# Climate Justice Lesson Snapshots

Developed By Chicago Teachers Union Members For Earth Week 2023





CHICAGO TEACHERS UNION





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# A Message from the Officers of the Chicago Teachers Union, Local 1

We are proud to publish these excellent lessons created by incredible Chicago Teachers Union educators who are leading the way to create a Green, Healthy, Anti-racist, and sustainable community school district.

These lessons are ready to implement in classrooms across grade levels, interests, and student concerns. National surveys of students show they want to learn more about climate change, how they can address it, and meet the needs of front-line communities.

Whether it is implementing Green Schools powered by solar energy, HVAC with heat pumps, pipes and paint that are lead-free will ensure that Black and Latine communities with the most significant cumulative impacts get clean air and green energy to power schools and their homes.

We hope these lessons will inspire educators to help our students and school communities to advocate for and realize these necessary changes.

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### **Project Overview**

Climate change is an urgent crisis confronting people all over the world and is having a direct impact on Chicago. Chicago's communities of color are disproportionately impacted by pollution, climate change, and resulting extreme temperatures. From lead pipes to lakefront erosion, pointing to the city's structural issues, climate change will only exacerbate the limited resources funded to communities with high poverty rates.

In many instances in Chicago, **environmental justice equates to racial justice for communities**. Equipping educators with a pedagogical toolkit to address climate change for their students is a new frontier in curriculum development. The Climate Justice Education Project seeks to address the lack of support for teachers in educating students to advocate for a green and clean future.

The Quest Center for Professional Learning and Teacher Leadership graciously received support from the **Oppenheimer Family Foundation** to achieve the goals set forth within the Climate Justice Education Project (CJEP). The overarching goal of this project is to support educators and, by extension, their students, to design and complete projects/lessons to address the root causes of climate change by uplifting the voices of communities who have been least culpable and most affected: Black, Latinx, and Indigenous communities, and youth generally.

The Climate Justice Education Project will seek to win **environmental justice and clean energy transformations in schools** by developing educational and advocacy opportunities for Chicago educators, students, and communities. CJEP will achieve this by supporting teachers in designing and implementing climate justice lessons for their students by funding supplies and resources. Educators will network to learn best practices with classroom experts in environmental justice studies.

By learning how to teach students across Chicago how climate change works, how to investigate climate problems and solutions, and how to get involved in civic action for climate justice, teachers will empower students and their colleagues to demand green policy solutions that transform the physical infrastructure and the everyday practices of schools and communities.

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## **Project Goals**

The overarching goal is to provide educators with educational materials, climate justicerelated pedagogy, curriculum, and ongoing support to bring coherent, accessible, culturally responsive, and student-centered climate justice education to public schools across Chicago to empower young people and their school communities to advocate and win green policy transformations that truly address the imperatives of the climate crisis.

- 1. Provide targeted funding for classroom supplies to teach climate justice in Chicago Public Schools.
- 2. Support educators with professional development where they learn to design and implement climate justice education into their curriculum and instruction.
- 3. Share the climate justice lessons and student impact through storytelling, investigations, and public advocacy of school and community-based climate solutions.



The CJEP lessons were designed and developed by Pre-K through 12th-grade teachers from communities throughout Chicago, focusing on supporting communities in Chicago's West, South, and South East, where environmental racism has the most significant negative impact on the lives of families and students.

### Neighborhoods

Roseland, Greater Grand Crossing, South Shore, Chicago Lawn, Woodlawn, Bridgeport, South Loop, West Town, Irving Park, and Rogers Park.

### Schools

Lionel Hampton Fine & Performing Arts School, Suder Montessori Magnet School, Burnside Scholastic Academy, Dunne Technology Academy, Mount Vernon Elementary School, Robert Healy Elementary School, National Teacher's Academy, George Armstrong Elementary School, Burley Elementary School, Paul Revere Elementary School, Arnold Mireles Academy, Richard T. Crane Medical Prep High School, and Air Force Academy.



## Audience

The Chicago Teachers Union Foundation invited educated from targeted school communities with educators who serve communities of color most impacted by environmental degradation to attend Quest Center Professional Development on environmental justice and apply for grant support to design and develop their classroom climate lessons to influence change in their communities.

The CJEP supported climate justice education for students through education, civics, and policyinfluencing units of instruction. Educators received funding for the supplies to implement the lesson/unit of instruction they designed alongside the Quest Center for Professional Learning and Teacher Leadership support. Educators submit a project plan to extend the learning of climate justice with their class through the CJEP application. Nineteen CTU member educators completed the course and implemented their lessons using funds for classroom supplies and experiential learning activities to support their school-based environmental justice plan.







30 ISBE PD Hours 2 Lane Placement Credits

#### **Course Description**

In this course, educators will collaborate to learn ways they can teach the topic of climate change through student inquiry projects that connect to issues of racial justice, climate solutions, and civic action. All live online sessions and asynchronous activities focus on educators learning to engage students in climate change for all content and grade levels. Participants will learn strategies to develop and facilitate inquiry projects that lead students to research the impacts of climate change to create civic action by students toward the goal of mitigating climate change.

#### **Course Objectives**

Participants will learn how to:

- Engage students on climate change at many grade levels in a way that fosters student empowerment, hope, and advocacy.
- Adapt and integrate climate change curriculum with other subjects.
- Connect climate justice education to racial justice and their students' personal experiences.
- Facilitate inquiry projects that lead students to research the impacts of climate change and the local actions schools and communities can take.
- Coordinate meaningful civic action by students toward the goal of mitigating climate change.

The Chicago Teachers Union Foundation QUEST CENTER for Professional Learning and Teacher Leadership is the premier professional development provider supporting Chicago's public school educators through re-licensure, National Board Certification, and endorsements. New through veteran educators collaborate, network, and learn to improve their practice by addressing students' cognitive development and social-emotional well-being via culturally responsive, trauma-sensitive learning environments.

The Quest Center serves public school teachers, clinicians, counselors, and PSRPs. We offer a variety of professional learning opportunities through workshops and courses. Our professional development offerings provide the opportunity for participants to collaborate and network to improve their practice. All sessions offer ISBE Professional Development Hours, and some courses offer an additional CPS Lane Placement Credit.



# Teaching Climate Justice Through Interdisciplinary Learning

Climate Justice Education Project Class of 2023

## **Climate Justice Education Project**



Teaching Climate Justice Through Interdisciplinary Learning CJ 2023 Instructors: Ayesha Qazi-Lampert & Erin A. Lynch The CJEP 2023 Cohort was comprised of PreK to 12th grade educators who completed the 30hour professional development course, "Teaching Climate Justice Through Interdisciplinary Learning," instructed by **Ayesha Qazi-Lampert**, Environmental Instructor at Northside College Prep, and **Erin A. Lynch**, Visual Arts Teacher at Jahn Elementary School.







# Implementing Environmental Justice into the Expanded Core Curriculum for Visually Impaired Youths



**Implementing Environmental Justice For Visually Impaired Youths** Elementary By Dee Fredrick

City-Wide Specialist

#### Learning Outcomes

• To provide insight on environmental justice, environmental equity and ways to make the community better starting at home.

# Call to Action Question

How can I personally start to change my community starting at home and bringing my knowledge to school.

#### Lesson Overview

The student will read the book "My Green Day," making connections on how this book personally relates to them. The student will then learn about environmental justice and environmental equity through an introduction of brief articles, specifically making connections to her own community. The student will complete the lesson by using a compost bin to make compost. Once the student has successfully made compost, it will be transported to school, where community organizers can use the compost around the gardens of the school. Further extension of the lesson would have the student make a short presentation to her class.

#### How can this lesson connect to racial justice?

This particular lesson connects to racial justice because my student lives in a very desolate, poverty-stricken area with no stores in sight and very little resources.





# **Gardening with Littles**



Gardening with Littles Pre-Kindergarten By Kenika Carter

Lionel Hampton Fine & Performing Arts School

### Learning Outcomes

- Students will identify the importance of trees and why we, as people, need them.
- Students will learn what trees require to stay alive and healthy.
- Students will take a poll on who has ever planted their own plant or who has a garden at their home.

# **Call to Action Question**

How can students learn how and use skills to help them grow plants/vegetables to have healthy food?

#### **Lesson Overview**

In the lesson, "Gardening with Littles," PreK students will extend their learning about Plants in our Themed Studies with books and videos. The students will learn about the importance of plants/herbs, what's needed to grow, what damages them, and how to grow and harvest your own herb. Students will learn about different herbs and discuss if they ever had it before. The students will plant their own garden pot, and once their pot is growing, they will be able to take it home to continue with the growth. Once it's ready, parents will be able to harvest the herb and hopefully use it in their daily meals. Parents will also be able to come to the class and harvest many of the herbs we planted in our indoor raised planter bed.

#### **Community Connection**

The Chicago Community Garden Association is a great organization to speak with my littles about gardening. CCGA teaches how to read seed packets, saving vegetables and starting seeds indoors, everything we've been learning about.









# **Reducing Single Use Plastics**



#### **Reducing Single Use Plastics**

Pre-Kindergarten - 3rd Grade By Maureen Fogarty Suder Montessori Elementary School

#### Learning Outcomes

- Students will be able to describe what a single-use plastic item is in reference to food.
- Students will be able to list alternatives to single-use plastics.
- Students will be able to explain how single-use plastics are harmful for the environment.

# **Call to Action Question**

How can you help the environment by being mindful of the foods you eat and the packages they come in?

#### **Lesson Overview**

The learning activity will start with reading "What a Waste" by Jess French. Then several common single-use plastics that are food-related will be taken from a basket and placed on a Montessori rug. The three single-use plastic containers are a one-use cereal, one-use yogurt container, and one-use water bottle. Then the students will be asked to match the single-use container with an environmentally better option. The options to match will be one-use cereal container to a cereal box, a plastic yogurt container to a glass one, and a one-use water bottle to a reusable water bottle.

Students will be asked how we could reduce single-use plastic in the classroom. Students will be introduced to a cereal holder with bowls and spoons they can use in the classroom for breakfast.





# **Planting for Our Future**



Planting for Our Future Pre-Kindergarten By Stephanie Essling Suder Montessori Elementary School

#### Learning Outcomes

- Students will learn how to garden and learn about different types of soil.
- Students will learn about the different lifecycles of plants.
- Students will reach out to our community by making seed bombs for others and explaining the importance of plants.

# Call to Action Question

# How can we inform our community about the importance of plants and vegetation?

#### **Lesson Overview**

Students will learn how to garden and learn about types of plants and soil. They will have the opportunity to plant seeds in our raised garden beds and care for the plants as the grow. We will also do a read aloud unit on gardening and plants. Students will have the opportunity to make seed bombs and share the importance of plants with the community.

#### **Community Connection**

I connected with families who know about gardening to share their expertise with us. They helped us with our flower beds and made different types of seed bombs to share. We also shared the seed bombs and knowledge with our school community.









# **Biomes of the World**



**Biomes of the World** Pre-Kindergarten By Celine Guerrero Suder Montessori Elementary School

#### Learning Outcomes

- Students will learn about the different components of the world- land, air, and water.
- Students will explore and learn about different biomes of the world. They will be able to contribute their ideas in a discussion on how to preserve the biomes.
- Students will be able to write a persuasive writing piece (letter, poster, etc) that explains how to save the biomes of Chicago with their community.

# Call to Action Question What can you contribute to the preservation of the biomes of the world?

#### **Lesson Overview**

This lesson is a multi-day unit. My students will be able to learn the different concepts and realize the grandeur of the world. Their persuasive writing will be their connection to the community and the topic, wherein the students will be able to share different ways on how to become part of the solution (to save the world).

# How can this connect to racial justice? How can this connect to big climate policy solutions?

Learning about the different biomes in early childhood provides my students with information on the interconnectedness of everything that surrounds them. This will allow them to find the motivation to do their part to support the movement to keep the world healthy. The introduction of this big picture idea will entice and empower my students to pay attention to the world and encourage their families and communities to support a more conscientious way of living. By understanding that we are all co-inhabitants of the Earth, our collective efforts, from all parts of the globe to our local neighborhoods, work to sustain a healthy planet. I believe that my lesson will play its part in contributing to the next generation's acknowledgment of the climate problems ahead of them. My role as a teacher is to spark that interest and continue to inspire future policymakers to act on this important crisis.





# Healthy Start, Healthy Heart



Healthy Start, Healthy Heart Elementary By Shawana Ridley Burnside Scholastic Academy

#### Learning Outcomes

- Students learn the importance of healthy food choices.
- Students learn the parts, growth, and needs of plants.
- Students learn the difference between soil-based fruit and vegetables and hydroponics.
- Students experience how plants can grow into healthy foods that supply our bodies with the
- nutrients needed for survival.

# **Call to Action Question**

How can eating healthy increase your ability to think clearer making healthy choices inside the body and outside the body?

#### Lesson Overview

Students build an indoor vegetable garden, monitor seed growth and learn the nutritional value of the vegetables and spices grown in the class.

# Earth Day ~ Litter Leaders



Earth Day ~ Litter Leaders Third Grade Elementary By Tamara T. Jones Dunne Technology Academy

#### Learning Outcomes

- Students will be able to identify and classify types of waste materials/litter and know what types of waste can be reduced, reused, and recycled.
- Students will be able to differentiate between items that are man-made and those that are natural. They will understand that "trash out of place" such as on roadsides is litter.

# Call to Action Question

How many people are needed to recycle? Is it easier to recycle when people help one another?

#### Lesson Overview

The teacher will have the students watch "How Trash is Recycled with LeVar Burton". The teacher will then begin leading the class in a discussion covering the key terms.







# **Pollution Solution**



**Pollution Solution** 

Fourth Grade Elementary By Kitty Ma Mount Vernon Elementary School

#### Learning Outcomes

- Students will be able to identify the various types of pollution.
- Students will collaborate to identify how pollution impacts their school, home, and neighborhood community.
- Students will collaborate to determine action-oriented ways to impact pollution in our school, home, and neighborhood community.
- Students will decide how to share their knowledge and potential action-oriented solutions to reduce pollution.

# **Call to Action Question** What are ways that we can prevent pollution?

#### **Lesson Overview**

Earlier this year, we engaged in learning around pollution and renewable energy resources. One of the studentgenerated questions we kept returning to was, "What can be done about the problem of pollution?". Through this mini-unit on pollution, we will do a deeper dive into the different types of pollution, and some actionable steps we can take to reduce pollution. In the first lesson, students will explore a curated text set on learning more about the different types of pollution. Students will work in groups of 3 to chart their learning on Wipebooks to answer the following questions: What are major types of pollution? What kinds of pollution do we see in our school, home, and neighborhood community? In the second lesson, in groups of 3, students will use the Wipebooks to generate ideas on how we can impact pollution in our communities. Using these ideas, as a whole-group, we will determine what project will help us measure and reduce pollution with the intention of engaging multiple classrooms in our project. In the third lesson, students will brainstorm ways to teach others what they have learned about pollution, and to invite them to participate in our day of action.



# **Get Upcycling**



### Get Upcycling

Fifth Grade Science Elementary By Eleanor Tom Robert Healy Elementary School

#### Learning Outcomes

- Students will define and reflect consumerism, evaluate how media and society influences consumerism.
- Students will research, and analyze how consumerism impacts our environmental health.
- Students will create solutions, Poster toward Earth Friend- Movement, promote the benefits of recycling and upcycle.
- Students will create products, identify people, or companies to promote awareness, and concerns (writing impact letters).

# Call to Action Question How does consumerism affect who we are and the environment we live in?



### **Lesson Overview**

Students will evaluate the impact of consumerism in correlation to waste pollution. By making personal reflections, students will evaluate and create solutions to alleviate problems. They Students will create upcycling products to promote consciousness and being kind to our environment.









# **Trees and Native Plants and Protecting Sanctuaries**



**Trees and Native Plants and Protecting Sanctuaries** 

Fifth Grade Social Science By Autumn Laidler National Teacher's Academy

#### Learning Outcomes

- Students will name positive outcomes to green spaces and efforts to gain and protect green spaces.
- Students will grow and plant Native Plants at school, name and understand the role of native plants in the local ecosystem and their importance to pollinators.
- Students will learn and understand the role of trees in air quality.
- Students will be able to see their own advocacy in action and name how change can be done by individuals
  or groups

# **Call to Action Question**

How can the public advocate for land to remain public and for the land to remain committed to native plants, animals and the people?

#### Lesson Overview

Students will be planting Native Plants around our school and learning about the pollinators that are attracted. They will be build a food web with research to show how the plants are interconnected to the system. Students will also learn about the South Shore Sanctuary and the advocacy needed to protect the sanctuary and not allow a golf course to be built, as it harms the native ecosystem. Students will work with teams to speak to elected officials and create flyers for families to inform them of the proposal. Students will work to distribute petitions to support keeping the sanctuary and why it benefits Chicagoans.

Students will also learn the role of trees in improving air quality. Students will be planting 10 trees on campus with the support of OpenLands. They will make advertisements for the event and share the benefits of adding trees to our school campus. Students will track air quality and also research the impacts on the bad air quality on youth.





# **Breathing Greener Air**



### Breathing Greener Air

3rd Grade - Library & Language Arts By Michelle Naughton Robert Healy Elementary School



### Learning Outcomes

- Students will identify the causes of air pollution and how society can contribute to the increase or decrease.
- Students will identify cause and effect relationships between the components of nature such as soil, plants, air and humans.
- Students will use fictional and nonfictional texts to learn about air pollution and environmental activism.
- Students will learn about upcycling and how to reuse everyday items.
- Students will learn how to be proponents of environmental justice on air pollution and other topics.

# Call to Action Question How can we find ways to improve our school's air quality to make it a safer environment?

#### Lesson Overview

This unit will be an extension of 3rd Grade Science lessons on plants, natural resources, and how environmental changes affect living things. Because this unit will be taught mainly in the Library, there will be an emphasis on using informational text. The lessons include several teacher read-alouds that will guide the students about topics such as air pollution, air quality, environmental activism, and persons involved in activism. Other lessons will allow the students to see how plants affect the air we breathe. The students will then create original poetry or letters to express the importance of plants on air quality and present them with each plant. The goal for this unit is for the students to learn about how air pollution is part of our everyday lives and how we can work to reduce the amounts both individually and collectively.

## How does this lesson connect to racial justice?

Robert Healy Elementary School is located on the South Side of Chicago in a high air pollution area. 73.5% of our school population are Low-Income Students. Our community is approximately 65% minority with a high population density. "Research has shown that racial and ethnic minorities and lower-income groups in the U.S. are at a higher risk of premature death from exposure to PM2.5 air pollution than other pollution and income groups. It has been shown that there are disparities in exposure to air pollution among these groups." (Harvard.edu, 2022)

There are **very few green spaces** in our community and around our schools. This project will help to create an awareness of using plants and vegetation to help **filter out air toxins**. The goal is to inspire students to help make changes for themselves and their community.









# Measuring Climate Change



#### **Measuring Climate Change**

Fifth Grade Mathematics By Jasmine Eisner George Armstrong Elementary School

#### Learning Outcomes

- Students will represent and interpret data about climate change
- · Students will discuss the causes and consequences of climate change and how it relates to themselves
- · Students will visual and convert between units of measurement

# Call to Action Question

What changes are happening in the world because of climate change, and what can I do to help the problem?

#### Lesson Overview

In this lesson, students will learn about the metric and customary systems of units and learn how to convert between units within the same system. We will approach this interdisciplinary by reviewing measurement units while beginning to read about climate change. In the third week, students will present about what they learned on climate change. We will be using tools to take measurements in the metric system. Students will create graphs and charts using data we collected and data about climate change.



# What kinds of civic actions could students take?

Students will be writing persuasive letters and mailing them to various people in power based on their individual ask. Potential people they will write to are the President, the Governor, the mayor, their alderman, the CEO of CPS, or the school principal.

Many of the students will also create additional projects such as petitions, changes at home, posters, videos, and presentations however the only requirement is the letter.



# Public Persuasion and the Climate Crisis: Teaching Rhetoric and Critical Media Literacy



Public Persuasion and the Climate Crisis Eighth Grade Humanities By Russell Mayo, PhD Burley Elementary School



#### Learning Outcomes

- Students will analyze multimodal texts that inform, persuade, and move audiences about climate change.
- Students will understand how video, data, language, images, and sound combine to create persuasive texts.
- Students will explore how rhetorical appeals such as ethos, pathos, and logos combine in these persuasive nonfiction texts.
- Students will collaborate in small groups to read, analyze, and discuss a high-level nonfiction book about climate change and environmental justice.
- Students will apply these techniques to speak out about climate change and environmental issues and craft their own
  persuasive nonfiction texts for a specific audience

# Call to Action Question How can I carefully and critically read various forms of persuasive media involving climate change?

#### Lesson Overview

This 8th grade English Language Arts lesson is part of a unit teaching multimodal texts, including books and documentary films, that focus on climate change. Students will be learning a great deal about the causes and effects of global warming, as well as possible responses to the climate crisis. At the same time, they will be taught to analyze and understand how writers and filmmakers communicate about these issues to the public. How do these speakers craft multimodal texts to inform, persuade, and move audiences about these important issues? How do data, language, images, and sound, combine to create persuasive texts? How do rhetorical appeals such as ethos, pathos, and logos combine in these persuasive texts? How can students apply these techniques to speak out about climate change and environmental issues and craft their own persuasive texts?

# How can this lesson connect to racial justice?

The connections to racial justice are made throughout the ELA books and Social Studies curriculum documents, specifically focusing on how to respond to the climate crisis at local, national, and international levels. Students learn about who is most/least responsible for contributing to this crisis and who is most/least vulnerable to the changes happening. Environmental justice also plays an important role in most of the "Think-Tac-Toe" group projects.

# How can this connect to big climate policy solutions?

In Social Studies, students discuss and examine forms of adaptation that can and will happen around the world, specifically engaging in a mock COP meeting as delegates and representatives deliberating future climate policy. They also research policies such as the Green New Deal, the CTU's Green Schools Plan, and local climate/environmental activism through their "Think-Tac-Toe" group projects.







# **Environmental Justice at Paul Revere Elementary School**

# **Call to Action Question**

How can the scholars of Paul Revere reduce, recycle, and reuse items in their community to promote a healthier sense of self through the SEL conduits of using fashion?



### **Civic Engagement Problem Solving**

Restorative Justice Coordinator By Monica Beal

#### Learning Outcomes

- Students will be able to resolve real-world problems using civic engagement.
- Students will learn how to cultivate problem solutions in the community and at home.
- Students will be able to define and explain civic engagement.



### **Recycling For Change**

Diverse Learners Third - Eighth Grade By Romanetha Walker

#### Learning Outcomes

- Students will know how to write a persuasive essay to include an introduction, hook, explain two reasons to support their side, and one counterargument concluding with a call to action to their Alderperson.
- Students will create a google slide to present their data findings on the three top environmental issues that plagued their community.
- Students will research solutions/ next steps to the three top environmental issues in their community.



### **Community Environmental Injustices**

Diverse Learners Third - Eighth Grade By Mary Dieudonne

#### Learning Outcomes

- Students will be able to understand that their voice can ensure equitable representation, and protection of the rights of those most vulnerable affected by environmental injustices.
- Students will be abe to define environmental injustices.
- Student will be able to identify various environmental injustices in their community.
- Students will know how to write a persuasive letter to included an introduction, hook, explain two reason to support their side and one counter argument and concluding with an call to action.



# **Environmental Justice at Paul Revere Elementary School**



## How do these lessons connect to racial justice?

Due to scholars living in under privilege, gang violence, and desert area, many would have never gained experience or be exposed to civic engagement. The opportunities will give scholars a chance to empower a voice that may not occur for the scholars who would not have been for this opportunity and experience the future of their hairstyle and learn about recycling in their community.

Scholars will work together in developing the fashion show. Scholars will use height x width and measure how much greenery will be needed to measure and design an area for display for the fashion show. Scholars will measure and cover a cabinet to design a visual display on the crown act for Social Science. The crown act exhibit which the scholars had created wooden heads, colored them, and use wigs and hair to describe their culture hair and added jewels to describe their royalty. Scholars will write a paper on how they feel the crown act affects them and them by designing props, designing clothes and working together, and learning personal jobs.

Due to the environmental issues that are commonly found in the black and brown communities, this will bring awareness to a sleep community on how this affects their living. Scholars will learn how to create a fashion show that will provide social and environmental awareness.







# We Are Born Resilient!!



We Are Born Resilient!! 7th & 8th Grade By Deidre Akram Arnold Mireles Academy

#### Learning Outcomes

• The student will explore Social and Racial Justice to create a Shared Vision, Set of Beliefs, Expectations and Direction for Desired Behaviors and Norms, that reflect Their Voice, Their Vison, Their World for Today!!

# Call to Action Question What Conversation Do You Want To Have!?

#### Lesson Overview

Students will collaborate in many activities during the unit of instruction from creating an art piece in Week #1, performing a slam poem, skit, or creating a video in Week #2, then choosing a book to summarize and then change the ending to the best ending for today's social justice needs, and in week #5 end with a Culture Wall as a culminating event.

# YOU Be The Media



YOU Be The Media: How Can the Green New Deal Benefit Our Society? 9th Grade Civics

By Nick Lucas

Richard T. Crane Medical Prep High School

#### **Learning Outcomes**

- Students will explain why addressing racial and economic justice are essential components of climate change solutions
- Students will create a media message evaluating (at least) 2 components of the Green New Deal
- Students will identify how media messages are constructed with particular purposes, reflecting embedded values and points of view and using a creative language with its own rules.

# **Call to Action Question**

How does media coverage of proposed environmental legislation impact its public perception and public support?

#### Lesson Overview

Students analyze media coverage of activists and the Green New Deal. Through their own inquiry, they discover and question this vast difference in coverage. While they analyze for themselves the components of the Green New Deal, they deliberate and debate with fellow classmates the merits of its many different components, explaining to their peers/American public its potential impacts on our society and democracy.



# It's Not Easy Being Green



It's Not Easy Being Green 10th Grade US History By William T. Langevin Air Force Academy

#### Learning Outcomes

- Connect waste consumption to actions.
- Quantify and sort waste from the school.
- Analyze waste and recycling systems currently in place at our school.
- Work to implement newer, greener solutions to current waste and recycling issues at Air Force.

# **Call to Action Question**

What steps can our school take to move closer to reducing our carbon footprint?

#### **Lesson Overview**

After highlighting lack of sustainability at our school, my class decided they wanted to quantify approximately how much waste Air Force produces per day/week. Using this information, students will be working towards building a more sustainable school in terms of waste and recycling. Currently, our school does not recycle at all.

After collecting and analyzing the type and amount of garbage/recycling collected, students will come up with ways that Air Force students can sort organic, recycling, and general waste with the goal of moving Air Force towards greener practices.

Not only that, we questioned what we could tangibly do in order to reduce the waste and Air Force's Carbon footprint by working towards building and maintaining a compost heap with the long-term goal of the following year to build a school garden or green space.





# Acknowledgments

# Chicago Teachers Union Foundation Board of Directors

Stacy Davis Gates, CTU President Jackson Potter, CTU Vice President Christel Williams-Hayes, CTU Recording Secretary Maria T. Moreno, CTU Financial Secretary Jesse Sharkey, CTU Past President Paula Barajas, CTUF Board Member Carmen Curet, CTUF Executive Director

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### Implementing Environmental Justice Into The Expanded Core Curriculum for Visually Impaired Youths By Dee Fredrick

Climate Justice Lesson

Learning Outcomes:

- To begin an understanding of how we impact the environment individual at a time.
- List least three ways we can change the environment starting at home.
- List three ways we can change the environment at school.
- Demonstrate knowledge of how making these changes can help the environment.

Hook/Phenomena (headline, video, tweet, map, pictures, audio, article):

• A picture of a compost bin with flowers surrounding.

Call to Action Question:

• How can I change the environment starting at home?

Content and Learning Experiences:

The student will begin by reading the book "My Green Day." Then student will learn ways she can contribute to the environment and make connections to her own home and community. I will focus specifically on composting. We will take a deeper dive into composting by discovering what it is and how it can help the environment. The student will culminate the lesson by starting to compost at home and finally bringing what was compost at home to school to give to the community partners.

How can this connect to racial justice?	How can this connect to big climate policy solutions?
This particular lesson connects to	This can connect to big climate policy
racial justice, because my student	solutions, by spreading the knowledge
lives in a very desolate, poverty	and hopefully starting small practices at
stricken area with no stores in sight	home which will trickle over in other
and very little resources.	areas.

Community Connection

What community activists, experts, leaders can we bring into this conversation? I am hoping to bring in the community partners who help plant flowers around the school.

Potential Culminating Action Pathways:

What kinds of civic actions could students take?

Student should be vocal and let all her peers and people in her community know what she is doing to make the environment better.

Student Discussion and Reflection

I would like for my student to start planning or taking action in showing the people in her community how using a compost bin or conserving energy is beneficial to the environment. I would also like for her to speak to her classmates and/or principal about ways to make the school more environmentally friendly.

### Gardening with Littles by Kenika Carter

Climate Justice Lesson

Learning Outcomes: Students will identify on the importance of trees and why we as people need them, Students will learn about the different herbs and plant their own Students will take a poll on who has ever planted their own plant/or who has a garden at their home. Hook/Phenomena (headline, video, tweet, map, pictures, audio, article): Students will read Casey's Compost and watch a video on how to properly plant and harvest their herbs. Call to Action Question: How can students learn how and use skills to help them grow their own plants/herbs to always have access to healthy eating. Content and Learning Experiences: Co-construct and anchor chart: In the lesson, "Gardening with Littles," PreK students will extend their learning about Plants in our Themed Studies with books and videos. The students will learn about the importance of plants/herbs, what's needed to grow, what damages them, and how to grow and harvest your own herb. Students will learn about different herbs and discuss if they ever had it before. The students will plant their own garden pot, and once their pot is growing, they will be able to take it home to continue with the growth. Once it's ready, parents will be able to harvest the herb and hopefully use it in their daily meals. Parents will also be able to come to the class and harvest many of the herbs we planted in our indoor raised planter bed. How can this connect to racial justice? How can this connect to big climate policy solutions? At my school, we have 5 very nice planters but no one takes care of it. The dirt is hard and the fragile trig is hardly thriving. There isn't any grocery stores around the neighborhood. I wanted to introduce to my students how they can grow their own herbs to have healthy options. They even learned how they can also take a slice of tomato and plant it for them to grow their own How to maybe make composting a city wide policy or in schools. vegetables. Community Connection The Chicago Community Garden Association would be a great organization to speak with my littles about gardening. CCGA teaches how to read seed packets, saving vegetables and starting seeds indoors, everything we've been learning about.

Potential Culminating Action Pathways:

Once students grow their own herb at school they will be able to take it home with instructions on how to take care of it in order for it to continue to grow and how to properly harvest it. We are also growing herbs inside the classroom in our indoor raised garden bed where parents are able to come and harvest herbs such as: Rosemary, dill, cilantro, peppermint, sage, basil and oregano.

#### Student Discussion and Reflection

While reading the book Casey's Compost, of course many of my students Eew the whole book. Once they saw the bugs, ants, half eaten fruits, and flies, they were no longer interested in learning about composting. However, at the end of the book, they did understand how the tree began to look vibrant and thriving, they understood the soil needed food. Students were able to connect with some of the herbs we learned about. Some of them mentioned they had peppermint inside their tea, ice cream and even had cilantro on their chicken. Students also enjoyed putting soil inside their planter and watering it. It was surprising that no altercation happened, they all shared the watering can, and shovels. It only took over the weekend for students to come back to school to see that 3 planters already started to bud cilantro. Now everyone is looking at their planters and waiting to see the magic happen.

# Climate Justice Early Childhood Montessori Lesson Plan: Lower Your Plastic Usage and Reduce Your Food Waste by Maureen Fogarty

Learning Outcomes:

- Be able to correctly identify single-use food plastics
- Identify correct child portion sizes
- Identify the difference between trash and recycling materials
- Correctly identify different types of recyclables and garbage
- Understand that single-use plastic negatively impacts the environment and creates extra waste in landfills
- Application of what can be used/purchased instead of single-use plastic food products
- Be able to articulate the difference between reduce, reuse, and recycle
- Be able to explain what food waste is and why it's negative to the environment
- Know what resources are available to them in the classroom to lower their plastic and food waste
- Be able to explain and put into action ways they can positively impact the environment by actions they use choose in the classroom and at home

Hook/Phenomena (headline, video, tweet, map, pictures, audio, article):

- The plastic problem isn't your fault, but you can be part of the solution.
- <u>https://www.npr.org/2021/07/12/1015296355/zero-waste-single-use-plastic-trash-recycle</u>
- Plastic Pollution and the River
- <u>https://www.chicagoriver.org/issues/policy/plastic-pollution-and-the-river</u>
- Plastic, be gone! How you can help Chicago restaurants and businesses reduce plastic use

Call to Action Question:

• Will you become more conscious of the amount of food you throw away and the packaging it comes in?

Content and Learning Experiences:

- Learning activities that focus on food waste, recycling, and treating the earth with respect will be integrated throughout the Montessori early childhood classroom which blends students that are prek-3, prek-4, and in kindergarten.
- The learning activities will start with reading books during twice daily "Read-ALouds" over a two week period.
  - "What a Waste" by Jess French.
  - Where Do Garbage Trucks Go?: And Other Questions about Trash and Recycling Ben Richmond
  - Pierre the French Bulldog Recycles Kate Louise
  - Peep Inside: How a Recycling Truck Works Lara Bryan
  - 10 Things I Can Do to Help My World Melanie Walsh CTU Foundation Quest Center for Professional Learning

- We Are All Connected, Taking Care of the Earth and Eachother Gabi Garcia
- Good Enough to Eat: A Kid's Guide to Food and Nutrition
- I can Eat a Rainbow by Olena Rose
- Budding Flowers, Breezy Days by Essie Bell
- The Adventurers of Aluminum Can: A Story About Recycling by Alison Inches
  - As the books are read they are added to the correct sections of the classroom library. Most books will go in section 4 (science) but some will be allocated to section 7 (peace). An additional book that doesn't fit Read-A-Load will be introduced to the children as available to the children section 2 (numbers) titled I Spy Garbage Trucks, I Spy Book for 2,3,4,5 Year Olds which features both garbage and recycling trucks that children have to count on each page. This is to reinforce the difference between a garbage truck and recycling truck.
- A handmade Montessori Better Choice Plastic sorting work with real items will be placed in the practical life area. Then several common single-use plastics that are food related will be taken from a basket and placed on a Montessori rug. Four single-use plastic items are a one-use cereal, one-use yogurt container, a plastic straw, a plastic spoon, and one-use water bottle. Then the students will be asked to match with the single-use container with an environmentally better option. The options to match will be one-use cereal container to a cereal box and reusable bowl, a plastic yogurt container to a glass one, a plastic straw to be matched with a reusable one, a disposable spoon to be matched with a reusable one, and a one-use water bottle to a reusable water bottle.
  - Students will be asked in what ways we could reduce single-use plastic in the classroom.
     Students will be introduced to a cereal holder with bowls and spoons they can use in the classroom for breakfast.
- Students will be introduced to a new breakfast setup that uses a cereal dispenser with a choice of two cereals, two different types of fruit that have been cut up (instead of left whole), given the option of zero-sugar oat milk or the typical cows milk provided by Chicago Public Schools Breakfast. They are given reusable bowls, plates, straws, and spoons to replace the typical throw away kind.
  - It is common in a Montessori early childhood classroom to have a dishwashing station. This already existed in our classroom and is an integral part of making reusable spoons, straws, plates, and forks work in the classroom.
  - $\circ$   $\,$  Paper straws will be provided to children who chew on the plastic straws.
- A Montessori sorting work will be added where children sort between items that are recyclable, food waste, regular garbage, and hazardous garbage. This work is taken from an existing educational toy called Fun Little Toys 12.2" Garbage Truck Toys with Lights and Sounds. This sorting work will be available on the science shelf.
- A Montessori Screwdriver Board Set of a garbage truck will be added to the practical life shelf. This is to reinforce the difference between a garbage truck and recycling truck.
- A Recycling and Conservation Pattern Block Set is added to the practical life area where students look at pictures and add geometric shapes to patterns that focus on recycling and conservation.

- A Recycling Truck Shaped Puzzle is added to the practical life area which pictures a racoon driving a garbage truck in a 15 piece puzzle appropriate for most pre k-3 and pre k-4 students. This is to reinforce the difference between a garbage truck and recycling truck.
- A go-together Respect The Earth Ecologic Puzzle is introduced and placed on the science shelf
  where children match a behavior that is negative for the environment to an activity that is positive for
  the environment. The go-togethers including throwing an item in the trash verses throwing it away in
  a recycling bin, littering verses picking up your own garbage along with others, driving a car versus
  riding your bike, leaving the sink on while brushing your teeth verses turning the water off, running
  over flowers verses watering them, leaving a television on while sleeping verses turning it off at night,
  using a plastic water bottle verses using glass, throwing away left-over food versus saving it in
  reusable containers, using a lamp for light when reading a book verses opening the blinds and using
  sunshine to read, grocery shopping verses growing your own food in a garden, and taking a bath
  verses taking a shower.
  - This activity pairs well to be introduced after reading the previously mentioned book, 10 Things I can Do to Help my World

How can this connect to racial justice?

- By reducing plastic there is less potential garbage from Suder Elementary to the primarily Black of African American residents also residing in 60612. Additionally, the breakfasts provided by the classroom are low/no sugar cereal, low sugar yogurt, zero sugar oatmilk, and appropriately portioned servings of fruit for 3, 4, 5, and 6 year-old. This reduces the students' morning sugar consumption to no more than 10 grams of sugar. The breakfast they had previously would around 27 grams of sugar.
- Among 2- to 5-years olds non-Hispanic Black children have a daily average of 13 teaspoons, 12 teaspoons for non-Hispanic White children, 11 teaspoons for Hispanic children, and 7 teaspoons for non-Hispanic Asian children of daily added sugar. A leading indicator of health, according to the CDC, is consuming a minimum amount of added sugar, with no more than 200 calories a day coming from added sugar. A high-sugar breakfast decreases attention span and memory. By providing a lower sugar breakfast to the diverse children in my classroom, racial justice is provided that is in-line with the resources of non-Hispanic White children that come from middle to upper class.

How can this connect to big climate policy solutions?

• If my classroom can successfully show that it is possible to provide a zero plastic waste breakfast, that is also healthier, and sets up children for better academic achievements and long-term better health outcomes while saving the school and district money it can start a ripple effect among the largest public school systems in the United States. Grants can be provided and single use plastic can be a thing of a past within public schools

What community activists, experts, leaders can we bring into this conversation?

• Friends of the Chicago River could present.

Potential Culminating Action Pathways:

What kinds of civic actions could students take?

- Students can discuss with their parents ways they can reduce single-use plastics at home.
- Students can use the Shedd Aquarium "Plastic Be Gone" to reach out to restaurants they go to, to consider more green practices with takeout.

Student Discussion and Reflection

- Ask students to think of ways the classroom can reduce single-use plastic.
- Ask students of other products that can be used to sort to expand the" Better Plastic Choice" work.
- Have kindergarten students model after the 10 Little Things book and write and illustrate their own mini 5 Little Things book.

## Climate Justice Education Project 2023 Climate Justice Lesson Plan Stephanie Essling

Learning Outcomes:

- Students will learn about gardening and how to care for plants.
- Students will explore and learn the life cycles of plants.
- Students will learn why plants are important.

Hook/Phenomena (headline, video, tweet, map, pictures, audio, article):

• Students will look through various pictures of plants and gardens. We will discuss the photos and choose which plants we like and why we like them.

Call to Action Question:

• What can you do to show the importance of plants to our community?

Content and Learning Experiences:

• Students will learn how to garden and learn about types of plants and soil. They will have the opportunity to plant seeds in our raised garden beds and care for the plants as they grow. We will also do a read aloud unit on gardening and plants. Students will have the opportunity to make seed bombs and share the importance of plants with the community.

How can this connect to racial justice? How can this connect to big climate policy solutions?

• Learning about gardening will allow my students to learn how everything is connected and the importance of taking care of our Earth. We all need to make a collective effort to care for the Earth.

**Community Connection** 

What community activists, experts, leaders can we bring into this conversation?

 I connected with families who know about gardening to share their expertise with us. They helped us with our flower beds and made different types of seed bombs to share. We also shared the seed bombs and knowledge with our school community.

Potential Culminating Action Pathways:

What kinds of civic actions could students take?

• My students can begin civic actions by garden clean up, beautifying our outdoor space, and caring for plants and the environment They can also share their knowledge with others.

Student Discussion and Reflection

- What important ideas did you learn from this lesson?
- What are some actions that you will do to advocate for community gardens?

Pictures



#### Climate Justice Education Project 2023 Climate Justice Lesson Plan: Biomes of the World Celine Guerrero Suder Montessori Early Childhood

#### Learning Outcomes:

- Students will learn about the different components of the world- land, air, and water.
- Students will explore and learn different biomes of the world. They will be able to contribute their ideas in a discussion on how to preserve the biomes.
- Students will be able to write a persuasive writing piece (letter, poster, etc) that explains how to save the biomes of Chicago with their community.

#### Hook/Phenomena:

• I will use <u>this video</u> to create background knowledge about the different biomes of the world. The discussion will lead to highlighting the biomes in our own area (city, neighborhood, school, etc).

#### Call to Action Question:

- I will give my mini lesson on persuasive writing. Students will be able to apply the modeled lesson into their own writing. (See a problem, Think of a solution, Write and convince or inspire others to take action as well.)
- Question: All of the biomes of the world are connected and important for a healthy planet. How do we contribute to the preservation of our own biome in our neighborhood?

#### **Content and Learning Experiences:**

- Background knowledge- The class will complete graphic organizers such as K-W-L charts and word webs.
- Biomes Introduction, Three-Part Cards & Research (vocabulary, animals, etc.)
- Field Trip to the Peggy Notebaert Museum (especially the interactive biomes exhibit)
- Read Aloud books
  - What is a Biome? By Bobbie Kalman
  - Many Biomes, One Earth By Sneed Collard III
  - Over in the Grassland By Marianne Berkes
  - Here is the African Savanna By Madeleine Dunphy
  - Life in a Stream By Carol Lindeen
  - Life in an Ocean By Carol Lindeen
  - Over in the Ocean By Marrianne Berkes
  - Life in a Wetland By Carol Lindeen

- Over in the Forest By Marianne Berkes
- Life in a Forest By Carol Lindeen
- Over in a River By Marianne Berkes
- Life in a Pond By Carol Lindeen
- The Temperate Forest By Philip Johansson
- Old Enough To Save the Planet By Loll Kirby
- This Class Can Save The Planet By Stacy Torino
- The Magic & Mystery of Trees By Jen Green
- Extensions- Compare and contrast (Venn Diagram), writing extensions (how would it be like for you if you lived in \_\_\_\_\_ biome?)
- Persuasive Writing- The class will be able to write a persuasive writing piece to showcase what they've learned about the different biomes (with a highlight on their own city's biome). This learning will be evidenced in how the students come up with innovative ideas to help preserve the biomes.

## How can this connect to racial justice? How can this connect to big climate policy solutions?

 Learning about the different biomes in early childhood provides my students with information on the interconnectedness of everything that surrounds them. This will allow them to find the motivation to do their part to support the movement to keep the world healthy. The introduction of this big picture idea will entice and empower my students to pay attention to the world and encourage their families and communities to support a more conscientious way of living. By understanding that we are all co-inhabitants of the Earth, our collective efforts, from all parts of the globe to our local neighborhoods, work to sustain a healthy planet. I believe that my lesson will play its part in contributing to the next generation's acknowledgement of the climate problems ahead of them. My role as a teacher is to spark that interest and continue to inspire future policy makers to act on this important crisis.

#### **Community Connection:**

What community activists, experts, leaders can we bring into this conversation?

• I have contacted parents and families who are environmentalists, ecologists and the like to share their expertise and knowledge of the environment. They can help my students widen their thinking of the world. Conversations for nature appreciation will also be included during the presentation.

#### Potential Culminating Action Pathways:

What kinds of civic actions could students take?

• My early childhood students can begin their civic actions by way of neighborhood and

garden clean up, persuasive writing, and presentations of their learnings to the other early childhood classrooms.

#### **Student Discussion and Reflection:**

- What important ideas did you learn from this lesson?
- What are some actions that you will do to advocate for your neighborhood's biome?

#### Photos:





#### Healthy Start, Healthy Heart by Shawana Ridley

Climate Justice Lesson

Learning Outcomes: Students learn the importance of healthy food choices Students learn the parts, growth and needs of plants, Students learn the difference between soil based fruit and vegetables and hydroponics Students experience how plants can grow into healthy foods that supply our bodies with the nutrients needed for survival
<ul> <li>Hook/Phenomena (headline, video, tweet, map, pictures, audio, article):</li> <li>Ask students to brainstorm plants that we eat, or products that came from plants. Students can name any fruit, vegetable, or grain. Make a list on the board in a single column.</li> <li>Choose some of the food items from the list and ask the students how they were produced. For example, if the students listed an apple, ask them how apples are grown. If they do not know, explain that apples grow on trees and develop from a flower. Explain that a farmer must understand biology to be successful in producing apples. Give other examples reinforcing the fact that understanding basic biology and plant anatomy is crucial to the successful growth of the plants we use for food. Today, students will be learning basic understanding about the parts and functions of plants.</li> <li>Call to Action Question:</li> <li>Does eating fruit and vegetables improve brain function in children?</li> <li>How can we grow fresh fruits and vegetables in the classroom with limited space?</li> </ul>
Content and Learning Experiences:
Co-construct and anchor chart:
1. Students learn about seeds and what is required for them to grow successfully, i.e. soil, minerals etc.
<ol><li>Students learn about aquaponic seed growth and begin to learn about plants that produce vegetables.</li></ol>
5. Debate the pros and cons of different types of agriculture
<ol><li>Brainstorm ideas for growing produce inside the classroom with limited space</li></ol>
7. Work with teacher and classmates to decide which crops we would like to grow and its nutritional value
8. Plant seeds in rockwool cubes
9. build a classroom aquaponic system.

Community Connection What community activists, experts, and leaders can we bring into this conversation?

How can our communities encourage healthy choices like fresh fruit and vegetables

How can we ensure that our communities are receiving fresh fruit and vegetables in our local grocery stores?

How can we lower the cost of fruits and vegetables in lower income communities?

Can healthy food choices be impacted by society or based on social class, inherited choice based on family, community, etc?

Potential Culminating Action Pathways: What kinds of civic actions could students take? Students will campaign for healthy eating and provide organic grown products from our garden to teach others about healthy food and how it could impact our lives and society.

Student Discussion and Reflection

What types of fruit and vegetables are found in our local grocery stores? Are they fresh? Is it a variety?

Why are fruits and vegetables more expensive than other foods if they are grown naturally in the earth from a seed?

Is healthy eating based on social class or an inherited choice based on family, community, etc.

# Dunne Stem Academy Earth Day ~ Litter Leaders Challenge



## Room 112 ~3rd Grade Students Tamara Jones ~ Teacher Facilitators

### April 24 - 28, 2023

CTU Foundation Quest Center for Professional Learning

## Earth Day Video 🌎



CTU Foundation Quest Center for Professional Learning

## Earth Day~Litter Leaders Challenge Video 🌎



### Pre-K ~ Recycling for Kids | Recycling Plastic, Glass and Paper https://youtu.be/6jQ7y\_qQYUA

Kindergarten ~ Reduce, Reuse, Recycle: What Can Kids Do? https://youtu.be/ofcFuaKKJB4

First ~ Recycling: Why Is Recycling Important? https://youtu.be/71DmyhloazQ

Second ~ How Trash is Recycled with Levar Burton ~ <a href="https://youtu.be/FX55cKJvg-g">https://youtu.be/FX55cKJvg-g</a>

## The Inquiry Process 🌎





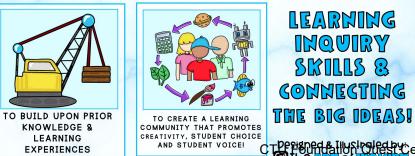




TO EXPLORE PERSONAL AND COMMUNITY INTERESTS, VIEWPOINTS AND DETERMINE A FOCUS



TO ENGAGE IN DISCUSSIONS ABOUT IDEAS AND POSE QUESTIONS TO THE LEARNING COMMUNITY



### Students will:

- Explore recycling.
- Analyze the question: Why is it important to reduce, reuse and recycle?
- Investigate the damage littering has done to the earth and the community around them.
- Engage in a recycling challenge.
- Measure the amount of recycling collected.
- Promote recycling for a cleaner environment

CTPPrinted Illustrolled by Center for Professional Learning

TO INVESTIGATE

STUDENT INTERESTS

FURTHER AND FIND

CONNECTIONS

## Call to Action Question Climate Justice Education Project 2023

How can we reduce, reuse and recycle our garbage?

Recycling is a team effort that everyone can participate in. Each class is responsible for collecting recyclable products and placing them in the appropriate bins for weighing.



### <u>Rules:</u>

- Work together as a class
- Sort your materials by category: paper, plastic, and aluminum
- Rinse & dry your recyclables
- Empty all food waste from recyclables before placing it in the bins

## Empathize and Define: What is Reaveling?

## What is Recycling?

- Definition
  - Collecting, separating, and changing items into something new
- Why we should recycle...
  - Save our planet
  - Saves natural resources like trees
  - Reduce pollution



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## Empathize and Define: Radelate Education Project 2023

## Reduce

## Sustainable choices means using disposable only when you need!

Using plastic when you need to doesn't mean you don't care. Doing so in excess is when it becomes a problem. Invest in some reusable items like a good water bottle and a couple of cloth bags and sub them in when you can.





## Empathize and Define: Relative Education Project 2023

Plastic never needs to be single-use!

Reuse

Plastic is strong and built to last. While this makes it hard to get rid of in the garbage, it also makes it a great item to reuse. One plastic water bottle can be refilled. Plastic utensils can be washed and reused. Plastic bags can be repurposed to dispose of waste.



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## Empathize and Define: Remy Oste Education Project 2023

## Recycle

#### A recycling center is the best place for your plastic to end up!

Not all plastics are recyclable in every area and some are hard to recycle anywhere. Educate yourself about what plastics are recyclable with your regular service and look for other locations for trickier items like shopping bags, styrofoam, and plastic wrappers.





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## The Benefits of Recycling Imate Justice Education Project 2023

#### **Recycling Saves Resources**

Recycling helps save our natural resources like coal, oil and gas. By choosing to recycle we can avoid the consumption of raw materials as well as the need to produce new products.

#### **Recycling Helps Protect The Environment**

Recycling helps prevent more damage to our environment. It does not only preserve natural resources because also help protects our ecosystem and every living organism that depends on it.

#### **Recycling Helps Save Energy**

Recycling products less use energy compared to creating new product. We can recycle many products like paper, plastic, glass and metal.

#### **Recycling Reduces Landfill Waste**

Landfill causes air, soil and water pollution. Decomposting materials release methane gas. Consequently, the air surrounding a landfill area oftentimes smell unpleasant.

#### **Recycling Reduces Incineration (Burning)**

The process of incineration generates carbon emissions that contribute to climate change. It also produce acid gases, carcinogen dioxin, particulates, heavy metals, and nitrogen oxide...



## The Environmental Impa@tate Justice Education Project 2023



## Collaborative Groups & Roles

EARTH day is a collaborative activity. Every student has a role to play which increases success and accountability. Groups have been created for each class.

Classroom	Technologist	Photographer	Teacher	Teacher Assistant	Material Handler
Pre-K	Makiya	Jabari	Deshaun	Lamont	Cameryn
Kindergarten	Zaria (Ryan)	Marquese	Moriah	Ja'Kylah (Jaden)	Kaiden
1st	Amir	Aiden	Madison	Tevin	Khaleal
2nd	Damyah	Jaice	Devon	Colavito	Za'Niylah
		Miscellaneous CTU Foundation Que	Ryan est Center for Professional L	Jaden earning	Justin

#### Pollution Solution by Kitty Ma

Climate Justice Lesson

<ul> <li>Learning Outcomes:</li> <li>Define pollution</li> <li>Identify the effects of pollution</li> <li>Determine possible solutions to impact pollution at a micro level</li> <li>Use a democratic process to select a solution</li> <li>Students</li> </ul>
<ul> <li>Call to Action Question:</li> <li>What can be done to reduce pollution at the school or community level?</li> </ul>
Content and Learning Experiences: <u>Week 1</u> Learning Objective: Students can define the four major types of pollution. Students can explain the effects of pollution.
Materials         - Variety of books and videos about pollution         - Books         - Discover It Yourself: Pollution and Waste         - Fact Planet: Pollution         - A Kid's Guide to Pollution and How It Can Make You Sick         - Videos         - "What are the 4 types of environmental pollution?" YouTube video         - "Pollution   Four Major Types Of Pollution" YouTube video         - Sticky notes, Jamboard, white boards (materials for students to share their thinking and work in collaborative groups)
<ul> <li><u>Structure/Activities</u></li> <li>1. Introduction: KWL Chart <ul> <li>a. On separate post-its, students will write out what they know about pollution and what they want to learn.</li> <li>b. Using small group or whole group discussion, students share what they have written down on their post-its. These post-its serve as a guide to choosing books and videos.</li> </ul> </li> </ul>
<ol> <li>Book/Video Exploration         <ul> <li>Throughout the week, choose videos and read-alouds for students to deepen their understanding around the four types of pollution. After each read-aloud, students can chart their learning to answer the following questions:</li></ul></li></ol>

#### Week 2

Learning Objective:

Students can describe some solutions to reduce pollution. Determine possible solutions to impact pollution at a microlevel Use a democratic process to select a solution

#### Materials

- Variety of books and videos about pollution
  - Books
    - Alba and the Ocean Cleanup
    - Lobstah Gahden
    - The Last Straw
    - The Mess That We Made
    - The Curious Garden
    - Iqbal and His Ingenious Idea
    - Old Enough to Save The Planet
  - Videos
    - *"Pollution Solution"* YouTube video (or Edpuzzle)
    - *"Air Pollution: Effects and Solution"* YouTube video (or Edpuzzle)
  - Sticky notes, Jamboard, white boards (materials for students to share their thinking and work in collaborative groups)

#### Structure/Activities

- 1. Using the learning from the previous week, students will take a poll (Google Form, voting) to determine the type of pollution they are interested in planning a day of action around
  - a. Note: if students are between two types of pollution, there could be a day of action that addresses both
- 2. Book/Video Exploration
  - a. Throughout the week, choose videos and read-alouds for students to deepen their understanding around possible solutions. After each read-aloud, students can chart their learning to answer the following questions:
    - i. What are ways to reduce pollution?
    - ii. How does pollution show up in our community?
- 3. Student selected action
  - a. Using a whole-group discussion, students identify ideas for a Day of Action (either class-based or school-based)
  - b. Individual students can then make pitches for a specific idea
  - c. Students vote on a Day of Action (through a poll, show of hands, etc.)

#### Week 3

#### Learning Objective:

Students plan and enact project

OPTIONAL: Students gather materials and share it with an audience (younger grades, school-wide announcements, Celebration of Learning)

#### <u>Materials:</u>

- Any materials needed to implement project

#### Structure/Activities

- 1. OPTIONAL: Students organize their learning to present it to an audience through a presentation (Google Slides, poster board, etc)
  - a. With students, determine the information they need to share with an audience (ie: What is pollution? What are the effects of pollution? What are some ways we can impact pollution?) Students form collaborative groups to tackle that part of the presentation.
- 2. With students, use the following questions to help plan the Day of Action
  - a. Who will take part in the Day of Action?
  - b. What materials do we need?
  - c. What kind of data can we gather to help us better understand the issue?
  - d. After the project, how can we use this data to create more long term solutions around pollution?

Community Connection

What community activists, experts, and leaders can we bring into this conversation?

- Alder Office
- Any community organizations

Potential Culminating Action Pathways:

What kinds of civic actions could students take?

- Community Clean Up
- Recycling Program
- Composting Program
- Learning Garden
- Upcycling Items

Student Discussion and Reflection

**Reflection Discussion** 

- How did the Day of Action go? What went well? What could be improved for next time?
- How can we use this data to create more long term solutions around pollution?

#### Get Upcyling by Eleanor Tom

**Climate Justice Lesson** 

Topic: Get UpCycling

Learning Outcomes:

- Students will define and reflect consumerism, evaluate how media and society influences consumerism.
- Students will research, and analyze how consumerism impacts our environmental health.
- Students will create solutions, Poster toward Earth Friend- Movement, promote the benefits of recycling and upcycle.
- Students will create products, identify people, or companies to promote awareness, and concerns (writing impact letters).

Hook/Phenomena (headline, video, tweet, map, pictures, audio, article):



Call to Action Question:

How does consumerism affect who we are and the environment we live in? What is a conscious consumer? What can your actions say about you, what impact can we expect when we recycle and UpCycle?

Content and Learning Experiences: 5 days

**Day 1: Small to whole groups discussions: What do we know about consumerism**? Show 6 images, and how it is related to consumerism? How does this relate to them on a personal scale? How much do we consume? What do we do with the waste? **Reflect and write down notes:** How often do your family buy things? How much do families use from what they buy? How much goes to waste? Monitor within a week's time, up to 4 weeks Monday thru Sunday.

**Activity:** Create a track chart of what is recyclable, and organize. What happens to the waste, where does it go? Do some research. (Bring in a bag of recyclable waste from home or from within their own classroom).

Materials needed: journal, tracking sheet, pencil, waste organization bags for school

**HW:** Research articles on consumerism and the impact on society and the environment. Write what you have learned about the negative impacts. How can you, or a community, make a difference? (Kid friendly websites)

**Day 2: Reflection share:** (Share your thoughts) What is the biggest impact of consumerism, and how it affects our environment, in society and perhaps globally. What are some solutions?

Activity: Create a poster representing your solution/ create an image to promote consumerism pollution awareness.

#### Materials needed: color pencils, color pencils, ruler, white construction paper

**HW:** Students will read about Recycle, Reuse, Reduce, and Upcycle. Students will continue to collect the last of their recyclable waste materials to repurpose for the project next day.

**Day 4: Creative Solutions Day**: Students will look at the recyclable and non -recyclable waste they collected. Students will work in table groups of 6. Divide and categorize waste items to Upcycle. Groups will discuss and research resources in books and use chrome books for ideas. Students will create an Earth friendly product for UpCycle..

Materials Needed: recycled and non-recyclable waste and materials (from students) \* resource/ reference books for Recycle, Upcycle.

- \* Paint brushes, sponge brushes, scissors, decoupage
- \* Xacto knife and hot glue gun (at teacher station)
- \* glitter, paints, etc

**Day 5**: Final project: A classroom walk promoting "Be Kind to Earth," a show and tell of projects to bring awareness to peers, classmates, and last but not least the school community at large. \*Posters to be hung and tables and products displayed, Upcycle. In raising awareness, proceeds may go towards Clean and Green. Students will mark the price for product purchase. Students who purchased should drop by at the end of day to pick up a purchase.

HW: Reflect and write a personal letter to share with family and friends about consumer

awareness, the impact and purpose of recy educate.	cling and repurposing, a	nd why it is important to
	How can this connect to racial justice?	How can this connect to big climate policy solutions?
	Living in a high density urban community, the environmental pollution and waste is significant, because of convenience buying. With piles of waste building it affects the air quality and quality of life.	Students comprehension of consumerism and how it's waste impacts on our environment, students are bringing awareness in creating posters and/or petition, creating solutions themselves to showcase creativity in reducing waste.
	Reflect on cultural, societal views of consumption and waste?	
	Students' comprehension of consumerism, and the analytical impacts on our environment through research will show that we need to be conscious and mindful consumers, and find ways to reduce waste.	

Community Connection:

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What community activists, experts, leaders can we bring into this conversation? Students will find solutions to a problem, and inspire others (family, friends, and school community) through their work, in increasing awareness in Reduce, Reuse, Recycle, & Upcycle.

Potential Culminating Action Pathways: What kinds of civic actions could students take? Cleaning and organizing school to repurpose, and create one of a kind tools and deco. Clean and Green: Earth Day Projects.

#### Student Discussion and Reflection:

What have we learned about consumerism and how can we make the change to improve where we live? What solutions can we continue to build on for the community, the neighborhood and globally?

#### Protecting Sanctuaries By Autumn Laidler

#### Climate Justice Lesson Plan

Learning Outcomes:

- Students will be able to name positive outcomes to green spaces and efforts to gain and protect green spaces.
  - Students will learn and understand the role of trees in air quality.
  - Students will be able to see their own advocacy in action and name how change can be done by individuals or groups
  - Students will be able to explain the role of producers and pollinators in the local ecosystem.
  - Students will be able to document the process of larva, caterpillar, chrysalis and butterfly for painted ladies.
  - Students will make a personal connection to the producers and pollinators in our community ecosystem.

#### Essential Questions:

How do our choices affect us, our community, and the world?

- How are human and natural systems interrelated?
- What can communities learn from natural systems to improve our common future?

•In what ways do you depend on others?

• In what ways do you depend on natural systems?

How are we all connected?

•Who or what depends on you?

Hook/Phenomena (headline, video, tweet, map, pictures, audio, article):

• Video: Climate Change and the Green New Deal https://www.youtube.com/watch?v=GxIDJWCbk6l

Native Plants and Role in Ecosystem
 <u>https://www.youtube.com/watch?v=trJKZDEfvrc</u>

Native Plants explained

Call to Action Question:

• How are human and natural systems interrelated?

How can this connect to big climate policy solutions?

Students are going to investigate the impact of native plants in the ecosystem. How they support both animals in the system and how they support the environment (i.e. flood mitigation, erosion, etc). Students will learn how biodiversity in the ecosystem allows for native pollinators and producers to thrive and support the animals in the ecosystem.

Students will also learn how trees not only create clean air, but also support flood mitigation. Our school has an area in the front of the building that often floods after large rainfall. Students have written a grant with Openlands to plant 10 new trees that are able to provide support for air quality, flood mitigation and provide shade for our community.

Community Connection What community activists, experts, leaders can we bring into this conversation? Open Lands

Potential Culminating Action Pathways:

What kinds of civic actions could students take? Addressing city officials to protect the South Shore Sanctuary Sharing PSAs about air quality, flood mitigation, native plants and pollinators Data collection and sharing about trains, trucks and traffic around NTA Native plants vs. invasive species in Chicago

Student Discussion and Reflection

Students have been a part of the planting process and will continue to care for the trees through watering of the plants. Students see the impact they can have on our entire school community by providing trees.

Students have had lively discussions about the transformation of their lava into caterpillars and soon chrysalis. Through the process they are able to see the changes in an animal in our ecosystems. They are learning about the importance of pollinators and the connection between native plants and native pollinators.

Students have taken an interest in the air quality and monitor the daily levels near our school via air quality reports. They are able to graph the data and explore how it may relate to issues like asthma in our community.

#### BREATHING GREENER AIR by Michelle Naughton

#### Climate Justice Lesson

<ul> <li>Learning Outcomes: <ul> <li>Students will identify the causes of air pollution and how society can contribute to the increase or decrease.</li> <li>Students will identify cause and effect relationships between the components of nature such as soil, plants, air and humans.</li> <li>Students will use fictional and nonfictional texts to learn about air pollution and enviromental activism.</li> <li>Students will learn about upcycling and how to reuse everyday items.</li> <li>Students will learn to be proponents of environmental justice on air pollution and other topics.</li> </ul> </li> </ul>
Hook/Phenomena (headline, video, tweet, map, pictures, audio, article: Greta Thunberg Speech <u>https://www.youtube.com/watch?v=VFkQSGyeCWg</u> Air Pollution 3 Young Air Pollution Activists <u>https://www.weforum.org/agenda/2022/05/3-young-activists-on-their-journeys-to-becoming-air-pollution-campaigners/</u> Call to Action Questions: How can we find ways to improve our school's air quality? How can we make our lives more "green" by recycling and reusing items?
Content and Learning Experiences: (See next table for details)
Lesson 1 Activate Prior Knowledge on 3rd Grade Science Lessons on Plants, Soil, Natural Resources, and How Environmental Changes Affect Living Things through fiction and nonfiction texts. Lesson 2 Air Pollution Activism and Reflection Lesson 3 Informational Text on Plants and Air Quality Lesson 4 Giving our Plants a Voice/ Inspiring Others to Add More Plants to their lives and communities. Poetry, Letter Writing Lesson 5 Organize and Deliver Plants /Unit Reflection
Community Connection: Students will identify how they can inspire others through their own modeling to create a better environment.

#### Lesson 1 Activating Prior Knowledge

Activate Prior Knowledge on Science Lessons on Plants, Soil, Natural Resources, and How Environmental Changes Affect Living Things through fiction and nonfiction texts.

**Pre- Assessment-** Students will answer one question showing their understanding. - "What is air pollution and why should we care about it?"

#### Day 1 Nonfiction Section of Library / Special Topic Section

Students will explore the Science Topic Books in the Nonfiction and Special Topic section with an emphasis on books about Air Pollution, Climate Change, and Plants.

#### Day 2 Activity 1

Students will identify the characteristics of items from nature and how they are connected.

Group Work:

- 1. Place all items on the table.
- 2. Teacher will model making connecting the items. For example: Seeds→ plants because seeds turn into plants
- 3. Students will take turns connecting items .
- 4. Teacher will encourage the students to choose an item and connect to more than 1 other.

#### Independent work:

Graphic Organizer- Students will draw and label one item in midde circle. Students will draw and label at least 2 other items from the group and write to explain their connection.

Group Discussion: "What would happen if one of these items was polluted or worn away?"

Materials: Jars with soil, water, plants, seeds, rocks. Graphic Organizer

### Lesson 2 Air Pollution Activism and Reflection Air Pollution Activism

Students will learn about activism and people like Greta Thunberg and how they can also help in the reduction of air pollution.

- 1. Show Air Pollution Videos.
- 2. Teacher Read Aloud: "Our House is On Fire"
- 3. Engage in Interactive Read Aloud Activities (See Below)

Group Discussion/ Reflection: "What Can I Do to Make People Care About Pollution?"

Independent Activity: Students will read these nonfiction books on EPIC. "Dirty Air" "Pollution" "Pondering Pollution" "Manufacturing Pollution"

Materials:

"Our House is On Fire" Jeannette Winter Greta Thunberg Speech <u>https://www.youtube.com/watch?v=VFkQSGyeCWg</u> <u>https://www.weforum.org/agenda/2022/05/3-young-activists-on-their-journeys-to-becoming-air-pollution-campaigners/</u> Air Pollution Videos

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Interactive Read Aloud Plan Book:

Before Reading

Book: "Our House is on Fire" by Jeannette Winter

Warm Up!: Let's think about what we know about pollution and how it is unhealthy for the earth, the plants, animals, and people.

FOCUS: Climate Change And How People Can Help Stop It

Word to Watch: CLIMATE

During Reading

Thinking + Talking Stems:

Teacher Think Aloud #1: The book says that the earth is getting warmer and it is affecting the plants, the animals and the people.

Student Interaction #1: What do you think would happen if the earth was too warm for plants to grow?

Partner 1:

Partner 2:

Teacher Think Aloud #2: Greta was sad when she saw all the bad things happening because the earth is getting warmer.

Student Interaction #2: What things that happened made you feel sad? Partner 1: Partner 2:

After Reading

After-the-Book Discussion:

What did the children like Greta do to make people care more about the pollution?

Let's answer the question "What will you do?"

Lesson 3 Informational Text on Plants and Air Quality Students will use informational text and resources to learn more on air pollution and how plants can help filter the air. **Day 1** Teacher Read Aloud- "Old Enough to Save the Planet (See Interactive Read Aloud below) Day 2 Activity 3 Air Pollution Fact Sheet Students will collect facts from safe search engines and databases on Air Pollution. They will add the facts on a whole class fact sheet. Materials: "Old Enough to Save the Planet" Loll Kirby Chart Paper Various nonfiction titles in the library. **Epic Nonfiction Pollution Titles** Kidzsearch and PebbleGo resources https://climatekids.nasa.gov/air-pollution/ https://www.ducksters.com/science/environment/air pollution.php https://www.pebblego.com/ https://www.livescience.com/do-indoor-plants-purify-air Interactive Read Aloud Plan Book: Before Reading Book: "Old Enough to Save the Planet" by Loll King Warm Up!: What is pollution? Group discussion with students leading by describing the types of pollution they can name. FOCUS: The students will learn about student activists around the globe that are helping to preserve their environment and reflect on ways that they use what they have learned about pollution to act as activists in our own community. Word to Watch: **ENVIRONMENT** During Reading Thinking + Talking Stems: Teacher Think Aloud #1: Set Goal for students - Fill in the graphic organizer to list the person, the country, and strategies they use.

Student Interaction #1: After the page on Himalgi Halder in India , students will compare traffic pollution in our community and in India and brainstorm ways that we can also reduce air pollution.

Partner 1 Partner 2 Teacher Think Aloud #2: Taking from the pages, "I am responsible enough...." Student Interaction #2: The students will work with a partner to finish the sentence to be added to a whole group display. Partner 1: Partner 2: After Reading After-the-Book Discussion: On the last pages, there are ideas for students on how they can save the planet and 10 things you can do to make your voice heard. I will divide the students in groups to choose one of the ideas and expand upon it. For example, "Stop Food Waste". The students can write about how they can actually do that in their everyday lives. Lesson 4 Giving our Plants a Voice/ Inspiring Others to Add More Plants to their lives and communities. Day 1 Teacher Modeling/ Read Aloud - Poetry, Dialogue, Letter Writing Teacher will introduce the lesson by activating the students' prior knowledge of the three forms of communication. Activity 4 Students will work in groups to create a name tag for each plant describing how it can improve lives. It will include an original poem, song or dialogue that wil inspire others to help reduce air pollution. Peer Editing- Students will peer edit poems, etc for grammatical errors and strength of message. Day 2 Finish creating name tags. Students will match with plants . Materials: Examples of Plant Poetry, Letter, Dialogue Name tags made from recycled white breakfast bags **Dialogue Bubbles** Markers, Colored Pencils, Crayons Plant Names and Examples **Lesson 5** Organize and Deliver Plants Students will deliver plants to our school community presenting each with an Air Pollution Fact Sheet created by the students' ideas, a name tag with the students original work, and a plant tag explaining plant care and function. **Post Assessent-** "Saving Our Environment" Suggestion Box Students will add ideas on reducing air pollution (or other pollution) to the suggestion box

showing their understanding of how air pollution is created and how society can help to reduce its effects.

How can this connect to racial justice?	How can this connect to big climate policy?
Healy School is located on the South Side of Chicago in a high air pollution area. 73.5% of our school population are Low Income Students. Our community is approximately 65% minority with a high population density. "Research has shown that racial and ethnic minorities and lower-income groups in the U.S. are at a higher risk of premature death from exposure to PM2.5 air pollution than other pollution and income groups. It has been shown that there are disparities in exposure to air pollution amoung these groups." (harvard.edu, 2022) There are very few green spaces in our community and around our schools. This project will help to create an awareness of using plants and vegetaton to help filter out air toxins. The goal is to inspire students to help make changes for themselves and their community.	The EPA does not have laws regarding indoor air pollution but does provide some information on indoor air quality issues such as formaldehyde amounts. In this project, the students will learn how plants can help to filter toxins such as formaldehyde in indoor environments. The EPA does off a "Clean Air in Buildings Challenge" which offers recommendations and resources for improving indoor air quality. The Illinois Dept of Public Health (IDPH) does provide guidelines for air quality safety and includes formaldehyde as a targeted toxin. Illinois Attorney General Kwame Raoul is urging the EPA to adopt stricter air pollution laws. <u>https://illinoisattorneygeneral.gov/news/story/ attorney-general-raoul-urges-epa-to-adopt- strict-standards-to-protect-the-public-from- particulate-matter-pollution</u>

What community activists, experts, leaders can we bring into this conversation?

Nicole Lee- 11th Ward Alderman Kwame Raoul - Illinois Attorney General Healy School Administration, Science Teachers, Clean and Green Coordinators

Potential Culminating Action Pathways Students will spread their message throughout our school community on using plants to improve air quality. The students will provide each school location with a plant and a message on how they are useful to filter toxins. The students will also share facts on air pollution and how it affects our school community.

Our school leaders and science committees can send a proposal to our local alderman Nicole Lee on increasing the amount of green spaces in our community to combat air pollution. They can also monitor Kwame Raoul progress on his proposal and encourage our school community to sign any petitions. Student Discussion and Reflection

**Activity 1** Students will work together to determine relationships between items in nature. Students will share ideas, report findings on paper, and present orally.

Follow Up Group Discussion: "What would happen if one of these items was polluted or worn away?"

Activity 2Group Discussion/ Reflection: How Can I Make My Life Cleaner?

Students wil reflect on the work of environmental activists and how we can all participate in the effort of improving and maintaining a healthy environment.

Activity 4 Giving Our Plants a Voice

Students will work in groups to create an accompanying tag for the plants in order to inspire others to join in the battle of improving air quality.

#### Activity 5 Unit Reflection

Students will add ideas on reducing air pollution (or other pollution) to the "Saving Our Environment" suggestion box showing their understanding of how air pollution is created and how society can help to reduce its effects.

Improving Air Quality with Plants Unit Plan

Library Goals/ Standards ISAIL add more

Standard 3: Use information accurately, creatively, and ethically to share knowledge and to participate collaboratively and productively as a member of a democratic society

Standard 4: Appreciate literature and other creative expressions of thoughts and ideas and pursues knowledge related to personal interests and aesthetic growth

• Derive meaning from informational texts in various formats

Language Arts Goals/ Standards Common Core Standards

# Reading Informational Text *Kev Ideas and Details*

CC.3.RI.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.

#### Integration of Knowledge and Ideas

CC.3.RI.7 Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).

#### Writing

CC.3.W.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

#### Reading Informational Text

# Key Ideas and Details

CC.3.RI.1 Ask and answer questions to demonstrate understanding of a text, referring

explicitly to the text as the basis for the answers.

Science Goals/Standards Common Core Standards

# Earth & Space Sciences

Earth's Systems

3-ESS2-1. Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.

#### **Biological Evolution: Unity and Diversity**

3-LS4-4. Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.

Prior Science Lessons

Plants and Animals

- 1. Plant Life Cycles
- 2. How Do Living Things Change?
- 3. What Are Structural Adaptations?

Ecosystems and Interactions

- 1. What Are Ecosystems?
- 2. How Do Environmental Changes Affect Living Things?

People and Resources

- 1. What Are Some Natural Resources?
- 2. How Can We Conserve Resources?
- 3. What is Soil?

Water and Weather

- 1. What Is Weather?
- 2. How Can We Measure Weather?

#### Measuring Climate Change by Jasmine Eisner

#### Climate Justice Lesson

Learning Outcomes:

Convert like measurement units within a given measurement system.

 5.MD.1. Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.

Represent and interpret data.

5.MD.2. Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.

NGSS Standards

- 5-ESS2-1. Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.
- 5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

Writing Standards

- W.5.7. Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.
- W.5.1. Write opinion pieces on topics or texts, supporting a point of view with reasons and information.
- W.5.2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

Examine the causes and effects of climate change

- Watch and discuss videos
- Read and analyze books on climate change and environmental issues.
- Analyze, convert and display measurement data

Hook/Phenomena (headline, video, tweet, map, pictures, audio, article):

• What is Climate Change Book

Call to Action Question:

- What is climate change and how can I make a positive difference?
- Who has the ability to make the change I want to see? And how can I best convince them to make that change?

Content and Learning Experiences:

- Read the book What is Climate Change
  - Discussion and note taking throughout
- Complete measurement and climate change worksheets
  - Can be broken up over several days as Do Nows.
- Measurement lab <u>worksheet</u>
  - Using the Wind speed monitor students measure m/s and convert to cm/s
  - Using the laser thermometer students measure temperature in °C and °F
  - Using the <u>Sound monitor</u> the class measures sound in decibels and students convert to bels and create a bar diagram of the decibels.
  - Using the <u>Gallon Measurement</u>, <u>Liter Measurement</u> and calculations students record liquid capacity conversions.
- Watch Young Voices for the Planet video and have discussions
- Write persuasive letters to people in power about climate change and what changes are wanted
- Read a section of one of the following books in a small group: <u>What a Waste</u>, <u>Old</u> <u>Enough to Save the Planet</u>, <u>Climate Change and How We'll Fix it</u>
  - Present the book and some findings to the class
  - Other possible books: <u>Water Protectors</u>, <u>The Mess We Made</u>, <u>Climate Change</u>: <u>The Choice is Ours</u>

How can this connect to racial justice?	How can this connect to big climate policy solutions?
Watch <u>Words Have Power</u> and discuss what environmental racism is and how it is present in Chicago.	Read What is Climate Change and discuss how policy and opinon has changed over time. Watch <u>Save Tomorrow</u> and discuss how they can demand change from people in power.

Potential Culminating Action Pathways: What kinds of civic actions could students take?

Students will be writing persuasive letters and mailing them to various people in power based on their individual ask. Potential people they will write to are the President, the Governor, the mayor, their alderman, the CEO of CPS, or the school principal.

Many of the students will also create additional projects such as petitions, changes at home, posters, videos, and presentations however the only requirement is the letter.

Student Discussion and Reflection

- How has politics around the environment changed since the 1970s?
- Why does climate change create a vicious cycle?
- Why are there more natural disasters?
- What is the difference between climate and weather?
- What can individuals do to help the environment?
- What should companies be doing to help the environment?
- What should governments be doing to help the environment?
- How is the climate change that is currently happening different from climate change that has happened on the Earth in the past?

# Climate Justice Educators Project 2023 Lesson Plan Public Persuasion and the Climate Crisis: Teaching Rhetoric and Critical Media Literacy

By Russell Mayo, PhD russmayo@gmail.com 8th Grade Humanities Teacher Burley School (CPS)

### Learning Outcomes

(1) Students will analyze multimodal texts that inform, persuade, and move audiences about climate change.

(2) Students will understand how video, data, language, images, and sound combine to create persuasive texts.

(3) Students will explore how rhetorical appeals such as ethos, pathos, and logos combine in these persuasive nonfiction texts.

(4) Students will collaborate in small groups to read, analyze, and discuss a high-level nonfiction book about climate change and environmental justice.

(5) Students will apply these techniques to speak out about climate change and

environmental issues and craft their own persuasive nonfiction texts for a specific audience.

# Hook/Phenomena

According to rhetorical scholar Lloyd Bitzer, "rhetoric is a mode of altering reality, not by the direct application of energy to objects, but by the creation of discourse which changes reality through the mediation of thought and action" ("The Rhetorical Situation," 1968, p. 4). We live in an age of growing climate emergency coupled with the politicization of both climate science and political action. To avoid cynicism or eco-anxiety, our students today must be able to understand, analyze, and employ the tools of rhetoric. Studying the ancient tools of rhetoric can help young people turn uncertainty, doubt, and fear into action.

# **Call to Action Question**

How can I carefully and critically read various forms of persuasive media involving climate change?

# **Content and Learning Experiences**

This 8th grade English Language Arts (ELA) lesson is part of an interdisciplinary Humanities block unit teaching multimodal texts, including nonfiction books and documentary films, that focus on climate change. Students learning a great deal about the causes and effects of global warming, as well as possible responses to the climate crisis. At the same time, they are taught to analyze and understand how writers and filmmakers communicate about these issues to the public. How do these speakers craft multimodal texts to inform, persuade, and move audiences about these important issues? How do data, language, images, and sound, combine to create persuasive texts? How do rhetorical appeals such as ethos, pathos, and logos combine in these persuasive texts? How can students apply these techniques to speak out about climate change and environmental issues and craft their own persuasive texts?

Funding given as part of the Climate Justice Educators Project was used to purchase copies of four recent nonfiction books about climate change. Students selected from these choices to read in "book clubs" or literature circles in ELA class over the course of 4 weeks in April-May 2023. These books include *A Bigger Picture* by Vanessa Nakate (2021), *A Hot Mess* by Jeff Fleischer (2021), *How to Change Everything* by Naomi Klein (2021), and *The Story of More* by Hope Jahren (2021). During this time, in Social Studies class, students study the Choices Program curriculum unit "Climate Change and Questions of Justice" through a digital textbook to better understand the causes and impacts of global warming, and to better understand it as a social, political, economic, and ecological issue of great import and study potential responses to it. (Note: Since the focus of these lessons are the ELA teaching strategies, the Social Studies component of this unit is not fully discussed here.)

While they are learning about climate change and environmental justice in Social Studies and reading their ELA book club books, students are also be learning about the rhetorical features of nonfiction texts by studying three of recent climate documentaries. Documentaries studied include *An Inconvenient Truth* (2006), *Chasing Ice* (2012), *2040* (2019), and *Greta Thunberg: A Year to Change the World* (2021). I lead students through a rhetorical analysis of each film, adapting lessons and concepts from John Golden's 2006 book, *Reading in the Reel World: Teaching Documentaries and other Nonfiction Texts*. Through these modeling lessons, students learn about specific rhetorical terms and concepts such as the rhetorical situation (speaker, audience, purpose, text, context) and rhetorical appeals (ethos, pathos, logos, kairos). Over the course of a month students apply their rhetorical skills by watching, analyzing, and discussing climate documentaries in class. They also apply this knowledge to their book club climate nonfiction books.

How can this connect to racial justice?	How can this connect to big climate policy solutions?
The connections to racial justice are made throughout the ELA books and Social Studies curriculum documents, specifically focusing on how to respond to the climate crisis at local, national, and international levels. Students learn about who is most/least responsible for contributing to this crisis and who is most/least vulnerable to the changes happening. Environmental justice also plays an important role in most of the "Think-Tac-Toe" group projects.	In Social Studies, students discuss and examine forms of adaptation that can and will happen around the world, specifically engaging in a mock COP meeting as delegates and representatives deliberating future climate policy. They also research policies such as the Green New Deal, the CTU's Green Schools Plan, and local climate/environmental activism through their "Think-Tac-Toe" group projects.

#### **Community Connection**

What community activists, experts, and leaders can we bring into this conversation?

Two specific community connections are being made in this unit. The first is that I have arranged for a guest speaker from the Oak Park-based One Earth Collective, who have organized the annual One Earth Film Festival each Spring, with environmental documentary screenings across the Chicagoland area. They also sponsor an annual youth filmmaking contest. Cesar Almeida, the Marketing Manager and Youth Programs Coordinator for One Earth Collective, virtually visited with our 8th grade students to speak about how he got involved in environmental issues, the power of the arts for engaging and persuading people around climate justice, and about how our students can get involved in local action and events. Students could clearly see how climate change connects with the arts and humanities through Cesar's presentation.

The other community connection is that one of the required parts of students "Think-Tac-Toe" group projects (described further below) is to connect with local students, activists, or representatives to speak about their learning and concerns related to climate change and environmental justice. These activities offer students a chance to put their learning about climate and rhetoric into practice.

#### Potential Culminating Action Pathways

What kinds of civic actions could students take?

One theme of our year-long 8th grade Humanities curriculum is to learn about how everyday people, including teenagers, can make a difference in society. With this, our final unit together, students are provided with many different options for taking civic action on climate change and environmental justice. Through their final group "Think-Tac-Toe" projects, students will select at least one project that requires them to reach out to community members and/or civic leaders to discuss climate challenges and advocate for policy and practices that they believe in. They might choose to speak with their Local School Council, Alderperson, or U.S. congressional representatives. Making memes to share with friends and family via social media is also an option. Additionally, all students will develop visually persuasive presentations to share important aspects of their learning with younger students at our school.

### **Student Discussion and Reflection**

Opportunities for student discussion and reflection abound throught this unit. For the Book Clubs, groups meet first to make reading plans and set up roles for their weekly discussions. As students read, they reflect on the text and record notes on rhetorical situation and appeals, important/unfamiliar vocabulary words, and questions they wish to discuss with their groups. Then, during their student-led Book Club meetings, students have around 30 minutes to meet together to unpack the text and discuss important questions and interesting ideas for the text. For the documentary films that we watch in between each meeting, students are given time to analyze specific aspects of the rhetorical strategies as well as other choices made by the director that make an impact on the audience. Finally, in the "Think-Tac-Toe" projects, students have multiple opportunities to reflect on and discuss each project with their group members.

\* \* \*

# ELA Q4 - Climate Nonfiction Book Club Portfolio!

**Step 1:** Change the name of the document to the Book title that you all will read together and your first initial and last name

**Step 2:** Make sure all of your book club members have editing access to the document

**Step 3:** Create your Book Club Contract

Step 4: Figure out your Book Club reading goals per week and per day using the table below

Step 5: Assign specific pages to the calendar below

Step 6: Assign a leader and recorder for each book club meeting.

Total number of pages:	Total Number of Weeks: <u>4</u>	Total Number of days reading per week:

How many pages do we need to read each day we are supposed to read?: \_\_\_\_

Meeting # 0: Friday, April 14th Create your Book Club Contract below:
-
-

Week/Day	Mon.	Tue.	Wed.	Thur.	Friday
<u>Week 1</u>	Monday 	Tuesday 	Wednesday	Thursday 	Book Club #1: Friday 4/21/23
<u>April 17-21</u>	Pages:	Pages:	Pages:	Pages:	Leader: <u>Name</u>
					Recorder: Name
					Covering Pages:
<u>Week 2</u>	Monday 	Tuesday 	Wednesday 	Thursday 	Book Club #2: Friday <b>4/28/23</b>
<u>April 24-28</u>	Pages:	Pages:	Pages:	Pages:	Leader: Name
	i ayes.	i ayes.	T dyco.	r ages.	Recorder: Name
					Covering Pages: to
<u>Week 3</u>	Monday	Tuesday	Wednesday	Thursday	Friday
					Pages:
<u>May 1-8</u>	Pages:	Pages:	Pages:	Pages:	Book Club #3: Monday <b>5/8/23</b>
					Leader: <u>Name</u>
					Recorder: Name
					Covering Pages: to
<u>Week 4</u>	Tuesday 	Wednesday	Thursday 	Friday	Book Club #4: Monday <b>5/15/23</b>
<u>May 9-15</u>					Leader: <mark>Name</mark>
<u>,</u>	Pages:	Pages:	Pages:	Pages:	Recorder: Name
					Covering Pages: to

	Book Club Meeting 1 - 4/21				
Chapter Title	/page numbers cove	ered:			
	<u>Five</u> Book Club Discussion Questions (p. #s)	Key Events, Details, and Notes: (p. #s) **RSR: Audience, Purpose, Context, Text	Vocabulary Words (p. #)		
Person 1	•	•	•		
Person 2	•	•	•		
Person 3	•	•	•		
Person 4	•	•	•		
Discussion Notes:					

	Book Club Meeting 2 - 4/28			
Chapter Tit	Chapter Title/page numbers covered:			
	<u>Five</u> Book Club Discussion Questions (p. #s)	Key Events, Details, and Notes (p. #s) **SOAPSTone (Speaker, Occasion, Audience, Purpose, Subject, Tone)	Vocabulary Words (p. #)	
Person 1	•	•	•	
Person 2	•	•	•	
Person 3	•	•	•	
Person 4	•	•	•	

|--|

	Book Club Meeting 3 - 5/8				
Chapter Tit	Chapter Title/page numbers covered:				
	<u>Five</u> Book Club Discussion Questions (p. #s)	Key Events, Details, and Notes (p. #s) **Rhetorical Appeals 3Cs (Convincing/Logos, Credible/Ethos, Compelling/Pathos)	Vocabulary Words (p. #)		
Person 1	•	•	•		
Person 2	•	•	•		
Person 3	•	•	•		
Person 4	•	•	•		
Discussio n Notes:					

	Book Club Meeting 4 - 5/15			
Chapter Title/page numbers covered:				
	Five Book Club Discussion Questions	Key Events, Details, and Notes: (p. #s) <mark>**Claims + Evidence →</mark> Central Idea	Vocabulary Words (p. #)	
Person 1	•	•	•	

Person 2	•	•	•
Person 3	•	•	•
Person 4	•	•	•
Discussio n Notes:			

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# **Environmental Documentary Notes 1**

\*\*Adapted from John Golden's *Reading in the Reel World: Teaching Documentaries and Other Nonfiction Texts* (NCTE, 2006).

Parts of a Documentary			
Title:	Chasing Ice	Year: 2012	Director: Jeff Orlowski-Yang
Visual Track		Primary/archival footage	e, still pictures, etc.
Audio Track		Voices, music, sour	nd effects, etc.
Text Track		Identifications, subtitles	s, information, etc.
elements		hen keep writing to compose	ey visual, sound, and/or textual e a paragraph explaining the effect of

Rhetorical Analysis: SOAPSTONE		
<u>S</u> ubject	How can you paraphrase the text in a sentence or two?	
<u>O</u> ccasion	What are the larger historical issues that inform the piece (rhetorical situation) as well as the immediate need to speak at this particular time ( <i>kairos</i> )?	
<u>A</u> udience	To whom is the piece directed? How do you know?	
<u>P</u> urpose	What is the point or the message of this piece?	
<u>S</u> peaker	Who is the speaker? What can you say about the speaker's age, situation, social class, identity, etc.?	
<u>Tone</u>	What is the attitude of the speaker to the subject? What words and phrases reveal this?	
	Choose one or more of the elements above and explain them with supporting and/or contrast them with another text or a similar subject.	

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# **Environmental Documentary Notes 2**

\*\*Adapted from John Golden's *Reading in the Reel World: Teaching Documentaries and Other Nonfiction Texts* (NCTE, 2006).

Parts of a Documentary		
Title: Gre	eta Thunberg: A Year to Change the World Year: 2021 Director: BBC Studios	
	Primary/archival footage, still pictures, etc.	
Visual Track		
	Voices, music, sound effects, etc.	
Audio Track		
	Identifications, subtitles, information, etc.	
Text Track		
elements	In this box, in a topic sentence, identify the key visual, sound, and/or textual used in the film. Then keep writing to compose a paragraph explaining the effect of ments on the viewer.	

	Rhetorical Appeals: "3Cs + T"		
<u>C</u> onvincing (Logos)	Filmmaker and/or speaker uses reasoning by citing statistics, facts, experts, and evidence. Problem/solution, cause/effect logic is stated or implied.		
<u>C</u> redible (Ethos)	Establishing the filmmaker and/or a speaker as trustworthy, knowledgeable, credible, or the opposite—undermining or questioning someone's credibility.		
<b>C</b> ompelling (Pathos)	Filmmaker and/or speaker appeals to the emotions describing in detail the effect of a particular situation or experience to arouse pity, anger, fear, etc.		
<u>T</u> iming (Kairos)	Filmmaker and/or speaker appeals to the urgency of the topic and/or shows how they are making the case at the right time and place.		
film. Describe	oose one of the rhetorical appeals listed above that plays a major role in the e specific moments and examples of where/how it is used and to what effect on ow does this make the text more persuasive?		

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# **Environmental Documentary Notes 3**

Parts of a Documentary			
	Title: 2040	Year: 2019	Director: Damon Gameau
Visual Track	Primary/archival footage, still pictures, etc.		
Audio Track		Voices, music,	sound effects, etc.
Text Track		Identifications, sul	btitles, information, etc.
Analysis: In this box, in a topic sentence, identify the key visual, sound, and/or textual elements used in the film. Then keep writing to compose a paragraph explaining the effect of these elements on the viewer.			

Claims/Evidence $\rightarrow$ Central Idea		
Important CLAIMS made in the film	EVIDENCE for the claims made	
Claim 1:		
Claim 2:		
Claim 3:		
Claim 4:		
Claim 5:		
<b>Analysis:</b> Determine the central idea of the film its development over the course of the text by film, assessing whether the reasoning is sound support the claims.	tracing and evaluating the specific claims in this	

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# **Climate Think-Tac-Toe Group Project**

As a group, choose 3 connected activities to complete. You can connect vertically, horizontally OR diagonally, but everyone MUST include the middle box.

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WRITE THE AUTHOR	<b>CREATE A MEME</b>	<b>EJ DISCUSSION</b>
Each group member will draft,	Read about " <u>The Surprising</u>	Read these 2 articles ( <u>Guardian</u>
peer review, revise, then send a	<u>Power of Internet Memes</u> " and	article ; NDRC article) and watch
formal email to their Book Club	study these recent " <u>30 Earth</u>	this <u>AJ+ video</u> about EJ.
Book author—and CC Dr. Russ!	<u>Day Memes</u> " as examples of	- Take notes on all 3 and be
- Introduce yourself, tell them	environmental-minded memes	ready to share/discuss with your
about our Humanities unit,	- Take notes and share/discuss	group. Re-watch the video if you
summarize what you've learned	with your group, then pick an	need to get a good set of notes.
about climate/EJ, rhetoric, etc.	important climate/EJ issue.	- Then audio record a group
- Then tell them what you liked	- Work together to make a	discussion about the video and
about their book and the	meme that engages/persuades	your insights, connections,
actions you plan on taking now	an audience of teens/adults to	questions, take-aways, etc.
that you know what you know.	think, care, or act on the issue.	- End your discussion by talking
- Close by asking at least 1	- Post the meme to your socials	about what you/we can do to
thoughtful, open-ended Q	and tag Burley, CPS, etc.	impact EJ here in Chicago.
GREEN NEW DEAL	DIGITAL PRESENTATION	FILM ANALYSIS
CIVIC ENGAGEMENT	**REQUIRED**	Watch a documentary film
Read the proposed 2021 Green	Create an infographic OR Clips	about climate/environmental
New Deal bill and watch Vox's	video to teach 3rd-4th grade	justice that no one in your group
Video about the GND.	Burley students about an	has seen: <u>see my list here</u> .
- Take notes and share/discuss	important aspect of climate	- As a group, make a list of 5
with your group.	change/environmental justice.	docs that look interesting and
- Create a Venn Diagram that	- Use details and evidence from	watch the trailers—then pick 1.
compares the GND with what	your ELA Book Club book, the SS	- Watch, then share/discuss
you want from climate policy.	digital text, and/or the films we	your notes w/ your group.
- Email your congressional reps	watched together.	- Create a visually appealing
expressing your opinion and	- Employ the rhetorical appeals	SOAPSTone mini-poster using
advocating for action.	that we studied (3Cs + T).	color, words, and images.
ONE-PAGER PROFILE As a group, review each group on my list of <u>local climate/EJ</u> orgs and select one of mutual interest to research. - Take some notes from multiple sources. on the group, their aims, members, etc. - Create a one-pager profile of the group and one of its members.	GREEN SCHOOLS PLAN Read the CTU's " <u>Green Schools</u> for Chicago" plan and flyer. - Take notes about this and share/discuss with your group. - Create a plan for how to share this info, express your opinions, and advocate for action: - Set up "Office Hours" w/ your <u>Alderperson</u> - OR -	CLIMATE TIMELINE Create a digital or poster timeline of the 10 MOST important events in the history of <u>climate change</u> and/or <u>environmental justice</u> . - Add images and brief info boxes for each "milestone" event, w/ sources cited. - Make sure your events are listed in chronological order and

- Share your profile with the group via email for feedback.	- Attend our next <u>Local School</u> <u>Council</u> meeting to share info on the plan and your views.	displayed to scale—or use zigzags to break the scale.
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## Civic Engagement Problem Solving by Monica Beal

#### Climate Justice Lesson

Learning Outcomes:

- Scholars will be able to create social awareness, build relationship's in the community and create clean environment where they go to school and home.
- Scholars will be able to resolve real world problems using civic engagement. Scholars will learn how to cultivate problem solutions for community and home.
- Scholars will be able to define and explain civic engagement.
- Scholars will use recyclables material to create fashion show garments using recyclable items such as plastic, chip bags creating clothing and accessories.
- Scholars will use creativity by using measurements and writing to create a platform for stakeholders in the community they live in.
- Scholars will visit the Design museum in downtown Chicago that will give resources to learning about fashion designs and creating civic engagement to a community that may not have opportunities and resources.
- Scholars will create expression's through petition and surveys of one's point of view by pointing out the injustice in area's they live compared to other ethnic groups.
- Scholars will work together in developing the fashion show.
- Scholars will use height x width and measure how much greenery will be needed to measure and design and area for display for the fashion show.
- Scholars will measure and cover a cabinet to design a visual display on the crown act for Social Science. The crown act exhibit which the scholars had created wooden heads colored them and use wigs and hair to describe their culture hair and added jewels to describe their royalty.
- Scholars will write a paper on how they feel the crown act affects them and their future in the work place. SEL by designing props, designing clothes and working together and learning personal skills and interest in fashion.

Hook/Phenomena (headline, video, tweet, map, pictures, audio, article):

KidSuper Presents: Recycling: A Fashion Show // New York Fashion Week Call to Action Question:

https://www.youtube.com/watch?v=CA1ydW0evc802/civic\_engagement\_changing\_transition\_ adulthood.pdf

https://circle.tufts.edu/sites/default/files/2020-

Call to Action Question:

- Scholars will use current Fashion videos and Fashion articles that reflect civic engagement.
- Scholars will create expression's creating survey's that will be passed out in the community and school on who recycle and who doesn't.

How can this connect to racial justice?	How can this connect to big climate policy solutions?
Due to scholars living in a under privilege, gang violence and desert area many would have never gained experience or be expose to civic engagement. The opportunities will give scholars a chance to empower a voice that may not occurred for the scholars would not have been for this opportunity and experience future of their hair style and learning about recycling in their community. emotional skills on a. SEL – Scholars will work together in developing the fashion show. Scholars will use height x width and measure how much greenery will be needed to measure and design and area for display for the fashion show. Scholars will measure and cover a cabinet to design a visual display on the crown act for Social Science. The crown act exhibit which the scholars had created wooden heads colored them and use wigs and hair to describe their royalty. Scholars will write a paper on how they feel the crown act affects them and the n by designing props, designing clothes and working together and learning personal job.	Due to the environmental issues that commonly found in the black and brown communities this will bring awareness to a sleep community on how this affects their living. Scholars will learn how to create a fashion show that will provide social and environmental awareness.

#### Community Connection

What community activists, experts, leaders can we bring into this conversation? Terrance Thompson (Activist), Fashion Bar LLC, Nordstrom Michigan Ave and Design Museum Chicago

Potential Culminating Action Pathways: What kinds of civic actions could students take?

Scholars will be involved in group activities and volunteering in the community and school. Create a fashion show for their Families, School and Community. Scholars will use survey's and petition's will be created by scholars to address disseminating of funds that cause poverty, and violence in their community and school. Student Discussion and Reflection

Scholar's will host a student driven fashion show that will be able to show case the work of designing items that will save the planet and beautification of the school and neighborhood. Scholar's will use written prompts to discuss what they learned and how it can be implemented in their everyday life.

### Recycling For A Change By Romanetha Walker

Climate Justice Lesson

Learning Outcomes:

- Students will know the definition of reducing, reusing, and recycling. -Students will understand the importance of reducing, reusing, and recycling. -Students will know what items can be reduced, what items can be reused, and what items can be recycled.
- Students will understand that their voice can ensure equitable representation, inclusion, and protection of the rights of those most vulnerable to the effects of climate change.
- Students will understand how to read data through research.
- Students will know how to write a persuasive essay to include an introduction, hook, explain two reasons to support their side and one counter argument concluding with a call to action to their Alderman.
- Students will create a google slide to present their data findings on the three top environmental issues that plagued their community.
- Students will research solutions/ next steps to the three top environmental issues in their community.

Hook/Phenomena (headline, video, tweet, map, pictures, audio, article):

- Climate Justice and Air Pollution in Illinois | Youth & Climate
- How Plastic PET Bottles Are Recycled Into Garments
- https://www.youtube.com/watch?v=ftKwPqO0CMg
- Southwest Side residents discuss the environmental issues they face
- https://www.youtube.com/watch?v=rF9Hv1X5FIY
- Something stinks on Chicago's Southeast Side: Despite complaints, fines, odors persist
- https://www.youtube.com/watch?v=EZyLoROCssc

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Call to Action Question:

- How can the scholars of Paul Revere reduce, recycle, and reuse items in their community to promote a healthier sense of self through the (SEL) conduits of using fashion?
- Paul Revere scholars, how can you reach out to your local Aldermen to ask him/ her to consider cleaning up your beach in your community?

Content and Learn	ing Experiences:		
	How can this connect to racial justice?	How can this connect to big climate policy solutions?	
	Due to scholars living in an underprivileged area many will experience that may not have opportunity to occur had this not been introduced to them. Scholars will research data on the three highest environmental issues that plagued their community.	Due to the environmental issues that are commonly found in the black and brown communities this will bring awareness to a sleep community on how this affects their living.	
Community Connection What community activists, experts, leaders can we bring into this conversation? Terrance Thompson,			
Potential Culminating Action Pathways: <i>What kinds of civic actions could students take?</i> Involved in group activities, volunteering and community beautification. Create a fashion show for their peers .Civic engagement through cleaning up the lakefront at 71st Rainbow beach and comparing hyde park 55th street beach.			
Student Discussion and Reflection			
Students will explore their community to analyze sources for recycling, and will then write and design a student driven fashion show. This will enable the scholars to showcase the work of their designing items that will save the planet and beautification of the school and neighborhood.			

### Community Environmental Injustices by Mary Dieudonne

#### Climate Justice Lesson

#### Learning Outcomes:

- Students will be able to understand that their voice can ensure equitable representation, and protection of the rights of those most vulnerable affected by environmental injustices.
- Students will be able to define environmental injustices.
- Student will be able to identify various environmental injustices in their community.
- Students will know how to write a persuasive letter to included an introduction, hook, explain two reason to support their side and one counter argument and concluding with an call to action to their Alderman.
- Student will create a google slide or Tri Fold board to present their data findings on the three top environmental issues that plagued their community.

Hook/Phenomena (headline, video, tweet, map, pictures, audio, article):

- <u>Climate Justice and Air Pollution in Illinois | Youth & Climate</u>
- Southwest Side residents discuss the environmental issues they face
- https://www.youtube.com/watch?v=rF9Hv1X5FIY
- Something stinks on Chicago's Southeast Side: Despite complaints, fines, odors persist
- https://www.youtube.com/watch?v=EZyLoROCssc
- The Climate Emergency | Our Climate Our Future SHORTS
- https://www.youtube.com/watch?v=dc8RcilCsk4
- Email Your Local Representative: Urge them to declare a climate emergency!
- https://go.acespace.org/page/93699/action/1?utm\_medium=orga&utm\_source=org\_ta k&utm\_campaign=advo&ea.tracking.id=actpage&\_ga=2.76576085.1195988711.1679886419-415670583.1679886419

Call to Action Question:

- Paul Revere scholars how can you reach out to your local Aldermen to ask him/ her to consider cleaning up your beach and school in your community?
- Paul Revere scholars are urge to ask their peers to sign a petition to encourage Congress to pass H.R. 794, The National Climate Emergency Act

Content and Learning Experiences:

How can this connect to racial justice?	How can this connect to big climate policy solutions?
Due to scholars living in an underprivileged area many will experience illness due to environmental injustice.	Due to the environmental issues that are commonly found in the black and brown communities this will bring awareness about climat education to elementary students to help education their community to make some changes.

**Community Connection** 

What community activists, experts, leaders can we bring into this conversation? Student will present their presentation at the local library near the school to display their findings and urge community members to send an email to their local representative urging them to declare a climate emergency.

Potential Culminating Action Pathways: What kinds of civic actions could students take?

Civic engagement includes cleaning up the lake front at 71st Rainbow beach and comparing hyde park 55th street beach. Scholar will showcase their environmental issues finds in their community which include lack of grocery stores, health issue, the amount of trash at the community public beach and air pollutions. Scholar will ask their peer to sign up for the ACE Youth Action Network and join the environmental injustic cause.

Student Discussion and Reflection Student will discuss

- Student will be able to understand how to read data through research.
- Students will be able to identify the components of an interactive digital heat map.
- Students will be able to graph a scatter plot comparing the environmental burden and population burden of different neighborhoods in Chicago.

Declaring a climate emergency will allow for the bold climate action we need and investment in measures such as climate mitigation and resilience, distributed renewable energy, environmental justice, climate education and more

# We Are Born Resilient!! By Deidra Akram

#### Climate Justice Project Based Learning

What is it you ask? Well **Benjamin Hardy** has written a long-read piece on that. He defines the Culture Wall as an intention "to create an environment that continually reminds me of what I stand for and what I aspire toward.....they create a shared vision, set of beliefs, expectations and direction for desired behavior." by Subhanjan Sarkar

## Learning Outcomes:

Students Will Create A Culture Wall As The Culminating Event! Students will perform/present a selection of conversation pieces ranging from at the LSC Meeting as a part of the topic for Earth Day's Funding for Climate and Environmental Justice Initiative, within the school and the community.

G3 Demonstrate decision-making skills and responsible behaviors in personal, school and community contexts

*Reflecting, Collaborating, Communicating, Empathy, Decision-making, Self-Control, Awareness of Others* 

Middle School, 6th through 8th, EOY CCSS Focus In Writing, Literacy, Social Studies, Science, SEL, and College and Career Bound Successes...

Hook/Phenomena (headline, video, tweet, map, pictures, audio, article): Here Are Some Resources:

"Tending The Soil" ...Book Poetry, Me Please: Series Poetry Slam...Series Alexis Green, "Thick Skin"...Video Tupac Inspired... A Muslim and A Jewish Girl bold Poetry Slam, A Common Grounds Award Winners...Video Ted X Selections...Shakespeare, Hip-Hop from then to Now...and More.. Social Justice Collection...Teacher Guided...Books, Read To, Audio, Visual, with summaries, excerpts, notes, and preferably a Movie Adaptation... Call to Action Question:

We Are Born Resilient! What Conversation Do You Want To Have!?

This call to action gives students a Voice to Create a Shared Vision, Set of Beliefs, Expectations and Direction for Desired Behaviors that reflect Their Voice, Their Vision"!



# Content and Learning Experiences:

Week #1

Show Video Clip From Rocky IV...If I Can Change and They "Russian" of the Soviet Union can Change, We All Can Change...

Use The Book Tending Soils To Lead The Conversation...

What Wrongs Do You Relate to In Your Community...Home, School, Neighborhood, World... Students Select Groups/Partners to Create A Piece to Present that Reflects Justice/Injustice... Create an Outline of the Topic of Justice/Injustice with 2-3 Subtopics with 2-3 examples~

Week #2

Show Video-You Tube...Poetry Slam<sup>~</sup>Common Ground Slam Poem Award Winners "Two Girls, A Muslim Girl and a Jewish Girl"...2nd Alexis Green's "Thick Skin"

Create An Authentic Poem, Skit, and/or Video to Express Your Convo, Concern, Call to Action, Grip..

Perform and/or Present a 3-5 min Piece...to be recorded by Myself and/or an assistant...signed disclosures needed~

Week #3 and Week #4 Book Selection: Students Choose Books from "The Social Justice Collective" Teacher Guided Selections for Diverse Readers...from "The Hate You Give", "Speak", "Internment", "A Long Walk to Water", "Dear Martin", "Stamped", "Just Mercy", and/or "The 57 Bus".

Student Groups of 4, will choose a book based on their Theme, Perspective, Voice... Each Book will have a Written Copy, Visual Copy, Audio Copy, Excerpts, and/or Summaries and Preferably A Movie Version as well...

Students Create A Summary that depicts the Book as it relates to Social Justice..Next student groups Create a new ending that depicts the Social Justice they seek for TODAY...SOCIAL JUSTICE FOR "JUST US"

# Week #5

Students Will Create A Culture Wall As The Culminating Event! Students will perform/present a selection of authentic conversational pieces ranging from Art, Videos, Skits, Slam Poetry and more, at the LSC Meeting as a part of Earth Day Programming to unveil The Social and Climate Justice Initiative, for the school and the surrounding community.

How can this connect to racial justice?

This project based learning event will result in creating a Culture Wall...The Culture Wall will be designed with the intention "to create an environment that continually reminds me of what I stand for and what I aspire toward.....students create a shared vision, set of beliefs, expectations and direction for desired behavior" at home, at school, in their community, and in the world at large.

Projections for "The Future, We Deserve" Justice for Just "US"!! Student Voice, Student Lead, Student Vision!!!

# **Community Connection:**

What community activists, experts, and leaders can we bring into this conversation?

- Senior Council Involvement
- Administration Involvement
- LSC Involvement
- Parents Invited In...Involvement~
- Local Stakeholders and Community Partners
- Alderman/Alderwoman

• EAP Grants...City and State Level Grants...

# Potential Culminating Action Pathways:

Students Will Construct A Culture Wall Rich with Pieces Intentionally Selected to Convey The Message of the Conversation Topic They Choose to Have and How The Conversation Has Evolved over the Four Weeks...

What kinds of civic actions could students take?

Students will take their Constructs to the Administration of the School and Request to Present Pieces of Art, Poems, Skits, Videos, etc to the LSC Committee to start the Earth Day Initiative within our school community and the surrounding community.

Student Discussion and Reflection: Earth Day Event Outdoor Discussions in the School Garden Food and Drinks ~ Indoors, Small Gym, Pictures and Videos of Culture Wall and Students...~

## YOU Be The Media

# Climate Justice Lesson 9th Grade Civics, Richard T. Crane Medical Prep H.S. Spring 2023, Instructor Nick Lucas

#### Context:

- This 4 day lesson was performed within CPS' Civics *Participate* Curriculum, specifically the Media unit.
- Enduring Understandings #2 and #3 are from said curriculum, and one viewing guide worksheet is adapted from said curriculum

#### **ENDURING UNDERSTANDINGS:**

- 1. Addressing racial and economic justice are essential components of climate change solutions
- 2. Media messages are constructed with particular purposes, reflecting embedded values and points of view and using a creative language with its own rules.
- 3. Media messages are interpreted differently by different people depending on their own values, points of view, and media literacy skills.

#### ILLINOIS SOCIAL SCIENCE LEARNING STANDARDS:

ISBE.SS.IS.4.9-12. Gather and evaluate information from multiple sources while considering the origin, credibility, point of view, authority, structure, context, and corroborative value of the sources.

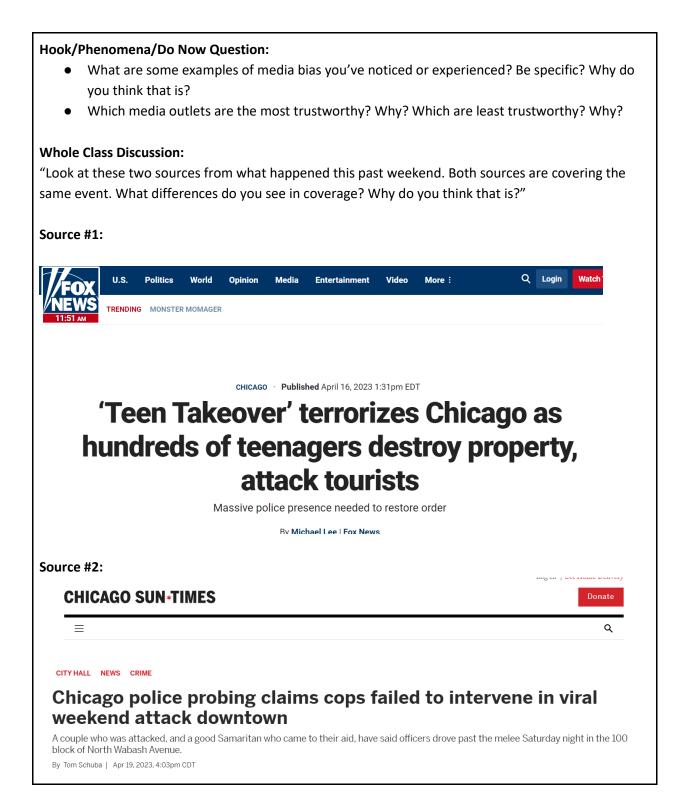
ISBE.SS.CV.6.9-12. Describe how political parties, the media, and public interest groups both influence and reflect social and political interests.

#### COMMON CORE STANDARDS:

CCSS.ELA-LITERACY.RH.11-12.2. Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.

CCSS.ELA-LITERACY.RH.11-12.8. Evaluate an author's premises, claims, and evidence by corroborating or challenging them with other information.

CCSS.ELA-LITERACY.SL.11-12.1. Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11-12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.



# 1. <u>Five solutions to downtown mayhem in</u> <u>Chicago</u>

At least two teenagers were shot over the weekend as hundreds of young people gathered downtown. Several videos posted on social media showed cars broken into and some lit on fire.

These chaotic scenes in the heart of the city have led to a wave of outrage, with many downtown residents wondering what the summer will hold.

"I know folks are looking at this as a possible preview of what the summer is going to be like. It doesn't have to be that way," said Norman Kerr, a local public safety expert. "There's some things that can be put in place to mitigate it."

#### **Content and Learning Experiences:**

#### Call to Action Question/Essential Questions:

- 1. How can I be an advocate for climate change legislation?
- 2. How does media coverage of proposed environmental legislation impact its public perception and public support?
- 3. How does media coverage influence the public and our democracy? How does media coverage shape what we believe is possible?
- 4. How do different media outlets make decisions about what to cover and how?

#### **Direct Instruction**

"Let's keep these Essential Questions in mind as we watch the following news coverage of the Green New Deal"

- Elicit background knowledge of the New Deal
- Then elicit brainstorm suggestions of what the Green New Deal could be

Students complete <u>Viewing Questions Worksheet</u>\*\* as whole class watches the following clips: (1) <u>CBS</u> (2) Fox (3) <u>Time</u> (4) <u>Vox</u>

(\*\*I adapted this worksheet from CPS' Cultivate curriculum)

Whole class debrief and discussion of worksheet viewing questions

#### Exit ticket:

How do different media outlets make decisions about what to cover and how?

#### **Do Now Questions:**

#1: What does the phrase "We can't be what we can't see" mean to you?

#2: Which of the following ways to address climate change do you think is most impactful and why?

- 1. Renewable energy
- 2. Smart grid
- 3. Energy efficiency
- 4. Transportation
- 5. Restore Natural Ecosystems
- 6. Reduce livestock emissions
- 7. Guaranteed employment
- 8. Strengthen labor laws
- 9. Higher education
- 10. Honor indigenous peoples' rights
- 11. Improve the American social safety net

#### **Content and Learning Experiences:**

**3-2-1 procedure as we watch this brief video** <u>"A Letter from the Future"</u> from Rep. Alexandria Ocasio-Cortez

• "In the context of this video, why do you think Rep. Ocasio-Cortex says "We can't be what we can't see"? Has its meaning changed for you from our initial Do Now question?

#### **Direct Instruction:**

"Together we've analyzed 5 different media outlets' coverage of the Green New Deal. Now you'll analyze it for yourself."

• Read opening two paragraphs of <u>"Here's What The Green New Deal Actually Says" by Zach</u> Wolf, CNN "Now YOU be the media! You are going to analyze and educate the American public about how our society could benefit from the Green New Deal.

**Step #1:** Choose two of the sections in the above CNN article. Annotate it for 3-2-1 (Three take aways, 2 questions) Be ready to explain to the class!

The 11 sections of the Green New Deal are: Renewable energy; Smart grid; Energy efficiency; Transportation; Restore Natural Ecosystems; Reduce livestock emissions; Guaranteed employment; Strengthen labor laws; Higher education; Honor indigenous peoples' rights; Improve the American social safety net

Step #2: present your analysis of these two sections in this <u>Slides template</u>.

For the two sections you analyzed, answer the following questions (on each slide):

- 1. Explain this section of the Green New Deal (ex: energy efficiency, reducing livestock emissions). What would this resolution do? How would it help?
- 2. What is one action an every day citizen can take to support the Green New Deal or to participate in \*this\* aspect of climate solution? (ex: how can an every day citizen participate in energy efficiency, reducing livestock emissions, etc)
- 3. Include an image that represents each section

**Step #3:** Present to our class as a reporter or news anchor!

Teacher note:

- One class period for students to read and annotate above article <u>"Here's What The Green</u> <u>New Deal Actually Says" by Zach Wolf, CNN</u>
- Then one class period for students to develop their media messages into <u>Slides template</u>

How can this connect to racial justice?	How can this connect to big climate policy solutions?
1) Lesson content addresses (and builds on earlier lessons about) environmental justice.	1) Directly connected by analyzing the Green New Deal and ways that every day citizens can get involved, mobilize, and participate in
2) Sources such as Rep. Ocasio-Cortez's "Letter from the Future" and sections of the Green New Deal (ex: honoring indigenous peoples' rights) directly address causes and solutions to environmental and racial justice	passing it and benefiting from it.
3) Green New Deal sections on living wage	

jobs and Medicare-For-All directly address
the need to address systemic disinvestment
and wealth inequality

#### **Community Connection**

What community activists, experts, and leaders can we bring into this conversation?

See below re: Service Learning Project. There's lots of opportunities for students to build on this lesson in their Service Learning Project in community interviews.

Potential Culminating Action Pathways: What kinds of civic actions could students take?

This is a Civics class, so educating others as a civic act is the direct focus of the final product and assessment. Additionally, this lesson sets up environmental activism as a possible student-led project for their Civics Service Learning project (which is 1 month later in the curriculum).

#### **Student Discussion and Reflection**

Student presentations were great and led to much discussion!

### Recycling Revolution - It's Not Easy Being Green By William Langevin

#### Climate Justice Lesson

Learning Outcomes:

- Describe the ways and reasons that South Korea recycles the way they do.
- Compare/contrast S. Korean recycling to that of the United States and Chicago.
- Create and implement a recycling program at Air force that can be added to each quarter, semester, or year.
- Measure the impact the recycling program has had at Air Force.
- Calculate the difference of the carbon footprint of Air Force by looking at recycling.

#### Hook

Hook: Plastic inventory, what in your bookbag is made of plastic? What in this classroom is made of plastic? What at your home is made of plastic?

Run Through Question Forming Technique with Recycling as the topic. Have students record lists of questions for display.

### Call to Action Question:

What levels of sustainable change can we implement to push Air Force towards more sustainable and eco friendly practices?

What impact can one class have on their school community as it relates to our environmental impact and carbon footprints?

# Content and Learning Experiences:

1. Go over how plastics are made and their impact on the environment. Through the article Plastic: <u>How It's Made and Why It's Bad</u>

- Preview by having kiddos in groups share out what they know about plastics in quads.
- Have students in their quads go through the text graffiti.
- Quads will read then read the article and share out annotations.
- One minute debates.

2. Debrief the article and connect to any previous questions. (dialogic questions about the article). Illicit connections to the QFT as it relates to recycling.

3. Students will go over the Ted-Ed Video of plastic bottles.

4. Return to QFT questions and connect South Korea's recycling system to any questions.

5. Have quads develop systems of recycling that can be implemented at the high school level.

Kiddos will then present their programs to the class and determine the best program or create a hybrid program.

6. Have groups troubleshoot the problems/issues that might arise with the program and how we will respond.

7 Introduce the Earth Gen Spread Sheet and introduce the recycling revolution idea to class. Students will be responsible for informing and assisting students in properly recycling their lunch and other materials.

8. After lunch students will weigh the data and record what Air Force's carbon footprint is due to a lack of recycling structures. Students will use data to present their ideas on how to implement recycling in the building.

9. Present their findinds to school adminstration, with the focus on using data to convince the school to add new (refillable) water fountains to promote the reduction of plastic bottles.

How It's Made and Why It's Bad Ted-Ed Plastic Bottle Recycling in Korea Earth Gen Waste and Recycling Spreadsheet

How can this connect to racial justice?	How can this connect to big climate policy solutions?
Connect the idea of safe water access to lead pipes. Leading many students to use bottled water only.	Work towards establishing safe and clean drinking water fountains in our school so students do not need to rely on bottled water. Review the small changes one class in one school has implemented and what can be added to it by the next class. How can thee small changes move schools and citizens towards greener policies?

Community Connection

What community activists, experts, and leaders can we bring into this conversation?

Principal, custodian staff, Water policy experts, alderman

Potential Culminating Action Pathways: What kinds of civic actions could students take?

The lesson is really designed to have students develop and implement recycling programs they think will impact their school and communities. The project, hopefully can be built upon withe other classes introducing

Student Discussion and Reflection:

What worked well? What did not? What shocked, surprised, stood out to us while we were working on this? What impact did we have as a class, looking at the data collection before and after? How will we keep this practice at school? In what ways can we add to this for the next class? Next year? Next school?