UMFA
UTAH MUSEUM OF FINE ARTS

MINING LESSON PLAN:
The Big Idea Generator: Improve the Future

by Sheree Birrell

A collaborative mixed media collage using expressive, colors, textures, and mark making that generates ideas to improve how we manage our land and natural resources in the future.

Objectives:

Students will:

- Learn about the impact of mining and the damaging effects to the natural landscape by taking a closer look at the UMFA, *Mining the West*, digital exhibition, and contemporary artist Nolan Preece.
- Participate in peer discussions to brainstorm ideas.
- Experiment with color, texture, and mark making using mixed media to express emotions and represent ideas.
- Create both an independent and a collaborative artwork.
- Write a letter or note to student's legislators explaining their big ideas

Grade level:

Fourth Grade. Can be adapted for other grade levels.

Duration: Flexible

Materials:

Create rotation stations with tables or grouped desks

Each rotation station contains one type of media

Example station: Paint (no black paint or dark brown paint)

- Use a variety of brush sizes and shapes to create a variety of marks and textures
- Sponges
- Textured pompoms
- Bubble wrap or other textured surfaces
- Anything else you can think of or have available

Example station: Markers (no black markers)

- Explore the thin marks made with the pointed top
- Explore thick marks made with turning the marker on the side

Example station: Crayon rubbing

- Find textured objects to create rubbings
- Plastic rubbing plates with different textures

Example station: Use the best available media from your classroom and your own ideas

Example station: Drying station

- Black sharpies or markers
- 8 ½ x 11 white mixed media paper or card stock
- Scissors

Vocabulary/Key Terms:

- Natural Resources – Materials or substances such as minerals, forests, water, and fertile land that occur in nature and can be used for economic gain.
- Commissioned artwork – An artwork that is created based on a client's invitation.
- Independent artwork – An artwork based on an artist's motivation and ideas that does not adhere to outside criteria or other requirements.
- Collaborative artwork – An artwork created by at least two or more people using the ideas, experiences, and skills of its creators. An artwork that gives meaning and creative expression to what is important in their lives.
- Expressive artwork – A term used to describe artwork that communicates the feelings and emotions about the artists ideas.
- Mark making –The act of using a tool to create different types of lines, dots, marks, patterns, and textures. Mark making can be loose and gestural or controlled and neat.
- Repetition – Using the same mark, element, or effect over and over.
- Texture –The feel, appearance, or consistency of a surface which engages our sense of touch.
- Collage – An artwork created by piecing together various elements, such as cut-outs or fabric, into a single composition.

Pre-teach, Fourth Grade, Social Studies, Mining Lesson:

Add relevant, supplemental information, photos, and artwork provided by the UMFA's digital exhibition, *Mining the West*. (More information in the "Additional Resources" section below)

Artwork can be commissioned, independent or collaborative:

Humans express themselves in many ways.

- One way is by creating commissioned artwork.
- Another way is by creating Independent or individual artworks.
- A third way is by working together with each other to create collaborative artwork.
- Artwork can sometimes tell a story or narrative.
- Some of these stories and narratives can be told by using expressive colors, textures, and mark making to represent how we feel, express our emotions, and share our ideas.

Nolan Preece – Is an artist that created both commissioned artwork and independent artwork about *Mining the West*. Using the information in the "Additional Resource" section below, teach the students about the artist Nolan Preece. Show, and talk about his work.

While looking at Nolan Preeces commissioned photographs, discuss:

- What is the story and/or narrative in his commissioned photographs?
- How does Preece express his client's ideas, emotions, and points of view with his choices of texture, mark making, and repetition in his black and white photographs?
- What do you as the viewer see and understand by looking at Preece's commissioned photographs?

While looking at Nolan Preeces independent artwork, discuss:

- What is the story and/or narrative in his independent artwork?
- How does Preece express his ideas, emotions, and points of view with his choices in color, texture, mark making, and repetition in his independent artwork?
- What do you as the viewer see and understand by looking at Preece's independent artwork?

In general, what role does artwork and photographs commissioned by mining companies play in the mining narrative?

- Is their point of view true, false, and/or romanticized?
- What is being depicted, what is left out?
- Who benefits and in what ways?

In general, what role does independent artists/photographers play in the mining narrative?

- Is their point of view true, false, and/or romanticized?
- What is being depicted, what is left out?
- Who benefits and in what ways?

Activity

Session 1 | Explore and Experiment:

Students will each create an independent artwork that explores emotions using texture, color, and repetition. This artwork will be used later as part of the class collaborative collage.

- Setup mixed media rotation stations in the classroom
- Have the students pair up with a classmate to brainstorm and write a list of their thoughts, feelings, and ideas about what they learned studying the *Mining the West.*
- For example, they could use; happy, sad, frustrated, thoughtful, interesting, etc.
- Next have the entire class brainstorm together and write these ideas and emotions on the board.
- Have the students look at the list and think about the emotions they would like to express in their independent artwork.
- Pass out 8 ½ x 11 white mixed media or cardstock paper to the students, one or for each rotation station
- Next ask the students to write their names on the back of their paper.
- Have the students write their chosen emotions on the back of the paper. Suggest that each paper represent a different emotion.
- Introduce each rotation station to the students.
- Demonstrate the various mark-making options, textures, colors, and repetition that can be created at each station to express an emotion.
- Have the students experiment using the art supplies at each rotation station to express their chosen emotions.
- Students are free to experiment, while respecting the art supplies and their peers.
- Finally, set a timer for the rotation and let the students enjoy themselves and experiment.

Session 2 | Improving the Future:

Students will generate ideas to improve how we manage our land and natural resources in the future. This brainstorm session will then be used to create individual and creative machine parts which will later be used to create a collaborative class-wide art piece.

What are the damaging effects and outcomes caused by mining and western "progress"?

How can we improve how we manage our land and natural resources in the future?

- Pair up students with a classmate to brainstorm ideas to improve how we manage our land and natural resources in the future.
- Next have the class work together to make a master class list of student ideas.
- This list will be used later in the class collaborative artwork.

Machine Part Creations – Students will imagine and draw individual machine parts to explore imaginative and sustainable alternatives to invasive mineral extraction. These machine parts will be used later as part of the class collaborative collage.

- Explain how working together as a class we can create collaborative artwork, that resembles a machine, that can generate big ideas, to improve the future: The Big Idea Generator.
- Show examples of typical and atypical machine parts that can be mechanical or organic. Show examples of mining machines found in the UMFA, *Mining the West.*
- Pass back the student's artwork they previously created, independent, 8 ½ x 11, textured, mixed media artworks.
- Hand out a black sharpie, or marker to each student.
- Have the student invent and imagine a variety of different machine parts and draw them onto their previously created, independent, 8 ½ x 11, textured, mixed media artworks.
- Encourage the students to use the entire paper being careful not to make it too small in the middle of the page.
- Have the students use scissors to cut out their machine parts.

Session 3 | The Big Idea Generator

Students will collectively assemble their machine parts to create a collaborative mixed-media collage that expressively generates ideas for improving how we use our land and natural resources in the future, a big idea generator.

- Previously students used their imaginations to creatively come up with a list to improve how we use our land and manage our natural resources better in the future.
- Have the students choose an idea from this list or come up with new ideas.
- Have the students write their idea onto their machine part with a black sharpie marker.
- Students do not need to write on all their machine parts, leaving some without writing will look great.
- On a large enough bulletin board or wall, begin by having some finished machine parts, created by the teacher, already taped up on the wall.
- Have the students come up one at a time to share the idea they wrote down and to attach their machine parts to *The Big Idea Generator.*
- *The Big Idea Generator* will creatively grow into a collaborative mixed-media collage as each student adds to it.

Reflection and Discussion

While looking at the class collaborative mixed media collage, discuss:

- What do you see? (Mixed media, color, shape, line, texture, repetition, words, individual machine parts, a whole machine)
- What is the story and/or narrative in the class collaborative artwork?
- How does the class express their ideas, emotions, and points of view with their choices in color, texture, mark-making, and repetition in their artwork?
- Who benefits and in what ways?

The Big Idea Generator, generates big ideas, discuss:

- How does putting everyone's individual ideas together generate some big ideas?
- While looking at everyone's individual ideas, merge some together, as a class, come up with one or two big ideas that will improve how we manage our land and natural resources in the future.

Have students write formal letters or informal notes to their legislators explaining their big ideas for the future.

- This can be accomplished as one collaborative class letter, many small group letters, or by having each student write individual letters or notes.

Additional Resources:

State Core Links:

Social Studies Fourth Grade

Standard 2: Students will understand how Utah's history has been shaped by many diverse people, events, and ideas.

Objective 3: Investigate the development of the economy in Utah.

- Identify the factors which bring about economic changes (e.g. natural resource development new technologies, new market development, globalization, global conflicts, education).
- Examine how economic development affects communities (e.g. dams, sports, tourism, power plants, mining, etc.)

Visual Arts Fourth Grade

Strand: CREATE (4.V.CR.): Students will generate artistic work by conceptualizing, organizing, and completing their artistic ideas. They will refine original work through persistence, reflection, and evaluation (Standards 4.V.CR.1–4).

- Standard 4.V.CR.1: Brainstorm multiple approaches to a creative art or design problem.
- Standard 4.V.CR.2: Collaboratively set goals and create an artwork that is meaningful and shows the intent of the makers.
- Standard 4.V.CR.3: Explore and invent art-making techniques and approaches by utilizing and caring for materials, tools, and equipment in a manner that prevents danger to oneself and others when making art, and by documenting, describing, and representing regional constructed environments.
- Standard 4.V.CR.4: Revise artwork in progress on the basis of insights gained through peer discussion.

Other Links:

Utah Mining

- https://www.jstor.org/stable/j.ctt4cgn2r
- https://collections.lib.utah.edu/details?id=419804
- https://issuu.com/utah10/docs/danger_and_diversity_in_carbon_county_ourpasttheir
- https://www.uen.org/utah_history_encyclopedia/

Nolan Preece

- http://www.nolanpreece.net/www.nolanpreece.net/Page_5__White_River_Oil_Shale_Country.html
- http://www.nolanpreece.com/index.html
- https://www.viewpointgallery.org/content/nolan-preece-chemigrams
- https://www.artdealerstreet.com/single-post/2020/04/10/nolan-preece-experimental-photographer

Artwork Spotlight:

Nolan Preece, *White River Dam Site (near Bonanza, UT),* 1981, gelatin silver process, gift of the artist, UMFA2010.3.8.

White River Oil Shale Country: The oil shales of Utah are a potential source of oil for the nation. White River Oil Shale Corporation (WROSC) was formed by three major oil companies – Phillips, Sohio and Sunoco to mine oil shale in eastern Utah. In 1974 they leased the land from the BLM and started environmental impact work. In 1980 I was working as a field technician/photographer for Bio Resources, Inc, owned by Dr. Val Grant and Mr. Peter Kung. BRI is located in Logan, UT. The company had won the contract to do the environmental impact statements for WROSC.

I received a grant from Bio Resources for this series of photographs. It was intended to show the area before mining and to help with mitigation. During mining and after mining photo sessions were also planned. Although oil shale mining never began because it was not economically viable, it is currently being reconsidered. This series documents an ecosystem that is still fairly undisturbed.

These photographs were taken with a 4x5 camera from the best available vantage points. The objective was to make archival silver gelatin photographs. Therefore, they were all slightly selenium toned then some were also gold toned to acquire a cooler effect. The total series has as many as 100 negatives. These twelve images are in the collection of the Utah Museum of Fine Arts.

http://www.nolanpreece.net/www.nolanpreece.net/Page_5__White_River_Oil_Shale_Country.html

Nolan Preece, *The Devil's Playground (near Bonanza, UT),* 1981, gelatin silver process, gift of the artist, UMFA2010.3.5.

White River Oil Shale Country

Nolan Preece, *Fantasy Canyon (near Bonanza, UT)*, 1981, gelatin silver process, gift of the artist, UMFA2010.3.5.

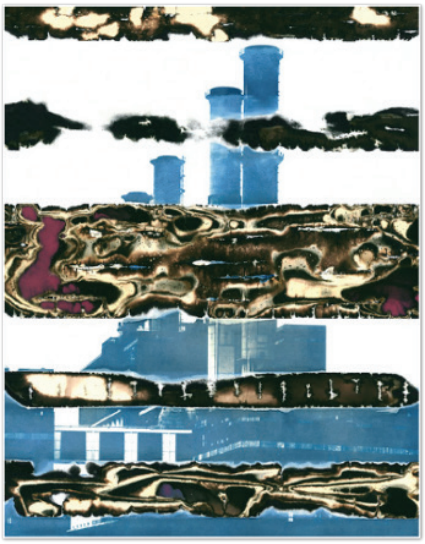
Independent Artwork Examples:

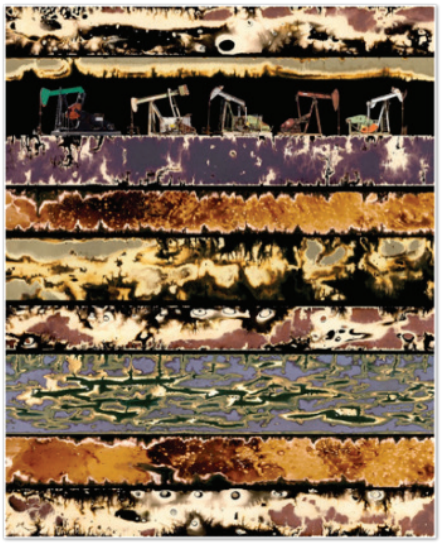
Nolan Preece independently created mining related artwork, expressing his own thoughts and feelings. Left to right:

Nolan Preece, "20 Oil Refineries in a Chemigram Frame", 2016, "32"H x 40"W, digital archival pigment print, ed. 5

Nolan Preece, "Chemigram with Disappearing Refinery", 2015, 14"H x 11"W, chemigram & cyanotype on Forte WT

Nolan Preece, "Big Oil Finds Its Page in Time", 2012, 40"H x 32"W, digital archival pigment print, ed. 5





Collaborative Artwork Machine Examples:

Showing students these machine images will help them get ideas for their own collaborative artwork. Feel free to find and show more machine images.

Right, W. Eugene Smith, *The Turbo Generator*, 1961-1962, gelatin silver process. Pearl, Dr. James E. & Debra Photographic Collection, UMFA1994.028.003.

Left, W. Eugene Smith, Gear Abstraction, 1961-1962, gelatin silver process. Gift of Dr. James E. and Debra Pearl to the Dr. James E. and Debra Pearl Photograph Collection, UMFA1994.028.045.

Nolan Preece, “Quagmire”, , 2013, 20”H x 16”W, digital archival pigment print, ed. 10

Contributer Bio:

Sheree Freeze Birrrell is an artist and art educator born in Salt Lake City, UT. She will graduate from the University of Utah with an Art Teaching BFA degree in 2022. She has worked as an educator at Salt Lake Community College and Woodrow Wilson Elementary. Sheree has enjoyed being an art educator for all age groups including the wonderful community that meets at the Murray Senior Recreation Center. Sheree is currently working at The Chase Home Museum of Utah Folk Arts, engaging in community art education, visitor services, tours, and digital art exhibitions. She is interested in the way art can communicate the narratives and ideas of diverse individuals and communities living in Utah. Sheree enjoys art exploration and experimentation. She intends to continue her own art practice with medium experimentation as she explores how narratives and memories can be captured and embedded into her artwork. @sheree.birrell

Heading image | Photograph of the Buckeye Mine at Silver Reef, Utah, ca. 1885. detail, Mark A. Pendleton Photograph Collection, P0008, Special Collections, J. Willard Marriott Library, University of Utah.