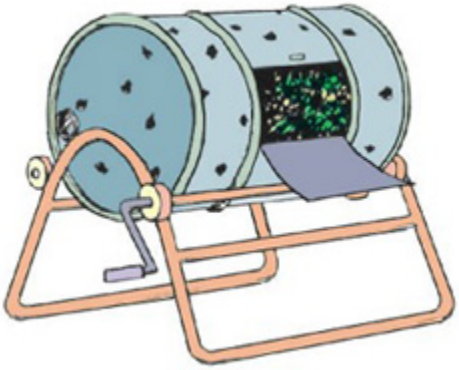
Overview of Compost Systems

There are so many different designs for compost systems - it can be overwhelming! This guide gives an overview of some of the system designs that are best-suited for school gardens

Barrel Turning

DESCRIPTION: Compost materials are held in a turn-able barrel on a stand.



PROS:

- High degree of pest resistance
- Makes turning of materials easier
- Finished compost in short period of time

CONS:

- Requires careful attention to composting details in order to achieve rapid composting
- Relatively expensive
- Full barrel is heavy
- Must compost in batches, so you may have to stockpile fresh materials

Plastic Holding

DESCRIPTION: Compost materials are held in a designated plastic composting container.

PROS:

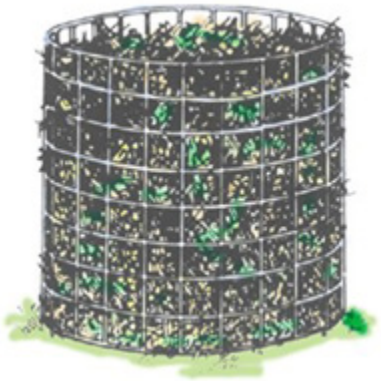
- Compact size
- Resistant to pests
- Lid sheds rain
- Plastic bin reduces moisture loss

CONS:

- Some have limited holding capacity
- Relatively expensive
- Door may not open easily, especially if compost has compacted at bottom of bin

Wire Holding

DESCRIPTION: Compost materials are held in a designated mesh wire container.



PROS:

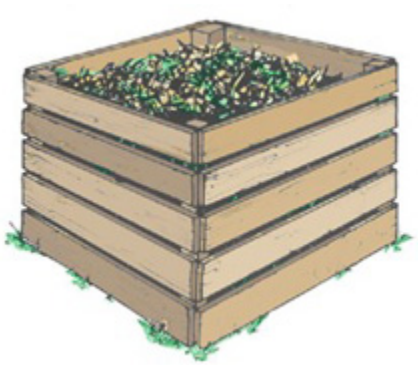
- Inexpensive
- Easy to build
- Light weight
- Can be made from vinyl coated mesh or galvanized wire

CONS:

- Bin is easily crushed or bent
- Tendency for materials to dry out

Wood Holding

DESCRIPTION: Compost materials are held in a designated wooden container, often made of pallets.



PROS:

- Pallets are available free
- Diverts pallets from landfilling and open burning
- Large capacity

CONS:

- Pallets are irregularly sized and sometimes broken
- Used pallets can look unattractive
- Heavy and bulky to move
- In static holding system expect slower composting rate

Heap

DESCRIPTION: Compost materials are held in a designated pile on the ground.

PROS:

- Inexpensive
- Low maintenance

CONS:

- Compost pile tends to spread out
- Heat loss reduces microbe activity
- Slow rate of composting

Soil Incorporation

DESCRIPTION: Compost materials are buried under the soil to decompose.

PROS:

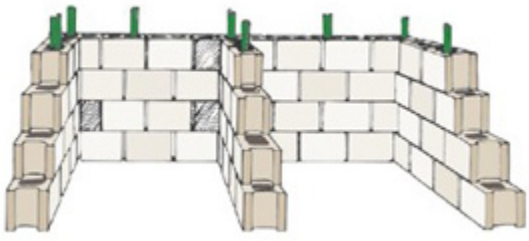
- Low cost
- Low maintenance (after you get the hold dug)

CONS:

- Not suitable for large volumes of waste
- Requires dedicated space for a year or more
- Ground may freeze solid in winter
- Recommended for a limited range of waste types, primarily food scraps

2-Bin Turning System

DESCRIPTION: Compost materials are put in designated bins at certain times.



PROS:

- Can produce high-quality compost in a shorter amount of time
- Allows composting of large volumes of yard debris

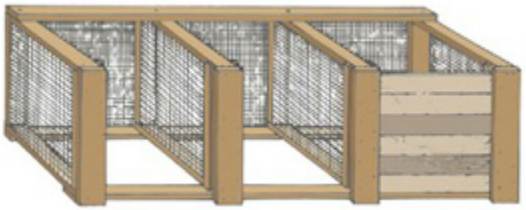
- Concrete block system is durable and long-lasting

CONS:

- Labor intensive
- Moderately expensive to build using new blocks
- Requires careful attention to composting guidelines in order to achieve rapid composting

3-Bin Turning System

DESCRIPTION: Compost materials are put in designated bins at certain times.



PROS:

- Can produce compost in a shorter amount of time
- Allows composting of large volumes of yard debris
- Concrete block system is durable and long-lasting

CONS:

- Can be expensive to build
- Requires careful attention to composting guidelines in order to achieve rapid composting
- Labor intensive
- Requires fairly large amount of space

Worm Bin

DESCRIPTION: Compost materials are put in a designated bin for worms to break down.

PROS:

- Can compost food and paper waste year round
- Produces high quality worm castings
- Can be scaled to match volume of food waste
- Rapid composting rate with minimal effort

CONS:

- Must protect worms from hot sun and freezing weather
- Requires timely attention to maintenance
- Moderately expensive to get started
- Too much moisture or over feeding can kill worms

Resource:

Klickitat County Solid Waste (2005). Types of compost methods. Retrieved from: http://www.klickitatcounty.org/solidwaste/ContentROne.asp?fContentIdSelected=1939319116&fCategoryIdSelected=9