reading case studies of Rhyolite, NV and Bodie, CA.
- Research and explore how industry in your own town has grown and changed over the course of history.
- Create collages using photographs and other media to explore and express the process of growth, boom and/or decline in their hometown

Grade level: 4th to 8th grade

Duration: 2 hours (can be divided into multiple activities)

Materials:

- Images of the following artworks from the UMFA Collection:

Lloyd Ullberg: UMFA2018.15.22, UMFA2018.15.27, UMFA1018.15.28

Todd Webb: UMFA2018.15.13, UMFA2018.15.14

Patrick Nagatani: UMFA2003.25.32

- Printouts of historic photographs from your school's town or surrounding area. (You can find images of most towns in Utah by visiting [this website](#) and searching for your town's name)
- Digital camera or polaroid camera (optional)
- Drawing paper
- Drawing materials (pencils, crayons, watercolors, etc.)
- Glue or tape

Vocabulary/Key Terms:

- Ghost town – a town or city that was busy and populated in the past but is now mostly or completely abandoned.
- Boomtown – a town that has very quick population or economic growth.
- Boom – to grow very quickly.
- Decline – to become less in quantity, power, or strength.
- Collapse – to fall apart.
- Industry – the process of making products by using machinery and factories.
- Natural resources – materials from the Earth that are used to support life and meet people's needs.
- Extraction – to remove natural resources from the Earth.
- Collage – a picture that includes various materials or objects glued to a surface.
- Layer – a thin piece of material that is stacked above, below, or on top of another piece of material.
- Viewpoint – a specific place or position from where you view or watch something.

Activity**Activity 1 | Viewing and Discussion:**

View and discuss photographs by Lloyd Ullberg and Todd Webb- (Ghost Town, Rhyolite, etc)

Lloyd Ullberg (American) *Ghost Town: Exterior of abandoned storefront with awning*, gelatin silver print. Purchased with funds from Dr. James E. and Debra Pearl and the Phyllis Cannon Wattis Endowment Fund for the Dr. James E. and Debra Pearl Photograph Collection, UMFA2018.15.27.



Lloyd Ullberg (American) *View of mountains through abandoned building, ghost town of Rhyolite, Nevada, 1972*, gelatin silver print. Purchased with funds from Dr. James E. and Debra Pearl and the Phyllis Cannon Wattis Endowment Fund for the Dr. James E. and Debra Pearl Photograph Collection, UMFA2018.15.22.



Todd Webb (American), *Bodie, California*, 1960, gelatin silver print. Purchased with funds from Dr. James E. and Debra Pearl and the Phyllis Cannon Wattis Endowment Fund for the Dr. James E. and Debra Pearl Photograph Collection, UMFA2018.15.13.



Todd Webb (American), *Miner's Cabin, Bodie, California*, 1960, gelatin silver print. Purchased with funds from Dr. James E. and Debra Pearl and the Phyllis Cannon Wattis Endowment Fund for the Dr. James E. and Debra Pearl Photograph Collection, UMFA2018.15.14.



- When do you think people lived here?
- Why did they choose to live here?
- What do you think their daily lives were like?
- Do you think people still live here today? Why or why not?

These photos were taken during the 1940s (Bodie, CA and Virginia City, NV) and the 1970s (Rhyolite, NV) by artists who were interested in documenting ghost towns of the American West. They are now state parks that tourists visit to witness mining history.

Have the students read the following articles and answer the discussion questions that follow:

- [RHYOLITE](#)
- [BODIE](#)

- Where are these structures located?
- Who lived in these spaces?
- Why did the residents choose to live here?
- What do you think their daily lives were like? Why do you think that?
- When did they live here?
- How long did people live and work here?
- Why did the residents leave?

Reflecting on your guesses based only on the photographs, were your assumptions about the history of the locations correct? How were your answers similar or different after reading the case studies?

You may have learned about early civilizations such as Ancient Rome and Ancient Egypt that were very powerful and then collapsed. Many historic civilizations have grown, “boomed”, declined, and “busted”. We can see evidence in the American West of communities that have gone through this same process by studying ghost towns. In the case of the towns that the artists Ullberg and Webb chose to document, mining was the cause of the growth and boom of these communities. What do you think caused the collapse of these communities and why?

Activity 2 | Researching your town’s history:

Research: In small groups or as a class, answer the following questions about your school’s town:

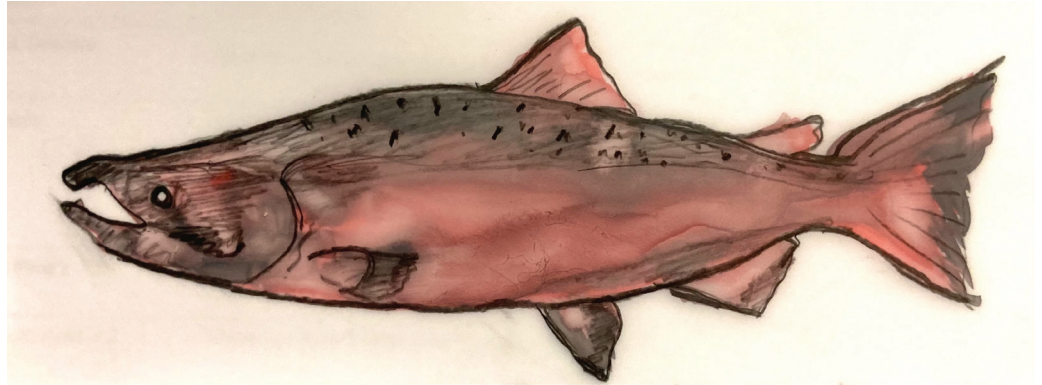
- Who are the original human inhabitants of your location? Why did they originally choose to live here? (Natural resources? Food? Travel? Trade? Spiritual or religious reasons?)
- What geographical features make your location unique from the surrounding areas? (Mountains? Climate or Weather? Rivers? Minerals?)
- Why did your family or ancestors choose to live here? (Work?, Recreation?, Natural resources? Spiritual or religious reasons? Emigration?) Optional homework: *Students can take some time to ask their own family or community members to answer this question.*
- What are the main types of industry in your town today? (Agriculture?, Ranching?, Technology?, Finance?, Tourism?, Recreation?, Education?, Arts?, etc.)

Discuss: As a class, answer the following questions: (write the answers on the blackboard for students to use for the next activity)

- Which industries or resources do you think are the most important features of your town?
- Is your town famous for any particular communities, industries, or historical events?

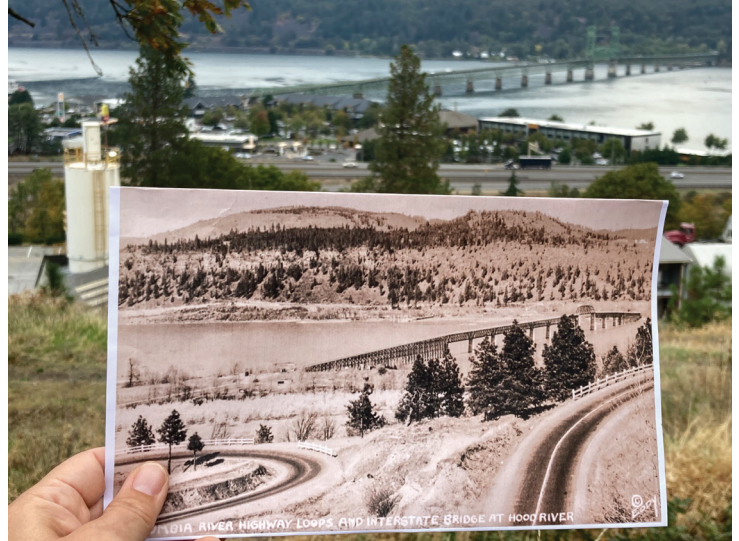


Create: Create a drawing or photograph of something that represents one of these features of your town. (This can be a company logo, a building, a geographic feature, or another symbol of your choosing)



Activity 3 | Reflect and Create:

- Print out historical images of your town. (You can find images of most towns in Utah by visiting [this website](#)) Students can either choose their own image, or the teacher can select one for the entire class to use as reference.
- Using the historical image as a reference, each student will create a drawing or take a photograph of that same location as it appears today. Teachers can provide a photo taken in the same spot for the students to draw from, or the class can visit the site and draw or photograph together, if resources and time allow.



In small groups or as a class, discuss each student's artwork by answering the following questions:

- How much time has passed between the "before" and "after" photographs?
- What are three differences between the before and after pictures?
- Can you find three things that have been added to the landscape since the first photo was taken?
- Can you find three things that were in the first image but are no longer around today? Have they been replaced by something else?

Conclusion: Past, Present, and Future

Answer the following questions:

- What story do these artworks tell about your community? Would you say that your town is growing, booming, or declining? What makes you say that?
- How has your town changed, if at all, to support or reflect today's industries or economy? (telephone poles? Highways? Public transportation? Radio towers? Chain Restaurants? Walmart? Airports?, Etc.)
- If your town were to become a "Ghost Town," which structures, landmarks or evidence of your experience here do you think would remain?

Optional art making opportunity: Using the previous photographs and drawings of your town as a reference, students can make a drawing of what their town would look like as a ghost town.



Critical Thinking extension: Reacting and Expressing

As a class, view and discuss *Bida Hi/Opposite Views; Northeast – Navaho Tract Homes and Uranium Tailings, Southwest -Shiprock, New Mexico*, by Patrick Nagatani.

Discussion questions can include:

- What is the first thing you notice about this image?
- Assuming that the photo that the person is holding in the foreground is an image of the same place, what are some changes that have taken place over time? What has been added to the landscape? What has disappeared from the landscape?
- Why do you think the artist chose to document this location?

Have the students read Patrick Nagatani's artist statement for the series "Nuclear Enchantments" and review as a class:

Bida Hi/Opposite Views; Northeast – Navaho Tract Homes and Uranium Tailings, Southwest – Shiprock, New Mexico is one of a series of 40 images documenting the impact of uranium mining and nuclear testing on sites throughout New Mexico.

- According to the artist's statement, why do you think he chose this site?
- Why does he want the viewer to see the changes to this particular site?
- How do you think he feels about the changes that have occurred?

Using the images and drawings from the earlier activities, create a collage inspired by Nagatani's work. Students can layer the images, add additional objects or text, or use watercolor or colored pencils to personalize their works.

Things to consider while creating the collage:

- How do you feel about the changes occurring in your own environment?
- Pay attention to what you are covering up or revealing by adding more layers to your collage. Why did you choose to hide, reveal, or replace parts of the landscape?
- How can the addition of color or text help to show your feelings about your town? (examples: making each layer a different color to highlight the before and after; Highlighting buildings, trees or other objects that haven't changed)



You can find the entire “Nuclear Enchantments” series on [this website](#) if students need some additional inspiration.

Methods for Assessment:

- Did students participate in the discussion before and after each activity?
- Did students complete drawings or present photos that showed a change from the historical images provided?
- Did the students complete a collage that combined at least two different images?

Additional Resources

State Core Links:

- Fourth Grade: Social Studies Standard 1: Objective 3 – Analyze how human actions modify the physical environment.
- Fifth Grade: Social Studies Standard 4: Objective 4 - Understand the impact of major economic forces at work in the post-Civil War.
- Sixth Grade: Social Studies Standard 3: Objective 1 and 2 – Understand processes of revolution and Analyze the impact of revolution (specifically the Industrial Revolution)
- Seventh Grade: Social Studies – Utah Studies:
- UT Standard 2.6: Students will explain how agriculture, railroads, mining, and industrialization created new communities and new economies throughout the state. (economics, geography,)
- UT Standard 4.5: Students will describe the historic and present management of natural resources and make recommendations for natural resource management in the future. (geography)
- Eighth Grade: Social Studies: U.S.I Strand 6: Expansion U.S. I Standard 6.3: Students will identify the economic and geographic impact of the early Industrial Revolution.

Other links:

- [Learn more about the Indigenous territories and lands that you call home.](#)
- [Learn more about Patrick Nagatani’s “Nuclear Enchantment” Series.](#)
- [More photos and information](#) about American Ghost towns:
- [Video Tours of Bodie, CA](#)
- [Bodie State Park: The coldest place in California is also a ghost town | Bartell’s Backroads](#)
- [A Ghost Town Frozen In Time: Bodie, CA](#)

Artwork Spotlight:

Patrick Nagatani (American), *Bida Hi/Opposite Views; Northeast - Navaho Tract Homes and Uranium Tailings, Southwest - Shiprock, New Mexico*, 1990, chromogenic color print. Gift of Dr. Mark Reichman, UMFA2003.25.32.



This artwork is part of a series called “Nuclear Enchantments” that Patrick Nagatani created to document industrial activity in the landscape of New Mexico. Each artwork in the series is a collage created by photographing objects or photographs in front of an image of a real location.

According to the artist statement for this series, Patrick Nagatani created the works as a way to raise public awareness about the effects of the nuclear industry on the environment and the people who live in the American Southwest. In this image, he combines two photographs that have been taken from the same viewpoint, but at different times in history so we can see what has been added or subtracted from the landscape over the course of time.

“Since my arrival in New Mexico, twenty-three years ago, I have become increasingly aware of the various activities in the scientific, military, mining, medical, etc. industries here in my home state. The historical as well as the contemporary development of the nuclear industry as well as its impact on this state has been my prime emphasis of investigation. A concern of this work is to promote a dialogue with and about the contemporary/historical landscape of the state that contains the most extensive nuclear weapons research, management, training, and testing facilities and organizations in the United States.” - Patrick Nagatani

[Artist Statement, “Nuclear Enchantment,” 1988-1993](#)

Contributer Bio:

Kate Sherrill is a photographer, printmaker, and retired arts educator based out of Hood River, Oregon. She loves finding ways to use artwork to inspire students to make discoveries about the world and their place in it. As an outdoor recreationalist, Kate is fascinated by the complex issues of land use and the human impact on sensitive watersheds and desert ecosystems of the American West. She hopes to encourage others to contribute their perspectives and voices to the debate.