

## **Original Work Assessment**

**Date:** December 16, 2020

### **Assessment:**

In ISM, the year of 2020, I got the opportunity to focus on any career and aspect I desired. From my interests and problem solving and creating things I decided to focus on Mechanical Engineering. In this first semester I obtained much research about how mechanical engineers function and their roles as well as other information. As I went on throughout the year I wanted to find a problem I desired to solve. The conflict I settled on was environmental health. Today pollution is one of the leading problems that affect us as well as will bring more negative effects in the future. This is why I wanted to find out more information about helping the environment. Many people think about only short term solutions, but that is very close minded. People need to think with more of an open mind and think about long term solutions and how they will affect people, environment and natural life.

After much research at first I was focusing more on the problems with air pollution, such as global warming and carbon dioxide released into the atmosphere. Diseases asthma, COPD, and other respiratory diseases are linked to the increase in air pollution. By decreasing the amount of these toxic air in the atmosphere we would be able to slow global warming and prevent many of those diseases. My first plan was to create a plan for a company to reduce their amount of air pollutants released, but after talking to my instructor I decided to find more of a local issue.

I believe that finding the right topic for my original work was the most difficult task. Since sustainability and environmentalism are broad topics it was hard to narrow down a single aspect I wanted to cover. In the process of selecting the proper topic I did research on the different environmental issues in my local community. For example, one of the things I found out about my community is that there used to be a battery plant and it left large amounts of lead, this caused buildings and facilities to not be allowed to be in that area. I thought this was interesting and did some research regarding removing the lead and found different methods. Although this was interesting I wanted to focus on something else. As I was throwing away trash one day I wondered where all the trash went and how it affects the environment. I found out that trash is actually damaging to the environment and can even cause a greater increase in the amount of air pollution. This is what I decided to make my original work on and found methods to reduce the amount of trash that is put into landfills and change it into energy(conservation).

My original work about converting trash into energy research was to find a way that we may be able to reduce the amount of trash. From this information gathered, it can definitely be applied to real world situations as this is a large problem today. If we are able to target this problem by doing research similar to this and applying it in daily life then it will prevent large amounts of land as well as air pollution.

Completing this original work was not easy work and caused me to think outside of the box. I have grown tremendously from not knowing exactly what I want to focus on to being focused on the topic I want to pursue. It was challenging, but I was able to push through it and stop being indecisive. Accomplishing my project has filled me up with confidence for my final project and will help guide me to completing it with clarity. The original work has helped me have the backbone to my final project, but to take it to the next level I hope to do even more research and have a mentor that will be able to help guide me to create an effective project.