

a Linguistic Intelligence z b c



Upper Primary-Tervuren exploring the 1950's

Multiple Intelligences



Typical education still very much rotates around the belief that intelligence is a single entity. IQ scores are still being tested for and outcomes can affect student's educational opportunities.

IQ tests examine mostly mathematical, linguistic and visual-spatial intelligences.

However, an increasing number of researchers believe there are a multitude of intelligences. Each intelligence has its own strengths and constraints and these vary within individuals. It is difficult to teach things that go against the learning style of a particular student. Therefore the educational setting needs a multitude of learning situations, thus preventing students from blocking, failing a class or in the worst case, dropping out of the schooling system. The child should not need to adapt to the school system, but, in order to get the best possible results for every child, the system needs to adapt to the student.

Howard Gardner

provides a paradigm shift; from 'one size fits all' educational practices to individualised learning.

The different intelligences rarely operate independently. They are used at the same time and tend to complement each other as people develop skills or solve problems. All intelligences are needed to live life well. Schools and teachers need to tend to all intelligences, not just those that are traditionally seen as important.

This newsletter has its focus on Linguistic Intelligence. We will discuss the strengths associated with this intelligence and also the related challenges. Additionally we will describe the activities done in the classroom that aid first and second language acquisition at the different age levels.

Linguistic Intelligence

Strengths particular to this intelligence:

Children with a high linguistic intelligence are recognisable. First of all they usually love to talk! But they also love to read and write. Once in Secondary school, they will not complain about writing an essay.

The traits are:

- High sensitivity to all aspects of language; likes to read, write, talk and listen
- Often speaks of what they have read

- Has the capacity to use language to accomplish certain goals
- Has the knowledge of the many different uses for language, such as persuasion, negotiation information, and pleasure.
- Ability to interpret others
- Learns second languages 'easily' and enjoys using them
- Flexibility in extracting meaning when speaking several languages



- Good at spelling and is sensitive to patterns
- Knowledge of the structure of the language; can recognize and apply grammar rules
- Likes word games, puzzles, poems
- Cherishes their book collection
- Good memory for general knowledge
- Easily remembers quotes and famous sayings
- Orderly and systematic
- Good ability to reason
- Can communicate their viewpoints in a clear, beautiful, and refined manner
- Can describe abstract concepts well
- Good public speaker
- Likes to debate
- Likes to use "fancy" words

Possible career choices:

Teacher, writer, poet, lawyer, copywriter, novelist,
journalist, scriptwriter, orator, seminar presenter,
politician, editor, publicist, journalist, translator,
speechwriter, actor and broadcaster

Strengthening the linguistic intelligence through the other intelligences:

Not all students of course have linguistic intelligence as their prime intelligence. However, it is an important tool to have in the acquisition, processing and understanding of knowledge. In individualised education, the other intelligences can be used as an entry point. Some examples for Primary and MYP students:



Interpersonal Intelligence – ‘Happy to be with others’

- Make up stories and tell them to the group
- Have debates about current events
- Interview friends, family and mentors; process data
- Discuss life, the universe and everything; produce a story
- Write letters/e-mails to pen pals

Intrapersonal Intelligence – ‘Liking quietness and reflection’

- Keep a journal
- Write poems
- Read all kinds of novels, stories
- Present a Haiku poem
- Help someone else write a poem
- Organise a book club

Bodily-Kinaesthetic Intelligence – ‘Movement is the main purpose in life’

- Make a questionnaire and interview fellow students on which sports they would like to do
- Write a letter to the sports hall, communicate with the staff
- Write letters to the parents about equipment needs
- Organize an outing, research it, prepare, plan and execute

Logical-Mathematical Intelligence – ‘Seeing it abstractly’

- Explaining concepts to others
- Write word problems for the class
- Reason out concepts
- Present the timeline of a famous mathematician
- Write a story combining history and math



Musical Intelligence – ‘Hearing the beat in everything’

- Write songs, lyrics
- Organise a small concert
- Write introductions of each song, present at the concert
- Make a time line of the life of a famous composer

Natural Intelligence – ‘Love for nature’

- Write observations
- Write lab reports
- Present your expertise to a small group
- Organise a Nature Appreciation day
- Organise excursions to the botanical gardens
- Write an article for the local newspaper

Visual/Spatial Intelligence – ‘Building images in the mind’

- Write using a word processor
- Practice your challenging words
- Make your own website and teach this to others
- Prepare a Power Point presentation on a certain topic
- Explain to others how to do mind mapping
- Make a document with directions for an excursion



Language in the classrooms

The Montessori classroom offers a large variety of language activities. It covers oral acquisition of mother tongue and second language(s), written acquisition at all levels and language extensions through the integrated curriculum. The classroom offers 'whole language learning'. Languages are presented as living phenomena, not only as a grammatical entity.

The importance of Concrete Experiences:

Language development is an integral part of the personality. It is not just a skill that can be taught; it is based on life experiences. One cannot talk about what one has never experienced. Small children want to touch, smell, taste and see. They use their senses to obtain many impressions. The adults automatically match a young child's activities with the appropriate words. A child who has little to touch and who has little contact, usually also has a small vocabulary.

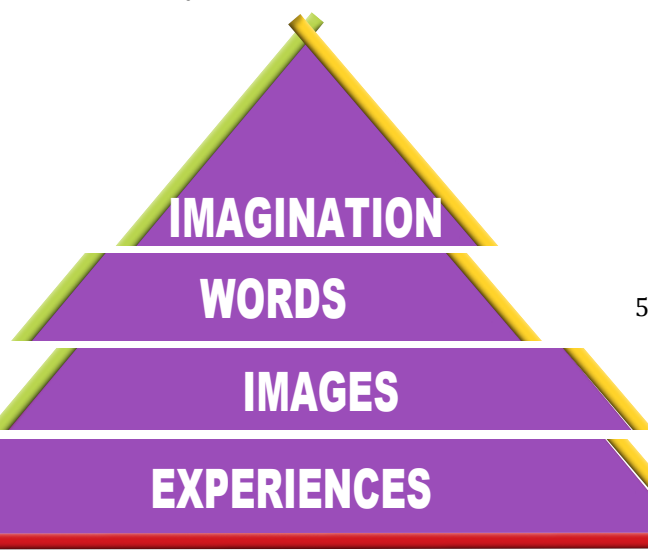
Built upon the experiences, the child forms an image of the object in his/her mind. The word is then attached to the image. And so language

development moves from concrete experiences to abstract thought during the first six years of life. During those early years, the mind absorbs the words without conscious learning. Such sensitivity is unique and slowly diminishes. However, then the reasoning mind takes over. From approximately six years onwards, the child has gained life experiences. He/she can start to think more abstractly, develop abstract skills such as reading and abstract thinking in the form of imagination. Therefore also imagination is related to early experiences. Now a child can read and imagine the desert, this is because he has had sandpit experiences, knows what is heat, dry, beach and other related concepts.



Children therefore need time to play. They do not receive concrete experiences that become integrated in their personality in front of the TV. Children also need time spend with adults and older children so that they absorb and learn to converse, to ask and to listen. This dance of language develops through practice and stimulation.

Individualised education allows teachers to sit and listen to the child. They make eye contact and respond after a question has been made. They also ask to be able to speak uninterrupted and to not repeat their message unnecessarily. This contact stimulates language acquisition and also helps the child to tune into language. They know that when something is being said it is important, so it becomes necessary to listen.



Expansion of vocabulary

In Toddler Community and Children's House one finds many activities related to acquisition and expansion of the vocabulary. The sequence is as follows:

- 1) Children acquire words through small objects that are classified according to topics. E.g. objects related to summer holidays on the beach, animals of the farm, cleaning objects, fruit, winter gear, clothing, sport and so on.
- 2) The second level offers objects and related cards, thereby giving children the initial idea that an object can be represented in a two dimensional image.
- 3) Once this abstract representation is understood, work with cards only continues.
- 4) In Children's House children continue with classified nomenclature. This can be common or scientific. Each set contains approximately ten cards that are rotated. Each noun is represented by a card with its name, a card without its name and the name separately on a label. The child matches the words to the cards and then checks with the control cards. Again, the topics are as wide as the interest. It can be names of trees, animals from Australia, flags of Europe, kinds of vegetables, animals and their young. Scientific topics can range from the shapes of leaves, parts of the frog, development of a seed, names of continents, and so on.
- 5) Extended language activities are related to what we traditionally call academic subjects. Children can learn the name of instruments, composers, artists, means of transport, local costumes, seeds of trees, names of the planets, parts of the flower and much more.

Besides the specific language activities there are an abundance of language moments throughout the day, week, term, and year. Children learn from both the teacher and the other children. The other areas in the classroom such as practical life, sensorial and mathematics offer a wealth of vocabulary. Social interactions offer many opportunities to communicate with each other.



Children learn to write and read in the Children's House and the beginning of the Lower Primary. The process moves the child slowly from very concrete to abstract. Reading by its nature is an abstract phenomenon. However, Montessori developed many activities to bring this abstract activity to the concrete.

Once the child knows approximately 50% of the alphabet, he/she starts to work with the large movable alphabet. Both of these tools are made in cursive letters. Cursive letters are initially taught since the child has a natural inclination to round movements and because the child moves from writing to reading. Why would this be, since it is the opposite of what typical schools do? Writing is a much simpler activity to reading.

we call this 'writing'. Children form words, without needing to synthesize. Reading is a lot more difficult, in that the child first needs to interpret what someone else has thought up, analyze it to sounds, then synthesize the letters and try to make sense of it. This is a double process and should be done later.

They then continue with:

- With all these different activities they move from being technical readers to total readers. This is defined as the child enjoying reading and seeing it as an important means to gather information and knowledge.



Integrated curriculum

As soon as the child can read, the written language is used in all subjects. The integrated curriculum ensures that language does not become a 'boring' subject, but that it is a mechanism to discover the world! Children in Primary are very keen to learn about the question 'Why?' They love to know more and find out. By integrating the subjects, they have an opportunity to see the relationships. It also ensures that all the different intelligences can be used. Like adults, children are not all interested in the same thing. Children with different personality traits remain concentrated and motivated, as there are always several interesting topics going on.

Multi Age Range

The variety in ages stimulates the development of language since different levels of acquisition and mastery are present. Children hear and see more advanced language use. The other students function unconsciously as role models. The teachers often say they 'help each other'. This is often at an unconscious level. In a multi age classroom, students benefit from many 'teachers', not just the one in front of the class.



Second Language Learning in the Bilingual Classroom

Toddler Community, Children's House and Primary

The Montessori classroom offers 'whole language learning'. The two teachers, who speak their respective language, provide a rich environment. Children do not learn primarily through grammar exercises, but are exposed to the languages all day and in a variety of circumstances.

Depending on children's history, for some the bilingual environment is a submersion into new

languages. For others it is immersion. Those who speak English or French at home gradually open up to the second language. The child can speak the home language and while being exposed to the second language at the same time.

In order to help the newcomers, children can talk in their first language, even if this is not English or French. Many teachers are multilingual and understand. Even if they do not understand



Middle Years Programme

the language literally, they are accustomed to communicate with children and can interpret what they mean. The aim is first for the child to feel confident that he/she is being heard, that language is not an issue and not an obstacle. This stimulates the self-esteem and opens the child's mind for the second language. When there is no stress involved, learning goes fast.

Language used by the teachers is linked to concrete objects or gestures as long as it is needed. The teacher uses direct language that indicates the concrete experience. Therefore the child always knows what she is talking about and absorbs language together with the experiences.

By simulating first language acquisition and expansion through concrete experiences and language activities, the network that is being built up is also usable for the second language. Both are rooted in the real life experiences.

In the classrooms, the child moves from verbal understanding, to speaking, to writing and reading. Written acquisition within the second language can start as soon as the child has reached the level of technical reader in his/her first language. For children who started at Montessori in the Children's House this is from approximately 7 years onwards. For children who are not mother tongue French or English, the teachers choose the language that the child knows best as the language they initially learn to read and write in.

Classroom communication is meaningful and relevant. Second language learning seems incidental, mirroring the manner the first language is acquired. However, the nature of the classroom, the philosophy and the interactions are all planned and provide a very rich language environment.

Within the Middle Years Programme one has different levels of second language mastery and development. This is depending on how long the students have been in the Montessori school and what they have been exposed to before and/or outside school.

Within the IB curriculum, we now call the mother tongue language A and a second language B. Students progress in at least two languages. Additional second languages can be chosen, depending on individual workload and level in the first two languages. Overall English, French, Dutch, German and Spanish are on offer.

Students have the opportunity to grow within their level at their own pace. So it can be that some children function in two languages at Level A. As Level A is considered to be mother tongue level it is more demanding than language B.

Students also attend other subject classes in language B, thereby learning scientific vocabulary. Emphasis at this age is of course on becoming a fluent speaker, increase the vocabulary to a pre-adult level and grow towards becoming a fluent writer. Children read and write essays in the different languages. Grammar exercises are practiced in order to understand the syntax and grow to a mature level.

Furthermore children organize and go on excursions that stimulate language development. They attend plays, write and perform parts of their own theatre performance in a second language and communicate in the different languages whilst doing their work experience activities. All these experiences stimulate the language in a holistic manner. The aim being that children learn usable language skills and become confident communicators.



Children acquire language in different ways and intensities



Since language is an intricate part of the personality, language learning is different for every child. It depends on many factors. As a family, one can assist in many areas, some which seem not related:

- Starting age of the child: The brain of a child aged 0-6 absorbs languages automatically and without difficulty if the languages are provided in a holistic manner and with the same person speaking the same language at all times. After six years of age, language absorption slows down and conscious language learning comes in its place. New language acquisition slows down with age.
- Linguistic history: Does the child come from a monolingual or bilingual background? Early exposure to a second language influences the speed and ability of learning another language at a later stage. This is because the neuro networks have been made.
- Major and minor developed intelligences: The learning style of a child influences the speed and intensity of learning. A child with a large component of e.g. interpersonal intelligence will want to learn fast, because being amongst others is very important. Thus language learning takes priority.
- Cognitive abilities: Language learning requires, especially at a late age, large components of analysis, synthesis and abstract thought.
- Concentration: A student with a good concentration span will do well with language exercises, matching classified nomenclature cards, grammar boxes, sentence analysis, group tasks and so on.
- Value factor of the culture of the language: Language is integral to the related culture. When the family appreciates the new culture, language learning goes faster for the child.

There has to be an emotional connection to the language. 'Cultural shock' or negative emotions related to the host country or the fact that one had to move, can have an inhibitory effect on the learner.

- The amount of exposure: School offers a learning environment that can be complemented with other activities such as; ballet, football, summer camps, music activities, free play with neighbouring children in the street, babysitters, and friends of the family. This provides additional time spent with the language and different vocabularies.
- Necessity to learn: When the language understanding and use is required, the need to learn increases. Motivated students learn fast!
- Creating a climate in which a child feels he/she is allowed to make mistakes: When the child is immediately corrected he/she might decide not to continue using the language. Indirect
- Allowing the child to be whom he is meant to be: An extravert learns differently from an introvert. Both might know the language to the same degree, but will display it in a different manner. An extravert will start talking as soon as he/she knows a few words. The introvert might wait and start talking once the language is completely absorbed. Children who love to take initiative will not be very good at a continuous repetition of grammar facts, whilst those who like to have patterns and structures love to do language exercises. Children can be accepted for whom they are and be given help according to their preferred learning styles. Thus creating interest and love of learning.

Advantages of second language learning

Providing a bilingual environment is unique. The Montessori School is the only school in Brussels offering two teachers in a classroom, each speaking a different language, thus providing an integral stimulation to become multi-lingual. Now, the school's aim is not only to become multi lingual. The set up has many more advantages.

Multiple language learning has a lot of effect on different aspects of the personality:

- 1) It provides greater mental flexibility. People who speak several languages can become less 'black and white' in their opinions. They have more access to information that can help to see things from different points of view.
- 2) Needing to transfer between languages benefits flexible thinking.
- 3) It influences divergent thinking; creative, original, imaginative, open minded personalities
- 4) Provides the necessity and ability to analyse and think abstractly. One question can, in different languages, have nuances in the answers. This is because words never mean exactly the same, due to it's emotional context. This offers more variety in order to solve a problem.
- 5) It offers enriched cultural experiences which benefit the development of the different intelligences

- 6) Cultural acceptance and respect. When we speak several languages, we get to know other people on a deeper and more personal level. This can lead to mutual respect and appreciation. Language is not a means in itself, it is a tool. It is a human capacity that can combine people and help the world ahead in a positive way!
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- A photograph showing a group of children and adults standing in a line outdoors, possibly in a schoolyard. They are looking towards a wooden structure, which appears to be a play area or a display. The children are wearing various clothing, including blue shirts and jeans. The background shows trees and a building.



Annie Hoekstra – de Roos



Interesting reading

Books:

- Howard Gardner, 'Multiple Intelligences' – 1993
- Fons Trompenaars & Charles Hampden-Turner, 'Riding the waves of culture' – 1997
- Geert Hofstede & Gert Jan Hofstede, 'Cultures and Organisations' – 2005
- Maria Montessori, 'Absorbent Mind' – 1947

- Lise Eliot, 'What's going on in there?', 'How the brain and mind develop in the first five years of life' - 1999

Internet:

- Smith, Mark K. (2002, 2008) 'Howard Gardner and multiple intelligences', the encyclopedia of informal education, <http://www.infed.org/thinkers/gardner.htm>

