Greenhouse Curriculum Motivates Young Adult Students with Special Needs to Learn, Grow and Communicate

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Philadelphia Student Growers Talk about Their Hands-On Career Education Experience



Each summer, something extraordinary happens on the campus of the Martin Luther King High School in Philadelphia, PA. Young adult students, ages 18 to 21, who have multiple disabilities, from autism

to intellectual disabilities, are talking with excitement.

Students who rarely speak or make eye contact talk about their bountiful harvest of vegetables, herbs and flowers they have grown through teacher-led instruction and hands-on learning on their school farm.

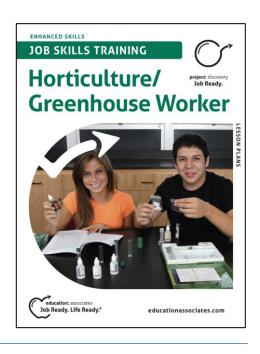
Many students come from neighboring schools and take instructional classes at the school from October to May. They come for one hour a week and also attend an 18-day summer school program. Each student has a written individual education program (IEP) that includes academic and job transition goals. The greenhouse skills are taught with hands-on activities that match a student's ability level and garden tools. Their instructors are Rasheeda Reynolds, a special educator of 31 years, and Tara Campbell, the Youth Education Coordinator for the non-profit Weavers Way Community Programs, which manages the garden and greenhouse. Reynolds says, "Even severely challenged students participate in this curriculum. Their transformation is like a flower in bloom! Summers are a magical time at our school."



Some greenhouse skills that Ms. Reynolds' students will describe for you are how to plant seeds, build raised gardens, prune blackberry bushes, repot plants, and identify good and bad insects. Students will speak to teachers, their families and schoolmates about their plentiful rows of squash and pumpkins, tomatoes and potatoes, kale, cucumbers, peppers, and onions. During summer classes, you may find them wheelbarrowing their bounty into the school's culinary chef for cooking classes or delivering crops to Weavers Way, a local health food co-op. Reynolds grew up shopping for organic food at Weavers Way with her mother, a co-founding member. "I love to see things grow and wanted our students to enjoy gardening," she said. "The skills they learn now may prepare them to someday be a landscaper, florist or organic grower."

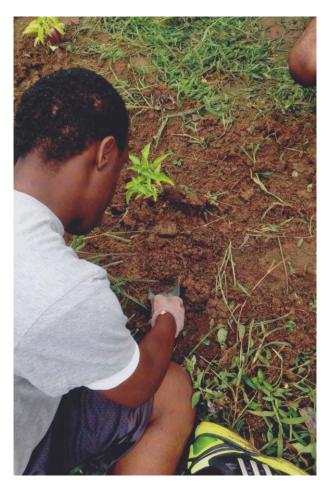
Specialized Career Education Curriculum Meets All Students' Ability Levels

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Reynolds came up with the greenhouse idea using Project Discovery, a curriculum developed by Education Associates, a Louisville, KY company. The specialized job skills training enables students to have real-world experiences on four ability levels -- beginning, intermediate, advanced and adapted for low-functioning learners. Students can explore careers, practice job skills and learn important life skills for independent living. Reynolds says, "Project Discovery curriculum provided a foundation to deliver a sustainable vocational program for our special needs students."

Teachers use the curriculum to deliver instruction in print or digitally on desktops, laptops, or tablets to teach marketable job and trade skills to middle, high school and young adults at-risk and with special needs. Students like the hands-on learning, colorful images, simple lessons, tools and activities. "I like the visual instruction, because students can easily comprehend how to perform a job, skill or task," adds Reynolds.



Local Farm and Nutrition
Program Successfully Partners
with School

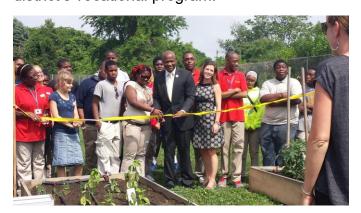
"Our community benefits from the produce the students bring to life."

Jill Fink, the Executive Director of Weavers Way Community Programs (WWCP), says the student's bounty is more than she expects each year. "We're thrilled to support the district," says Fink. "When the special education teachers approached us, we were happy to help and reached out to professionals who helped us to adapt our existing farm and nutrition education programs into the horticultural therapy program we now operate at MLK. Our community benefits from the produce the students bring to life.

It's a powerful demonstration of what nonprofits and schools can achieve in pursuit of helping students learn in innovative and experiential ways, and be passionate about the skills and knowledge they gain." Other partnerships with the district include Home Depot and Lowes who now provide soil, watering cans and plants.

Job Skills Learned in School Lead to Entry Level Jobs

The Philadelphia district's intention is that the students' skills will transfer into entry-level jobs, such as grocery clerking. Since the program's inception, Ms. Reynolds has evolved the project. First, with Project Discovery, the curriculum that incorporates fundamental reading and math skills relevant to job tasks with adapted lessons and alternate assessments; then blending in the MLK district's vocational program.



Highly Visual Curriculum and Hands-On Practice Improve Post-Test Scores

During pre-tests, she noticed that her students were reading and spelling well, but had difficulty comprehending what words meant in vocabulary lessons. Using the highly visual curriculum, they made better progress. "We keep a good balance of instruction and hands-on practice using Project Discovery," she said.

In classes, students improved their gross and fine motor skills using the gardening tools. They were better able to follow multiple instructions and learned teamwork. Lesson assignments included writing thank you notes to businesses, sending photos of crops, assisting the chef to wash and prep vegetables and learning about nutrition and how to cook simple foods – an important life skill.

Gardening Grows Self-Confident Students

"We want them to leave school knowing that they have skills that can transfer to a job or pastime."

Amy Szymanski, a vocational coordinator and life skills teacher, takes the students on field trips and emphasizes gardening as a stress reducer, another life skill. She pursues employment and/or volunteer opportunities and said, "Students display self-confidence in the garden. We want them to leave school knowing that they have the skills that can transfer to a job or pastime."

In June, Weavers Way Community
Programs erected a pavilion on the farm
site for use as an outdoor classroom and
are seeking additional funds for picnic
tables and instructional aids. Teachers
Reynolds and Szymanski intend to
develop a safety training program.
Reynolds says, "Students like these rarely
get opportunities to be involved in a
project from the ground up. When faces
light up and we hear them talking, it's an
indication that they've made significant
progress and we know that we've opened
a pathway to life after school."

Photographs by: Joyvanelia Jefferson, and Larry Goldfarb.

Originally Published in Hope Farm News