Zero food waste recommendations for the Fred Tjardes School of Innovation (FTSOI)

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Background

- Being entirely zero waste has been described as a complete individual and societal lifestyle shift (Schumpert and Dietz, 2012).
- For the purpose of this project, “zero waste” refers exclusively to food waste.

Process Approach

- Target audience: Staff of the FTSOI
- Meets the needs of the school directly by giving solutions to reduce food waste.
- Solutions heavily focus on constraints provided by the community partner
- Any solutions that would not fit into the constraints were eliminated from consideration
- Constraints include: limited funding, a desire for a mobile solution, limited opportunity to transport waste, and limited space available for on-site solutions

The Fred Tjardes School of Innovation wants to become the first zero food waste school in Greeley-Evans School District 6 and we have created a series of a solutions that can help them reach their goal.

Optimal Solutions

Compost Tumbler

- Inexpensive to create a makeshift tumbler
- Recommendation to purchase multiple in future to reduce labor involved
- Reduces waste that goes directly to landfill
- Produces soil that can be used in the garden

Community Garden

- Within walking distance of FTSOI
- Reduces packaging waste from purchased fruits and vegetables
- Students with access to a community garden pick 50% more vegetables from the lunch line (Parmer et al., 2009)
- Can use soil created by composting

Green Earth Brewing Company

- Donates spent grains to Greeley West HS agriculture program as animal feed
- Could partner with FTSOI to transport food waste as an additional source of food – reduces need for local pickup service or volunteer transport
- Helps FTSOI and GWHS agriculture – large community benefit

Expected Outcomes

- Cost effective
- Reduces waste and landfill impact
- Educates students and families on zero waste principles
- Encourages students to create and maintain healthy habits

Future Recommendations

- Upgrade compost system to be more efficient and require less labor and upkeep
- Begin to compost materials that are harder to compost
- Partner with UNC senior seminar to gain funding and implement recommendations

References

Parmer, S. M., PhD, Salisbury-Glennon, J., PhD, Shannon, D., PhD, & Struempler, B., PhD. (2009). School gardens: An experiential learning approach for a nutrition education program to increase fruit and vegetable knowledge, preference, and consumption among second-grade students. *Journal of Nutrition Education and Behavior, 41*(3), 212-217. doi:https://doi.org/10.1016/j.jneb.2008.06.002

Schumpert, K., & Dietz, C. (2012, Spring). Zero waste for schools. *Green Teacher,* , 5-7. Retrieved from https://unco.idm.oclc.org/login?url=https://search-proquest-com.unco.idm.oclc.org/docview/1032551744?accountid=12832