

October 2011

INSIDE THE WOODS

Plans are shaping up for our 50th

Momentum is approaching warp speed in planning celebration events for our 50th birthday year.



The special Kick Off meeting on September 15 was a great success, as was the Parents' Social on the 12th, where much positive conversation was overheard.

The Gala Committee is being led by co-chairs Ju Wotring and Patty Keys. They are assembling their committee, all of whom will co-ordinate the myriad details of A BIG TO-DO, the high-point of this birthday year. Anyone wishing to volunteer please contact one of the chair-persons or Barbara Bends in the Advancement Office or at bbends@schoolofthewoods.org.

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Eloise Rochelle, Editor

Can't get enough of that wonderful stuff Chili competition rules this day

The date of the first School of the Woods chili cook-off is lost in the mists of antiquity, but it's been an annual event for a long time. This year it will happen on Sunday, October 30 at 1 PM.

Rival chili chefs will set up their paraphernalia and try to one-up each other with clever signs and décor. The panel of judges will award prizes for four categories of the magic substance.

In addition, there will be hot dogs from James Coney Island; Goode Co.'s House Chili, roasted corn, slushies, popcorn, apple and pumpkin pies, Starbuck's coffee and water.

More activities than the law allows! The ever-popular rock wall, mechanical bull, Kong Obstacle Course, Junior Slide, Double Bay slide, Turn-Around Obstacle Course, fishing pool, and all kinds of crafts.

There's will be a raffle, and all ages from Early Childhood through Middle School will make the talent show the highlight of the afternoon.

Tickets will be sold Tuesday/Wednesday, 18th/19th and Tuesday/Thursday/Friday, 25th, 27th, 28th, \$10 for students, \$15 for adults. Day of event tickets will be \$12, and \$18.

PARENTS' ORGANIZATION

EVENING MEETING

OCTOBER 5 6:30 PM (NOT 7 PM)

NO CHILD CARE AVAILABLE

MAIN CAMPUS - WIRT ROAD

How the Montessori Classroom Facilitates Your Child's Ability to Concentrate

When we speak of freedom in education we mean freedom for the creative energy which is the urge towards the development of the individual.
(Maria Montessori, "The Child, Society and the World," 1989, p. 12)

Maria Montessori believed if the classroom environment was carefully prepared for the age of the child and children were allowed the freedom to make choices during their work time, then their abilities to concentrate deeply on work would be enhanced.

Three guiding principles applied in Montessori classrooms encourage the child to exercise the power of deep concentration: the three hour work period, minimizing interruptions during the work period, and the use of interesting, hands-on materials. Research suggests that children will choose to concentrate most on material that is just above their current level of competence (Hanna & Meltzoff, 1993).

Dr. Montessori developed an incredible array of materials specifically aimed at the child's learning needs for each stage of development and specifically made for manipulation by the hand. She noticed in her schools that the children were drawn to concentrate and work repeatedly with the hands-on materials.

The child's level of interest and concentration are peaked by the fact that abstract concepts are interpreted in the hands-on materials, allowing children to comprehend at a much earlier age than if the concepts are presented only on paper in written symbols (Tomasello, Striano, and Rochat, 1999).

Teachers (often called guides in Montessori classrooms) observe *how* the child uses the materials to see where the limits of the child's abilities are. The teacher is then able to better guide the child's work choices so that they match the particular needs of the child more perfectly.

The child's level of understanding in a subject area is expressed by the way they manipulate materials, sometimes even before they are able to convey their knowledge in speech (Golden-Meadow). Matching the child's level of understanding to the work leads to greater concentration during the work period.

Just as it is difficult for adults to concentrate on work when there are constant interruptions, it is difficult for children to concentrate on their work when they are interrupted. Dr. Montessori felt it was important for children to freely choose work within the context of a three-hour work period to give them enough time to develop their inner guides, creating interest and deep concentration.

The three hour work period also allows children to choose more complex work and then perhaps choose something less taxing, depending on their needs at the moment. Movement, which has been shown to increase cognition, spatial skills, memory, and accuracy, is built into the

activities and options within the classroom (Angeline Stoll Lillard, 2005).

Because she saw that children need a three hour length of time to fully develop their powers of concentration, Dr. Montessori was emphatic that the children should not be interrupted during this time. Teachers work to time lessons, both group and individual, so they do not interrupt a child who is deeply concentrating in a work cycle.

Adults visiting the classroom for observations are asked to respect this uninterrupted time. They may be instructed to sit in one place quietly and only speak if they are spoken to. Children, through modeling and verbal instruction, are asked to become conscious of the need to avoid interrupting the work of other students.

Early childhood classrooms, where children tend more toward parallel play, are often quiet due to the concentration of the children. Though elementary classrooms go through periods of intense quiet, they are also likely to go through times during the three hours that contain more social activity. For the elementary child, interaction with others is important to meet their needs for social learning.

The materials, time to fully concentrate on them, and a climate of respect for the engaged learner are necessary components to aid the deep concentration required for optimal learning.

"Montessori school children learn not because they have to memorize for tests...but because they are [deeply] interested in what they are learning about." (Angeline Stoll Lillard, 2005).

... Elizabeth Stepankiw



ALL POINTS BULLETIN!!!

Everybody, be on the look look-out for this highly-noticeable logo on every single item you buy, no matter what or where – food, office supplies, more. Box Tops Education will pay 10 cents for each logo we collect.

The list of participating products is extensive and you can see the whole list on the website boxtops4education.com.

During October 1-31, this program is having a contest –the top five schools with the highest per student average number of Box Tops will win 100,000 bonus box tops. That means \$10,000.

Teacher Suzy Josef is faculty sponsor for this program and she really wants that \$10,000 prize. Give it your best shot and let's see what happens. See Mrs. Josef for details.

Can you find your way home?



Lost in space? Not a problem – just look for this Milky Way galaxy. It has six whirly arms named Norma, Scutum Crux, Sagittarius, Orion, Perseus and Cygnus. We live in the Orion Arm, pretty close to the outer edges. Look for a big sun (see picture) with eight little planets buzzing around it. Ours is the blue one. You can't miss it.

DON'T PANIC!

Follow That Binomial: Laying a firm foundation for mathematics

By Elizabeth Stepankiw

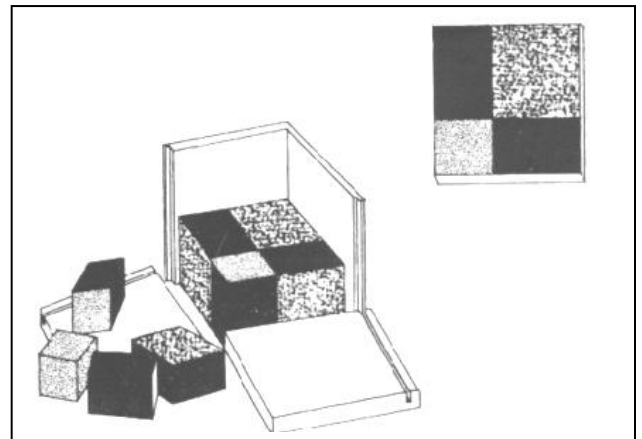
It is well-known that ... all new knowledge [must be linked] to the old, "going from the known to the unknown," because what is absolutely new can awake no interest. . . . Maria Montessori ("Spontaneous Activity in Education: The Advanced Montessori Method," 1965, p.45).

Children in Montessori schools use many of the same materials in new ways as they move from the Early Childhood classes to Elementary, Upper Elementary, and on through Middle School. There are numerous interconnections designed into the materials that Montessori placed in her schools. She had the opportunity to organize the materials for ages three through 12 and brought her own highly educated knowledge of various disciplines to the design of the lessons and materials.

Just as when a person reviews the table of contents before beginning a book, they gain more knowledge from the actual reading, children in Montessori are able to benefit from the continuity in the materials across the Montessori curriculum. Interest and understanding are enhanced. New concepts are introduced with old materials--linking the old with the new, building new knowledge onto the old (Lillard, 2005).

The use of binomial and trinomial materials is one example of the continuity across the curriculum. In Early Childhood classes, it is considered to be a sensorial material. A cube is composed of eight red, black, and blue cubes and prisms. With the use of this material, the child develops visual discrimination of color and shape and an intuition of the pattern. The wooden blocks fit together in a binomial pattern, representing the cube of two numbers $(a + b)$.

After carefully removing the blocks, the child then places it back while taking note of the pattern.

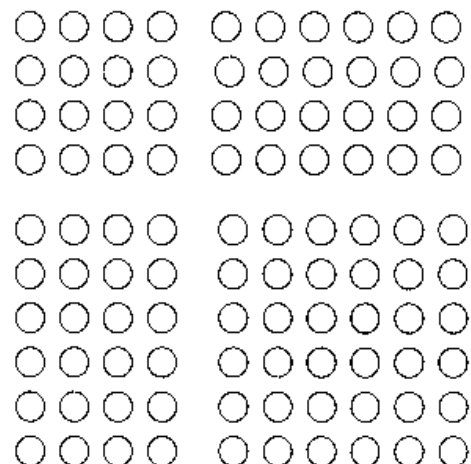


The Binomial Cube

Elementary students see the binomial and trinomial squares, at which time the materials are first associated with mathematical formulae. A beaded square is used to demonstrate the derivation of the formula $(a + b)^2 = a^2 + 2ab + b^2$. This exercise provides a hands-on introduction for algebra and preparation for algebraic proofs as well as practice for multiplication facts:

$$(4 + 6)^2 = (4 \times 6) (4 \times 6) = 4^2 + 2(4 \times 6) + 6^2 = 100$$

Visualized as,



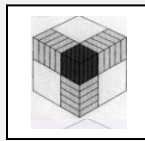
In Upper Elementary the child builds binomial and trinomial cubes. After experience building cubes, the children are able to discover the pattern of the cubes. They see a concrete representation of the algebraic equation represented by $(a + b + c)^3$.

Cubing and cube root

The study of cube roots begins much the same way as square roots – your child builds cubes with the “cubing materials” – cubes from 1 to 10 and multiple squares from 1 to 10. She builds binomial and trinomial cubes to see what parts are involved.

Here’s an example of the binomial $(3 + 5)^3$ constructed with the cubing materials:

$$\begin{aligned} (3 + 5)^3 &= \\ (3 + 5) \times (3 + 5) \times (3 + 5) &= \\ 3^3 + 3(3^2 \times 5) + 5^3 + 3(5^2 \times 3) &= \\ \text{cube} \quad \text{prisms} \quad \text{cube} \quad \text{prisms} & \end{aligned}$$



$$27 + 135 + 125 + 225 = 512$$

After building several binomial cubes, your child discovers that they always follow the pattern of the binomial cube familiar to her from her days in the primary class, combining cubes and rectangular prisms in the same fashion as a puzzle at that level.

This leads her to a study of the trinomial cube – again a familiar material from the primary class. This cube is a concrete representation of the following algebraic equation:

$$(a + b + c)^3 = a^3 + 3a^2b + 3a^2c + b^3 + 3ab^2 + 3b^2c + c^3 + 3ac^2 + 3bc^2 + 6abc$$

If *a* represents 100s, *b* represents 10s and *c* represents units, then the trinomial cube becomes a guide for your child to extract the cube root of a number as large as nine digits. She deconstructs the numbers into its parts of the cube, much the way she proceeded when she did the square root work. And she’s likely to have a great time doing it.

Source: Math Works

By the time the students reach Middle School and begin formal algebra class, they have built a strong intuitive understanding of the patterns involved in these formulae.

Montessori Up-Close evenings are coming up in November

If your child is nearing a transition from Upper Elementary level to Middle School or from Middle School to High School, these two evenings will give you vital information about what to expect.

The first one will be held on Monday, November 7 at Woods Middle School. Dr. Betsy Coe will explain the Montessori education process as it pertains to rapidly-growing teens and changes in the thought processes that occur.

Tuesday, November 8 will be Montessori Up-Close for Woods High School. Faculty and students together will conduct tours of the buildings and then separate into classroom groups where parents get specific subject information and can also ask questions.

These Up-Close evenings have proven to be very beneficial and parents should attend, if possible. Each evening begins at 7 PM.

Similar sessions are scheduled for three evenings in January for the younger children’s transitions. Those going from Elementary to Upper Elementary will be January 10, from Early Childhood to Elementary, January 17 and those just entering Early Childhood, January 24.

Tips on packing a healthy lunch for your child

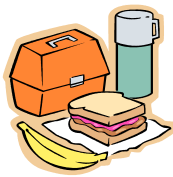
Lunch is a critical part of a child's diet because it contains about one-third of the calories he or she eats every day. Food in the tummy is necessary for optimum concentration.

Make the food as user-friendly as possible by cutting up apples and peeling and segmenting oranges, and other fruits and vegetables, so they are easy to eat.

Involve the kids in the lunch-planning process by taking them to the grocery store to select items and having them help pack their lunches.

Give them a choice of only two items for a sandwich – turkey or ham; tuna or chicken, say. Otherwise, too many choices may overwhelm them.

Use an insulated lunch box, rather than a paper sack. Keep food safe by using a Thermos for hot foods, such as soup, and gel freezer packs for cold foods.



Recommended healthy items;

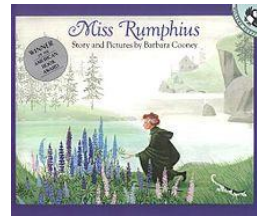
- Whole grain bread for sandwiches
- Meat or cheese in sandwich for protein
- Lettuce for sandwich garnish
- Veggie pieces, small for easy eating:
Carrot sticks, cucumber sticks, cherry tomatoes, cauliflower chunks, broccoli pieces, raw snow peas or sugar snap peas, raw asparagus tips
- Fruit for easy eating:
Sliced apple, peach, nectarine; grapes, cantaloupe chunks, strawberries, orange slices, banana
- Dairy: milk, yogurt



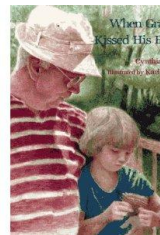
For better keeping quality until lunchtime put foods in reusable containers which a child can open easily. And be sure to include a fork and/or spoon, plus a cloth napkin and a placemat.

Books recommended for specialized purposes

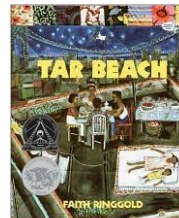
Lists of recommended books will appear in future issues of Inside the Woods. These below are considered highly-visual books



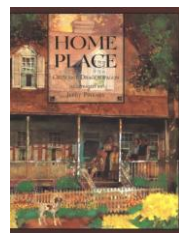
Miss Rumphius, by Barbara Cooney, 1982, 32 pgs. The author writes about her maiden aunt who became a librarian, then retired to make the world more beautiful by planting lupus flowers in wild places.



When Grampa Kissed His Elbow, by Cynthia DeFelice, 2001. This is a touching story about a young girl, Maggie, and the time she spent with her Grampa. They share small wonders of nature and a special magical event from Grampa's childhood. Not only does this book portray a special relationship between Grampa and granddaughter, but it inspires the imagination of children.



Tar Beach, by Faith Ringgold. This story recounts the dream adventure of eight-year-old Cassie Louise Lightfoot, who flies above her apartment building rooftop, the "tar beach" of the title, looking down on 1939 Harlem. This allegorical tale sparkles with symbolic and historical references central to African-American culture. A practical and beautiful book with spectacular artwork.



Home Place, by Crescent Dragonwagon. 1993. On a backpacking trip, a girl and her parents find the ruins of a house. Curious about its past, she digs in the ruins and finds a marble, a horseshoe, the arm of a china doll. This is a picture book that will ask children to think about the life cycle and riddles of the past.



Tales of a Gambling Grandma, by Dayal Kaur Khalsa, 1994. This is a bittersweet story of the author's special relationship with her eccentric Jewish grandmother, who came from Russia to Brooklyn. Grandma taught her to play poker (hence, the title) and they had lunch together every day.

Source: 7 Keys to Comprehension, by Susan Zimmerman and Chryse Hutchins.

“Evening of Learning” – Children Teach Parents

Parents of students in the three Lower Elementary classrooms get an extra dose of information about how Montessori education works by attending their child’s classroom and listening to that student’s explanation of favorite activities at school.

These evenings are a great way for parents to see Montessori teaching tools in action.

Parents in the Collins classroom visit on October 18, the Dhruv classroom on October 19, and the Stepankiw classroom on October 20. All events start at 7 PM.

“It is the child who makes the man, and no man exists who was not made by the child he once was.”

María Montessori

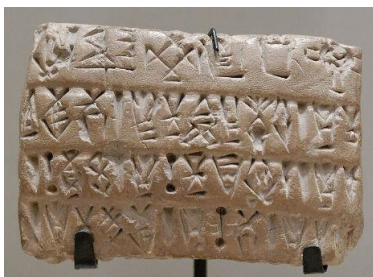
Looking for an exciting new career?

These will give you a challenge. Speaking of clay tablets as we are in the next column, there are some eight or so ancient scripts still not deciphered.



the 35th and 20th centuries B.C.

This is an example of Harappan script from the Indus Valley (India). The many specimens found of this script have been dated to between



deciphering them even more difficult.

This is Proto-Elamite script, an early Bronze Age writing system used by the oldest civilization of Iran over a large geographical area, but for only about two hundred years. The symbols being purely abstract make

The Rosetta Stone, as difficult as that was to crack, was a piece of cake, compared to the ones left to do. It was written in three languages, one of which was already known.

It’s Fall again and time to think about great family activities

The big item on everyone’s calendar should be King Tutankhamun, who will be arriving October 13 and plans an extended stay through April 15.

King Tut was here in the late 1970s at the Museum of Fine Arts, Houston, and will again set up digs at that Museum. He will be accompanied by an entirely new array of artifacts and antiquities. There will be 130 of those, more than double in the 1970s exhibit. For information, call MFAH, 713-639-7300. (Just for fun, see Steve Martin-King Tut on the Internet/YouTube.)

Older students may be interested in visiting the Museum of Printing History, in the Montrose area, 1324 West Clay St.

Its exhibits trace significant developments from ancient Mesopotamian clay tablets, to the Chinese invention of movable type, to Gutenberg’s printing press. American history is dramatized through newspaper accounts of major events. Call them at 713-522-4652.