Montessori Pathways' News

March, 2012

Notes from Ms. Alena

March brought yet another addition to our Montessori Pathways family. We would like to welcome our new friend *Christian R*.





We started off the month with our **Parent Evening** on the topic of "*The Unique Montessori Math.*" Despite the fact that we conduct this meeting every year (critical thinking is the basis of our lives), it is possible to discover something new every time. The meeting went by successfully, with the presentation of many materials, as well as the involvement of the parents, which allowed them to experience the Montessori Math firsthand.

This year, spring has come with warm days surprisingly early, which allowed us to be outside not only during recess, but during activity time as well. One day, the kindergarteners spent their "Show and Tell" time out in the front lawn.

During this time of the year, it is clearly possible to see the growth of the children over this past year. Are you familiar with the feeling of working on a large project and after finally finishing it, feeling a sense of "phew, I did it"?



One of such activities in the classroom is *The*

Hundred Board, where before the children can lay the tiles out numerically, they organize the numbers by ones, tens, twenties, etc. This activity necessitates a lot of work, time, concentration, and attention, as well as fine motor development. If at the beginning of the year, not many children were able to do this work independently or in one sitting, I am now greeted daily by "Ms. Alena, look. I did it by myself. Nobody helped me."



us adults would have). It is amazing to see the proud eyes of the kids who, after days of working on the project, finally finish it and can say "Look at me, I did it!"

Similar strengths are needed for *mapping*, when children not only prepare their paper (tape to board, rub contours of countries with crayon, etc), but also trace every country of the continent and then poke each country out (requiring immense amounts of concentration and patience, which not even all of



At the end of each project, not only is knowledge important, but also the child's assurance of his/her power and confidence.

It was interesting to observe the progress of our kindergarteners in their completion of the weekly work plans. If at the beginning of the year, while placing the plans in the blue bags, I saw some unfinished or with only minimal amounts completed, I am now seeing that practically all of the children are capable of independently finishing their work plan.

One day, a kindergartener approached me and stated that he finished his work plan. I could not believe him, since it was only Thursday, but the kindergartener stated that he had done so on purpose, in order to have a free-work day on Friday and choose any work he wanted. When I asked him how he had done it, he explained that he counted the total number of works that were assigned and divided them evenly by Monday, Tuesday, Wednesday, and Thursday. This is exactly what the work plans are intended to create within the children-a sense of planning and organizing.



I would like to thank my daughter and Alex's sister, *Masha*, for her **presentation** in the kindergarten club **about the country where she was born, Belarus**. Children enjoyed seeing the many different objects from Belarus (toys and things made from linen, as well as decorations made from straw, both of which are abundant in the country).

The students also heard several interesting traditions and holidays of the country (such as women making wreaths to send down a river to find a future husband!) I finished off the presentation by singing a traditional song in Belarusian, which the kids loved and even asked for an encore!

Children love to hear about different countries and traditions, so we invite any parents who have knowledge of other countries to visit the school!

Coming School Events

We will be holding the *Parent Evening* on the topics of "Grace and Courtesy Lessons and Line Time in a Montessori Classroom" on Tuesday, April 10th at 7:00pm.

On *Saturday, April 14th* we will be holding our second *Open House* from *11a.m.-2p.m.* where you will have a chance to stop by and ask questions, register for Summer Camp or the coming School Year.

We would like to remind you that registration for the next school year is underway and if you register with the 10% tuition deposit by May 15th, you will lock-in this year's prices.

Spring *Picture Day* will be on *Tuesday, April 17*, where we will be taking individual and class pictures.

Did you know that the week of *April 16-April 20* is "T.V. off week"? We invite you to *Story reading/telling family night* on *Thursday, April 19 at 6:45pm*

Join us for "Spruce It Up!" on Saturday, April 28th at 10:00 am -1:00 pm to help make our school beautiful after the winter.

Warmly,

Ms. Alena

Working with Montessori materials:

The Multiplication Board

This is a square board with indentations for 100 red beads, with numbers 1 - 10 across the top to indicate the multiplier: the number that tells how many groups we will set up. There is a slot on the side of the board to tell how many beads will be in the group.

There are several objectives in using this material: the most obvious is to help children memorize their multiplication facts. However, visually, it provides information on the geometry of the multiplication table. Any number times itself will make a square. All other combinations produce a rectangle.

Another objective is to come to an understanding that multiplication is just a process of repeated addition. In fact, multiplication is simply a shortcut we memorize so we do not have to compute, for example, 8 + 8 + 8 + 8 + 8 + 8 + 8 =. Rather, we have memorized that seven 8's are 56. The



memorization is more efficient and is also more accurate. Repeated addition lends itself to errors.

We can also use **color-coded wooden bars** to perform multiplication. This material is easier to handle and sometimes precedes the multiplication board. It serves the same function as the board, but provides another experience for the children to work with concrete materials which illustrate a mathematical principle.

If the child gets tired of the above materials, there are other games to play starting with a series of "finger charts." The charts are more abstract and are an aid for specifically memorizing the multiplication tables. They do not express the mathematical relationships as visually and obviously as the above materials do though.

Note:

Traditionally, schools teach subtraction before multiplication. However, with the Montessori materials, the child can see the close connection between addition and multiplication. Both are additive processes. It is an example of a sequential and organized curriculum based on relationship.

The process continues in the Montessori elementary classrooms.

Child using the multiplication materials: "Oh, this is almost like skip counting." ----of course! The multiplication answers ARE skip counting!

Ms. Karen

The Division Board

Children naturally understand the concept of division: if I have 10 cookies and 5 friends how many cookies will each child receive? Generally, we introduce the formal Montessori work called the Division Board for children 5 and up. This work takes this concept and provides concrete materials for the child to manipulate in order to solve division equations. We began with equations that have no remainders and then once a child is proficient, we add in the additional concept of remainder.



The wooden division board has 81 green beads and 9 green skittles (wooden objects that kind of look like a tall game piece). The green beads are manipulated by the child to represent the dividend of the equation, while the skittles are used to represent the divisor. A child who has the equation 63÷7= will first count out 7 skittles and line them up at the top of the division board. Next they will count out 63 green beads and place them in a small bowl. Then, one at a time the child will place one green bead under each of the 7 skittles. Once each skittle has one bead the child will move to the second row of the board and give each skittle a second bead. The child will continue until all beads are placed on the

board. The child then determines the answer to the equation by counting how many rows of beads each skittle received.

The Division Board requires focus, concentration and control of the materials in order to complete.

These skills are then built upon in the Elementary environment where the children have a new Montessori material that explores long division beyond the limits of a dividend of 81.

Ms. Jocelyn

Notes from the North Classroom:

Ms. Jocelyn and Ms. Christine



We began this month in our morning class with a focus the work of **Dr. Seuss** in **celebration of his birthday on March 5.** We read many of the Dr. Seuss books together and the children had the opportunity to try a special "One fish, two fish, red fish, blue fish" art project. While most children are already familiar with Dr. Seuss books from home, we extended their awareness by calling *attention to rhyming words, rhythm and repetition and different types of illustration styles*.

New works added to our shelves this month include the Baric Tablets, Rough and Smooth Boards, North American Animals and North American Foods.

In the Sensorial area of our classroom the Baric Tablets and the Rough and Smooth Boards allow the children an opportunity to work using only their sense of touch. By isolating this one sense, awareness is created and developed in each child.

Many of the children love working with the globes and puzzle maps. Our new works of North American animals and food 3-part cards build upon this interest and expand with a fun and meaningful work. Montessori 3-part cards are used in all areas of the classroom and the children are able to organize and match pictures and words in order to complete these works.

As we have turned our clocks ahead one hour and welcome the new season of Spring, it's been a wonderful opportunity to reflect on the growth we see not only outside, but especially inside our class. Snow-pants and boots were sent home and we are so enjoying the weather outdoors. We are watching for signs of spring like blooming daffodils and crocus; robins that we watch trying to find a safe nesting place.



In our own classroom, we have seen much growth with our class this year. Children who needed assistance with tying their shoes or zipping their coat are now able to help others. They are proud of their capabilities. This is setting up a life skill of self confidence and helping others.





Once again, thanks to everyone for bringing in items for the Sharing Basket. One of the most coveted activities in **preparing muffins** for snack is **cracking an egg**. Everyone wants to do this! We have a "lesson" about cracking the shell on a hard surface and then you have to use your thumbs to pry the shell open without getting any of the shell in the batter. This is slimy and gross and just, basically, really, cool.

We experienced a food tasting activity of papaya last week. It was interesting to explore the texture, smell and taste of this fruit that most haven't tried before. It definitely wasn't the most popular fruit that we have tried...the smell repelled most but the taste was very different and creamy. The ability to try new foods and keep an open mind in doing so is a good lesson in developing one's palate.

Also, this month we have added some fun **new group songs and dances at line time**. Be sure to ask your child to show you "*The Banana Dance*"!



We enjoyed meeting with each of our parents for **conferences** this month. This is such a wonderful time of year to meet because *the children are truly comfortable with their choices of work by this point in the year and are interested in explore new and challenging works.* Even though these spring conferences are over, please do not hesitate to contact us throughout the end of the year as questions arise.

Hopefully the weather will be as beautiful over spring break as it has been; we look forward to some fun projects and seeing friends next weeks.

Happy spring!

Ms. Jocelyn and Ms. Christine

Notes from the South Classroom

Ms. Karen, Ms. Ambreen, and Ms. Alena

Thank you: Conferences:

Thank you to all the families who participated in the conferences. It is always a help in understanding your child and it is a pleasure for us to meet with you.

We do have two conferences left to schedule. We will not forget you!

Evening Math meeting:

What a great evening. We all had fun, including Ms. Jocelyn and me. It was an opportunity to actually get hands on the materials as well as talk about mathematical thinking.

Emphasis was on the progression of the curriculum and its inter-relatedness. We were able to show the development of the math materials from "simple" materials like the red and blue rods to advanced materials such as the multiplication board.



We also talked about the need for the base of mathematical thinking to be formed in practical life, whether at home or in school. Mathematical thinking depends upon making connections, seeing differences and similarities, seeing multiple ways to solve a problem and, perhaps especially, the knowledge that you are a capable problem solver.

A look into the classroom this month:



- 1. This month: one 5 year old totally excited because HE DISCOVERED, using the addition strip board that 4 + 6 gives the same answer as 6 + 4.
- 2. Problem solving: Two boys having to pour 8 glasses of water for lunch: "Okay George, you pour 4 and I'll pour 4 because I know that 4 and 4 make 8." This was subsequently verified by counting the total of glasses after each boy had poured their 4 glasses.
- 3. One of our 3 years olds "dancing" precisely to each word of the counting of another child who was counting out groups of 15. A kinesthetic learner perhaps?
- 4. After lunch, the children clear their places and put the plates in the dish basin and the silverware in the silverware dishwasher rack that sits on the table. The next morning, the children put the silverware away, sorting spoons into the spoon basket, etc. One of the kindergartners said: "You know Miss Karen, it would be so much easier to put the silverware away in the





morning if we sorted the silverware when we put it in the dishwasher basket." So he set it up that way: his spoon in one section, his fork in another, his knife in another. The rest of the children followed his example. The next morning he came in and asked: "Did the sorting make it easy for you to put the silverware away?"

Overheard in the classroom:

"It's too bad the whole world isn't a classroom. Then everybody would be learning every day!"

Words from Maria Montessori:

"Education is a process which develops spontaneously in the child. It is not acquired by listening to words, but in **experiences** in which the child **acts** on his environment."

Ms. Karen, Ms. Ambreen, Ms. Alena



Kindergarten Extended Day News



This month the Kindergarteners began their **study of the continents and oceans**. The children had several works that focused attention on broad knowledge of our world and being able to identify locations on a globe. Then, as Montessori always does, we move from "the big picture" to more narrowed topics, in this case we moved from the concept of the world to a study of our **home continent of North America**.

After exploring different works and reading books as a group, this research was culminated in each child having the opportunity **to create their own book of North America**. They learned how to create their own book (folding and stapling evenly), creating straight lines for

writing using a ruler, creating a cover, having a country title on each page and finally writing out

each of their country facts on the appropriate page.

For the Kindergartners, this project was an introduction in how to research.





The Kindergarten class participated in a cooking activity this month as part of their study of North America. The children, as well as the teachers, found *The Pumpkin Pie* recipe quite tasty and we would like to share it with you to try with your Kindergartener at home or with your Preschooler.

The utensils and ingredients:

1-Gallon Ziploc Freezer Bag

Scissors

25 small cups (or fewer large cups or bulls)

Spoons

2 2/3 cups cold milk

2 packages instant vanilla pudding mix (four serving size)

1 Combine the milk and instant pudding in the Ziploc bag

- 2 Remove the air and Ziploc it shut
- 3 Squeeze and kneed with hands until blended for 1 minute
- 4 Add the pumpkin, cinnamon, and ginger
- 5 Remove the air and Ziploc it shut
- 6 Squeeze and kneed with hands until blended for 2 minutes
- 7 Place ½ tablespoon of graham cracker crumbs in the bottom of small cups
- 8 Cut corner of freezer bag and squeeze pie filling into cups
- 9 Garnish with whipped topping
- 10 Add a spoon and eat up

1 can (15 ounces) solid pack pumpkin

1 tsp ground cinnamon

½ tsp ground ginger

Graham Cracker Crumbs

1can of whipped cream



Over Spring break, the Kindergartners are working on their **first at-home research project about their family heritage.** Focusing on the idea that most of our ancestors came from other parts of the world before living in North America, the children are contacting their grandparents and great grandparents in order to find out their heritage. Then, using books they are recording facts about their "home country". When they return from break, each child will present their research to our group.

This introduction is the foundation for the Kindergartners work next year in the Montessori Elementary program, where research skills and confidence in sharing knowledge with others is emphasized.

This month the first **Kindergarten field trip** was to the **Challenger Learning Center in Woodstock.** As a meaningful ending to our study of the solar system and the universe, the children were able to spend the afternoon "working as astronauts" in the space simulator. The children were partnered up in order to work through 8 different stations to complete jobs similar to those real astronauts do at the real space station.







For our *second field trip*, we focused on *the changing of the seasons* and enjoyed a **walking field trip to Veteran Acres Park** in order to look for signs of spring.

The children spotted buds and flowers on trees, green grass growing, daffodils and hyacinths and ducks and geese swimming in the pond. We took the same walking path as we did on our fall walking trip so that the children became naturally aware of the differences in nature we observed in a different season.





Ms. Jocelyn, Ms. Katy

Notes from the afternoon classrooms:

Ms. Terri

This month we **finished reading <u>Heidi</u>** by **Johanna Spyri**. The children really enjoyed reading a new chapter each day and getting to know Heidi and all of her adventures. We celebrated our accomplishment (<u>Heidi</u> is 349 pages!) by having a special "Heidi Snack" of goat cheese melted



on bakery bread. We may have to do it again by popular demand. Heidi and Peter had a lunch of cheese, bread and fresh goat's milk everyday (they rarely had meat available). So we ate this snack as we read the last chapters.

Also, since **reading** is something we do together as well as individually each day in the afternoon class, the children each **made their own bookmarks**. Ms. Terri even laminated them! This way we can hold our place in our book if we haven't finished reading it during silent reading time.

One of our **art projects** this month was from a favorite book of ours called <u>Cactus Hotel</u>. The book tells the life story of a saguaro cactus from a tiny black seed to a fallen, decomposing 200-year-old cactus which has been home to countless creatures like woodpeckers, owls and birds while it was alive to ground dwellers like scorpions, snake, termites and lizards after it was fallen. The cactus grew only 4" in the first ten years but was 18' tall when it stopped growing at 150 years old. Very interesting! We drew and cut out our cactus tree and added holes, needles, birds and flowers.





The kindergarteners did a version of Mondrian artwork this month. While Pier Mondrian is known for painting real-life landscapes and portraits of people, he also wanted to create pictures to express thoughts and feelings entirely created with straight lines and simple colors. We used poster board covered with graph paper and added stripes of black construction paper which we drew with a ruler and cut out. The graph paper helped us keep our horizontal and vertical lines straight.

After gluing the stripes of paper down we each had our own design made up of squares and rectangles. We colored in some of the areas with marker. Mondrian likes bright colors like red, blue and yellow. We "tried" to leave some areas white – this was a little hard to do for some of us. Our work is on display if you want to take a look!

Our favorite **baking** this month was *Orange Muffins*. We doubled the recipe and poured it into a 9"x13" cake pan and cut it into squares to fit our needs but the recipe recommends a muffin pan. Here is the recipe if you're interested:

Orange Muffins

2 c. Bisquick mix

2 T. sugar

1 egg

1 t. grated orange peel

2/3 c. orange juice

Topping

2 T. sugar

1/4 t. cinnamon

1/8 t. nutmeg



Grease 12 muffin cups (or a pan). Mix first 5 ingredients. Beat 30 second. Fill muffin cups about 2/3 full. Mix topping and sprinkle atop each muffin or cake. Bake at 400° for 15 minutes.

In our class we served our Orange Cake with a spoonful of raspberry jam and it was delicious! As a special treat and because of the warm weather we ate our snack outside. Any crumbs were left for our small outdoor "friends" the bugs!

Ms.Terri

Ms. Katy

Happy Spring! This month "The Nappers" have been very busy. We began the month by reading the book <u>The Very Hungry Caterpillar</u> by Eric Carle. This book led into many art projects as well as the opportunity to learn about the **life cycle** of the butterfly.

The art projects included using our thumbprint to create a picture of a caterpillar, painting to create the symmetrical wings of a butterfly, and making butterflies using coffee filters and pipe cleaner.



As a class project the children painted paper plates green and yellow. We then stapled them all together in a row, added facial features and pipe cleaner legs to create a caterpillar that was 17 plates long! It was wonderful to have all the children working together.



To study the life cycle of the butterfly we read books, looked at pictures and created our own page where we put the stages in order. Towards the end of our Hungry Caterpillar study, we **recreated the book**. The children had to remember the order of the story when putting it together. I hope they enjoyed reading it to you at home!

The Very Hungry Caterpillar also provided an opportunity for the children to share in a **tasting.** We tried the fruits that the caterpillar ate on each weekday of the story. This included apples, pears, oranges, strawberries and plums. The children enjoyed the chance to explore the differences in taste, smell and texture of all the different fruits.



Following our study of the butterfly, we read another Eric Carle book called <u>Mister Seahorse</u>. In this book "Mister Seahorse and fellow fish fathers who care for their soon-to-be-hatched offspring, share their stories while acetate pages reveal camouflaged creatures who bear witness to the conversation between fathers with fins" (from the official Eric Carle website). The children **created lovely seascapes** using oil pastels and blue paint. We then **made beautiful, colorful sea horses** to swim in our pictures.

The final activity this month was **a planting activity.** We *planted aloe seeds* using an aloe plant kit. We went through the instructions step by step with everyone getting a chance to be involved.



When reading through the instructions, we found out that it can take almost a month for the seeds to sprout. However, each day the kids have been checking the plant and we are recording any changes we might see. Perhaps we will have a picture of the sprouted seeds to send home in the April newsletter!

Again, I would like to remind parents to please feel free to have your child bring in a story to share from home that we can read after afternoon snack. I also wanted to share the website for the **Eric Carle books**: *http://www.eric-carle.com/home.html*. Many of these books can lead into wonderful projects to do at home with your children and an opportunity to raise questions and spark interest for further animal and nature studies.

Thanks,

Ms.Katy

Gym Notes Ms. Donna



We took advantage of being able to be outside for some of our classes. A safer way of Red Rover was introduced. The students were all on one side of the blacktop. Before the chant was said, I explained how they were to come across the blacktop to get to the other side (zig zag, sideways, fly like a bird, hop etc.). "Red Rover, Red Rover, send (blue) right over. If you had blue on then you would come over".

Then other colors were called. The last child over became the new "IT".

Ready, Set, Jump was used as a warm up. The students followed the direction of the arrows. Jump from A to B and then Jog from C to D.

Throwing with our dominant hand and retrieving was a success. Arm up, opposite foot forward, ball hand back behind ear and throw. Then when Retrieve was said they went to get their ball. We also used our non dominant hand. Most of the children said that they liked throwing with their dominant hand better.

Four Corners is a game with the following corners, red, blue, yellow and green. The students would do a movement within the 4 corner space. When they heard pick a corner they would go to the corner of their choice. Then I would pull out a stick with a color on it .If you were in that corner you got to do jumping jacks and if you were in the chosen corner you jumped up and down.

We worked with throwing beanbags through hoops and catching beanbags with a partner. We also worked on rolling balls to our partners. The Kindergarteners also worked on bouncing a ball to their partner trying to catch it on the first bounce.

Ms. Donna