

FRESH from the Garden

Take 5

One of our key messages is that plant science is not the only subject that can be taught in the garden. Amy Bowman, PHHI STEM Educator and former math teacher, offers this list of 5 topics in 4 core subject areas for a total of 20 lessons that work great in the school garden. And none of them are plant science.

Math

- Measurement
- Coordinate graphing
- Area, perimeter, volume
- Arrays
- Addition, subtraction, multiplication, division

Science

- Weather
- Living and nonliving things
- Life cycles
- Interdependence of plants and animals
- Ecosystems

Social Studies

- Cardinal directions
- Map skills
- Change over time
- How humans impact the environment
- Understanding basic economic concepts

ELA

- Sequencing
- Setting
- Point of view
- Fiction and nonfiction
- Author's purpose



Plan ahead by "planting" paper towels

Pre-plant your garden squares with the [Square Foot Seeds](#) lesson. Glueing root crop seeds to a paper towel at teacher-directed spacing (depending on your folding, or your “more than/less than” objective) will make “planting” the first garden crop a breeze. The seeds won’t germinate until they are watered, so let this be an early January, get-back-in-the-swing-of-things lesson and then set it aside until next month. In mid-February, simply place the seeded paper towels on top of the soil in the garden, sprinkle a thin layer of soil over the paper towel and water. The seeds will germinate, the paper towel will compost and with regular irrigation, you’ll be harvesting in a few short weeks. This is a great way to get a head start on the planting season and to foster anticipation for going to the garden when the time is right.



Plant

It's time to start sowing seeds indoors (under a light bank) for transplanting outdoors in February and March. Growing your own transplants will save money, create daily interest in the germination and growth of the seedlings, and develop student interest in the garden before they ever go outside. Don't be discouraged if challenges arise; learn from them and try again! Remember, you can contact Doug for advice or troubleshooting.



Harvest

It is certainly possible to still be harvesting fall cole crops, such as kale, collard or turnip greens, lettuce, and spinach. Remember to always have a plan for your harvest, such as making [fruit smoothies infused with nutrient dense kale](#), salad tastings, sending it home, sharing with teachers, or even making art! Sometimes it's ok to play with your food. Here's a [fun science experiment](#) to explore what causes greens to turn brown.



Maintenance

Does the soil in your beds seem a little shallow? It is not uncommon for soil to settle or for soil to be removed when beds are harvested or cleaned out. Top off the beds with additional soil to support optimal plant growth, especially for root crops like carrots and beets. Soil is sold by cubic feet or cubic yards, so take the opportunity to teach a lesson on volume, allowing the students to figure out what's needed. Take one step further by figuring out the cost.



Save the date!

The PHHI School Garden Summer Institute will be June 24-25, 2020 at the NC Research Campus in Kannapolis. Doug and Amy are busy planning sessions and lining up speakers. Mark your calendar now; registration information will be forthcoming.



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Questions? Contact us!

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