PKY Community Garden Renewal and Expansion

Project Description

We have had a PKY Community Garden for seven years. In its first year we installed 24 4’ x 4’ raised beds. We doubled the garden in its second year to include 56 4' x 4' raised beds, a 9’ x 12’ tool shed, and a 9’ x 9’ greenhouse so all PKY Biology students could grow vegetables across three growing seasons as part of a larger service learning project in 9th grade. Students sold the vegetables to community members and donated equipment and extra vegetables, as well as volunteered time serving the homeless population at a local shelter. Some vegetables were also donated to our school cafeteria as part of the "Farm to Table" education program. Because of Florida's relentless sun, the plastic garden beds have deteriorated over this seven year period to the point that it was unsafe to have students planting in the broken, sharp-edged boxes. Also the shed’s floor had rotted and was no longer usable.

We would like to refurbish and expand the garden during the 2015-16 school year to continue to include high school Biology classes focused on learning about plant growth, development, and sustainable growing practices, as well as supporting our local shelter through sales of vegetables, and to expand these learning opportunities to our elementary students so they can learn hands-on science through authentic field experiences related to gardening. To expand the project in the three elementary learning communities and throughout high school biology, we will increase the number of 4' x 4' raised beds from 56 to 88. Our K-1, 2-3, and 4-5 learning communities will each have 10 4' x 4' raised beds to use as part of hands-on, authentic, science units. We will build these beds out of landscape timbers to withstand the environmental conditions and to increase soil depth to 11” to accommodate vegetables that require deeper root systems. We will continue to use the 4x4 Square Foot Gardening method to teach students how to grow large quantities of food in small areas which supports sustainable community gardening, conserves water, and reduces pests. For elementary students, this method of gardening also allows for many math concepts to be taught related to spacing, proportions, and scaling.

In addition to building 88 garden beds, we will build 6 potting benches that can be used for starting seedlings and for cleaning harvested vegetables. As part of this potting area, we will set up 3 rain barrels to reclaim rainwater that flows off of one of our school building's roofs. This catchment system will be used for watering seedlings, rinsing off potting benches, and rinsing off residual soil from harvested vegetables. A final project that we will complete is building 4 convertible garden benches/tables that will anchor the four corners of the garden for parents to eat lunch when visiting their elementary students, for art students to sit and create botanical drawings, and for other students to use as a location to read or write for their academic classes.

Project Grant Reason

For many students, few opportunities exist for outdoor learning experiences that instill a sense of community, provide a way to sustainably use spaces not traditionally used on school campuses, and result in supporting those members of the larger community, the homeless population, who have the fewest resources. This project is deserving of the Lowe's Toolbox for Education grant as it will allow us to accomplish Phases II and III so that we can create opportunities for authentic science learning at multiple grade levels and integrate service learning to meet a growing need within our community.