

CAT 4 RESOURCE DEVELOPMENT

Group 4-048

PROJECT FOOD DIVE

Wang Xincheng (Leader) 3P1(27)

Brandon Lim 3P1(05)

Fan Shao Cong 3P1(10)

Keagan Njoman 3A3 (14)

ABSTRACT

Project Food Dive is an integrated, intuitive and user-friendly online platform aimed at assisting Secondary school students to recognise the importance of saving food and how to reduce food waste. As students become more tech-savvy nowadays, they are likely to access most information from their digital devices. Hence, our resources include a webpage, interactive app, and a virtual pamphlet to better engage and allow them to grasp such concepts effortlessly, from their preferred platforms. We utilise a user-centred 4E approach - Engage, educate, encourage and experience to entice users, promoting better habits to reduce food waste.

1 INTRODUCTION

1.1 Rationale

Researchers at the University of Illinois found that many young adults did not feel that their personal food wasting habits contributed to the problem of food waste. They also did not think that changing their behaviour would solve the problem of food wastage. Hence, this shows that many students are wasting large quantities of food annually, with no regard for the consequences of their actions.

1.2 Objectives

The main objectives of our project is to:

- Raise awareness on the significance of food waste
- Encourage teenagers to adopt better food management behaviours
- Inspire them to take action to help in the efforts against world hunger

1.3 Target Audience

We have chosen teenagers (13-19 year olds) to be our target audience as:

- Teenagers are more vocal nowadays
 - Willing to make a change to make their futures brighter
 - Willing to spread the change to others

1.4 Resources

For this project, we have designed various resources, namely our Instagram page, Wix website, and a virtual pamphlet. They were chosen because they would be more likely to be utilised by Secondary School students, who are more comfortable with such platforms.

Through the wide plethora of resources, we were able to better reach our target audience and cater to their needs.

2 REVIEW

“Approximately one-third of all food produced for human consumption is lost or wasted.”

- A quote from a report done by the Food and Agriculture Organisation of the United Nations

Food waste is a serious problem that affects every one of us. In 2019 alone, Singapore generated 744 million kilograms of food waste. This is a serious problem as it affects the food security of Singapore. Furthermore, most of the food waste generated could have been easily prevented. Food waste that ends up in landfills produces a large amount of methane – a more powerful greenhouse gas than even CO₂.

As we analyse the current available resources, it is evident that the problem of food waste is a grave threat. However, information remains passive, whereas readers need to be proactive about learning more about this issue, a major flaw as people are less likely to know the causes and impacts of food waste, as well as how to prevent it.

3 METHODOLOGY

3.1 Needs Analysis

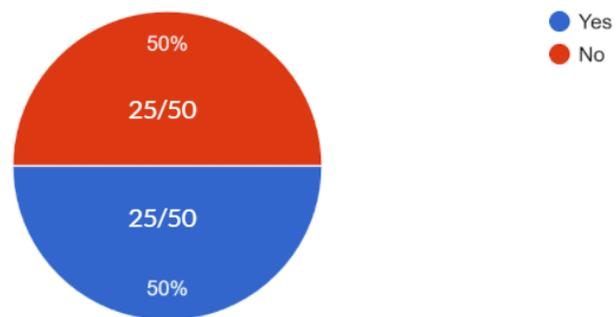
We conducted a needs analysis to ascertain the relevance of our project earlier this year. Our group strategically targeted Secondary school students, our target audience. Therefore, all our 50 Lower Secondary respondents were able to provide us with their most constructive and valuable inputs for our project.

3.2 Survey Results

The results of our needs analysis:

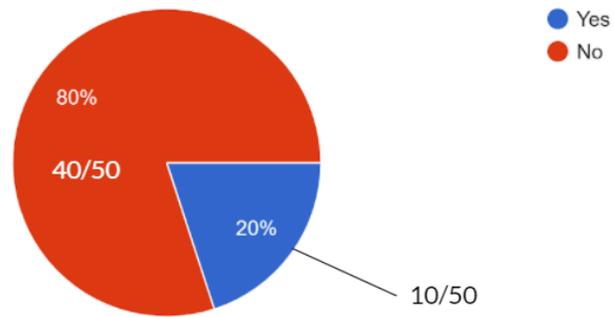
Are you aware that the amount of food waste in Singapore has been gradually increasing over the years, especially so in the past 5 years?

50 responses



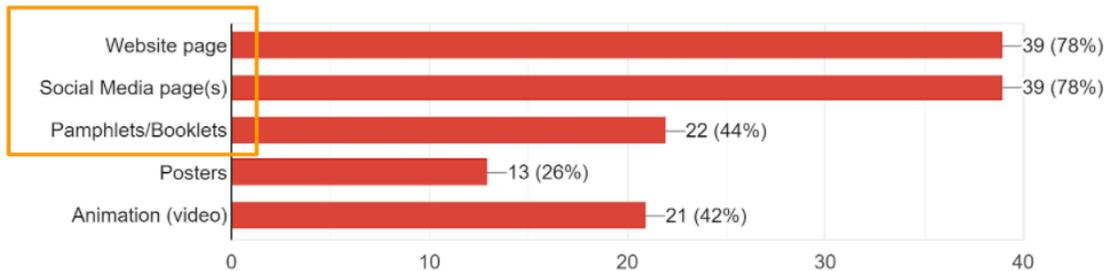
Have you heard of Zero Waste SG?

50 responses



What would you like us to include in our resource package?

50 responses



Note: The reason why total votes exceeds 50 is because respondents were given the option to select multiple choices

Shockingly, half of the respondents interviewed did not know that the amount of food waste in Singapore has been increasing, and a large majority of them did not know about Zero Waste SG, which is the main movement in Singapore promoting better habits to reduce food waste. Based on our interview results, we have decided to create a Website page, a Social Media page as well as a pamphlet.

3.3 Development of Resources

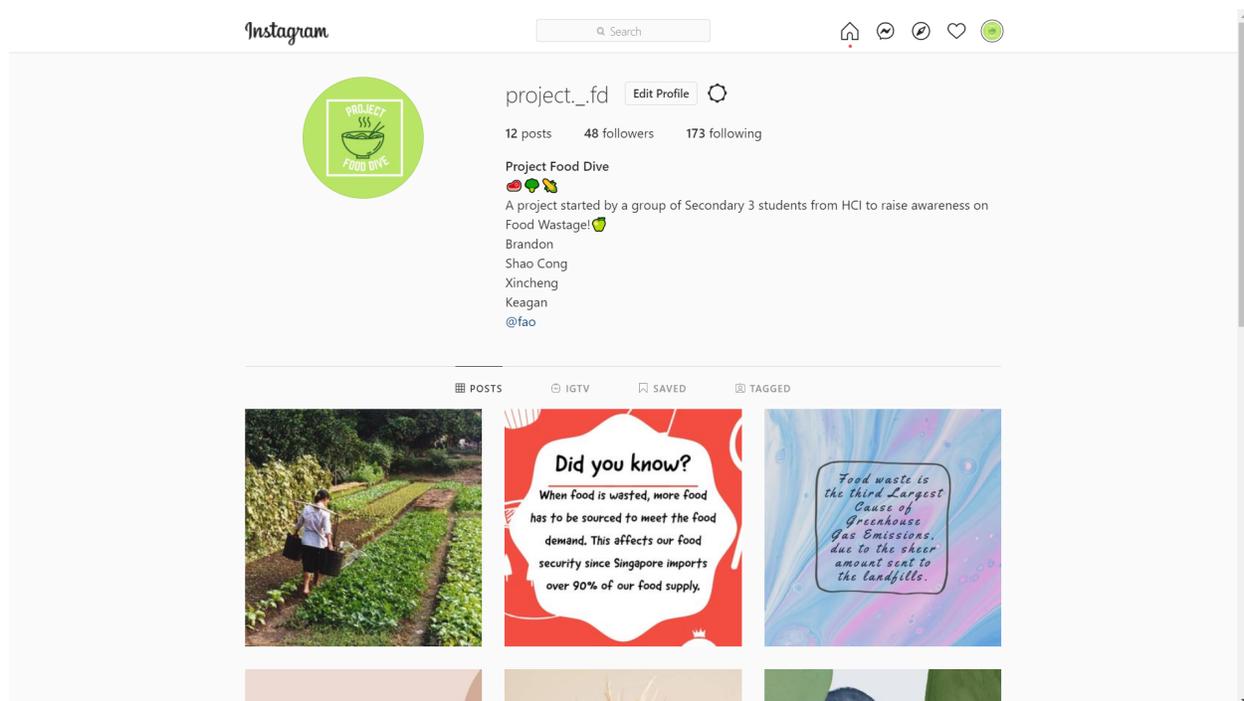
[Website \[Link\]](#)

After many rounds of fact checking, we collated verified information about food waste from a multitude of sources. We added the information into the Wix webpage, splitting them into various categories to incorporate functionality and user-friendliness. Inspired by a clean and minimalistic design, we struck a balance between simplicity and

informativeness for our webpage. Our webpage drafts went through rounds of vetting by our target audience, ensuring that our content was engaging, educational, informative and easily accessible, truly helping teenagers better understand the issue of food waste and how to prevent it.

Social Media Page [Instagram]

We worked on our Instagram page, making it informative yet engaging. Templates were meticulously chosen and edited in order to make post designs simplistic, appealing, and informative. Through this resource, teenagers are able to find out about different topics easily and conveniently using a platform they are most comfortable using.



Pamphlet

Our pamphlet includes information about the amount of food wastage in Singapore and internationally. It also includes a realistic comparison of the amount of food wastage to common objects that we see, such as double decker buses, for easier understanding.

Advice and tips on preventing food waste is included too to give consumers an idea of how to reduce their food wastage.

\$350 MILLION
of food is wasted yearly in Singapore, and

\$1 TRILLION
of food is wasted yearly Globally

In 2019 alone,
744,000,000kg
of food was wasted in Singapore
That is equivalent to 51,000 SBS double decker buses.
Just how many families can that amount of food feed?

**FOOD WASTE
~ A QUICK PRIMER**

@project._fd

What are some ways to save food?

- 1) PLAN AHEAD OF TIME**
Draft out a plan before heading out to buy groceries and ensure that you buy only what you need for a time period, for example for a week
- 2) FINISH YOUR MEAL**
Yes, it is as straightforward as that. Cook or buy what you can eat, and don't waste anything.
- 3) STORE FOOD PROPERLY**
Ensure that you have proper refrigeration with the right temperature (2°C - 4°C), and the required storage needed to preserve the food.

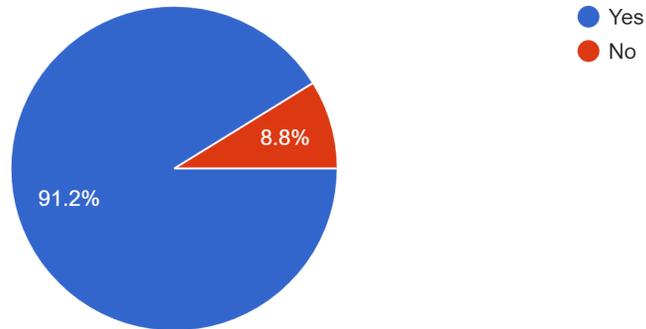
3.4 Pilot Test

Our pilot test was administered to 68 Lower Secondary students. We sent out links to the pilot test via social media platforms, seeking students' opinions on our project. After an immersive tour of our resources, our respondents provided us with valuable feedback we utilised to improve our resources.

Results of our pilot test:

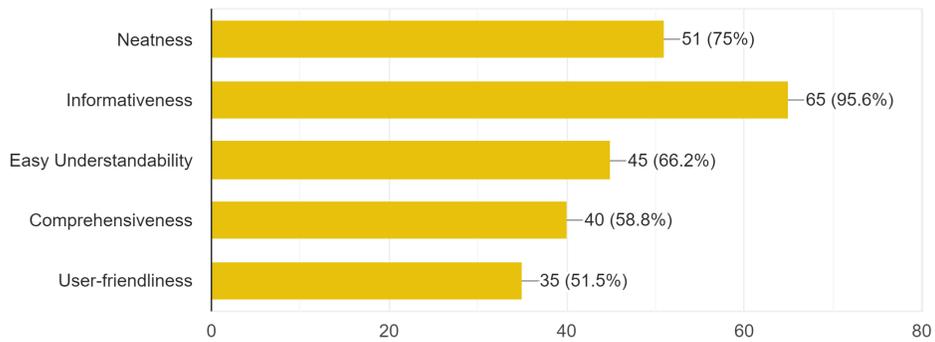
Do you like our website?

68 responses



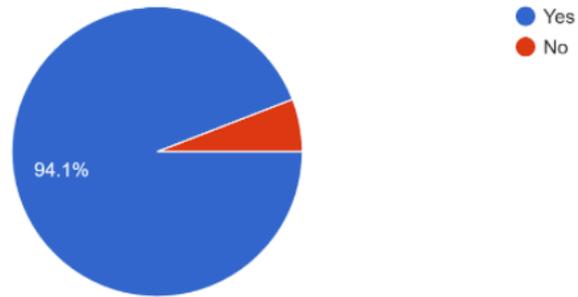
Which of the following have we achieved through this resource (Website)

68 responses



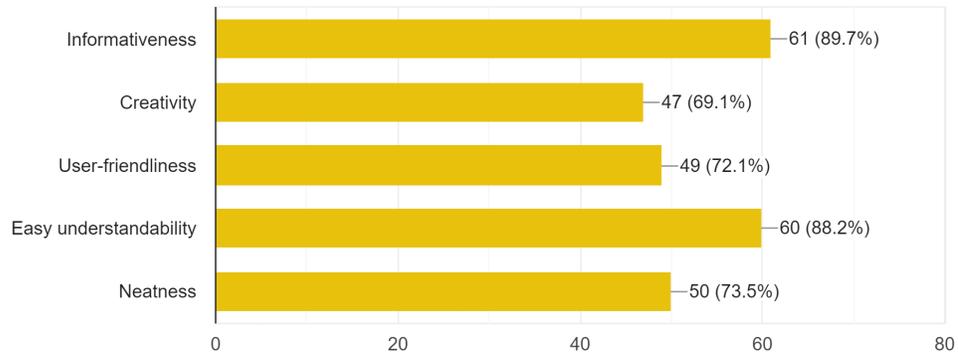
Do you like our Instagram page?

68 responses



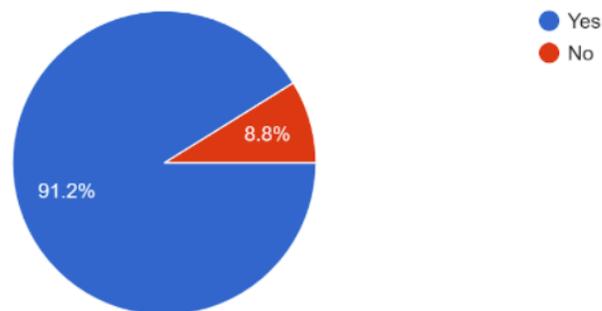
Please select the following you think our social media pages have achieved:

68 responses



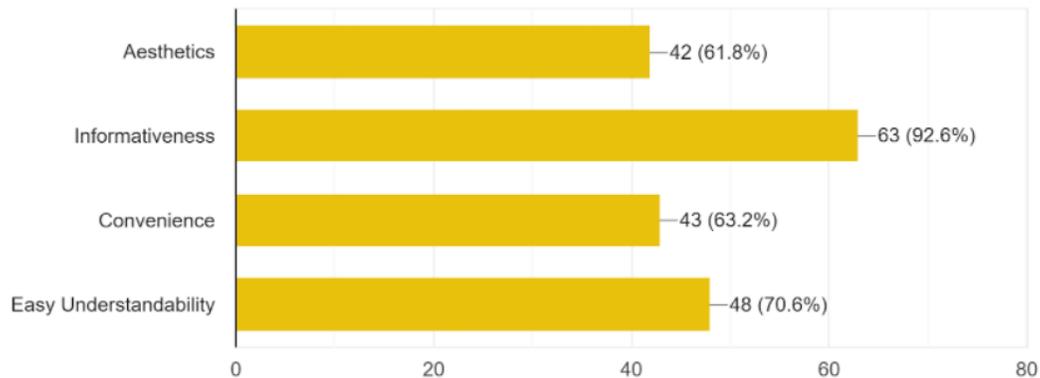
Did you like our pamphlet?

68 responses



Which of the following have we achieved through this resource? (Pamphlet)

68 responses



Overall, the feedback was positive and they said that our project was easy to follow and easily accessible due to the wide range of resources available. However, there were areas of improvement, including user-friendliness and aesthetics.

4 OUTCOME AND DISCUSSION

For our website, after considering many responses, we decided to include relevant videos to the topic which we felt would have been useful for secondary school students. Additionally, we added citations as we had neglected them previously. For our social media page, we further simplified, organised and improved the quality of our posts in accordance with feedback received. For our pamphlet, we added more content and rearranged the layout slightly in order to make it more appealing to read and more memorable.

Limitations of our project include the issue of food waste covering an extensive range of topics that cannot be fully covered. Moreover, due to the rise in the number of local COVID-19 community cases, we decided against handing out physical pamphlets to reduce the risk of COVID-19 potentially spreading.

5 CONCLUSION

Project Food Dive has enabled us to benefit teenagers from all walks of life, guiding them towards healthier habits to reduce food waste generated. Although it required rigorous effort to design our resources while searching for and compiling gathered information, it was an enriching learning experience overall. The joy of being able to help students learn more about food waste in Singapore motivated us to keep going despite the various challenges we had faced. From this project, everyone of us was able to make use of a multitude of soft skills and techniques to make the best decisions during the process. We were able to harness various critical thinking skills and methods, including elements of thought and the decision matrix, helping us open new doors moving forward. We encountered new challenges, faced numerous arguments on certain ideas, but these intangible experiences truly built our character through firsthand experience. Perseverance, teamwork, and commitment are essential for the final stretch of completion as we tie up loose ends meticulously. Despite our differences in personality and opinions, we learnt to accept, step into others' shoes, give in at the right time, and see how the collective ideas of everyone can equate to a desirable outcome.

6 REFERENCES

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