

Enhancing Children's Health Through Gardening

Azita Martin, Hannah Skocypec, Jake Mirius, Eve Levi, Vanessa Delgado, Janice Gillett

Introduction

Goal

To educate students on growing sustainable agriculture and positive, healthy food consumption that would be shared with their families and community.

Impact

To facilitate a sense of community that is focused on getting children to think about how the natural world functions creatively and cumulatively. Incorporating aspects of biology, botany, horticulture, engineering, and education to support a healthy lifestyle.

Gateway Pointe Elementary School

Inspired to assist a school with an existing garden that was unsustainable. In addition to supporting a Title 1 School that services grades K- 6th. Focused on bringing the community together by obtaining volunteers from the school to assist in maintaining the garden. Long term success through the continuous help from ASU student.



Funding

- Awarded the Humanities Lab Amplifier Student Mini-Grant - Program funded by ASU's School of Sustainability, the President's Office, and the Department of English.
- Gateway's School Garden Club
- Seed donation from Joan Baron from Baron Studio's, the Edible Landscape Project and Food in the Alley Initiative
- Partnered with Gateway PTO
- Potential for additional funding through Woodside Grant

Obstacles

Gophers

A nuisance for past few years, that dug up the roots of all plants. Installed Gopher wire to prevent the gophers from eating the roots. Will be planting marigolds, lavender and other gopher deterrent plants. Installed gopher sound waves spikes throughout the garden.



Wood Garden Bed

Discussed with school to use pretreated wood for the new garden beds. Researched pretreated wood that was safe for garden beds. Purchased wood and constructed garden beds. Upon completion principal elected to not use treated wood due to pesticides and had to remove garden beds. Constructed new plan to use metal garden beds.



Sustainable Garden

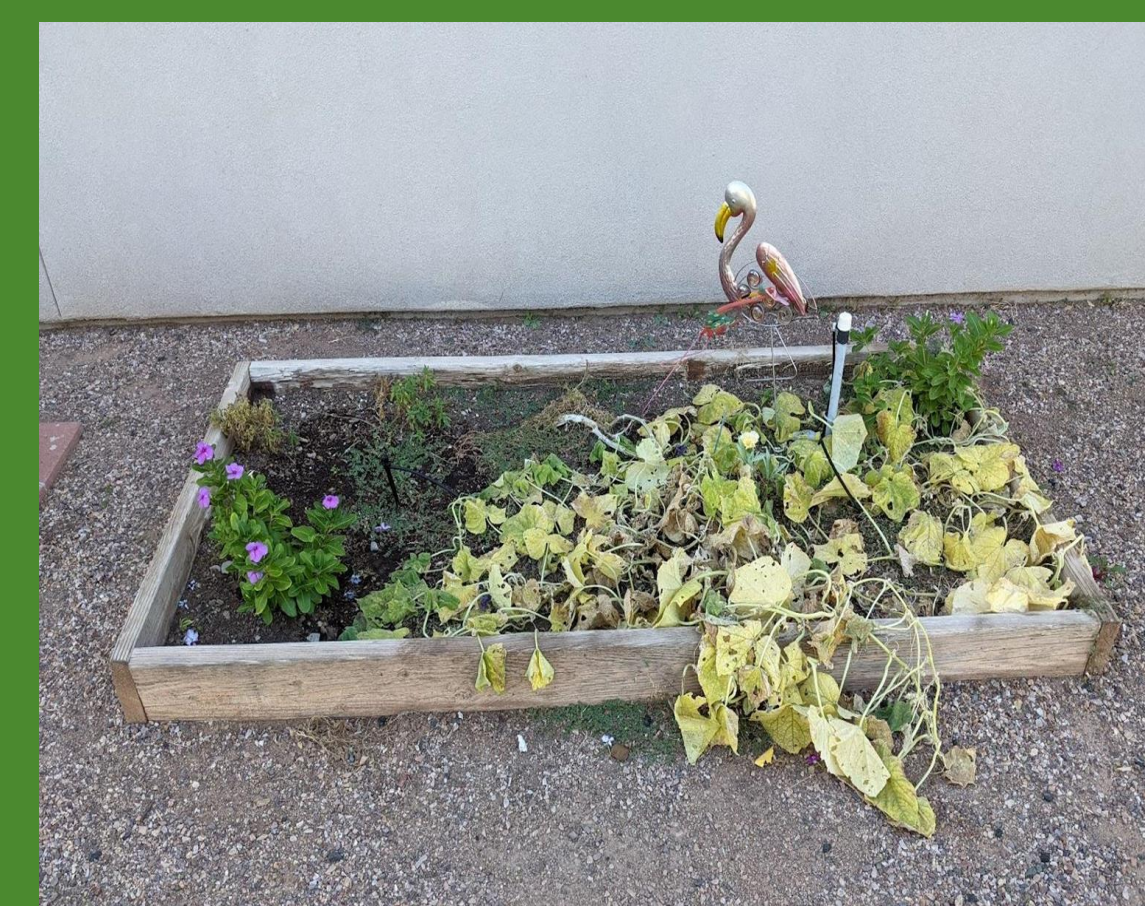
Together organized a plan with the assistance of parent volunteers, teacher in charge of school garden to successfully maintain the garden. Emphasized having a garden manager to ensuring all needs of the garden are met.

Design

- Integrated current garden design that teacher had with our design
- Increased soil depth by 12 inches
- Size appropriate for children by building beds into the ground to lower height a few inches
- Guide for Seasonal Crop Rotation
- Implemented transplanted pollinator plants to the center of each garden bed to promote
- Added gopher wire to bottom of open beds

Garden Revamp Event

December 4th from 8:00am-12:00pm
 -Set up New Garden Beds
 -Plant Transplants
 -Take home Bags



Student Engagement

Began by allowing students to plant the seed in the classroom. Allowing them to watch how the seeds sprout. Goal is to have transplants for students to plant the day of the event. Build the connection with what will be grown.

Partnered with passionate teacher to create Garden Club for K-6 graders. Work with the principal to set the tone of the school that nutritious food is important. Designate a time each week for the teachers to use the garden on a rotating basis.



Plant	Specific Type	Companions	Enemies
Arugula	Rocket	Bush beans, Beets, Carrots, Onion, Garlic	Stawberries, Eggplant, Peppers, Potatoes, Tomatoes
Bean	Scarlet Runner (pole)	Carrots, Marigold, Peas	Broccoli, Cabbage, Sunflower, Cauliflower, Chives, Leeks, Garlic, Onions
Broccoli	Calabrese Broccoli	Bush beans, Marigolds, Lettuce	Tomatoes, Strawberries, Cabbage, Cauliflower
Bush Bean	Bluelake (bush bean)	Peas, Beets, Celery, Cucumber, Radish, Savory, Strawberries	Garlic, Onions, Fennel
Carrot	Chantenay	Beans, chives, lettuce, onions, peas, Peppers, radishes, rosemary, sage, tomatoes	Cabbage, Fennel, Strawberries
Cauliflower	Purple	Beets, Celery, Cucumbers, Dill, Garlic, hyssop, Lettuce, Mint, Onions, Potatoes, Rosemary, Sage, Spinach, Swiss Chard	Beans, Peppers, Tomatoes
Lettuce	Mesclun Mix	Beets, Broccoli, Brussel Sprouts, Cabbage, Carrots, Cauliflower, Chives, Garlic, Kale, Onions, Radishes, Strawberries	Celery, Parsley
Pea	Oregon Sugar Pod	Beans, Carrots, Chives, Corn, Cucumbers, Mint, Radishes, Turnip	Onions, Garlic
Romaine Lettuce	Parris Island	Beets, Broccoli, Brussel Sprouts, Cabbage, Carrots, Cauliflower, Chives, Garlic, Kale, Onions, Radishes, Strawberries	Celery, Parsley