Climate: Change-Makers!

Discussing climate change often evokes many different thoughts and emotions that can be hard to express. This class provides a framework for students to express those thoughts and emotions regarding climate change through ephemeral art and poetry. It is essential that participants come into this field experience with sufficient background knowledge on climate change. Please refer to the Background section of this lesson plan for a list of core ideas from NJ State Standards that should be covered prior to participants' arrival.

OBJECTIVES

After this course, students should:

- Feel more acquainted with their senses in the natural environment and have an increased knowledge, appreciation, and respect for the environment through the opportunity to be in an outdoor setting
- Feel an interconnection between their thoughts, emotions, and personal understanding about climate change through exploration of the outdoors with the guidance of discovery cards
- Have an increased awareness of the detail in which they can describe a chosen object.
- Understand and appreciate the concept of ephemeral art.
- Understand the types of poetry that give voice to nature art with an emphasis on Climate Change.
- Feel comfortable creating poetry that: expresses the art they created, or expresses the process of creating their art or what it is like to spend time outdoors in their special place with an emphasis on Climate Change.

MATERIALS NEEDED

- Poster of Earthrise/Amanda Gorman
- Audio of Earthrise poem by Amanda Gorman (on your phone)
- Flip chart
- Discovery Cards
- "Tips for Creating..." print out

- Natural materials arranged into art
- White board
- Marker
- Rite in Rain pads
- Pencils
- Bag for writing supplies

PROCEDURES

Introduction

- 1. Begin with a quick description of the class: This is a class on Nature Art and Poetry with a focus on an environmental issue we know as *Climate Change*.
- 2. Either:
 - a. Introduce the United Nations definition of climate change: long-term shifts in temperatures and weather patterns. These shifts may be natural, but since the 1800s, human activities have been the main driver of climate change, primarily due to the burning of fossil fuels (like coal, oil and gas) which produces heat trapping gasses. OR
 - b. Ask the kids for their definition of climate change
- 3. Introduce students to **COP26**: In 2021 a very large group of people met to talk about climate change. The meeting is known as COP26. That stands for **Conference of the Parties** and is a United Nations Climate Change Conference. The meeting was held in Scotland. "The Parties" refers to 197 nations (that agreed to a new environmental pact-the UN Framework Convention on Climate Change in 1992). The **26** refers to the number of times the group has met.
 - a. Four goals were established at COP26:
 - i. Keep global warming below 1.5 degrees
 - ii. Protect communities and natural habitats
 - iii. Developed countries provide money to help other countries commit to 1 & 2
 - iv. That everyone works together to play their part
 - b. Put this into local context: COP26 has noted that the planet has experienced many changes such as storms, heatwaves, droughts and other extreme weather events, which have a huge impact on the planet. But, locally, you may have also observed changes in the plant or animal life in your area. Maybe you noticed spring flowers blooming earlier, or a change in temperature of your local winter or summer, or perhaps you've observed streams or reservoirs that have less water because of a lack of precipitation.
- 4. Tell students the main goal of the class and what to expect from the outdoor field experience:
 - a. Goal: Our hope, in this field experience, is to help you express through art and poetry some thoughts you may have on this topic. Poetry can be a powerful tool in giving voice to environmental concerns and may even motivate people into action.
 - b. This class will have an outdoor field experience that will give you an opportunity to create art that allows you to look closely at the natural environment. At the same time it will allow you to grow within, or express your thoughts on Climate Change by putting your thoughts to that art through poetic voice.

Climate change discussion

- 1. What have you heard or read about in regards to Climate Change that has made an impact on the planet and its people? Leaders from all over the world have met to discuss these issues...what is it that they are concerned about? What are they doing to address the issues?
- 2. In addition, what kinds of technology is being put into action to help reduce our use of fossil fuels? Think about the ways we use energy to power our cars and heat our homes. What are some of the positive changes that are being made to help reduce carbon emissions? (hoping the kids can come up with electric cars, wind turbines, solar panels) What kinds of actions can we as individuals take, or have already put into practice, to make a positive effort to reduce carbon emissions?
- 3. Ask them what words or phrases come to mind when they hear the topic Climate Change. Prompt them as needed...it can be things that have already been discussed. List words/phrases on the white board.

You might say...'based on your list, there are a lot of thoughts about this topic'.

4. *Introduce Amanda Gorman:* "I'd like to share with you how one person took their feelings on Climate Change and organized them into a poem called Earthrise.

The poet's name is Amanda Gorman. Here's a bit of background on her."

Born in 1998

Graduated from Harvard University in 2020

Founder and executive director of One Pen One Page, an organization providing free creative writing programs for underserved youth.

2017- Named the first ever National Youth Poet Laureate of the United States

She is the author of many poems including:

2021- The Hill We Climb-read at Pres. Biden's Inauguration-youngest poet to have done this! 2015-The One for Whom Food is Not Enough

She is also the first poet commissioned to write a poem to be read at the Super Bowl. Her poem honors three individuals for their essential work during the COVID -19 pandemic.

Earthrise and an introduction to poetry

- 1. Provide a brief background on the actual Earthrise photo (show poster)
 - a. Taken during a lunar orbit. It shows planet Earth rising along with some of the moon's surface
 - b. Taken by Astronaut William Anders December 24,1968 during Apollo 8 space mission (1st crewed voyage to orbit the moon)
 - c. Here is a link to the Wikipedia article about the photo
 - d. Amanda Gorman was only 16 years old when she wrote *Earthrise* for the Climate Reality Project in 2018.

- 2. Play a recording of Earthrise (4:30) on your phone:
 - 24 Hours of Reality: "Earthrise" by Amanda Gorman.

Have students follow along with a poster of Earthrise and Amanda Gorman while listening, and have them consider the following points while they listen:

- a. Listen to AG's message and the passion and energy she uses to deliver the message.
- b. Think about the power of her voice because of the words she has chosen, and listen for the words Change-maker.
- c. Prompt the participants to listen for one word or a phrase in the poem that touches you or makes you feel a certain way.
- d. How is AG a change-maker?
- 3. Pause for a moment after listening to AG's poem.
 - a. Have a quick discussion about her passion, her delivery, her energy, the power of her voice, the words she chose.
 - b. How does AG **engage as a change-maker** when she reads Earthrise?
 - c. then ask students for a **list of words, phrases or feelings that captivated them.**Perhaps they can name their own emotional response to the poem List on white board.
 - i. You can prompt reactions to the poem by reading some lines from the poem to help jog some thoughts, reactions, responses, emotions.
 - ii. You could do this by starting a line of her poem to see if they can add the missing word. It's not the missing word you want to write down, but their response to that line.
 - 1. Those three guys were surprised To see from their eyes Our planet looked like an _____ (earthrise) (you can point to the poster)
 - 2. And as threats drew nearer, Our own urgency became clearer, As we realize that we hold nothing dearer, than this floating body we call ____(home)
 - 3. So, earth, pale blue dot We will fail you ____ (not)
- 4. Show the students a few, different and simple styles of poetic writing. Have your sample poems written on a flipchart for visual support. (Place the flip chart on the white board). These styles may include:
 - c. Free form poem
 - **d.** Rap poems- have students slap their hand on their leg to set a beat while you read this rap poem..get the rhythm started...then begin the poem.
 - e. Acrostic poem
 - f. See sample poems on the <u>helpful hints page</u> and/or create your own
- 5. Now, have students look at the art on the table made from natural materials and, keeping in mind ideas about climate change, tell them they are going to put a poetic voice to nature art.

Suggest to students that the voice of the art should/could have a strong ending, or a surprise ending as if to make a point....ask how the use of punctuation changes the voice.

- 6. Hand out paper and pencil. Then, go back to the list of words and phrases on the white board and have students come up with a poem that describes what they see in the art with an emphasis on Climate Change.
- 7. After a few minutes, ask if anyone would like to share their poem. (if no one volunteers, ask if you could read their poem to the class)

Prep for Field Experience

Tell the participants (if you wish) what this experience involves:

- a. Discovery walk
- b. Creating the art
- c. Writing the poem
- d. Sharing the poem
- e. Summary

****bring the writing pads and pencils with you. It might be helpful to have the staff carry the pads in a bag until the students need them.

Discovery Walk using prompts

Tell the students you will be taking them on a Discovery Walk and that ideas written on a card will prompt them to discover various things about their surroundings. Create a boundary that's within your sight. BUT, emphasize that this Discovery Walk will present them with an unusual challenge: they are going to connect what they see, feel, notice in some way to something that relates to climate change. Present this different way of thinking as a challenge for them to think out of the box.

- a. Start them off with the card that says: **Without speaking, walk a short distance and feel/be aware of the surfaces under your feet.** How can you relate the surfaces you walked on to the challenges and solutions of climate change? After you've moved to a location, elicit a few responses.
- b. Continue with the Discovery Cards. You could hand a card to one student and ask them to read it to the group, or have them pick it as if from a deck of cards.
- c. Then allow paired students (or threesomes) to move around a bit to observe their surroundings looking for what the card asked them to find. For example: **Find the biggest and the smallest tree. What do they have in common/what is different?**

Imagine that you are one of those two trees. What might you want to share with the other tree about climate change?

d. Complete enough Discovery cards until you feel the group is really beginning to observe the landscape in a deeper way than just casually noticing their surroundings, as well as having a chance to express some thoughts/emotions, understanding about climate change.

Settling into a space

Take them to a location where the art is to be created and provide them with a boundary of the area you want them to stay within. Direct them to walk around a bit in an effort to find a place that speaks to them, to look at the materials available and think about how they might use those materials. Before you split up, guide them with some thoughts: imagine how the art they are going to create will look on the "canvas". How big/small of a space does your art require? How will your art look from different angles, or in different light, or on the color of the surface the art is made on? What is your art saying to you as you create it?

Creating the art

Tell the students to work with partners to use the objects in nature that reflect their feelings/thoughts about climate change. What will their canvas look like? What materials best 'represent' their thoughts? How will they arrange them? Some thoughts/feelings that may come out through their art may include:

- Their understanding about climate change
- Their emotions about climate change
- Their acknowledgement of their part in climate change
- Their rise to action in climate change- what can they do?
- Their hope for healing the earth

Tell students they may use materials found on the ground, but not to use living things for their art. Exceptions could be if the material is an invasive species, non native or very common. Site check the area ahead of time.

As they make the art walk around and begin to hand out Rite in Rain pads/pencils

Crafting the poetry

Move around to each group

Remind students (as needed) how they began the process of writing the poetry by making a list of phrases and words. Finding the right words and organizing them in the right place...much like they did with their art...is key.

- *provide them with a pad and pencil
- *the students could make a list of observations about their art
- *group the words/phrases into a voice for the art
- *let them know they don't have to use rhyming patterns
- *how they incorporate punctuation, if any
- *how will the ending of the poem make the listener feel
- *poems can be free flowing and don't have to follow standard forms taught in school
- *10-15 minutes (students may feel this is way too much time OR not enough time)

The poem should focus on some component of Climate Change.

- 1. Vision of the future
- 2. Witness how Climate change impacts certain plants or animals
- 3. Communicate the impact of Climate Change
- 4. Communicate personal behavior changes-how can they act to build a more sustainable future?
- 5. What will it take to make us act on climate change?
- 6. Your hope for healing the earth

Sharing the Poems

- 1. Move through the *nature art gallery* to look at the work and listen to the poetry. Encourage students to remain quiet for 5 seconds after each poem is read.
- 2. Photographs by staff should be taken for future reference and used back at school to make a bulletin board on the voices of Climate Change

Summary

This is an important part of your lesson. Oftentimes, we run short of time to substantially allow time for sharing...but keep in mind that these questions could/should be given to the teachers to use as a follow up in the classroom. The teachers can create a collection of the art/poetry, along with quotes from the students that answer the following questions.

- How has creating art and adding poetry to the art helped you in your knowledge and understanding of the space you were working in?
- How might your experience creating art and poetry help you when you visit other natural environments?
- What art/poem, besides your own, did you enjoy. What made someone's work unique?
- Based on the reader's language use, what was the poet's stance on climate change?
- Name one way you grew when thinking about climate change?
- Who might benefit from hearing your poem on Climate Change?
- What will be your Earthrise moment?

Optional post-experience extension

Before the class concludes, encourage students and/or teachers to take pictures of their ephemeral art as an effort to record it. Back at school, students or teachers are encouraged to showcase the pictures of the art and each piece's accompanying poem as a means of sharing students' thoughts and feelings about climate change, engage others in conversation, and, as a school, be proactive about climate change solutions. This can be done in a variety of ways, including but not limited to a gallery in the halls or an art show.

BACKGROUND INFORMATION

Prior to this field experience, students should have a general understanding of the core ideas about climate change. These ideas include, but are not limited to:

- Climate describes a range of an area's typical weather conditions and the extent to which those conditions vary over years.
- Energy and fuels that humans use are derived from natural sources and their use affects the environment in multiple ways. Some resources are renewable over time and others are not.
- Human activities, such as the release of greenhouse gasses from burning fossil fuels, are major
 factors in the current rise in Earth's mean surface temperature (global warming). Reducing the
 level of climate change and reducing human vulnerability to whatever climate changes do
 occur depend on the understanding of climate science, engineering capabilities, and other
 kinds of knowledge, such as understanding of human behavior and on applying that
 knowledge wisely in decisions and activities.
- Human activities have significantly altered the biosphere, sometimes damaging or destroying natural habitats and causing the extinction of other species. But changes to Earth's environments can have different impacts (negative and positive) for different living things.
- Resources need to be utilized wisely to have positive effects on the environment and society.

RESOURCES

DISCOVERY CARDS

Visit an area of sun and an area of shade. Place your hand on different surfaces in each area. What do those surfaces feel like?

How might a long-term change in temperature change affect how this soil might feel overtime? How might that be an advantage or a disadvantage to those surfaces and the life around them?

Find the biggest and smallest trees. Describe ways they are the same and tell how they are different.

Imagine that you are one of those two trees. What might you want to share with the other tree about climate change?

Find evidence of two different kinds of animals in your area. Can you identify the kind of animal from the "sign" it left behind?

What kind of evidence is there signaling that the planet's climate is changing? What evidence is in place that shows solutions to climate change?

If there is a natural water source nearby, sit down for a moment and close your eyes. What do you hear?

What might that water source be saying about climate change?

OR

Imagine climate change has caused a drought in this area. What effect might it have on this body of water? What else would that drought impact?

Without speaking, walk a short distance and feel the sensations under your feet. Describe each of the feelings you noticed.

How can you relate the surfaces you walked on to the challenges and solutions of climate change?

Walk around a bit to see how many colors of the rainbow you can find. What color was the most prominent? What color was hardest to find?

Imagine that climate change has created warmer seasons in this area. Name the positive impact it may have on your finding the colors of the rainbow in this area at any given time of the year.

Find two places that would best protect a bird during a winter storm. What is it like there?

How might a major winter snowstorm brought about by climate change affect where a bird could find protection?

Find a unique boulder or rock. Get down to the level of the rock and look around. Describe what it sees and an emotion it may have.

How might your perspective on climate change differ when you look at it from a different angle?

Stand in place and look around. What "catches your eye". What is it that attracted your attention?

How could creating nature art and writing a poem about solutions to climate change catch someone's attention?

Walk 4 steps. With each step, bend down and select a leaf from the ground. How are the leaves alike and different?

How are people who are engaged in helping to slow climate change both alike and different?

Find a tree with "character". How would you describe that tree to someone?

What might that tree want to tell the other nearby trees about Carbon emissions and the job the trees have to do? What might that tree want to tell humans about this same idea? Find a tree trunk that is smooth. Close your eyes and slowly run your hands along the trunk. Describe what you feel. Do the same thing for a tree trunk that has rough bark.

How are issues regarding climate change like each of these tree trunks?

Tips for Creating Poetry with Your Partner

You've made your art. Now it's time to find the words to express some things about what the art is saying. Here are a few suggestions to get you started, or, help you along. (Hint: Read this entire page out loud, taking turns with your partner)

Look at your	art and	d make	some	observ	/ations.
--------------	---------	--------	------	--------	----------

In your writing tablet, write down words or phrases of things
*you notice
*you hear
*you touch
*you smell
about your art. What you write can be recorded in any way you want
Think about a style of noetry you want to create. Here are some ideas but you

Think about a style of poetry you want to create. Here are some ideas, *but your own idea may be best!*

*Free form-something that flows from you through your pen, onto the paper. Chunk words or phrases together in a way that makes sense. Slip in some punctuation, or not.

* A poem that includes Who What When Where Why How......in any order you want. *Create an......I Remember When, poem..... *Create aQuestion poem....

What punctuation will help strengthen the voice in your poetry? (if any at all)!

Consider the ending of the poem:
.....how does it strengthen the voice in your work?
.....how will it make the listener feel?
.....how does it complete the voice of the art or its surroundings?

?,.

Amanda Gorman Bio

Earthrise

By Amanda Gorman

Dedicated to Al Gore and The Climate Reality Project

On Christmas Eve, 1968, astronaut Bill Anders

Snapped a photo of the earth As Apollo 8 orbited the moon.

Those three guys Were surprised To see from their eyes

Our planet looked like an earthrise A blue orb hovering over the moon's gray

horizon,

with deep oceans and silver skies. It was our world's first glance at itself Our first chance to see a shared reality, A declared stance and a commonality; A glimpse into our planet's mirror,

And as threats drew nearer, Our own urgency became clearer,

As we realize that we hold nothing dearer than this floating body we all call home.

We've known

That we're caught in the throes Of climactic changes some say

Will just go away, While some simply pray To survive another day;

For it is the obscure, the oppressed, the poor,

Who when the disaster Is declared done,

Still suffer more than anyone.

Climate change is the single greatest challenge of

our time,

Of this, you're certainly aware.

It's saddening, but I cannot spare you

From knowing an inconvenient fact, because It's getting the facts straight that gets us to act

and not to wait.

So I tell you this not to scare you, But to prepare you, to dare you To dream a different reality, Where despite disparities We all care to protect this world,

This riddled blue marble, this little true marvel

To muster the verve and the nerve

To see how we can serve

Our planet. You don't need to be a politician To make it your mission to conserve, to protect,

To preserve that one and only home

That is ours,

To use your unique power

To give next generations the planet they deserve. We are demonstrating, creating, advocating We heed this inconvenient truth, because we

need to be anything but lenient With the future of our youth. And while this is a training,

in sustaining the future of our planet, There is no rehearsal. The time is

Now Now.

Because the reversal of harm,

And protection of a future so universal Should be anything but controversial.

So, earth, pale blue dot We will fail you not.

Just as we chose to go to the moon

We know it's never too soon

To choose hope.

We choose to do more than cope

With climate change
We choose to end it—
We refuse to lose.

Together we do this and more Not because it's very easy or nice But because it is necessary,

Because with every dawn we carry

the weight of the fate of this celestial body

orbiting a star.

And as heavy as that weight sounded, it doesn't

hold us down,

But it keeps us grounded, steady, ready,

Because an environmental movement of this size

Is simply another form of an earthrise.

To see it, close your eyes.

Visualize that all of us leaders in this room

and outside of these walls or in the halls, all of us changemakers are in a spacecraft, Floating like a silver raft in space, and we see the face of our planet anew. We relish the view; We witness its round green and brilliant blue, Which inspires us to ask deeply, wholly: What can we do? Open your eyes. Know that the future of

this wise planet
Lies right in sight:
Right in all of us. Trust
this earth uprising.
All of us bring light to exciting solutions never
tried before
For it is our hope that implores us, at our
uncompromising core,
To keep rising up for an earth more than worth
fighting for

Helpful Teaching Hints

1. Share an example of nature poetry. Ask students to stay silent for 10 seconds afterwards. Don't ask them to analyze it, but perhaps ask them what they liked about the poem.

The wind lifted me
up into the trees,
where i danced
to the rhythm
of the evergreen
swaying to the tune of the northern breeze,
frozen in timeless melody.
-Christy Ann Martine

- 2. Create a poem that doesn't rhyme, doesn't count syllables. Provide examples from the support sheet or your own resources.
- 3. Don't hover over students as they are writing their poems. Wait til students ask for support. You could ask the students questions to help them think about their poems.
 - Have them read you the list of words/phrases they made. How have they used them to get their poem going?...might their arrangement of words be confusing to the reader?
 - Could a simple rearrangement help clarify the poem?
 - If their list needs a little more bulk, you could ask the students questions and use their responses to add to the list of words/phrases.
 - Have they created their own "poetry forms"? Are they following their rule/form throughout?
- 4. Challenge the students to build the poem so it has a strong ending or a surprise ending
- 5. Ask students how punctuation might be part of their poem.
- 6. Accept and embrace their work. Do not require a lot of changes (can be done back at school). Be excited for their poetic creations!

Examples of Poems (RA)

I Remember When...

I remember when I was white, icy
Cold when the sun warmed me, and
Pulled by gravity Into the stream.
I remember as I swirled, danced in the current
Around bubbled rocks
Then drifted quietly into an eddy
I remember when I was a snowflake

Five W and H poem

Who Aspen leaf
What flat stemmed, twirling and waving
When in the bright summer sun
Where on smooth barked tree
How strongly tethered
Why it's my season to hold tight

Question poems

Fox, why do you sit and watch
Me as I watch you
From the stillness of my
Being? Your eyes curious, head tilting, body
calm
Breaths in.... out..... watching..... waiting.....
trotting
....and then, the next morning
Joy! you appear,
sit...breathe...in
....out....watch....
wait Trot away
Why?
Still curious? Or do you just need a rest before

you continue your journey?

NEW JERSEY LEARNING STANDARDS

CLIMATE CHANGE

1.5.5.Cn11b: Communicate how art is used to inform others about global issues, including climate change.

1.2.8.Re7b: Compare, contrast and analyze how various forms, methods and styles in media artworks affect and manage audience experience and create intention when addressing global issues including climate change.

6.3.5.CivicsPD.1: Develop an action plan that addresses issues related to climate change and share with school and/or community members.

9.4.5.DC.8: Propose ways local and global communities can engage digitally to participate in and promote climate action.

COMPREHENSIVE HEALTH AND PHYSICAL EDUCATION

2.1.8.PGD.4: Analyze the relationship between healthy behaviors and personal health.

ENGLISH LANGUAGE ARTS

Writing

NJSLSA.W2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

NJSLSA.W4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

NJSLSA.W5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.

Speaking and Listening

NJSLSA.SL1. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

NJSLSA.SL3. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.

Presentation of Knowledge of Ideas

NJSLSA.SL4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

Language

NJSLSA.L3. Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

NJSLSA.L4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.

NJSLSA.L5. Demonstrate understanding of word relationships and nuances in word meanings.

LIFE LITERACIES AND KEY SKILLS

9.3.12.AG-NR.2 Analyze the interrelationships between natural resources and humans.

VISUAL AND PERFORMING ARTS

- 1.5.8.Pr5a: Individually or collaboratively prepare and present theme-based artwork for display and formulate exhibition narratives.
- 1.5.8.Pr6a: Analyze how exhibitions in different venues communicate meaning and influence ideas, beliefs and experiences.
- 1.5.8.Cn10a: Generate ideas to make art individually or collaboratively to positively reflect a group's identity.
- 1.5.8.Cn11b: Analyze and contrast how art forms are used to reflect global issues, including climate change.

SOCIAL EMOTIONAL LEARNING

All of our field lessons integrate the concepts of self-awareness, self-management, social awareness, responsible decision-making, and relationship skills found in the New Jersey's Core Social and Emotional Learning (SEL) Competencies.

Standards updated by Robin Anderson, 2023