GARDEN CURRICULUM

For Kindergarten - Third Grade November, 2000

prepared for the

RUTH T. and WILLIAM L. PENDLETON MEMORIAL FUND

by

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GARDENS for HUMANITY

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INTRODUCTION

Acknowledgments

The development of this Garden Curriculum was made possible by a grant from the Ruth T. And William L. Pendleton Memorial Fund to Gardens for Humanity, a national non-profit organization which facilitates and catalyzes the creation and integration of gardens and works of art into programs for children, the sick and the elderly.

The Curriculum is based on and documents the authors' experiences between 1995 and 1998 teaching and conducting garden classes and activities with children in Kindergarden through Third Grade at the Pine Forest School, a Waldorf-inspired public charter school in Flagstaff, Arizona.

Our work would not have been possible without the vision of Adele Seronde, founder and president of Gardens for Humanity; the consistently cheerful and patient hard work of many Pine Forest School parents including Mary Balagna, Meg Bollig, Susan Craig, Denise Mondragon, Veronica Seronde, Regina Wolfe, and many others; the enthusiastic participation of teachers Louis Bullard, Dorothy Iselin, Marcie Pollack, and Eleanor Seidman; and the steadfast support of the school leadership, especially founding Board members Donny Dove and Teresa Vail. To these and all the others who helped with their energy, heart and love for the children and Nature, we offer our deepest thanks.

We hope that this Curriculum will help inspire and encourage teachers and others seeking through structured garden classes and activities to engage young children in hands-on experiential love and learning of the natural world.

Gardening In Flagstaff

Flagstaff lies at about 7,000 feet elevation in the mountains of northern Arizona. The southwest mountain climate provides mild winters, moderately hot summers, a frost-free growing season of not much more than three months – and especially, intense sunlight, unpredictable and scanty rainfall, and consequent very low relative humidity year-round. Thus, our particular local conditions dictate close attention to frost- and drought-tolerant plants, heavy soil mulching, and careful consistent irrigation throughout most of the year.

Every place has its own particular set of climatic and environmental conditions which will shape successful garden strategies. This Curriculum is not limited to use in any one area or region. Rather, it provides conceptual and experiential tools and processes with which the children – and their teachers and parents – may learn to observe and understand what is happening locally, and to adapt their local garden approaches and activities accordingly.

In The Beginning

When we started our garden program in the fall of 1995, the Pine Forest School had just opened its doors for the first time. The school was situated at a former vocational school facility in an industrial section of Flagstaff. The school site was bounded by the railroad tracks, a car dealership, a storage facility, and the state police's regional compound. The school buildings were two cinder block and metal-sheath structures surrounded by asphalt and concrete parking areas and lifeless cinder soils. A few small trees and scraggly shrubs were planted beside one of the buildings. No flowers. No grass. No butterflies. Few birds. Hardly even any weeds.

Goals And Objectives

"In the end, we will conserve only what we love, we will love only what we understand, we will understand only what we are taught"

-- Baba Dioum, Senegal

From the outset, our fundamental Goals were to nourish and strengthen the children's love and compassion for the natural world, and their understanding of our human inter-relatedness and inter-dependence with the greater community of all living beings on the Earth.

We wanted the children to observe, experience, feel, participate in and learn about the wondrous beauty and order of the natural world. We wanted the children to connect deeply with plants, animals, soils, water, wind and sun -- to engage all of their senses, to experience and learn through doing, and to delight in the changes wrought by their own gardening work.

To do this at the school, we had to work with the children to transform the barren school grounds into an environment of beauty and wonder. We also needed to develop curricula, teaching materials, and processes.

Approach – The Earth Is The Teacher

"Only look at what is to be seen, and you will have garden enough without deepening the soil in your yard. We have only to elevate our view a little, to see the whole forest as a garden."

-- Henry David Thoreau

We believe that the natural world – the marvelous interwoven communities of plants, animals and other creatures formed through the agencies of Fire, Water, Air and Earth -- is truly our first Teacher, our first Classroom and Curriculum. We believe that academic, social and moral lessons appropriate to every age may be drawn from observing, experiencing, and working with the Earth and the natural world.

There was a time when everyone's first teacher was the Earth, when all of the world's peoples and religions took their teachings from the Earth's cycles, from observing her plants and creatures and moods. There was a time when our senses were alive and awake to the lessons of the natural world.

Young children learn almost entirely through their senses. Yet today, in our predominantly urban American culture, the great majority of our children spend an average of three or four hours every day indoors, passively, their senses and curiosity, their imaginations and creativity being numbed and deadened by television and video games. And then, when at school they act out in accordance with the energies and images fed them by the electronic media, one tenth of our children are sedated with Ritalin and other behavior-modifying drugs, to make them sit still and listen passively to their teachers...

We believe that our children -- and we as adults -- may be healed and strengthened by re-engaging our minds, our bodies, our senses and our imaginations in the natural world. This is why we offer this Curriculum.

We seek to relate all of our garden themes and activities to what is actually going on in the garden and in the natural world around us -- to the teachings and lessons being offered at any given moment by the Earth. This Curriculum includes music and poetry and craft projects as well as math and science. The primary music, however, is the ever changing garden. We will observe and feel and work with the cycles of the sun and rain and seasons, of the weather, of plant and animal life. We will learn to take silent walks and to reawaken and enrich our senses through the wind on our faces, the warmth of the sun, the crunch of pine needles underfoot, the birds around us.

Developmental Stages Of Children -- Teaching Through The Imagination

The most important thing to remember when planning lessons is to keep the developmental stage of the children in mind. Teach each class what is right for that age. For example, if your children are under seven and you would like them to experience the element of wind, your plan will be much different than if your children are nine or fourteen years old.

<u>Children Up To The Age Of Seven</u> should be working with their bodies and senses while playing in the garden and exploring and discovering and imagining. We emphasize nourishing the children's imagination, bringing to their very receptive minds pictures filled with feelings which reflect the subtleties of nature. This keeps what is already there alive in the children. Imagination makes the difference between intelligence and genius – learning is built on imagination.

This Curriculum includes many activities of observation and interaction with all of the elements – Fire, Water, Wind and Earth. These activities will often be presented to younger children through the imagination and ongoing stories of gnomes and elemental beings – fire fairies, wind spirits and the like. The poetry of the elemental beings will make the experiences live for the younger children -- will inspire the older ones to write their own stories and poems.

The younger child can experience the wind on an opportune day while it is blowing; trying to catch tumble weeds or scarves in a circle game, listening to the trees sing and watching their movement, or racing hard on a windless day to create some wind of their own. You may encourage the activity, spontaneously singing a song of the wind, and telling a story of the wind, which gives it a character.

Before the age of nine, everything in the child's environment can talk to each other and act with each other as humans do. We want to guard and protect the children's imaginary world. Not create illusion, but protect what already naturally lives in them -- the wonder and newness of the world and the possibility for all things. Young children may often be damaged by a language that does not participate in their own world view.

You may use animism in creative ways and speak of the plants, stones and animals as though they were human. They will come alive to love and struggle with one another, to have all the same human temperaments and failings as the children. Many lessons of working together and accepting diversity, helping with chores, loving the Earth may be given to the children in story form. You may use feelings and actions that are obvious in the children -- and others which some children may need to explore and try on. Group work is wonderful for the younger children.

Children up to age seven imitate everything they see. A nature table, a moss garden, earthworm box. Collecting daily compost from lunches and feeding it to them. Collecting, sorting, matching

colors and shapes, stacking things found on walks, sorting seeds after collecting them, same with rocks and sticks.

<u>Children After Seven</u> are still engrossed in the feeling and imaginative realm even though they are wanting more and more information as they get older. It is not till the child is nearing fourteen that you can teach them abstractly through the intellect. Nevertheless, the garden is still the basis and living laboratory for all of the experiences.

In the younger years, the child doesn't distinguish herself from the environment, but by nine years old this process of separation, of developing the sense of a distinct "I" is almost complete. After the age of nine, the child is needing to discover and work alone as well as in group projects.

To bring older children to experience the element of wind, for example, with the nine year old child, you might explore kite making, sail-boating (putting a sail on a block of wood), pretending to be a particular plant (how would it feel to be a mullein plant on such a windy day?). Have them draw or paint a picture of wind, copying down in their best cursive writing a poem or song or story which you have told them and then written on the board.

With older children you may also add graphing of the wind's velocity over a period of time, combined with observing the effect on plant growth of living in places either exposed to or sheltered from the wind. Clear thinking and the scientific process will be added to the artistic experience. The children will be interested in meteorology, studying how winds are created. Be sure to give purpose to the graphing, by using the information to decide where to put the garden, where the tall wind-breaking plants like corn might be grown, other ways to provide shelter from too strong or hot winds.

Organization, Process And Use Of The Curriculum

Our Garden Curriculum is organized in four eight-week blocks, one for each season -- Winter, Spring, Summer, Fall. Each eight week season block is divided into four two-week long Main Lessons. Finally, each Main Lesson includes two 45 minute class periods per week, for a total of four class periods per Main Lesson.

The two class periods per week form the basic unit of instruction. In each two-day unit, we want the children to observe, feel, experience, and work with plants, soils, water, sun and air, and all the creatures who come to the gardens; to reflect on and discuss what they have observed and experienced; and to record their growing understandings through words and art work in their Garden Journal/Lesson books.

Thus, for each weekly topic, we take the children through a process of (a) opening the children up; (b) engaging them in hands-on activities and experiences; (c) reflection, discussions and

explanations; (d) more hands-on activities and experiences; and finally (e) consolidation and strengthening of the learning process through art and journal work.

The two 45 minute Garden Classes per week are organized:

Day 1 (a) set tone with verse/dance/song/music -- 10 to 15 minutes; (b) outdoor hands-on activity - 30 to 35 minutes;

A day or two between classes, to let the experiences sink in; then –

Day 2 (c) story, discussion -- 10 to 15 minutes; (d) outdoor hands-on activity -- 20 to 25 minutes;

(e) art work, journal writing -- 10 to 15 minutes;

We wrote the Curriculum to document our own year-round Garden program, and out of our desire and hope that young children have as much time as possible to experience and work with the natural world – and to provide at least some balance to the cultural diet of television.

We do recognize, however, that in some cases teachers and schools may not be willing or able to dedicate a consistent two periods a week all year long to gardening. In such instances, the Curriculum may be used as a general resource guide, from which teachers might pick and choose one or several specific two-day units to engage in with their children – rather than taking on an entire seasonal or annual progression.

Role Of Adults - Teachers And Parents

Your gardening program will need the leadership of adults. The children will experience the garden through their own senses, but they will also absorb your own gratitude and connection with the natural world. If teachers and parent volunteers surround the children with their own concern and love for the earth, those children will grow up with a deep-rooted connection to it.

Adults are needed to model the joy of the physical work and the deep silent focus of observation and of attuning our senses to what is going on in the natural rhythms and cycles. Adults also model order with well-kept tools.

We have found that –

• for a successful year-round program, you must engage the participation of at least one individual -- teacher, staff, or parent -- with vision, love of gardening and children, practical knowledge, and with the commitment to follow through during the entire cycle of seasons;

during the outdoor activities with younger children especially, in order to convey and hold the
sense of peace working in the garden, you should have one adult for every two to four
children. This will require either mobilizing enough parent volunteers; or engaging the other
children in other activities; or even having the teacher keep the extra children in the classroom
until their turn comes.

And Finally, Some Glimpses Of What May Be Ahead For You...!

Second graders tumbling out of their seats onto the floor to enact the plant life cycle, first curled up as seeds, then germinating, squirming, sprouting, growing, reaching leaping for the sun... third graders yelping and squealing with delight as with each shovel of compost turned, more worms and sow bugs come into view...fourth graders wanting to work, with shovels, wheelbarrows, rocks...a troubled child and his divorced father walking hand-in-hand during garden work together..."hyperactive trouble-makers" gentle out and are 'grounded' when allowed to work on garden tasks with one-on-one mentoring and attention.... volunteer parents (mostly moms) hacking through asphalt to make space for corn planting....and, later, "build it and they will come" – the once-barren school yard is alive with flowers, bees, butterflies, hummingbirds, horny toads ...the children make their own little gardens in different corners...and they take the garden ideas home...