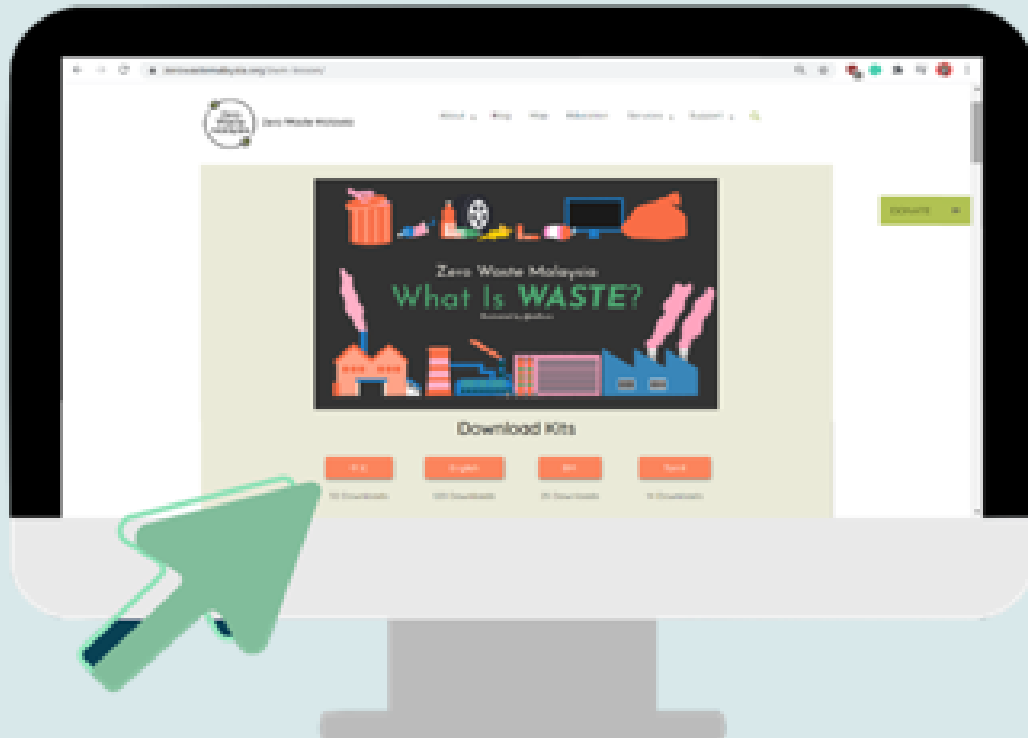




ZWM LESSON & WIRA ZERO WASTE



SPECIAL REPORT

SUPPORTED BY

Korea
Safety Health Environment
Foundation



재단법인 숲과나눔

3	ZWM LESSON & WIRA ZERO WASTE
4	PROJECT SUMMARY
6	PROJECT PROGRESS
19	CHALLENGES
21	PROJECT OUTCOME
22	POST-PROGRAMME
23	SPECIAL THANKS
25	CONTACT INFORMATION & DONATION CHANNELS

TABLE OF CONTENTS

ZWM Lesson is Zero Waste Malaysia's first range of educational resources for young students in Malaysia. Launched in July 2020, ZWM Lesson started out with its first publication of educational modules and lesson plans.

This first set of publication revolves around waste and its problems, and what can be done to reduce our waste generation. Previously named ZWM Lesson, it was later rebranded to Wira Zero Waste (WOW) with the launching of the guided e-learning classes for primary and secondary school students.

Wira Zero Waste (WOW) encompasses a series of lesson plans, educational materials, and virtual classes for at-home online learning to educate the future generations on environmental awareness, value-driven development, and sustainability management, specifically related to waste.

This report covers all the activities that have occurred during the pre-launch, launching, and post-launch of ZWM Lesson and WOW.

PROJECT SUMMARY

Zero Waste Malaysia's first publication of a series of free educational modules for primary and secondary school students aged 11 to 17 has been designed in alignment with the Malaysian Secondary School Curriculum Standard (KSSM). The materials are to be used in class, at home, or in extra-curricular workshops. The materials have been produced with an intention to bring local and familiar settings into the learnings. As such, the lesson plans, videos, and guidance slides are prepared in four of the most widely used languages in Malaysia which are English, Malay, Chinese and Tamil.

It consists of 5 modules:
“Module 1: What is Waste?”,
“Module 2: Where Does Waste Go?”,
“Module 3: Types of Waste”,
“Module 4: How Much Waste Do We Produce?” and
“Module 5: What Can We Do?”.

Whereas, the learning slides and audio aids are prepared in English and Malay.

The Wira Zero Waste (WOW) virtual classrooms were launched to deliver free lessons to more than 100 students in Malaysia. The WOW virtual classroom program has been split into three cohorts – two conducted in English and one in Malay from August to October 2020.

Open Learning, Facebook, Telegram Messenger, Google Meet, and Google Slides have been the main platforms used to conduct these virtual classes and to communicate with the students. We used additional support platforms like Kahoot and Padlet for missions.



‘Wira’ is a Malay word that means ‘Hero’, thus the program is created with a superhero theme in mind. We term tasks as ‘Missions’, we call our facilitator by ‘Captain’, and we have our custom-designed male and female superheroes as fun digital stickers!

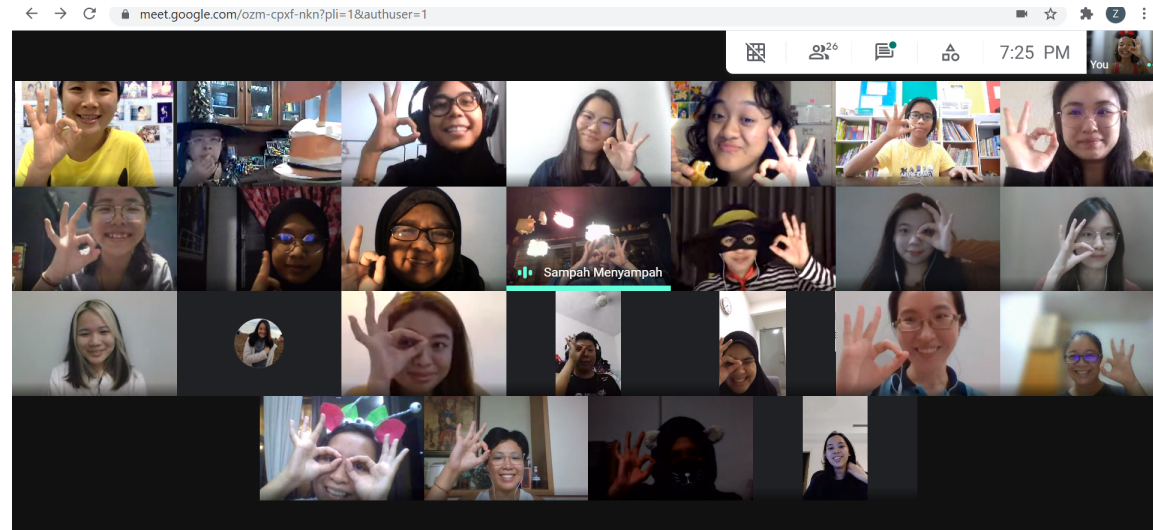
PROJECT PROGRESS

What is ZWM Lesson Plan ?

ZWM Lesson Plan is a series of educational modules that teach students about waste.



Due to the Malaysia Movement Control Order (MCO) regulations to abate the spread of COVID-19, the entire project was executed remotely by contributing members from across Malaysia.



We have a total of 55 members which comprises the Project Manager, Project Coordinator, Content Developers (Phase 1: ZWM Lesson Plan and Phase 2: Wira Zero Waste), Content Editors, Translators, Designer, Videographer, Voice over Talent, PR and Marketing contributors, Finance Lead, Webpage Developer, UX/UI contributor, Educator Advisors, and Class Facilitators.

Since early 2020, Zero Waste Malaysia had been interested to produce educational materials that can be used in Malaysian schools. Upon receiving the Global Seed Grant, in June 2020, we were able to turn our ambitious ideas and preliminary drafts into reality!

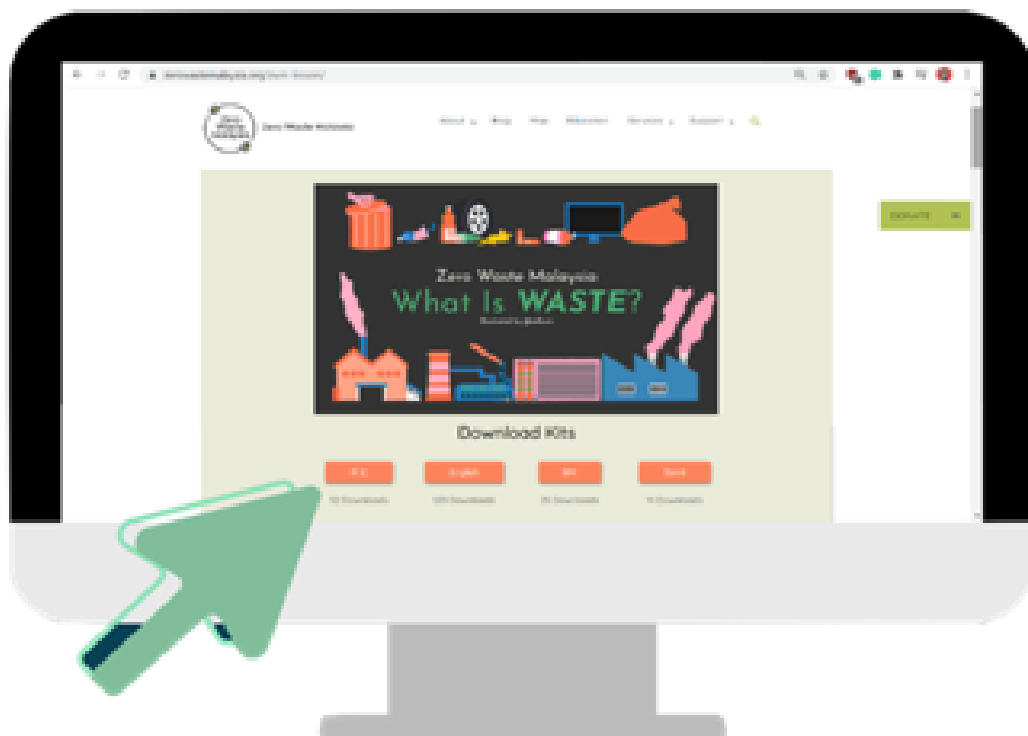


A total of eight content developers, three content editors, six translators, one videographer cum video editor, one designer, and two project managers were involved to complete the guidance slides, activity sheets, lesson plans, and video publications for five modules.

The materials were first created in English and then translated into Malay, Chinese and Tamil. In June, we completed one video each for Module 1, Module 2 and Module 3 recorded in Malay with English, Chinese and Malay subtitles.

On the promotional aspect, we have a marketing team of three that helped us to promote the publication on our social media and through press releases. June was an exciting month as we were able to promote ZWM Lesson during our online sharing at BluHope conference, a British High Commissioner's campaign for World's Ocean Week.

In the same month, we were also completing the recruitment of our team for the next phase of the project, which was the guided e-learning coined as Wira Zero Waste program.



Wira Zero Waste (WOW)

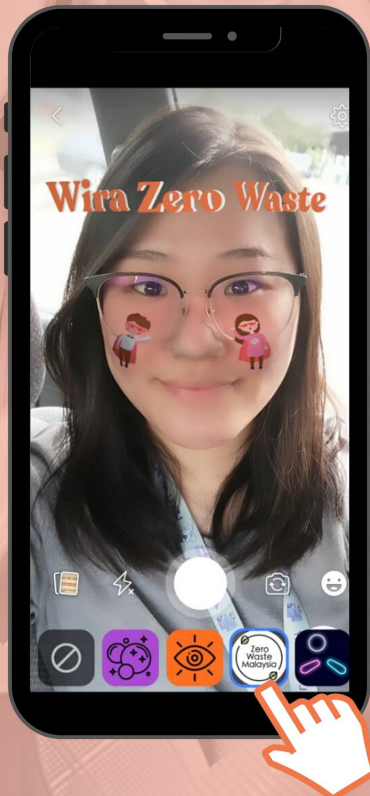
A **FREE** Virtual Classroom



On 1 July, we made the official announcement for the launching of ZWM Lesson and an overview of what the virtual classroom is all about.

With the help from our marketing team, these initiatives were proudly featured and discussed on The Edge, The Rakyat Post, Sin Chew Daily and The Star Online, four local online news publishers; a non-governmental organization; and BFM, a Malaysian independent business and current affairs-oriented radio station.





USE THE WIRA ZERO WASTE FILTER

1. Click the 'create a story' button on FB
2. Select 'selfie'
3. Click the filter icon to find our filter
4. Share the story with your friends and help us spread the word about WOW!



For the whole month of July, we focused our efforts to reach out to individuals who may be interested to sign up to our program as facilitators or students. Four students from Tunku Abdul Rahman University College majoring in Bachelor of Design (Honours) in Graphic Design chose Wira Zero Waste as their Advertising & Design university project. Their effort was critical in promoting the program. These talented minds helped us to create social media banners, coordinate ads, and design WOW-themed augmented reality (AR) filters for our Facebook and Instagram users!

In just three weeks, we received 130 job applications for the facilitator role. The criteria we were looking for to determine the best candidate for this role were their passion and experience in teaching primary and secondary school students and their knowledge in sustainability, the environment, and zero waste. Our project coordinator and project manager teamed up to select 31 of the applicants for an interview, and finally offered 18 of them for the position as WOW facilitators. At the same time, our three content developers, one content editor, three translators, and one designer were also working on converting the guidance slides into an extended version (learning slides) that can be directly used for the five-weeks WOW classes.



The new version, the learning slides, expanded each module to fit a one-week schedule, whereby we further developed the initial content into three to six new slides as detailed below.

MODULES

1 WEEK SCHEDULE

Module 1: What is Waste?

- Part 1: What is Waste?
- Part 2: Difference Between Natural and Man-Made Waste
- Part 3: Linear Economy
- Part 4: Circular Economy
- Part 5: Life Cycle Analysis
- Part 6: Weekly Check-in

Module 2: Where Does Waste Go?

- Part 1: Journey of Waste
- Part 2: 5 Types of Places that Waste End Up
- Part 3: Description of Landfills and Dumpsite
- Part 4: Differences Between Landfills and Dumpsites and Their Impact
- Part 5: What Happens to Waste That Doesn't End Up in Landfill?
- Part 6: Weekly Check-in

All 22 slides (excluding Weekly Check-ins) are supported by both English and Malay audio aid to cater to individuals with reading disabilities.

MODULES

1 WEEK SCHEDULE

Module 3: Types of Waste

- Part 1: Solid Waste
- Part 2: Liquid Waste
- Part 3: Organic Waste
- Part 4: Hazardous Waste
- Part 5: Reusable and Recyclable Waste
- Part 6: Weekly Check-in

Module 4: How Much Waste Do We Produce?

- Part 1: How to Collect Waste
- Part 2: Waste Diary
- Part 3: Weekly Check-in

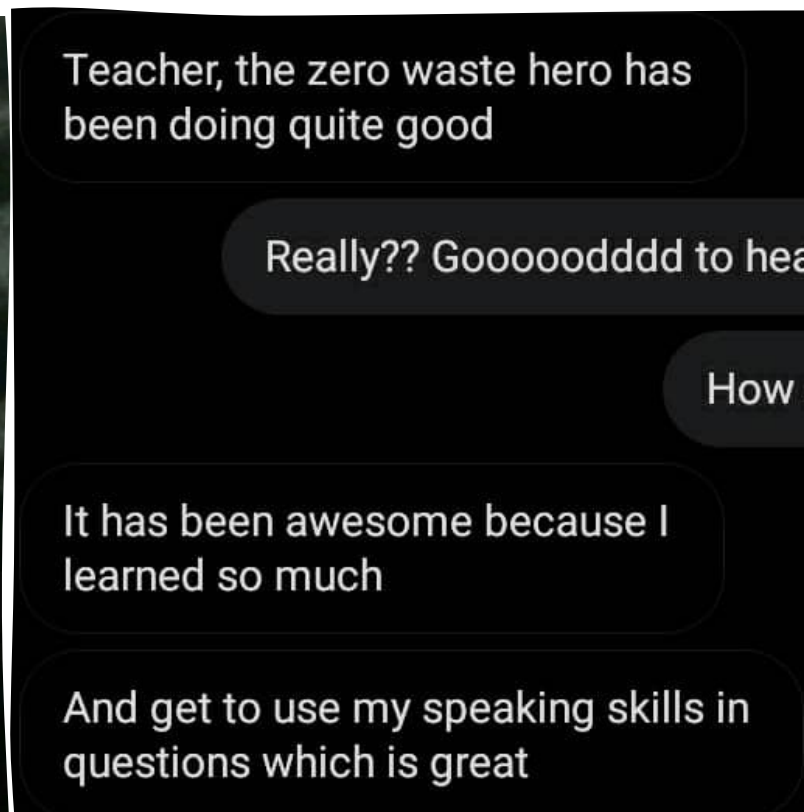
Module 5: What Can We Do?

- Part 1: Waste and Climate Change
- Part 2: Needs and Wants
- Part 3: Rethink and Refuse
- Part 4: Reduce and Reuse/Repair
- Part 5: Rot and Recycle
- Part 6: Weekly Check-in

We continued to create digital materials that can be used by students, including stickers that can be shared on WhatsApp and Telegram Messenger as well as videos for Module 4 and Module 5. In July, we started reaching out to the Ministry of Education Malaysia (MOE) to propose the adoption of this program in local schools across Malaysia. To maintain effective project management, we continued our weekly progress check-in and discussions regarding promotions and marketing, recruitment, content creation, the endorsement from MOE, financial budget, project goals, and target, etc.

In August, we kickstarted the Wira Zero Waste virtual class for Cohort 1 (English). We amassed a registration of 113 eligible students. The 113 students were separated into four classes: Wise, Intelligent, Righteous, and Audacious based on their age groups: 11-12 years, 13-14 years, 15-16 years, and 17 years old respectively. As mentioned above, each class ran for five weeks, with one module taught each week. The students' tasks were to read and understand the daily lessons presented in Google Slides which contain narratives in writing, audio, and videos; and complete the daily missions on Kahoot, Padlet, Google Forms, etc. before the end of the week. Each daily lesson and mission was estimated to require 30 minutes or less worth of commitment per day from students. By the end of the week, the facilitators conducted an optional virtual call with the students from each class to reflect and discuss what they have learned during the week.

For Cohort 1, six facilitators were involved – one being the main facilitator who taught for the entire five weeks, and five facilitators who taught one module each. Before the classes commenced, the facilitators added all participating students on Telegram Messenger and grouped them into their respective classes. In the chat groups, students were able to engage with one another and the facilitators. The students enjoyed the interaction and provided substantially good responses!



By the end of the month, we have issued Certificates of Completion to 40 students who have successfully completed all of their missions. In this month, we realized that the number of students who signed up for Cohorts 2 and 3 was not up to our expectations. Thus, we decided to open the course for public registration, i.e. not only restricted to 11 to 17 years old. This entails us to switch platforms to centralize both student and public access and streamline our process.

In September, we used Open Learning as the centralized platform to enable students to find their reading material and missions integrated in one page. There were a total of 33 registrations for Cohort 2 which was conducted in Malay, out of which 21 followed through on Open Learning. Three students completed all of their missions to obtain their Certificate of Completion. Whereas for Cohort 3 which was conducted in English in October, we received a total of 48 registrations, out of which 47 followed through on Open Learning. 14 students completed all of their missions to obtain their Certificate of Completion.



Every week in September and October, the facilitators organized Facebook Live sessions on ZWM Facebook page to engage with the public about the topic of the week. Both students and the general public are able to participate in the discussions.

The total view counts from both cohorts are currently at 9,053 views (UTD: 29th December 2020)

COHORT 2 (CONDUCTED IN MALAY)

- Module 1: 627 views
- Module 2: 935 views
- Module 3: 465 views
- Module 4: 434 views
- Module 5: 664 views

COHORT 3 (CONDUCTED IN ENGLISH)

- Module 1: 980 views
- Module 2: 1.3k views
- Module 3: 1.6k views
- Module 4: 748 views
- Module 5: 1.3k views

CHALLENGES



What is WOW?

WOW is a virtual classroom project that introduces the **Zero Waste Malaysia Lesson Plan**, educating students aged 11-17 on sustainability and environmental awareness

Wira Zero Waste (WOW)
A FREE Virtual Classroom

What is WOW?
WOW is a virtual classroom project that introduces the Zero Waste Malaysia Lesson Plan, educating students aged 11-17 on sustainability and environmental awareness

Modules To Learn:

- 01 What is Waste?
- 02 Where Does Waste Go?
- 03 Types of Waste
- 04 How Much Waste Do We Produce?
- 05 Where Does Waste Go?

HELP SPREAD THE WORD ABOUT WOW

Be it sharing our posts on social media or telling your friends about our program, every little bit helps!

Being the only one to care about the environment is daunting, so let's get more people onboard and join our mission!

Zero Waste Malaysia

Since the start of the Movement Control Order (MCO) restrictions in March 2020, the Malaysia government ordered that schools were to be closed. The sudden transition of students forced to study from home had not been very effective. This was expected to result in an overload of assignments and subjects to catch up on once schools reopened.

After approximately four months of studying and learning from home, the government announced that schools can reopen in July. Schools had to rush syllabuses, assignments, and homework for students to complete. Consequently, students were more concerned with their existing workload from their schools.



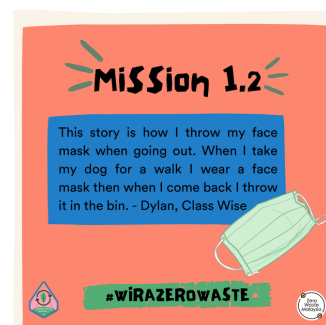
MISSION 1.1

Waste is something no longer in use or useful to us. - Sunny, Class Wise

I think waste is something that is no longer useful and can't be recycle. It is also called trash, junk, garbage, and rubbish. - Zaara, Class Intelligent

#WIRAZEROWASTE

Zero Waste Malaysia

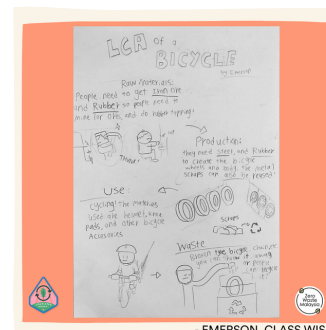


MISSION 1.2

This story is how I throw my face mask when going out. When I take my dog for a walk I wear a face mask then when I come back I throw it in the bin. - Dylan, Class Wise

#WIRAZEROWASTE

Zero Waste Malaysia



LCA of a BICYCLE

People need to get their car and Rubber so good good to make for the car and the rubber tyre!

Production:
They need steel and Rubber to make the bicycle which they need to make for the car and the rubber tyre!

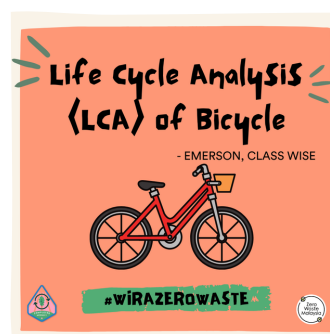
Use:
Cycling the bicycles use the bicycle, and the rubber tyre, and the car.

Waste:
When the bicycle is broken, they need to throw it away, and the rubber tyre, and the car.

- EMERSON, CLASS WISE

#WIRAZEROWASTE

Zero Waste Malaysia

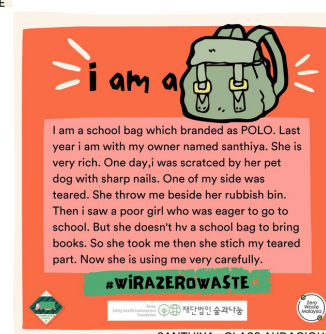


Life cycle Analysis (LCA) of Bicycle

- EMERSON, CLASS WISE

#WIRAZEROWASTE

Zero Waste Malaysia



i am a

I am a school bag which branded as POLO. Last year I am with my owner named santhiya. She is very rich. One day, I was scratched by her pet dog with sharp nails. One of my side was teared. She throw me beside her rubbish bin. Then I saw a poor girl who was eager to go to school. But she doesn't hv a school bag to bring books. So she took me then she stich my teared part. Now she is using me very carefully.

#WIRAZEROWASTE

- SANTHIYA, CLASS AUDACIOUS

Zero Waste Malaysia

We estimated that this was the main reason that the number of students who signed up was lower than expected. We managed to obtain registrations of more than 100 students for Cohort 1 in August as the pace at school was only starting to pick up, but significantly lesser registrations for September and October when students' schedules started to get more packed.

On average, 31% of students who participated in the course managed to complete the whole program. We measured this through the missions that they have to complete. The outcome is not very satisfactory, and it may be attributable to a lack of connection or accountability from the students, which is a common challenge in online learning.



PROJECT OUTCOME

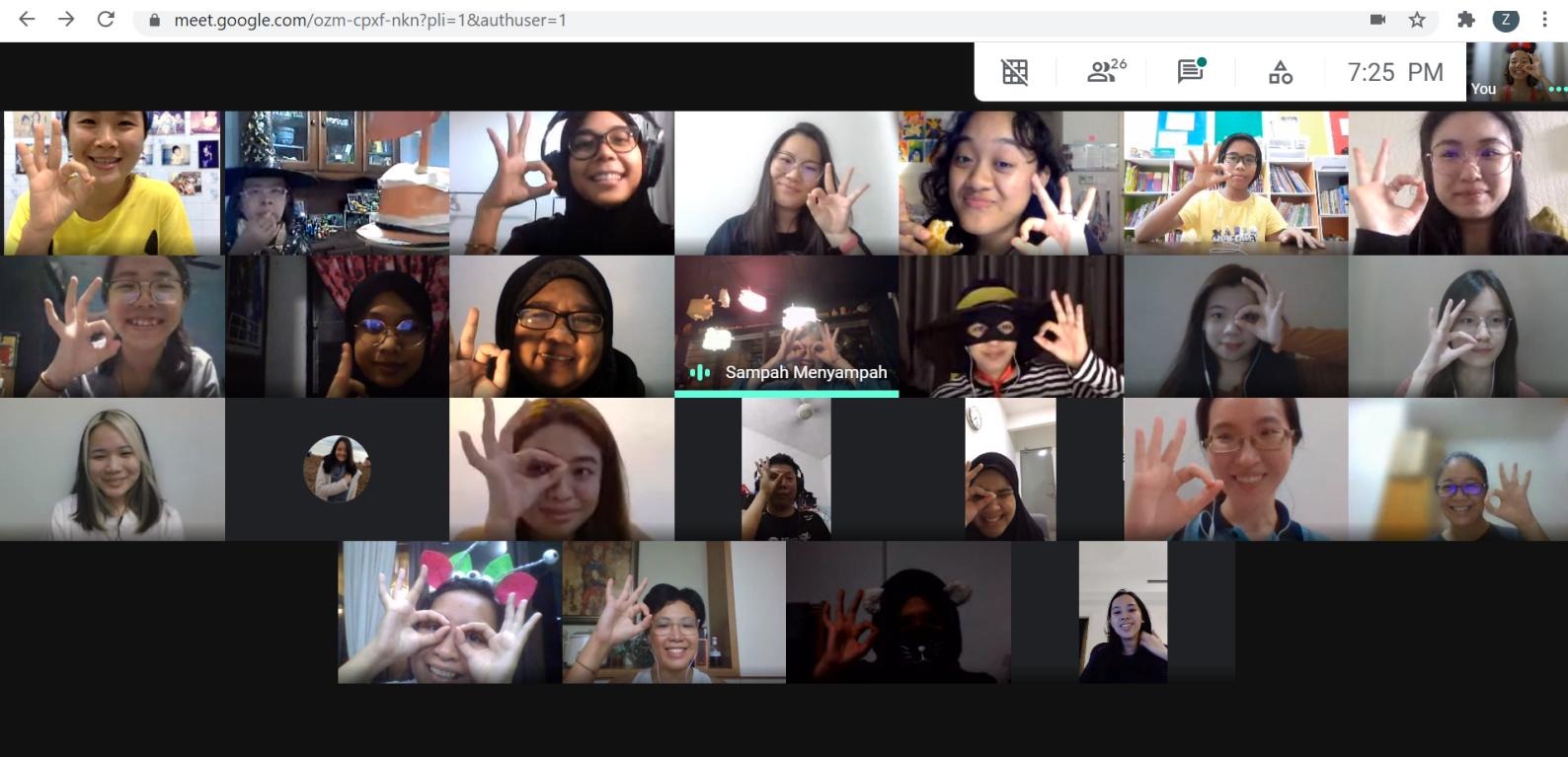


Overall, the project has been a success. The project is able to produce long-term impacts because the production of the educational materials can be continuously used for future learning. **Total download count: 2,279 including Bahasa Melayu, Mandarin, English, and Bahasa Tamil (UTD: 29th December 2020)*

We have received really positive feedback on the content of the materials from both students and educators. Parents and the general public have also complimented the practicality and effectiveness of the modules, where they were able to increase their knowledge on zero-waste, sustainability, and the environment, especially from the provision of local real-life examples and weekly discussions.

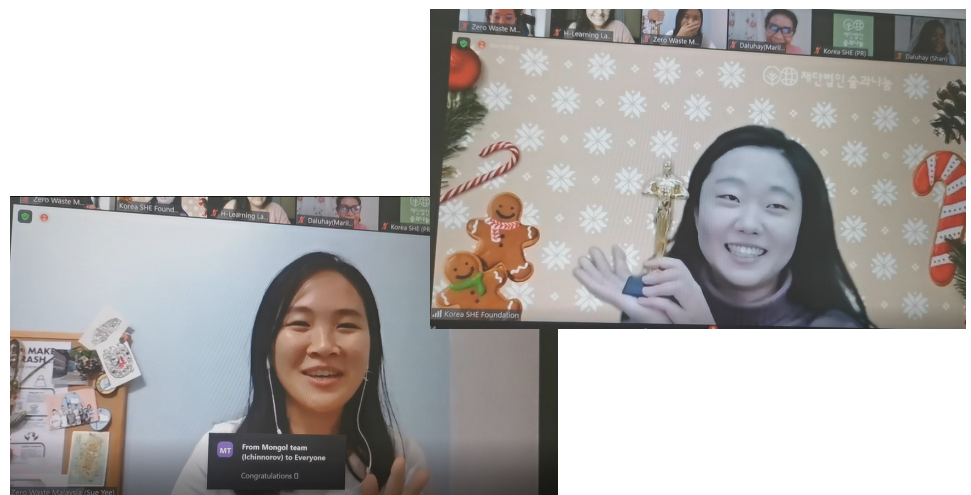
We are really grateful that we are able to work well together, albeit having more than 50 individuals to work on a project. The support we received from each team member is the pillar of strength in making this project a success.

POST-PROGRAMME



In October, we organized an appreciation virtual dinner to bring the entire group together. Good progress was made with MOE as we were invited to present our proposal for the ministry to endorse WOW and adopt it in local syllabuses.

In December 2020, ZWM was invited to the closing meeting with Korea SHE Foundation. During the meeting, the Foundation announced that we received third place for the Peer Award!



SPECIAL THANKS

PHASE I: ZWM LESSON

CONTENT DEVELOPER

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Nicole Fong
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Siti Hajar Abdullah
Suseela Nagappan
Tee Kam Chyi

DESIGNER

Eelhum

VIDEOGRAPHER

Dwayne Foong

VOICEOVER

Jaz Leen

PROJECT MANAGER

Marylyn Poh
Khor Sue Yee

ZWM would also like to thank the volunteers involved in developing ZWM Lesson and Wira Zero Waste.

PHASE II: WIRA ZERO WASTE (WOW) VIRTUAL CLASSROOM

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Suhaila Zaini

CONTENT EDITOR

Marylyn Poh
Sue Yee Khor

TRANSLATOR

Nurul Amalina Che Ariffin
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Siti Hajar Abdullah

DESIGNER

Eelhum

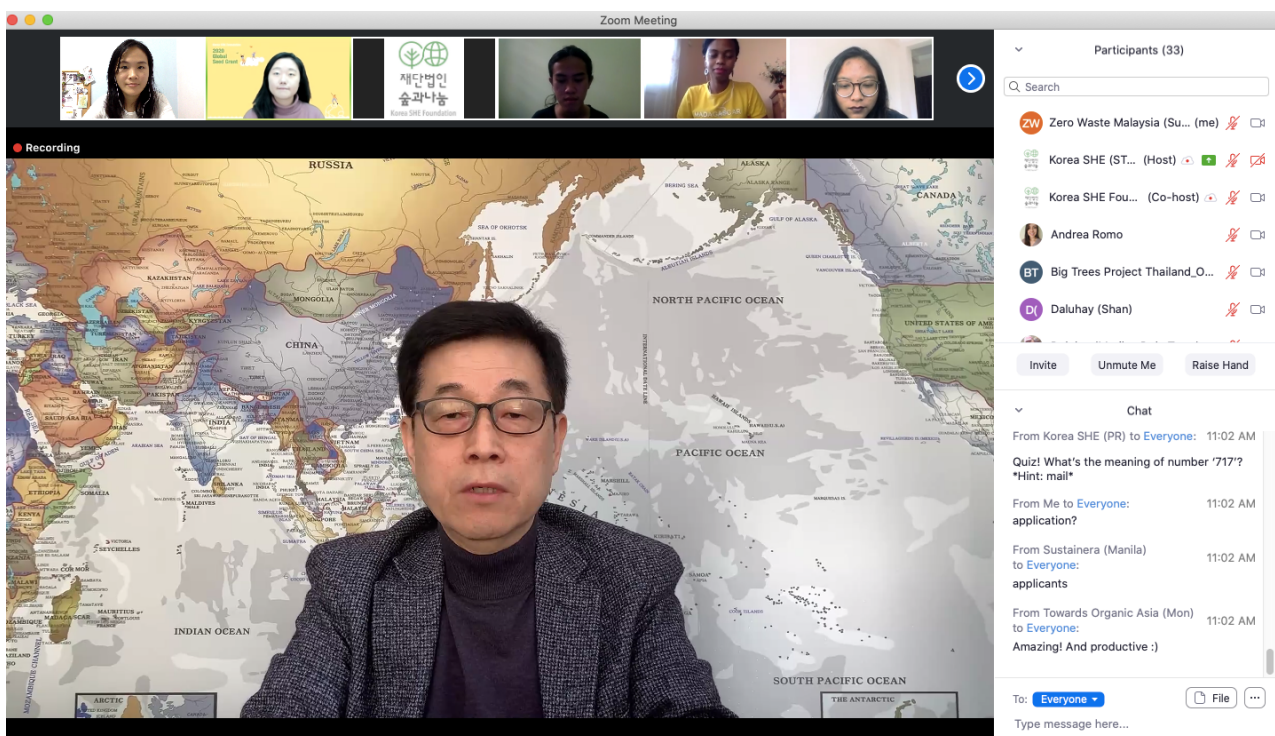
VIDEOGRAPHER

Dwayne Foong

PROJECT COORDINATOR

Nicola Choon

All this while, ZWM has been publishing resources by relying on a volunteering system. The funds we received from Korea SHE Foundation is an important factor as we are able to compensate for professional expertise and provide opportunities for them to contribute their talent. This indeed has been able to push the program to be highly effective.



CONTACT INFORMATION

ZERO WASTE MALAYSIA (PPM-044-10-29032018)

WEBSITE	zerowastemalaysia.org
FACEBOOK PAGE	facebook.com/zerowastemalaysia.official
COMMUNITY GROUP	facebook.com/groups/zerowastemalaysia
INSTAGRAM	instagram.com/zerowastemalaysia_official
TWITTER	twitter.com/ZeroWasteMsia
YOUTUBE	tinyurl.com/zerowastemalaysia
GENERAL EMAIL	info@zerowastemalaysia.org
SPEAKERS TEAM	teach@zerowastemalaysia.org
ZERO WASTE PLEDGE	cert@zerowastemalaysia.org
FUNDRAISING/SPONSOR	sponsor@zerowastemalaysia.org
ZERO WASTE RESOURCES MAP	map@zerowastemalaysia.org

COMPLETED
MODULE 5

DONATION CHANNELS

CASH DEPOSIT



Bank Name:
CIMB Bank

Bank Account no.:
8009296721

Beneficiary Name:
Pertubuhan Sisa Sifar
Malaysia
(Zero Waste Malaysia)

Billplz

BillPlz: <https://www.billplz.com/orh8btyv8>



PayPal: <https://paypal.me/zerowastemalaysia>



Zero Waste Malaysia



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