

Options for Reducing Landfill Waste



Goal: Research options for reducing school waste going into landfill

Objectives: Students will...

- Brainstorm strategies for reducing waste to landfill or improving sorting of waste
- Identify specific things they need to know more about in order to develop a detailed plan
- Research answers to specific questions using a variety of sources
- Share findings with peers in clear and concise manner
- Listen for understanding to peers' research findings

Materials: access to phone, computers with internet access, local and/or school waste sorting guidelines

Advance Preparation: identify resources relevant to your community regarding waste sorting and hauling



Time Estimate: 2 classes (may not be sequential depending on how long you give for research and presentation prep)

Day 1: 2 min introduction, recap audit data

20 min brainstorm

5 min assign research tasks and explain process for sharing results

15 min start research in class; develop a plan for completing and sharing results

Day 2: 20 min finish sharing prep
25 min share findings

Instructional Plan

Now that you know exactly how much waste your school generates each day, it is time to figure out what you can do to reduce the amount of waste your school is sending to its ultimate destiny: the landfill. Waste that gets diverted from the landfill has more useful life in it: it can be reused by someone in its existing form, it can be recycled by simplifying it into its raw material and making something new, or it can be composted by breaking it down into its core elements and returning those to the soil.

Waste Reduction Brainstorm

Recap the numbers calculated in your waste audit and ask your students to brainstorm what the school could do to decrease what ends up in the trash dumpster. Once they have the basic strategies, ask them to think through what they would need to learn more about in order to implement a plan to get that action item accomplished. Below is a list that represents some ideas for this brainstorm (bullets are questions they may need to research). If your students are missing any of the major components, you may want to volunteer them for consideration.

What can we do to reduce trash?

Recycle More

- What do our school and municipality currently accept for recycling?
- Who does the recycling for our school and how is it collected (sorted, single stream)?
- Do they accept waste that our school is not currently recycling?
- What are options for recycling specialty items? (i.e. electronic waste, hazardous waste, bottle caps - Aveda, yogurt cups- Whole Foods, plastic bags - grocery store)
- How can we get students and teachers to sort recycling better?
- Would our school qualify for any recycling fundraisers?

Use less disposable stuff

- What is used in cafeteria? Are there non-disposable or recyclable substitutes?
- Are reusable water bottles allowed?
- Should vending machines be outlawed?
- Would wood or paper pulp pencils be a better choice than plastic?

Find better uses for things than throwing them away

- Eat food or give it to someone who wants it, only take as much as you will eat
- Find a farmer who would take food scraps for animals
- Save certain materials for art projects or other uses (creative reuse)
- Compost paper towels rather than landfill

Compost organic waste

- Are there commercial composters in area who would collect organic waste from school?
- Is composting cafeteria waste an option? What size system would it take to handle all organic waste from school?
- Would classrooms be interested in small indoor or outdoor composting systems?
- What can and can't be composted? How would you separate or collect them?
- How much dry material would you need to mix in with food waste? Where would you get it?

What school or district policies would affect what you can do regarding waste collection and sorting?

- Are there any permitting issues associated with school composting systems?
- How is waste handled at school currently (ask a custodian to show group or class the process from waste bin to dumpster for both recycling and trash)?
- What past efforts have been made and how did they turn out?
- What concerns would school/district administrators have about altering the waste collection system? (so you can address them from the beginning)

Student Research

For each of the questions the class identifies as needing more research, assign a pair of students (or whatever number works for the number of questions you have) to research that question. Depending on the question, they may need to interview school or district employees, call the municipal waste hauler or conduct internet research. Give them what you feel is an appropriate amount of time to complete the research and prepare a means of sharing their findings with the class (powerpoint, poster, verbal, video, etc.). The sharing of research should lead into the next lesson, which focuses on developing a specific action plan.