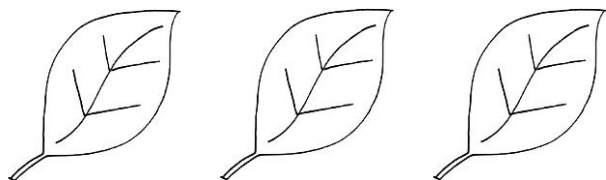




Growing a Nature Preschool



Rebecca Wolf

Director of Education & Garden
Operations

Queens Botanical Garden

Eileen Prendergast

Director, Education

Chicago Botanical Garden

Cara Scarce

Manager of Studio Programs

Newfields

Newfields



Newfields by the Numbers

152 Acres of Land

300 Full Time Staff

50,000 Artworks

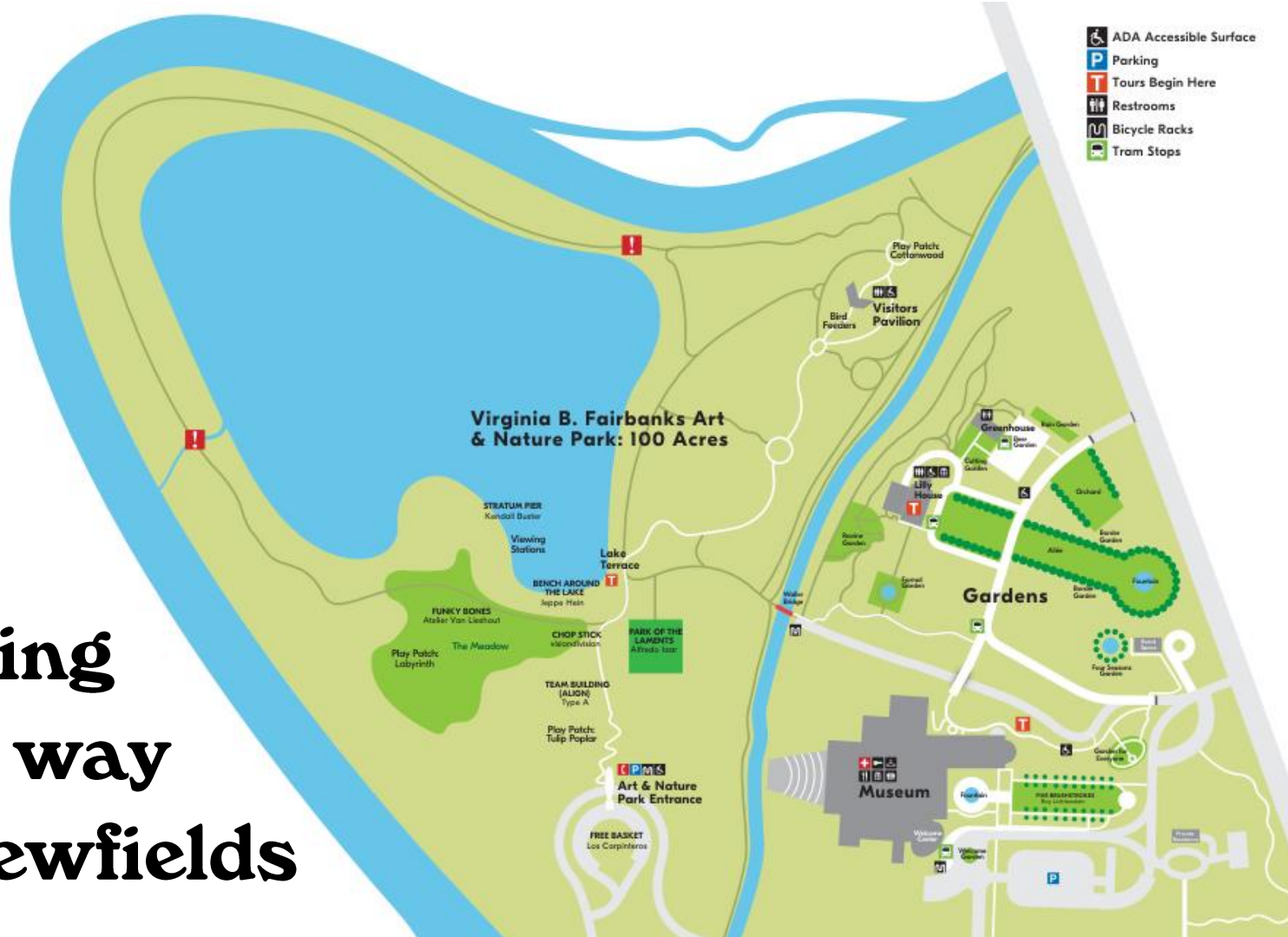
10,000+ Plant Species

250,000 Spring Bulbs

135 Years Old



Finding your way at Newfields



St. Mary's Child Center at Newfields Preschool

Enrollment: **12 students**

Student to Teacher ratio: **6:1**

Student ages: **3, 4, & 5**

School Day: **9-11:30am**

School Year: **August-June**

Annual Tuition: **\$5,170**

Full time/Part Time options

Tuition/Scholarship



The (Indoor) Classroom



Growing a Nature Preschool at Newfields



Early Childhood Programs at Newfields



Toddler Art Group



wee Wonders



Preschool Summer Camp

Reggio Emilia at Newfields

“Children need the freedom
to appreciate
the INFINITE RESOURCES
of their hands,
their eyes
and their ears,
the resources of FORMS,
MATERIALS,
sounds and COLOURS.”

Loris Malaguzzi



The Business Plan



An Average Day at Newfields Preschool

9:00 – 9:15

9:15 – 9:45

9:45 – 10:15

10:15 – 10:30

10:30 – 11:00

11:00 – 11:30

11:30 – 11:45

Drop Off

Exploration and Play in Classroom

Gallery Visits and Special Guests

Morning Meeting

Outdoor Activities and Project Work

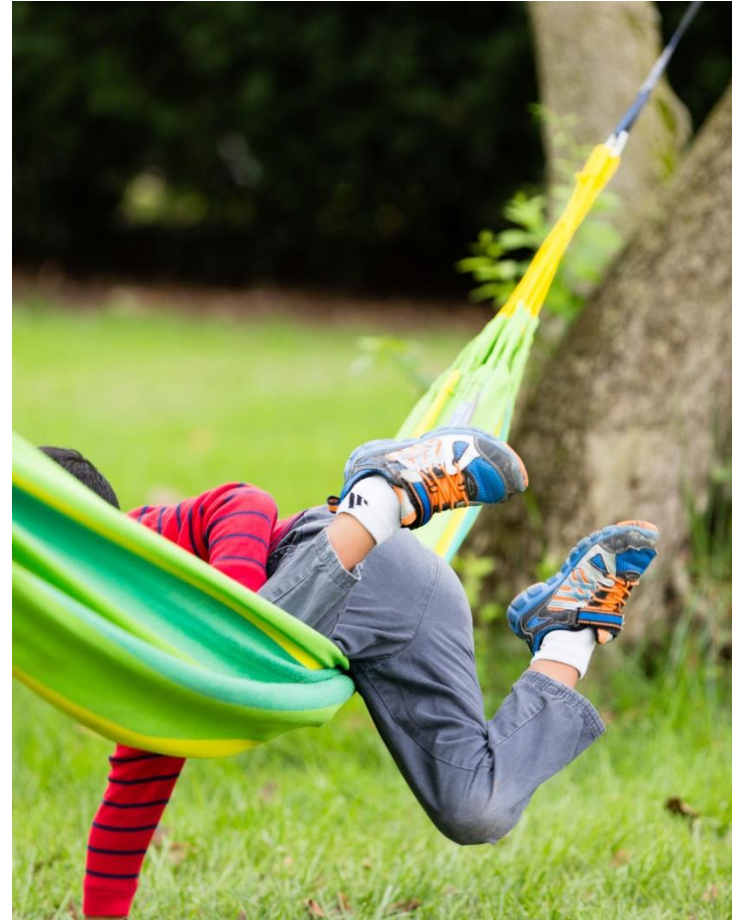
Clean Up and Snack

Pick Up



Challenges

- Storing Muddy Boots
- Occupying a Museum Space
- Refining Processes
- Recognizing Limitations



Successes

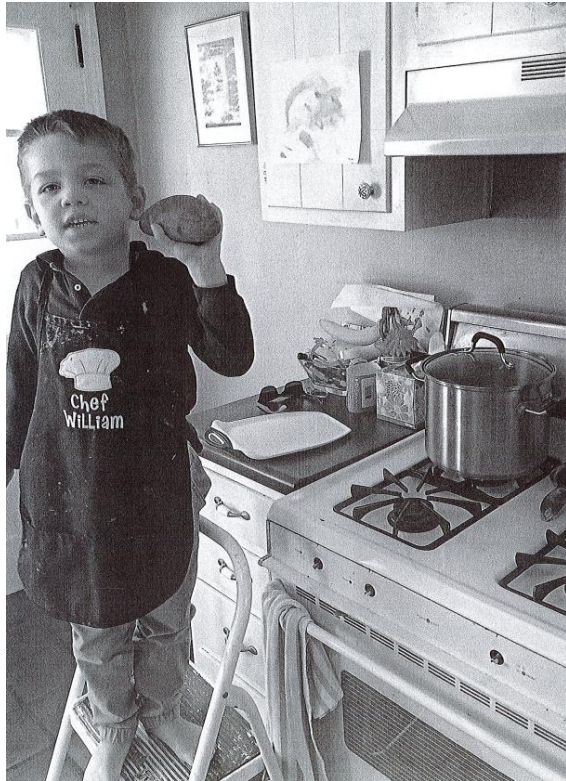
- Teaching Team
- Integrating Art + Nature
- Learning Laboratory
- Returning students



Potato Harvest Project



Potato Harvest Recipes



FAMILY POTATO "PROJECT"

In honor of our splendid potato harvest this week, we decided to send home a fun project for the children to do with their families. Today, each child will be coming home with a potato to cook in some way and taste at home. We ask that each family write down a recipe or describe in some way how they cooked the potato, and then each child can draw a picture of the finished potato dish and write (with family help) down how the potato tasted, smelled, etc. after tasting.

Enjoy!
Mary & Elizabeth

RECIPE: POTATO MUFFINS

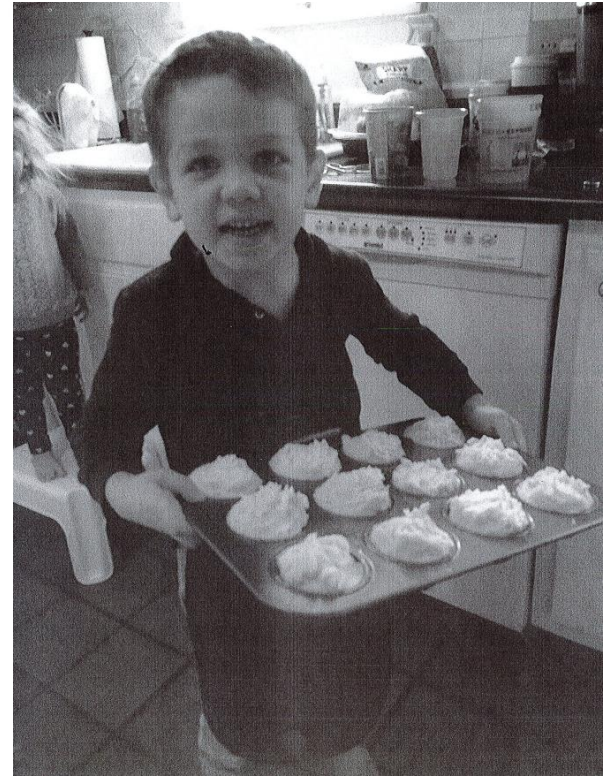
"WE WASHED AND PEELED. THEN CUT THEM UP AND PUT SOMETHING ON THE STOVE AND POURED THEM INTO THE PAN. THEN PUT LOTS MORE INGREDIENTS IN THEM. BUTTER, YUCKY MILK (CREAM)... SHREDDED CHEESE. AND PUT THEM IN THE MUFFIN PAN. AND POTATO DISH DRAWING: PUT THEM IN THE OVEN."



DESCRIPTION OF HOW POTATO TASTED/SMELLED:

"THEY SMELLED GOOD. LIKE CHOCOLATE."

"THEY TASTED YUMMY LIKE POTATOES. AND I LIKED THE KIND I MADE BETTER THAN THE OTHER KIND."



Label Writing Project



Preschool Stories

Meerkats

2018

Cracking Art

Italian, founded 1993

recyclable plastic

Collaborative by nature, meerkats travel in groups known as “mobs” or “gangs.” This is essential to their survival. Each member of a mob acts as a lookout, warning others of predators. They are also able to adapt to their environment, even in the most hostile conditions.

SUMMER
WONDERLAND:
SPECTACULAR
CREATURES

Preschool Stories

Addie: Mine is dancing.

Ollie: Mine is spitting.

Aerith: Mine is drumming.

Addie: There at a birthday party for the meerkat. Time to blow out the candles. Here's your cake, here's my cake.

Ollie & Aerith: Num, num, num.

Wild animals. Please do not ride.



Addie | Age 3



Ollie | Age 3



Aerith | Age 4



Growing a Nature PreSchool

By Rebecca Wolf

Assistant Director/Director of Education and Garden Operations

Queens Botanical Garden, Flushing, Queens, New York City

Mission: Queens Botanical Garden (QBG) is an urban oasis where people, plants, and cultures are celebrated through inspiring gardens, innovative educational programs, and real-world applications of environmental stewardship.



Our Programs: School Programs

- Botanical/Science Content
- Year-round but matching school calendar
- 17 different workshops
- Mostly Mornings, matching school bus schedule
- Mostly one-time visits



Our Programs: Children's Garden

- Gardening and other nature based programming
- Spring, Summer and Fall sessions
- Ages 4-10
- Split into groups by age
- 8-10 kids per group with 2 counselors
- Spring: 8-week series, weekends
- Summer: Two week sessions, weekdays
- Fall: 5 classes, can do drop-in or whole series, weekend



Our Programs:

Garden Buds (newer)

- 2+3 year olds w/caregiver
- 1 hour program
- Offer both weekend and weekday
- 4 week series (tried 6-week but too long)
- Sessions sell out very quickly
- Spring, Fall and just added Summer 2018
- 5 options: 1 weekday, 2 Saturday, 2 Sunday



Our Programs:

Nature Discovery Area

- Installed to ‘test out’ a freeplay area
- All natural materials found on site
- Pilot started at large event
- Incredibly successful
- Has mostly biodegraded (installed 2015)



Rebecca's inspiration: seeing is believing

- Nature Explorium: Middle County Public Library (Long Island, NY)
- Brooklyn Nature Days: Prospect Park, (Brooklyn, NY)

Nature Based PreSchool Conference through Natural Start Alliance (under NAAEE)

- Nature Preschool at Dodge Nature Center: (St Paul, MN)
- Green PlayYard, Minnesota Landscape Arboretum (Chaska, MN)

AND SO MANY MORE!!!!



Nature Play Programming- how do we do it!?





Forest Explorers Season 1: Autumn 2016

- 6 children, 2 teachers
- 2 days per week; same children both days
- 3-6 years old, must be potty trained
- 3 hours per day

Revenue: \$4720

Expenses: \$4865 (84% Staff time, 16% OTPS)

Net: **-\$145**





Forest Explorers Seasons 2 and 3: Spring and Summer 2017

- 12 children, 3 teachers + one intern
- 4 days per week; children chose 1, 2, 3 or 4 days/wk
- 2-6 years old, if not potty trained parent must stay
- 3 hour sessions
- Updated curriculum
- Sessions: March/April, May/June, July/August

Revenue: \$32,225

Expenses: \$29,286

Net: +\$2939 ✓





Forest Explorers Seasons 4 and 5: Autumn and Winter 2017/8

- Only change in structure is 2 days/week minimum sign-up
- Expand number of weeks per session
- Sessions: September to November; January to March
- Solidify cold weather curricula and space
- Less full winter registration

Revenue: \$36,103

Expenses: \$31,158

Net: **\$4945** ✓





Forest Explorers: Season 6 and beyond

- Increase number of children
- Meet children first
- Structured internship program
- Pilot afternoon program:
 - Older children only (non-nappers)
 - Limited to 8 children
- Budget in office hours
- Minimize set-up/breakdown
- Continue breaking even



Issues and Concerns:

1) Initial lack of clarity about the program in communication with families

Resolved by:

- Require a ‘new family questionnaire’ (added spring 2018) completed
- Elicit and discuss previous experiences in similar settings
- Require that all new families observe a 45 minute segment of the program (added spring 2018)-- used a doodle poll for scheduling!
- Increase and expand staff training so everyone could speak confidently and clearly
- Registration link is not public; we invite people to sign up (Downside: a lot more work on our end, but worth it!)

Issues and Concerns:

2) With expanded program, need experienced staff

- Be VERY specific on job descriptions and during interview (outdoors, with kids, heavy lifting, all weather....)
- Review motivation/protocols/techniques of program throughout the season
- Pay a reasonable rate
- Offer PD and train them well! Do readings but also observations of our program and other similar programs, watch videos
- Weekly meetings and check-ins throughout
- Talk through challenging children/families. Come up with joint solutions
- Have backup so everyone can get a break

Looking to future programming

- More family engagement
- More collaboration with Horticulture, Farm and Education teams
- Scholarships
- Adding office hours
- Making the area shade/rain tolerant
- Creating an preschool/UPK program
- More PD for staff
- Looking for older (homeschool) children to join
- Adding social justice and other relevant issues to training and curricula
- Need for separate area that is not open to the public

One day in the life of an Expanded Forest Explorers Program running 41 weeks of the year

Time	Group	# Children	Activity	Head Teacher	Co-Teacher	Assistant 1*	Assistant 2*	Total Staff	Support
8:30-9:30 (K 9-9:30)	Set up	0	Set up	\$15	\$18	\$15	\$8		\$41
9:30-10:30	Group 1	12	Open Play	\$30	\$18	\$15	\$15		\$48
10:30-11:30	Group 1	12	Meal Story Art	\$30	\$18	\$15	\$15		\$48
11:30-12:30	Group 1	12	Open Play	\$30	\$18	\$15	\$15		\$48
12:30-1:30	Group 2	4	Lunch	\$30	\$18	\$15	\$8		\$41
1:30-2:30	Group 2	4	Open Play	\$30	\$18	\$15			\$33
2:30-3:00	Lunch break	0	Lunch break	\$0	\$0				\$0
3:00-4:00	PLAN (EOD)	0	Planning EOD	\$15	\$9				
Mondays	OFFICE	0	Work/Teaching	\$30		\$0			
				\$210	\$117	\$90	\$60	\$477	\$258
				X 4 days per week	4 days per week	4 days per week	4 days per week	4 days per week	
				47 weeks per year	43 weeks per year	41 weeks per year	41 weeks per year	43 weeks per year	
				39,480	\$20,124	\$14,760	\$9,840	84,204	
Mondays	Children	Children	Revenue		Staffing	Supplies	Overhead	Contingency	Annual Cost of Program
8 X 20	12 X \$42	4 X \$22				Staffing + Supplies \$87,644	Staffing + Supplies \$87,644		
\$160	\$504	\$88	\$752			\$20 per day			
1 days per week	4 days per week	4 days per week	4 days per week			4 days per week	x	x	
31 weeks per year	41 weeks per year	41 weeks per year	43 weeks per year			43 weeks per year	10%	5%	
\$4,960	\$82,656	\$14,432	\$102,048		\$84,204	\$3,440	\$8,764.00	\$4,382	

*2 fewer children are paying due to scholarships and under enrollment

SEASON	WEEKS
WINTER	10
break	2
SPRING	12
break	2
SUMMER	7
break	2
AUTUMN	12
break	5
	41 ON
	11 OFF

THANKFUL!

- **Horticulture** (mowing the lawns, letting us pick flora for projects, pruning the trees over our heads!)
- **Education** (sharing staff, jumping in if needed, sharing bathroom and other spaces, collaboration on curricula, giving us gardening spaces)
- **Security** (making sure the kids are safe!)
- **Maintenance** (fix broken objects, let us use their tools as well as laundry machine)
- **Visitor Services** (helping out parents and other visitors, parking, etc)
- **Development** (looking for various grants and opportunities-- we did receive one during our first season!)
- **Marketing** (created our flyer!, helped us GREATLY with registration forms and online documents, edited our listing many times on the website and social media)
- **Finance and HR** (helped make sure we were meeting our goals, paid our staff, helped hire and make decisions on staffing)
- **Executive Director** (pushed for and encouraged us!, allowed us to run our experiment, helped raise money, network with other leaders about our great program)



CHICAGO BOTANIC GARDEN

Growing a Nature Preschool

Eileen Prendergast

Director, Education

American Public Garden Association

Conference 2018

Chicago Botanic Garden

- North of Chicago in Glencoe
- Opened in 1972
- 385 acres: 27 display gardens & 3 native habitats
- 240 full time staff
- 1 million + visitors; 51,000 member households
- 150,000 people in 1,700 education programs



Mission: We cultivate the power of plants to enrich and sustain life



Preschool Overview

Year One	Monday	Tuesday	Wednesday	Thursday	Friday
Mornings: Classroom A	4 year olds	3 year olds	4 year olds	3 year olds	4 year olds
Afternoons: Classroom A		3 year olds		3 year olds	
Year Two	Monday	Tuesday	Wednesday	Thursday	Friday
Mornings: Classroom A	4 year olds	3 year olds	4 year olds	3 year olds	4 year olds
Afternoons: Classroom A	4 year olds	3 year olds	4 year olds	3 year olds	4 year olds
Year Three	Monday	Tuesday	Wednesday	Thursday	Friday
Mornings: Classroom A	4 year olds	3 year olds	4 year olds	3 year olds	4 year olds
Mornings: Classroom B		3 year olds		3 year olds	
Afternoons: Classroom A	4 year olds		4 year olds		4 year olds
Afternoons: Classroom B	3-5 year olds	3-5 year olds	3-5 year olds	3-5 year olds	

34

55

78

3 year olds meet 2 days a week for 2.5 hours (\$2,520)

4 year olds meet 3 days a week for 3 hours (\$3,940)

3 – 5 year olds meet 4 days a week for 3 hours (\$5,200)

15 – 16 students per class

1:8 ratio plus volunteer

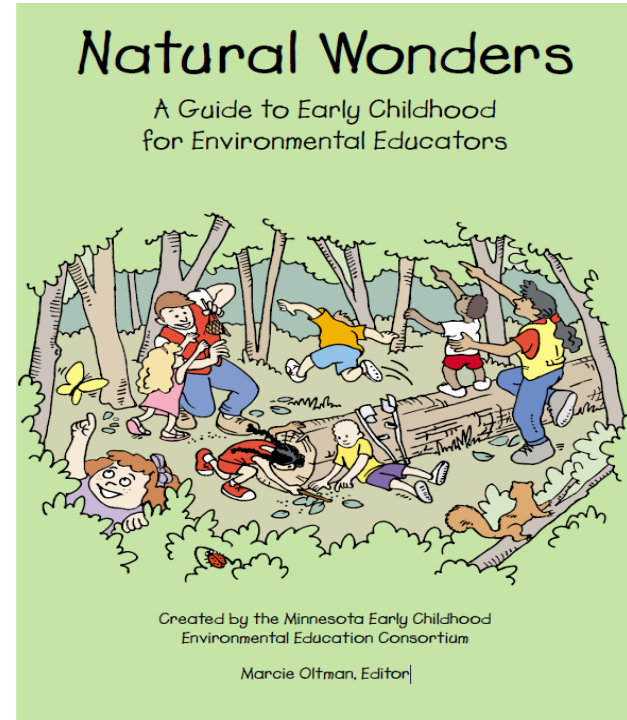
Early Childhood: The Early Years

Hands-on, inquiry-based science activities that did not meet audience needs



Inspiration

Emphasis on developmentally appropriate methods, processes, and experiences, not facts and content.



<https://www.seek.mn.us/sites/default/files/naturalwonders.pdf>

Youth & Family

- Open ended play
- Sensory “sandboxes”
- Toddler/baby adaptations
- Loose parts



Youth & Family



Teachers

- Early Intervention
- Gateways authorization
- Custom programs
- Conferences



Spaces: Growing Garden & Cove

Self-guided and
free play
opportunities

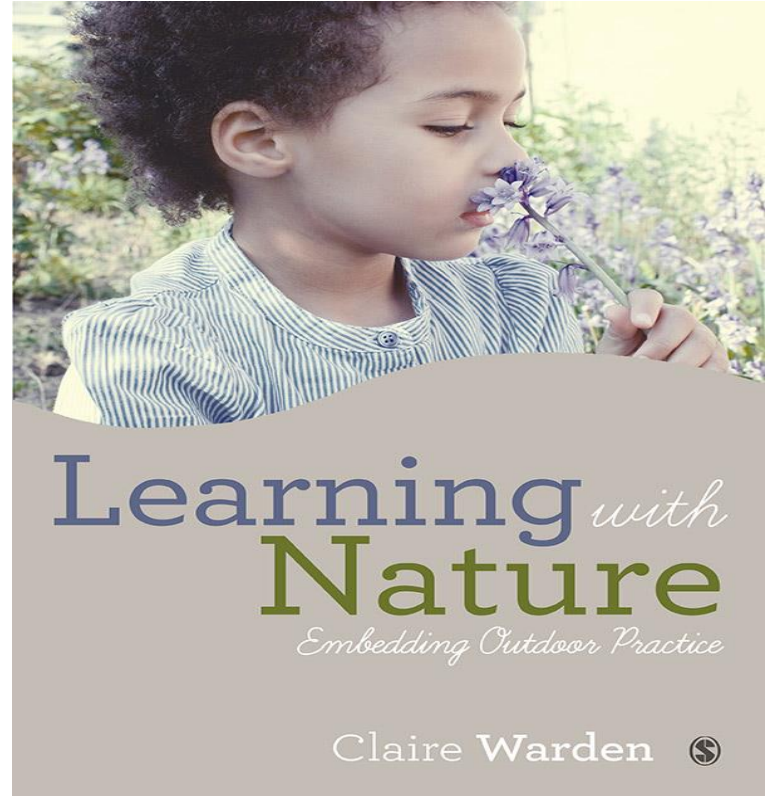


Nature Preschool

Can we really
do this?

- Conference
- Site visits & research
- Five year business plan
financials & programs

naturalstart
alliance



First Steps

- Hire staff-make the investment
- More site visits & research

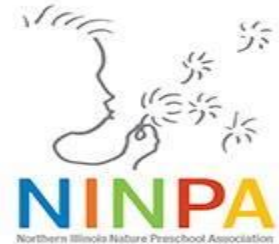


Schlitz Audubon
Nature Center



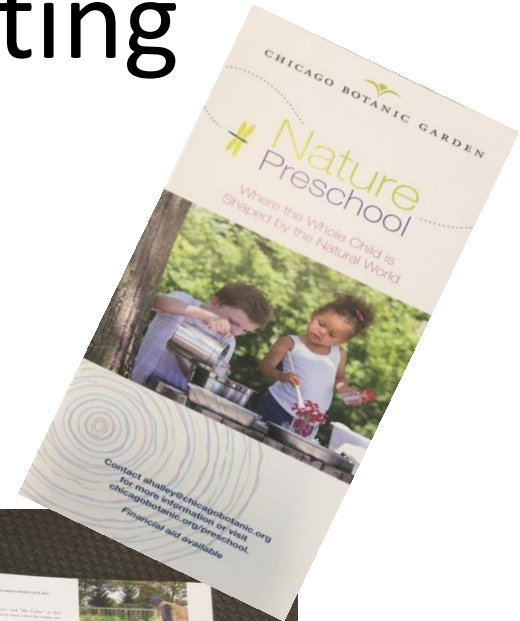
Professional Development

- National & international organizations
- Local organizations: Northern Illinois Nature Preschool Association & the Alliance for Early Childhood, Eastern Region Association of Forest & Nature Schools
- Conferences
- Continuing education



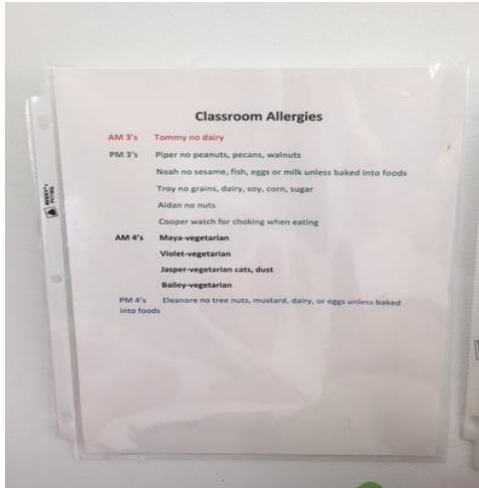
Advertising & Recruiting

- Open houses
- Libraries
- Buckslips
- Member magazine & catalog
- Presence at family programs
- Word of mouth



Licensure & Accreditation

- DCFS-Yes!
- NAEYC-Maybe!



Spaces: Nature Play Garden

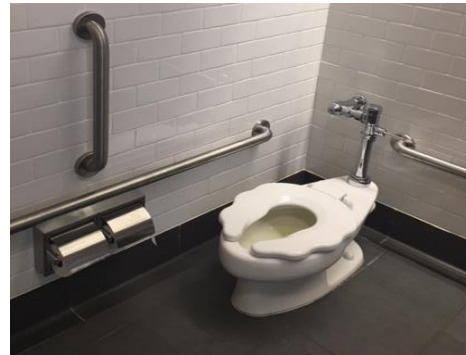
Gross Motor
Appropriate Risk
Loose Parts



Indoor Classroom



Indoor Classroom



Outdoor Classroom



Outdoor Classroom



Year One

- Enrollment began 9 months in advance
- ~~Two~~ Three classes!

Daily Schedule

30 – 45 minutes: Outdoor Classroom Play

1 hour: Garden Exploration/Hike

15 minutes: Snack

30 – 45 minutes: Continued Hike/Free Choice

15 minutes: Circle & Story

At least
50%
outdoors

Year One

- Staffing & volunteers
- Horticulture collaboration



Year One

- Parent & Family Support
- Gear
- Snacks



Year Two

- Assessments
- Conferences
- Substitutes
- Nature Buddies



ENVIRONMENTAL AWARENESS			
Does not show interest in the natural world and the living things in it	Takes an interest in the natural world and the living things in it	Shows respect and empathy for the natural world	Cares deeply about the natural world and is motivated to take action to protect it
PRE-LITERACY SKILLS			
Enjoys looking at and listening to books	Connects print with oral language and shows interest in letters and words	Associates letters with sounds and can read some words	Matches oral language with words on the page, points to words as reads
LARGE MOTOR SKILLS			
Can maintain short hike on flat terrain without falling	Sustains balance during movement experiences such as jumping	Can hike in a controlled way in a variety of terrains including hills and rocks	Can balance while walking along a log

Year Two: Documentation

“We began our hike looking for the letters in the tree branches. We searched...for...the letter ‘L’ for love! The children were so proud of themselves when they found the letters...I posed the question, ‘What do we love about the outdoors?’ The children and their ideas inspired our hike! ‘We love the snow,’ the children exclaimed, so we stopped to show some love to the snow...[We rolled] down the hill. This is something that the children love and it strengthens their vestibular system which is part of the larger sensory motor system. The vestibular system has to do with balance, movement, and is centered in the inner ear.”



Year Two: Emergent Curriculum

RAMPS!

“ A way of planning curriculum that is based on children’s interest and passion at a certain point in time.”



Balls



Forts



Waterfalls



Cookie
Factory

Year Two: Emergent Curriculum

FIRE!

1



2



3



Year Two

- More Horticulture Collaboration
- New Outdoor Spaces



Year Two: Natural Materials



Year Three & Beyond

- Financial aid
- Marketing plan
- Continued professional development
- More gardening
- Changing role of director
- Partnerships



Please continue the conversation



Rebecca Wolf

Director of Education and Garden
Operations

Queens Botanical Garden

rwolf@queensbotanical.org
718-886-3800 x237



Eileen Prendergast

Director, Education

Chicago Botanic Garden

eprendergast@chicagobotanic.org
847-835-8363



NEWFIELDS

A PLACE FOR NATURE & THE ARTS

Cara Searce

Manager of Studio Programs

Newfields

CSearce@discovernewfields.org
317-923-1331 x490