

Authentic Data

Carbon Dioxide Levels & Climate Change

Data Links:

NASA Global Climate Change: Vital Signs of the Planet: <https://climate.nasa.gov/vital-signs/carbon-dioxide/>

Global Patterns of Carbon Dioxide: <https://earthobservatory.nasa.gov/images/82142/global-patterns-of-carbon-dioxide>

A Year In The Life of Carbon Dioxide: <https://earthobservatory.nasa.gov/images/87146/a-year-in-the-life-of-carbon-dioxide>

Lesson Enhancement

Over the last couple years, I have been having my classes do an argumentative essay on climate change. The students must look at information and decide if climate change is real or it is fake. In previous years I have shown videos about climate change for example Bill Nye “Global Meltdown Climate Change”, Leonardo DiCaprio “Before the Flood”. These movies are good, but I had a lot of students that still believed that climate change was fake. So now with these new sites that I found with data and more visual data I feel it will help for my students to see that climate change is real. Having them go to the NASA: Vital Signs of the Planet the students will be able to see how the Carbon levels have increased over time. In using real data will give numbers to a problem that students really don’t see in their lives. Having my students go to these sites they will be able to research the number to get a better understanding of what is really happening to the planet. Then they will design a graph to show how the carbon levels are changing over time. If the student wants to look at certain parts of the world the can that too.

The older I get in life the more I understand how important data is to understanding topics. I feel that kids now days just get some topics, because they in a society that if it is not affecting me now in my little world then it is not happening. Now we have some much data that is out there in the world that it helps us to understanding how it does impact us. For example, the carbon dioxide levels in our atmosphere for a long time we did not have great data on the levels.

Now with all the satellites just focusing on the carbon levels we have a solid data of the number, and they can predict what the levels will be in the future.

Interdisciplinary Context

This lesson will connect to ELA and Math in a couple ways. In ELA one of the standards ccs ela literacy.ri.8.1 which is citing textual evidence that supports an analysis of what the text says. So, when the students are researching information that will take these standards to help them cite the information correctly. The students will also use this information when they are designing their results for their paper. As for math the students will work on the following standards CCSS.MATH.CONTENT.8.SP.A.2, CCSS.MATH.CONTENT.8.SP.A.3 and CCSS.MATH.CONTENT.8.SP.A.4. The students will be able to understand how to read a graph that has information about the carbon dioxide levels. They will be able to design a graph to show their findings.

Overview

What I have realized is that I have not done a really good job at presenting or using data in my classroom. I have used some of the NASA sites before, but I didn't used the data in the right way. Since I have started to take these classes I have starting using data better in my class. I even started using the NASA Observatory site as a data in my class. I am working on getting my students to look at all the data on my lessons. This is a work in progress for me because I am learning myself along the way just like my students. I know when I get to the climate change argumentative essay, I will definitely be using a lot more authentic data in the lessons.