

**2016-2017 Nursery Curriculum Report**  
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*“Follow the child’s interests in people, objects, places, and activities, and talk with them. It’s social interaction that creates a link between the child and an ongoing activity. Help them learn how to articulate themselves and participate in the world.”*

*--Anne Haas Dyson*

Our nursery learners make a variety of choices during morning inside-outside play. Over the past few weeks, we’ve observed a flurry of planning and collaboration among the children while they performed a Wedding Ballet, constructed a house for puppies on the loose, made a temporary habitat for caterpillars beneath the walnut tree, and designed Magna-tile palaces for cats. Their emerging interests and pursuits provide us with so many possibilities for extending their investigations.

One morning during choice time, two friends exclaimed that they discovered a “roly-poly” bug beneath a rock. At once other children ran over to observe the finding, and soon a group of roly-poly detectives was formed. We used this exciting exploration to modify our plans for the day. We borrowed the book, *Hank’s Big Day: The Story of a Bug*, by **Evan Kuhlman and Chuck Groenink**, which was in our lineup of stories to read sooner or later this spring because not only does it feature a pill bug (a.k.a. roly-poly) protagonist but also the bug’s friend, Amelia, who enjoys pretending that she’s a pilot! How meaningful for our learners to be whisked into a story that connects to our ongoing study of female pilots such as Brave Bessie Coleman, Sarla Thakrla, Amelia Earhart, and Ruth Law and to our ongoing interests in Miquon wildlife and insects.

Next, we used our Inquiry time for that morning to take a hike to the Bamboo Forest to look for more pill bugs and other creatures featured in *Hank’s Big Day* beneath logs and rocks and above us in the trees. Many of the children practiced using binoculars, while others crept quietly like a fox, hoping to find deer or — a fox and her kits!

Anne Haas Dyson, whose scholarly works focus on children’s early literacy development and sociocultural language in play, notes that “Children learn the way we all learn: through engagement, and through construction. They have to make sense of the world, and that’s what play or any other symbolic activity does for children.”

It was a fascinating year in the nursery as we formed a community, worked and played together, asked big questions, and explored new ideas. Following the model of an emergent curriculum, our inquiries developed out of student interests and wonderings. An emergent curriculum is described by Susan Stacey (2009) in her text *Emergent Curriculum in Early Childhood Settings* in this way:

- While framed by the teacher, it is child initiated, allowing for collaborations between children and teachers, and giving everyone a voice.
- It is responsive to the child, thereby allowing teachers to build upon existing interests.
- In its practice, the teacher takes on the role of facilitator, taking what she sees and hears, and bringing to children the opportunity to discover more, dig deeper, and construct further knowledge.
- It is flexible in that curriculum planning, rather than being done well in advance, is constantly developing. Curriculum is dynamic, neither stagnant nor repetitive.
- It allows children’s learning and teacher’s thinking to be made visible through varied forms of documentation.
- It builds upon the recognized theorists in our field: the work of Dewey, Piaget and Vygotsky supports the philosophy of emergent curriculum.

Our days are structured to allow ample time for independent play, the generator for all learning, as well as times to gather together to share stories, play games, and explore ideas in greater depth. At the center of our day is inquiry time, in which half of the group explores an idea or concept of interest in greater depth, in a focused and

hands-on manner, while the other half of the group is learning with one of our specialists. During choice time learners discover how to become engaged in work and play, and through their experiences, they develop self-regulation and discover how they learn best, including choices about whether to work inside or outside, for how long, and when to stop to have snack. Reflecting back on the year we lived, it is amazing to see the thoughtfulness of the work of these children, the excitement with which they pursued discovery, and the many transformations that occurred.

### **A Day in the Nursery**

Each day begins with morning choice time in the classroom. Children sign in by placing their picture on an image of where they will go at dismissal, either the play barn for parent pickup, After-School, or the van. This offered opportunities for the children to investigate math concepts, such as counting with understanding and recognizing "how many" in sets of objects, understanding the effects of adding and subtracting whole numbers, and sorting and classifying. Questions the children have asked and answered include: "How many people are going home by van? How many people are After-School today? How many are signed in for parent pick-up? How many are going to Van and After-School?" Nursery children love to help, and one of the classroom structures we have that supports this strong desire is classroom jobs. After signing in, children check to see if they have a job (we take turns, alternating job days with vacation days), and then select the job of their choice. The nursery learners loved to choose their jobs and help ring the bell, set out snack, gather rest boxes, put out cots, and fly the bird to different parts of the schedule!

At 9:00 we have morning circle, where we sing songs, play games, tell stories, share news, sometimes explore a morning message, and greet each other. Morning circle is a chance to come together and talk and explore. Some of our favorite games from this year were Who's Under the Blanket? Harvest Blanket, Here We Sit, Gem, Detective, and Name and Word Scramble. Rhythm Sticks were a favorite movement game as well as songs such as, Squirrel, Squirrel, Fox, Fox, Butterfly, My Bonnie, Fish and Chips and Vinegar, There's a Train, Sleeping Bunnies, Freight Train, and many more!

After morning circle, we have choice time for at least an hour, during which children are free to move between the classroom and our playground, and snack is available during this time. We then clean up and have a whole group read-aloud--usually a story that is connected to our inquiry at the time. We then divide into half groups, and half of the children go to one of our five specialists for 30 minutes, and the other half stays in the room for inquiry.

Inquiry is a time for more focused, in-depth, hands-on exploration of a topic or idea. The children work in half groups during Inquiry, allowing for more space and voice in their investigations, which this year have ranged from pond and creek studies to balance scales and tile blocks.

After both groups have had inquiry and specialist time, we play outside to build up our appetites, and then we have lunch at 12:15 (sometimes a little later, depending on the flow of the day and our play). Nursery children will spend anywhere from 15 minutes to a full hour eating, and to ensure that everyone has the time they need to eat, we have choices available such as books, puzzles, one or two building toys, and outside.

At 1:30 we then have rest for approximately 45 minutes. During rest children who do not sleep will choose between bringing a selection of books, a box with building manipulatives, or journals to use. We believe that it is important for children to learn how to entertain themselves quietly, resting the mind that is working so hard all day making social connections, negotiating play, and making discoveries.

At the conclusion of rest we have closing meeting, which is another important ritual within our day. Students have an opportunity to share a highlight or "rose" of their day, share news, sing a song or play a game such as name scramble for phonemic practice. We make sure that we say goodbye to one another and if the buzzer rings and we aren't finished, the students joyfully say, "We'll be right there, buzzer!"

## Becoming Friends

Each year is a beginning of new faces, new routines and new discoveries. We learn how to be a friend and what it means to be a friend. We get lots of practice with trying a do-over, the language of conflict resolution through apology of action, which cultivates empathy. Together we embark on becoming a community of learners and friends who take care of one another. So, such as in years past we discussed what it means to be a friend and the responsibility of what it means to take care of each other, ourselves and our environment. These lessons were revisited daily, sometimes individually and sometimes as a group. We enjoyed many puppet shows which were often about exclusion.

From day one we began a ritual that was our greeting during morning meeting. Although seeing this greeting might seem mundane or simple at first glance, it was the beginning of building an amazing community; a community of students who took care of one another, respected each other and understood what it meant to be a part of a group. This ritual, which became a tradition, helped everyone practice how to make eye contact, recognized each individual in the group, and allowed each student to be seen. Jacky Howell and Kimberly Reinhard share in *Rituals and Traditions* that rituals and traditions offer a personalized sense of familiarity and create shared values. The students knew what to expect each morning and saying hello to their friends and teachers created a caring environment.

We began our year by learning about one another through interviews. We learned what our friends like to play, eat and treasure. We learned their names and about their families. The year provided growth in understanding how to listen to the perspectives of other friends and how to be kind and generous.

## Literacy

Our literacy curriculum derives from a collection of best practices in emergent reading and writing. Our philosophy of literacy is rooted in the understanding that engaging, rich and inspiring interactions with others and with the surrounding world propel us to listen, speak, read, and write. We aim to provide authentic opportunities to use these skills in work and play, and we model multiple ways to do so. Our approach to literature invites learners to delight in stories while simultaneously developing critical literacy skills. Children come to recognize their own ability to question the texts and authors, and explore intertextual relationships.

At the core of our program are daily picturebook read-alouds which create opportunities to interpret stories, make predictions and comparisons, immerse ourselves in story language, notice the parts of books, and simply fall in love with stories. During read-alouds we practiced **echo reading**, in which students echo the teacher, **shared reading**, in which they are responsible for certain parts of reading, and times to **“turn and talk”** in which learners pause to talk with a peer about an aspect of the text and then share back with the whole group. We explored the rhythm and cadence of language through chants and fingerplays, poetry, songs and nursery rhymes. One of the learners’ favorite things to do was dramatize texts as we paused the story for students to act out different parts while exploring tone and volume, and how to really become a character.

As we read big books we called the learners’ attention to the directionality of print, the ways that punctuation influences reading, and the idea that the length of a word relates to the length of its sound.

As literacy starts with ourselves, a great deal of letter study happened through exploration of our names. Students looked at each other's names and discovered similar letters, made connections between letters and sounds, and many began to recognize and read the names of their friends. The understanding that words are made of letters develops through name study, and learners were amazed to find the letters from their names inside of other books in our class.

Similarly, our explorations of writing also began with the learners’ names. Their names are an expression of their identity and a way to mark something as belonging to them; simply writing the first letter is an important step. We provided many authentic opportunities to use writing including **write-alouds**, in which the teacher models the thinking that happens while composing; **shared writing**, in which students helped write letters and words in a message using their growing phonemic awareness; and **individual writing**, in which teachers took dictation, or supported students in writing their own messages. Daily opportunities to write and draw were available at the art

table, in rest journals, at the easels, in handmade books, and in clipboards that could go anywhere. Learners were encouraged and supported to use writing in their play, and they created many restaurant menus, signs for their structures, recipes for mud pies, and movie tickets at play over the course of the year. Children learned how to use writing and drawing to represent their experiences, such as describing and reflecting on their story quilts inspired by **Faith Ringgold's *Tar Beach*** and ***Cassie's Word Quilt***. They were also invited to create their own unique fictional tales or nonfiction books.

During morning choice time this year, many of our learners working at the art table began to make art for each other. We observed how they took agency in talking about what they were creating, such as cards, collage, or drawings, and their intention to give it to someone as a kind gesture. We shared how exciting it is when people exchange handmade gifts with each other and how artists often exchange their work with other artists. Soon the art table became an innovative social space at choice time, where friends were making things, even paper inventions, with the intention of giving them to someone. Some children even began asking friends to create something for them, which prompted us to use Inquiry time for making a class experience book filled with these art gifts. Partnerships were made after picking names from a basket, and each pair of learners shared with each other some of their favorite things, including colors, animals, and shapes. Next they started to make a drawing or build a block structure that included the partner's favorite color, shapes, animal, or design, such as "swirls." This Inquiry time was filled with dialogue about what they found out about each other. "Gabriel and I both like cats!" "I used purple and pink because that's what Iris likes." "Lyndon likes red." "I like pink and purple. I'd love purple." Our learners brainstormed on ideas for a book title: "The Big Book of Cards," "The Happy Book!" "The Big Book of Kindness!" We struck a balance by calling it *The Big Happy Book of Kindness*. Our group has agreed that the book is "in production" as we continue to add more pages of kindness. Who knows? We may have to publish it in several volumes!

The opportunity to make something that is meaningful for someone and to begin to understand another person's experiences and emotions promotes empathy in our nursery community. In the article, "[Why Empathy Holds the Key to Transforming 21st Century Learning](#)," Thom Markham writes that "empathy can't manifest unless we have had our *own* experiences and emotions to contrast, compare, and connect with others—and we can see that empathy is more than a simple connector; it's the subterranean, fundamental glue that holds humanity together."

We recently read **Duncan Tonatiuh's *Pancho Rabbit and the Coyote: A Migrant's Tale***, which expanded our understanding of another person's experiences and emotions beyond the classroom. Pancho Rabbit's father heads north to work in the lettuce and carrot fields to earn money for his family. When he doesn't return home for the family's fiesta, Pancho Rabbit packs his father's favorite foods, including tortillas and rice and beans, and sets out to find him. He meets a coyote who promises to help him find his father in exchange for the food. Duncan Tonatiuh writes that "On the surface it is a story that reads like a fable, a bit like the Little Red Riding Hood or the Gingerbread Man. But the book is also an allegory of the terrible journey that undocumented immigrants go through in order to reach the U.S." Many folk tales and storybooks have been curated by the dominant "mainstream" lens. As a counterstory told by Tonatiuh, who is both Mexican and American, *Pancho Rabbit's* themes of family, community, culture, injustice, migration, and immigration emerged as we read and connected with the characters during the exciting narrative. This book became a three-day read-aloud to make space for the children's dialogue during the story: "He has to find work for money." "One day we came home and there was no food in the refrigerator." "Fiesta means party." "They had to get work for food because there wasn't any food." "Pancho Rabbit's family feels sad when the dad has to go to work." "Like my mom has a desk in my house." "They were going to have a party when he came back." "There's a pattern on the decorations." "He might be lost in the woods." "That was generous of him" [to give food to the coyote].

Each day, we took a "**book walk**" to invite our learners to retell the story to where we stopped the previous day. "They were sad." "Papa is going to get the food." "Maybe they're sad because they're thinking Pancho Rabbit is lost in the woods." "The oldest brother goes out—he's packing his papa's favorite food." "He meets a coyote and the coyote says 'It will take you days but I will show you a shortcut if you give me rice and beans.'" The children enjoyed acting out scenes from the story, showing how they might feel if they were Pancho Rabbit or the Coyote.

Additionally, the cooking in the text paired well with our exploration of grinding corn and cooking with corn and beans. This read-aloud story became a transformative process for our learners and for us because we shared our own experiences and emotions to compare and connect with our understanding of how Pancho Rabbit's family and the coyote might feel. Empathy grows from the children's openness, curiosity, appreciation, and awareness that can inspire them to engage with the world.

In *Reading for Living: How to Teach Reading in Today's World*, Lorraine Wilson asks, "How do we develop readers whose lives are enriched because of how and why they read; who are concerned about the lives of others, and who are prepared to use their literacies to improve the lives of all?" This year, owing to an emergent interest in pilots and airplanes, one of our learners and her family introduced us to ***Fearless Flyer: Ruth Law and Her Flying Machine*, by Heather Lang and Raúl Colon**. *Fearless Flyer* tells the true story of the first female pilot who broke the record in flying from Chicago to New York City in 1916. The children responded to the narrative as engaged text participants and text analysts, showing empathy to Ruth when she was told that women should not fly planes. "She wanted to be a pilot." "They said she couldn't fly. That wasn't nice." Next we read ***Nobody Owns the Sky: The Story of "Brave Bessie" Coleman*, by Reeve Lindbergh and Pamela Paparone**, which tells the story of Bessie Coleman, the first licensed African-American aviator. Owing to racial prejudice in U.S. in the 1920s, Bessie had to get her license in Paris. The children contributed to so much dialogue about unfairness, compassion, and admiration of Bessie in *Nobody Owns the Sky*. The children observed, "They didn't let her fly because of the color of her skin. That wasn't fair." "Anybody can fly. All people can fly today." Children as text participants develop new understandings from their experiential knowledge and meaning making. ***I Am Amelia Earhart*, by Brad Meltzer**, and ***Sarla in the Sky*, by Anjali Joshi**, invited our learners to make more text-to-text and text-to-world connections. *Sarla* is based on the true story of India's first female pilot Sarla Thakrla. Children noticed and wondered, "Is she the same age as Ruth Law?" "Boys and girls can fly planes." "Everybody can do things in the whole entire world."

#### *Writers' Workshop*

Writers' Workshop provided our learners with time and a collaborative space to write stories based on personal experience or sparked from their imagination. At the beginning of the year, Language Arts Coordinator Rossana Zapf demonstrated during Writer's Workshop how authors can draw and tell their story. Some of our authors and illustrators created story from fantasy play and fairy tales. Some were inspired by personal experiences, as with "This is my castle because it has these long lines, and this is the ocean. These are the crocodiles. The princess is walking." "This is me and Mommy going to the pumpkin patch. Not Daddy and Jasper because there's no room. I'm making little pumpkins for Smokey and Scout."

For another workshop with Rossana, our authors wrote response stories to Celia's story ***A Curly Tale***, about the adventures of a curvy line that transforms on each page, accompanied by alliteration (often excitedly referred to as "agglitteration") and onomatopoeia, such as "jaggety-jag," "loopity-loop," "squiggle, giggle, giggle." The children's collective responses were made into a book, *A Curly Tale Continues...*, which includes the adventure of a piece of yarn on each page, transforming in some way. Our authors also worked on drawing and telling stories, some of which were inspired by our read-alouds, family experiences and memory, and dramatic play, for this year's issue of *Miquon Grass*, the school literary publication.

An insightful conversation about princesses emerged during a read-aloud of ***Princess and the Pea*, by Rachel Isadora**, which takes place in an unspecified African country. When someone observed that "the princess doesn't look like a princess from other stories," Rossana took this opportunity to invite some responses to the question, What is a princess? The children began with "A princess is a person that has a pretty dress." "A princess looks pretty and she has a crown and long hair." "Not every princess has blonde hair." From their varied ideas, our learners were able to share that not all princesses look a certain way; they can have brown skin, short hair, or dress in armour as a knight. To support their critical analyses, Rossana read ***The Princess Knight*, by Cornelia Funke and Kersten Meyer** ("She defeated her brothers." "She's smarter than her brothers."), ***Rachel Isadora's Rapunzel***

(“Her hair is black.” “There was a sorcerer.”), and *Anklet for a Princess: A Cinderella Story from India*, by Lila Mehta and Youshan Tang (“The magic was just so beautiful.” “She didn’t have golden slippers. She had anklets.”).

The storybook, *Fox*, by **Kate Banks and Georg Hallensleben**, became so embedded in the children’s dramatic play because of the rising action of the narrative. A fox is born, and as it grows into a kit, it wants to be able to leave the den and hunt like its parents. Every day the adult foxes tell the kit that it’s not ready. Finally, it gets to leave the den and hunt, after months of learning how to hunt and avoid predators. The children revisited the story by acting it out, deciding about what roles to play and what to use as props. Then a learner thoughtfully asked, “What will happen after the ending? What if the fox goes out to find a partner?” This question prompted us to write a new story, inspired by *Fox*. Each half-group wrote a version of Fox’s new adventures. Writers’ Workshop proved to be a perfect time to show the group how the revision process can work. We began with brainstorming ideas and contributing to the narrative. Next time, we read our first draft and problem solved about the sequence, plot, and characters to add to the story. When we revised and edited our two collaborative stories, we were ready to “put them into production” as oversized class books. Each author helped illustrate a page of text by creating a collage with fox and coyote photographs.

With *Fox* being such an important book this year, we embarked on a Kate Banks and Georg Hallensleben author study. The children soon discovered that this author and illustrator team write storybooks that speak to their emergent interests and pursuits. The following textset became much loved for read-alouds and for independent book time: *A Gift From the Sea; Spider, Spider, Close Your Eyes; The Cat Who Walked Across France; and The Night Worker*. “They look like they’re all paintings.” “They have blue and mountains.”

Author Share invited our children to present their stories to the class and respond to any questions or comments from the group. Hallie Cirino, in *Tell Me More: Listening to Learners Explain* (ed. Eleanor Duckworth), notes that giving children a space where they can interact during the writing process fosters their development. “Social skills, phonetic concepts, confidence, and a sense of empowerment all seem to grow during this process” (p. 91). Working together in small groups, many of the children shared ideas about wildlife and plants, family experiences, and strategies they use for drawing or finding letter sounds, all of which adds to building our community of nursery authors and illustrators.

### **Painted Story Quilts: Piecing Together What We Treasure**

Inspired by the art and stories in *Tar Beach and Cassie’s Word Quilt* by **Faith Ringgold**, the nursery learners created a quilt square, using (1) wax pastels dipped in water and painted on muslin and (2) fabric and paper remnants for designing their borders. Each child selected meaningful elements for their work such as favorite shapes and colors, some symbolic, representational, or experimental drawing, and material with captivating texture. The children practiced independently cutting with scissors and pasting, thoughtfully arranging their work.

We reflected often this year that many parts make a whole. Our story squares are infused with sensory treasure, and, like Faith Ringgold’s character Cassie, each square tells a story that conveys our personal or community identity. The following extracts are from some of our quilt square stories:

*“And the story quilt goes straight up and down--vertical. I did four lines of border and cut them how I like them. Sometimes I got them on the fabric and that’s okay. When I made the border, I tried to keep it simple, but it’s beautiful.”*

*“The painting takes place in my backyard. And this is a fairy garden. And I planted it. Fairy flowers are growing in it. They smell sweet like fairy dust. It never rains in this garden.”*

*“Once upon a time, I was starting science time. You can see that I added a lot of color from all over the earth. I was holding a worm poop smoothie. I was going to feed it to the plants. And then another day they started to grow.”*

*“It happened for real. My Nona was planting plants to get food in the backyard. Then I came over to see if the peas were growing, and they were growing.”*

### **Mathematics**

Math is all around to observe through the lens of curiosity, wonder and excitement. This year in the nursery classroom, the students were observers of the multitude of ways that math presents itself both inside and outside of the classroom. Beginning the day using the sign-in chart, we compared and contrasted while asking the questions *How many students came to school today? How many are taking the van?* Our chart was a tool to use mathematical language such as *more than, less than and equal to* as well as an opportunity to make it personal and meaningful.

Each day, the bell ringer would have the exciting responsibility to chime the bell and tell the students how many minutes until morning meeting. This of course began by the teachers modeling for many weeks until it was turned over to the students. “Morning meeting will begin in 2 plus 1 minutes” or “morning meeting will begin in 5 plus 2 minutes.” Later in the year, a student provided this problem: “morning meeting will begin in 5 plus 3 take away 4 minutes.” This responsibility became an exciting way to practice simple addition and subtraction while allowing the students to have ownership of their work and play.

Morning meetings were a venue to play math games such as Guess My Rule, an attribute game where children and teachers would have to figure out what attribute a collection of objects had in common and I’m Thinking of a Number, a number game which reinforces the concepts of quantity. This year, patterns became an interest and were woven throughout the curriculum in all areas of study. During morning meeting our greeting evolved into an opportunity to make a pattern by using rocks or other found objects in nature. A student would begin a greeting by using two rocks and doing a tap, rub pattern, for example, while then saying good morning to a neighbor. This pattern changed daily depending on the leader. The students once again were the agents of this study; it was an interest and love of theirs and our job was to just make space for it.

Measurement was investigated through our many baking and cooking inquiries. We measured carefully, learning about teaspoon, tablespoon, a pinch of salt and a cup of milk. The students were keen observers of these endeavors and were always eager to try new recipes! We read books such as ***Froggy Bakes a Cake* by Jonathan London** and ***Bunny Cakes* by Rosemary Wells**. The nursery students learned about recipes and the step-by-step process this requires. Procedural text was discussed, explored and enjoyed and we learned about sequence and order. The children learned how to operate a corn mill, which we used to grind barley, and they discovered the strenuous gross motor work needed to make many cups of ground barley!

Additionally, we investigated geometry and measurement by collagraph printmaking and by studying the work of Piet Mondrian. Inspired by his use of straight lines to form new shapes, the children arranged strips of paper in exciting ways to see shapes take form, adding oil pastel to the negative space. Through our study of quilts we explored shapes, design, symmetry and pattern. We discovered how shapes fit together to create designs and form patterns. We built our block city of shapes after reading ***City Shapes*, by Diana Murray and Bryan Collier**.

Sewing stitches with yarn on burlap helped our learners practice fine motor and visuospatial skills as they created designs that fit within their embroidery hoop. Growing paperwhite bulbs and garden beans supported our math inquiry when we measured the height of the plants using unifix cubes and compared the results.

We used math in daily explorations of loose parts such as rocks, leaves and shells and manipulatives such as cuisenaire rods, unifix cubes, tangrams and counting bears. Outdoors we observed the number of tadpoles multiplying in the upper creek this spring. We also researched the egg-to-frog cycle in terms of time. Student-initiated projects at the makerspace table during choice time required problem solving with peers who were making bags, stuffed animal clothing, and kites out of paper, tape, and recycled materials. These materials were open-ended and gave space for the students to explore grouping, counting, comparing, contrasting, measuring, and configuring patterns.

Our math circle challenged our learners to play a game with ten frames and patterns on dot cards to develop their subitizing skills, the ability to “instantly see how many.”

We curated our year-long collection of rocks and stones by attributes including color, texture, size, weight. The children made comments like, “When I feel it, it feels smooth.” “It looks like the inside of a lemon.” “I wonder how it would sound if you hit it against another rock.” “It’s loud!” “I like it because it’s mixed with gray.” “It feels rough.” “I think it came from the sand because I see some sand on it.” “It has three curves and it’s bumpy.”

Our learners were steadfast and delightfully engaged with exploring measurement, often using the balance scales to compare the weight of a variety of materials such as pom-poms, blocks, and rocks. Using beads, wire, and sticks, we made Calder-inspired mobiles to hang in the Art and Science Show and around our room, and this turned out to be a meaningful way to play with balance. Friends worked in groups to construct a tower of Kapla blocks (to represent a beehive) and then they made a track of blocks leading all the way to the nursery door--we counted by tens and they used 119 blocks!

### **Pattern Study**

As soon as our learners stepped outdoors to play this year, they were intrigued by leaves. As they sorted their collection, they found some that were pointed, round, paw-shaped, skinny, and gigantic. They compared the vein pattern on one side and the speckles on the other side. Patterns! Our emergent curriculum leads us far and wide, and the children's exploration thus far invited us to look at repetition and design of patterns that interconnect within nature, math, sound, movement, art, and the cyclical pattern of time. One morning as we were noticing early spring buds, one child exclaimed, "Patterns are like a cycle!"

Studying patterns of feathers on the light table revealed characteristics that helped us imagine how birds fly, stay warm, and bathe. We paired this investigation with a read-aloud of *Feathers Are Not Just for Flying*, by **Melissa Stewart and Sarah S. Brannen**.

We investigated geometry, measurement, artifactual literacies, and social studies during our quilt study. How exciting to see our learners make connections of how many parts make a whole. Two quilt makers visited us and shared their family stories and handmade artifacts with us. The children wondered and observed, "What is a quilt?" "A blankie." "They're made out of fabric." "One is on my bed." "It has shapes." "Triangles." "There can be lines in a paper quilt."

The read-aloud of *The Quilt*, by **Ann Jonas** inspired us to create individual quilt squares using six shapes and embellishing the square with "dots doing the polka." We realized that there can be quilts made from paper, fabric, and other materials. Looking at some nonfiction books about making quilts gave us ideas about how different quilt patterns have unique names, such as "sun and waves" and "wedding rings." Our learners thought carefully of names during the process of their quilt square design, including "Butterflies" and "Triangles and Squares." Vocabulary such as vertical, horizontal, and diagonal became meaningful as they arranged the shapes on their quilt squares. We connected our squares to discover how many pieces make a whole quilt.

We were delighted to welcome two special quiltmakers to our classroom. One visitor, Sandy, shared that "My grandmother made a quilt for me and that's why I like to quilt." She described how quilts can be made from sewn pieces and from an appliqué process. Evan shared his community quilt with us, which was created by Sandy and many other friends. Together the children observed, "How many quilts do you have?" "About 30." "There's patterns." "That's a little quilt." "I love playing with colors." Emma's grandmother showed us a Fields and Furrows quilt, pointed out the hourglass block pattern, and told us an exciting story that corresponded with each meaningful square on Emma's *I Spy* story quilt.

We assembled our Velvet Paper Quilt, which was exhibited in the Miquon office. We helped Connie with the installation. The Velvet House quilt was created by the Ducks half-group, and the Monster quilt was made by the Guinea Pigs group. It is composed of triangles cut out of velvet paper, and we used oil pastel on top of the surface.

We read many texts to solidify our understanding of quilts. A square takes a journey in *A Perfect Square*, by **Michael Hall**, and as it breaks into pieces along the way, the possibilities to transform are endless. We began with perfect rectangles that (1) we painted and (2) we cut up into pieces that turned into new stories based on so many ideas. In *Moon Rope: Un Lazo a la Luna*, **Lois Ehlert** uses elements of Peruvian folk art to tell the tale of Mole who is tricked by Fox into trying to climb a grass rope to the moon. The children observed, "Rainbow stairs." "I notice a pattern." "Up-up-up pattern." "A pattern. Blue-green-blue-green." We explored making similar patterns from loose parts during Inquiry. We engaged with the singing and rhyming patterns of *Can't Scare Me*, by **Ashley Bryan**, with the words, "Too-de-loo-de-loo-de-loot! Tanto, tanto! I'm wild and I'm free! Grandma's stories can't



scare me!” Even more ideas about quilts and patterns emerged as we read **Rachel Isadora’s *Princess and the Pea***: “A quilt-shaped mountain!” “I think it’s colorful paper.” “I see a pattern!” To scaffold this experience, we invited our learners to build designs from strips of patterned fabric on heavy stock.

Patterns came into other studies this year as well. We drummed outdoors with a variety of objects to experiment with sound and pattern, and we made the horizontal and vertical stripes of Gee’s Bend quilts and the triangles of Magna-tiles allowed for thoughtful, complex designs. Next we welcomed spring with an introduction into beekeeping by Clara’s mom, Stephanie, painting the new hive with art specialist Nicole, which is now thriving on our classroom roof! We connected hexagons, trapezoids, and other block shapes to make a garden with honeybees, flower blossoms, and, of course, a playground.

We ended the year by experimenting with Suminagashi printing, a peaceful process of adding drops of ink to water to observe the pattern of swirls when the ink floats on the water. The children placed paper lightly in the water, lifting it up to be surprised by a colorful, marbled Suminagashi print. Many learners connected this printmaking experience to our shaving cream and food coloring printmaking earlier in the year as well as the end pages and illustrations in **Ezra Jack Keats book, *Dreams***.

Inquiry time during the final two days of school introduced the children to paper making. We discussed how much we enjoy using paper for so many projects during the day, and then we wondered about other ways to make paper without cutting down trees because “we need trees for air” and “the animals and insects live in trees.” We read about a paper recycling plant in ***The Way Things Work*, by David Macaulay**, and we made pulp by mixing our ingredients of used paper, bamboo leaves, fallen petals, fallen crabapples, and grass with water. After it sat overnight, we made slurry by grinding small amounts of our pulp in a blender. Very exciting! We used framed screens to collect the slurry and strain the excess water. The children used sponges to dry the paper, and the next day, we examined our two pieces of paper. Many of us predicted that it would be green because of the leaves and used green paper; it turned out to be very light green with so many patterns from grass and leaf bits.

### **What Is a Recipe?**

In October we asked our nursery learners to help us answer the following question: What is a recipe? Immediately someone exclaimed, “Steps!” Young children enjoy describing how something is achieved through a series of actions or steps. When our nursery learners engage in dramatic play involving mud kitchens, palaces, and camping, they are contributing to group meetings to share ideas about conflict resolution, collaborating to add to circle songs and movement games, and working together on all kinds of things from kneading dough to printmaking. They also begin to make meaning of dialogue based on recipes, step-by-step instructions, lists, and other examples of procedural text. Outside in the mud kitchen, children can be heard instructing each other on how many cups of water to add to their sand batter. Other friends may be on the playbarn brainstorming on a supply list needed for the road trip in their camper. Another friend may share the sequential steps to a game at circle. A group of learners might join in mixing the ingredients to form bread dough following the steps from a cookbook.

The experience of walking and talking together through a series of steps, diagrams, and other similar text forms promotes visual literacy in our learners. It provides the perfect opportunity for them to explain how to make something or how to begin something in many contexts. As noted in ***I See What You Mean*, by Steve Moline**, they begin thinking about a meaningful sequence, visual elements and vocabulary that explain the sequence, and observations about what is happening or changing during the process.

Visual literacy happened inside and outside of the classroom this year, in step-by-step instructions of course! The following explorations are examples of how our learners worked and played through step-by-step processes:

#### Recipe for a do-over during conflict resolution

- Step 1. Play with a friend or friends;
- Step 2. if there’s a problem, such as excluding, get teacher help;
- Step 3. talk about how you feel;

Step 4. ask what someone needs to feel better;

Step 5. try a do-over by doing something over in a kind, helpful, safe way. “Include not exclude.”

#### Recipe for making Ooblek

1. Gather materials: 1 cup of water; 1 to 2 cups of cornstarch; mixing bowl; watercolor. “If you don’t add water it’ll be too dry.” “That’s called a measuring cup.”
2. Preparation: Pour 1 cup of cornstarch into the mixing bowl, and dip your hands into it.
3. Now pour the water in, slowly. Add a few drops of watercolor. What happens when you hold a handful in your palm? Try squeezing it. Is it a liquid or a solid? What happens when you release the pressure? “It feels really, really sticky! I love making Ooblek. I can do it all the time.”

#### Recipe for sunset purple

1. Pour a few drops of purple.
2. Add a little bit of white paint.
3. Mix.
4. Test the color on paper.

#### How to explore our creek

1. Put on your creek boots.
2. Be aware of your personal space.
3. Look closely to find something, such as raccoon tracks.
4. Release any living thing that you were observing.
5. Take off your creek boots before coming inside for lunch!

#### **Dramatic Play**

“Guys, I want to be Rapunzel. Pretend you never could find me and one day I return and Mother Goose turns to dust.”

A central piece of our learners’ exploration this year was dramatic play and reenactment. The children took agency in role-play. On any given day, the classroom would include students at work becoming snakes, squirrels, foxes, lost puppies, cat families, knights, ninjas and princesses. Vivian Gussin Paley notes in *A Child’s Work: The Importance of Fantasy Play* that “Dramatic or fantasy play is a critical component for students’ growth socially and emotionally. It allows students to make connections to literacy and the ingredients to expand on these stories. This “play” makes space for the learners to own and control the stories and experience strong emotions such as power, security, belonging, and escaping.” At the same time, she explains that “honoring the process is a complex notion.” In our nursery classroom, we not only “honor the process” but we also extend this play into a unit of study. Our practice takes these emerging interests and expands their stage.

In the children’s storied construction of *Fox*, the baby foxes (kits) had to stay in their den for two years. During this time, they had to learn the skills of hunting and survival before they would be released by their parents. This specific scene was acted out many times with role shifting, script changing and outcomes varying. We read many books to learn more about these animals. Some included *The Hat* by Jan Brett, *Those Darn Squirrels Fly South*, by Adam Rubin, *I Don’t Like Snakes* by Nicola Davies, *Fox* by Kate Banks and Georg Hallensleben and *Rabbit’s Gift* by George Shannon. Other story books that prompted dramatic play included *How to Find Gold*, by Viviane Schwartz, and Duncan Tonatiuh’s *Pancho Rabbit and the Coyote: A Migrant’s Tale*.

Our field trips this year included a trip to Briar Bush Nature Center and Liberty Veterinary Clinic; both of these trips supported the students’ engagement, interest and work in their fantasy play.

We made an experience book detailing our observations, illustrations, photographs, and reflections from our field trip to Briar Bush Nature Center. Some of the reflections were as follows:

“I liked all the animals, especially the snake and bearded dragon ( see arrows).”

“Carl the Bearded Dragon. I like his spikes when I pet him, it felt rough.”

“I liked Scarlet Screech Owl and I loved the wing part. I loved the tunnel. It was underground. I loved the trees.”

The dramatic play centering around Cat Family, Lost Puppies, and Puppy School is familiar yet new each time the children engage in re-enacting and role play. To extend the children’s stories and understandings, we read *The Cat Who Walked Across France*, by Kate Banks and Georg Hallensleben, *Whistle for Willie*, by Ezra Jack Keats, and *City Cat*, by Kate Banks and Lauren Castillo. During Inquiry time, we thought about what we needed to take care of stuffed animals who walked for miles or who needed check-ups by a veterinarian. Then we gathered tape and bandages, stethoscopes, and medical charts attached to clipboards as we transformed our classroom into a veterinary clinic. The doctors reported the following findings:

“Your rabbit needs to stay overnight. You can pick him up tomorrow morning, and bring a bag if he gets sick in the car.”

“This chickadee fell out of a tree and broke its wing.”

“This turkey needs a shot. It’s going to hurt.”

“I’m typing up the chart. These are the instructions for taking care of your patient.”

We extended our in-depth Inquiry by taking a field trip the following week to visit Dr. Patten at the Liberty Veterinary Clinic! Dr. Patten and her veterinary staff invited us to examine two friendly patients, Penelope and Mabel, carefully using the stethoscope and otoscope for listening to the heart and checking the ears, respectively. We shared information about our stuffed animal patients as we compared colorful medical charts that included animal pictographs and space for drawing and writing. For the next several days, our Inquiry time provided the continued space for our learners to apply their veterinary clinic experience to their play. Rest cots were available for stuffed animal patients who needed to stay overnight at the hospital, and the children put on their scrubs and masks donated by Dr. Patten’s office to make sure the stuffies weren’t exposed to germs.

### **Every Other Thursday: Older Buddy Time!**

Our cross-grade partnership with our buddies from Rachel & Marie’s 3/4 Group is a community-building experience that generates many meaningful connections between the pairs of friends. We spent the year with them, every other Thursday, playing together outdoors, sharing cozy read-aloud time, and constructing elaborate structures with a variety of blocks. Some poignant moments during the year truly enriched their partnerships:

- Sitting together during assemblies
- Hiking along the creek to collect seeds, leaves, petals, and twigs to make autumn sprays and sculpture
- Building the Peace Wall structure in our classroom, made from colorful window blocks, mirror blocks, and unit blocks. It became a cozy reading space.
- Performing a Nursery Talent Show in the classroom. The children set up a stage and seating for their older buddies, who were treated to a showcase of dance, drumming, fancy superhero moves, singing, and jokes.
- Joining each other for the end--of-the-year All School Hike
- After reading *Maybe Something Beautiful: How Art Transformed a Neighborhood*, by F.I. Campoy, T. Howell, and R. López, our learners built upon an idea of creating murals for our older buddies to share with them at our end-of-year picnic. We painted four murals on oversized paper and exhibited them among the trees in our outdoor space. Beneath each mural were dictated reflections from the younger children to their older friends, such as “I noticed you’re happy. I liked hanging out with you. I liked doing art with you.” “I liked building with you and when you push me on the tire swings.” “I really liked the Peace Wall. I liked playing on the light table with you.”

### **In Closing**

As our school year draws to a close, like the tallest tree in the woods from a nursery learner's story quilt story, we can see our leaves growing! Robust play, lively, reflective dialogue, innovative problem solving, and energizing inquiry were the very nutrients that made us grow together this year. We are grateful!

*Once upon a time, the tallest tree in the woods said, "Thank you for watering my body, Rain. Sun, thank you for drying my roots." And then the grass came out. "Thank you for growing, Grass, so I can nibble on you." And then a little rainbow came out. "Thank you for coming out, Rainbow, so I can look at you." Then everything he saw came out. "Actually I can see my leaves growing. Gracias, hojas anaranjadas." The end.*

--Excerpt from a nursery learner's story quilt square