

CAT 4 RESOURCE DEVELOPMENT

WRITTEN REPORT

Project name: Plastic-free Lifestyle

Group ID: 4-03

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ABSTRACT

Our project is based on the idea of curbing the overuse of plastic items in Singapore. Through this project, we are encouraging and educating children in the age group of 8 to 13 about the importance of reducing/ avoiding the usage of plastic by introducing a plastic-free lifestyle to them. The aim is to do our part to create a greener and more environmentally friendly country.

1. INTRODUCTION

Rationale

People are overusing, even misusing plastics in their daily lives, for example, plastic straws, plastic bags etc., having a negative impact on the biodiversity as most are either irresponsibly discarded thus ending up in the natural habitats of biodiversity e.g. ocean, or just incinerated at the incinerating plant both having a negative impact on the biodiversity. In the ocean, plastic debris serve as an obstruction to marine life. Turtles and seals get stuck in the debris, sea birds eat the plastic bottle caps, feeling full when they are actually not, thus dying of starvation; sea turtles consume plastic bags as they look like floating jellyfishes. Besides affecting the biodiversity, they also may affect us too as the tiny microplastics travel up the food chain, from the fishes, into our stomachs.

Speaking to Channel NewsAsia, Mr Pek Shibao of the non-profit group Plastic-Lite Singapore said plastic straws break down into microplastics. This can threaten the lives of marine animals such as seabirds and sea turtles when ingested.

Look at what other countries are doing now:

In Taipei, Taiwan, 14 types of businesses private schools, department stores, hypermarkets, supermarkets, convenience stores, fast food restaurants, pharmacies, medical equipment stores, book and stationery stores, laundries, beverage stores, bakeries, and computer, consumer electronics and communications product retailers are all banned from providing/selling plastic bags to all consumers. Even a fine of between NT\$1,200 (US\$39) and NT\$6,000 (US\$200) will be issued upon failure to abide by the rule after being given the first warning.

France, supermarkets, pharmacies, bakeries, petrol stations, covered and open-air markets are prohibited from providing plastic bags.

Now back to Singapore. As a First World country, what have we, or rather the government, done so far? Firstly, KFC recently stopped providing plastic straws for consumers. This is a good way to greatly reduce plastic usage. Secondly, some schools in Singapore have events and activities that help to reduce plastic usage. For example, in Nan Chiau Primary School, they have this day called “NO STRAW DAY”, which teachers will educate the students on why not to use plastic straws. They will also ban plastic straws for that day. This is a good way to promote a plastic-free lifestyle.

In HCI, as one of the top schools in Singapore we should also do something to support the cause. Nan Chiau Primary School, have a “NO STRAW DAY” day, so why can't us too. In the canteen, the drinks stall vendors provide straws for the juice that students order, straws comes with the tetra packs drinks, and the bread and coffee stall places almost everything they sell in a plastic bag.

Objective

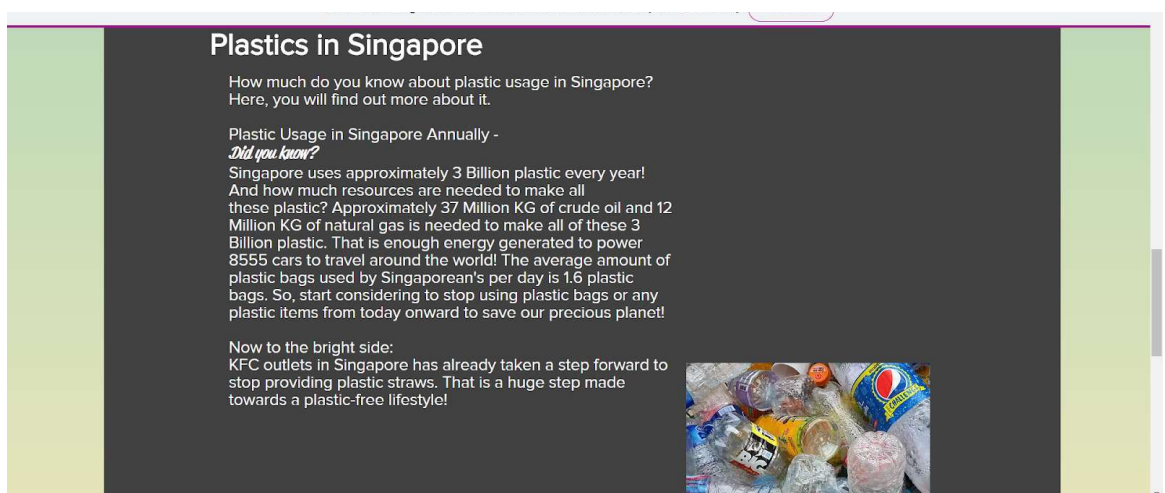
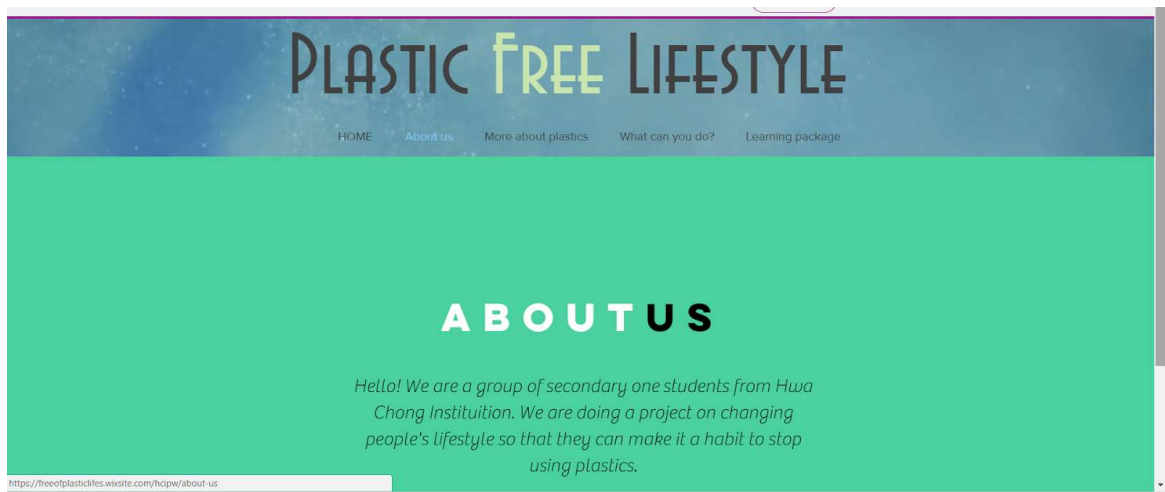
The objective of this project is to encourage and change the people's mindset and lifestyle into a plastic-free lifestyle. We also want to raise awareness as to how harmful plastic are, and also teach them how to reduce or even avoid using plastic in their daily lives.

Target audience

Children aged between 8-13. We chose this age band as based on research, children aged 8-13 are usually more accepting to ideas and changes. Youths aged 14 and above are typically at their teenage rebellion stage and hence there is a lower chance of listening and accepting what we have to share with them.

Resources

We have created a website (<https://freeofplasticlifes.wixsite.com/hcipw>) that includes a learning package and other information to help people better or avoid plastic usage etc. Below are screen grabs of some webpages.



Harmful effects of plastic to biodiversity

Over 100 million marine animals are killed each year due to plastic debris in the ocean.

Approximately 1 million sea birds also die from plastic.

Estimated that there are 100 million tons of plastic in oceans around the world. Furthermore, 6.4 million tonnes are dumped into the ocean each year and each plastic takes 50-2000 years to disintegrate!

Think about the mass of a plastic bag, over 6.4 million tonnes of plastic are strewn all over the ocean, can you imagine the load of plastic thrown into the sea Furthermore, all the marine animals, cute seals and dolphins, are dying because of this! Did you know, if we continue this, by year 2050, there will be more plastic in the ocean than marine animals!



2. REVIEW

Other researchers and scientists from all over the world have created different physical items that help people cut down the use of plastic. For example, metal straws, non-disposable containers etc.

However, the aspects that make ours website different from the rest on the internet (to a Singaporean) is that firstly, this website is done locally. We understand Singapore's plastic usage and wastage better than some people from other countries, hence, we can solve this problem more easily compared to people from other countries. Secondly, we ensure that the content is not too wordy so viewers will be able to absorb it faster. Last but not least, we have added a lot of visuals (pictures, videos etc) to make the entire learning package more engaging, as research shows that people tend to be more focused and engrossed when there is more visual than words. We also included animations that makes it interactive. Teachers can also use this package to help educate their students and this package will also include a printout to see if the students absorbed the information.

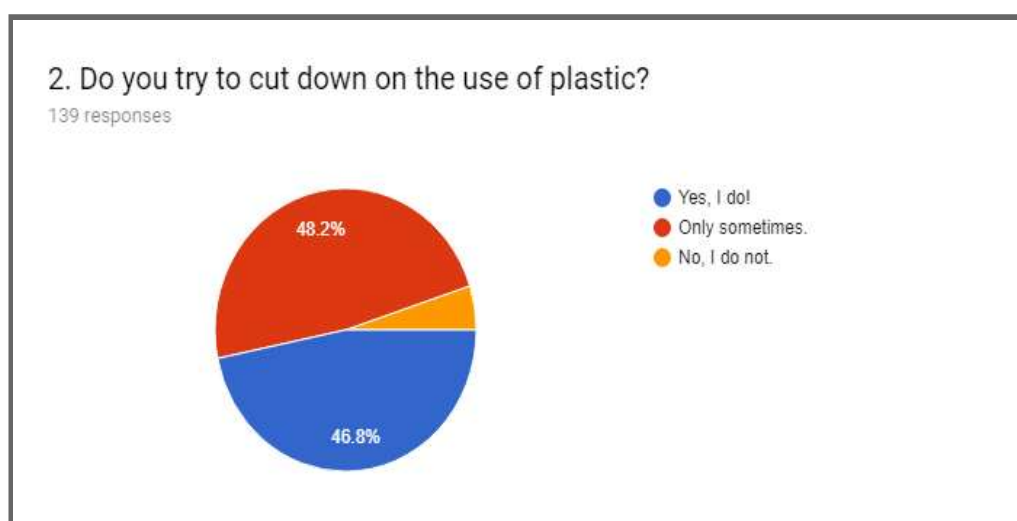
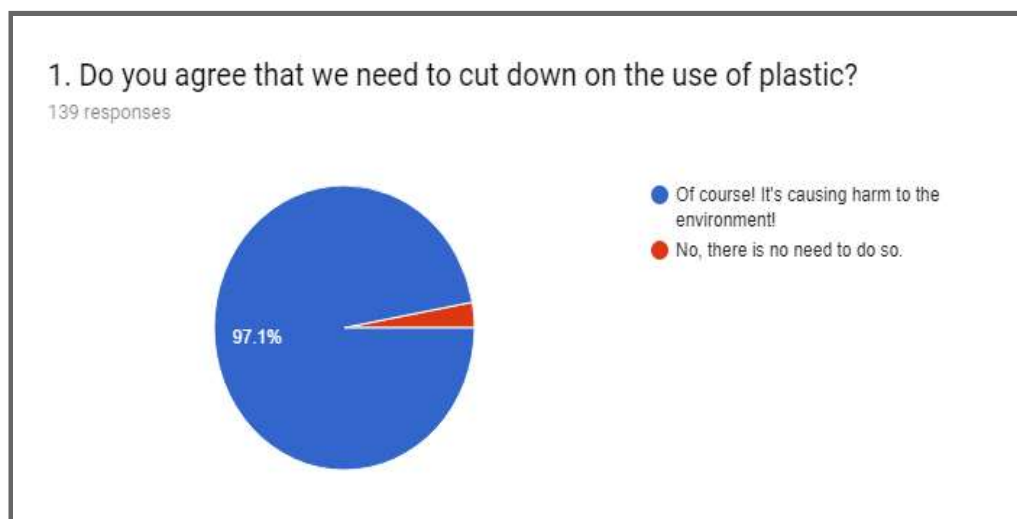
3. METHODOLOGY

Needs Analysis

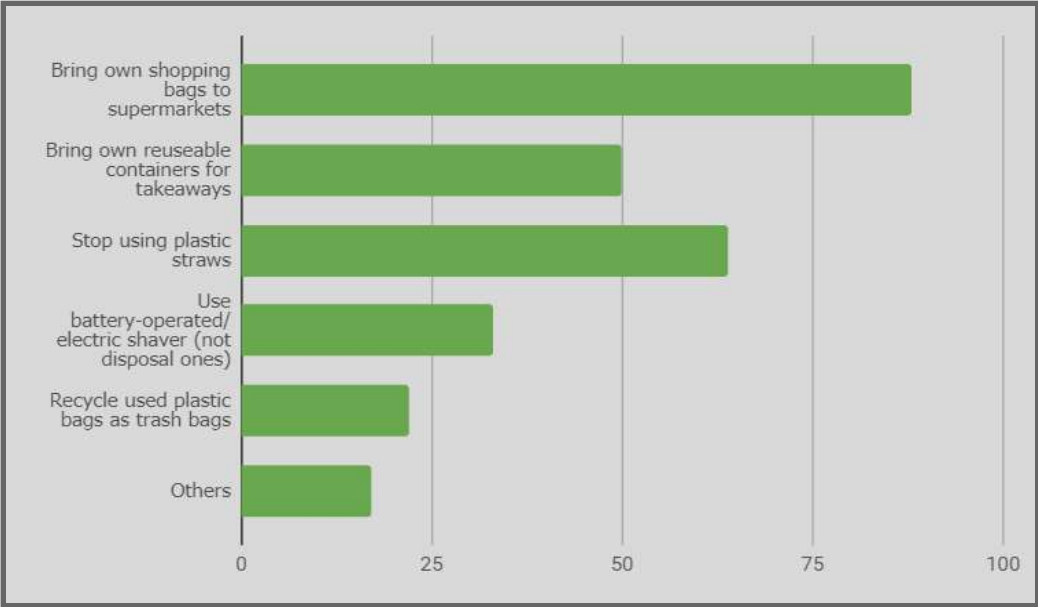
A needs analysis was carried out at the initial stage of the project to assess the relevance of our topic and that a website is meaningful for this purpose. We conducted a short survey which comprised 5 questions specifically to address the issue.

Survey Results

We managed to obtain feedback from 139 respondents. The results are tabulated below.

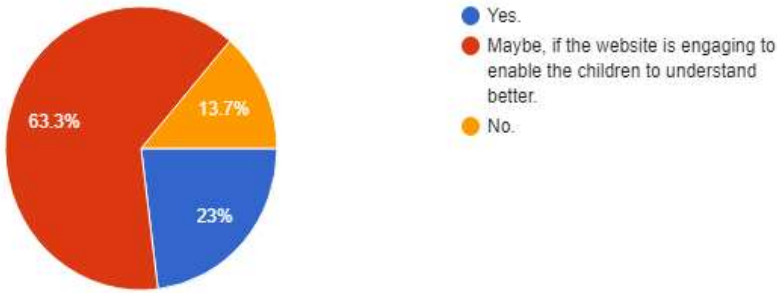


3. In your personal capacity, which method(s) would you use in order to cut down on the use of plastic? (You may select more than one)



4. In your opinion, would it be effective to make use of a website to educate children (aged 8 to 13) to reduce the use of plastic?

139 responses



5. If you currently have not tried to reduce the use of plastic, what is the main reason that is preventing you to do so? Or if you support the cause, what do you think is the main reason that prevents people to do so?

The 3 most common reasons are:

- Inconvenience
- Laziness
- Lack of awareness/ enforcement by government

Development of Resources

We have created a website that convince others that we need to reduce the usage of plastic or else it would lead to very bad consequences, such as pollution which will lead to water shortage, marine life endangered etc. In the website, we will add in videos to make the entire learning package more lively and fun. Our survey results and further research have shown that adding more visuals such as videos and pictures into the learning package will help the viewers remember and thus having a higher chance of them accepting and start reducing the use of plastic. Our surveys have also shown that one of the vital reasons as to why people nowadays do not help to reduce the use of plastic is due to the fact that “there is not enough convincing” and people are not aware of “how plastic can cause harm to the environment”. Thus by creating this website, we can convince the children that reducing plastic is a must.

Pilot Test

What have we done? Our first pilot test was a success with almost all our 30 participants giving our package a 3 - 4 (on a scale of 1 - 4, with 1 being bad while 4 being very good) which to us was a great success, as it shows that users of the age group from 8 to 13 have generally mentioned that they have enjoyed our website and felt that is was good.

4. OUTCOME & DISCUSSION

Based on the survey results which they have provided, many will “encourage their family to try and live a plastic-free lifestyle” and “have enjoyed listening to us”. With this positive feedback from our participants, we believe that our website and learning package will definitely benefit the targeted audience in Singapore.

Limitation

Our website will most probably be spread around only within Singapore or Hwa Chong and we cannot be very sure that every viewer will change their mindset towards cutting down on plastic usage.

5. CONCLUSION

Through our surveys, we have decided to tackle the severe problem of ‘lack of enforcement’ and ‘inconvenience’. In our websites, we will endeavour to change the mindsets of the viewers and help them understand the importance of cutting down on plastic. We will also come up with suggestions as to how people can cut down the use of plastic without causing any inconvenience to them. Hopefully after learning these ways of cutting down the use of plastic, they will use it themselves and even recommend our learning package to their family members etc.

6. REFERENCES

Acknowledgement

Mr Ong Juin Han (Mentor) for guidance and support.

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