

Group Project: Designing a Community Composting Hub

Topics

- Community-scale composting
- Environmental Justice
- Food sovereignty

Teacher's Guide

Project Overview:

Students will learn about the components and considerations needed to design a community composting hub in their neighborhood. Using resources from the [Central Valley Community Composting Collaborative](#) and the [Institute for Local Self Reliance](#), students will design an ideal community composting hub.

Prerequisite topics/knowledge:

- What is Composting? - Graphic available [here](#).
- Benefits of Community Composting - Graphic available [here](#).

Video: [LA Compost: Soil and People](#)

- Provides an example of a successful composting hub in Los Angeles, California

Note: This project complements the *Google Earth Activity* available in the *Community Composting* module. It is recommended that both activities are completed together. However, the project can be done on its own.

Without Google Earth activity - Students draw a map of a community composting hub, complete with composting bins, feedstock storage, pedestrian access, watering systems, and all other necessary design features. Maps must be drawn to scale with real world dimensions. Students consider practical design elements and take inspiration from reference photographs, designs, videos. Students work on a poster, on which they also write explanations of why they chose specific design elements.

With Google Earth activity - same + students consider specific needs of the community they are serving to design their composting hub to be culturally and practically appropriate. Students connect their research findings to their poster design.

Materials List

- Large poster (1 per group)
- Rulers
- Pencils
- Colored markers/pencils
- Printed materials (linked below)

Supplemental Materials

Video Guiding Questions

1. What are some considerations you think the community took in order to design their composting center?
2. What systems do they have in place to make composting more efficient?
3. Is there anything you would have done differently?

General Guiding Questions

1. What types of responsibilities do you think community composters have?
2. What kinds of features are important to have in a composting center?
3. Do you think you can apply your design in your community?

Graphics from the Institute for Local Self Reliance

Source: L. Bilsens Brolis, B. Platt, Community Composting Done Right: A Guide to Best Management Practices, Institute for Local Self-Reliance, 2019 (www.ilsr.org/composting-bmp-guide). Reprinted with permission.

1. [Example of Community Composting Layout](#)
2. [The Closed Loop of Community Composting](#)
3. [The Basic Tools of Community Composting](#)
4. [Common Steps of the Composting Process](#)

Note: These graphics can be printed and included in the student handout. They are also included at the end of this document.

STUDENT HANDOUT - WITH PROJECT INSTRUCTIONS

Objective: In a group, you will design your ideal community composting hub! Refer to the materials in your packet to plan out your composting center.

Instructions:

1. Use a ruler to ensure your layout is to scale.
2. Your design should include the components below.
3. Your design should address the considerations below.

Components to Include:

- **Composting Bins:** Designate areas for different types of feedstocks (ex. green waste, brown waste) and composting systems (ex. 3-bin system, vermicompost, tumbler, static pile, etc.)
- **Signage:** Create signs to educate the community on what can and cannot be composted, as well as instructions for using the compost bins. You can also add signage to your bins to indicate the different stages of the composting process.
- **Tools:** Draw and label tools that will be available (ex, shovels, rakes, thermometers, bins, tractor, gloves, etc.)
- **Drop-off/Pick-up Area:** Clearly mark where community members can drop off compostable materials and pick up finished compost.
- **Personal Roles:** Draw yourselves! What will your role be at the community composting hub? (ex. Compost turner, compost educator, etc.)
- **Optional – Community Garden:** Design a garden that can be accessed by the community. Community members can grow food by applying compost to the soil!
- **Optional – Educational Area:** Space to hold workshops and other events to teach your community about composting!
- **Optional – Farm:** Manure is a great source of nitrogen for your compost. Having a farm on site can be an easy way to add those nutrients to your compost!

Considerations:

- **Cultural Differences**
 - How can you make your hub welcoming and inclusive for everyone?

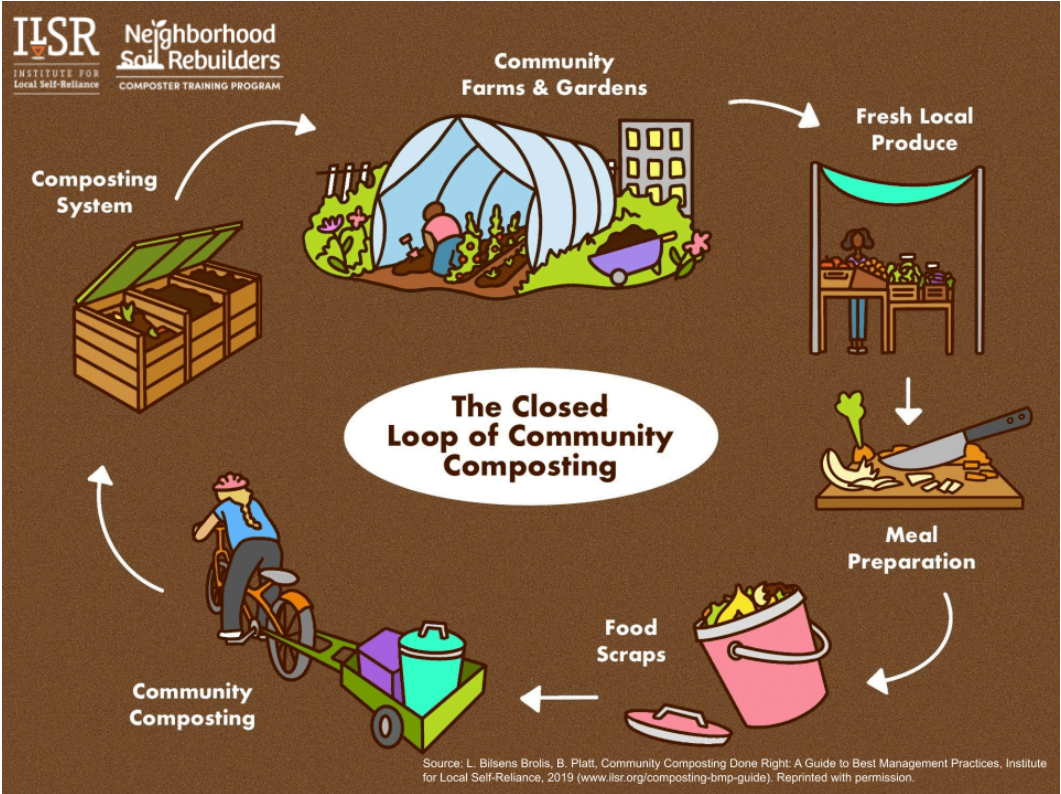
- o What languages does your community speak? Will you have to translate any of your signage/materials?
- **Accessibility**
 - o How will you ensure everyone, especially those with disabilities, can access your composting hub?
- **Transportation**
 - o How will the compost hub be accessed by the community?
 - o Is public transportation available?
 - o Are there bike/walking paths?
 - o Will you have bike racks or parking spaces at your hub?
- **Climate**
 - o Design your hub to withstand local weather conditions
 - o Consider covered areas for rainy days or shaded areas for hot weather.

Poster Set-Up:

| | |
|------------------------------|--|
| Composting Hub Design | Tools: Draw and/or list |
| Student Names | Your personal roles: Draw and describe |

An Example Community Composting Site Layout





COMMON STEPS IN THE COMPOSTING PROCESS

