



Hannah Testa's Ingram Scholars Summer Project Two-Pager

Kōkua Hawai'i Foundation

The Issue: Plastic Pollution

Every piece of plastic that has ever been made still exists somewhere. Plastic doesn't break-down and biodegrade comparative to other materials, instead it breaks-up into smaller micro and nano pieces. Approximately 50% of all plastic is produced for single-use and then disposed of. If not disposed of correctly, plastic can end up in the environment and create plastic pollution. Plastic pollution has devastating impacts on marine life, including entanglement, ingestion, and habitat destruction. Plastic pollution can also have a significant impact on human health. Plastic can contain a variety of hazardous chemicals that can leach into food and water sources, and can be inhaled or absorbed through the skin. Due to Hawai'i's geographic location, it is disproportionately impacted by ocean-based plastic pollution. The state is located in the center of the North Pacific Subtropical Gyre, also known as the Great Pacific Garbage Patch, which is an area of concentrated plastic debris. An estimated 80% of the plastic in the ocean originates from land-based sources. Therefore, it is essential to reduce the amount of plastic waste produced and increase the amount of awareness to encourage a culture shift towards waste reduction.

The Nonprofit

The Kōkua Hawai'i Foundation is a 501(c)3 nonprofit organization that is based in Hale'iwa, Hawai'i. The organization was cofounded by Jack Johnson – an artist passionate in environmentalism – and Kim Johnson – an educator – in 2003, with a mission to further environmental education and awareness. Kōkua Hawai'i Foundation's mission is to provide students with diverse and meaningful learning experiences that promote environmental stewardship, healthy and sustainable living, and caring for the 'āina (land). The organization is staffed by experienced educators and has become a leader in plastic-pollution education, equipping students and the community with resources and knowledge to address environmental concerns of Hawai'i. The organization strives to create a more sustainable future for Hawai'i and its communities by connecting people with resources to create positive change. The organization has created educational curriculums to engage students and the greater Hawai'i community in learning about eco-friendly practices and solutions. Kōkua has five ongoing programs that are rooted in furthering their mission. The foundation supports environmental programs in Hawai'i's public schools and communities, provides environmental education resources, offers classroom grants, and organizes waste-free events. Through its programs and campaigns, Kōkua Hawai'i Foundation strives to inspire and empower the next generation of environmental stewards. Their classroom curriculum program, "Plastic Free Hawai'i", has been inactive since the pandemic. Their expressed need in helping to revitalize the initiative in tangent with my passion for sustainability is the perfect opportunity to continue the program in a meaningful way. I gravitated to this organization because of their effectiveness in reaching a diverse audience of people, due to Hawai'i's global tourism, and their ability to create tangible solutions to reduce plastic waste.

Hawai'i



The Kōkua Hawai'i Foundation works in public schools and communities across the Hawaiian islands. It serves over 50,000 students and adults in Hawai'i each year, with a particular focus on rural communities with limited resources. Hawai'i is especially vulnerable to the global plastic pollution crisis due to its unique geography and position in the Pacific Ocean. As a remote island chain, Hawai'i is surrounded by the vast ocean, a major source of plastic pollution. Furthermore, Hawai'i has few options for disposing of waste, making it particularly vulnerable to the issue of plastic pollution. Native Hawaiians have long practiced a strong tradition of respect and appreciation for the land and environment. The Hawaiian phrase "malama 'aina" translates to "care for the land" and encapsulates the Hawaiian practice of taking only what is needed and leaving the rest for future generations. Hawaiians also practice spiritual respect for the land, often through the practice of hula and music, which are used to pay tribute to the gods, spirits, and ancestors living in and among the environment.

My Project

My service project aimed to give a facelift to the Plastic Free Hawai'i Program and was divided into three sections: creating a teacher survey, updating existing resources that were outdated, and adding new additions to their resource bank. I collaborated with the Kōkua staff to design a survey, which was used to gather feedback from teachers in Hawai'i who had experience with the Plastic Free Hawai'i resources. The goal was to identify what they found helpful and what needed to be changed. During my on-the-ground service at Hale'iwa, I worked closely with the staff to determine how my research efforts could best contribute to modernizing the existing Plastic Free Hawai'i curriculum. The resource bank encompassed robust teaching tools designed to provide elementary, middle, and high school teachers with engaging and hands-on materials. The resources had been originally created using an outdated computer program that was challenging to use and had limited accessibility. This led to frequent instances of outdated content. To address this, I developed a Canva template for their resources, ensuring that every member of their team could access and make necessary updates. Subsequently, I conducted research to refresh existing resources with updated information and to eliminate outdated data. Furthermore, I expanded their resource bank by introducing new documents that had been reviewed and augmented by the Kōkua staff. These additions covered subjects such as Environmental Justice and the Intersection of Plastic and Climate. In addition to my curriculum work, I also contributed to the Kōkua Hawai'i Foundation's student summer program hosted at their learning farm. This experience provided me with valuable insights into the community I was serving, allowing me to tailor my curriculum accordingly. I was actively engaged in various outreach events, including visits to schools to educate students about the issue of plastic pollution. Before concluding my time at Hale'iwa, I collaborated with the staff to ensure they were acquainted with the updates and new resources. Ultimately, I generated a comprehensive report detailing my findings and the successful implementation of the new resources. The enhanced resource bank aimed to equip teachers with impactful learning materials, fostering environmental stewardship and empowering students with the knowledge and skills needed to make a positive impact on their community.