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: