

Student Name:

Student Number:

School: Island School

Topic Area: Water, Food and Agriculture

Team Project Research Question: To what extent can schools develop systems to reduce food waste?

Word Count: 1298

TEAM ELEMENT

Topic Area

Water, food and agriculture

Research Question

To what extent can schools develop systems to reduce food waste?

Aims and Objectives

- To promote and improve our food waste system at Island School.
- Creating a long-lasting system to manage food waste.
- Establish methods of successfully recycling food waste, such as bokashi.

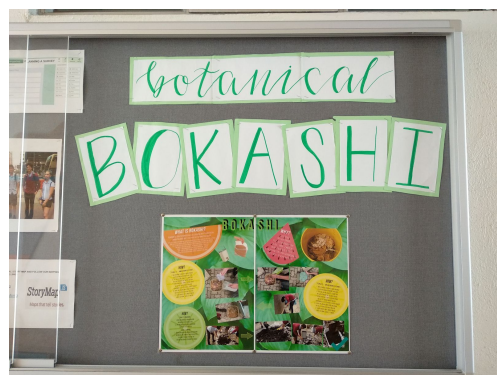
Outcome

For our outcome, we completed direct service by restoring the bokashi composting system at school. Bokashi is a Japanese effective-microorganisms composting method that transforms food waste into compost for gardening.¹ However, change cannot be made if only our group were dedicated to this. Therefore, we produced a poster board which highlighted what bokashi is, the benefits and how we do it in order to promote and celebrate it within the school community. As a result, our knowledge and experience can be passed to future year groups.

¹ *Bokashi: All You Need to Know* | Planet Natural. (2019). Retrieved 7 March 2019, from <https://www.planetnatural.com/composting-101/indoor-composting/bokashi-composting/>



Our poster that highlighted what bokashi is, how bokashi is carried out and why we do it.



Our final display board that included our poster and an eye-catching title



Photos of team members completing direct service

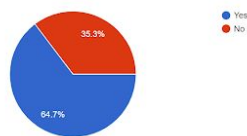
Cross-Cultural Research

Before completing our display board outcome, we wanted to understand our audience better. We conducted a cross-cultural research survey with international students in our community to discover the attitudes and levels of perception about the food waste issue. This revealed that many students in our community are aware of the issue in Hong Kong but a large proportion does not physically take action in

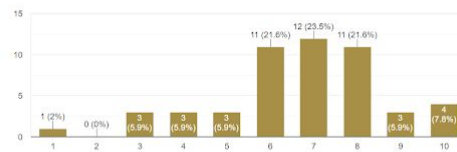
school. Food waste in Hong Kong made up 34% of our total municipal solid waste (MSW) in 2017,² which is higher than the United States of America, where food waste composes 15.1% of their total MSW.³ Therefore, it inspired us to tackle food waste in our community.

Furthermore, we completed additional primary research by interviewing Paul Melsom- a professional horticulturist from the UK. We asked him about methods to decrease food waste at home and school, as well as a detailed explanation about the bokashi process. This made our research more reliable as his interview supported our aim of promoting and passing on the bokashi knowledge.

If you don't finish your food, do you use the food recycling bins on the corridors?
51 responses



How much do you know about Hong Kong's food waste issue?
51 responses



*Results from our
cross-cultural research
survey*



*Interview with
horticulturist- Paul
Melsom*

² (2019). *Wastereduction.gov.hk*. Retrieved 6 March 2019, from https://www.wastereduction.gov.hk/sites/default/files/msw2017_atag glance.pdf

³ *Food: Material-Specific Data | US EPA*. (2017). *US EPA*. Retrieved 7 March 2019, from <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data>

PERSONAL ELEMENT

Strengths and Limitations of Outcome in Achieving the Project Aims

I think that we successfully achieved our aim of continuing the food waste system at Island School through our direct service of bokashi composting as we effectively reinstated the process back into the school. We also accomplished to turn food waste from one Bokashi bin into compost for our school gardens. Nevertheless, a limitation of this was that not all group members were actively involved in doing the composting weekly. We could have been more efficient if we did it more often, in order to turn more food waste into compost.

However, I feel that the second outcome of the informative poster was not as successful. Although it does fulfil our aim of promoting the school's food waste system, its impact is limited. This is because the location of the board was not placed in an eye-catching area and students may simply be uninterested in such a display. We tried to address this issue by making the design as colourful as possible and included a good balance of picture and words. Despite this, it completes its purpose of educating future students who will carry on the bokashi system and therefore, also fulfils our aim of creating a long-lasting system to manage food waste.

Strengths and Limitations of the Work Process

A strength of the work process was that I showed dedication and commitment to my project. We began the project and the composting in early September and currently, in February, I am still dedicated to the cause. Despite my enthusiasm, I occasionally forget and miss days, especially at the beginning of the project where I was sporadic. However, my group learnt from our mistakes and created a schedule where we allocated specific days to specific people, as well as sending reminders to each other on our group chat. As a result, we have now established a clear arrangement and I no longer miss as many days.

A personal weakness was time management. This is because I did not realise how much time it would take to compile the poster nor factor in the obstacles we would

face during the process. Along with my other commitments and concept changes of the poster so it would be better suited to its purpose, it was a challenge to complete this by the deadline. In the future, to avoid unnecessary stress, I need to set a clear and practical timeframe.

Benefits and Challenges of Working in a Team

One of the benefits of working in a team was that it fostered our skills and abilities whilst blending our strengths and improving our weaknesses. As we progressed through the project, we all became friends and this was highlighted when we started to look forward to our regular bokashi sessions as we had each other's company. Thus, the project became more enjoyable and felt more than just an assigned task.

In spite of this, we still faced challenges. For instance, participation from team members wasn't always evenly split as some had other commitments that they prioritised over the project. Therefore, it led to other members having to compromise by doing additional work. However, we resolved this by ensuring that group members notify us of any commitments they have when we were allocating tasks so that we could share out the work better.

Strengths and Weaknesses of Own Performance as a Team Member

My role in our group was the leader, which meant that I had to guide the team and demonstrate responsibility, reliability and rationality. I feel that I effectively demonstrated each of these skills throughout the project, such as when making decisions regarding the outcome and in group discussions. Furthermore, I was able to help others to succeed, encouraged others to contribute and build consensus within the team. I listened actively to other perspectives and was always respectful to other ideas, even if far-fetched. Yet, sometimes I found myself to be too firm in my beliefs. In the future, I need to establish a balance between the whole team's opinions and mine.

What Has Been Learnt About Different Cultural Perspectives

The most surprising fact gained from our secondary research was that annually, about one-third of all the food produced in the world is wasted or lost,⁴ thus proving that food waste is indeed a global issue. Furthermore, I discovered that consumers in Europe, North America and industrialised Asia, including Hong Kong wastes between 95-115 kg of food per year.⁵ This is a colossal number compared to the 6-11 kg of food wasted per year from consumers in Africa, Latin America and developing nations.⁶

As a result of the student survey conducted, I learnt that a majority of students feel that they know an adequate amount about Hong Kong's food waste issue and that a large portion (52.9%) are aware of approximately how much waste is produced per week at school. However, a fraction of students (35.3%) does not take action by using the food recycling bins at school. Therefore, it demonstrated that I needed to find out more about how action could be taken.

I also interviewed a British horticulturist that works locally at our school. It allowed me to learn that in order for action to be taken, we need to find out the root cause of why we are wasting food in the first place- whether that be if we are buying too much food or if we dislike what we are eating. This was intriguing as it opened up a new perspective on how the issue could be tackled.

Practical Skills That Have Been Developed

Through this project, I have gained a better understanding of the food waste issue, my skills in working with people I used to be unfamiliar with and my abilities as a leader. I realised that being a leader is more than being able to listen to everyone's ideas and give out tasks, but more about developing the individual skills of each team member and working to use each skill in an effective way to contribute to a team goal. If I ever get an opportunity to lead a project again, I need to focus on my

⁴ *Key facts on food loss and waste you should know!*. (2019). *Food and Agriculture Organization of the United Nations*. Retrieved 7 March 2019, from <http://www.fao.org/save-food/resources/keyfindings/en/>

⁵ *Which countries waste the most food?*. (2019). *World Economic Forum*. Retrieved 7 March 2019, from <https://www.weforum.org/agenda/2015/08/which-countries-waste-the-most-food/>

⁶ *Key facts on food loss and waste you should know!*. (2019). *Food and Agriculture Organization of the United Nations*. Retrieved 7 March 2019, from <http://www.fao.org/save-food/resources/keyfindings/en/>

time management skills but I would definitely like to revisit the subject area of the environment.

BIBLIOGRAPHY

(2019). *Wastereduction.gov.hk*. Retrieved 6 March 2019, from
https://www.wastereduction.gov.hk/sites/default/files/msw2017_ataglance.pdf

Bokashi: All You Need to Know | Planet Natural. (2019). Retrieved 7 March 2019, from
<https://www.planetnatural.com/composting-101/indoor-composting/bokashi-composting/>

Food: Material-Specific Data | US EPA. (2017). *US EPA*. Retrieved 7 March 2019, from
<https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data>

Key facts on food loss and waste you should know!. (2019). *Food and Agriculture Organization of the United Nations*. Retrieved 7 March 2019, from
<http://www.fao.org/save-food/resources/keyfindings/en/>

Which countries waste the most food?. (2019). *World Economic Forum*. Retrieved 7 March 2019, from
<https://www.weforum.org/agenda/2015/08/which-countries-waste-the-most-food/>