Green Heart Action Plan

Problem Definition/ Problem Statement

Through our daily observations, we have noticed that the littering of plastic bottles in our practice field outside our school building is a serious problem. Most students and staff members use more plastic bottles than they need to, and it's polluting our environment as we speak. They don't bother to make the effort of finding a trash can before throwing something away, which is most clearly seen at the end of club meetings like track and soccer practice. However, some athletes are refilling their plastic water bottles inside, and a few students are using reusable water bottles. Despite this, most of these plastic bottles never end up in a trash can when they're thrown away. One reason for these bottles being left out in a field is that many don't consider that their one plastic bottle will do anything impactful, but many of these plastic bottles can start to build up over time, and will cause a major problem in our environment. The eventual breakdown of these plastic bottles releases greenhouse gases and pollutes the soil, directly contributing to the deterioration of our environment. Once in the soil, these plastic bottles will persist throughout hundreds of years, constantly breaking down and putting microplastics in the environment.

Root Cause of the Problem

1. Lack of Motivation
2. Poor Accountability
3. Overuse of Plastic Bottles
4. Inadequate Infrastructure
5. Not Aware of Consequences

List at Least Three Credible Resources that Support Your Problem Statement

- https://www.nrdc.org/stories/single-use-plastics-101#why
- https://www.ejmste.com/download/nurturing-learners-awareness-of-littering-through-environmental-campaigns-an-action-research-5079.pdf
- https://heroforthepeplanet.org/ghsc-earth/

Proposed Solution

We can establish a program to have all after school club members take 5-10 minutes before or after the club ends to clean up any trash they have left behind, especially their plastic water bottles. Each club will appoint a "Green Captain" to oversee the cleanup and ensure waste is properly sorted into recycling bins rather than standard trash cans. Additionally, we will work with custodians to identify "dead zones" where litter builds up and request that recycling bins be moved or added to those specific locations. We can also promote awareness of the consequences of plastic pollution with the use of things like posters and social media campaigns.

How We Will Measure Our Success

Our main measure of success will be the creation of a chart to record the amount of plastic pollution in our school field. This can help us identify what needs to be changed and how we can go about changing it. This will give us an unbiased viewpoint where we can measure our success with reducing the amount of plastic bottle pollution in our school. Also, we can see the changes in the student's behavior, such as their motivation to find a recycling can or the decision to switch from single-use to reusable bottles.

Who are Decision Makers We Need to Reach

Teachers (to give us advice on how to approach our main problem), janitors and other staff members (to get the supplies we need), and administrators (to set up the program). We will also need to contact a garbage company to obtain the recycling bins and dumpster.

Our 3-5 Step Plan for Change

1. Ask teachers for help to make a proposal on how to advertise our team and get started, since we don't have the necessary knowledge for implementing our program into the school. If need be, we can ask our teachers to help us put together the proposal for the administrators.
2. Request the help of our principal to implement our program, since we need permission and authority to change these kinds of things in our school.
3. Acquire equipment and staff support, since we need a recycling company to actually transport and recycle our waste, and staff members to provide additional assistance for our program by observing the student's behavior for us.
4. Observe what is most effective and least effective, since the measuring of our success is very important for accurately and effectively solving the problem.
5. Refine what needs to be changed, because chances won't get our solution perfect the first time.

Impact & Equity

We hope that our project will impact our community and hopefully we will have a cleaner and healthier school environment for students, staff, and the natural area. The equitable benefit of this will be a greater motivation for recycling and a cleaner environment for everyone to enjoy, as well as a mutual benefit for the school's health and the students' learning. This will also lead to the rejuvenation of the soil in our fields, which in turn will help restore and sustain our green spaces.

What Help We Need to Be Successful

To begin our program, we will need the help of our teachers to create a proposal so our administrators will allow for it to be implemented into our school. This may also require some assistance from others to construct the proposal as effectively as possible. Once we are granted permission from our administration for us to create and campaign our program, we will start to bring awareness to the problem by using things like posters and social media posts that people will see. We will also request from our admin if they can support us in purchasing the infrastructure required for this program to function. What we are asking for is a donation of $300 for our program "Team Evergreen," and for support of our program both online and in person. This will help us cover the early expenses of our program, including things like equipment and the fees for using a recycling company.

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