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Comparison/Contrast

One thing that everyone should know about climate change is that the only word that truthfully describes it is scary. The fact that it is caused by people who do not understand what it is or the extent of the problem is scary. The fact that it is effecting earth's water, air, and weather is scary. Also the fact that a lot of this information is completely new knowledge is extremely scary. Comparing this knew knowledge to the Science -Literary Narrative that I wrote showed how I only know the basic information about climate change. Research showed that climate change is basically the warming of the earth, because of the emission of certain gases that stay in the atmosphere and trap heat radiation. Certain gases keep this heat from escaping, which is called the greenhouse effect (Shaftel). This is important because the Earth being warm, effects not just temperatures, but farming seasons, weather, and sea levels. I did know how the extent of these effect could ruin the livable habitat on Earth, and this is shown in my Science-Literacy Narrative. While in my narrative I knew that the extent of the problem was severe, I only knew basic information about the extent of the problem, the causes, the effects, and the solutions, of climate change.

"The extent of the problem of climate change is severe," was the first thing I wrote in my Science-Literacy Narrative. It was my first sentence and my first thought when I heard we were writing about climate change. Hearing from my parents about how all the hurricanes that have

been plaguing the nation is a result of climate change, also clued me into the extent of the problem. While I know that the problem is serious, I also always thought that if it was truly that difficult of a problem it would be more of a conversation on the national level. If it was that bad it would be everywhere online, in newspapers, and on television. This is what I found to not necessarily be true from my research.

The extent that which climate change has effected things is shown in the evidence that it is an actual occurrence. It is shown in how, “the planets surface temperature has risen about 2.0 degrees Fahrenheit since the late 19th century” (Shaftel). It is also shown in the heat that has been absorbed into the oceans, and the shrinking ice sheets in the arctic regions. One thing that has really shown the extent of the problem are the extreme weather incidents that have been happening around the world. The problem has also shown itself in the ocean, in rising sea levels and in the acidity that has increased 30% since the 1800’s (Shaftel). Climate change has also shown its extent in the decreasing snow cover, which relates back to the temperatures rising. All of these things have shown the extent of the problem, and these problems are happening now. If the extent of the problem is severe now, what is it going to be in 5 years? 10 years?

In my Science-Literacy Narrative I summed up that the main cause of climate change is humans. Yes I have heard from my father that the cause is fossil fuels that we allow into the air from cars and factories, but at the end of the day it is humans that have created the monster of climate change. I brought in the fact that these fuels, “hurt the ozone” in my Science-Literacy Narrative. This is just another fact that I picked up from years of school and from my family, but I never really looked farther into the causes of climate change.

In the area of causes most scientists are in agreement that certain gases are polluting the air and atmosphere, which keeps heat from leaving the earth after it is absorbed. This occurrence is called the greenhouse effect and, “humanity is fundamentally changing the planet by pumping greenhouse gases into the atmosphere” (Tollefson). These gases can include carbon dioxide, nitrous oxide, methane, and water vapor (Shaftel). The burning of fossil fuels, such as coal and oil, have increased the greenhouse gas emission with the help of other human activities and the industries that human culture supports. Not only do the majority of scientists blame humans for the cause of climate change, but they have, “concluded there’s a better than 95 percent probability that human-produced greenhouse gases such as carbon dioxide, methane nitrous oxide have cause much of the observed increase in Earth’s temperatures over the past 50 years.” (Shaftel). The other side of the argument is that the, “changes in the sun’s energy output,” has caused climate change, but many scientist have investigated this idea and found different facts to refute it. Any research can show the specific science of the greenhouse effect and how it is the cause of climate change, but the research also shows that without the people in the world and the things that they do, the greenhouse effect likely wouldn’t be phenomenon.

When ever I think of future effects of climate change my mind always goes to natural disaster movies that I’ve watched growing up. Movies where huge tidal waves take out the coast line and earth quakes take out entire cities, are what I pictured in my mind. I also brought up, in my Science-Literacy Narrative, that in the future, “the air could stop being breathable,” which could make Earth a non habitable planet. These are all very exaggerated effects and in my opinion these things couldn’t happen within my life time, but if things continue to decrease future generations could have to deal with these very severe effects.

The future effects of climate change are very uncertain. Scientists have a basic premise for what might happen based on the amount of heat trapping emissions, but truthfully no one knows, “how sensitive the Earth’s climate is to those emissions” (Shaftel). Research shows that the most likely effects will be temperatures rising, the lengthening of certain seasons, and precipitation patterns could be altered (Shaftel). Sea levels are also projected to rise and the arctic could become so warm during the summer months that it could be completely ice free. While these are all more short term effects, longer effects could include stronger hurricanes and extended droughts (Shaftel). All these things depend on how the planet reacts to the greenhouse gases that are still being dumped into the air, but also how the people of the world confront the problem of climate change.

Growing up I heard a lot about climate change from teachers, family, and even friends, but one thing that seemed to always happen was that instead of finding solutions, these conversations always seemed to be about blame. The only logical solution would be to, “stop the use of certain fossil fuels that pollute the air,” or even creating new technology that can replace these fossil fuels. The only solutions in my mind and in my Science-Literacy Narrative, were about stopping the known causes of climate change, but nothing that I included had anything about how fix the things that have already been done.

Finding replacements for the fossil fuels that send greenhouse gases into the air seems to be one of the only solutions that scientists can find as a way to stop the continuance of climate change. The way separate scientists think the world could do this is where things vary. One group thinks that, “biofuels- the product of living things- certainly fits the bill, being both renewable and biodegradable” (Yong). Not only do these biofuels help restore land that isn’t

useable, it also cuts carbon emissions, which could be the key to creating, “an alternative to fossil fuels” (Yong). While this idea is still very new and further research is going to be needed, it could also help create a new renewable energy source. Another solution to climate change that a lot of individuals have discussed, is putting certain restrictions on the use of fossil fuels, but a lot of large, “corporations whose revenues might be adversely affected by controls on carbon dioxide emissions” have used large sums of money to disagree with these discussions (Oreskes). Solutions are hard to come up with unless everyone is participating, including the huge industries that thrive off the emissions of greenhouse gases.

The one thing that I noticed throughout my Science-Literacy Narrative is that the only information that I really knew was just basic knowledge. Seeing the extensive causes, effects, and solutions, really showed me the importance of this topic and how only knowing the basics doesn't help anything. This should be a topic that most people should have a deep base of knowledge for, and should want to learn about.

Works Cited

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