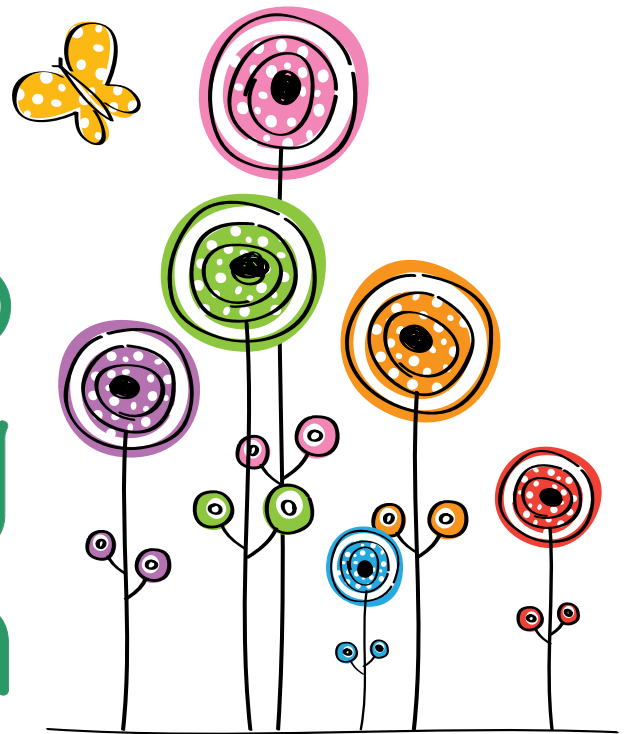


Monaco Learning Garden



The Monaco Learning Garden's mission is to develop, implement and maintain a beautiful, resource-rich school garden. Integrated into the curriculum, the Monaco Learning Garden will inspire teachers, students and families with a deep, hands-on connection to the natural environment.

*“Once you
learn to read,
you will be
forever free.”*

- Frederick Douglass



Table of Contents

Why Build a Learning Garden?..... 2

How to Build a Learning Garden 4

Step 1 - Define the Purpose & Objectives
of the Garden 5

Step 2 - Choose a Permanent Garden Site
and Design Plan..... 6

Phase 1 - Open Air Classroom..... 9

Phase 2 - Margarite's Fountains 15

Phase 3 - Butterfly Meadows 19

Phase 4 - Apple Cider Orchard 25

Phase 5 - The Peace Garden 29

Step 3 - Seek Permission and
Community Support 34

Step 4 - Create a Learning Garden
Committee 35

Step 5 - Acquire Funding 37

Step 6 - Build the Garden
According to Plan 41

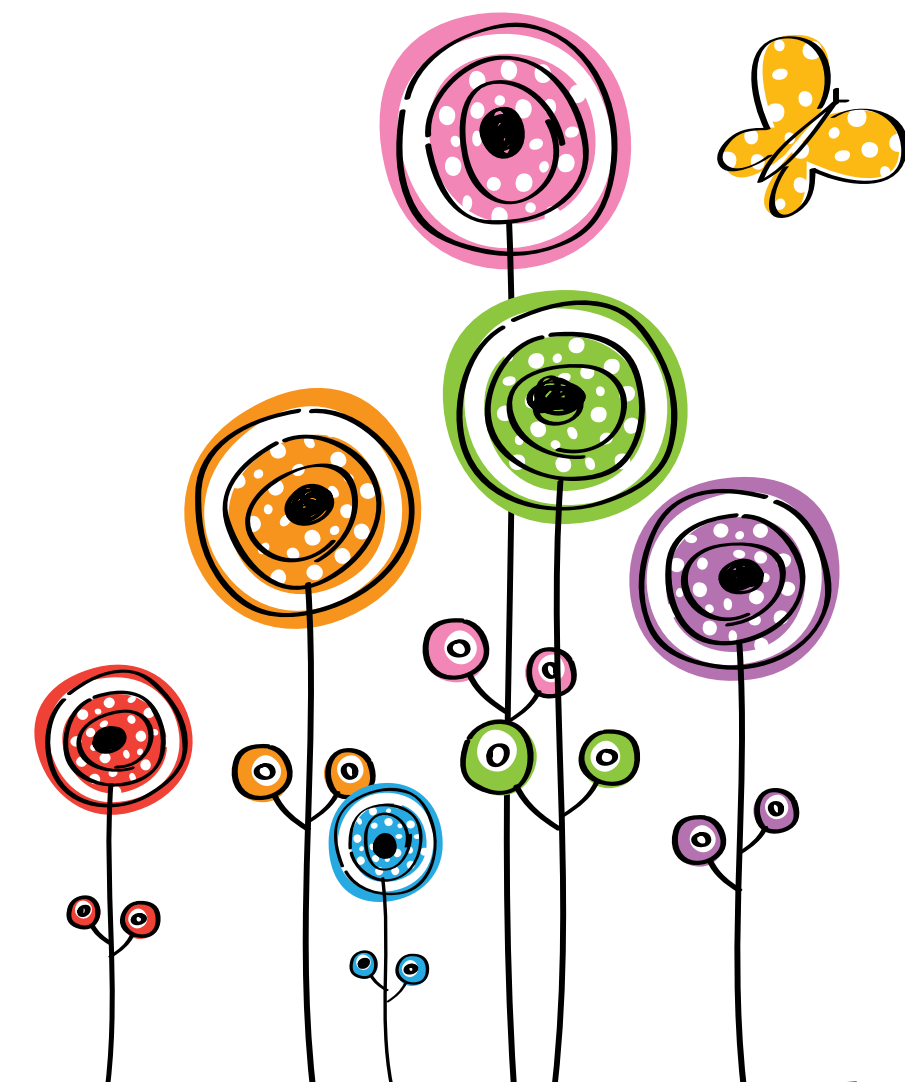
Step 7 - Layout the Students
Gardening Activities 42

Step 8 - Define a Year-Round
Garden Plan..... 47

Partners 48

Comments from Schools
with Garden Plans 51

Appendix 53



Why Build a Learning Garden?

The Monaco Elementary School Learning Garden will create a place for our **children** that is conducive to and heightens the enjoyment of reading. PTO members will feel **self-worth** and **pride** as they build the garden. Students will be proud of their **accomplishment** as they see the fruits of their labors when they use the garden as a **reading sanctuary**.

The garden will include various places for **seating**, benches and boulders, to accommodate independent and group reading. A vivid combination of **trees**, annuals, perennials, fragrant plants and a butterfly meadow will shelter the garden providing **serene views** and a feeling of enclosure.

The addition of an **apple orchard** will provide a jumping off point for a new annual Fall Apple Festival. Solar water features will adorn the garden attracting native **songbirds**, which will create a peaceful setting for our children. The centerpiece will be an **open-air classroom**, which holds up to 25 students and will be surrounded by shade trees for group discussion.



Literacy Fact Sheet

Overall, it is estimated that 93 million U.S. adults have Basic and Below Basic literacy skills. Adult literacy is defined as: Using printed and written information to function in society, to achieve one's goals and to develop one's knowledge and potential.

Illiteracy Statistics

- 7 million Americans are illiterate.
- In a study of 20 'high income' countries, the US ranked 12th on literacy tests. Illiteracy has become such a serious problem in our country that 44 million adults are now unable to read a simple story to their child.
- 50 percent of adults cannot read a book written at an eighth grade level.
- 20 percent of Americans are functionally illiterate and read below a 5th grade level.
- 30 million Americans cannot read a simple sentence.

America's Reading Problem

- 37% of fourth graders struggle with reading problems so severely that it is impossible to successfully understand and complete normal fourth grade assignments. Further, 3 out of 4 of that group read so poorly they have little chance at educational progress and ultimate educational attainment.
(This data was reported in a recent National Assessment of Educational Progress report.)
- America is supposed to be one of the world's most affluent and technologically-advanced societies. Free public education is available everywhere in this country.
- Illiteracy has been proven to cause children to drop out of school. Dropouts cost our nation \$240 billion in social service expenditures and lost tax revenues.

Where Illiteracy Leads

- Low literacy is strongly related to crime.
70 percent of prisoners fall into the lowest two levels of reading proficiency.
- 85 percent of juvenile offenders have problems reading.
- To determine how many prison beds will be needed in future years, some states actually base part of their projection on how well current elementary students are performing on reading tests.
- 3 out of 5 people in an American prison cannot read.
- Approximately 50 percent of Americans read so poorly that they are unable to perform simple tasks such as balancing a checkbook and reading prescription drug labels.

Why is adult literacy important?

Literacy skills impact every aspect of adult life. Adults who are more literate are more likely to:

- Read to their children and discuss school topics;
- Be employed full time and receive a higher income;
- Use the Internet and email;
- Vote, volunteer, and access information about current local and national events.

Unfortunately, only a fraction of low literate adults seek literacy services from community providers. Many people with low literacy do not perceive their skills as a problem until a crisis such as the loss of a job, a child's need for school help or a health care emergency makes them aware of their literacy needs.

What can we do about it?

By building the Learning Garden and allowing our children the opportunity to grow with it, they can learn lessons in patience and delayed gratification, persistence and responsibility as well as improving their own literacy.

Children who are solid readers perform better in school, have a healthy self-image, and become lifelong learners, adding to their viability in a competitive world.

Many of our nation's children lack the motivation to read. Researchers have described motivation as the "skill and will" to learn.

Students who reported reading more frequently for fun have higher reading proficiency scores than those who reported reading less frequently.

Interestingly, a positive correlation also exists between the amount of time children read for pleasure and their math and science achievement.

How To Build a Learning Garden?

School gardens can provide an environment in which students can learn to work with teachers and parents while learning the relationship between people, plants and wildlife. A school garden must function as a garden education center not only for the students, but for their parents. The lessons that are taught at the garden site are limited only by one's creativity.

School Gardens are a special kind of learning center. Like libraries, they need responsible and knowledgeable people to do all the jobs necessary to maintain them as functional places in which children will learn.

They should be seen as permanent additions and must be utilized year-round. The following is a framework which you should consider before starting your garden. Gardens require work, and if you have not thought through the following guidelines, your garden will become a learning aid which cannot be utilized.



- Step 1 - Define the Purpose & Objectives of the Garden
- Step 2 - Choose a Permanent Garden Site & Design Plan
- Step 3 - Seek Permission and Community Support
- Step 4 - Create a Garden Committee
- Step 5 - Acquire Funding
- Step 6 - Build the Garden According to Plan
- Step 7 - Layout the Students Gardening Activities
- Step 8 - Define a Year-Round Garden Plan

Step 1 - Define the Purpose & Objectives of the Garden

Every school garden must fulfill some need or objective. This is why each garden is unique. All teachers utilize the garden as a learning aid. For some teachers it may reinforce natural science classroom studies. For others it may reinforce social studies. Some teachers may utilize the garden across all curriculums. Whatever your needs are, by addressing these issues, you will have a better understanding of the work involved in this stage.

Purpose

- Build a garden that heightens the enjoyment of reading for all
- Involve students in building the Learning Garden and working with others in the community
- Provide a peaceful environment for our children and teachers
- Instill a sense of wonder for the kids
- Promote a real-world study of reading, math, language, physical science, life science and earth systems frameworks not available in the regular classroom
- Build a fun and educational tool for teachers if they choose to use it
- Enable students to learn focus and patience, cooperation, teamwork and social skills
- Give students self-confidence and a sense of "capableness" along with new skills and knowledge about gardens
- Address different learning styles and intelligences; our non-readers can blossom in the garden

Objectives

- Increase the number of books students read per month by 100%
- Boost students reading scores to meet the required standards
- Create a low maintenance space by using self-sufficient plants, as well as natural paths, garden beds and rocks that will work to alleviate mowing and watering needs
- Provide means of raising additional funds, such as selling engraved pavers and seeking sponsorships for the gardens
- Benefit children who learn better with hands-on activities and have a direct correlation in achievement scores improving
- Integrate natural features that expand the classroom's learning opportunities
- Encourage students to become more fit and healthy as they spend more time active in the outdoors and start choosing healthy foods over junk food

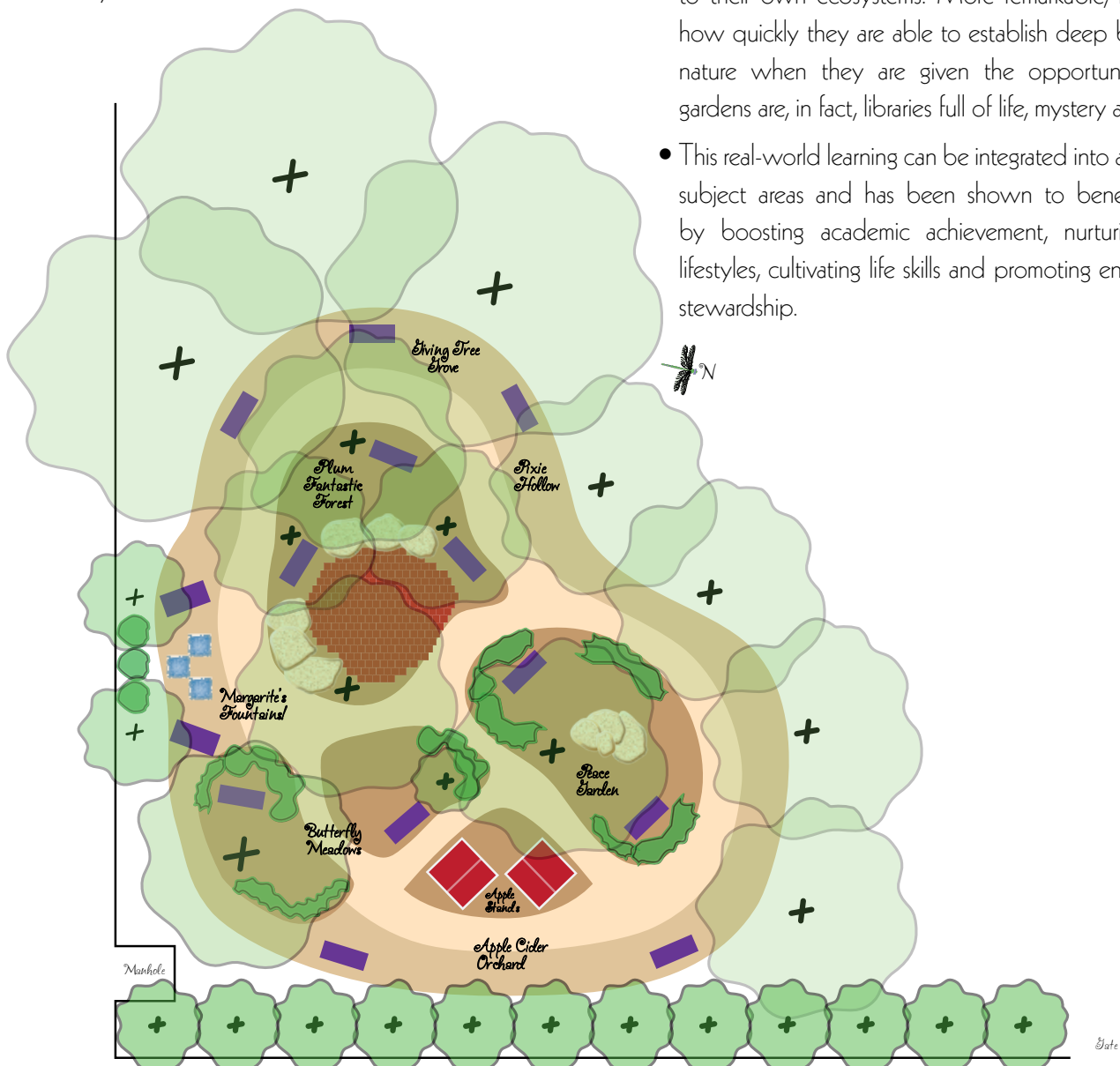


Step 2 – Choose a Permanent Garden Site & Design Plan

Look for an area on or near the school grounds. It should be a place that is easy for children to walk to, gets plenty of sunshine and has good soil. Accessibility to the students and staff will often determine the amount of time the school participates in the garden. Sun exposure will help determine which plants will grow well in your garden area.

Objectives –

- The garden should be comfortable, convenient, useful and functional.
- The garden should have structural stability, sound construction, sustainable technology and good use of materials based on a knowledge of their ecological suitability.
- The garden should be beautiful, sublime, picturesque, inspiring, exciting, dramatic, calm, spiritual.
- The garden should be built with the appropriate safety measures and accessibility standards in place.
- It is remarkable how few children have a connection to their own ecosystems. More remarkable, however, is how quickly they are able to establish deep bonds with nature when they are given the opportunity. School gardens are, in fact, libraries full of life, mystery and surprise.
- This real-world learning can be integrated into all academic subject areas and has been shown to benefit children by boosting academic achievement, nurturing healthy lifestyles, cultivating life skills and promoting environmental stewardship.



Step 2 – Choose a Permanent Garden Site & Design Plan (cont.)

Ensure that your water source will be easily accessible. Accessibility to the students and staff will often determine the amount of time the school participates in the garden. However a location that receives heavy foot traffic may increase usage but may also increase trampling of area plants. Choose a site that is safe for the school and the neighboring community.

Learning Garden Sections

- **Open-Air Classroom with Shade Trees -**

Size of Space - 40'x40' (1,600 sq ft)

Classroom - 13'x12' (156 sq ft) 266 engraved bricks

The floor of the classroom will consist of 266 engraved bricks, surrounded by 3 Tulip Poplars, 2 Hawthorne's, 2 Texas Ash and 2 Texas Redbud trees. There will be 6 benches with gravel paths.

- **Margarite's Fountains -**

Size of Space - 15'x21' (315 sq ft)

The fountain area will have 3 solar fountains made of slate with two decorative benches flanking both sides. Along the back of this area will be 2 Desert Willow trees, dwarf fountain grasses and perennial sunflowers.

- **Butterfly Meadow -**

Size of Space - 30'x19" (570 sq ft)

Our goal is to attract every butterfly native to North Texas! We are incorporating 5 Butterfly Bushes, a Texas Lilac Vitex tree, Shasta Daisies, Dianthus, Baptisia, Joe Pye Weed and Lantana.

- **Apple Cider Orchard -**

Size of Space - 10'x31' (310 sq ft)

This will be our crowning jewel where the Fall Apple Festival will be held. A total of 12 apple trees will be planted along the 85' fence. Granny Smith, Jonafree, Enterprise and Gold Rush will give everyone a variety they'll love.

- **Peace Garden -**

Size of Space - 26'x25' (650 sq ft)

This will become the entry to the Learning Garden. It will be full of color with Flowering Cherry trees, Texas Sage, Spirea, purple & yellow daylilies and Nandina. Two sections of benches will be set inside with large boulders in the middle for sitting.

