Montessori Pathways’
News
January 2015

“Our care of the children should be governed not by the desire to 'make them learn things', but by the endeavor always to keep burning within them the light which is called intelligence.”

Dr. Maria Montessori

“Happy Winter!” (East room project)

Notes from Ms. Alena

Since it’s time for parents to make a very important decision about the future of their children, one of the events we had this month was our parent evening “Thinking About the Future (Montessori Kindergarten and Elementary Year)”, where Ms. Karen and Mr. Matt demonstrated the spiral nature of Montessori education, whereby the skills learned in the early years of the Montessori Primary class are studied at a deeper level in the Kindergarten and Elementary years.

They also explained why the Montessori Kindergarten year is not a beginning of Elementary education, but the final and crucial year of the 3-year cycle of the Primary Education. Keeping this in mind is important in deciding where to continue your child’s education.

"As April approached during our daughter’s last year before Kindergarten, my husband and I began the same process many Montessori preschool parents engage in every spring: making the decision about where she would go for Kindergarten... When we thought about our daughter’s progress at Montessori in particular, we discussed how much progress she had already made – we were amazed by her burgeoning math skills, her beginning writing, her ability to select work and focus...we thought perhaps the ‘third year leap’ was something she was already experiencing. She had been so prolific and learned so many new and diverse things, how much more could she grow in the following year?

We decided to observe the Non-Montessori classroom our daughter would be placed to make the best-informed decision we could.

... The teacher had explained to us that the children needed a break from the math exercise, because they really couldn’t concentrate on it for more than about 15 or 20 minutes at a time. This was the beginning of the end for us. We knew from our experience at Montessori, our daughter (and many others children in our classroom) had no problem working on a project for long periods of time, because they chose work they wanted to do and were interested in. They didn’t have to stop working because other students (who weren’t really interested in the work at hand) got restless.

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In fact, this classroom’s whole day was scheduled out in 30-minute increments (or less) for various subjects. Then they lost about 4-5 minutes each time they moved from one lesson to the next as they waited for the entire class to simultaneously finish one project, move, and settle in to the next. While this allowed the children to move a little between tasks, it seems strange, having the Montessori experience to relate to, that kids who need to move aren’t allowed until it is time for the whole class to do so. And that kids that might not be ready to finish the task at hand are required to because others are, or the schedule says it’s time.

We made our decision as we walked out the classroom door from our observation that this was simply not an environment that was best for our daughter. She was clearly thriving with the Montessori Method, and we didn’t see anything that seemed it would provide her with a greater educational benefit...

(“From Creeping to Leaping the Kindergarten Year – A Montessori Parent’s Perspective”)
To read more, please visit : http://mariamontessori.com/mm/?p=2019

For more information about the Montessori Kindergarten year, you can watch "The Montessori Kindergarten Year - A Question for Parents"

https://www.youtube.com/watch?v=Je8DZABCJY

Also, "A Time to Blossom - Montessori for the Kindergarten Year," which offers more detail on many of the topics.

https://www.youtube.com/watch?v=x-yt-ts=1422579428&v=67zbYX_qVLA&x-yt-cl=85114404#t=16

When you observe an Elementary Montessori class at work, you may find it difficult to get a sense of the big picture with so much going on. In one area, some students are working on math, some are reading, while others are working on science. In the corner, a teacher is giving a lesson to a small group of children, while occasionally glancing up to keep an eye on the rest of the class.

The Elementary classroom may appear to be unstructured, but this seemingly random, yet obviously purposeful activity, is basic to the independent learning and self-directed activity of the Montessori approach.

Each child is considered as an individual. We can see a vast range in the level of curriculum on which the children are engaged. Montessori teachers strive to challenge each according to his or her developmental needs and abilities.

"Montessori Elementary gives children the opportunity to continue to progress at their own pace in an environment that nurtures love of learning. Children take responsibility for their own learning and have daily opportunities to make decisions and choices in a child-centered classroom. They are exposed to many complex concepts at an early age through the use of wonderful concrete learning materials.

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It is not unusual to see seven-year-olds in a Montessori classroom constructing atomic and molecular models. Nine-year-olds analyze the squares of trinomials, while ten-year-olds solve algebraic equations, and twelve-year-olds compute the square root of large numbers.

What parent who has watched her children thrive both intellectually and socially in the Children’s House wouldn’t want this to continue in the Elementary years?"

"Imagine a School: Montessori for Elementary Aged Children" combines scenes from two public and four private Montessori schools to show the effectiveness of this philosophy of education.

https://www.youtube.com/watch?v=cBs73rff0n0

In February, we plan to have the pre-kindergarteners visit the Kindergarten Extended Day class, and the Kindergarteners visit the Elementary class. I know that the kids will be really excited to be a part of the Kindergarten or Elementary class during the day.

Coming School Events

- **The registration for the upcoming 2015-2016 school year and Summer Camp 2015 has begun**
- **February 2 – New Families Enrollment begins**
- **February 10 (Tu) – Vision / Hearing Screening for Preschool – Pre-K**
- **February 9-13 - Elementary Standardized Tests**
- **February 13 (F) – Valentine’s Day at Montessori Pathways**
- **February 16 – 27 – Kindergarten Extended Class Visit Days for Pre-K student**
- **February 16-27 – Elementary Class Visit Days for Kindergarten students**
- **February 19 (Th) – Chinese New Year activities day**
- **February 26 (Th), 5:30 – 7:00 pm – Family Fun Fair Night**

As always, if you have any comments, questions, or concerns, feel free to contact us via e-mail montpathways@hotmail.com

Warmly,
Ms. Alena

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January really flew by! It took the students a little while to get back into the swing of things after break and then a snow day and a short week for Martin Luther King Jr.’s birthday. However, we still had a lot of meaningful learning happening in the classroom.

In math, the third and second graders continued their work with multiplication and division and are beginning to master these concepts. The third graders also were introduced to measuring angles with the Montessori Protractor. The first graders focused on dynamic subtraction and some multiplication. Dynamic subtraction took the class as a whole a little while to understand, but after multiple presentations the first graders are getting the hang of it.

In language the students were introduced to the last part of speech in the lower elementary curriculum, the interjection. Interjection comes from the Latin interiectionem meaning “to throw between.” Our symbol for this part of speech is a keyhole because interjections unlock emotion to our writing. Sentences like “Ouch! I cut my finger,” are more interesting than “I accidently cut my finger.”

We also spent a lot of time working on the editing process of our writing and are beginning to publish stories that will be placed in our library for other students to enjoy.

In biology, we studied more on roots of plants as well as stems. We also continued our study of invertebrates introducing birds, which have many different characteristics than the other animals we have studied.

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In geography, we learned about the tilt of the Earth in relation to the Sun and had a demonstration that showed us how this accounts for the seasons. This sparked interesting conversations and the children explored what Earth might be like if the axis of the Earth was more extreme or exactly perpendicular to the Sun.

We also began our study of Asia. Asia is the first continent that we have studied that has all seven biomes that we study, and the children contributed this fact to the size of the continent as well as its location in relation to the equator.

We also spent time this month focusing on cooperation and peace. The students worked on revising some of our procedures that weren't working for us in the winter and were causing conflict. They also worked very well together to build a larger snow hill as well as walls that would redirect sleds and keep children from going into hazards such as plants and fences.

We also talked about Martin Luther King Jr. and listened to a portion of his "I Have a Dream" speech. The children were confused by the idea of segregation. It seemed so unfair and silly to them. One child remarked that, "People have no control over their skin color," and another student added that, "You shouldn't judge people based on things they can't control." I also told them about MLK's methods of peaceful protest, and all the violence that the people in his movement received and did not retaliate.

I would also like to thank everybody again for coming to Parent-Teacher conferences. I enjoyed speaking with all of you about where your child is and our goals for the rest of the year.

Warm regards,

Mr. Matt
Notes from the Art Class (Kindergarten and Elementary)

Ms. Susan

In January, the art class explored sculpting and painting. First, the kids learned about native Alaskan/Inuit art and symbols, then drew, sculpted, and painted Arctic animals. Then, they learned to create a seascape image inspired by their choice of French Impressionist Claude Monet or Japanese ukiyo-e painter Katsushika Hokusai. During this activity they learned about famous artists, observing and using color, and laying out a composition. Overall, they explored different cultural approaches to art, and different artists' techniques to inspire their own creativity.

Sincerely,
Ms. Susan

Kindergarten Extended Day News

Ms. Karen,

January went by so fast. (I realize I have begun this way each month, but it is true). I would like to highlight just a few of the many activities and lessons from this month.

A BIG interest for many of the children has been the math chains. So, you are probably wondering what kind of chains could possibly be in a Montessori classroom. They are among the most beautiful and flexible materials in the Montessori curriculum.

First a short description. To begin with, there are 2 sets of chains. One set contains 10 “short” chains; the other set is made up of 10 “long” chains.

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They are beautifully color coded to go with previous colored bead bar work. Hence, 1 is always red, 2 is always green, 3 is always pink, and so on. The children associate a particular color with a number value. In more advanced work, this helps to facilitate number recognition without always having to count.

So, the short chains are comprised of individual colored bars connected by small golden links. Colored bars are thus separated one from another (ex. the short 3 chain has 3 pink bars linked, the 4 chain has 4 yellow bars linked, the 5 chain has 5 blue bars linked and so on 1 through 10.)

The long chains are made similarly, but instead of representing the square of a number, they represent the cube of a number. Hence the long 3 chain has 9 linked pink bars, the 4 cube chain has 16 linked bars, etc. They are beautiful and enticing to the students.

So what were the students doing? On a simple sensory, experimental level, they matched individual bars to the chains. So, experientially, they could make their own “chain” without the links. That in itself is very cool. But the children realized there are 5 bars of in the 5 which is 5 x 5 which is 25, 6 bars of 6 in the 6 chain which is 6 x 6 which is 36, and so on.

Even “cooler” is the children could then organized the individual bars into a square, then they could get a matching square from the bead cabinet, then they could fold the chain into a square!!! So, the idea of $5 \times 5 = 25$ ACTUALLY is a square is realized. Because they had the bars arranged singularly, and in a long line, and in a square, they could also EXPERIENCE the idea that the value is retained no matter what the shape of the bead bars is.

Same with cubes. They make 5 squares, stack them up and saw that it makes a cube. So, 5 squares taken 5 times = $5 \times 5 \times 5$ which is ACTUALLY a cube! We are continuing to connect children to the geometry of math.

But, additional patterns can be made sensorial --- experimentally if you will. For example, each chain of $3^2$ or more can be folded into a closed shape (ex. short chain of 8 makes an octagon). Or the set of chains can be formed to show a triangle, or hexagon or decagon, etc. Hopefully, along with accompanying photos, this gives an idea of some very special math that is going strong.

Mathematically we count the chains, leaving a small number tag at the end of each bar of the chain (ex. for the short chain of 5: 5, 10, 15, 20, 25.) There are a set of tags for each chain.

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This is interesting to the children and also helps connect the chains to multiplication and to the memorization of their multiplication facts.

Okay, so what else you may be wondering! Well, division has been taken to a new level using the division board and the beads. We are working with remainders, but also, importantly, the board allows us to show/work with patterns of addition. Example: 

\[ \frac{10}{5} = 2 \]

But what about:

\[ \frac{9}{5} = 1 \text{ R } 4 \]
\[ \frac{8}{5} = 1 \text{ R } 3 \]
\[ \frac{7}{5} = 1 \text{ R } 2 \]
\[ \frac{6}{5} = 1 \text{ R } 1 \]

(In this example, the number of “people” stayed the same, (5) but the amount to be distributed (9,8,7,6) changed. As the amount decreased, the remainder (left over) also decreased.)

One of the most helpful things in understanding math is to see the patterns, the connections. We can see the “Oh, I get it” look on their face. But it can only be done by showing, demonstrating. Words alone are not enough.

Lest you think we overlook pure play, let me assure you that the children have loved the snow. They roll in it, shovel it, ride down it, build with it and taste it. As something to play with, it cannot be beat. Pure happiness.

And speaking of play, several “stars” have been born. One day, 2 children asked to put on a performance. And so, at the end of the class, we assembled and the children entertained us. A moderator welcomed us, the children performed and the audience enjoyed. The next day, the children again lined up our chairs for the audience. Several more children were included. The children have loved “performing” for each other, making up their own dialogue and music: [http://youtu.be/WOgic5SCdNE](http://youtu.be/WOgic5SCdNE)

After telling them the dramatic story of Martin Luther King Jr., they all decided they wanted to act it out. So, that day, we made a list of characters and a list of the scenes from the story that we could perform. So, Monday we had our first practice. Who know what will come of our theatrical experiences??????

Best regards,
Ms. Karen

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Hello and Happy New Year to you! We are off and running this 2015 year; the children have not missed a beat with our two week break and have picked up their pace and settled in with their routine and work ethic. Montessori strives and teaches the benefits of a "normalized" classroom (where children are self directed and able to make appropriate choices) and your children are reaching the goal - yay!

Every day, we see leadership, self direction in their work choices, self satisfaction in their work, the ability to problem solve/conflict resolution, working together and helping each other with their own ideas on how to manage a task. It has been a very thoughtful and insightful experience this year. Thank you for supporting your children at home with these critical thinking skills.

As the new year has arrived, we are continuing work with days of the week and months of the year, along with knowledge and differences in the seasons. This helps with logical thinking and sequencing of events; winter, spring, summer and autumn - monthly calendars that the children put in order - what day is the first of the month?, what season is it?, how many days are in a particular month.....we have looked at weather patterns, night and day and the solar system.

Math and Language are daily requirements for our students; we really admire and appreciate the fact that they choose these areas before moving on to Art or Practical Life at this time of the school year - as mentioned earlier......the self directed child!!!!!!

We continue to work with Math materials in addition, subtraction, ways to make 10, skip counting, cards and counters (matching the proper number of pieces to the corresponding numeral), the 100 board along with its extensions....

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Daily Language lessons are learned through a variety of materials; word building with objects or cards, matching words to picture cards or sentence cards, reading, blending of rhyming sounds and sometimes the child will just write the words; sometimes with illustrations. We observe your child and assess where their level of knowledge and interest lays and then appropriately introduce them to the next tier.

We wished Tyler a happy 4th birthday - he is a New Year's Eve boy! Thank you for the wonderful pictures and goody bags and we look forward to watching you grow and bloom this year!

In Art and Practical Life, we enjoyed pineapple tasting, silver polishing, bird seed pinecones, snowmen and snowflake projects. We loved the beautiful flowers along with candles on our lunch tables as well as some fun food prep activities for snack - thank you all for your Sharing Basket contributions!
Next month: Valentine's help with a craft or two, as well as a snack for our class - any ideas or help would be so greatly appreciated. Just let us know......

Also, I am trying to put together our school's First Annual Family Fun Fair on Thursday, February 26th - 5:30 - 7:00; any ideas for games / volunteer help? I would love to get some ideas from our creative parents as well as have a fun night for our children and families ....I think all three classrooms could have a couple of games set up for families to share and enjoy a night of friendship and camaraderie! Please bring your ideas and help us establish this event into a regular mid-winter occasion. Thanks! Looking forward to hearing from you!

Warmly,
Ms. Christine, Ms. Laxmi

Notes from the South Classroom

Ms. Ambreen

After a restful, happy winter break we all joined back with our big smiles on the 5th of January 2015. We all had a lot to talk and share. All my friends were very excited to share their holiday traditions, experiences and happy feelings. For me it was a great happy start of the New Year.

We welcomed two new friends in our classroom, Shivain and Ana Sofia.

Although on January 7th we had a no school day due to extreme cold temperatures, it did not deter us from moving forward with our excitement. We kept our spirits high and entered into a new phase of discovery and exploration.

The Kindergartners worked a lot on word building, forming sentences and writing stories. The cold weather motivated them to study about the cold lands of Antarctica and the Arctic region of the North Pole. They studied facts about the Penguins and Polar bears.

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In Math, they learned addition of fractions. It was very awesome to observe how they discovered that a 1/4 and a 1/4 together is equal to a 1/2.

The preschoolers were busy working on the various polishing activities, baking, spooning and cutting activities. Tracing of sandpaper letters and practice of alphabet sounds has become a part of our daily routine as all our preschoolers have shown a great interest towards reading. Tracing of numbers and matching with the number rods was also one of the favorite activities this month.

In art, all the children loved gluing punched out paper snowflakes, creating beautiful snowman pictures and making big paper snowflakes.

On Thursday, January 29th, we in South room celebrated Frosty the Snowman Day. It was a great morning full of fun.

I extend my appreciation and thanks to all the parents who were able to join us for this event and the families who participated in our sharing basket activity.

Sincerely,
Ms. Ambreen

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January, the first month of the year, is a month of snow and cold temperatures. Hence, as we all got back after a joyous winter break on January 5th, we experienced our first snow day off due to extreme cold.

However, this did not affect our enthusiasm; we in Pre-k marched forward with full zest and spirit towards opening a new door of exploration and discovery.

The rise and fall in temperatures outside and the changing state of snow into ice and water motivated us to study about the 3 states of matter i.e. Solid, Liquid and Gas.

It was very interesting for the Pre-k kids to know that all the bare trees and perennial plants will start getting new leaves in springtime because their roots are alive and this encouraged them to learn about the Parts of the Root.

All the kids enjoyed playing in the snow making snow angels, sledding, and building a snowman. Hence, we became interested in knowing the parts of a snowman.

In Math, we worked on addition with snowflakes, geometry solids and worked on the teen board to reinforce the teen numbers.

In Geography, the extreme cold temperatures motivated us to learn about cold lands of Antarctica, the Arctic North Pole region, and the animals that survive there like Penguins and Polar bears.

In language, our vowel of the month was 'u' and so we worked on making word families using this vowel.

In Art, the Pre-k students created beautiful winter paintings, worked with primary colors to create secondary colors, did amazing water color paintings, and made wonderful paper snowflakes. I would like to end my newsletter with our January poem,

In January it’s so nice,
While slipping on the sliding ice,
To sip hot chicken soup with rice,
Sipping once, sipping twice,
Sipping chicken soup with rice.

Sincerely,
Ms. Ambreen

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Notes from the Late Afternoon classroom:

Ms. Donna

GAMES: 2 board games were introduced to the children. The first one was Scrabble Junior. Up to 4 players may play. They each choose 7 blue tiles and when it is their turn they may use 2 of their tile letters to put on the board. The catch is that they must put them on the beginning of the word. When a child puts the last tile of a word on the board they receive a red triangle marker. The one with the most markers win at the end of the game.

Our second board game was Monopoly Junior. Where children may buy property and put up a ticket booth. When someone lands on their property they pay to play that game. Instead of landing on the go to jail it is called the bathroom and you must pay $3 to take the tram to the bathroom.

ART: Paper tube snowmen, paper chain snowmen, an egg carton penguin, large and small penguins made out of paper, den for a polar bear, and snowflakes.

BOOKS: Lots of stories about winter, snowmen, polar bears, penguins and snowflakes.

FLANNEL BOARD: Story called “Have You Seen Our Snowman, who lives in our backyard?”

MUSIC/DANCE: Ice skating on paper plates.

NEW WORKS: Rainbow Cars. See which car can cross the finish line first by drawing the rainbow colors out of a bag.

Drive Your Car. Paper roads are arranged by the child and then they drive their cars on their roads.

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Winter Camp with Ms. Donna

This year I really thought we would have had snow for winter camp. On day one when we went outside before lunch it began to snow. We tried catching snowflakes on our tongues and looking at the snowflakes when they landed on our jackets. Sadly, when we were coming in for lunch it began to rain. We had no more snow during winter camp.

We learned a little bit about Christmas in Germany: The children receive Advent calendars to use for counting the number of days until Christmas.

On Dec. 5, the children wait for a visit from Saint Nicholas, who comes riding on a white horse and carries a bag filled with cookies, fruits and nuts. Sometime the children fill their shoes with hay and leave them out with a bowl of water for Saint Nicholas' horse. In the morning they find small toys and other treats inside their shoes. The tradition of the Christmas tree comes from Germany.

Winter activities: Baking holiday cookies for our snack, making flour and salt ornaments, paper ornaments, snowman projects, snowball throwing in the lower level of school (with rolled up socks), playing the Dreidel game using our recycled bottle tops for our gold coins,

The game called Canoga was a favorite of the children. You throw two dice and add the sum of the dice, next you cover what makes the sum using the numbers from 1-9. Each person would try to get the lowest score by covering the numbers from 1-9. They became quite good. Lots of scores were 0 or 1.

Another favorite game was our Build a Snowman game. You start with a blank piece of paper, roll one dice (1 was the body, 2 the face, 3 the hat, 4 buttons, 5 scarf and 6 arms). If you rolled a 2 you would make your face on your paper where you thought it should go. Some of us had everything but a body so our snow people looked funny.

Our favorite games outside were Hide and Seek and soccer.

Next year we are hoping for more snow so we can track all of the animals that visit us on our playground.

Sincerely,

Ms. Donna