
THE EAGLE EYE

Aurora High School Newspaper of 2019/2020 Year

The Planet Is Changing, Why Aren't We?

By Callum Young

Climate Change. A topic that seems to suffocate the oxygen from every other issue humanity faces today. It feels much easier to roll your eyes and ignore this "threat" that so urgently attacks the world. What's the big deal anyways?

Well, the truth is, this "big deal" that cynics may imagine to be a hoax or a regular fluctuation in Earth's climate, is much more real than what humans may experience throughout their day-to-day activities. Our planet is changing much faster than the life living on it can evolve with, and these changes may never be reversible. Scientists predict that in twelve years, the changes produced by global warming will become permanent. The temperature of Earth has dropped two degrees since the beginning of the 20th century! Statistically, this may not sound like much, however, these minute differences have a dramatic effect on the makeup of our planet. Still don't believe the impact Global Warming has on our planet yet? Here are some facts:

- In the last nineteen years, eighteen years have been the hottest on record.
- Polar ice caps are melting by 413 Gigatonnes a year, adding much more water into our oceans (creating floods and destroying habitats).
- Nowadays, the Earth's atmosphere contains the highest percentage of carbon dioxide in its history
- Natural disasters all around the world have been occurring, ranging from floods, tropical storms, forest fires, droughts, heat waves and many more disastrous events.
- Coral Reefs provide food for 500 million people across the world, but the "bleaching" of corals due to warmer temperatures are killing off these magnificent ecosystems

The time for change must be now. So what can people like you and I do to help fix this disaster that surrounds our planet? The answer is to focus on our own personal actions while encouraging others to do so as well. Forget the "it's just one straw" attitude, because remember, 8 billion people also once said "it's just one straw" and look where it has gotten us. Be inspired by young advocates such as Greta Thunberg, who at just 16, sailed from England to America in a zero carbon emitting boat to raise awareness about Climate Change. If we all try to make a difference in our daily lives, then maybe a better future can be created for ourselves and future generations to come.

Book Review: The Alchemist By Paulo Coelho

By: Deniz Caglar

The Alchemist is a book written by world famous author Paulo Coelho. The Alchemist is one of his worldwide bestselling novels. The ultimate message and purpose of the book - as you will hopefully understand if you read this story, which I think is one of the best stories written- describes that every living thing in this world, has a purpose for being in their life, and that everything happens for a reason in our lives, be it positive or negative. The story that is told, is of a boy and his journey to find the purpose and meanings of his life, and from the boy's perspective, he begins questioning his life, and wanting more out of his life. The story mentions of omens - symbols that are found everyday, and all around us, that actually exist to help us stay on our pathway in our life to help us fulfill our destiny. But the narrative mentions, that most of us are unable to see these omens since they have been long lost from the stories and teachings from our elders, so how would we know how to look for them. Another major point of the story explains that every living thing in this universe is connected. We cannot view ourselves detached from nature and other living organisms, or the universe, this would not be right. Since the philosophy of the story is followed by every living thing having a purpose and reason of being, therefore there must be a reason that we exist together with all the living things around us. The story further explains, that if we allow ourselves to believe that we are connected to things around us, this will help us vision the universe in a different, but helping way, to understand our being. Not wanting to spoil any further details of this amazing book, I would like to give you a small introduction of how the story unfolds. The narrative tells the story of a boy who is a shepherd in Spain. This boy only knows of being a shepherd and nothing else, and is all alone with his sheep and nobody else. Days, turn into months, months turn into years, and the boy continues his routine duty, and is at first happy and doesn't think to question why his life has turned out the way it has. On stumbling upon this question, the boy continuously asks himself and thinks of an answer that he

thinks will be good enough for him, all of a sudden viewing his life as not good enough, since thinking he should ask more from life. The boy sees a dream telling him to sell his flock of sheep and begin a journey with a clue to where he will find his treasure. He thinks of what to do, and with his questions about his life, he does decide to sell his sheep, the only thing he knows in the world, and takes off on his journey, hoping what he thinks will be a better life to find. I won't go into anymore details and I hope this introduction as encouraged you to read this novel. If you do, the boy's treasure at the end is very shocking, and you will understand why his treasure is what it is, if you understand the teachings of the story. The story proceeds with the boy's journey and what he learns, which are very interesting and meaningful.

Understanding and incorporating the philosophy of the story into our lives will help you stay more positive, especially if things in your life don't turn out the way you had hoped, and teaches you of what to be grateful for in life.

The Effects of Deforestation of The Amazon; One of The Most Biodiverse Places On Earth

By: Deniz Caglar

Amazonia is one of the most important areas on Earth, for helping to regulate and keep planet Earth's natural systems balanced, and for its extensive biodiversity. Amazonia, the Amazon Basin, is an area of South America, where all precipitation and water systems flow into one stream, eventually flowing into the ocean. Amazonia is located within the countries of Bolivia, Brazil, Columbia, Ecuador, Guyana, Peru, Suriname, and Venezuela, and are mostly covered by the Amazon Rainforest.

The Amazon Rainforest is known for its major contributions to planet Earth, in terms of balancing atmospheric gas percentages, precipitation, water currents, and biodiversity. The Amazon Rainforest is credited for the absorption of carbon dioxide from our atmosphere, in aid of reducing greenhouse gases, and in result helping to decreasing climate change. Although, there is a misconception that the rainforest absorbs 20% of the atmosphere's carbon dioxide. This rainforest would only be able to absorb the equal amount of oxygen this forest produced, to carbon dioxide, which is still a good number to help.

The rainforest's biodiversity is unbelievable! The species, genetic, and structural diversity of the forest and species living and depending on this structural ecology, expands to a large number of variety. Genetical changes allow to differentiate individuals within a species, many variety of species relying on different ecological niches to surviving, and the impressive ability of, not only the

species, but as the ecological structure of the rainforest, to change and adapt to different conditions that occur. Whether this be, a new formation or a loss of a group of species, a formation or loss of an ecological structure, changes in ocean currents, then affecting temperature, and so on. For the rainforest and it's inhabitants to have the ability to adapt, to what are actually extreme changes, since both sides are affected, for survival, is very difficult, but possible. This possibility most greatly occurs from the interconnectedness and dependency of every living thing on each other, of the multiple biomes existing in the Amazon rainforest, that in result forming one, large, interconnected and interdependent environment. Therefore, the rainforest is a very important system to itself, but also important and valuable to the planet.

For example, there are many natural resources existing in the Amazon Basin. Our society though, is extracting these resources in an unsustainable manner, and therefore the resources cannot be sustained and remade in a balancing amount of time. Unfortunately, we are not treating this beautiful rainforest with respect, and are extracting resources in a very unsustainable and violent way. This year of 2019, has accounted for the highest recorded number of forest fires, equally the 3 previous years, COMBINED. To clear the land of trees, humans have ignited forest fires to clear land for cattle ranching, soy crop production, oil drilling; of mahogany, gold, steel, nickel, copper and aluminum. Dams and roads also need to be built for support to the developments of mining and farms, increasing land needing to be cleared. The burning of the trees effect two major, and important factors. First, the burning of the trees release all of the carbon emissions the trees had previously stored, back into the atmosphere. Second, the trees act as a structural component to the biodiversity of the environment. Species relying of the trees for survival. By destroying these trees, if majority of the species cannot survive by adapting to the new circumstances, one or more species can be lost, decreasing the biodiversity of the environment, and resulting in a weaker system. Not only animals, but native people living in the Amazon, also rely on the trees as a source of shelter, and resources for food, materials, and medicine. With the clearing of the land, their tribes must move to find and adapt to a new area, which is very difficult, especially if needing to move several times from constant land clearing. Deforestation, especially at its increased rate, is contributing to other environmental cycles. For example, trees help with the systemic water cycle, effecting the patterns of rain. With decreased trees, rain pattern consistences will decrease alongside, which could eventually result in droughts. Water cycles greater affect ocean currents, affecting temperature and precipitation, because everything is connected.

"Very few people talk about biodiversity, but the Amazon is the most biodiverse ecosystem on land, and climate change and deforestation are putting that

richness at risk”, states Climate Scientist Carlos Nobre, with the University of Sao Paulo’s Institute for Advanced Studies, in a National Geographic article.

At the end, yes, nations do increase their economy, currency and trade, with developments, natural resource mining, and agricultural development, that could possibly help increase the quality of living of the people of that nation, which is a responsibility of nation leaders. But what we forget most of the time, is that resources are only renewable when sustained properly. If we continue to use natural resources unsustainably, the resources will not be able to renew in our expected time scale. And when this happens, the possibly resulting increased economy from the use of natural resources, will be worthless, because there will be nothing left to buy at that point. Therefore, we not only need to think about the present, but also think about the future for the planet, and of sustainable practices.

Nicotine Addiction

By: Olivia Juman

Nicotine is found in many different plants, one of which being the tobacco plant, specifically in tobacco plants of the nightshade family of plants. Nicotine itself isn’t extremely harmful on its own but is extremely addictive and increases the chances that an individual becomes dependant on tobacco.

What are substances that contain Nicotine

Pipes, cigars, chewing tobacco, hookahs, and e-cigarettes.

What Nicotine Does to the Body

Nicotine is often inhaled through some form of cigarette smoke, and travels through the respiratory system until it reaches the bloodstream where it is absorbed into the blood. Once in the bloodstream, nicotine can cause a chemical reaction within the brain to release the “feel good” chemicals, which induce a temporary relaxed, happy feeling. A chemical reaction that is a product of the consumption of nicotine, is the release of adrenaline from the adrenal glands into the body. Adrenaline is the hormone that prepares the body for ‘fight or flight’ response. This hormone causes an increase in heart rate and blood pressure. This results in the nicotine user experiencing fast shallow breathing as well as a racing heartbeat. The excess release of adrenaline also causes the body to release a surplus of glucose into the bloodstream and prevents the pancreas from releasing insulin. The insulin the pancreas releases helps remove

extra glucose from the bloodstream. When the pancreas doesn't perform this function, this results in the formation of a hyperglycemic condition.

Hyperglycemia is a condition in which excess glucose is present in the bloodstream. Nicotine also increases the release of dopamine in the brain, which is a chemical that impacts emotions, movements, and sensations of contentment and pain.

Side Effects of Nicotine

- Dryness of mouth
- Dizziness
- Disturbed/ Irregular sleep
- Nausea
- Vomiting
- Diarrhea
- Increase blood pressure
- Heartburn
- Nightmares

These are just a few of the many side effects

Commonly Asked Question about Nicotine

Can you overdose on Nicotine?

Yes, overdosing on nicotine is very possible as it is poisonous, however, it is unlikely. Majority of nicotine poisoning cases occurred because children mistake nicotine gum and lozenges as candy. However, data has shown that there has been increased cases of nicotine poisoning as the popularity of e-cigarettes rises. Some signs of nicotine poisoning are, difficulty breathing, vomiting, fainting, headache, weakness, and increased or decreased heart rate. Nicotine poisoning occurs only if there is too much nicotine in the body, and the amount that causes an individual to overdose varies by person, based on their body weight and where the nicotine came from.

*Swallowing the liquid cartridges of nicotine in vape pens are extremely poisonous and can result in nicotine poisoning. *

Common Myth of Nicotine

It is a common misconception, especially amongst youth, that e-cigarettes are healthier than smoking regular cigarettes. Data has shown that e-cigarette manufacturers, create nicotine packs for their e-cigarettes, that are substantially more potent than regular cigarettes. For instance, one pod can be equivalent to 20 cigarettes. Accompanying this, the liquids used within e-cigarettes have been tested to be poisonous if swallowed or absorbed by the skin or eyes, and can result in death. However, it has been proven that e-cigarettes do not contain tobacco. They do on the other hand contain “detectable levels of known carcinogens and toxic chemicals to which users could be exposed” as stated by the FDA in 2009. Two of the chemicals detected within the e-cigarette cartridges that are known to cause cancer are formaldehyde and benzene.