

# October 2012

## INSIDE THE WOODS

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Edited by Eloise Rochelle

### **Chili Cook-Off: The Big Deal Oct. 28**

What would School of the Woods be without it's annual Chili Cook-Off? Unthinkable!

Nobody doesn't like chili – although some of our entries historically have been pretty weird – and nobody doesn't like James Coney Island hot doggers, either. (Well, maybe vegetarians.)

Everybody's favorite stuff will be there – the rock wall, face painting, all those slides, the talent show. Plus a new blockbuster – the Human Hamster Balls. What a blast!

Of course, events of this sort need volunteers, so contact Cindy Oldham and sign up.



### **Remember Flower Power**

It's time to start thinking about the upcoming holiday season (yes, now).

This year, ordering for all that wonderful greenery and Poinsettias (#1 quality), began September 24 and will continue through October 8.



### **Parent Education Programs, too**

Parents have no doubt received information about the very inclusive schedule of programs for parents' learning about the Montessori classroom which will take place throughout the year. Be sure to check the back page calendar for these dates. There are several scheduled for this month.

Also note that in November, there are events for you to learn about Middle School and High School which all parents will find interesting. We encourage parents whose children are still in the lower grades to attend and learn about these transitions that will happen in just a few years.

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## Fathers Courageous

The film "Courageous." explores a father's role in the life of his children. Modern fatherhood--along with everything else--has become more complicated and less clear in its definition than ever before. In this process men are disenfranchised from their traditional roles of protecting children and their children's mothers.

"Courageous" tell the story of four police officers from Albany, Georgia, and how after a tragedy befalls one of them, they decide to define their roles as fathers for the good of their children and their children's mothers.

What our fathers find is that it requires all their courage to be the fathers they want to be, the fathers they pledge to each other to be. On the good days they get being a daddy right. On the bad days, their despair can be suffocating.

For the success of our children and our world, caring and involved fathers are critical. Research statistics show the positive difference of what an engaged father or father figure means in terms of how a child does in school, future earnings, chances of not being involved in criminal behavior and more.

Our times have confused the issues of rearing children to become independent adults and contributing community members. It takes all of us working together to provide places--in our homes, in our schools, in our churches, in our neighborhoods, and in our towns--for our children to reach their full potential.

Children need as many people as possible to support their growth physically, emotionally, mentally and spiritually. A mother will usually be a child's first support system. A father's job is to offer his strength and support to his children, not just financially, but with body, mind, heart and spirit.

Fathers can be the spiritual leaders of their families. By their courageous example of fully engaging in their children's lives, fathers show us the way we should go.

My father's day wish would be that all men would watch "Courageous." This story might make you squirm with its biblical references, or it might inspire you with the wisdom of fathers past. Perhaps some of the scenes might be too emotional or schmaltzy for your tastes, but those scenes dramatize the difference a courageous father can make. That difference is huge and life altering.

I have been blessed with a lifetime of courageous men: Father; husband; grandfathers; uncles; brothers. And so many more. To these men, even though some of them have never been biological fathers but are fathers nonetheless, I say, "Thank you for having the courage, the patience, and the follow through to be a father. The world is better because of you."

## A Special Note about a great parent group

Join other parents and teachers for the up-coming Book Club event. It is scheduled for the evening of February 21, 2013. More detailed information will be sent out soon.

The book chosen for this first get-together is *Montessori Learning in the 21st Century* by M. Shannon Helfrich.

To get a head start on your reading, please purchase your copy of this book, either through Amazon (Kindle version is also available) or your favorite bookseller.

News Age Press describes this book as follows:

In *Montessori Learning in the 21st Century*, Shannon Helfrich demonstrates how Dr. Montessori's empirical knowledge of how children learn, regardless of class, culture, or country, has been validated by neuroscientific findings in the 21st century.

She also includes numerous engaging and informative stories and anecdotes, along with photos and diagrams, on why the Montessori approach works so well for children. She backs up her assertions with the latest science on the brain and how it develops and functions.

Shannon Helfrich has written this book for parents as well as for teachers, explaining the different "Planes" and the "Sensitive Periods" in child development that Dr. Montessori identified more than 100 years ago.

Shannon's hope is that parents will find this book to be a great resource for supporting their children's development in every day life and in the home. And for those parents who choose a Montessori education for their children, this book will greatly expand their understanding of the Montessori approach, becoming their children's greatest advocates as they experience a Montessori education.

## Montessori Parents, Rejoice!

A recent news article from *The Globe and Mail* -- a Canada-wide mixed-media conglomerate -- reveals the beginning of an astounding trend. The article, by James Martin, is titled "Maria Montessori: guru for a new generation of business innovators,"

The writer cites not only the usually mentioned Montessori-trained celebrities, but goes farther afield to note other entrepreneurs who are equally successful but not in the public eye.

In addition to Larry Page and Sergey Brin (Google) and Jeff Bezos (Amazon), Jimmy Wales (Wikipedia), Bill Gates (Microsoft); gorgeous George Clooney and lovely Helen Hunt (see more in footnote), we are informed about Canadian Doug Hrvoic, president and tech director of Marine Magnetic Corp., which designs and builds sensitive magnetic sensors for resource exploration and other underwater activities.

We also learn about computer scientist Carlo Consoli. He was a Montessori student in Rome and is today a senior consultant at IBM Global Business Services in Rome where he has won many awards for his innovative work.

The astounding trend, however, is that Montessori methods, principles and results are being noticed by non-

Montessori people who are beginning to apply Montessori teaching methods to other innovative businesses.

One such is Vancouver entrepreneur Michael Gokturk, whose company provides payment processing services for e-businesses. He learned about Montessori by talking with colleagues who had children in Montessori schools. He was impressed by the children's independence and creative thinking, and was intrigued by how they became that way. He began to study if Montessori methods could be applied to the workplace. Now in his company, all new employees, from sales to tech support, forego formal training process and are free to play with their systems and discover things on their own through intuitive use.

As Carlo Consoli says, "Being a Montessori child is a gift for life. It pays back a lot in terms of job quality."

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Note: Some others are Anne Frank; Friedensreich Hundertwasser; Austrian architect; Wioll Wright, designer of The Sims; Katherine Graham, publisher, The Washington Post; Sean Combs, rapper; Julia Child; Prince William and Prince Harry; Gabriel Garcia Marquez, novelist and Nobel Laureate; Joshua Bell, violinist; Jacqueline Kennedy Onassis; T. Berry Brazelton, pediatrician/author; Andrew Lloyd Webber, composer; Hugh Grant, actor; Peter Drucker, business writer; Queen Noor of Jordan; Taylor Swift, singer; Dakota Fanning, actress; David Blaine, magician; Erik Erickson, psychologist; Beyonce Knowles, singer; Mathew Bronsil, comedian; Chelsea Clinton; Princess Eugenie of York.

# GETTING THE MOST OUT OF YOUR BRAIN

By Elizabeth Stepankiw

*Knowing how the brain uses its resources can lead to higher levels of accomplishment in our students work day as well as our own.  
... E. Stepankiw*

In his book, *Your Brain at Work*, David Rock helps us understand and develop more effective strategies to improve the skills we use to regulate the flow of energy and information that can help us become more satisfied and effective people. He does this by explaining the emerging fields of neuroscience and cognition as they relate to the events of our everyday lives.

Tiny changes in behavior can help us make the most of our brain power. Developing what Daniel J. Siegal calls "mindsight" gives us the ability to make conscious choices about how we use our brains.

Our ability to solve problems and make decisions is largely dependent on the last major brain region to grow during the history of our development. This region is called the **prefrontal cortex**. Without the prefrontal cortex, we could not set goals, control impulses, solve problems, visualize an event from our past, or think up creative solutions. It is where we generate our own thoughts.

Another region of the brain important to our performance is the **basal ganglia**. The basal ganglia are four masses in the brain region that are involved in routine activities that don't require a lot of mental attention. It is an older part of the brain that performs beneath our conscious awareness and is much more energy efficient than the prefrontal cortex.

When we repeat activities, they become more routine, and those skills are quickly taken over by the basal ganglia. This is why, for instance, an experienced driver following a regular route to work can perform certain thinking tasks while driving. However, if the driver is faced with an unusual circumstance, the prefrontal cortex will activate almost immediately. The basal ganglia forms

patterns efficiently - if we work to repeat a pattern often enough, we can free up space in the prefrontal cortex for new learning.

One of the best ways to improve our ability to use the prefrontal cortex, the ability to make complex decisions and solve problems, is to understand the biological limits that underlie mental performance. The five functions that make up the majority of our conscious thoughts in the prefrontal cortex are:

- **understanding** a new idea-requires connecting to information already in the brain
- **making decisions**-involves holding information long enough to make comparisons and value judgments
- **recalling information**-bringing a memory from the past back to mind-the older that memory is, the longer it will take to retrieve
- **memorizing**-putting information with older memories and keeping it there long enough to do so
- **inhibiting**-keeping away nonrelated distracting thoughts, which requires a lot of effort

Information must hold the attention long enough so these functions of conscious thought will allow us to learn new information, plan, problem-solve, communicate, and comprehend complex ideas.

There are three main biological limits to this capacity: energy, the amount of information we can hold at one time, and the fact that we can hold only one visual or auditory representation in the mind at one time.

All of the prefrontal cortex functions **use an incredible amount of energy**, much more than the more automatic functions of the brain. The fuel that

provides the energy, such as glucose and oxygen, is a limited resource. It decreases as you use it. Our best quality thinking lasts for a limited amount of time. Impulse control and decision making use so much energy that there will be less available for the next activity. In other words, it is easy to get distracted when you are tired or hungry.

Given this limitation to the brain's energy capacity, it is important to learn to prioritize. However, prioritizing takes more energy than any other prefrontal cortex activity. Prioritizing is particularly difficult because it involves recalling information from the past, which means thinking back in time and recalling things in chronological order. Sometimes we must go very far back, which is even more difficult.

Prioritizing also requires picturing something you have not yet seen, which takes even more energy and effort. "The brain likes to minimize energy usage because the brain developed at a time when metabolic resources were scarce. So there is a slight discomfort involved in putting effort into thinking, or any other activity that uses metabolic resources" (p. 13).

This explains why people spend more time thinking about problems than solutions. Problems involve things we have seen and solutions involve things we haven't seen. Prioritizing "is like the triathlon on mental tasks" according to David Rock.

Prioritizing involves understanding new ideas, making decisions, remembering, and inhibiting all at the same time. To help yourself better prioritize, use visual -- write things down or create physical objects to manipulate. Arrange blocks of time for similar activities by brain use. You can save attention-rich activities for when you are fresh and rest when you need to. Shift around the type of work you do to suit your own needs.

There is a **limited amount of information that can be held in the mind** and manipulated at one time. Because there is a limited amount of space, it is easy to get overwhelmed if we are trying to juggle too many thoughts at once. Researcher Nelson Cowan found that the number of items you can hold in mind at one time is about four, depending on the length and familiarity you have with these items. When

these items connect to long-term memory, the brain can work more efficiently and is more likely to come up with new ideas. The fewer variables you are working with, the more effective you will be at making decisions.

The most efficient number of variables to hold in mind for comparison is two -- should I turn left or right, etc. To take advantage of this knowledge, follow three techniques:

(1) simplify complicated ideas into a few core elements

(2) group information into chunks-such as remember a number sequence as forty-seven rather than as four and seven, and

(3) choose carefully what is most important to keep in mind at the moment. The brain tends to want to think about what is easiest, not necessarily what is most important. It is useful to consider what is most important by writing out the possibilities on paper or a whiteboard.

The visual and auditory circuits in the brain compete with each other in a way that makes it **possible to only hold only one representation in the brain at a time**. Although you *can* switch between dominant representations, such as in the optical illusion where you see either a vase or an old woman, you can't see both at the same time. Therefore, it is sometimes physically possible to do several mental tasks at one time, but accuracy and performance are sacrificed because of this switching phenomena.

Since the 1980s scientists have tested the idea that we can only consciously process one idea at a time. They found that whether the task involves sight or sound, even simple tasks take twice as long when our attention is divided. Despite years of consistent findings about what is called dual-task interference, workers are often expected to do several things at once.

When our focus is continuously split, the effect can be intense mental exhaustion. The brain is on alert

too much of the time. In fact, studies show drops in IQ tests, effects similar to those of a person who has lost a night's sleep. Readings of stress hormones relating to our sense of threat increase. Our bodies respond as if we are in a state of constant crisis -- our adrenalized fight or flight mechanism is activated!

Multitasking requires the brain to hold tasks in the background while the working memory tries to focus on one thing. This reduces the amount of items being held in the mind at one time. The brain is most likely to lose the most difficult items, such as the more abstract conceptual thoughts.

Switching between tasks also uses more energy. Energy loss reduces the capacity to understand, decide, recall, memorize, and inhibit. Doing multiple conscious tasks causes a loss of accuracy and performance. Good ideas and valuable insights can be lost. "The only way to do two mental tasks quickly, if accuracy is important, is doing one of them at a time" (p. 43).

The best technique for reducing this kind of loss of performance is to switch off all communication devices during any thinking work. To improve mental performance, block out all external distractions. Our brains are trained to orient our attention to anything unusual-the novel-the rustle in the bushes.

"Distractions exhaust the prefrontal cortex's limited resources" (p. 58).

David Rock compares these activities of the brain to actors trying to perform a play on a stage. First, the stage uses lots of energy, so be aware of when you plan the most difficult tasks. Second, the stage can only hold a handful of actors at a time. Know that you can use strategies such as grouping information and making use of the basal ganglia's ability to hold information. Finally, actors can only play one scene at a time. Do not try to have several scenes going on at once.

Being your own director with this knowledge will improve performance, accuracy, and bring out those creative insights that lead to our most satisfying accomplishments!

## MARIA MONTESSORI SPEAKS

The Forgotten Citizen: excerpts from a letter from Maria Montessori to all governments, in 1947

My life has been spent in the research of truth. Through study of children I have scrutinized human nature at its origin both in the East and the West and although it is forty years now since I began my work, childhood still seems to be to be an inexhaustible source of revelations and – let me say – of hope.

Childhood has shown me that all humanity is one. All children talk, no matter what their race or their circumstances or their family, more or less at the same age; they walk, change their teeth, etc., at certain fixed periods of their life. In other aspects also, especially in the psychical field, they are just as similar, just as susceptible.

Children are the constructors of men whom they build, taking from the environment language, religion, customs and the peculiarities not only of the race, not only of the nation, but even of a special district in which they develop.

Childhood constructs with what it finds. If the material is poor, the construction is also poor, As far as civilization is concerned the child is at the level of the good gatherers.

In order to build himself, he has to take by chance whatever he finds in the environment.

The child is the forgotten citizen and yet, if statesmen and educationists once came to realize the terrific force that is in childhood for good or for evil, I feel they would give it priority above everything else.

All problems of humanity depend on man himself; if man is disregarded in his construction, the problems will never be solved.

No child is a Bolshevik or a Fascist or a Democrat; they all become what circumstances or the environment make them.

In our days when, in spite of the terrible lessons of two world wars, the times ahead loom as dark as ever before, I feel strongly that another field has to be explored, besides those of economics and ideology. It is the study of MAN – not of adult man on whom every appeal is wasted. He, economically insecure, remains bewildered in the maelstrom of conflicting ideas and throws himself now on this side, now on that. Man must be cultivated from the beginning of life when the great powers of nature are at work. It is then that one can hope to plan for a better international understanding.

Maria Montessori

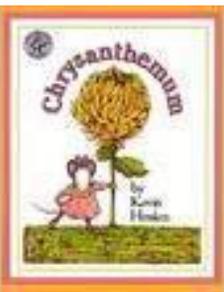
*Source: Montessori Life, Issue 1, 2007*

## A few books to help cultivate awareness



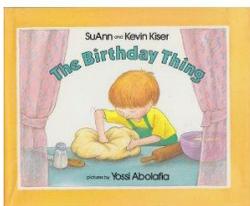
*The Paper Bag Princess* by Robert Munsch. The Princess Elizabeth is slated to marry Prince Ronald when a dragon attacks the castle and kidnaps Ronald. In resourceful and humorous fashion, Elizabeth finds the dragon, outsmarts,

him, and rescues Ronald—who is less than pleased at her un-princess-like appearance. Full color. Paperback, 32 pages. 1980.



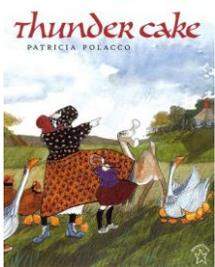
*Chrysanthemum*, by Kevin Henkes, treats the issue of bullying. Chrysanthemum loves her long flower name until kindergarten, where most kids have short names like Sue and Joe. All the girls threaten to "pluck" and "smell" her. But they find their teacher, too, has a flower name, Mrs. *Delphinium*

Twinkle, then all the kids want flower names, too, and Chrysanthemum blooms again. 32 pages, 1996.

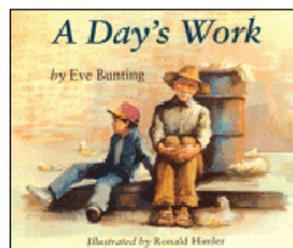


*The Birthday Thing*, by SuAnn and Kevin Kiser. A small boy, Timothy, wants to give his mother a special birthday present. So, in the kitchen he begins creating a "birthday thing" helped by his Dad, sister,

and brother. It's a bizarre oven-baked creation which delights his mother. Hardback; 24 pages, 1989.



*Thunder Cake*, by Patricia Polacco. When the air gets heavy and dark clouds drift low over Grandma's farm, her granddaughter hides under the bed. But Grandma insists that this is Thunder Cake weather and the two gather the ingredients and get it baked before the storm arrives. Paperback, 32 pages, 1990.



*A Day's Work*, by Eve Bunting. On Saturday morning, young Francisco waits with his abuelo (grandfather) with other day laborers, hoping for a

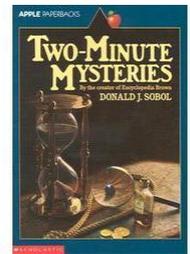
day's work. In order to persuade a potential employer to choose them, Francisco claims his grandfather is a gardener, even though he is actually a carpenter. It is only at the end of the day that the lie is found out. Then Abuelo shows Francisco the value of integrity, admonishing, "We do not lie for work," and taking steps to make restitution. 1997; 32 pages.



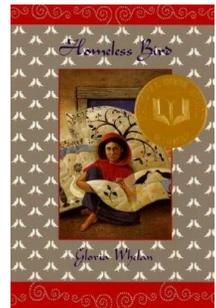
*Baseball, Snakes, and Summer Squash*, coming-of-age poems by Donald Graves, chronicle a boy's experiences in the country as a fourth grader and fifth grader range from baking pies with his grandfather and suffering from chicken pox to

erstorm with his family and fishing for conger eels late at night. 80 pages, 1996.

*Two-Minute Mysteries*, by Donald J. Sobol. Whether testing their own sleuthing abilities by working against the clock, or enjoying the intrigue of unraveling each case, readers gets lots of spine-tingling mystery with these thrilling puzzlers. Author Sobol also wrote the popular *Encyclopedia Brown* mystery series. Paperback, 160 pages, 1991.



*Homeless Bird*, by Gloria Whelan is a breathtaking story of a remarkable young woman who dares to defy fate in India. 13-year-old Koly faces an arranged marriage with courage but finds that she has been misused and misled, and is cast out for her defiance. She then sets out to forge her own future. The prose is both graceful and unflinching, and inspired by newspaper accounts of real 13 year-old cast-outs. 192 pages, 2001; age 10+.



*Bridge to Terabithia*, by Katherine Paterson, is about two fifth graders. Jesse Aaron and Leslie Burke who begin a friendship, and discover a magical kingdom in the forest, where they reign as king and queen. Their friendship grows as they meet in their secret hiding place. Terabithia, and only ends with the tragic death of one of them. Set in contemporary rural America; 1977, 128 pages.

