

# Stories from the Climate Crisis: A Mixer

BY BILL BIGELOW

GLOBAL WARMING. CLIMATE CHANGE. The climate crisis. One of the things that makes it so challenging to teach about what is happening to our climate is that no matter what term we apply, it can seem overwhelming — and yet also impersonal. The terms connote something that is happening absolutely everywhere, but also nowhere in particular. And there can be a false equality communicated in how we name the crisis. If it is “global,” then it is happening to everyone, everywhere.

And it is. But not equally.

One of the ways that we can help bring the climate crisis to life in the classroom, and to underscore its profound inequality, is through story. In this role play, the Climate Change Mixer introduces students to 23 individuals around the world — each of whom is affected differently by climate change. For some, climate change threatens to force them to leave their land. For others, it is a business opportunity. In this activity, students meet one another in character and learn about the impact of climate change in their lives — and how each is responding. It makes an excellent introductory activity to introduce themes that students will encounter as they explore the breadth of the crisis and how it is changing life on Earth.

We encourage you to read [“How to — and How Not to — Teach Role Plays,”](#) by the Zinn Education Project, prior to teaching this and other role plays in *A People’s Curriculum for the Earth*. Note that if you are teaching online, digital materials for this role play are on the last page.

## Materials Needed

- Mixer roles, cut up. One for every student in the class.
- Blank nametags. Enough for every student in the class. (Optional, but advised.)
- Copies of “Climate Change Mixer Questions” for every student.

## Time Required

- One class period for the mixer. Time for follow-up discussion.

## Suggested Procedure

1. Explain to students that they are going to do an activity about the impact of climate change around the world. Distribute one role to each student in the class. There are only 23 roles, so in many classes, more than one student will be assigned the same individual. That’s not a problem. Point out to students that all of the roles describe actual people. Some are no longer living; and some are in different positions than described in the roles, but this will not affect the success of the activity. In some cases, the roles incorporate these individuals’ own words. However, none of the roles should be used for quotation, as every individual’s description has been adapted for the mixer.
2. Distribute and have students fill out their nametags, using the name of the individual they are assigned. Tell students that in this activity you would like each of them to

attempt to become these people from around the world. Ask students to read their roles several times and to memorize as much of the information as possible. Encourage them to underline key points. I ask students to list the three or four things they think are most important about their characters.

3. Distribute a copy of “Climate Change Mixer Questions” to every student. Explain their assignment: Students will circulate through the classroom, meeting other individuals who also have some connection to climate change. They should use the questions on the sheet as a guide to talk with others about and to complete the questions as fully as possible. Emphasize to students that they must use a different individual to answer each of the eight questions. (This is not *The Twilight Zone*, so students who have been assigned the same person may not meet themselves.)

Tell them it’s not a race; the aim is for students to spend time hearing each other’s stories, not just hurriedly writing down answers to the different questions. Any role play risks stereotyping, so tell students not to adopt accents in an effort to represent an individual from another country. Encourage students to speak as if they are their assigned characters. Emphasize the use of the “I” voice, as sometimes students will begin by saying something like “My character lives in Bangladesh.” It’s important to the success of the activity that they attempt to *become* their characters — for example, to say, “I live in Bangladesh.”

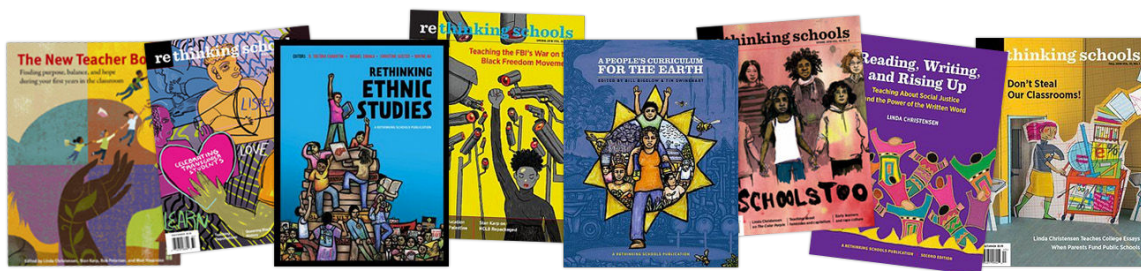
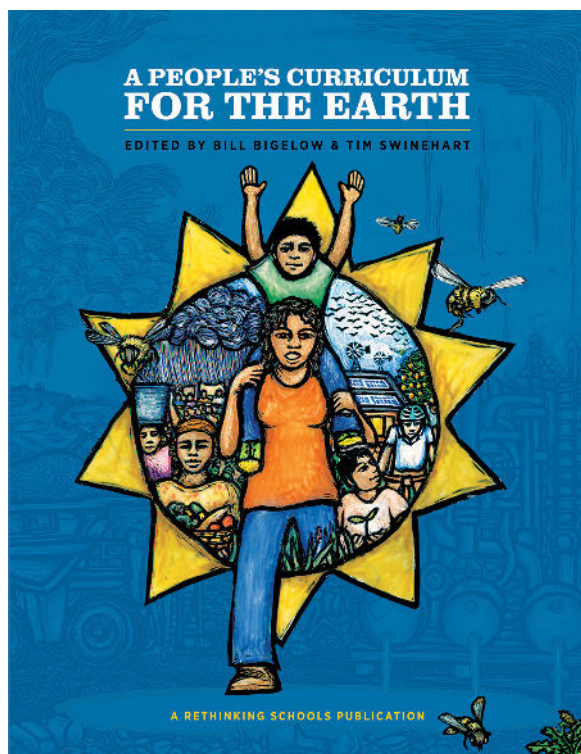
Note that it’s best to encourage students to meet one on one, as they circulate throughout the classroom. Sometimes students will cluster in groups, but this tends to allow some students to be passive and simply listen to others’ conversations, rather than engaging in their own. Encouraging students to discuss the questions in pairs helps to address this potential problem. Finally, the last two questions ask students to begin to think about possible solutions. Tell students that in answering both of these questions, they don’t

have to limit themselves to the information included in their role descriptions; however, they should try to propose ideas that are consistent with their characters’ circumstances and concerns. For example, in one class, students playing two different individuals harmed by climate change decided they would make a film about the negative impact of rising temperatures throughout the world. This solution was not included in either role, but it was a creative response.

4. Ask students to stand up and begin to circulate throughout the class to meet one another and to fill out responses on the “Climate Change Mixer Questions” student handout.
5. There is no set length of time for the mixer. I generally play a character myself, so I get a feel for how it’s going and how much time students need, and as I move through the classroom, I’ll look to see how many questions on the handout students have completed. Allow at least a half hour for students to circulate.
6. After the students have met the other individuals, ask them to write briefly on some of what they learned from their conversations with people from around the world. Questions that I’ve used:
  - Whom did you meet, or what situations did you hear about, that surprised you? Did you have any “aha’s” while talking with people?
  - Did anyone make you angry? Who?
  - What themes seemed to come up in your conversations?
  - What’s the “big picture” — the big story — that comes across in this activity? Can you summarize it in one or two sentences?
  - Whom did you meet or which situations did you hear about that gave you hope?

7. Discuss these with students. See my article, “Teaching the Climate Crisis,” in *A People’s Curriculum for the Earth*, for a description of how this played out with one group of students Tim Swinehart and I worked with.

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# Climate Change Mixer Questions

1. Find someone who is hurt by climate change. Who is the person? How has the person been hurt or how might this individual be hurt in the future?
2. Find someone who might benefit from climate change, or who contributes substantially to climate change. Who is the person? How might the person benefit or in what way does this person contribute?
3. Find someone who has been forced to move because of climate change, or may have to move. Who is the person? Why might this person have to leave and where will they go?
4. Find someone who is affected by climate change in a way that is similar to how you're affected. Who is the person? How are your situations similar?
5. Find someone whose story involves a connection between water and climate change. Who is the person? What's the connection?
6. Find someone who will have to make life changes because of climate change. Who is the person? Why does this person have to make a life change? What might they do?
7. Find someone who has an idea about what should be done to deal with climate change — or someone who is taking action in some way. Who is the person? What is the person's idea or action?
8. If possible, find someone here with whom you could take some joint action around climate change. Who is the person? What action might you take in common? Be imaginative. This needn't refer directly to anything described in your role.

# Mixer Roles

## **Larry Gibson**

**Mountaintop removal activist, Kayford Mountain, West Virginia**

They say that to move away from oil we need to rely more on “clean coal,” mined here in the USA. Clean coal. That’s a lie. That so-called clean coal comes from mountains in Appalachia that have been destroyed by coal companies, like Massey Energy. They blast mountains apart to get at the coal and dump everything they don’t want in the valleys and streams, poisoning everything around. When they talk about clean coal, they sure don’t mean how they got it. They want you to focus on the fact that burning coal today produces less sulfur dioxide than it used to. That’s the stuff that causes smog and acid rain. But burning coal still releases about twice as much carbon dioxide as natural gas, and a third more than oil — for the same amount of energy. And carbon dioxide is a greenhouse gas, which causes global warming. So mining coal is bad for the people of Kentucky and West Virginia, but it’s also bad for the planet. I’ve been fighting mountaintop removal of coal for more than 25 years. I’m not going to sit around and watch my home and the planet be destroyed. The coal companies care about the money. For me, it’s not about the money. It’s about the land. My mother gave me birth. The land gives me life.

## **Anders Opedal**

**CEO and president Equinor, Norway**

Just because I am president and CEO of a huge oil and gas company doesn’t mean that I don’t care about the environment. I do. As an engineer, I understand the science of climate change. In fact, my company is building the world’s largest wind farm in the North Sea and we are developing solar energy, too. But look, we can’t abandon fossil fuels. We can’t just flip a switch — the energy transition will take time. Equinor is Norway’s largest oil and gas company, and is owned mostly by the government, but is a for-profit company. Norway has been involved in oil and gas exploration and drilling since 1969, and the Norwegian people have benefitted tremendously from oil and gas. After Russia, Norway produces more oil than any country in Europe — about 4 million barrels a day. Norwegian companies like mine continue to drill 30 to 50 exploratory wells every year. One result of the warming climate is that this allows us to drill for oil and gas in areas of the Arctic that were previously too frozen-over to get to. Yes, this oil and gas produce more greenhouse gases, but if we didn’t drill there, Exxon, Shell, or BP would. As our energy minister said, “Access to new, attractive exploration acreage is a pillar in the government’s policy for further development of the petroleum industry.” So yes, we hate climate change, but we benefit from it. Drilling in the Arctic leads to new jobs for Norwegians, and big profits for our shareholders. That’s just the way the world works.

## **Evelyn Acham**

### **Coordinator, Rise Up Movement, Uganda**

I want to tell you a story about what happened to my friend and fellow climate activist, Vanessa Nakate, who also lives in Uganda. Vanessa went to the World Economic Forum in Davos, Switzerland, to demand that the rich nations take more action on climate change. She was photographed with other climate activists, like Greta Thunberg, from Europe. But when Reuters news agency published the photo, they cropped out Vanessa, the only Black activist in the group. As Vanessa tweeted, “You didn’t just erase a photo. You erased a continent. But I am stronger than ever.” Cutting out the only African in the photo said so much. Africa is responsible for just 3 percent of the world’s greenhouse gas emissions, and yet climate change hits us much harder than it does rich countries in the global North. Unpredictable rains and floods, prolonged drought, crop failures, and fertile lands turned into deserts are changing the face of Africa. The continent’s poor and vulnerable are hit the hardest. Some places in Africa are seeing temperatures rising twice as fast as world averages. This is personal. Uganda’s terrible floods and droughts threaten families like mine that depend on predictable rainfall for our crops. I became friends with Vanessa when she bravely began going to the Ugandan parliament in our capital, Kampala for her “climate strikes” to demand more action on climate change. For me, the most important thing is to have schools teach young people about the climate crisis, so they learn what I never learned in school. A person cannot do anything if they don’t have knowledge. I am now the coordinator in Uganda for the Rise Up Movement to work for climate justice. One of our slogans is: “There is no future in the fossil fuel industry. The future is renewable energy. The future is the youth.” #UprootTheSystem

## **Enele Sopoaga**

### **Prime Minister, Tuvalu**

Most people have never heard of my little island that is 400 miles from Fiji in the South Pacific. Tuvalu has about 11,000 people in a place that averages just six feet above sea level. My people live on fish and fruit; everyone knows their neighbors and people don’t even lock their doors. Rising sea levels, caused by global warming, threaten the very existence of my land and people. As I told a U.N. conference in 2014, “No national leader in the history of humanity has ever faced this question: Will we survive or will we disappear under the sea?” Beginning in 2000, at high tide the water began covering places on the island that had never before been covered in the memory of even the oldest residents. In August 2002, the entire island flooded and the increased salinity [salt] has forced families to grow their root crops in metal buckets instead of in the ground. Many people believe that if current trends continue, there will be no more Tuvalu in the near future. The former prime minister of Australia said that if Tuvalu disappears, people should be relocated elsewhere. What incredible selfishness. How can anyone say that people in Tuvalu should suffer so that people in the so-called developed world can continue to fill our atmosphere with carbon dioxide by driving their big cars and buying stuff made halfway around the world? This is sick. That is why I have been speaking out.

## **Chris Loken**

### **Apple grower, Hudson Valley, New York**

Everybody is saying awful things about global warming, and I know that it's bad for a lot of people. But recently *Fox News* did a report on climate change "winners," and they came to talk to me. As they said in their report, "There are some upsides to global warming." Frankly, I saw this coming. I knew that things were going to get warmer and you know what they say about a crisis: It's also an opportunity. I live in a beautiful place. Rolling hills. Good for apple trees. But I decided to diversify. Right next to the apples, I planted peach, apricot, and plum trees. Years ago. As I say, I saw this coming. These trees wouldn't have survived the winters of the old pre-global warming days. But our winters are getting milder, and I'm betting my trees will do just fine. As I told the *Fox News* people: "This farm here has been set up for the future." It's not easy running a farm these days, and if the weather decides to cooperate a little bit, who am I to argue? I'm sorry for those folks who are hurt by all this, but I've got to think of my family. *Fox News* understands this, which is why they told my story.

## **Mustafa Abdul Hamid**

### **From Azaz, Syria — now living in Kara Tepe Refugee Camp, Lesbos, Greece**

I am 30 years old. I am from Aleppo in the north of Syria, from a town called Azaz. My life used to be good. It all changed beginning with the winter of 2006–07. That was when the drought began — a drought that continued through 2010. It was the worst drought in Syria's history. Before the drought, my family and I farmed three hectares (almost seven and a half acres.) Beautiful, rich top soil. We grew wheat, fava beans, tomatoes, and potatoes. Before the drought we harvested almost a ton of wheat per hectare. Farmers like me made \$500 to \$800 a month. But then there was no more rain. All I needed was water, but I didn't have water. So things got very bad. The government wouldn't allow us to drill for water. You'd go to prison. Not only did the government not help farmers, they increased the price of fuel and fertilizer, making things even worse. Many people left their farms and tried to get jobs in the cities, but there were not enough jobs there. People made war against the government. As I told a reporter, "The start of the revolution was water and land." The government started killing us. The violence was terrible. I could no longer make a living for my family. So I decided to flee Syria. Now I live in the Kara Tepe refugee camp, the main camp for Syrians on the Greek island of Lesbos, near Turkey. Some people say that we are refugees from the war. Some people say that we are climate refugees, because climate change is creating drought everywhere. But for me, the war and the drought, they are the same thing. Climate change means war.

## **Stephanie Tunmore**

### **Greenpeace climate campaigner**

I joined the environmental organization Greenpeace because I felt like I had to do something to make the world a better place. To me, it seems that climate change is the most dangerous problem facing humanity and the environment. The consequences of global warming will be catastrophic, and we have to do something. I've been working to save the Arctic. People think of the Arctic as just one big empty block of ice and snow. Either that, or where Santa Claus and the elves live. But it's an unbelievable place. There are species of birds and fish that are found only there and a few other places. Polar bears, musk oxen, and caribou live there; and in the summer, snowy owls, ducks, and swans migrate there to nest. But already Alaska's North Slope has been taken over by 28 oil production plants, almost 5,000 wells, and 1,800 miles of pipes. But the oil companies see global warming and the melting ice as an opportunity to drill for even more oil and gas. Haven't we learned anything? Why are we looking for more fossil fuels? The good thing is that more and more people are determined to stop oil development. We've taken direct action and have confronted the oil drillers in places like the Beaufort Sea, where we towed a fiberglass dome with two Greenpeace activists inside into a BP Northstar oil-drilling construction area. Two other activists unfurled a banner: "Stop BP's Northstar, Save the Climate." Direct action. That's what it will take to stop these oil-drilling criminals.

## **Rafael Hernandez**

### **Immigrant rights activist, The Desert Angels, U.S.-Mexico border**

In 1986, I crossed the border from Mexico to the United States, looking for a better life for my family. Now I am committed to helping migrants in need. My group, Los Angeles del Desierto — The Desert Angels — patrols both sides of the Mexican-California border near San Diego. We look for lost migrants and leave water, clothing, and food at key spots in desert locations to help people on their journey. Recently, we rescued María Guadalupe Beltrán, a 29-year-old mother of four who had been burned severely in the huge Harris Fire on the border. Her father had died in Mexico and she had returned home to attend his funeral. She was caught in the fire coming back into the United States. But after suffering terribly, Beltrán died of her injuries. Afterward, I spoke to her husband, Rafael, who sat by her hospital bed for two weeks. He told me: "I asked the Virgin: 'Tell me whatever you want, please just don't take her.' But she did. At 11 in the morning my wife went away. She died at 11." Six migrants died in the fire and eight were injured. The border patrol has pushed migrants to cross in unsafe desert areas. And global warming is making these areas even more unsafe, more deadly. Climate experts say that these wildfires, just like the awful ones in Greece, Australia, and here in California, are going to happen more and more as the climate shifts. We see new record fires almost every year. So María and other wildfire victims are also victims of global warming.



## **Quannah Chasinghorse** **Han Gwich'in and Oglala Lakota; Fairbanks, Alaska**

I'm 18 years old. I am fighting to protect my homeland from oil drilling, to protect the Arctic National Wildlife Refuge, and to prevent global warming from destroying our land and lives. I wrote a poem about my life and shared it with a writer from *Teen Vogue*:

I'm from the beaded moose hide in modern clothes, from the smell of sage and taste of fry bread.

I am from the fireweed trails. From the birch trees I used to climb, whose limbs I remember as though they were my own.

I'm from the mushing, hunting, fishing, and berry picking trips, from the family of traditions.

I'm from the potlatches and the legends our elders tell.

The Alaska National Wildlife Refuge has almost 20 million protected acres, with tundra, rivers, and mountain ranges that provide a home to wildlife, especially the 200,000-strong porcupine caribou herd. In Gwich'in, we call this "Iizhik Gwats'an Gwandaii Goodlit," — "the sacred place where life begins." The Gwich'in have lived here for thousands of years, and the caribou are central to our identity and existence as a people.

Because of climate change, and record-breaking heat in summer, we now have more and more wildfires that blacken our forests and kill wildlife.

But we are fighting back. I have helped the Gwich'in Steering Committee organize to demand that the world's biggest banks agree not to lend money for oil drilling in the Arctic. And we have made progress. Five banks — Deutsche Bank, Goldman Sachs, Wells Fargo, Citi, JPMorgan Chase, and Morgan Stanley — agreed to no longer support Arctic drilling projects.

We have to fight, because they're tearing up more land, destroying more water, and in the end, when all of the oil is extracted out of Alaska, what are they going to do? We need to reconnect and rebuild our relationship to the land. If this were to be destroyed from drilling and oil spills, I don't know how I would feel connected anymore. I don't want that taken from us.

## **Rinchen Wangchuk** **Snow Leopard Conservancy, Ladakh, India**

When I was a boy, after school ended for the summer, I remember slipping down the glacier that stretched far down the mountains near my village in the Nubra Valley — in Ladakh, the far northern part of India. Today, that glacier is almost gone. And I am watching the glaciers of the Karakoram Mountains disappear a little more every year. One study found that each year, the glaciers lost between 49 and 66 feet, and another found that since the 1960s, more than 20 percent of the glaciers have disappeared. And as global warming increases, the glaciers will begin to melt faster and faster. Glaciers are ice that has built up over thousands of years. Because it rains only two inches a year in Ladakh, we depend on the glaciers for 90 percent of our water. Farmers depend on this water to irrigate fields, and everyone depends on it for drinking. Ladakhis in the villages have worked out a cooperative system to share the water, but what will happen if the glaciers disappear? How will we survive? In the rural areas of Ladakh, we have almost no cars. We pollute very little and release almost no greenhouse gases. It is unfair that the rich countries that produce so much carbon dioxide should be destroying the glaciers we depend on.

## **Moi Enomenga**

### **Huaorani Indian, Eastern Ecuador**

For years, the oil companies have invaded my people's lands and the lands of neighboring peoples — the Shuar, the Cofan, the Sequoya — in the rainforests of eastern Ecuador. First was Texaco, which is now Chevron. They left thousands of open pits that poisoned our rivers. Oil companies have spilled millions of gallons of crude oil and they continue to dump toxic chemicals into our rivers and streams. And oil development has also led to deforestation. When the oil companies build the roads, other “settlers” move in and chop down our forests and scare away our game. With oil comes destruction. And now we learn that not only is oil development destroying our rainforest, it is destroying the world, through carbon dioxide pollution that leads to global warming. Oil kills the Huaorani through pollution and kills everyone through global warming. We say, “Leave the oil in the ground.” Why do rich countries come here? People from the richest and most populated countries come to the poorest to take our resources, to live their life better, and leave us even poorer. But we are richer than they because we have the resources and the forest, and our calm life is better than their life in the city. We must all be concerned because this is the heart of the world and here we can breathe. So we, as Huaorani, ask those city people: Why do you want oil? We don't want oil.

## **Tom Conway**

### **Developer, Miami, Florida**

I know that climate change is going to hurt people. But here's the thing: With any change comes opportunity, and if you're smart, you'll take advantage of opportunities that come your way. I am a developer in Miami. Basically, I buy places as inexpensively as I can and then I fix them up either to rent or to re-sell. As I say on my website, I have a “sharp financial foundation” and “an analytical aptitude.” I began to notice that property values in certain inland neighborhoods were going up faster than property values on the beach. Sure, beachfront property is still expensive and desirable, but the scientists say that by 2060 the sea level here will rise by 14 to 34 inches, so people are becoming more interested in the parts of Miami on higher ground. For years, areas like Liberty City, Little Haiti, and Overtown were where the poor people lived. In these higher ground neighborhoods, property values are increasing three times the average in the rest of Miami-Dade County. So I'm going in to these neighborhoods and buying up businesses and homes as cheaply as I can. For example, I just bought up a couple of shopping centers in the Little Haiti neighborhood. The tenants — a travel agency, a tuxedo shop, a clothing store, some restaurants, a tax preparation place, and other businesses — had been there for years, some as long as 30 years, and weren't paying much rent. As wealthier people move into the neighborhood, they want other kinds of businesses — businesses that can pay a lot more rent. So I evicted all the tenants in order to remodel my new shopping centers. I followed the law and gave people 15 days to move out. People in the community protested — they are still protesting. “Climate gentrification!” they called it. They said I am a racist, because the tenants I removed were Black and I'm white. Look, I have nothing against the former tenants of my buildings. This is just business. I can make more profit renting to people who have more money, people who feel that with climate change, the neighborhoods on higher ground are a safer risk.

**Nancy Tanaka\***  
**Orchard Owner, Hood River Valley, Oregon**

Our family has owned and operated fruit orchards in Oregon’s Hood River Valley since my husband Ken’s grandparents bought land here in 1917. Our family’s only “time off” was when the U.S. government locked our family in incarceration camps during World War II. But that’s another story. Every generation of our family has farmed this land. And then we woke up to the front-page article in our local newspaper. It was a shocker. In fact, it scared us half to death. A study by Oregon State University found that 75 percent of the water during the summer months in the Upper Middle Fork of the Hood River comes from melting glaciers on Mt. Hood. And because of global warming, the glaciers are disappearing. That’s our river. Well, we don’t own it, but it’s the river that irrigates our pears and cherries. Our family has grown fruit on this land since before we were born, and now they tell us that our irrigation water may be disappearing? To tell you the truth, I never knew so much of the river’s water in the summer came from glaciers. You see, glaciers on Mt. Hood are kind of small compared with glaciers on other mountains. Scientists say the problem is that glaciers have been shrinking because of global warming. I always thought global warming might affect the Arctic and the polar bears, but not the Upper Middle Fork of the Hood River.

\*Nancy Tanaka is a real person, but her name has been changed here.

**Trisha Kehaulani Watson**  
**Environmental lawyer, Hawaii**

I was born and raised in the valley of Manoa, in the district of Kona (known today as Honolulu), on the island of Oahu. I am native Hawaiian. I am a lawyer specializing in environmental law — but much of my knowledge comes from talking with my family and kupuna, our elders. Over the years, I have seen the beaches I played on my entire life steadily erode. In many places, the sand is disappearing. My valley has always been very waiwai (wealthy, rainy, with much fresh running water), yet the waters have changed. With climate change, we have far more unstable weather. When I was a little girl, my grandfather used to take me down to the streams to watch the water rise when the heavy rains came. But things are much different today. The heavy rains are devastating. A few years ago, we had a terrible flood wash through the valley. Since then, my street has been shut down numerous times due to dangerous flooding. The seasons have also changed. It gets much colder than it used to, and also much hotter. The plants have changed because of it. Fruits come at unusual times of the year. Flowers bloom at different times of the year. Health problems also result from these weather changes. The Earth is not well. The less action we take now, the more burden we are leaving for future generations.

## **James Hansen**

**Former director, Goddard Institute for Space Studies, National Aeronautics and Space Administration (NASA), New York, City**

I am a scientist, but I am also a grandfather. So that makes me especially interested in the future. For years, I have been speaking out on the dangers of climate change — but I don't just speak, I also attend demonstrations, sit-ins, and sometimes I get arrested. I was arrested at the White House in Washington, D.C., protesting the construction of the 1,700-mile Keystone XL Pipeline to send oil from the Tar Sands of Alberta, Canada, to Texas. Why would a scientist and a grandfather commit civil disobedience and get arrested? That's simple. If this pipeline is built and they continue to take this especially dirty and polluting oil from the Canadian Tar Sands, it makes it very unlikely that we will be able to stabilize the climate and avoid the disastrous effects that we are already beginning to see. As I've said, this pipeline is the fuse to the biggest carbon bomb on the planet. Many years ago, I was one of the first scientists to warn that as we burn more fossil fuels — coal, oil, natural gas — the carbon dioxide created will heat the Earth to dangerous levels, with terrible, terrible consequences. I thought people would respond to scientists' rational arguments that we needed to end our addiction to fossil fuels. Now I know we need to take more drastic action. So I volunteered to be arrested with 1,200 other people to draw attention to the importance of stopping this deadly pipeline from being built. I was also arrested protesting mountaintop-removal coal mining. I have been arrested many times for civil disobedience to stop climate change. I am more than 80 years old, but if need be, I will keep getting arrested.

## **Regina Brave**

**Lakota, Pine Ridge Reservation, South Dakota (Paha Sapa)**

I am Lakota. I grew up on the Pine Ridge Reservation, where I still live. My great grandfather, Ohitika, helped negotiate the 1868 treaty, which preserved our rights to the Black Hills, of what is now known as South Dakota. We call this land the Paha Sapa, "the heart of everything that is." I was part of the famous 1973 Wounded Knee Occupation, and I was arrested in 2017 protesting the Dakota Access Pipeline. And now I am fighting the construction of a 10,600-acre uranium mine proposed to be built in the Black Hills. The so-called Dewey-Burdock mine, owned by the company, Powertech, would use as much as 8,500 gallons of groundwater per minute from the Inyan Kara aquifer to extract a total of about 10 million pounds of uranium ore. It violates our treaty rights, and would permanently poison our water. And for what? To feed nuclear power plants — which are supposedly "cleaner" than plants powered by coal, oil, or natural gas. Because of climate change, the nuclear industry tries to pretend that it is the "clean" energy. That is a lie. In 1962, about 10 years after they began to mine for uranium here, radioactive material leaked out of a broken dam into the Cheyenne River, upstream from Pine Ridge. Today, my reservation still has huge levels of birth defects, cancer, and kidney disease. Pine Ridge has the lowest life expectancy of any county in the United States. For more than 70 years, the U.S. nuclear industry has targeted Indigenous communities — for mining, for above-ground tests of nuclear weapons, for storage of radioactive waste. No more. The Lakota people and I will continue to fight poisonous uranium mining on our land. We will do whatever it takes.

## **Ed Bastian**

### **CEO, Delta Airlines, Atlanta**

I am CEO of Delta Airlines, and live in Atlanta and Florida. I'm a businessman and first went to work for Delta in 1988, but have worked at other companies, too. My job is to oversee Delta's long-term goals. Ultimately, I need to keep the company profitable for our investors and a secure and fulfilling place to work for our 80,000 employees. I've been reading that air travel is bad for global warming. People say our jets produce a huge amount of carbon dioxide and other greenhouse gases that increase global warming. An article I read recently said, "Flying is one of the most destructive things we can do." This researcher concluded that "the only ethical option . . . is greatly to reduce the number of flights we take." Look, I have four kids, so I care about the future, but ethics are complicated: Don't I have an ethical responsibility to my employees and stockholders — and to the 160 million customers who fly Delta every year, on more than 15,000 flights each day? And that means expanding air travel, advertising low fares, and trying to get people to take vacations to faraway places like Japan and China, to keep Delta profitable. Sure, we will try to pollute less, but we'll leave global warming to the politicians and scientists to figure out. I'm a businessman.

## **Yolanda del Carmen Marín**

### **Coffee plantation worker, Sonsonate, El Salvador**

These are hard times for people like me who work on coffee farms. I've worked here in Sonsonate since I was a kid. I have done pretty much every job there is to do on this farm. There are a lot of problems now — pests, low prices for coffee beans — but the big one is climate change. It used to be that the rainy season would start in May. But with climate change, who knows? The rains sometime come early, and the coffee plants flower, but then the rain will stop and so things dry up. Sometimes the rains come late or don't come at all. That leads to a terrible harvest. Forty years ago, this farm produced 4,000 tons of coffee. This year? It will produce about 300 tons. In the last 10 years in El Salvador, 80,000 people lost their jobs in the coffee industry. I guess I'm one of the lucky ones, because I still have a job, although it pays only about \$30 a week. My daughter couldn't find any work at all, other than trying to sell food on street corners. So in order to survive, she and her family joined one of the migrant caravans traveling to the United States. What else was she supposed to do? I'm old now, so cannot make the journey north, but if I was younger, I probably would. My friend, Reyna de Jesús López, who works on the coffee farm with me, paid to send her 12-year-old son to the United States. She says that sometimes he calls her to say that he wants to come home, but she tells him, "What are you going to do here? There are no opportunities for young people." Things here have never been easy, but climate change made them worse. The government in the United States tells Salvadoran migrants to go home. But one of the main reasons migrants can't go home is because of climate change — caused mostly by the rich countries, like the United States, with all their greenhouse gases.

## **Paulette Richards**

### **Miami, Florida**

I live in Liberty City, a mostly low-income and African American neighborhood in Miami, Florida. I love this neighborhood. Just walk down the street and you can smell that wonderful Haitian fried pork and plantains coming out of people's houses. I bought my home back in 2001 for \$90,000. Recently, I've struggled to make mortgage payments because without health insurance my cancer treatments left me with a lot of debt. Somehow, the real estate people must have heard that I was short of money, because I have been getting phone calls everyday from people wanting to buy my home. It's the rising seas, caused by climate change. That's why the rich white folks want my house. For years, those people wanted to live down near the water. They still do, but now they are starting to see that with climate change, it's risky to live near the ocean. The city of Miami says that by 2060, the sea level will rise anywhere from 14 to 34 inches. For years and years, because of segregation and racism, banks wouldn't lend to people of color, and we were only allowed to live in the less desirable high ground — the coral ridge, stretching from north Miami-Dade County to the upper Florida Keys. That's why suddenly, all the real estate people and developers are trying to buy our places and sell them for lots more money. Community activists in my neighborhood call it "climate gentrification." And as housing prices go up, so do the taxes. People who rent homes or businesses are seeing their rents skyrocket. What are they supposed to do? But I didn't buy a house for investment. I bought this to live in, to die in. It's my legacy, my home, my worth. Without that what else do I have? The good news is that this community is organizing and fighting back — people are talking about rent control and freezing taxes, and forcing developers to build affordable housing, if they want to do business here. This is my community; I'm not going anywhere.

## **Elizabeth Easton**

### **Beaumont, Texas/Oakland, California**

I guess you could say that I am a climate change refugee. I now live in a big old lot behind an Office Depot with about a hundred other people in Oakland, California. We live in cars, in tents, in old campers, in tiny houses people have put together. But I used to live in Beaumont, Texas, about 90 miles from Houston. Here's the story. In August of 2017, Hurricane Harvey made landfall on the coast of Texas. Harvey had winds of 150 miles per hour when it hit. In Beaumont, where I lived, we got more than 50 inches of rain! I had never seen anything like it. The worst thing is that the little house where I was renting lost water service — the whole city water system shut down. No drinking water, no way to flush the toilet. It was terrible. Beaumont opened a shelter, but conditions were so unsanitary in the shelters that the city had to get us out of there. I know that there have always been hurricanes, but I heard a scientist on the news who said that climate change made storms like Hurricane Harvey three times as likely, and Hurricane Harvey had 38 percent more rain than if there wasn't any global warming. I didn't have much, but I lost everything in that storm. I liked Beaumont, but I had to get out of there, so I took a bus to Oakland, California, where I have family. But it is way too expensive to live here. There is no place I can afford. I lost almost everything in the hurricane. Now, my home is here, behind this big Office Depot. I paid someone to let me stay here, but it's not safe — especially at night. Here, I feel forgotten, tossed aside. People talk about the "homeless crisis." For me, it all started with a hurricane, fueled by climate change.

**Anisur Rahman**  
**Mayor of Antarpara, Bangladesh**

I am the mayor of Antarpara, a village in Bangladesh. Antarpara is on the Brahmaputra River that flows from the Himalaya Mountains in India. We are in the lowlands, and our village floods every year during the July to September monsoon season. We are used to it, and, in fact, the flooding is good because it puts rich nutrients in the soil that leaves our land more fertile. But now the floods are much worse. Now the floods are huge and each year they destroy our homes and carry off the land underneath them. My village used to have 239 families. Now we are 38 families. But where can we go when our homes are gone? The monsoon season in 2020 left 3 million people in Bangladesh homeless. And because of climate change the rains are getting much, much heavier. One scientific report I read predicted “catastrophic flooding as the climate warms.” Our country has 160 million people — the most densely populated country in the world. I have an 18-month-old child. By the time she is grown, this village won’t be here. Where are we supposed to go? Do we all get tickets to America?

**Elizabeth Yeampierre**  
**Environmental justice organizer, New York City**

On the evening of October 29, 2012, as Superstorm Sandy slammed into New York City, I watched tree branches crash past my windows in the Sunset Park area of Brooklyn. It was devastating. Because of climate change, we know that the world — and likely my community of Sunset Park — will see more superstorms in the future. I’m not waiting. I’m taking action. I am a Puerto Rican attorney and environmental and climate justice leader of African and Indigenous ancestry, born and raised in New York City. Today, I co-chair the Climate Justice Alliance, a national coalition of 70 organizations dedicated to fighting climate change as we work against racism and economic injustice. My own organization, UPROSE, is one of these climate justice organizations working for what we call a “just transition” — moving away from capitalism, away from plundering the Earth, away from racism, and toward climate solutions that put frontline communities like mine in positions of leadership. What are we doing? UPROSE led an urban forestry initiative to double the open space in Sunset Park. We organized Sunset Park Solar, New York City’s first cooperatively owned community solar project, committed to delivering clean, reliable, and affordable solar energy to the Sunset Park community. In the wake of Superstorm Sandy, UPROSE launched the Sunset Park Climate Justice Center, New York City’s first grassroots-led community climate resiliency project — to prepare for the next superstorm. We don’t just fight against climate change. We work for a just transition to a new society of dignity, democracy, and environmental sustainability.

Think of our history. Think about the enslaved people who got the worst food, the worst health care, the worst treatment, and then when they were freed, ended up on lands that were surrounded by things like petrochemical industries. In my 20s, I worked for the Puerto Rican Legal Defense Fund. In our communities in New York, people suffered from asthma and upper respiratory disease. And they still do. When the police murdered Eric Garner, he said, “I can’t breathe.” When police murdered George Floyd, he said, “I can’t breathe.” Whether we fight police brutality, pollution, or the effects of climate change, Black and Brown people demand the right to breathe, the right to live. I’m trying to do my part.

## **Julia Fay Bernal**

**Pueblo Action Alliance, New Mexico**

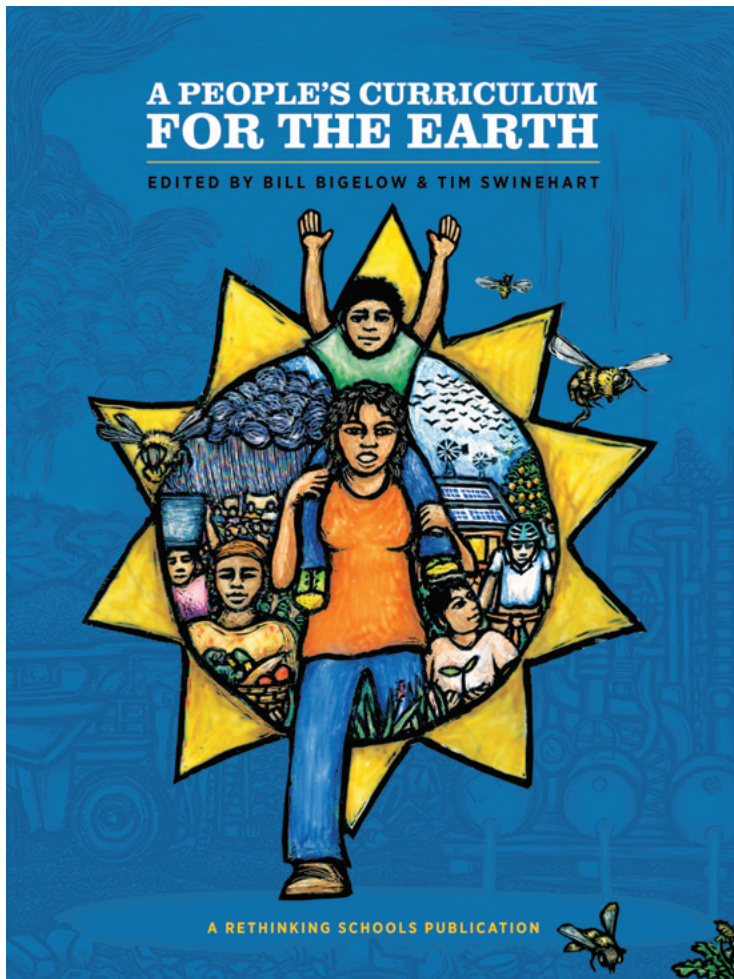
**Enrolled tribal member at Sandia Pueblo, but also from Taos Pueblo and the Yuchi-Creek Nations of Oklahoma**

The desert: People who don't live here often talk about the desert as if it were a wasteland. Hot. Dry. Nothing. This is one way that corporations and the government justify using Indigenous land as "sacrifice zones" — places where they can dig and drill and pollute, and not have to worry about the people who live there, and who have lived there for millennia. I co-direct the Pueblo Action Alliance, an organization led by Indigenous women that promotes what we call cultural sustainability. We work on environmental and social issues that affect Indigenous communities in the Greater Chaco Region, a sacred place that encompasses the Four Corner area, where Utah, New Mexico, Colorado, and Arizona come together. This area includes more than 44,000 fracking wells, that are poisoning the land, the wildlife, and our people. President Biden imposed a temporary stop to more drilling in this area, but that doesn't do anything to stop all the toxic fracking still going on. Fracking is when companies pump sand, water, and poisonous chemicals deep underground, and then horizontally break through rock formations to release oil or gas. One result is that we have a huge cloud of methane that hovers over our land. According to a NASA study, it's "the largest concentration of the greenhouse gas methane seen over the United States." This hurts people's lungs, and makes people more vulnerable to other infections. It's one reason why Indigenous people in New Mexico suffer from COVID-19 more than others in the state. During the peak of the pandemic, in May 2020, 60 percent of New Mexico's COVID cases were Indigenous people, even though we are only 11 percent of the state's population. What poisons the people also contributes to climate change, as methane is much worse for the climate than carbon dioxide. The fracking companies deny what we know. Here is a story: I was talking to a field geologist who worked closely with the fracking companies who said that fracking did not have any environmental impact on the land. I told him that before fracking, snakes would bury themselves for the winter and when it was warm enough, they would come out in the spring. But once fracking started, snakes would not burrow any more, they would stay on the surface and freeze to death. How can you argue with a story like that?



This lesson comes from the Rethinking Schools book, *A People's Curriculum for the Earth: Teaching Climate Change and the Environmental Crisis*. The book includes more than 80 additional environmental justice lessons and student-friendly readings, for elementary through college. Go to [www.rethinkingschools.org/earth](http://www.rethinkingschools.org/earth) to see the table of contents and to read the book's introduction.

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**“To really confront the climate crisis, we need to think differently, build differently, and teach differently. *A People's Curriculum for the Earth* is an educator's toolkit for our times.”**

**NAOMI KLEIN**

author of *The Shock Doctrine* and *This Changes Everything: Capitalism vs. the Climate*

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**GLORIA LADSON-BILLINGS**

Kellner Family Chair in Urban Education  
University of Wisconsin-Madison

**“This is the kind of book that can change the way young people look at everything.”**

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Director of Teaching Tolerance



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Use the online role assignment template for remote instruction.

Copy the Google Doc “Role Assignments for Remote Instruction Template,” enter your students’ names in the left column, and the class will be able to access their roles online by clicking on the linked names to the right.

**TEACHING PEOPLE'S HISTORY** **ZINN EDUCATION PROJECT**  
A collaboration between Rethinking Schools and Teaching for Change.

**Remote Instruction Role Assignments**

**Stories from the Climate Crisis: A Mixer**  
**By Bill Bigelow**

Lesson link: <https://www.zinnedproject.org/materials/climate-crisis-mixer>

**Teacher Instructions:** Assign your students roles and groups by entering each of their names into the left-hand column. The template here comes with spaces for 38 students, or 19 roles assigned twice. Add or remove spaces to fit your classroom size. Delete these instructions, delete “Template,” and share this sheet with your students.

Students/Participants' Names	Link to Role Assignment
1. Student name	<a href="#">Elizabeth Easton</a>
2. Student name	<a href="#">Stephanie Tunmore</a>
3. Student name	<a href="#">Moi Enomenga</a>
4. Student name	<a href="#">Matthew Gilbert</a>
5. Student name	<a href="#">Chris Loken</a>
6. Student name	<a href="#">Rafael Hernandez</a>
7. Student name	<a href="#">Trisha Kehaulani Watson</a>
8. Student name	<a href="#">Wangari Maathai</a>
9. Student name	<a href="#">Paulette Richards</a>
10. Student name	<a href="#">Robert Lovelace</a>
11. Student name	<a href="#">Anisur Rahman</a>
12. Student name	<a href="#">Elizabeth Yeampierre</a>
13. Student name	<a href="#">Larry Gibson</a>
14. Student name	<a href="#">Richard H. Anderson</a>
15. Student name	<a href="#">Mustafa Abdul Hamid</a>
16. Student name	<a href="#">Nancy Tanaka</a>
17. Student name	<a href="#">Roman Abramovich</a>
18. Student name	<a href="#">Rinchen Wangchuk</a>
19. Student name	<a href="#">Tom Conway</a>
20. Student name	<a href="#">Enele Sopoaga</a>
21. Student name	<a href="#">James Hansen</a>
22. Student name	<a href="#">Steve Tritch</a>
23. Student name	<a href="#">Yolanda del Carmen Marín</a>

Role assignments for the lesson [Stories from the Climate Crisis: A Mixer](#)  
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Click [here](#) to make your own copy of the Role Assignments Template.