

June 29, 2018

To the Directors of the Foundation for Sustainability and Innovation:

Thank you!

Thanks to your donation and the support of other friends and donors, Hudson Valley Seed was able to expand this past fall to offer garden lessons in Newburgh's Vails Gate STEAM Academy. 594 Vails Gate students were able to visit their school garden for the first time, taste new veggies, connect with nature, and stretch their minds by practicing writing, math, and science ideas in the real-world setting of the garden.

Hudson Valley Seed's Garden Educator Serena Padilla built the garden at the end of August 2017. The garden is situated at the center of the school in a large, sunny courtyard, which was previously only used for teachers eating their lunch or taking breaks. Serena built the garden creatively, making the best use of previously-decorative concrete structures as well as buckets and potato bags to accommodate the large amount of paved surfaces. She planted the garden with a profusion of more than 40 varieties of vegetables and herbs including lettuce, cilantro, squash, peas, carrots, and more! Cucumbers, cherry tomatoes, zucchini, and rainbow chard were the most prolific crops.

Serena taught garden lessons to Vails Gate Kindergarteners, first graders, and second graders every other week throughout the school year, totalling 240 lessons from September to June 2018. When the weather was too rainy or cold to be outside, garden classes took place inside, with students studying, planting, and preparing veggie snacks in their classroom. Some examples of classes included:

- September classes focused on learning the role of gardens and how to be a new gardener. Classes worked together to learn where vegetables come from and how to behave carefully in the garden to let plants live. Students loved learning to water their garden's plants!
- In October, of course we studied pumpkins, with students practicing measuring, prediction, and counting while dissecting pumpkins and saving their seeds.
- November was one of our busiest months in the garden, with students learning to harvest and snack on dozens of varieties of vegetables.

- In December, our students experimented with different pickle recipes from cucumbers to turnips and various spices. The kids really liked some (even wanting to drink the juice!) - and others not so much. The following week, a number of students shared that they had gone home and made more pickles! Students also shared their scientific knowledge of food preservation by drawing comic strips about the pickling process, practicing literary skills, planning, and creative drawing.
- In January, Kindergarteners learned about different vegetables and fruits that we can grow in our garden by playing a “Guess the Vegetable” game; First graders learned about seasons & life cycles and the garden as a habitat in winter; and Second graders learned about the five food groups & nutrition, kept a food journal of what they ate for lunch at school, and graphed their results in a bar graph. We had fun while making connections to science, math, and literacy!
- Also in January, students developed their cooking skills. They practiced using several cooking tools, explored various flavors, got inspired by a famous kid chef, read and created their own recipes, and finally, made veggie hummus wraps.
- As a mid-winter connection, 1st grade Hudson Valley Seed students were thrilled to write letters and share seeds with their new friends from other schools with Hudson Valley Seed gardens. Our classes in Newburgh and Garrison wrote to classes in Beacon, and vice versa. Already familiar with seed saving from the fall, they learned about the importance of sharing seeds, diversifying seed stocks and giving more people access to seeds, and how people have been sharing seeds for thousands of years. Then the students looked at maps to learn where their pen-pal school is located, and used satellite images to find the other school’s garden. The classes each chose what seeds to send their pen pals and worked with their garden educator to write a letter, including learning how to say hello and goodbye in a letter, how to address an envelope, and where to put a stamp (plant stickers, of course). The kids chose to share hilarious and sweet sentiments in their letters, including telling garden jokes, sharing how much they love flowers, complimenting their pen pals, sharing how well the peas they planted in their classroom did and asking about the other classrooms’ pea shoots, and asking about the other class’s favorite part of garden time.
- In February, our 1st grade students learned how plants transport water from the roots to the rest of the plant in a 1st grade lesson. We set up a celery experiment, with a stalk sitting in colored water, allowing you to see the water to move up the stem’s “tubes.”

- Also in February, students did “seed yoga”, doing a very slow dance going through the life cycles of a plant, with focus on what seeds do under the ground in winter to learn about nature's winter survival adaptations while practicing being focused and still.
- In March, our students didn't let persistent snowstorms stop them from planting seeds and getting ready for spring! Each of our kindergarten classrooms planted three pea seeds in a 2-liter soda bottle. Throughout the month, these budding scientists observed the pea plants, tracked their growth, and completed observation journals. 1st graders carefully dissected lima bean seeds and observed the beans' anatomy to find the baby plant hidden inside. 2nd graders learned about the germination process and discovered that seeds come in all different shapes and sizes when they planted tomatoes, scallions, kale, and marigolds in starter trays, which we grew back at the office and later planted in the garden!
- Also in March, 2nd graders learned about maps, and created their own unique and creative garden maps. Students really got into plotting their imaginary gardens decked out with zip lines, zoo animals, pools, and of course lots of delicious vegetables.
- On the last Friday in March, Vail's Gate kindergarteners through 5th graders had their first Veggie-of-the-Month taste test. 99% of students tried the veggie sample, and 70% of students voted that they liked the special green cabbage dish, which was baked with salt, pepper, oil, and a sprinkle of parmesan cheese. Most kids recognized cabbage from Chinese food, and after getting over the fact that it smelled “a bit like farts”, chowed down on every little piece and begged for seconds.
- In honor of Earth Day in April, our students learned all about respecting bugs and protecting pollinators because of their very important role in the garden ecosystem.
- On May Day, the whole Vails Gate school community helped spruce up the garden in an active work day, setting the stage for so many new spring plants to take root.
- In May, kids loved how chewing on kale turns their tongue green, and laughed at eating leaves. When it's growing in the garden, they beg to eat it right off the plant, and always devour however much we plant.
- Our late-May lesson on pollination, one of the year's faves, included a bee costume and waggle dance (did you know bees dance?!) as kids passed “pollen” pom-poms to help flowers grow. Of course the kids haven't stopped doing the waggle dance ever since!
- In June, all classes enjoyed whole salads they had planted themselves. They had sowed seeds in April. Students diligently observed and watered their seeds as they emerged and grew. Then they got to harvest from those lettuce, spinach, chard, turnip, and radish

plants! We picked the veggies and made a salad for all to share as we discussed what we'd learned throughout the year. Kids went gaga to eat the fresh, delicious veggies they'd grown, chowing down on it all!

- Throughout this past school year, Serena and the Vails Gate school community were also very helpful in further improving our garden curricula to meet into school's literacy learning needs, and better integrating Spanish-language lesson components and garden signage to meet the needs of our predominantly-Latinx student population.

Why Your Support is Important: We see every day the need in our communities to encourage more nutritious eating and academic success. Coming to school hungry and stressed, with only the inexpensive sugars and fats their families can afford to fuel them through their day, it's no wonder that they struggle to pay attention and learn even the most basic academic skills. Facing community stresses of poverty, violence, and environmental disruption (a poisoned water system, record heat waves and cold snaps, and tornadoes affected Newburgh this past year) we also see our students yearning for the time outside to connect with something larger than themselves, slow down, and listen to themselves and the earth. Kids who grow in their school gardens with Hudson Valley Seed each year get excited about school and love eating veggies. And at a deeper level, they develop senses of wonder, curiosity, and responsibility. Learning in the garden sets them up for a lifetime of healthy choices, exploration, patience, and success.

Without outside support, Newburgh's public elementary schools couldn't give their students the chance to learn about gardening. The school district is massively underfunded, under strict mandates to spend school time focusing on test preparation, and most classroom teachers lack the basic gardening know-how necessary to keep a garden growing and are unfamiliar with teaching outside. By not only building, planting, and maintaining a school garden throughout the year, but also bringing an expert garden teacher to lead each Kindergarden, first grade, and second grade class in one hour of garden lessons every other week; integrating each of our hands-on lessons into the Common Core academic goals of the school district; and funding this program through diverse support (like yours!) from outside the economically-depressed Newburgh area, Hudson Valley Seed is able to make garden learning accessible and sustainable for Newburgh's schools and students.

The Vail's Gate STEAM Academy's students whose garden your funds made possible especially need the help that Hudson Valley Seed garden classes offer, and couldn't access this help on their own - 85% are economically disadvantaged, 40% are overweight or obese, 29% are newly

learning English, and only 15% are up to academic grade standards. Through their Hudson Valley Seed garden lessons this past year, we have seen significant improvement in students' willingness to eat vegetables, ability to write and explain what they observe, apply math concepts including measuring and multiplication, and get excited about learning!

From the Garden Educator: "I was impressed to see how brave the kids were to try new things! We were not only trying new vegetables, but we were also working as a team to learn new concepts together. I loved seeing excited faces every time I would approach a classroom for garden time, and one of my favorite things is seeing our kids grow in confidence over the year. I also loved seeing their teachers' reactions to their enthusiasm for learning, exploring, and trying new vegetables." - Serena Padilla, Vails Gate's Hudson Valley Seed Garden Educator

Teacher-Approved: During one of our first Garden Time classes, Serena had taught Ms. Finfrock's kindergarten class a song about the parts of the plant including the roots, stem, leaves, flowers, fruit, and seeds. When months later the students were filling out a plant worksheet in class, they exclaimed, "And the flower turns into the fruit!" Ms. Finfrock was so impressed that they remembered and understood the concept, and said to Serena, "So, just so you know: what you're doing is working!"

Principal-Approved: "Watching students grow in the garden inspired our teachers and invigorated our school community." Ciria Briscoe-Perez, Principal, Vails Gate

Student-Approved:

"I learned that worms are good for the garden! I like to dig for worms!" - Atori, 1st grade, Vails Gate

"We learned that corn can be different colors and we collected it!" - Rashad, 1st grade, Vails Gate

"I could eat these all day!" (After trying pepitas for the first time) - Milah, Kindergarten, Vails Gate

Expenses Actual, Vails Gate STEAM Academy, school year 2017-2018:

Expenses for the Vails Gate STEAM Academy garden were as anticipated, with some cost-savings made possible through in-kind donations of cement garden beds, seeds, and seedlings. The funds saved were reallocated to support educational materials used for teaching students in

the Vails Gate garden, including journals for students to write in. Total expenses (not including staff time) were:

- Shovels \$31
- Hand pruners & shears \$43
- Trowels, plastic (10) \$51
- 8 tool sets \$60
- Pitchfork \$25
- Rake \$18
- Wheelbarrow \$89
- Garden gloves, child sized \$35
- Storage shed \$1,095
- Shelving \$75
- Picnic tables (2) \$176
- Umbrellas & bases (2) \$128
- 2 watering cans \$47
- Garden hose & nozzle \$58
- Garden hose key \$17
- Sprinkler \$27
- Metal garden sign holders with stakes \$38
- Soil testing kit \$10
- Topsoil \$120
- Compost \$100
- Hay mulch \$50
- Pots \$60
- Potato bags \$160
- Buckets \$62
- Jute twine \$7
- Wire cutter \$12
- Ladybug larvae \$26
- Bell \$9
- Hand lenses \$54
- Blank journals \$386
- Educational garden children's books \$116

- Posterboard \$21
- Magnetic clips for posters, 4 \$7
- Markers \$23
- Felt \$18
- Velcro \$37
- Laminating \$183
- Printing worksheets \$494
- Paper \$67
- Whiteboard \$68
- Card holder headband for guessing game \$22
- Purchasing vegetables for winter recipe lessons \$474
- Small paper cups for veggie taste tests \$93
- Paper plates \$128
- Pint jars for pickling lesson, 36 \$55
- Child safety knives, 10 \$47
- Cutting boards, set of 4, 2 \$20
- Produce bags, 1 roll \$26
- Paper towels \$14
- Raised bed kits \$0 (recycled and donated)
- Seeds and seedlings \$0 (donated)
- *Total:* \$4,982

Up Next: JFK in Kingston!

We look forward to sharing with you next year the successes you have helped make possible in our new school garden at JFK Elementary School in Kingston, NY. The school community there is *very* excited about their garden, which we have just started building, and our newly hired Garden Educator for Kingston, Jen Morris, is already jumping in to start up summer programming at JFK and prepare for fall lessons. And the other Kingston schools are taking notice! We look forward to fast expansion into each of the Kingston elementary schools, prioritizing those with the greatest economic, nutrition, and academic needs, to help an ever-growing number of kids become informed, self-sufficient healthy eaters and learners.

We are also excited to have made such a good impression at the Vails Gate school, because the Assistant Principal there has just been promoted to become the new Principal at Meadow Hill

*Hudson Valley Seed Program Report, Foundation for Sustainability & Innovation
School garden education, Vails Gate STEAM Academy, Newburgh, NY
School year 2017-2018*

Elementary School in Newburgh, which is the school with the next-greatest need in the region. She is already asking for us to build a garden and teach lessons there, and we are looking forward to our continued growth serving the kids who need garden time most.

Feel free to contact me any time with any questions. Thank you so much for your continued support of school garden education in the Hudson Valley!

With gratitude,

Air Nonken

Director of Development

Photos

Don't miss out! We've compiled an album of photos for the Foundation for Sustainability and Innovation of the Vails Gate students enjoying the garden you made possible. Check them out:

tinyurl.com/VailsGate2017

