



INTEGRATED CURRICULUM

The Montessori Primary Curriculum is quite specific to ensure that children learn fundamental concepts and skills. There is however a choice of ways that the children can explore the concepts and practice their skills.

The Montessori Links Document has been developed to provide a framework in which the Montessori Primary Curriculum links with and covers the New Zealand State Curriculum. In addition, the latest version (2009) of the New Zealand Curriculum has “key competencies” to be adhered to while teaching all subjects. These key competencies - thinking, managing self, relating to others, participating and contributing – sit well within Montessori principles.

At any given time different children will be studying any number of different subject areas, at varying degrees of complexity. All subjects are interwoven, not taught in isolation. This means that the children will understand the relevance of what they are learning and place it in context. They learn that everything is connected: climate, crops, culture and so forth. The aim of an integrated curriculum is to make education a coherent whole rather than an assortment of unrelated bits of information.

The children have a 3 hour work cycle every morning where they are allowed the freedom to work uninterrupted. They are expected to give numeracy and literacy a priority in this time, but these skills are “scaffolded” to include other areas that interest them as well – for example art, fitness, gardening, zoology etc. In the afternoons they cover additional parts of the curriculum such as music, information technology and art.

Language is an important part of the entire Montessori curriculum. Its treatment as a separate subject comes only at the points in which it is necessary to give clarity to the child's mind, that is, to give him conscious awareness of language in order that it may be used more effectively. Once the child has an understanding of writing being a graphic form of language, these focus points centre around spelling, word study, penmanship, grammar, punctuation, and capitalisation. The real experience in reading and writing comes through the child's work in other areas of the curriculum, such as geography, history, botany, etc.

Because children have different cognitive styles, they are provided with different ways to learn to read within the environment. In this way, the child will be able to select the components of reading which fit his cognitive style and put them together in the way that is best for him. Once reading is mastered, the child expands into reading quality literature and poetry and into self-expression through creative writing.

Mathematics. Manipulation of concrete and symbolic materials with built-in error control develops sound arithmetic skills and leads the child to make his own abstractions. As in other parts of the Montessori curriculum, experience with a material comes first, then the spoken language or naming of the concept. This is followed by the symbolic representation or written symbol. After these three approaches have been mastered, they are then associated with one another in the child's sub-conscious. In Montessori mathematics, this sequence is referred to as quantity, symbol, and association.

Geometry in Montessori follows the historical development of the subject. Geometry began as a concrete experience, with abstractions following at a later time. Each child follows the same sequence. Geometry is experienced sensorially through manipulation of both plane and solid geometric figures. These materials induce a creative activity that involves two and three dimensional construction of various forms, artistic drawings, and ornamentation. As much geometric nomenclature as the child is able to assimilate is supplied, so that the child will have as much information as possible at his command when entering the stage of exploring why, how, and when things happen.

Social Studies and Science. Subjects like anthropology, astronomy, biology, chemistry, economics, geography, geology, government, history, philosophy, physics, politics and sociology are not broken down into separate subjects. Instead, they are totally integrated within the curriculum. Where appropriate they are also

integrated even more broadly into the teaching of language and mathematics. The aim is to make education a coherent whole rather than a conglomeration of unrelated bits of information.

Five "great lessons". These lessons set the stage for the presentation of the integrated curriculum. The stories deal with the development of the universe, solar system and earth; the development of life on earth; the coming of human beings; and the development of the alphabet and the development of the use of numbers. For example, the study of geography is designed to show how the physical configurations of the earth contribute to the history of all people. Thus students learn about the atmosphere and erosion and then relate this to climate and vegetation and finally to agriculture and the challenges the local people face. The students gain knowledge of the world around them and how vast our universe is. This can be a very humbling experience.

One especially important material serves as an organising centre for the "Human Relations" curriculum. This is a chart titled, "Fundamental Needs." It is introduced as early as possible in the primary school. Preparation for it begins at the pre-school level. Discussions around this chart help children see that the needs of human beings in all places on the earth and in all times in history are the same.

Arts and Crafts. In the Montessori Primary Class, the adult aids the child in the development of skills in order for the child to creatively express himself through various media. In addition to art expression for its own sake, art is an integrating factor for the rest of the curriculum. The child may make use of it in such ways as geometrical drawings, geographical maps, mathematical graphing, or illustrations for history, botany, etc. With a variety of techniques and media at their disposal, the primary aged children may choose appropriate forms of artistic expression for the areas of the curriculum.

A study of the historical development of artistic expression is made available within the history material. It is developed simply at first as an idea by itself; then, as the child matures, it is related to architecture, religion, music, politics, literature, inventions, explorations, etc. Later, it is taken again by itself and studied more deeply. Appreciation activities are a natural part of the historical study.

Music in the Primary Programme consists of seven related elements, namely singing, listening, music theory and ear training, eurhythmics, producing music and music appreciation. Singing provides opportunities for understanding scales, expression of feelings, and understanding of other cultures. In addition, parents may enroll their child with KBB. KBB conduct lessons during school hours in playing a number of instruments. Children may also join the school choir and the school band.

Physical Education. An interest in the development of skills that could be used in later life is the emphasis, along with the challenge of competing with oneself rather than competing with others. Biological studies relating to physical education include human anatomy, physiology, and nutrition. Practical life areas such as sewing, weaving and movement activities in music are also related.

Virtues. Montessori education advocates the teaching of virtues to children. Virtues are more fundamental than values. Values may differ from culture to culture and from individual to individual, but virtues are strived for in all cultures and religions. In co-operation with the Montessori Unit, Howick Primary has adopted the following virtues: Purposefulness, Tolerance, Courage, Perseverance, Creativity, Enthusiasm, Flexibility, Self-discipline. Each virtue is focused on for a term. The children may hear a story emphasizing the virtue, role-play how they might use the virtue in daily life or draw a picture showing an instance where they have seen someone practicing the virtue. You can read more about Virtues Education at <http://www.virtuesproject.com/virtues.html>

In addition the New Zealand Ministry of Education has included Values Education in the latest revision of the State Curriculum (2009). Students will be encouraged to value:

- Excellence, by aiming high and by persevering in the face of difficulties
- Innovation, inquiry and curiosity, by thinking critically, creatively and reflectively
- Diversity, as found in our different cultures, languages and heritages
- Equity, through fairness and social justice
- Community and social justice for the common good
- Ecological sustainability, which includes care for the environment
- Integrity, which involves being honest, responsible, and accountable and acting ethically and to respect themselves, others and human rights

For more information:

<http://nzcurriculum.tki.org.nz/Curriculum-documents/The-New-Zealand-Curriculum/Values>