

Special Materials for Recycling



eco-cycle

Snapshot

From plastic bags to books to cell phones, students can make a difference by collecting non-traditional items for recycling.

<https://bit.ly/eco-cycle-zero-waste-schools-guide>

Objective: To divert from the landfill a significant number of hard-to-recycle items through an organized recycling collection.

Age Group: K-12th grade

Setting: School building or greater community

Project Duration: One week to ongoing

Materials:

- Collection bins and signage
- Poster-making materials
- Camera
- Scale (optional)



Why This Project Matters:

There are several categories of discarded items within the solid waste stream, such as paper, plastic, metal, etc. The category of “other”, which includes polystyrene foam, shoes, clothing, electronics, wood, rubber, and more, comprises as much as 20 percent of our waste! To achieve a Zero Waste future, diverting these “other” materials from the landfill is essential.

Project Summary:

This activity will outline how to hold a one-time recycling collection of a special material. The chosen material should be one that is not already collected in the community’s regular recycling program, or only collected on a limited basis. Special collections of non-traditional recyclables offer a chance to expand the materials being diverted from the waste stream. In some cases, one-time collections of special materials may lead to a permanent collection of the non-traditional recyclable item. Most collection programs are legitimate, but be wary of ‘too-good-to-be-true’ recycling programs including some fundraisers, mail-in programs, electronic and textile collections, etc. Research the entire process and reviews on the internet before signing on. Find out what happens to the collected materials along their journey, where they are sent for recycling (or reuse), what percentage is actually recycled, and what the final product is. Local programs and businesses that accept used materials are a great place to start. Some support charities or employ people with disabilities, disadvantaged youth, etc. In contrast, some e-waste recycling programs have sent electronics to Asia and Africa where they are being processed in conditions that are unsafe for the workers and the environment. (The Basel Action Network [ban.org] is a reputable source for promoting legitimate e-waste recyclers. They provide a strict set of requirements to verify where and how the electronics are being recycled, and that the process is not causing harm to the environment or human health.) Some textile recyclers and mail-in programs have also been shown to have questionable practices and to be making a high profit on donated materials.

Implementation:

Planning:

1. A special materials recycling collection makes a perfect project for a student group or club. Identify a group of youth that can help with the collection.
2. Brainstorm possible non-traditional recyclables. Contact local businesses (including those who may be producing an “upcycled” product), charities that collect items, and local trash/recycling programs and facilities for support, ideas, and feasibility. Verify that there is a stable market for the material you decide to collect to ensure it gets recycled. It may also be possible to piggyback on another local collection event (the Lions Club usually has an ongoing collection for used eyeglasses, for example). Other ideas include used clothing, shoes, books, and plastic bags. It is important to consider who pays for the shipping cost (if there is one) when deciding on a material.
3. When considering a material or program, ask what happens to the collected material, where it will be sent for recycling, what percentage is actually recycled, and what the final product is. This information will be useful to verify that recycling of the material is legitimate and beneficial. It can also be used to increase participation when advertising the collection event.
4. Once a material has been chosen, decide on the length and location of the collection event (classrooms, schools, stores within the community, etc.). An event lasting 7-14 days keeps collection time manageable, but if it is a popular item, a weekend may be enough time. The collection may even work better as an ongoing event for the semester or school year. A student group may approach local businesses about sponsoring the expense of shipping the collected materials, and/or for some materials, they could request the usage of their location as a collection site.
5. The material may require cleaning and sorting. Arrange for a method of pick-up from collection points and any storage of the material needed, designate responsibility for collecting, sorting, and shipping, and establish a timeline for each step.
6. With help from students, gather appropriately-sized containers (5-gallon buckets, used boxes, large plastic containers, etc.) for collecting the material. Create standard signage for all collection points throughout the school or community.

Extensions:

- Have students create a life cycle display of the collected material. They can research what natural resources were used to first make the item, how it will be recycled, and what it will become. Ask the material recipient: “What will happen to the new items that are made from our collected material? Will they someday end up in a landfill or could the new items be recycled again?”



Three weeks before the collection:

7. Announce the collection event, including the specific requirements for recycling the chosen material, the date and time duration of the event, and what will happen to the collected material. If it is a school collection where the public will also be allowed to contribute, utilize local media for publicity. When advertising within the school, include mentions on the website and e-newsletters, create and display posters, make announcements, and notify the PTO and student groups. If advertising throughout the local community, request mentions on the town's website and social media, and create newspaper, television, and radio station ads.
8. Students can research and develop short presentations about the chosen material and how it will be recycled. The presentation may be given at an all-school assembly and/or community meetings.

Launching the collection:

9. Distribute collection bins with signage around the school and/or community.
10. Assign responsibility of collection point maintenance to volunteer staff, students and/or families.
11. For a large community event, arrange for local media coverage on kick-off day or take pictures for your own press release.

After the collection:

12. Gather all collected material to one location. If possible, wait 2-3 days after the final day for any late material.
13. Process the materials to the collector's specifications.
14. Measure or weigh the amount of the collected material.
15. Send the material off to be recycled!
16. Celebrate and report success to participants.

Assessment:

Success can be measured by the amount of material collected or number of people participating. If the collection event will be coordinated annually, the goal is to see an increase each year in the amount of collected material and/or the number of participants.

Related Activities:

Reusing Children's Books – Chapter 14
Creative Crayon Recycling – Chapter 20

