

ECOSYSTEM SCIENCES



PILOT STUDY OF ELEMENTARY SCHOOL FOOD WASTE DIVERSION AND COMPOSTING

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AFRICAN STUDI at the University of Florida

VEGETABLES

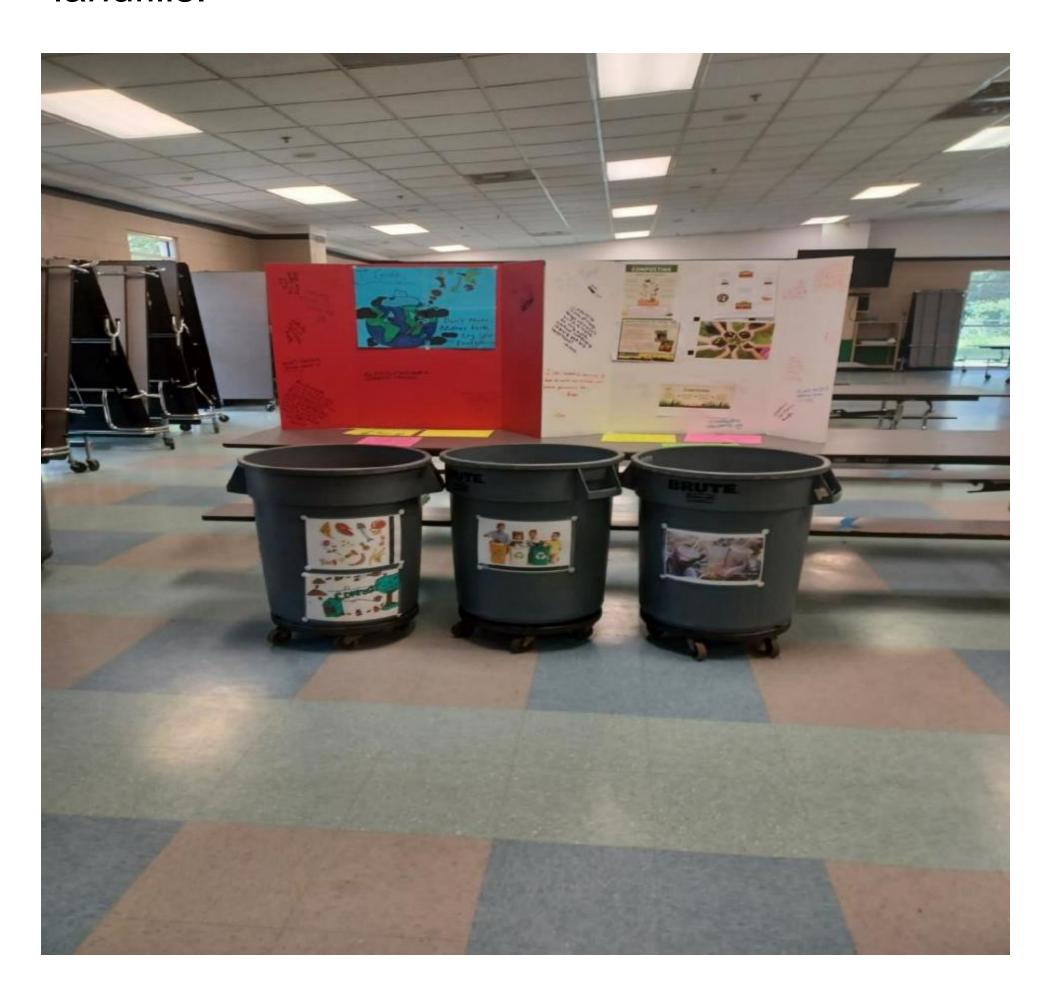
LEFTOVER FOOD

BACKGROUND

The study focused on training elementary school students at St.Patrick Interparish School, Gainesville, Florida, on food waste reduction and recycling through composting. The study aimed to apply experiential learning and hands-on activity to teach environmental responsibility and resource conservation. The food waste, plastics, and paper were collected and weighed daily over a six-week summer camp.

OBJECTIVES

- To undertake a food waste audit to assess the quantity of food waste generated from the cafeteria during the summer camp.
- To create awareness and enhance food waste reduction and composting knowledge through educational training.
- To install a compost system to recycle and divert food waste generated from the cafeteria from landfills.



Waste collection/sorting



METHODS

Quantitative method:
Quantity of food waste generated at the cafeteria.

Qualitative method:
Pre- and post
assessment activities,
a total of 48 and 12
students participated
in the pre- and post
assessment activities,
respectively.

<u>Intervention</u>

Food waste

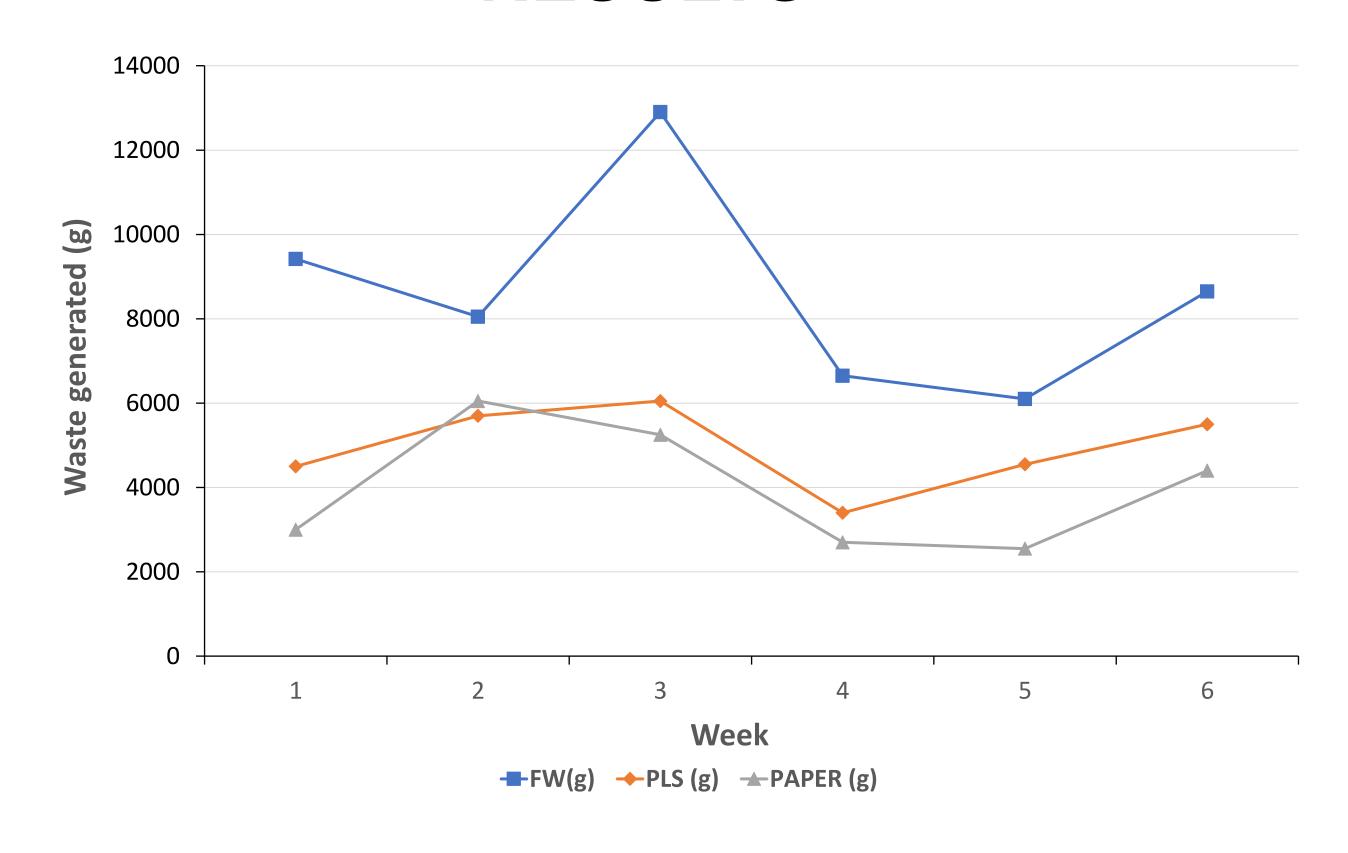
School

Participant Observation:
Observing 80 students at the cafeteria during lunch to understand their thoughts on food waste and composting

Output Food waste reduction Plant growth Economy Sustain Plant growth

CONTEXTUAL FRAMEWORK

RESULTS



Waste generated from cafeteria (g/week)

Students' comments about composting after the training

The earth should not suffer our choices

Take care of the

world by picking

up trash

To stop waste, build a compost company

Composting helps the world and our future generations

It is good to help the earth

Compost is fertilizer for the earth!

- A compost system was set up to recycle food waste as soil amendment that was applied to the school's garden for plant growth.
- The total food waste collected from the school's cafeteria and diverted from landfills was 52 kg.
- ➤ The students' perception of food waste reduction and composting increased after the training.



Students turn the composter



Students apply compost to garden soil.

WHEN DECOMPOSED COMPOST IS MIXED WITH SOIL IT SUPPORTS PLANT GROWTH SCRAPS AND OTHER ORGANIC MATERIAL ORGANIC MATERIAL GOES IN THE COMPOST BIN

CONCLUSIONS

- ➤ A food waste audit is crucial in discovering how much food is wasted and not eaten in the cafeteria.
- Hands-on training and experiential learning contributed to food waste reduction, increased environmental awareness, and behavioral change.
- ➤ Food waste can be recycled and diverted from landfills for soil enrichment through composting.

RECOMMENDATIONS

- > Students should be involved in meal planning to avoid food wastage.
- Kitchen staff should be trained on preventing pre-consumption waste.
- ➤ This study could be replicated in other schools to help mitigate food waste and encourage generational learning in food waste reduction.

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