#### SCHOOL GARDEN GRANT APPLICATION

### Request:

James A. Cotten Intermediate School, located in Willingboro, New Jersey, requests a grant of \$500.00 to advance the learning opportunities of children in the Willingboro School District via the establishment of a School Garden and an Outdoor Learning Center. James A. Cotten Intermediate School is comprised of  $600\ 5^{th}-6^{th}$  grade students. The school's enrollment is 86% African-American, 11% Latino, 2% White and 1% Asian. 53.6% of students are economically disadvantaged with 51% of students receiving free or reduced lunch.

## 1. Project Mission Description

By the Fall of 2023, James A. Cotten Intermediate School, located in Willingboro, NJ, will create a School Garden/Outdoor Learning Center to engage students in hands-on learning across all curricula areas, with the specific focus being on science, mathematics, language arts and health/nutrition. The ultimate objective being to provide better experiential learning opportunities for all students at every academic level.

Our goal will be to promote the social, environmental and nutritional benefits of sustainable gardening through the development of a School Garden and Outdoor Learning Center.

By providing an Outdoor Learning Center, via the establishment of said gardens, we will encourage students to engage with their surrounding environment as well as foster the interdisciplinary pursuits cited by the Willingboro Board of Education School System.

Indeed, the Outdoor Learning Center will serve as a conduit to the entire Willingboro Community by providing a shared forum for teaching and strengthening students' learning proficiencies.

In a collective effort to improve their surrounding ecosystem, students will gain a sense of purpose, duty and ownership via the interaction with their physical environment.

## Needs Addressed by the Project

Emphasis will be placed on the total development of the student, inclusive of academics, character building, interpersonal skills and teamwork. Involvement of parents and the community in our public school will also be an integral element.

### Our current situation includes the following:

District science and math scores are at an all-time low. Due to the recent COVID pandemic, most of our students received little if any instruction. While on-line learning and Chromebooks were provided by the District, many students lacked the resources to partake in said learning because they did not have internet access at home.

As such, upon their return to school, students advanced two grade levels without securing the vital skills required to master the curricula at their current placement in school.

A School Garden and Outdoor Learning Center will provide students with opportunities to be outside and connect with nature. To learn about plants, vegetation, the insect world and the climate's impact on our impending survival.

## 3. Project Benefits

- 1. Teach & enhance the science, math, language arts and health curricula outdoors to improve overall performance on test scores;
- 2. Provide students with a nature journal to record their reflections on the gardening process;
- 3. Have students share their work and what they have learned from the gardening process with other students in the school community;
- 4. Invite different community groups to volunteer and participate in the gardening process (churches, community centers, local food organizations, neighborhood farms, gardening centers and business organizations);
- Organize student/parent workdays on Saturdays;
- 6. Share outdoor education successes via workshops with fellow teachers and faculty within the District to inspire them to launch a garden and outdoor learning center at their own schools.
- 7. Seek the direct support of the principal, upper administration and the Board of Education;
- 8. Attend professional development training to better learn outdoor inquiry-based methods as well as gardening techniques to better equip students with the skills mandated to be successful in an outdoor learning center;
- 9. Celebrate successes with students' work in the garden both individually and as a team/class group.

### 4. Overview of Desired Outcome

#### The 5 key success indicators for our project will be:

1. Increase both science and math scores:

- 2. Engage children empirically, analytically and logically;
- 3. Foster a sense of responsibility, fellowship, solidarity and collaboration with the planning, management and sustaining of the School Garden;
- 4. Create a minimum of 3 significant associations with the greater Willingboro community; and
- 5. Involve parents & faculty at all levels via the School Garden's and Outdoor Learning Center's implementation and continual existence.

# 5. <u>Time Frame for Completion of the Project</u>

## PHASE I

<u>Date</u>	Activity	<u>Status</u>
September 2022	School/Community Meeting to discuss the project	Complete
September 2022	Created Planning Committee for the project & blueprint of garden and outdoor learning center for school courtyard (see Appendix A of pictures showing the school courtyard and layout)*	Complete
October 2022	Submission of ideas to School Administration	Complete Approved
November 2022	Writing Grant Proposal for School Garden Applications	Complete
December 2022	Submitting Said Grant Proposal Application for funding School Garden Project	Pending Approval
February 2023	Purchasing some materials: seeds, grow lights and seed trays for beginning growing process indoors to later be transferred to the raised beds in the school garden	
March 2023	Purchasing other materials for Garden Outdoor Learning Center;	
	2. Creation of Student Committees to create, work & plant school garden.	
April 2023	Preparing Soil/Raised Garden Beds &     transferring seedlings grown inside to	

	outdoor raised beds and floral garden beds;  2. Students working hands-on in garden.	
May 2023	Official launch of the Outdoor Learning Center & School Garden	
June 2023	Volunteer of Student & Faculty Workers to tend to the Garden & floral beds throughout the Summer (Irrigation/Weeding)	
July - August 2023	Students/Faculty Harvesting & Collecting the vegetables grown	

## PHASE II

<u>Date</u>	Activity	<u>Status</u>
September 2023	Introduce curricula linked to School Garden Project to Students	
October/November 2023	1. Solicit donations of gardening supplies and planting materials for spring planting;	
	2. Holding Fund Drives within the School Community;	
	3. Writing & Submission of additional grant applications for continual funding of school garden & outdoor learning center.	
Fall/Winter 2023-2024	Students learn about agriculture/food production/insect world via Science, Mathematics, Health/Nutrition & Language Arts (via gardening journal)	
Spring 2024	1. Students create & plant vegetable garden & floral garden;	
	2. Students set up bird feeders, insect & butterfly hotels.	
	3. Teaching presentations held for students in the Outdoor Learning Center linking the Science, Math, Health/Nutrition & Language Arts Curricula to the Gardening experience.	

July/August 2024	Volunteer Student/Faculty Committee to water, harvest & tend to the garden during the summer months.	
Fall 2024	Students harvest garden & continue     to learn via their hands-on gardening     experience.	
	2. Preparing for the Growing of Seeds for planting in the Spring of 2025.	

# 6. Projection of Costs Associated with the Project

### EXPENSES & BUDGET

ITEM	<u>OBJECTIVE</u>	TOTAL # NEEDED	COST PER ITEM	ESTIMATED COST
Bags of Gardening Soil/Potting Soil	For 8 Raised Beds 8 floral Beds	130 bags .75 cu	\$5.00	\$650.00
Seeds: Vegetables Tomato Bell Pepper Cucumber Eggplant Pumpkin Potato Corn & other	For: Vegetable garden	100 Vegetable Seeds - varied No GMO	1 Unit \$42.99	\$43.00
Plants: Perennials Annuals Wild Flowers	For: Floral beds	Forever Seed Pack 35 varieties: Perennials, Annuals &	\$26.96	\$27.00

		Wild Flowers		
Indoor Seed Starters/Startin g Kits	For:  To begin growing seeds indoor prior to spring planting	2 - 80 cell seed trays	\$39.99	\$40.00
Mulch	For: Flower beds	50 bags	2 cub. ft, bags \$3.00	\$150.00
SUBTOTAL ITEM	<u>OBJECTIVE</u>	TOTAL NEEDED	COST PER ITEM	\$910.00
Raised Beds	For: Planting the vegetables	8 raised beds	\$45.00 per raised bed	\$360.00
Student Disposable Aprons	For:  Protection of the students' uniform/clothes while gardening	5	\$17.00 per 100 aprons	\$85.00
Student Gardening Gloves	For:	72	36 pairs of gloves	\$104.00

	Protection of hands during gardening		per package \$52.00	
Student Hand Shovels	For: Planting	30	\$1.00 per hand shovel	\$30.00
Student Hand Rakes	For: Planting	30	\$4.00 per hand rake	\$120.00
Rakes	For: Gardening/Planting	4	2 Pk. \$18.00	\$36.00
Garden Cart/Wheelbarro w	For: Moving Soil and Plants	4	\$35.00	\$140.00
Adult Shovels	For: Digging/Planting	2	\$9.98	\$20.00
Landscaping Fabric	For: Weed Prevention	3 ft × 300 ft roll	2	\$104.00
SUBTOTAL				\$999.00
ITEM	<u>OBJECTIVE</u>	TOTAL NEEDED	COST PER ITEM	<u>COST</u>

Outdoor Workstation/Sin k connecting to hose	For: Prep. Work Prior to Gardening	2 w/sinks	\$130 per unit	\$260
Hoses/Nozzels	For: Watering/Irrigati on of Plants	2 - 100 ft. Expandable Hoses	\$25.99	\$50.00
Irrigation Sprinklers	For: Watering/Irrigati on of Plants	4	\$12.99	\$52.00
Storage Shed 8'-10'	For Storage of Gardening tools/materials	1	\$159.99	\$160.00
Outdoor seating of outdoor learning center 10 Bistro/café tables	For: Student Seating during teaching presentations	10	\$49.99	\$500.00
Pruning Shears	For: Pruning plants/vegetables	4	\$10.00	\$40.00
Bird Houses/Feeders	For: Observation of Birds & their environments	5	\$20.00	\$100.00
Butterfly /Insect homes	For: Observation of their environment	4	\$19.99	\$80.00
SUBTOTAL				\$1,242

# TOTAL COST: \$3,151.00

APPENDIX A:

<u>Pictures of Courtyard for Proposed School Garden & Outdoor</u>

<u>Learning Center</u>







