



FINAL PROGRAMME REPORT

CITIZEN SCIENCE FOR MICROPLASTICS AWARENESS AND ACTION

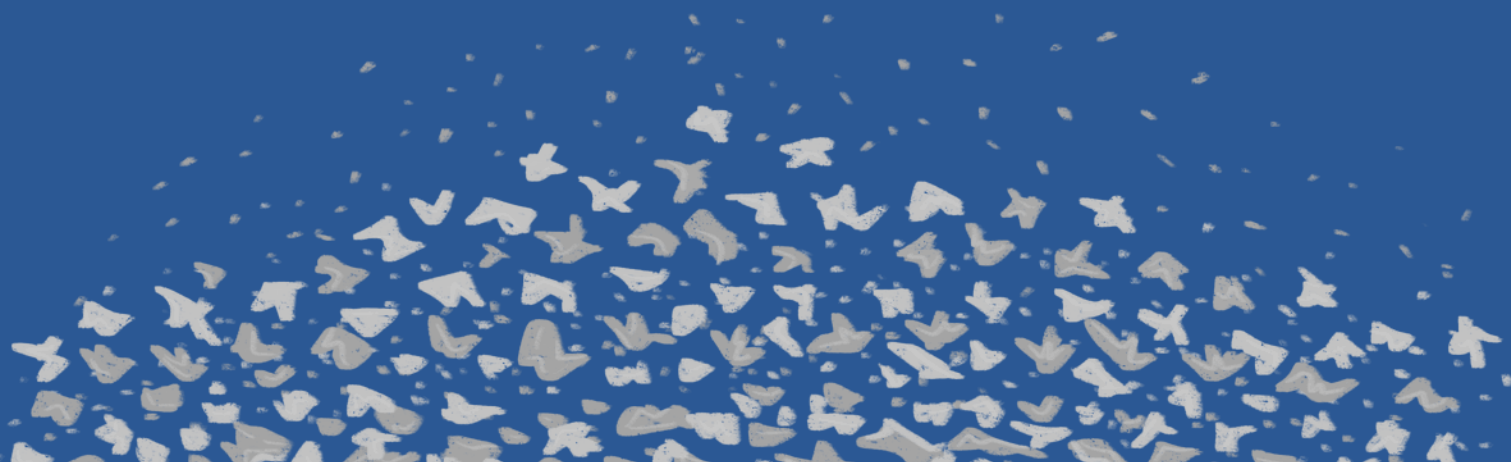


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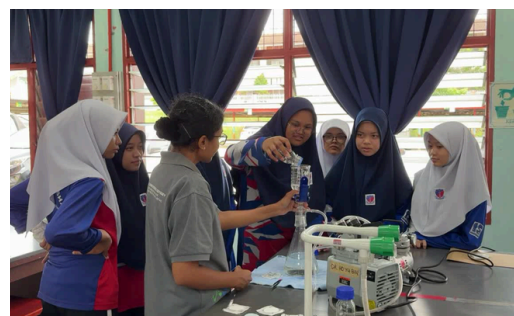


EXECUTIVE SUMMARY

From curiosity to conviction—empowering students to see the invisible threat beneath their feet sparks a lifelong journey of stewardship.

The project focused on **enhancing microplastics literacy** and environmental stewardship among Malaysian educators and students through a two-phase capacity building and citizen science initiative. The project **successfully trained teachers to integrate microplastics modules** into their science curriculum and empowered students through hands-on analysis and data collection. Notable increases in awareness and understanding of microplastics impacts were recorded across participating schools.

This project was a collaborative initiative under the Young Reporters for the Environment (YRE)— **Litter Less Campaign (LLC) programme**, in partnership with the **World Organization of the Scout Movement (WOSM)**. By bridging formal education and non-formal youth development platforms, the project created a unique space for collaboration between teachers and Scouts, both aligned in their mission to protect the environment.



PROJECT OVERVIEW



Project Title

Microplastics Awareness and Citizen Science in Schools

Duration

2024

Target Beneficiaries



Science Teachers (Secondary and primary school levels)



School students across various states in Malaysia

Main Components



Teacher Capacity Building Training



Student-led Citizen Science Investigations

ACTIVITY 1

CAPACITY BUILDING TRAINING FOR TEACHERS

“Knowledge passed forward—microplastics education begins with the educator.”



Objective

To equip science educators with the skills, knowledge, and tools to integrate microplastics analysis modules into classroom teaching.

Teachers received structured training using microplastics modules.

They were trained on the sources, impacts, and investigative methods for analysing microplastics pollution.

Each participating teacher was equipped with a microplastics analysis kit post-training.

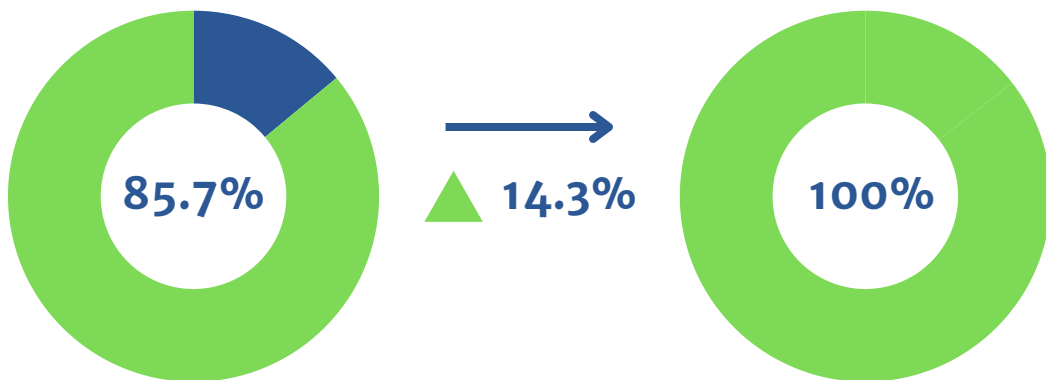
The trained teachers committed to embedding these modules into their lesson plans across science subjects.

Tracking the Shift: Knowledge & Awareness

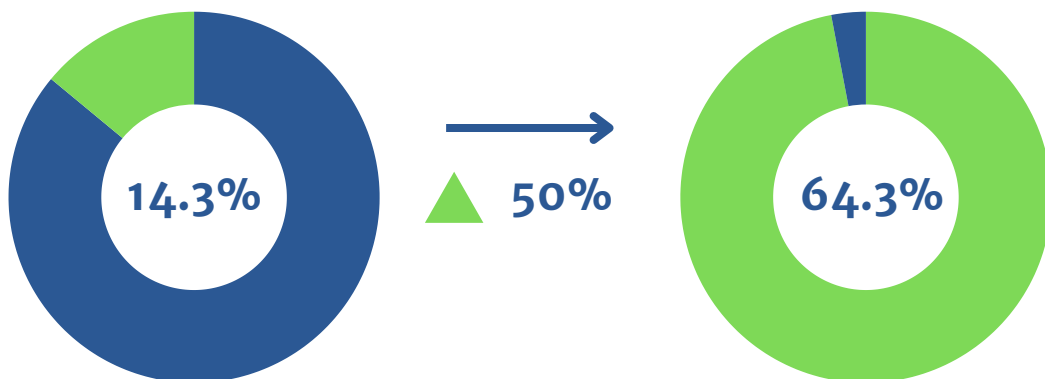
Before

After

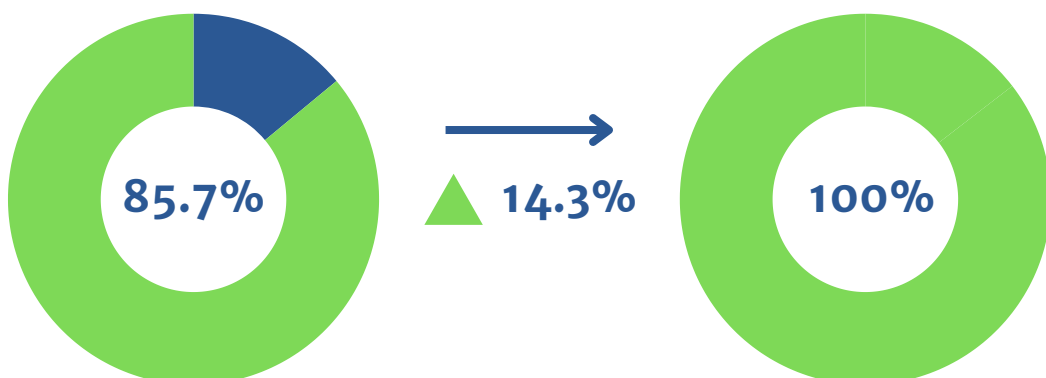
Awareness About Microplastics



Self-Assessed Awareness of Microplastics Pollution



Knowledge of Microplastics' Health Risks



ACTIVITY 2

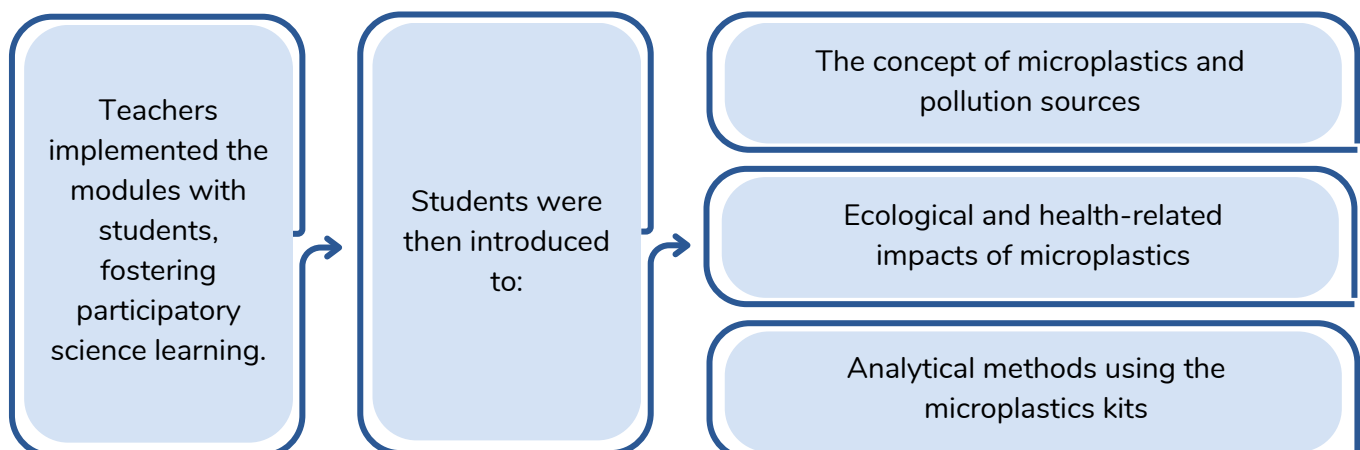
CITIZEN SCIENCE OF MICROPLASTICS ANALYSIS WITH SCHOOL CHILDREN

“Every plastic fragment they find becomes a story they carry—and a change they are ready to make.”



Objective

To involve students in real-world environmental science through hands-on microplastics investigations using citizen science methods.

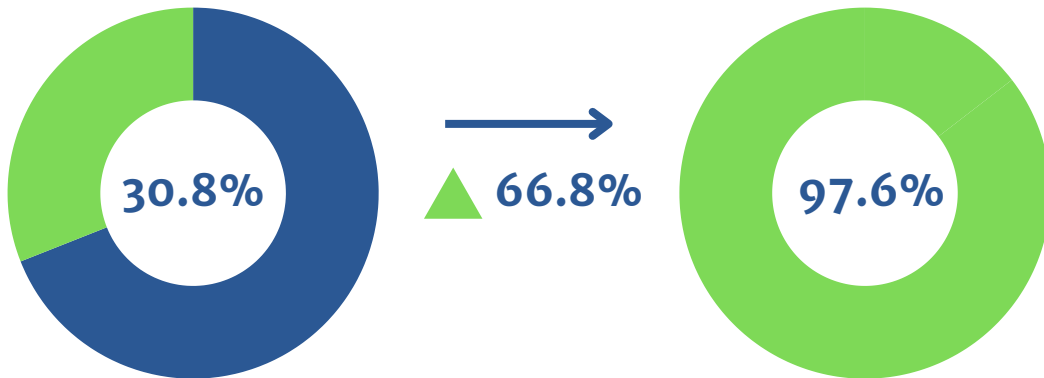


Tracking the Shift: Knowledge & Awareness

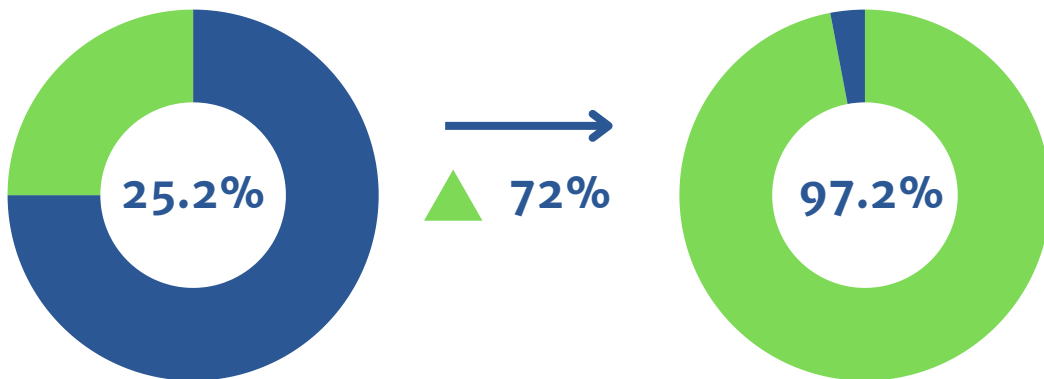
Before

After

General Microplastics Knowledge



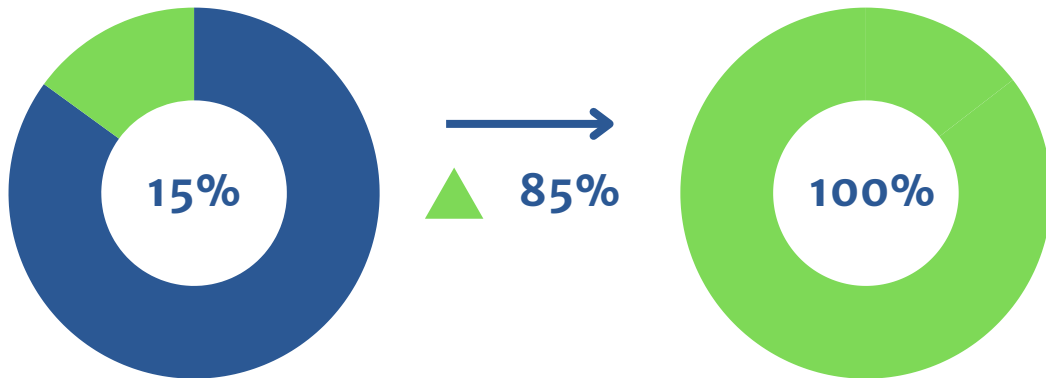
Knowledge of Pollution Sources



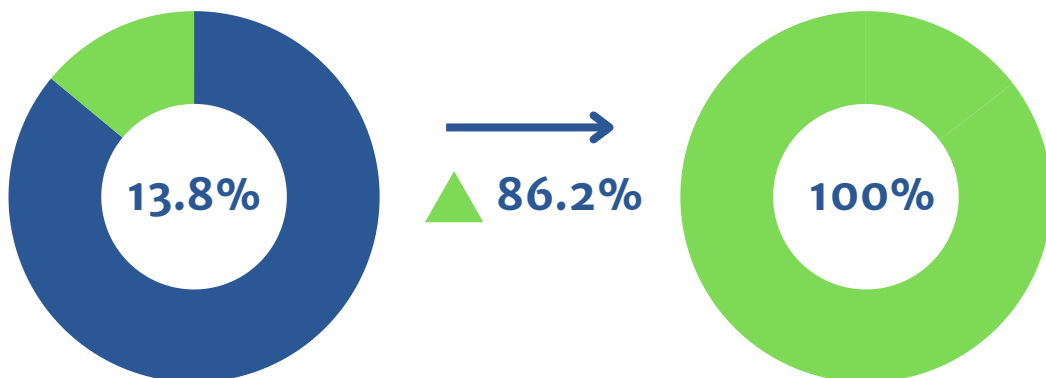
Before

After

Understanding Environment Impacts



Understanding Human Health Impacts



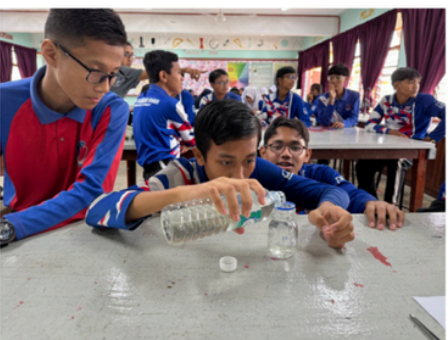
PARTICIPATING SCHOOLS

SMK Dato' Abdul Rahman Yaakob



14 June 2024

SMK Iskandar Shah



17 July 2024

SMK Raja Perempuan Ipoh



28 August 2024

PARTICIPATING SCHOOLS

SK Rapat Setia



14 August 2024

SJKC Keow Min



Notable Mention: Participation from YELL Team, Shu Min and Anusha



31 July 2024 and 21 August 2024

REFLECTIONS

1

The integration of citizen science in classrooms significantly enhanced environmental awareness.

2

Teachers displayed high confidence post-training, successfully guiding students in scientific investigations.

3

Strong potential to scale the programme to more schools under the Eco-Schools Malaysia framework.

RECOMMENDATIONS



Expand training to include non-science teachers for interdisciplinary integration such as AI.



Create student-led microplastics community projects (using GIS mapping) for wider impact.



Introduce a monitoring framework (formulated research) to assess long-term behavioural change.

CONCLUSION

JINM 2024 successfully empowered both educators and students with the tools and knowledge to become active environmental citizens. The use of citizen science as a pedagogical approach proved effective in fostering real-world learning, critical thinking, and stewardship on microplastics pollution.

“Awareness begins with a microscope, but transformation begins with a sense of purpose.”



This initiative would not have been possible without the dedication, energy, and passion of many individuals who committed themselves to making change happen—both behind the scenes and on the ground.

Contact

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