

School Garden Design Elements

Lauri Twitchell

	Type	Pros	Cons
Planting Beds	in ground	cheaper, ground can be dug year after year, cheapest method	if soil is contaminated need barrier, getting rid of turf roots, rocks,, sometimes gets trampled by garden visitors
	raised bed	new soil put in , easy to dig, protected from foot traffic	can be expensive. need some expertise to build, don't use railroad ties or pressure treated lumber
	pots	can be put anywhere, outside classrooms wine half barrels are available for around \$20. each	tend to dry out faster especially clay pots, can be expensive
	other	be as creative as your imagination allows- old boots, old dishes, old watering cans, barrels, handmade structures	garden can get pretty trashy looking if no one is monitoring
Compost	lg compost system- 3 piles or wire mesh types	makes lots of compost, lots of great exercise turning piles, can find lots of insects for study,	need an area to work the piles, piles are open to critters grazing piles have to be monitored, turned, sifted
	“slow” compost -multiple piles	small multiple piles in around garden	compost takes a long time to break down, piles are open to critters grazing
	stackable	easy to stack & re-stack, contained compost, can get them relatively cheaply	critters can access
	turnable barrel	closed to critters, small ones could be turned easily	can be expensive-\$200-\$500
	worm compost	kids' classroom garbage can be consumed by worms, see “Worm Eat my Garbage” by Mary Appelhof, great fertilizer for plants-”worm juice” good as a non toxic fungicide too. bins can be used in the classroom	store bought bins can be expensive, homemade boxes more involved for harvesting compost
	leaf mulch	dig under old leaf piles for great compost, kids can “dance” on piles to break up dry leaves	can be slightly acidic especially oak & pine needles

Irrigation	rain birds-over head spray	waters everything at once and tied into existing irrigation system	not water efficient, water paths, etc. some plants don't like overhead watering, have to get a grounds person to connect/install
	in ground pop ups	good for turf areas, or concentrated areas, tied into existing irrigation system	if not adjusted properly paths are watered, some plants don't like overhead watering, have to get a grounds person to connect/install
	soaker hoses	water efficient, can hook them up to hose bib, moved around easily	can be cut easily if not careful while digging
	drip w/emitters	water efficient, plants can get specific type of watering, can be connected to timer	can be cut easily if not careful while digging, little parts, easily lost, taken, time consuming to hook up, don't know if blocked until plant is dead
	netafim	water efficient, grid system can be hooked into timer	can be expensive
	cistern/rainwater/aqua ducts	capturing rainwater can be fun & educative	rain from Dec. - April., mosquito larvae
	hand watering/ hose/ watering bucket	most watering efficient, each plant is assessed	time consuming
Irrigation timers	electronic / blue irrigation boxes	most efficient-water & time	expensive, need grounds person
	battery operated	water & time efficient	can be expensive, need to protect from theft
	timer-wind up	water efficient, somewhat time efficient	need to protect from theft
Benches	store bought	uniform, usually safe, easy to install	expensive
	handmade benches	fun workday Mom & Dad projects	takes time to organize materials & labor
	seat walls-stone	permanent, low maintenance	need semi expert to build
	lawn chairs	easy set up, can find at second hand stores, yard sales	can be expensive
Walkways	dirt/soil	cheap easy to maintain	can be muddy, weeds grow in the paths
	mulch	free-call tree companies, good	can bring in weed seeds,

		weed barrier, holds moisture	don't use walnut or eucalyptus in beds- will prevent growth, fresh mulch takes nitrogen from growing plants to break down
	gravel	keeps some weeds down, delineates walkway & beds, helps during muddy season	can be expensive, raking up into beds
	decomposed granite D.G.	permeable to water, helps with weeds, is ADA approved for wheelchair use	can be expensive
	steps	helps with slopes, can be made from stones, wood, concrete, urbanite, etc	can be expensive, need a knowledgeable person to install
	rock mulch	help keep weeds from growing	can be expensive
Edging	trex/ recycled plastic & sawdust	lightweight, bendable, using up recycled waste, will not disintegrate over time	can be expensive
	wood	fairly easy to install, different options-logs,branches, milled edging, will break down over time	can be expensive, do not use railroad ties/creosote or pressure treated lumber/arsenic, copper chromium
	rocks	easy to install, can be done by students	can be expensive if you have to buy stones
	concrete	poured- easy to keep in place, neat, clean, can apply textures	need an experienced person to pour
	urbanite	usually free and broken into manageable pieces, using recycled material	takes a little leg work to track down
Trellis	architect designed/built	providing a place for plants to grow or people to gather	finding an architect to work for free or cheaply
	hand built	providing a place for plants to grow or people to gather, great school community organizer	need some expertise to build
	teepee / bamboo/ sticks	easy to build, materials free or cheap	vandals
	metal arch	neat, clean	can be expensive to purchase or build