Aspects of the learning environment
From concrete to abstract thinking
The Montessori classroom holds many keys to successful learning. Some are visible in the interaction of the teachers with the children, the vocabulary used, the setup of the classroom and organisation of presentations. One of these gems is a very visible component of the classroom in that the materials for children aged 0 to 6 are very concrete and become slowly more complicated and abstract during the Primary years. When one looks at the materials from an outsider’s point of view, the initial materials seem self explanatory, whilst the ones used by the older Primary children definitely need an explanation.

Why is this so? Other schools work with pens, paper, study books and educational aids. It looks like the young children in the Montessori school merely ‘play’, but “will they be able to settle down to ‘serious business’?”, is sometimes the question we get.

It suits the nature of a child to start with concrete experiences and move on to abstract at a later stage. A young child is initially a concrete thinker. Thinking is related to what the child sees and experiences. As life progresses and the child has received age appropriate experiences, thinking expands and the manner can change.

Concrete thinking is an important stage in the mental development. It provides the necessary base for abstract thinking. With the appropriate help of the materials and the interaction with the teachers the mind can first explore reality, the here and now, and then further develop towards abstract thinking. A measured progression from one to the other is very necessary in order to come to high-level strategy thinking.

When looking around us, one can observe that not all individuals reach that level. In order to be able to make use of the brain’s potential two important elements need to be placed in the child’s development. First of all, the child is to be allowed to work through and intensely experience that concrete period of early childhood. Secondly the child needs to move beyond the level of abstract thinking that is traditionally demanded of Primary and Secondary students.

The long-term aim is to help develop the child’s mind towards integrated abstraction. A well-wired neo cortex can analyse, synthesise, and develop strategies, relationships and patterns. By presenting a holistic approach, international mindedness and balanced social development, the mind moves towards abstract thinking that includes respect and empathy for others.

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From concrete to abstract thinking Montessori Motion 25/2 March 2016
What is concrete thinking?
Concrete thinking is a necessary base upon which to develop abstract thinking. An individual first needs to explore reality before being able to use information at an abstract level. This urge for interacting with reality is very apparent in children. It requires sensitive adults that provide appropriate activities and opportunities. Children should not be taken out of the concrete thinking phase too early, since that would limit building up life experiences and consequently develop limited neuro networks.

Nature has foreseen a keen interest in the world and all its small details. Young children see things that adults do not notice. They are ‘in the moment’ and when given time and space point out a bee, a bird, the full moon.

Let’s look at the characteristics of a young concrete thinker:

- They think in terms of their experiences.
- Their senses are very awake; the world is new and beautiful! The child has not yet built up expectations that numb the senses: they see, hear, touch, taste, smell and absorb the myriad of information.
- They ask questions about objects; “what is this?”
- They are interested in routine so that their concrete thinking skills develop and learn to predict patterns.
- When entering Primary age, they become interested in relationships. Right and wrong is explored. First at a very concrete level; right means; “She can come to my birthday party”! Wrong means: “He is not my friend anymore”. With the appropriate help this built-in Primary sensitivity becomes the base for healthy and respectful social development.
- Young children live in the moment. They do not predict the outcome yet. When discipline is necessary, the adult needs to look at the intentions of the child, not at the outcome. So a concrete directive response is necessary that guides the process.
What is abstract thinking?
From approximately age 10 onwards, abstract thinking can be integrated. When the child has gained appropriate life experiences in a well-prepared environment with adults that give appropriate freedoms and limits, the mind starts to relate experiences, information and knowledge.
A mind that grows up in an environment with autocratic discipline has no space to grow. The same happens with a mind that tries to evolve within an environment with the adult doing the thinking, where testing is most common, where rhetorical questions are plentiful and open-ended discussions uncommon. The mind needs a holistic approach. Multidisciplinary topics allow for multiple conclusions to be drawn. Collaboration allows things to be seen from different points of view. Open-ended research sparks interest, which can be eagerly acted upon. The absence of repetitive testing allows the child to open up and realise that one question can have many answers. These opportunities need to be available in the child’s environment to enable him/her to grow beyond the average level of abstract thinking.

What typifies an abstract thinker?

• A level of thinking about things that is detached from the facts of the ‘here and now’.
• Analysing and synthesising.
• Looking for common/uncommon factors which leads to strategic thinking.
• Planning by taking a myriad of influences into consideration.
• Reflecting upon events, ideas and relationships in order to get to a next level of actions.
• There is the understanding that each concept can have multiple meanings.
• Patterns are perceived beyond the obvious.
• Patterns are analysed and appropriate sections applied to different situations.
• Evaluating experiences according to concepts.
• Events and experiences are being connected and analysed to find basic principles.
• The world is seen as an unfolding set of more and more complex interactions that are dissected in order to find basic principles that can be used to be able to improve.
• Thinking in terms of possibilities and principles.
• Use of abstract language.
• Includes terms that refer to entities other than objects and events. Examples are, justice, peace, freedom and the Right of the child.
• Include indirect use of language, such as metaphors and figures of speech.
• Discussing concepts instead of using concrete language such as “He said…”. 
Abstract thinking is an important characteristic of a person since it allows logical and thoughtful behaviour. Self-regulating, inner discipline is a common factor. Unnecessary external discipline would actually provoke rebellion. The person can think for him/herself and wants others to give him the opportunity to do so.

They care for others and have a keen sense of justice. They do not join the ‘gossip’ circuit, as there is no need for them to prove themselves. They know their own strengths and areas to work on. A healthy built-in level of competition is present. This is there in order to improve for and by oneself, not in comparison to other people. Also, moral development reaches a mature level. It is not anymore about right and wrong. It becomes clear that human relationships are much more complex than that. They look at events, the news or relationships from 360 degrees point of view.
Progression of the mind of the growing child
The mind is able to progress and become an abstract thinker when given the right opportunities at the right age level. What are “right opportunities”? When looking at progression from concrete to abstract, a child needs to be able to use the first years of life to build up an understanding of the real world by means of real experiences.
During Primary years, the mind then continues and develops through realistic knowledge on which imagination is built. Imagination is not fantasy. It is the mind being able to project, predict, transfer and integrate knowledge. It allows for thinking without the actual objects being present.

From this the teenager can build further. When they receive individualised mentoring, they can balance their learning styles, develop aspects of the different kinds of intelligences and then become a person who is able to plan, make choices, and logical decisions. This guidance of teenagers is extremely important. Should he/she stay at that age in a ‘concrete education system’ where subjects are taught separately from each other, where topics are not studied across disciplines, individualised communication that helps the mind to grow is not taking place, then the student stays at a concrete adult thinking level.

Concrete adult thinkers discourage others who explore new angles. They do not like alternatives routes or questioning ‘facts’, or spending time on ‘useless’ ideas.

They think in terms of specific steps. They do things as they are being told and are hesitant to work on open-ended questions. They tend to interpret events from one point of view and are not willing to be challenged on that. When learning, they tend to learn best by hearing concrete examples, and once they learn something that is, for them, the only right way to do it.

Thinking out of the box is abstract thinking. One first has to challenge the perceived ‘right’ manner, in order to find something new.

How can we help to develop thinking and reach that level of adult abstract thinking? We can do so by acknowledging each stage of childhood and protect it, against current opinions and social influences.

• There are different ‘windows of plasticity’ during brain development. The brain of the young child wires by means of concrete experiences. The hand shapes the mind. Without ‘doing’ there is limited neuro network formation. A young child in front of a screen looses important time to build up real life experiences. On the other hand, a child mixing flour and helping dad in the kitchen receives multiple sensory input that provides information to the neuro network.

• IQ must not be seen as a fixed entity that a child is born with. Nature provides the child with tendencies and nurture provides the opportunities to develop them. ‘Nurture’ is made up of the physical environment and the psychological environment of the adult assisting the child. A tangible environment gives information to the different intelligences that are developing simultaneously within the child.

• Infants and toddlers are concrete thinkers. Concrete experience, the objects and the sensations received through the senses are vital. Young children learn best by manipulating objects and imitating others.
• The child aged 0 to 6 has an absorbent mind. He/she is attracted by the physical world provided by adults and wants to know “what is this?” By interacting within the environment, the brain wires according to the cultural values the child finds himself in. Concrete thinking is an age-appropriate mental activity that is necessary in order to progress to abstract thinking.

• After many relevant concrete experiences, the mind continues to develop. Nature has then foreseen that from the age of 6, the child has the opportunity to develop a logical reasoning mind. The environment will need to adapt and offer a gradation of activities that allows a gentle transition to more and more abstract.

• The child now becomes interested in ‘right and wrong’. Moral development starts and needs many mini conflicts in order to gain experience. Here the adult should become a guide, not the one with the answers. When the adult wants to avoid tension and comes with the solutions, instead of developing abstract reasoning, the child stays at a concrete ‘right/wrong level’. This is where mentoring starts! With each conflict the adult goes through a series of questions; “What did you feel, what did he/she say/do? Why did it happen? What happened before hand? What could be a possible solution? Is this good for both of you?” Ideally the outcome is not one answer, but a series of possibilities from which the child can choose and for which he/she is then responsible.

• Together with the above characteristic comes the question Why? Primary children love to receive knowledge on; Why were the Phoenicians good boat people?, Why was the most beautiful library in Alexandria?, Why did the Romans build roads all the way to here? These are starting points of research and as the child learns more, he/she can integrate that knowledge with other topics. An answer to one question is the start of another ‘Why’ question. The curriculum needs to enhance this sensitivity and not stifle it by ‘pretending’ that there are many answers that you will need to know in order to do the test.

• Imagination can be further developed by means of Going out activities and excursions. These provide an advanced level of tangible experiences. They give information on how the world works. As children become older and more knowledgeable, destinations can be chosen accordingly.

• Abstraction is a relative concept, related to the age of the child. For a two year old, ‘the day after tomorrow’ is a highly abstract concept. For a Middle years Programme student one can move on to researching the Aztecs and trying to understand for what reasons a culture can vanish. Interest and motivation are important characteristics that lead to deep research and consequent abstract understanding.
• Older children who have already developed a level of abstract thinking have a hungry mind and love of culture. Intercultural studies and activities together with multi language learning stimulate further development.

• Social development can be further integrated through collaboration with younger and older people. Working within different age ranges and different abilities gives concrete information to the abstract concept that everyone is different and that we can learn from each other! There is not one way of doing things. When students are pushed to do better than others (compared to doing better than they themselves did before) it fosters the principal of going against each other. This type of concrete competition (the opponent is right there) hinders the student from going beyond him/herself. The focus is then on others, not on the self. Related anxiety and stress undermines self-esteem and performance.

• Service to others is an important activity that helps develop the abstract emotion of respect and understanding. Entitlement is an unwelcome consequence of ‘consumerism’. Children who receive but do not need to give develop a feeling of entitlement. The world owes them. This level of concrete thinking is also counterproductive also for the individual. Needing to give, to prepare, to make, to organise, i.e. needing to work for others helps to develop the abstract thought that humanity is interrelated. One indirectly gains from what one gives somewhere else. This level of abstract thought is the basis of a world in which people can start to understand each other.
The effects of concrete thinking on society and visa versa
The mind is meant to grow up to abstract thinking. It is an amazing complex organ that has a tendency to be underutilised. Einstein said that we only use 4% of it’s potential. Maybe this is true. When we look at how society and the world at large functions, one would think that our human mind should be capable of creating, from an overall human condition point of view, a much more advanced world.
Many adults continue to function at a concrete thinking level point of view.

In adult language one can hear how the brain of the speaker is processing. In conversation a concrete speaker might say: “He said that…” literally repeating the conversation. A more abstract thinker will not refer to the wording, but ‘translate’ it into the concept that was discussed and then embark on developing that concept further.

Concrete processes and related solutions can be very unnecessary to abstract thinkers. We see it in daily life. The concrete local administration will set up road works that last a whole year. The abstract thinker will find a solution so that the work is performed in less time and economic damage is consequently limited.

Concrete adult thinkers are strong in routines and doing things the ‘right’ way. It is a way of thinking that was very much stimulated by traditional education by the means of tests, rules and exams. Concrete adult thinkers do not see the need of trying to explore other possibilities and alternatives. There is only one right way.

The mind has the capacity to go beyond that. It can be wired so that is becomes able to do both concrete thinking, when the immediate circumstances needs it, and abstract thinking and planning when the situation allows for it.

Piaget, Steiner and Montessori amongst other pedagogues emphasised that to get to higher thinking abilities, one needs to give the brain the right experiences at the right moment.

That means at first very concrete experiences to a young child so that a sense of reality is formed and a solid neuro network is built accordingly. Secondly, it means going beyond ‘what is right’ for older students. Open-ended research, finding out that there are several answers to questions, interrelated topics and functioning in a multi-age/multi able group brings the mind to a higher level. Abstract thinking allows the individual to explore and relate the myriad of topics surrounding our world and it’s people from many angles.

Can we be the devil’s advocate and claim that society likes to keep humanity at concrete thinking level?! There are maybe many reasons why this could be so. One of them being that growth in the open market economy depends on demand. Demand is related to basic emotions. Wanting or needing something is not always rational. There is often no strategy or analysis behind a purchase. Demand equals immediate concrete action. Supply follows.
If we want our children to become able to think abstractly, it is important to look at what the brain needs at what age. Not at what society offers to my child at what age. If we do that, we let ‘society’ shape the development of our child’s thinking skills.

This is obvious to most parents when they look at the advertisements e.g. alcohol and the effect it can have on their children, as parents we do not agree and provide a counter balance by setting specific limits. But there are less obvious influences that affect children’s thinking abilities in the long run. Screen time being one of them. Even though that looks like an abstract activity, it keeps the child in a concrete thinking world. It relates to what do I want, how do I get it. Instant gratification when I push the button.

By Annie R. Hoekstra – de Roos

Bibliography:
Interesting books:
- Alfie Kohn – Moving from rewards and punishments to Love and Reason
- Jim Faye and Dawn Billings – From innocence to entitlement
- Howard Gardner – 5 Minds for the future
- D. Gilles Cotte – Montessori a la maison – 80 Jeux Pédagogiques à réaliser soi-même
- Tim Seldin – Le Pedagogie Montessori a la maison

Interesting Google’s:
- http://thisreadingmama.com/comprehension/prior-knowledge/making-it-tangible/
- From concrete to abstract Montessori – images
- http://greatfallsmontessori.me/category/theorem-of-pythagoras
Digital Technology and the Young Child

Our children are the first generation of ‘digital natives’ and, sorry to say for those of us reading this sentence, we are ‘digital immigrants’; not born into a time of constant plug-in, but immigrating and adapting to this state of being. Our children, however, have only experienced the ease and immediacy of receiving answers, services, announcements, reactions, and news at the swipe of a finger. Even if it is not their finger, and not their swipe, it is a culture of immediacy and it is their reality. It is considered progress, and in many cases in the adult-world, convenience and efficiency have been gained (although our efficient emptying of our email box is just as efficiently filled again with incoming messages).

But this article is not about the gains and benefits of adult consumption of digital technology, but about the impact of this technology on the developing brains (and consequently the future personality and executive functioning) of the young child, specifically, from ages zero to six years old. During these first years of life the brain goes through a particularly expansive rate of growth, not just in size, but in the making of critical neurological synaptic connections.

**Formation of neuropathways**

We know that every experience a child has creates a synapse connection in the brain. Experiences that are repeated will strengthen the synapse and with enough stimulation will eventually myelinate – creating an insulating sheath around the connection. A sensorially-rich environment stimulates the five commonly known senses (sight, sound, taste, touch, and hearing), but also lesser known sensors are engaged including sense of balance, pressure, time, thermoception (temperature), proprioception (where your body is in space), tension (monitoring of muscles), hunger, magnetoception (sense of direction), just to name a few. In addition to these isolated individual experiences, the brain also creates synapses related to social and emotional cues. Pro-social behaviour such as empathy, sharing, cooperation, regulation of emotions and impulsivity, maintaining attention, intrinsic motivation, sensing community and value within the community, are complexly pathed neurologically during these first six years of life. This is a time when the child is profoundly forming the foundation of their individual personality and their complete disposition in life. By the age of six or seven a child already possesses the attitude of, “The world is good; I am good, and I am a capable.” Or conversely, “The world is untrustworthy; I am not secure and am incompetent”. The absorbent, malleable, and elastic mind forms itself during these early years to serve and suit the future adult.
From concrete to abstract thinking

Montessori Motion 25/2 March 2016

Digital Technology and the Young Child
A visual medium

Now let’s figuratively and literally plug-in digital technology to the young child’s experience, focusing on the most stimulated of the senses with this medium – vision. What is viewed on a screen is a manufactured depiction of something else. By definition it is an abstraction of an object or idea. As we know, young children need real hands-on experiences in order to form healthy neuropathways, and abstracted images are less helpful for this development. The image and movement of the digital image has been edited and manipulated for a specific effect. The effect may be for evoking emotion, sympathy, or persuasion and in most cases the reasons are related to commerce. These subtle and sophisticated motivations are far from the child’s ability to discern or filter. At best the experience is useless, and at worst it is detrimental to the healthy development of their forming personality.

Books versus bytes

Of course images in a book are also a depiction and abstraction of something else. However, there are distinct differences between a book’s one-dimensional image and an image in digital technology:

Accompanying stimuli

Viewing content on a screen will almost always involve quick edits, skewed points of view, and distracting sound. Conversely, reading a book has the descriptive words and static images with the child’s brain filling in the rest. The character of a ‘grumpy grandma’ in a read-aloud book may still be light and fun in the child’s mind, while the same character in a video version may be accompanied by suspenseful music, a screeching voice, and a menacing demeanor. The book version allows the child to create part of the story in their mind. This not only involves more active thinking on the child’s part but also generates a more age-appropriate and child-specific experience. The story in the child’s mind will be customized for them, by them, versus mass-produced for a generic target market.
Tangent machine
Smart technology is revolutionary in many ways, but most notably in terms of child accessibility; it literally puts a plethora of functionalities into the palm of a hand, accessed by a single swipe. (Chimpanzees in captivity are given tablets with communication apps and games for intelligence testing, proving the ease of accessibility). When opening a book with a child, there are many attractive and distracting associations that children enjoy and parents incorporate into the story-time. However, the book is the main focus and the book has just a finite number of functions. It can be opened, closed, pages turned, pictures viewed, and words read which invoke a story. In the classroom we call it ‘isolation of difficulty’. Classroom materials teach one direct concept and a few indirect concepts. Calm, clear, and uncluttered experiences are optimal for a young child’s inner development.

Viewed in isolation
Generally smartphones and tablets are viewed and experienced alone. The child can manage it alone (as proven by the chimpanzees) and the child is stimulated (not to be confused with concentrated) for a long period of time. Another person is not required for hours of this passive activity. Books can also be viewed alone, but again with a finite functionality a child will more likely engage another person to be part of the experience. Since books don’t make noise, then conversation is usually more prevalent while sharing a book than sharing a tablet. Conversation about the story and also about other things that may be on the child’s mind are more likely to come up during a shared experience of book reading.

Light rays
The effect of artificial light rays on a person’s biorhythms has been a topic since TV watching was the main conversation. These effects are still a concern with the added effects of the proximity of the device (smart screens are viewed much closer than the television screen) and the increased amount of exposure. The increase in exposure has to do with screens being more plentiful in all aspects of life. Even though a
A child may have a limited amount of time to play with a tablet at home, there is still the screen in the waiting room of the doctor’s office and the screen in the car ride for the appointment, and looking over mum’s shoulder while she texts, and the one in the store and on the train commute and at the friend’s house, etc. Besides the ubiquity of screens, the physical viewing of a screen is associated to lower melatonin levels, which most of us associate with sleep difficulty. As well, melatonin has a role in pubertal development. Early onset of puberty among girls has been associated not only to an average increase in weight among the adolescent population but also due to a decrease in levels of melatonin. This decline in melatonin levels is attributed to the average increase in screen viewing.

**Red herring staring**

Observing young children using a tablet or smartphone can lead to misinformed conclusions. One sees a child enthralled, mesmerized, and seemingly in a state of concentration while using a tablet. Computers are often equated with intelligence, so the young child appears to have a touch of genius as they expertly navigate the device. Concentration and intelligence are a fallacy when it comes to the use of smart technology with young children. By definition, a wholly concentrated experience will leave a person feeling calm, relaxed, grateful, and refreshed, while many parents report the opposite effect when their child comes away from a screen session. Most often the child is agitated, edgy, and demanding of more. This strong desire not to stop and to ‘have just one more minute’, is less of an intrinsic motivation but more related to the ‘stickiness factor’. This is the term used by video manufacturers to measure how effectively a game hooks users into continuing play.

**‘Cultural Autism’**

Scan and react games promote brain development that mimics the brain pattern of Attention Deficit Disorder. Surveying the situation and acting immediately is the talent of people with ADD and is also the challenge. Video games reinforce this brain neuropathway for those already experiencing ADD and also imitates and creates this neuropathway for those who are heavy game users.
Cultural autism is a term coined by Leonard Sax, author of ‘Boys Adrift’ and he noted the effect of gaming on children creating autism-like characteristics. Those with higher exposure to games had difficulty in internal motivation and self-direction. These children lack resourcefulness as they lack experience in finding practical solutions to real world problems. As well they showed a lack of tolerance for delayed gratification.

The gravitational pull and appeal of screens do not diminish as the child ages, but can increase and change to different and more complex interests during the Primary and Secondary years.

Primary and Secondary

The topic of technology in the lives of Primary and Secondary students is a future article in itself. Students of these ages move away from the absorbent mind, in need of concrete experiences, to a reasoning mind where the ‘why’ and ‘how’ need answering. Digital technology can bring the wider world to this inquiring mind. The older child has more critical thinking capacities to discern content. Use of screens can become less of a consumer activity, (as it usually is for a young child who possesses limited skills), and become more of a tool for productivity. Primary and Secondary students have proficiency in reading and writing and powers of reason – these are critical skills for productive use of digital media.

Here at school the Primary 2 classroom uses computers for research and also packaging of student studies and projects for presentations. The Secondary level uses computers on a daily basis and has a customised website called Exchange where teachers post assignments and additional resources. The Diploma Programme students own and use laptops as a requirement for their work. Computer programming is studied at the different levels as a lesson in logic and reasoning.

For each of these age ranges a different approach is applied with use and limits clearly defined. The exposure to digital technology should be based on the student’s age and individual disposition. One size does not fit all when it comes to digital technology use!
Technology as an aid to productivity

Typing this article on a typewriter versus the iMac I am using now, would have taken me a few days, versus these few hours. Digital technology is fantastic and here to stay. In the adult world technology is not only nice to have, it is a must-have. In our adult life we use the technology as it was originally intended, as an aid to our productivity, both professionally and personally. In terms of childhood, the child’s ‘work’ has little to do with being more efficient and productive. Their work presently is a long, arduous process involving millions of real-life experiences to fully form their standing as an intellectually and socially functional and productive human being. They are to become decision-makers, problem solvers, conflict resolvers, and future agents of change in the world. These skills are only developed with real-world interactions with real people in real situations. The technology of the future (we cannot imagine our children’s children’s reality) will aid them in their work for making a better world. Until then, allowing the young child to lay the foundation through real-world experiences is the best preparation.

Finally, I leave you with one parent lamenting the effect of the iPad on his family life:

“My kids accuse me and my wife for being overly concerned about tech, and they say that none of their friends have the same rules…that’s because we have seen the dangers of technology first hand. I’ve seen it in myself, I don’t want to see that happen to my kids.”

If this dad above, Steve Jobs, had these discussions at home with his children, you can be assured you are not alone in finding the right balance for your own children and new technologies!

By Lisa Thauvette
Head of School Tervuren
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Interesting books:

• Ronald Kotulak – ‘Inside the Brain: Revolutionary discoveries on how the mind works’
• Hilarie Cash, PhD and Kim McDaniel, MA – ‘Video Games & Your Kids: How Parents Stay in Control’
• Leonard Sax, MD, PhD – ‘Boys Adrift’

Interesting Articles:

• Jane M. Healy, PhD – ‘The Growing Brain in a Changing World’
• Economist 26th April 2014 – ‘A is for Algorithm’
• Dr. Aric Sigman – ‘The Impact of Screen Media on Children: A Eurovision for Parliament’
It takes a village
Spring time is here! Lighter weather and longer days affect everybody’s mood positively. We can move outdoors again and enjoy some sunshine! At school it means lots of great opportunities for the children; Shows, singalongs, windows into the classrooms, outdoor play, games, sports, nature activities and excursions.

For our oldest students, Diploma Programme 2 participants, it means Exams. The exams are provided by the IB and are the same for all of Europe, Africa and Asia. Isn’t that amazing! To join a worldwide system and connect to all these international students! But not to forget, it is trial time for students and families and we wish you all lots of succes!
New edition: Book by Maria Montessori

Parking Stickers

New addition to your daily drive: An International Montessori parking sticker on your front window!

In order to make sure that only Montessori families make use of the school's parking areas, and to decrease the likelihood of being fined when parking along the kerb of the school, we have made a sticker for every family.

Please place it on your windscreen, bottom right corner.

The sticker is attached to your Continuous Enrolment letter. Should you need a second one, please ask your Head of School.

‘Hot of the press’: Our ‘International Montessori’ village is expanding to the Dutch speaking part of the world in an exiting manner. The Dutch version of the book ‘The Discovery of the Child’ (De Methode, de ontdekking van het kind) by Maria Montessori has been reprinted by the Montessori-Pierson publishing Company. The photos in this book are all taken at our school! It was an interesting experience for the children in the Children’s Houses at ‘Hof Kleinenberg’ having a professional camera man and lighting in the classroom. They were well prepared for this and continued with their work as usual, resulting in beautiful photos.

For more information and orders please visit: https://montessori-pierson.com/de-methode-de-ontdekking-van-het-kind.html
Informative Events

Information Sessions

TUESDAY MARCH 8
Math is wonderful!
Venue: Wezembeek-Oppem
Time: From 19:30
Participants: Parents of all Children’s Houses are welcome!

The Mathematic curriculum and materials show beautifully how children in the Montessori school are guided in moving from concrete experiences to abstract understanding. In the Children’s House they learn numbers up to 10 with numberrods, then to 100 with the sequin Boards and then move on to the 4 operations all the way up to 9999 and this with the golden bead materials. Adjacent they work with memorisation charts and more abstract materials such as the stampgame. In Primary this continues and moves into abstract calculations related to fractions, decimals, powers, multiples, signed numbers and much more. The Primary team at Tervuren will give you a wonderful overview. Parents are invited to see how materials are presented to the children, discuss aims, objectives and knowledge that is passed on and get a feel of the materials by trying them out themselves.

TUESDAY MARCH 15
Title: ‘Raising the decision makers of tomorrow’
Venue: Children’s Houses and Primary ‘Hof Kleinenberg’
Time: from 19:30
Participants: All parents welcome with children in the 2½ to 11 age range.

Parents of the Children’s Houses and Primary classes are invited to an interesting discussion hosted by a strong pool of international speakers (teachers of Children’s House and Primary) discussing the topic ‘Raising the decision makers of tomorrow’.

Five speakers will function initially as experts and display characteristics of harmonious and well-rounded abstract thinkers with excellent decision making skills.

The speakers represent the following ‘bodies’:
• Global association of Independent Thinkers
• Ecological Literacy representation of the earth
• Mind Body and Will Foundation
• ADHD Inc. – Academy of Decision makers Hand Decision Breakers
• The Union of the seven Multilingual Continents

Come to this thought provoking evening and with ample opportunities for questions and positive interactions!
Parent Café

The Parent Café is our cosy space offering information sessions during the daytime. Speakers are teachers from the different International Montessori locations. Lisa Thauvette, Head of School in Tervuren, is the organiser and facilitator of the Parent Café sessions. She books interesting speakers, topics, and creates a nice atmosphere encouraging discussion and participation. For more information you can reach Lisa at 02/767 63 60.

**FRIDAY MARCH 11**

**Colour Therapy for you and your children**

Parent Café at ‘Savoorké’
Time: from 09:30 to 11:00

Colour has an enormous influence on every aspect of our lives. On a conscious level, the colours you choose to wear each morning are giving out a message to the outer world, as well as expressing what is going on in your inner one. Colour therapy is a complementary therapy that uses colour to rebalance the body’s energies, helping it return to health and wellbeing. Find out more about the secret language of colour and its messages for you and your children. This session will be presented by Jenny Wilson, a Montessori mum and trainer in Colour Therapy.

**WEDNESDAY APRIL 20**

**Sibling Relations**

Parent Café at ‘Savoorké’
Time: from 09:30 to 11:00

Is sibling rivalry an inevitable part of childhood or can children avoid this conflict? In many cases, siblings spend more time with one another than they do with a parent, making the sibling relationship one of the closest of their young lives. We will discuss causes, cues, and cures for sibling conflict and ways we can influence and also get out of the way of sibling’s evolving relationship.

**WEDNESDAY MAY 11**

**Families on the move**

Parent Café at ‘Savoorké’
Time: from 09:30 to 11:00

It is the time of year when some families of the school are packing up and getting ready to move country. Moving house and country is perceived and experienced much differently for children than for the adult. Younger children live in the moment and are most grounded by the presence of their immediate family, taking cues of security from their parents. While older children can be more attached to their wider community and consciously form a reasoned opinion on the change in postal code. Join our discussion on relating to children’s reaction on a pending move and also the great benefits to being a ‘Family on the Move’!
**Family Events**

**THURSDAY MARCH 10**

**Cheese and Wine**
Time: from 19:30  
Location: Hof ten Berg 22,  
1200 Woluwe-Saint-Lambert  
Participants: All parents of ‘Hof ten Berg’ invited

Come and spend an evening at your child’s school tasting the delicatessens of French and Belgian wines and fine cheeses. After a tasting and explanation experience you will have the opportunity to socialise and get to know each other in a different way!

**TUESDAY MAY 10**

**Belgian Cooking**
Time: from 19:30  
Venue: Molenweg 4,  
1970 Wezembeek-Oppem  
Participants: All families of ‘Wezembeek-Oppem’ invited

The Wezembeek-Oppem school will change into a cooking club for the evening. Parents are invited to observe and participate with our Belgian teachers in creating three Belgian dishes; a starter, a main course and a dessert. After having it all ready the best will come. Everyone will sit together and enjoy eating it together with a glass of wine or a Belgian beer. Come and join us!

**Open Day**

Our spring Open day is scheduled on a Friday and Saturday. Prospective families can make appointments for the Friday to see the children in action. The Saturday is for both prospective parents and the school’s families. You are very welcome to come and visit with grandparents, friends and extended family members. In both ‘Hof Kleinenberg’ and ‘Rotseelaarlaan’ music concerts are given. Please have a look at the Specific Event sheet of your school under the heading Music to see which groups are involved.

**FRIDAY APRIL 22**
Time: Scheduled tours for prospective families

**SATURDAY APRIL 23**
Open all day from 10:00 to 17:00
School photos

School photos is not a true family event, but does require mums and dads that help dress their children up! It is so nice in the future to look back at these photos and remember! And right now grandparents love receiving these photos.

Photos of each individual child will be taken and also photos of siblings attending the school. Apart from that classroom, school and teacher photos are taken on the day. It is a huge organisation that ends up with everyone together in one photo.

You will receive the packs and can choose what you like. Staff and School photos will go up on the noticeboards for you to have a look at and add to your order should you wish to do so.

The photographers will do their work on the following days:

**FRIDAY APRIL 15**
at ‘Hof Kleinenberg’

**WEDNESDAY APRIL 27**
at ‘Wezembeek-Oppem’

**THURSDAY APRIL 28**
at ‘Rotselaerlaan’, Tervuren

**FRIDAY APRIL 29**
at ‘Savoork’, Tervuren and ‘Hof ten Berg’
Woluwe-Saint-Lambert

International Baccalaureate Exams

It is a big year for our graduating group of 2016! They are in their final months of preparation and will sit for their final exams between May 2 to May 18. They are so lucky to be educated in a small group and do revision work that is needed by them. Also the small group setting ensures that they have direct access to their teachers and can ask for specific explanations and clarifications. The nit is exam time and all the hard work comes together! They will have several exam papers for every subject and we need to send them lots of energy!!!

Diploma Programme 2 Final Exams

**FROM MONDAY MAY 2 TO WEDNESDAY MAY 18**
Participants: The Diploma Programme 2 students
Location: Study house in Sterrebeek

Good luck to all DP2 students.
You can do it!
Gala Evening
Graduating students
International Baccalaureate
Diploma Programme

WEDNESDAY MAY 25
Location: Multifunctional room at ‘Hof Kleinenberg’
Time: from 19:30

It is time for celebration. The two year journey through the IB Diploma Programme is completed and we can admire these students on their hard work and dedication throughout this time.

This GALA is an evening of delight for all those who have supported these students and would like to celebrate with them and provide a beautiful ‘final’ International Montessori memory for them! The graduates from 2015, teachers, MYP Years 3, 4 and 5, DP 1 and 2 of course with their families, are invited!

Dress code: This is a celebration in style and requires formal dress.

Diploma Programme 1
Mock Exams

FROM MONDAY 30 MAY TO FRIDAY 3 JUNE
Participants: Diploma Programme 1 students
Location: Study house in Sterrebeek

For the second time this year, the IB Diploma Programme 1 students will take Mock exams. These aim at students learning to function optimally in an exam setting. They get used to their position, feel comfortable in the exam room, start to manage their nerves and practise the important skill time management and speed. It also gives them a good indication of their academic progress and level from which they can evaluate their functioning, on route, to Final Exams in May 2017.
Holiday Camps

International Montessori offers again three weeks of holiday camps in 2016!

The first will be held during the second week of Easter holidays and two more weeks are organised for the beginning of summer.

Children between the ages of 2 ½ to 11 can sign up. The cost is €265 per week and payable upon registration. This includes all cost including all materials, snacks and (cold or hot) lunches.

The hours are from 9:00 to 17:00. Sign-Up sheets are available on our website and will be distributed to all families.

We organise the number of camp guides according to the number of children enrolled and therefore the fees are not refundable. The camps are very popular. Therefore registrations are accepted in order of enrolment.

Easter Camp

Monday April 4 to Friday April 8

Location: ‘Hof Kleinenberg’, Woluwe

The holiday camp coordinator for the Easter camp is Caroline Redondo-Gonzalez, who is the directress in Children’s House 2 ‘Hof Kleinenberg’. She runs the camp with other Montessori teachers from our schools, sometimes along with help of adolescents who are graduates of the International Baccalaureate Secondary section. Every year we have new and interesting topics and activities combined with ‘old’ favourites.

During the holiday camps the children will ‘travel the world’! The world is such a beautiful place and so much to find out about! No better way to spend the holiday!

The Easter camp will offer activities around the theme: ‘The Mediterranean and its countries’

During the Easter Camp the children will take a cruise through the Mediterranean sea to visit the countries that surround it. This ‘Azur blue’ environment is lovely to visit! Children will learn about the different cultures, tasting the delicious food and creating and bringing to life the sublime lands and their history.
Summer Camp

During the summer, a further two interesting weeks of holiday camp are organised:

**FIRST WEEK: MONDAY JUNE 27 TO FRIDAY JULY 1**
Location: ‘Hof Kleinenberg’, Woluwe

The topic will be *The Amazon River*. Pack your bags and travel with us to South America where we’ll explore the depths of the Amazon rainforest! With 40,000 plant species, 3,000 types of fish, and 2.5 million different insects we’ll discover the vast diversity and wonderment of the area. We’ll replicate a multitude of creatures as well as research how various tribes live within this vast forest.

**SECOND WEEK: MONDAY JULY 4 TO FRIDAY JULY 8**
Location: ‘Rotselaerlaan’, Tervuren

*Journey into Art* – We will go on a five-day journey to five continents to meet and explore the world of five great artists! We will learn about these artists’ great techniques and also listen to the music, taste the food, and move to the rhythms of their time and culture. From mosaics to masks the children will experience many forms and mediums on this artistic journey.

Our music teacher will be part of the staff, bringing an expert level of knowledge and application to the musical elements of these artists’ time through violin and rhythm.
# Holidays

**FridaY MARCH 25**  
Staff in-service day  
No School

**MONDAY MARCH 28 TO APRIL 8**  
Easter Holiday  
School re-opens on Monday April 11

**THURSDAY MAY 5 AND FRIDAY MAY 6**  
Ascension Long weekend  
No School  
Exception: Some IB DP students have exams on these days

**MONDAY MAY 16**  
Whit Monday  
No School  
Exception: Some IB DP students have exams on these days
It takes a village to raise a child

Montessori Motion 25/2 March 2016

![Children playing with hula hoops in a playground](image-url)
International Montessori Schools
International Baccalaureate Secondary section
Providing optimal education from birth to university

+ Attractive learning environments + High ratio teacher-student
+ Multilingual + Multicultural + Vast and interesting curriculum
+ Individualised learning styles and approach + Critical thinking

Open Day

Friday 22 April: Scheduled Tours and Saturday 23 April: 10:00 to 17:00
Tervuren – Wezembeek – Woluwe
www.international-montessori.org
02-767 63 60 / 02-721 21 11