

Climate Refugee Stories: Rising Above Challenges

by (Seon S Sloley), 2021 CTI Fellow (Charles H Parker Academic Center)

This curriculum unit is recommended for: (Reading/Research/Science/Grades 3-5)

Keywords: Climate Refugee, asylum seekers, returnees, discrimination, obstacles, climate change, hunger, environment, challenges, weather, climate, ecosystem, natural disasters.

Teaching Standards: See <u>Appendix 1</u> for teaching standards addressed in this unit. (Insert a hyperlink to Appendix 1 where you've stated your unit's main standards.)

Synopsis: This unit will focus on integrating Language Arts, Art and Research with Science elementary curriculum. Students will gain valuable information on Climate Refugee stories through discussion, research and reading materials provided by teachers. The inquiry method, research method and comprehension skills will be used to assist students in better understanding the concepts taught in this unit. Focus will be on students understanding the importance of why it is necessary to learn about refugees from other countries. The lessons will enable students to learn about the migration of humans from different countries caused by climate and political change, known as climate refugees and its growing significance. The activities will consist of research, reading and discussion, and will provide insights into various geographical locations whose existence is threatened by climate change and communities that are fleeing their homes resulting in large-scale migration. In the research activity, students will be given a list of refugees where they will choose one to study and follow their journey; they will use a timeline to present information. Through research, they will read and have a classroom discussion on important information they came across while reading. Teacher and students will then make a comparison chart with refugees researched,

I plan to teach this unit during the coming year to (250) students in (Grade 3-5 using the Ecosystem, Weather and Climate unit integrated with Reading and Language Arts curriculum).

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Climate Refugee Stories: Rising Above Challenges

Seon S Sloley

Introduction

There is so much going on in this world that we live in. Things many people are unaware of and probably would not even care if they knew. Climate refugee is a topic that most people feel hesitant in discussing. Many people take a back seat in discussing this ever-growing phenomenon because they are afraid of information obtained; some are not readily acceptable of other people in their country due to terrorism and other negative factors. It is important that our students are aware of what is happening in their surroundings and around the world.

Our school is diverse and has been seeing an influx of immigrants in the past few weeks. Some of these students are refugees; they ran from their country to seek a better life in the United States. Teachers and students are not given information about where they are from and who they really are; this makes it difficult for them to relate to these students. There is a language barrier and differences in culture. As a school, we need to begin making better preparations for these students and their family. Other students need to be sensitized about the topic and workshops should be available for all in understanding the life of refugee students and their family. Research speaks about children being globally aware and the positive outcome it has. Mcconchie, 2020 states, "It seems that creating feelings of empathy, specifically through telling stories about the experiences of refugees, can create more of a desire to help them in the future". When they are aware, they appreciate differences in the world, develop greater self-esteem and make them able to relate and be accepting of others. There are many of our students who are immigrants and may even be refugees. It is important that we know their stories and how to relate to them.

What is a Climate Refugee? Cortes states, "Climate Refugees are people who leave their countries because of reasons that can be tied to climate change, either directly or indirectly, through extreme weather, drought, flooding, crop failures, or even violence or poverty caused by the loss of natural resources." It is important that we take an interdisciplinary approach (drawing from different areas) to fully understand the concept of climate refugees. Using this approach, we are able to redefine the problem and reach solutions. Teachers and administrators need to ensure students in host schools are equipped with information on how to carefully approach and assist new students who are refugees. It is crucial that students are aware of what is happening around them in the world. It is pivotal that our children know the importance of these refugees. Although

¹ Mcconchie, J. 2020. Why Children Need to Hear Refugee Stories.

² Cortes, A. 2019. The Refugees You Don't See – How Climate Fuels Forced Migration.

most of them are poor and flee poorer countries, they do have a lot to offer. They can contribute to social engagement, workforce participation, business ownership and even volunteering in our communities.

Rationale

"Education is an essential factor in the ever more urgent global fight against climate change. Knowledge regarding this phenomenon helps young people to understand and tackle the consequences of global warming, encourages them to change their behavior and helps them to adapt to what is already a global emergency." With their knowledge of climate change, it opens up the opportunity to better understand some of the reasons why humans flee their countries and they will be better equipped or prepared for climate change and its impacts on society. They will understand that climate refugees are people who oftentimes flee their country or who must leave their homes and communities because of the effects of climate change and global warming. 4

Our students' knowledge of this concept assists them in understanding and tackling the consequences of climate change. This is the reason why educating them on climate change and climate refugees is essential. As a Caribbean Native and a neighbor to one of the countries that has many refugees because of climate and environmental change along with political bondage, I have experienced refugees coming to the shores of Jamaica and hearing their cries for help. This has been an ongoing challenge and has fast become a global emergency. Many still do not understand the depth of pain and need for a better environment and country of the Haitian people. It is my role as an educator to sensitize and share information about this country and ensure I express the need for compassion towards a struggling nation and its people.

Although I am a K-5 Science teacher, this unit will be incorporated with my science unit on ecosystem and the environment. I will however focus more on grades 3-5. This is also a sensitive topic as our school is seeing an influx in Latino students who may be climate refugees. Grades 3-5 will better understand the concepts being taught and will be able to use comprehension skills to adapt better to others. Students will be introduced to analyzing data where they will work collaboratively to map information out on global crises. In working collaboratively, students will then be able to work independently in researching and mapping one refugees' journey.

This CU is intended to make our students more aware of what is happening in the world around us. They cannot live in a bubble because we are indeed living in a reality where things and life are not perfect. My job is to provide an objective and standardized approach

³ Iberdrola. 2021. How Can Environmental Education Help to Combat Climate Change?

⁴ National Geographic. 2021. In the Face of Unprecedented Challenges, Humanity is on the Move.

for students to participate in research and collaborative activities to improve their knowledge on climate refugee stories.

Student/School Demographics

Charles H Parker Academic Center- National Magnet School of Excellence is located near the intersection of West Blvd and Clanton Road, in Charlotte, NC. It is a part of the Charlotte Mecklenburg School system. CHP first opened its doors in the 1950's but has seen many changes over the years. CHP is a unique school with four separate programs uniting an overall school.

The Horizons program is for students who are highly gifted (at least two or more years above grade level) and go through an application process to enter the program. The Talent Development (TD) program is for students who are identified as Academically and Intellectually Gifted. These students are placed in an all-day TD classroom where they receive accelerated and advanced curriculum from a gifted certified teacher. The Learning Immersion (LI) program is for students in grades K-2 who are seeking an accelerated curriculum that will prepare them ultimately for the 3-5 TD program. There is no application process for this program, but students do need to be able to handle a rigorous pace as well as being above grade level in all subject areas. The Academy program serves students in the historic West Charlotte neighborhood and is an attendance zone for CHP. This is a K-5 program.

The school houses about 549 students. Of which 99.4% are free and discounted lunch recipients. The ethnic composition of the student population is 55.4% African American, 24.4% Asian, 14% white, Hispanic 4.2%, American Indian 0.4%, Pacific Islander 0.4% and two or more 1.3%. There are 48 teachers: 37.2% (16) teachers hold a Bachelor's degree and 62.8% (27) have Advanced degrees. There are 40 (93%) who are Highly qualified and 3 (7%), that are Not Highly Qualified. Years of experience ranges from 0-20+ years. BAC became a Title One school in the year 2015. We operate on a Traditional school calendar (10 months).

My role at Charles H Parker Academic Center is the Science Lead. I teach grades K-5 and is responsible for the yearly Science Fair and Science Olympiad competitions. At this moment, there are no connections with this competition and climate refugee stories, however, it is my hope that the organizers of this competition will develop a hands on event where students create a replica of a better community for people who normally flee their country due to weather. In creating such an event, we may have some of our refugee students who have first hands experience developing something that would be suitable for their country. There are four different programs with different academic levels and various learning styles that I have the pleasure of serving daily. Fifth grade is the only Grade level that sits a state test in Science (EOG), which is administered by the state of North Carolina. However, grades 3-4 have

formative assessments that cover concepts learned in Science. Each class has fifty minutes (5mins) during a regular school session; however, due to the covid pandemic, there is only 45 minutes of Science. This course is a Special Area, but I do teach to the North Carolina Core Standards.

Unit Goals

My first goal/objective is just to have a simple discussion with students on the topic; this is checking their previous knowledge on the topic. After a discussion, I will move into definitions. They are elementary students, although there are different levels of learners, I want to ensure all students know the definition of the words (climate refugee, obstacles, overcome, climate change, flee, host) we will be using while studying this topic. Students will be introduced to videos, and readings, gaining more knowledge on climate refugees.



Figure 1: Preparing for a Climate Refugee Tsunami: The Case for Climate Reparations Retrieved from: www.discoverysociety.org (2021)

Through use of pictures (visual images), it is hoped that they will tell students a story as they show what is going on in the story. Images are also powerful communication devices, which are used in conveying concepts and information.⁵

⁵ Harvard University. 2021. Climate Change a Global Threat that Requires an Urgent Response.

The primary objective of this unit is to have students understand and acknowledge that there are other things happening around this world that they can have a voice in. Students need to understand that the science of climate change affects people and needs; therefore, it requires them to be empathetic towards climate refugees. They will research on organizations that assist refugees such as the United Nations High Commissioner for Refugees (UNHCR) and how they themselves can get involved with other organizations in order to help refugee students and their families at their school. I want them to be more accepting of others and compassionate towards others. Refugee children will feel support when other children are more accepting and accommodating towards them. The North Carolina Standards of Learning will include the Ecosystem and Weather and Climate from the Science Unit and Research, and Reading comprehension skills from the Language Arts unit. This will assist students with the Science activity (Students will create an environment that will be stable and healthy using knowledge of natural disasters) associated with the project they will complete on Refugees journey and the environment they live in. Students will use their prior knowledge of these concepts. Throughout this unit, I will explain what students need to know and make the lessons so that other teachers easily understand them and incorporate other subject areas for a stronger understanding of the importance of refugee stories and their journeys. Through journaling, writing, art, math and engineering, students will discover something new.

Finally, students will grow in collaboration and their critical thinking skills through research, discussion and discovery.

Content Research

Being a Caribbean Native, I have first-hand experience of refugees coming to my island from other neighboring islands seeking asylum. One such island is Haiti. Haiti has been plagued over the years with natural disasters and political struggles. Our people have taken them in by hosting them in our homes, military bases and camps. It has never been easy to see the struggles of your own people especially the faces of pregnant mothers and children why have to flee their home. Not everyone was accepting or understood the depth of climate refugees. It should be a priority of ours to understand whom these people are and ensure we help in whatever capacity there is to assist them in having a better life. The people of Haiti are still struggling and fleeing their homeland, a place they belong but are not safe anymore because of climate change and political reasons.

Ryan Plano (2021) wrote about the recent convergence of thousands of Haitians who reached the borders of Texas. There has been crisis after crisis including the assassination of their president and disaster after disaster including the earthquake that killed 2.200 Haitians.

"Indeed, Haiti is considered the most climate-vulnerable nation in Latin America and the Caribbean. But the far-reaching effects of climate vulnerability, such as diminished crop yields in largely agriculture-dependent societies and resultant poverty, play out in countries around the region, posing an urgent challenge to the US as it emerges from years of blatantly anti-immigrant and anti-science policies."

The displacement of Haitians and many other refugees from other countries is expanding and people are seeking asylum in countries where they will have a better life for themselves and their families. The severity of climate change should never be downplayed and countries and individuals should begin to practice or create empathetic policies that will have all humans living a life of dignity, a secure environment where they feel safe and can enjoy livelihood with their families. Due to climate change becoming a future risk, our children need to be informed of the role they will be play in this growing phenomenon. The UN Refugee Agency (2021), states.

"With forced displacement reaching historic levels, schools all over the world are welcoming increasing numbers of refugee children. Teachers are facing new challenges in making sense of forced displacement and its complexities. Refugees and migrants regularly make headlines and the internet is bustling with information on the topic. Explaining the situation of refugees and migrants to primary and secondary school children has become part of many educators' daily work."

It is important that students learn about people from around the globe that are leaving their homeland because of climate change and political reasons. They need to learn to have empathy for those who are less fortunate than they are. In order for students to fully grasp and understand climate refugees and their stories, they need to know the definition of common words they will be using in this unit. Society is seeing a stable stream of estimates of people who will be coming from different countries due to climate change. Therefore, the gravity of this topic should not be downplayed and everyone needs to be made aware of how to assist when it reaches his or her doorsteps. The question we need to ask is, "What exactly is Climate Change?" As educators, we need to have an understanding of climate change and the effects it has on humans all over the world. NCBI, (2019), states,

"Climate change is one of today's major challenges, and among the causes of population movement and international migration. Climate migrants impact health systems and how their ability to respond and adapt to their needs and patterns. To date, the resilience of health systems in the context of climate change has barely been explored."

⁶ Plano, R. 2021. Haitian Migrant Treatment, Just the Latest Sign US is Woefully Unprepared for Climate Migration.

⁷ The UN Refugee Agency. 2021. *Teaching About Refugees*.

⁸ NCBI. 2019. Climate Change Migration and Health Systems Resilience.

The future will hold many challenges for most people. There needs to be a plan on how we will manage the influx of refugees fleeing their homeland. NCBI, (2019) states, "Climate change that causes environmental change will cause substantial increases in population movement. This movement will happen in or between countries in years to come". How do we manage this influx of movement? We have to plan and build resilience against those that oppose this change. Creating safe pathways for refugees whose homes have been affected by natural disasters or for those who are seeking political asylum, should be a priority. They need be given access to an environment, a world where they can live with dignity and feel safe. 350.org, (2021) states, "Many impacts of climate change are now unavoidable – but the harm they cause is not inevitable if urgent and effective adaptation is put into place, supported by solidarity between citizens of different nations, who all face a shared challenge".

Definitions

Climate refugees - According to the World Economic Forum, (2021), the term Climate refugee was first coined to describe the increasing large-scale migration and cross border mass movements of people that were partly caused by such weather related disasters.

"In April, the United Nations High Commissioner for Refugees (UNHCR) released data showing that the number of people displaced by climate change-related disasters since 2010 has risen to 21.5 million, pointing out that "in addition to sudden disasters, climate change is a complex cause of food and water shortages, as well as difficulties in accessing natural resources." The impacts of climate change is being felt worldwide, including countries already struggling with conflict and poverty.

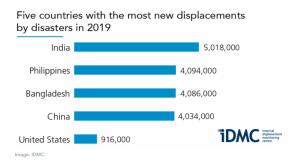


Figure 2: The five countries with the most displacements by disasters in 2019. Source: Internal Displacement Monitoring Centre

⁹ NCBI. 2019. Climate Change Migration and Health Systems Resilience.

¹⁰ 350. org. 2021. Build a Powerful Climate Movement.

¹¹ World Economic Forum. 2021. Climate Refugees, The World's Forgotten Victims.

Asylum seekers - An asylum seeker is someone who is seeking international protection but whose claim for refugee status has not yet been determined. In contrast, a refugee is someone who has been recognized under the 1951 Convention relating to the status of refugees to be a refugee (Parliamentary Library, 2011).

Returnees - According to the Collins Dictionary, a returnee is a person who returns to the country where they were born, usually after they have been away for a long time.

Discrimination - Discrimination is the unfair or prejudicial treatment of people and groups based on characteristics such as race, gender, age or sexual orientation (APA, 2019)

Obstacles - something that makes it difficult to do something. : An object that you have to go around or over: something that blocks your path (Merriam Webster, 2020)

Climate Change - Climate change is a change in the usual weather found in a place. This could be a change in how much rain a place usually gets in a year. Alternatively, it could be a change in a place's usual temperature for a month or season.

Climate change is also a change in Earth's climate. This could be a change in Earth's usual temperature. Alternatively, it could be a change in where rain and snow usually fall on Earth. (NASA. 2014)

Hunger - Hunger is an uncomfortable or painful physical sensation caused by insufficient consumption of dietary energy. It becomes chronic when the person does not consume a sufficient amount of calories (dietary energy) on a regular basis to lead a normal, active and healthy life (FAO, 2020).

Environment - The surroundings or conditions in which a person lives.

Challenges - is something new and difficult, which requires great effort and determination

Weather - Weather is the state of the atmosphere, describing for example the degree to which it is hot or cold, wet or dry, calm or stormy, clear or cloudy. On Earth, most weather phenomena occur in the lowest layer of the planet's atmosphere, the troposphere, just below the stratosphere. (Wikipedia, 2021).

Climate - Climate is the long-term pattern of weather in an area, typically averaged over a period of 30 years. More rigorously, it is the mean and variability of meteorological variables over a time spanning from months to millions of years (Wikipedia, 2021).

Ecosystems - An ecosystem consists of all the organisms and the physical environment with which they interact. These biotic and abiotic components are linked together through nutrient cycles and energy flows. Energy enters the system through photosynthesis and is incorporated into plant tissue (Wikipedia, 2021).

Instructional Implementation

Teaching Strategies

Discussion

To begin my unit, students will have access to artwork where they will have a discussion with class and teacher. This strategy is used school wide as it assist students to build self-confidence and develop better speaking skills. This is important in learning as it addresses all disciplines because it assists students to process information rather than simply receiving it. The goal for the discussion is to have students work and practice their thinking skills about the topic being discussed. In using discussion, it is my hope to stimulate critical thinking in students. This will help them in learning more about the topic, and increases understanding. Students will then generate more ideas and hopefully build confidence within themselves.



Figure 3: Retrieved from Bing Image Search 2021

Visualize





Figures 4 and 5: Retrieved from Bing Image Search 2021

Using these pictures along with others, students will be more inclined to participate in classroom discussions in a more involved and meaningful manner. Visuals also assist students in grasping concepts and allows them to also make associations and connections between pieces of information. These visuals will also be used to help with students' cognitive and emotional level.

Cooperative Learning

Students of mixed abilities will work together. This will be done by promoting small groups and whole group activities. Cooperative learning will develop their self-confidence as well as enhance their communications and critical thinking skills, which are vital. Shift Learning, 2021, states, "Students effortlessly relate emotions with visuals, which make what they're learning more impactful and memorable than only adding text".

¹² Shift Learning. 2021. Cooperative Learning.



Figure 6: Retrieved from Bing Image Search 2021

Inquiry Based

In teaching this unit, teacher will oftentimes post thought provoking questions to students.

These questions are intended to inspire students to think for themselves and become learners that are more independent. They will conduct their own investigation by being encouraged to ask questions and investigate their own ideas. This will help to improve their problem solving skills as well as allowing them to gain a deeper understanding of academic concepts.

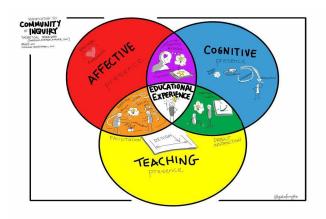


Figure 7: Inquiry Model of Learning. Source: Bing Image Search 2021

Lesson 1 Refugee Stories: Mapping Country of Origin (Adapted from: Roads to Refuge: 45 Minutes for two class sessions

Grades 3-5 Language Arts/Social Studies

https://www.roads-to-refuge.com.au/teaching-ideas/journeys-lesson1-mapping.html

Learning Outcome: Students will be able to identify and map countries of origin and countries of asylum.

Lesson Resources:

Refugee Journeys

World Map/Atlas

Chromebooks

Students will watch a short clip on What Does it Mean to be a Refugee: Refugee Journeys

https://www.youtube.com/watch?v=25bwiSikRsI

https://www.youtube.com/watch?v=9B41 HVLHYM

Step 1: Mapping

Students will be asked to use a map to locate the countries of origin in the short stories at Roads to Refuge.

"We were so scared, moving around from house to house, taking everything with us," says Abdul's 14-year-old daughter, Dania.

"As a child, my school was burnt down and no Hazara were allowed to get an education..." Karim, Afghanistan (Refugee Council of Australia).

"I see my mother in my dreams, cleaning the yard of our home, and think of her when I am awake," she said. Pasonata, Southern Sudan (UNHCR)

"They burnt our house and drove us out by shooting," says Mohamed (Rohingyha Refugee from Myanmar's Rakhine State) Refugee Council of Australia

Students will be asked to write down the name of the countries surrounding those listed above and to familiarize themselves with the geographical area (for example: physician borders, names of neighboring countries).

Step 2: Research

Students will be asked to create a fact file on each person's country of origin and present it to the class.

Fact Files could include:

- Languages Spoken
- Religion/s
- Population
- Types of food eaten
- Ruling Government
- Ethnic Groups

- Celebrations Cultural/Religious
- Occupations/Lifestyles (urban/rural)
- Education

Step 3: Presentation

Students will present (Independently) using google slides or PowerPoint. This will take two class sessions for each grade level 3-5.

Lesson 2: Overcoming Obstacles

Two 45 minutes Class Sessions

Language Arts/Art

Grades 3-5

Lesson Topic: Obstacles are a part of a person's everyday life.

Lesson Objectives:

Students will conduct a short research on a climate refugee's life explaining how they overcame an obstacle.

Students will describe obstacles as part of everyone's daily life and share examples of obstacles they may experience in their own life.

Materials

Chromebooks

Sticky notes

Warm-Up Activity

Students will be asked what they think the phrase "Overcoming Obstacles" means.

Teacher will then clarify what the phrase means. Students will then share some obstacles they think they have experienced in their life or someone close to them.

Viewing Videos

Students will be told they will be watching two videos that show two refugee children talking about their experience.

They will be told while watching the video to listen and write down questions or ideas they may have for these children.

https://www.youtube.com/watch?v=tkkVnQEB1mE

https://www.youtube.com/watch?v=7QVmXX62 H0

After watching the video, how did the children overcome their obstacles, if not, what can they do to overcome them?

Students will then watch a video displaying an NFL player who overcame an obstacle.

https://www.youtube.com/watch?v=lHtauASkebY

https://www.youtube.com/watch?v=RDYpwhxXjpE

Students will be asked to offer their questions, comments, reactions and responses to the videos. They will be invited to note specific things they learned in the video about ways to deal with and overcome obstacles and to reflect upon their observations (e.g., "I liked when the role model said we can ask for help with our obstacles.").

They will be placed in groups to answer these questions:

- a) Describe the obstacle the individual or group was facing.
- b) What did he/she/they do to overcome this obstacle?
- c) Were they successful in overcoming the obstacle? How do you know?
- d) What might you have done differently in that situation? Why?
- e) Have you ever faced a similar obstacle? If so, describe the situation. What did you do?
- f) Think about a career you are interested in. List at least three obstacles that you might face if you choose to pursue this career. How might you overcome each of these obstacles?

Independent Work

Students will be supplied with a collection of grade-appropriate short biographies, memoirs, or summaries of individuals who have faced and overcome obstacles (refugees).

Students will then use a timeline (with pictures) to review obstacles in the life of one of the refugees found in their biography, memoir or summary.

Lesson 3: Overcoming Obstacles through Music

Grades 3-5 (3 45 Minutes Class Sessions)

Lesson Adopted from: www.ClimateChangeNorth.ca Author: Grace Snider

Sing! Sing! Sing a Song!

Subjects: Social Studies, Science, Fine Arts (Drama, Music), English Language Arts

Enrichment: Drama, Music, Visual Arts, English Language Arts

Materials: Highlighter pens, felt pens, and chart paper, audio tape recorder(s) and blank audio tapes, student handout of lyrics to "What's That Habitat?" or other song, CD or tape of the sample environmental song

Skills: Cooperating, discussing, writing, presenting (singing)

Key Vocabulary: Climate change, greenhouse effect, greenhouse gases, carbon dioxide

In a Nutshell:

After learning about climate change, students work in small groups to write, sing, and make a recording of a song.

Goal: To be creative and have fun, while gaining awareness and communicating about climate change.

Background Learning:

Teachers and students should be familiar with the basic science of climate change and its anticipated impacts:

• Intermediate Backgrounder #3: Climate Change Solutions: We can all help! Ideally, students should do this lesson as a culminating activity after completing other lessons on climate change.

Activities

1. Read the lyrics and/or listen to an environmental song or a song about change or taking action. Tell the students that they will be writing, singing, and recording their own song about climate

change. If your students enjoy "rap" music, you may want to have them write a "rap" instead of a "song."

http://www.thinkabout.ca/tapsong.htm (Link to environmental songs).

- 2. As a class, we will review the background information and highlight key words or phrases about climate change. Teacher will then record these key words on the board. Students will be told that they should try to include as many of these key words about climate change in their song as possible.
- 3. While recording on the board, students will brainstorm the names of some simple songs that they want to use as the melody for their song (example "Spiderman" theme song). Students could also use the rhythm of a local First Nation drum song. If students are interested in poetry, they can write and recite their song as a rhyming poem instead of using a song melody. The possibilities are only limited by their imaginations!

"Spiderman" song melody example:

Climate Change, Climate Change,

Ice is melting, it is so strange.

- ...you get the idea!
- 4. Divide students into groups of two or three. Each group will be given chart paper and felt pens. Students will be given two minutes to name their singing group. Ask students to write the name of their group at the top of their chart paper.
- 5. Ask the groups to choose a melody for their song.
- 6. Ask the groups to write their own song about climate change using as many of the key words as possible and working these words into the song melody, poem, or drum rhythm that they have chosen. Students should record their song on the chart paper.
- 7. Once the songs are written, ask students to name their song. They should include the name of their song on their chart paper.
- 8. Allow students time to practice singing their songs.
- 10. When students are ready, they will perform their song for the class. Teacher will make audio recordings of students performing their songs so they can be shared!

Enrichment Ideas:

Drama, Music, Visual Arts, English Language Arts: Look out MTV!! – Have students create a music video of their climate change song, including movement, musical instruments, costumes, setting, etc. Students can imagine they are entering a contest through MTV or Much Music.

Lesson 4: Science

Topic: Creating a Stable Environment for Climate Refugees

Grades 3-5

Two 45 Minutes Class Sessions

Vocabulary: natural disasters, climate, weather, environment, safe, climate refugees.

Materials:

Computer

Drawing Paper

Markers

Pencils

Stencils

Various materials to create environment

Background:

Teacher and students will discuss weather/climate and the negative impact they have on any environment. Teacher will record information on white board.

Teacher and students will watch a video on The World's First Climate Refugees. This video will allow students to see first-hand what weather does to the environment.

https://www.youtube.com/watch?v=46yvAKge3qQ

Through discussion, teacher will recognize whether or not students' understood information from the video and see if any empathy is within their responses.

Teacher will then show a 3-minute video of the aftermath of an earthquake in Haiti.

https://www.youtube.com/watch?v=HL7HVpMUlvk

Teacher and students will then discuss other natural disasters and how they affect the environment. She will mention floods in New Orleans and other cities in the United States.

Question: How can we create a better environment that will better withstand the effects of natural disasters so citizens can live a life of dignity and feel a sense of safety? Answers will be written on the board through discussion.

Activity:

Students will be placed in groups of four. Through collaboration, they will design and create what they think a safe, healthy and stable environment is. The environment they create should:

Have people sharing resources; a garden where everyone can eat from and reflecting it not being too hot or too cold.

What does it look like without climate change damages?

How can they make it safe?

What can they do to ensure the environment they create are safe from natural disasters?

After they design their environment and make notes on paper, they will use various materials to make the environment created.

Finished environments will be displayed and each group be given the opportunity to share information about their environment and the thought process that went through its creation.

Appendix

- RL.3.2 Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.
- RL.4.2 Determine a theme of a story, drama, or poem from details in the text; summarize the text
- RL.5.2 Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.
- RL.3.5 Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.
- RL.4.5 Explain major differences between poems, drama, and prose, and refer to the structural elements of poems and drama when writing or speaking about a text.
- RL.5.5 Explain how chapters, scenes, or stanzas provide the overall structure of a particular story, drama, or poem.
- RL.4.7 Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.
- RI.5.2 Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.
- W.5.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information. a. Organize information and ideas around a topic to plan and prepare to write.
- b. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose.
- c. Provide logically ordered reasons that are supported by facts and details.
- d. Link opinion and reasons using words, phrases, and clauses.
- e. Provide a concluding statement or section related to the opinion presented.
- f. With guidance and support from peers and adults, develop and strengthen writing as needed by revising, editing, rewriting, or trying a new approach, with consideration to task, purpose, and audience.
- W.3.5 Conduct short research projects that build knowledge about a topic.

- W.4.5 Conduct short research projects that build knowledge through investigation of different aspects of a topic.
- W.5.5 Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic

Art

- 3.CX.1.2 Understand how art documents the history of the local community.
- 3.CX.2 Understand the interdisciplinary connections and life applications of the visual arts.
- 4.CX.1.4 Explain how place and time influence ideas, issues, and themes found in art.
- 5.CX.2.3 Understand the balance of individual roles and collaborative skills to create art.
- 5.CX.2.4 Interpret visual images from media sources and the immediate environment.

Science

- 3.L.2.2 Explain how environmental conditions determine how well plants survive and grow.
- 4.L.1 Understand the effects of environmental changes, adaptations, and behaviors that enable animals (including humans) to survive in changing habitats.
- 4. L.1.3 Explain how humans can adapt their behavior to live in changing habitats (e.g., recycling wastes, establishing rain gardens, planting trees and shrubs to prevent flooding and erosion).

Music

MU.Cr2.1.5b: Create compositions, use standard notation to document, and record the piece.

• Students may be given accommodations for writing/notational skill abilities, as needed.

*ANALYZE:

MU.Re7.2.5a: Discuss and/or write about the impact of the music and its meaning or purpose in its authentic context.

• Student reflects upon the impact of music through written means with appropriate accommodations for writing ability i.e. collaboration with a scribe.

• Student reflects upon the impact of music through discussion with appropriate accommodations for verbal abilities, i.e. providing an alternate way of showing understanding through writing or adaptive devices.

Annotated Bibliography

APA. 2019. Discrimination: What it is and How to Cope? Retrieved from:

https://www.apa.org/topics/racism-bias-discrimination/types-stress

This article gives a simple definition of discrimination. It also goes into details on how people cope with it and the health issues associated with it.

Cortes, A. 2019. The Refugees You Don't See – How Climate Fuels Forced Migration.

Retrieved From:

https://globalwa.org/issue-brief/acknowledging-climate-refugees-on-world-

refugee-day/

An article that gives definitions of words associated with Climate Refugees. It talks about one witnessing the destruction of their livelihood, childhood and home. How hard it is when you are searching for help and it is not there. What do you do?

Food and Agriculture Organization of the United Nations. 2021. Hunger and Food Insecurity.

Retrieved from: https://www.fao.org/hunger/en/

This article dives into hunger within the world. It spoke about insecurity ad forms of malnutrition. "At the same time, there are worrying global trends in malnutrition,

including a rapid rise in overweight and obesity, even as forms of undernutrition persist.

The way food is produced, distributed and consumed worldwide has also changed dramatically. This vastly different world calls for new ways of thinking about hunger and food insecurity."

Friends of the Earth United States. 2021. How to Communicate about Migration Caused by Climate Impacts. Retrieved from:

 $\label{lem:https://350.org/wp-content/uploads/2021/02/Brief_-Climate-m} igration-dangerous-narratives.pdf$

This article discusses the influx of refugees that we will be seeing in the years to come.

The authors looked on how countries can develop policies that will assist in making a better environment for refugees in giving them a better environment to live where they will have dignity and freedom.

Harvard University. 2021. Climate Change a Global Threat that Requires an Urgent Response.

Retrieved from: www.harvard.edu

This article talks about immediate opportunities and also emphasizes specific recommendations to establish the Interior Department as a purposeful catalyst for a fair and just transition to clean energy, healthy ecosystems and thriving communities.

Iberdrola. 2021. How Can Environmental Education Help to Combat Climate Change?

Retrieved from: https://www.iberdrola.com/social-commitment/climate-change-education

This article is solely witten on the basis of explaining climate change and the Science behind it. They go into details about the importance of educating our children about this topic and why it is needs to be a part of the curriculum.

Mcconchie, J. 2020. Why Children Need to Hear Refugee Stories. Retrieved from:

https://greatergood.berkeley.edu/article/item/why children need to hear refugee storis

This article speaks about the importance of children in host countries, hearing the stories
of other children who are refugees. In hearing their stories, they are more compassionate
and attuned to be more accepting.

NASA. 2014. What is Climate Change? Retrieved from:

https://www.nasa.gov/audience/forstudents/k-4/stories/nasa-knows/what-is-climate-change-e-k4.html

In this article, NASA explains the difference between climate change and weather. They discuss the climate on Earth and the changes being made daily. "People who study Earth see that Earth's climate is getting warmer. Earth's temperature has gone up about one degree Fahrenheit in the last 100 years. This may not seem like much. But small changes in Earth's temperature can have big effects".

National Geographic. 2021. In the Face of Unprecedented Challenges, Humanity is on the Move.

Retrieved from: www.api.nationalgeographic.com

This article looks into the United Nations Climate Change Conference, where Governments and industries got more serious about reducing carbon emissions and Decarbonizing key sectors of the global economy.

NCBI. 2019. Climate Change, Migration and Health Systems Resilience: Need for Interdisciplinary Research. Retrieved from:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7506192/

This article focuses on the importance of studying the relationship between climate change, migration, and the resilience of health systems from an interdisciplinary perspective. It describes and discusses the fundamental role that health care systems resilience can play in this regard and we identify interdisciplinary research as key to better understanding the existing linkages between climate change, migration and health systems and how to build more resilient health systems.

Plano, R. 2021. Haitian Migrant Treatment Just the Latest Sign US is Woefully Unprepared for Climate Migration. Retrieved from:

https://www.climate-refugees.org/spotlight/haiti

This article looked in depth at the recent convergence of the Haitian people on the Texan Border. He wrote about the crisis this country has faced and is currently facing. In this article, Plano also spoke about the US and its policy on climate refugees.

Resource Library. 2021. Environmental refugee. Retrieved from:

https://www.nationalgeographic.org/encyclopedia/environmental-refugee/

This website gives detailed definitions of words associated with climate refugee.

Tropical ICSU. 2021. Climate Refugees: Introduction to Climate Change. Retrieved from:

https://climatescienceteaching.org/lesson/climate-refugee/overview

This website has a compilation of lessons on Climate Refugees. They make lessons simple so teachers will be able to instruct students for them to better understand the concept taught.

The UN Refugee Agency. 2021. Teaching about Refugees. Retrieved from:

https://www.unhcr.org/en-us/teaching-about-refugees.html

This website gives you a guideline on how to teach about climate refuges in the classroom.

World Economic Forum. 2021. Climate Refugees The Worlds Forgotten Victims. Retrieved from:

https://www.weforum.org/agenda/2021/06/climate-refugees-the-world-s-forgotten-victim s/#:~:text=The%20term%20"climate%20refugee''%20was,by%20such%20weather-relate d%20disasters.

This article focuses on who are climate refugees. They present data of the five top countries with the most displacement form 2019. The article also looks into how the response to these countries are globally and the 2018 document that was adopted by the UN Human Rights Council.

"The document pointed out that there are many people who do not fit the definition of "refugees" among those who are forced to migrate long distances and cross borders due to climate impacts, and that the legal system to protect their human rights is inadequate, as the "non-refoulement principle", which states that people who have crossed borders should not be deported or repatriated to their original countries against their will, is not applied".

Parliamentary Library of Australia. 2011. Asylum Seekers and Refugees. What are the

Facts? Retrieved from:

https://www.aph.gov.au/binaries/library/pubs/bn/sp/asylumfacts.pdf

In this article, the difference between asylum seekers and refugees are explained thoroughly. It also dives into how refugees arrive from their native land into other countries.

Endnotes