

Elementary Curriculum

1. **Cosmic Education:**
2. **Language**
3. **Mathematics**
4. **Cultural Studies**
5. **Science**
6. **Practical Life**
7. **Music**
8. **Movement**
9. **Foreign Languages Program (Spanish and French)**

The Intellectual Period

(Ages 6 to 11 years, grades 1st. – 5th.)

1. Cosmic Education

Maria Montessori called her plan for the elementary child the "Cosmic Curriculum." "Cosmic" in this context means comprehensive, holistic, and purposeful. The goals of Cosmic Education go far beyond the usual goals of skill development and knowledge acquisition to address the development of the whole person. Children who complete the Cosmic Curriculum have a clear understanding of the natural world, of human knowledge, and of themselves. These children are prepared to leave childhood behind and to enter adolescence as independent, confident, responsible, emotionally intelligent individuals, balanced in physical, intellectual and social achievements. They are academically and practically prepared to pursue self-education in many areas; to make responsible decisions and act on them in a responsible way; to recognize limits and give, ask for, and receive help, as needed.

She also called this new stage of a child's formation the Intellectual Period of the second plane of development. She wrote "All other factors...sink into insignificance beside the importance of feeding the hungry intelligence and opening vast fields of knowledge to eager exploration." Montessori describes children of this age as being on the threshold of reason and "emerging into a new world of the abstract. It is a rich world in which the acts accomplished by human beings will interest them more than the things...Before they were interested in things. Now they will occupy themselves mainly with the how and the why. All that used to attract them tactically now interests them from a different point of view. They are looking for what needs to be done. That is, they are beginning to become aware of the problems of cause and effect."

They want to use their newly developing powers of reason to come to their own conclusions. "It is at this age that the concept of justice is born, simultaneously with the understanding of the relationship between one's acts and the needs of others." Teachers present ideas, spark motivation, and introduce materials that allow the child to access the richness of the world's knowledge.

The elementary Montessori curriculum is highly enriched and challenging. It spans around three streams:

1. The first stream is the ***Mastery of Fundamental Skills and the acquisition of Basic, or Core, Knowledge***. During the elementary years, Montessori students study all the basics found in a traditional curriculum, such as the memorization of math facts, spelling lessons, and the study of vocabulary, grammar, sentence analysis, creative and expository writing, and library research skills. But there is so much more to Montessori than the "Basics"!

Elementary Montessori students explore the realm of mathematics, science and technology, the world of myth, great literature, history, world geography, civics, economics, anthropology, and the basic organization of human societies.

2. In this second stream of the Montessori curriculum are found what we call the **"Great Lessons"**. These are key areas of interconnected studies that are traditionally presented to all elementary Montessori students. They are in inspiring stories and related experiences and inspiring research projects. They include the story of how the world came to be, the development of life on the Earth, the story of humankind, the development of our language and writing, and the development of mathematics and technology. They are intended to give children a "cosmic" perspective of the Earth and humanity's place within the cosmos.

The essential underlying theme, throughout these Great Lessons is that everything, living or static, follows its own natural laws in the development of the whole.

3. The third area of the Montessori curriculum is **Individually Chosen Research**. As their proficiency in reading and composition grows, elementary Montessori students are encouraged to explore every topic that captures their imagination. Students rarely use textbooks. They do a great deal of independent reading and library research. They gather information, assemble reports and portfolios and handmade books of their own, and teach what they have learned to their friends. Their oral presentations and written research reports grow in sophistication and complexity over the years.

At the elementary level, learning will continue to be a hands-on experience, as students learn by trial, error, and discovery. The Montessori applies the following curriculum as a tool to achieve their objectives.

2. Language

Language is the foundation upon which we build all other elementary studies. We present the child with the practical tools for encoding and decoding words, sentences, and paragraphs, yet it is never seen as an isolated exercise. With a more sophisticated level of language comes greater refinement in its use. While students continue to benefit from concrete experience with concepts in grammar and mechanics, they explore the study of language as an on-going creative process of research, ideas, and imagination.

- Phonics
- Word study
- Grammar
- Language mechanics
- Handwriting and fine motor skills
- Writing
- Research skills
- Reading and literature for understanding
- Elements of literature
- Major genres
- Prose, poetry, plays
- Folktales, legends, myths
- Newspapers and current events
- Sayings, phrases, idioms
- Oral reading
- Oral language
- Library skills

3. Mathematics

The use of mathematics arose thousands of years ago as a tool to meet a fundamental need for order and as a practical aid in daily life situations. Only later were rules applied. Students use materials to work toward the abstraction of math concepts, naturally formulating rules and formulas themselves. Traditionally, the study of mathematics starts with the rules and the drills follow. According to the Montessori Method, the rules are points of arrival, not departure. Through the student's own effort, internalization of abstract concepts is achieved.

Development of the concept of the four basic mathematical operations: addition, subtraction, division, and multiplication through work with the Montessori Golden Bead Material. The child builds numbers with the bead material and performs mathematical operations concretely. (This process normally begins by age 4 and extends over the next two or three years). Work with this material over a long period is critical to the full understanding of abstract mathematics for all but a few exceptional children. This process tends to develop in the child a much deeper understanding of mathematics. .They internalize a specific math concept, they can then move on to abstract problem solving. In addition to the manipulative, we use Montessori Made Manageable, which is a sequential set of worksheets that cover the elementary program math curriculum. They are used for both classwork and homework in a supplementary nature, along with various textbooks and workbooks that compliment specific concepts and skills.

Traditionally, the study of geometry is undertaken in later years as an abstract series of rules, theorems, and propositions. Maria Montessori saw geometry as firmly rooted in reality, and built a curriculum for student that uses concrete, sensorial experimentation, leading them to concepts through their own creative research. Although sophisticated in content, geometry continues to be well grounded in concrete experiences with manipulative materials around fourth and fifth year. In this way, etymology is discovered, relationships and concepts are explored and researched, and the child's conclusions serve as a basis for theorems, proofs, and formulas.

- Numeration
- Operations
- Math facts/memorization
- Algebra
- Study of Powers
- Integers
- Fractions
- Decimals
- Percentages
- Measurement
- Time
- Money
- Roman numerals
- Problem solving
- Graphing
- Geometry
- Equipment

4. Cultural Studies

Cultural studies are introduced by the first Great Story. These lessons, presented with highly impressionistic stories and materials, offer the child a panoramic view of the universe and a sense of humanity across time. The great questions that arise from this view then serve as a blueprint for further study in all cultural areas. The use of hands-on materials, coupled with developing reading, writing, and research skills allow the Elementary student to ask and

attempt to answer questions no less profound than "How did the world begin?" "Where did we come from?" and "Why...?" The hands-on experience at this age prepares the child for future abstract thinking in Elementary 2 where he gets to understand that which is not directly contacted by the senses.

The Great Lessons

- Story of the universe
- Coming of life
- Coming of humans
- Story of communication
- Story of numbers

History presents a school-wide, three-year rotation of content so special events such as cultural festivals, assemblies, field trips, and reading lists can be thematically planned for the whole school. Each year, a central question is posed and each level has its own sub-questions that focus the lessons and studies. Each level delves into the year's subject according to its appropriate developmental capabilities.

Year one-Ancient civilizations

*The school-wide question is "How and why were ancient civilizations created?"
In first 3-year focus is "What do we learn from creation stories?" "What is an ancient civilization?" "What stories do artifacts tell?" "What inventions helped ancient civilizations develop?"*

In later year focus is "Why does oral tradition exist?" "Why did some civilizations thrive and some fail?" "How did religion shape civilization?" "How did social structures shape civilization?" "What makes an ancient civilization ancient?" "What can we infer from the artifacts we find?" "What inventions were created to improve the life styles of early cultures?"

Year two-American civilization

*The school-wide central question is "How and why has American civilization changed?"
In first 3-year focus is "What is immigration?" "Who are the immigrants in America?" "Why do people immigrate?" "What events and people caused change in America?" "What is a hero?"*

In later year focus is "What does it mean to be an American?" "How has immigration influenced and changed American civilization?" "What events have changed America?" "How have the ideas of peace and freedom shaped democracy?" "How has war shaped and changed democracy?" "Do heroes and heroines impact our lives?"

Year three-World civilizations

The school-wide central question is "How and why do world civilizations connect?"
In first 3-year focus is "What causes people around the world to live differently and the same?" "What traditional ceremonies are practiced throughout the world?"

In later year focus is "How are cultures around the world similar and different?" "What cultural challenges might one face as a guest or host?" "How do people from different cultures tell stories?" "How are various countries governed?" "Can world civilizations co-exist in peace?"

Geography

- Physical geography

- Political geography
- Economic geography

5. Science

The Elementary science curriculum is deeply integrated with the cultural studies curriculum and the presentation of the five Great Lessons which center on themes of progress and interdependency. The stories present not only the changes the earth has undergone since its beginning, but also the ways in which each new animal or plant affects all others. Maria Montessori wrote, "Let us give -the elementary children- a vision of the whole universe..."all things are part of the universe and are connected with each other to form one whole unity."

Life science

- Biology (kingdoms of life, systems of the human body)
- Botany (classification of plants, form and function of plants, parts of plants, interdependencies of animals and plants)
- Zoology (classification of animals, form and function of animals, parts of the animal, interdependencies of animals and plants)

Physical science

- The process of scientific inquiry
- Composition of the earth
- Three states of matter
- Laws of attraction and gravity
- Balance and motion

Earth science

- Ecosystems
- Sun and earth
- Air and weather
- Land and water forms
- Map skills (puzzle maps, pin maps)

Life science

- Environments
- Food and Nutrition
- Human Body

Physical science

- Physics of Sound
- Magnetism and Electricity
- Levers and Pulleys
- Mixtures and Solutions

Earth science

- Solar Energy

- Land Forms

Scientific reasoning and technology

- Variables
- Measurement
- Models and Design

6. Practical Life

Physical skills

- Coordination of fine motor and gross movements
- Balance and exactness of movement
- Sensory awareness

Respect and care of environment

- Indoor environment
 - Caring for plants and animals
 - Caring for the classroom and coat areas
 - Food preparation
 - Recycling
- Outdoor environment
 - Ecology
 - Planting

Grace, courtesy, and etiquette

- Extending kindness and empathy to others
- Sharing and taking turns

Independence

- Care of self
- Health and safety
- Nutrition and food preparation
- Time management skills
- Organizational skills
- Problem solving
- Time management

Students practice these life skills by coming to lessons prepared and keeping track of both class and homework assignments,

Community service

We believe that community service promotes respect and awareness beyond our classroom. In the first 3-year students participate in service projects such as collecting gifts for children in a local shelter, **older students practice their oral reading with Extended Day students, and spend some time assisting in the Toddler program once a week, on a rotating schedule.**

7. Music

The Music curriculum combines individual and group work with work designed to appeal to a variety of learning styles. This directly relates to our philosophy of enhancing the Montessori philosophy with other innovative methods. The Music curriculum also offers significant opportunities to build community through our numerous performances, field trips, and assemblies.

Elements of music

- Melody
- Harmony
- Tempo
- Rhythm
- Dynamics

8. Movement and Fitness

The ultimate goal of our Movement and Fitness Program is to assist all children along the path to lifetime physical fitness, which aligns with our holistic mission. The benefits of this journey are many: health, longevity, positive body image, improved overall self-esteem, and increased energy and concentration in all areas. All students from Toddler to Middle School participate regularly in Movement Arts classes and activities.

Movement Arts at TMCS embraces the philosophy of the school as a whole. The program, at each level, is responsive to the needs and interests of the children, and the ultimate goal is the joyful discovery of movement and its benefits, both physical and psychological.

Our Movement Arts seeks to benefit ALL children, not just those with particular interest or talent in this area. Volumes have been written about the connection between body image and overall self-esteem, as well as the dangers of introducing children to competitive sports at an early age. Care is taken to keep the emphasis on fitness and fun, as opposed to individual superiority of skills.

- Combined locomotors and axial movement skills
- Increased ability in manipulative skills
- Creative self-expression through dance and movement
- Exploration of space, time, force and body mechanics
- Awareness and control of movement

9. Foreign Languages Program (Spanish and French)

The Foreign Language Program is designed to enable students to understand, speak and write their basic thoughts and questions in a second language. The curriculum utilizes a combination of computer-aided design which aid students learn to express themselves in a second language environment that promotes confidence and creativity.

- Use of existing classroom materials
- Spanish and French are self-taught through audio and video technology.