Human Impacts on Climate is the last unit of study for my Integrated Science II class. When looking for some data, I found a Data.gov. They linked me to Climate Explorer. https://crt-climate-explorer.nemac.org/historical-weather-data

"**The Climate Explorer is a web application offering interactive maps and graphs to assist users in making decisions for building resilience to extreme events. Built to support the U.S. Climate Resilience Toolkit, the Climate Explorer helps people explore projected climate conditions that may put people, property, and other assets at risk."**

HS-ESS3-5. Analyze geoscience data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems. [Clarification Statement: Examples of evidence, for both data and climate model outputs, are for climate changes (such as precipitation and temperature) and their associated impacts (such as on sea level, glacial ice volumes, or atmosphere and ocean composition).] [Assessment Boundary: Assessment is limited to one example of a climate change and its associated impacts.] (KAS, 2020)

Above is the science standard I will use on my human impacts unit. My students hear so much about global warming and they do not have an understanding of how this may impact their area. The unit I do with my students allows them to make a prediction about how climate change will impact their area of the world. This will allow my students to analyze the data of how their area will be impacted by using the Climate Tool. They will be able to compare their prediction to what the tool predicted to see if they were correct or incorrect. This will allow the students to see misconceptions they may have about how climate change could impact their future.

Most of my students enjoy using their computers. Using this data source will peak my students' interests because it shows how climate change will impact them directly. This allows them to compare their prediction to the results of the Climate Tool. Many of my students farm for a living. They will have a better understanding of how climate change will directly impact crop production or the increase in the cost of food due to droughts or flooding.

This will help my students have a better understanding of how cause and effect work in our everyday lives. It also will help students learn how to make better predictions based on prior knowledge. I will be able to integrate math into this unit using percentages, graphs, tables, charts, and how to interpret the information given in this format.

This could then lead to the use of technology and engineering in areas of design and development for irrigation, crop production, fire prevention, and waste disposal. All of this will impact the future of our planet and human survival due to the impacts of climate change on our planet.

References

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