
Environmental Education: The Effects Of Climate Change

Climate change is when the weather patterns changes. It's something that we should all be concerned, because it affects the environment and everything that lives in it. It is a debatable subject in which not a lot of people agree. When it comes to the questions of how and why climate change is happening, everyone has their own opinion. A handful of people believe that climate change happens because of natural occurrence. On the other hand, a lot of people believe that human behavior is what causes climate change. There is so much evidence that proves to us that climate change does exist, and we must do something about it before it's too late.

First, climate change occurs naturally and because of human activity. Earth has been going through warm and cool periods ever since the beginning of time. One of the Earth's coldest periods was during the ice ages. Every ice age has two periods, the Glacial period and the Interglacial period. The glacial period is when temperatures are much colder, and the ice covers almost the entire planet. The Interglacial period, on the other hand, is still cold but the cold only lasts for a few thousand years and then it gets warm. According to some scientists, we are still in the interglacial period of an ice age, which began 10,000 years ago. The climate changes occurred due to changes in the solar system, Earth's orbit, ocean circulation, volcanoes, albedo (clouds and snow blocking radiation from reaching Earth) and the atmosphere. Climate change still exists today the difference is that it occurs at a faster pace. The explanation is because it is not only happening naturally, because of all that we do, humans also play a huge role in this. We release green-house gases into the atmosphere every day. Gases from green-houses help the world stay warm enough for people and animals to survive in it. This may sound like a good thing, but it's not because we have emitted so much green-house gas that it's already exceeded the limit and we are now facing the consequences.

Furthermore, when the age of industrialization started, climate change began to happen more often. This is the period when everything became modern. This started when John D. Rockefeller and Andrew Carnegie founded the U.S oil and steel industries. Lots of factories were being developed during this time period. It meant that the people that needed employment were granted more jobs. People from around the world came to the U.S to work and support their families. This made cities grow faster. During this time the first vehicles were built. This was good for the economy but not for the environment because of pollution.

One of the big pollution-provoking sectors is the oil and gas industry. We are dependent to this industry because it generates energy, and it enables us to power on our vehicles. This is because it burns fossil fuels such as coal, oil, natural gas, and gasoline. This releases greenhouse toxic gases such as Sulphur dioxide, nitrogen oxide, carbon dioxide, carbon monoxide, methane, dioxins, hydrogen fluoride, chlorine, and benzene into the atmosphere. Each year it takes about two billion tons of carbon dioxide to produce electricity. This industry also produces 1.8 billion tons of carbon dioxide each year in transportation. We don't have oilfields in the Rio Grande valley, but we have power plants that generate electricity to thousands of homes that are located here. Every hour thousands of people drive their vehicles to places that they need to go. Even though the Rio Grande Valley isn't as big as many U.S states, it still pollutes the air every day.

Factories are the second industries to pollute the air. Everything that we consume, or use is manufactured by factories that release greenhouse toxic gases into Earth's atmosphere just like the oil and gas industries. Factories emit carbon dioxide, methane, and nitrous oxide gases. Factories account for a large percentage of the pollution on Earth. One popular factory in the Rio Grande Valley is called Rio Grande Valley Sugar Growers. This factory annually oversees the production of nearly 160,000 tons of raw sugar.

In addition, farm gas power machinery and industrial chemicals also release toxic gases into the environment. Millions of Americans mow their lawn weekly. Green houses gases such as carbon dioxide, carbon monoxide, hydrocarbons, and nitrogen oxides are released by lawn mowers and weed eaters. These gas-powered agricultural machines are similar to gas powered vehicles due to the toxic gases they release. When people spray industrial chemicals such as pesticides and weed killers, they can turn into gas and get into the air. This can have an effect on wildlife and can get into nearby water sources.

Additionally, indoor products such as hair styling products, household cleaning products and paint products can also pollute. Such indoor goods emit the same toxic chemicals as gas powered vehicles. Every time a person takes a shower and puts on shampoo and conditioner, the chemicals vaporize into the air once the person steps outside of their home. When we paint a house from the inside or outside, it leaves a strong odor of paint and that's because the chemicals get released into the air.

These are just a few ways in which pollution is causing climate change. All this pollution that we are creating in a daily basis is causing the weather to change drastically and it is affecting everything that is living in the environment. Today, we see how climate change is impacting the Rio Grande Valley.

The Rio Grande Valley is a place in where it rains a couple of times and almost the entire year it is hot. The average temperature ranges from 51 degrees Fahrenheit to 100 degrees Fahrenheit. The temperatures have been rising recently and we have had a few droughts. Droughts affect human, animal, and plant life tremendously. We would not be able to survive without water. There are several agricultural fields in the Rio Grande Valley that produce crops such as corn, watermelon, melon, citrus, sugarcane, grains and cotton. The droughts and the heat of the sun killed some crops before they could be harvested.

People employed in the agricultural fields are concerned about climate change, because when it is hot it's harder to work outdoors. The hotter it gets the less hours the employees work and the less money they earn. They are also concerned about the issue, because there may be mosquitoes and diseases with this heat. Exposure to the sun for several hours can lead to tumors and skin cancer. Mosquitoes can also carry diseases that can cause people to get ill.

Another impact that climate change has in the Rio Grande Valley is the melting of glaciers in the Arctic ocean. Even though we are far from the Arctic ocean, when the ice melts, sea levels rise. Since the Rio Grande valley is close to the Gulf of Mexico, we will feel the impact of sea levels rising. This can cause flooding in cities.

Another effect that climate change has had in the Rio Grande Valley is flooding when there is heavy rainfall. Cities need to be equipped with good drainage systems for the water to flow faster when it rains heavily. When there are heavy rainfall cities such as Weslaco, Mercedes,

McAllen, and Harlingen flood quickly. Floods can cause death, illness, and loss of property to people. In 2018, a storm hit the Rio Grande Valley which produced heavy rainfall for 4 straight days. This contributed to many cities being under water.

The decline in bird population is another effect that climate change has had in the Rio Grande Valley. Birds migrate into the Rio Grande Valley because it gets cold in the northern states. The problem is that the residents are the ones that kill the birds with the pesticides that they use to protect their lawns and the farms. They even kill the birds by throwing away plastics that the birds often chew on and they die because of the chemicals that are on the plastics. Residents are also killing the birds because of growing cities which means that residents destroy the birds habitats.

There's a solution to every problem. The people and the government must work as a team to prevent climate change. There are several things that we can all do in order help make the environment safer and healthier to live in. One remedy is for more people to drive electric vehicles because they contain little to no air pollution and because they reduce greenhouse gas emissions. Another option would be to install wind turbines in every town instead of using electric powerplants. Wind turbines do not cause pollution. They make energy by using the wind. Another idea would be that people should start walking or riding more their bikes instead of using gas powered vehicles. This will not only reduce the amount of pollution but also help people do exercise. Another way would be if anyone gets caught throwing trash on the streets or in their house then they should be charged. This will encourage people to think twice about throwing away garbage where they shouldn't. Another option would be for the government to ban products for household cleaning and personal care products because they are manufactured from chemicals that affect the environment. We should use more organic products that help keep our houses clean and take care of ourselves.

In summary, climate change is making our world end faster. It is affecting Earth tremendously. If we do not take action, soon every living thing in this planet will be gone. We must all work together to stop the effects of climate change. Teamwork will make our planet exist for many more years. We must make a change in our daily lives to save our planet before it is too late.