Teaching Elementary School Students About Preventing Food Waste Through Composting Nikitha Reddy & Dr. Amal Ibourk Florida State University, College of Education, Health, and Human Sciences



Abstract:

Climate change has been a prevalent and growing issue as the world progresses to future industrialization.

The purpose is to demonstrate and teach about composting to elementary school kids as this will allow them to understand the food, they waste in their cafeteria better and link this waste to methane produced from landfills. Therefore, they can better understand the importance of preventing food waste. In the end, students are becoming more aware about where their food comes from and where they dispose of the food they do not eat and its impact on climate change. They also learn about alternate ways they can dispose of the food they eat in their cafeteria's.

Methods:

- During the conduction of the research, fifth graders at Woodville elementary in Ms Villa's classroom are taught their lessons about climate change and global warming through their primary service teacher.
- During the lesson, the elementary school kids are taught about food waste and composting through an engaging lesson. We used a PowerPoint and, we engaged the fifth graders by not using a lecture based but by asking questions about their understanding of food waste and what they think is important when it comes to the food waste in their cafeteria and how that may contribute to climate change. Additionally, by asking questions throughout the PowerPoint, we were more likely to involve the students so they can better understand about composting and how it relates to food waste and landfills as well as understanding alternate ways. Additionally, we made sure each slide would cause the students to reflect back and remember what they learned during their climate change unit
- During this composting process, they specifically used the food waste from Woodville elementary from their cafeteria and learn about the dos and don'ts when it comes to composting. The students engaged in building a garden after.
- - Students are then to reflect on food waste and relate it back to how food waste can be linked to methane produced in landfills. Therefore, they would think about the food waste in their cafeterias differently.



A poster provided to the students about the dos and don't of composting when they perform their own compost.



Composting bin that was used by the students to conduct a class composting.



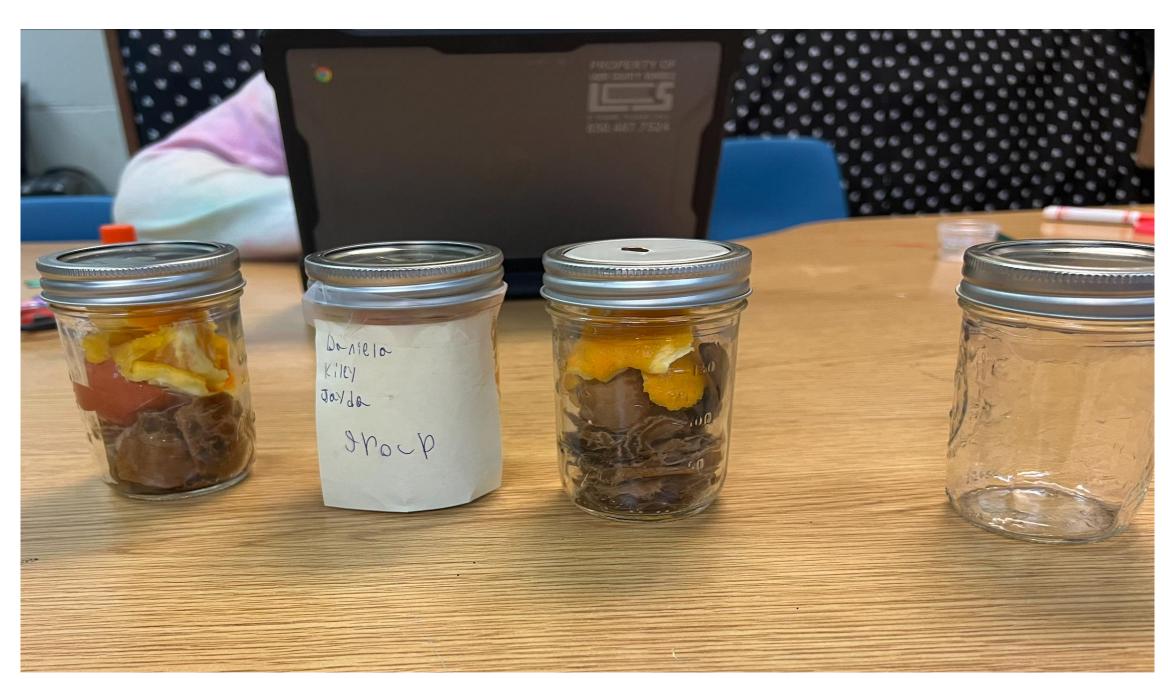
Engaging presentation of composting being presented to students.

compost log:		
tudent Name(s):	,	
tart date:		
inished Date:		
ngredients added to the comp	nst : (Examples such as banana or or	ange peels, bread, egg shells,
ardboard trays, lettuce, tomato		
Date the compost is mixed	Temperature of the area	Cm grown of the compost in the
		jar
Week 1:		
Week 1:		
Week 2:		
Week 2:		
Week 3:		
Week 3: Week 3:		

Compost should be mixed twice a week

This helps speed up the composting process by ensuring that the compost constantly has oxygen and that there are no parts of the compost that lack oxygen and cannot produce nutrient-rich soil.

Compost Log Sheet



Compost bins that the students created.

Discussion:

- about material they had learnt.
- and global warming
- jars.
- Students were also instructed to fill out a compost log.

Conclusion:

After the school visitation, it was shown that many of the elementary students were familiar with alternative resources like recycling and composting. However, they were not aware of the small usage of these resources and instead were intrigued by the amount of waste that ended up in landfills. The students were able to reflect on this and understand more about food waste in their cafeteria, Therefore, the next time, they get food from their cafeteria they can think about the other ways they can go about the food they waste. The teachers had also reflected on the presentation and are now able to assist the kids with composting in the classroom and encourage their critical thinking about food waste and the bad effects on climate change. The overall, goal was to bring awareness so students can see where their food comes from and how food can be recycled and re-used

References:

Imogen R. Herrick, Michael A. Lawson & Ananya M. Matewos (2022) Through the eyes of a child: exploring and engaging elementary students' climate conceptions through photovoice, Educational and Developmental Psychologist, 39:1, 100-115, DOI: 10.1080/20590776.2021.2004862 https://docs.google.com/presentation/d/1VwS1jyn-AzVJ10lZCV0Dszltv50TVZUIfkNHZN3i9Yk/edit#slide=id.g2261dc7f60d_0_3463 https://helpmecompost.com/home-composting/implementation/how-to-use-a-compostbin/#:~:text=6%20Steps%20To%20Using%20A%20Compost%20Bin%20Properly,That%20 Your%20Compost%20Is%20Ready%20To%20Use%20

Acknowledgments:

I want to acknowledge Dr Ibourk for guiding me through my research of composting and aiding me with teaching about science to a younger classroom

I want to thank Mrs. Villa and her students for letting me present them.



During the visitation itself, we had gone to a fifth-grade classroom to talk about composting. The kids were very engaged with the presentation that was presented to them. They were answering questions on every slide and made sure to ask me questions

• Many of the kids were made to critically think about the food waste in their cafeteria and how it can relate to gases like greenhouse gases and how that may affect climate change

. Students had related different concepts together like landfills and harmful chemicals. The students were able to learn about composting through a demonstration with mason