Problem Solving (A3) Report
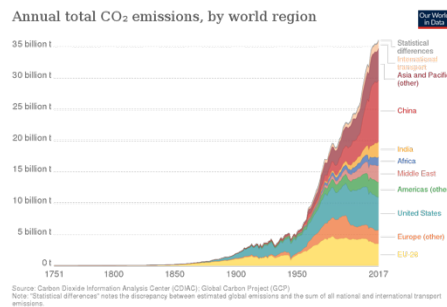
Topic: Climate Change
Date: August 21, 2020
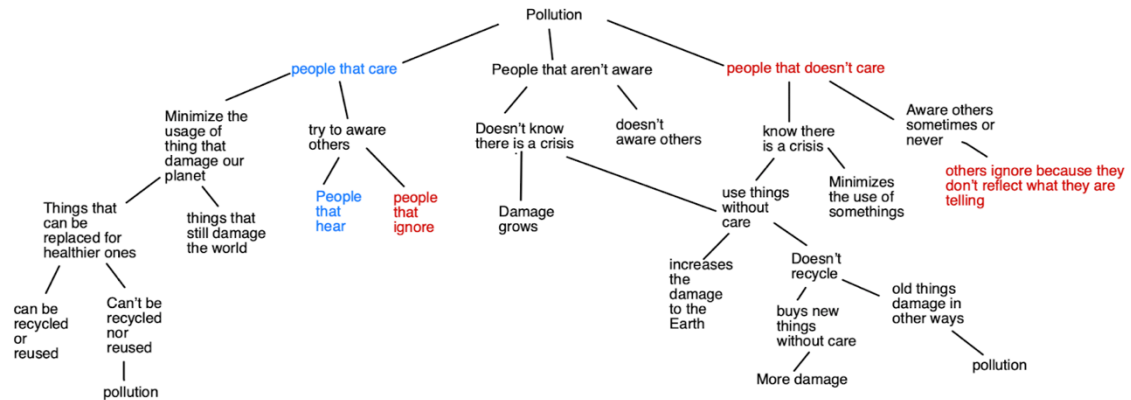**Author: Christian Robles**

1. Identify the problem

During the last decades Earth have been experiencing some extreme changes in the climate and weather patterns. This situation isn't something that happened last night, this is the result of hundreds of years of humans polluting the Earth's atmosphere and environment (mostly with CO_2). At first, it was a "regulated" amount of pollution but within the last years it has grown in dangerous amounts, and it's expected to continue growing if nothing is done. If we think and reflect about our last couple of years, months, even weeks we are going to find some strange things that can be related directly due to the climate change and global warming on the Earth. Some examples of this can be the continuous tremors in the South area of Puerto Rico that have last more than eight months, or the extreme fires in Australia and The Amazon, or the extreme floods and torrential rains in China, or the dust cloud that came over Puerto Rico from the Sahara desert. If there isn't a change these events will continue to happen consistently, or event unimaginable things may come. In simpler words, while there exist high levels of pollution, our planet will experience outstanding negative changes and its life is going to be shortened more and more with the past of time.

2. Set a target

Most people are ignorant to the damage they are causing to the Earth, or they think that their contribution isn't big enough to care about it. Our individual contribution to the climate change probably doesn't seem like enough, but when we start looking at our families, our neighbors, and so on, the weight we put on the Earth's atmosphere becomes bigger. Our ancestors were also big contributors to this crisis, but it's up to us to make a change, so that our children and grandchildren can see the beauty of this world. That change depends on all of us, same way one-person polluting does seem enough, one person doing a change isn't going to be enough. With this in mind our target will be to reach and aware as much people as possible so that we can decrease the rate of climate change growth in the coming years.

3. Analyze the Causes

Pollution

people that care — People that aren't aware — people that doesn't care

Minimize the usage of thing that damage our planet

try to aware others

Doesn't know there is a crisis

doesn't aware others

know there is a crisis

Aware others sometimes or never

People that hear

people that ignore

Damage grows

use things without care

Minimizes the use of somethings

others ignore because they don't reflect what they are telling

Things that can be replaced for healthier ones

things that still damage the world

can be recycled or reused

Can't be recycled nor reused

pollution

increases the damage to the Earth

Doesn't recycle

buys new things without care

old things damage in other ways

pollution

More damage

4. Propose and Implement Counter measures

Making a webapp or webpage where all the following countermeasures can be implemented in the most efficient and attractive way so that all the possible people can access it from one single location, and also keep track of their changes individually and as a whole. Use some notification mechanism to keep people motivated or encourage them if they haven't been so motivated.

Counter Measures	Why?	How?
Make people aware of the damage they are causing individually, or as a family, or as a community, etc.	If people see their wrongdoing, they'll probably want to make a change and start being more careful on how they use everything.	Using a calculation tool that will give them an idea of how much they are contributing to the atmosphere's pollution.
Make the most relevant information about how the Earth is being affected easy to access and understand.	Knowledge is power, and in power there is a will, and with will comes change	Making all the important and interesting information available in one place.
Promote recycling and reuse	Recycling and reusing means less garbage, and less garbage implicates less pollution	Having sources that show how to recycle or how to give other uses to unused things, promoting reusable and recyclable products, locating where recycling bin can be found, etc.
Make people able to be in contact and share their experiences and knowledge	More minds united work better, there are a lot of ways of helping our planet, and one person doesn't know them all	Creating something like a blog page where people can share their ideas.
Create sort of a congratulation or accolades system	By congratulating them, they will be encouraged to continue to live a life of awareness of our home planet's condition.	Keep track of the person improvements

5. **Check/Evaluate**

We will have an idea if the target was achieved by the number visits and/or subscriptions to our webapp, because that means that people are being informed, which increases the probability of people awareness about climate change, that means the countermeasures are being effective. A very good measure to know if our countermeasures work and our task is really being achieved will be a significant decrease in the rate of growth of climate change.

Otherwise if people bounce out of the app, it means that there is something missing, something is wrong, probably it isn't as attractive as we expected, or that our counter measures aren't so effective as we would want. We will have to look for a way around.

In this case the root cause will take a very long time to be eliminated, or probably it can't be eliminated at all, but our goal isn't to erase it but to decrease it, for now at least.

6. **Act and/or Standardize**

The process will continue to work by improving and extending our webapp domain and bringing more resources that will help people achieve a healthier life for the Earth. Also, we can encourage them to continue a better life by congratulating them and celebrating every important step of the journey since they started helping the Earth. With time we expect to make it more user friendly, and more user attractive so that more people will join. Also, we will use other resources like announcements to reach a bigger amount of people.