



LESSON 9

The Progress Song

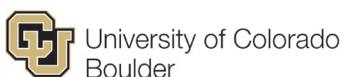
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This lesson strives to address NGSS, Colorado 2020 and JeffCo Generations standards and goals, cited at the bottom of the lesson, by communicating science through embodied expression

Shine, The Musical
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Description

Students will rehearse and perform the Progress song from *Shine* as a class and discuss the ideas, concepts, and challenges from the performance.

Concepts

1. The choices we have made about our energy sources impact our communities and society as a whole
2. Students can be authors and actors in performance-based communication

Outcomes

Upon Completion of this lesson, students will be able to:

1. Use performance to communicate how energy choices impact us
2. Through the movement and sound, create a visual representation of energy choices and impacts



Outline

- I. Set Up (10 min.)
- II. Introduction (5 min.)
 - a. Behavior Guidelines
 - b. Learner Level Assessment
- III. The Human Machine (30 min.)
- IV. Rehearse and Perform (25 min.)
- V. Follow-up Activities
 - a. The machine that we need
 - b. Go green!
- VI. Additional Resources
 - a. Sources
 - b. Vocabulary
- VII. Standards Addressed

I. Set Up (10 min.)

For this lesson, we'll be setting up and performing the fourth song of *Shine*, "Progress": <https://vimeo.com/217015719>. The choreography for "Progress" is on the *Shine* website: http://www.insidethegreenhouse.org/shine/shine_choreography.html

Read through pages 16 through 18 of the script, which will be performed as part of this lesson.

Materials Needed

- The paper strips created in lesson six, rolled with a rubber band gently holding each
- The flags created in lesson eight
- A screen, projector, and an internet connection for this lesson.

II. Introduction (20 min.)

Behavior Guidelines: This lesson involves embodied learning. Please review the "Guidelines for Embodied Lessons in the Classroom" included in this curriculum.

Learner Level Assessment: Machine Brainstorm

Ask students to consider this definition for machine:

Machine: An object that combines several parts and uses power to accomplish a task





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Give students sixty seconds to individually write down as many machines as they can think of (this should be review from lesson eight). At the end of their brainstorm, ask students to choose one of the machines they listed. Take another 60 seconds and ask students to list as many parts as they can think of for the machine they choose. Ask a few volunteers to share their answers with the class.

III. The Human Machine (30 min.)

Gather students in a circle and ask them to count off into ones and twos (going around the circle, each student says one or two and remembers their number). Both the ones and twos will get a chance to take part in the activity, but students will go in two groups to simplify logistics. Let students know that they are going to create a human machine. Begin with group one and ask for a volunteer to start who will go to the center of the circle and repeat a mechanical sound and movement. It can be any sound and movement, but the student should have a machine and a function in mind. It doesn't have to be a machine that exists in the real world. One at a time, each student joins in with their own sound and movement in such a way that each movement is interrelated to one other person, thus making a human machine. While group one goes, group two watches from the outside of the circle. Then, the groups switch and group two goes.

Have short discussion on what worked well in each group and what could have been improved. Students are encouraged to speak from their own experience of what they found fun and challenging.

Next, divide the class into six groups and give each group an energy source, coal, oil, natural gas, solar, wind, hydro. Challenge each group to create a human machine connected to that energy source using their bodies. The machine should perform a specific task, whether it is a real machine or one that could exist, and each group member should know their role in helping the machine perform its task. Give groups ten minutes to decide on their machine and roles and practice their movements and sounds. The parts of the machine and the machine's sounds and movements should connect to the power source the machine is powered by.

Assessment (Outcomes 1 and 2): *After each group has had time to practice, ask them to demonstrate their machine to their classmates without first explaining what they've created. At the end of each demonstration, take a few guesses from the class on what the machine was. Then, have each group explain their design.*

IV. Rehearse and Perform (25 min.)

In the performance of *Shine*, there is no dialogue between "Weaving" and Progress, but it may be helpful to remind students of where we're at in the script and what we did in lesson seven. You may want to watch the choreography for "Weaving" as a reminder: <https://vimeo.com/217015849>. Next, watch the "Inside the Studio" feature with composer Tom Wasinger located in the music section of the *Shine* website from minute 17 to minute 23: <https://vimeo.com/217016473>. This should help give students a feel for how the song was composed and which instruments were used. After the music composition video, watch the choreography for "Progress" as a class: <https://vimeo.com/217015719>.



For this performance, we'll be working in two groups. Sixteen students will be weavers and the other will be followers of Foss. To begin this performance, the 16 weavers should perform the "Weaving" song with vocals, found here. The weavers should hold their woven 'fabric' together and stay there during the next section. Switch to the "Progress" song with vocals using the fossil fuel flags created in lesson eight, eventually destroying the fabric of community by ripping through it near the end of the Progress song.

After the performance, read through pages 17 and 18 of the *Shine* script as a class. Let students know we'll be working toward solutions in the lessons to come.

Assessment (Outcomes 1 and 2): *Perform the choreography to the "Progress" song using the props created in lesson eight.*

Assessment (Outcome 2): *Ask students to consider how they feel after this performance. Discuss how Foss' ways can threaten the fabric of community and start to consider how we can work together to keep the fabric together (this is something we'll be working on in the next few lessons, but this should serve as a brainstorm session while the experience of this session is still fresh and give students a way to process their feelings on ripping through the fabric of community). In the time left, give students a few minutes to write about this lesson.*





V. Follow-Up Activities

a. The machine that we need

In groups of four to six, ask students to imagine and design a non-fossil fuel machine that would benefit their community. Using what they've learned in this lesson, ask students to demonstrate the design of their machine to the class using their bodies as different parts. They are free to use sounds and props as well.

Assessment (Outcomes 1 and 2): *Students work together in groups to design a green machine and present their design to the class using embodied expression and props.*

b. Go green!

In groups of four to six, ask students to think of one machine in their community that runs of fossil fuels that could be converted to use a renewable energy source. Each group should first create a human machine version of their choice, then rearrange the human machine's parts to accommodate a switch to a different fuel source.

Assessment (Outcomes 1 and 2): *Students work together in groups to create a human machine version of a fossil fuel-based machine and convert it to a renewable fuel-based human machine. Groups present their machines and conversions to the class and classmates provide feedback.*

VI. Additional Resources

a. Sources

Script of *Shine*: http://www.insidethegreenhouse.org/shine/assets/shine_script.pdf

Music of *Shine*: http://www.insidethegreenhouse.org/shine/shine_music.html

Choreography of *Shine*: http://www.insidethegreenhouse.org/shine/shine_choreography.html



Osnes, B. (2017). Performance for resilience: Engaging youth on energy and climate through music, movement, and theatre. Cham, Switzerland: Palgrave Macmillan.

b. Vocabulary

Community: A group that shares place, values, or feelings and is connected through a physical or virtual space.

Metaphor: A figure of speech or a symbol that is representative of something else, especially something abstract (like community). Highlighting the similarities between the two and can help us the referenced idea or thing in a new or more nuanced way.

Dramatic Metaphor: A movement, action, property, or piece of dialogue can make a comparison to something dissimilar, in order to enhance its meaning and to reveal what they might have in common through performance.

Tool: A device used to do work.

Machine: An object that combines several parts and uses power to accomplish a task.

Symbol: An item, idea, or representation that is used to represent something else. Often, the symbol provides a simple visual version of a complex idea.

Flag: A visual symbol that represents a group or idea.

Fossil fuel energy: Energy created by burning fossil fuels such as coal, methane and gasoline.

Property (prop): An object, often used to represent something it is not, for dramatic effect by an actor.

VII. Standards Addressed

a. Next Generation Science Standards Addressed

3-5-ETS1-1 Engineering Design

Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

3-5-ETS1-2 Engineering Design

Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

4-PS3-2 Energy

Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.

4-ESS3-1 Earth and Human Activity

Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.





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5-ESS3-1 Earth and Human Activity

Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

b. JeffCo Generations Skills

Civic & Global Engagement: Students take active roles in their communities, are prepared to be participatory citizens in our constitutional republic, and are engaged with issues of local, national, and global concern.

Self-Direction & Personal Responsibility: Students take initiative, are inquisitive, entrepreneurial, and curious. They persevere through challenging situations, take calculated risks, and stand accountable for their actions. They continually advocate for their own needs as well as the needs of others.

Communication: Students learn to effectively communicate in written, digital, artistic, and oral forms. Students learn to explore and articulate their own points of view, while respectfully exploring and understanding the perspectives of others.

Critical & Creative Thinking: Students learn to evaluate, weigh evidence, and apply reasoned decision making to problems. Students learn to use imagination, innovation, and ingenuity to solve problems.

Collaboration & Leading by Influence: Students learn to work together, harnessing the power of teamwork, and learn the importance of influence to motivate others to get things accomplished.

Agility & Adaptability: Students learn to change in response to dynamic situations, environments, and complex problems. Students adjust to disruptions, ambiguity, and uncertainty in themselves, their organizations, and their communities – and thrive in spite of the obstacles.

Colorado Academic 2020 Standards Drama and Theatre Arts

Create

- Create characters from scripts or improvisation using voice, gestures and facial expressions
- Design a scene through an inventive process, and perform the scene

Perform

- Participate collaboratively with partners and groups
- Demonstrate safe use of voice and body to communicate characters
- Define stage direction and body positions

Critically Respond

- Develop selected criteria to critique what is seen, heard, and understood
- Examine character dynamics and relations

