



## The Physical Science, Life Science, and Social Studies Area in Montessori

# An Education for Peace

by Samantha Pollington, Co-owner and Teacher at Sunflower Montessori

As citizens of the Universe, planet Earth, North America, the United States, Montana, Missoula and finally community members of Sunflower Montessori we find it of the utmost importance to instill a greater understanding for the child of his responsibility to the beautiful world around him. Children are egocentric creatures by necessity, trying with all of their being to understand how to meet their needs in this fascinating world. **The Physical Science, Life Science, and Social Studies curriculum is designed to bring an interconnectedness and big picture understanding of the world to children.** Maria Montessori understood the child's innate fascination with the natural world and designed a curriculum to play off those intrinsic fascinations. She wanted the children to have a "cosmic" view of the world, to understand the relationship to all living things inside of it. Their similarities, their differences and how they relate to one and other. This curriculum is divided into five basic categories; Geography and History, Zoology and Botany, Astronomy and the Physical Sciences, Art, Music, and Peace.

As with all other areas of the Montessori classroom the lessons are designed to be hands on and move from concrete to abstract. Though this area does have many beautiful materials, such as the puzzle maps, globes, puzzles of plants and animals, land trays, and water form trays, it has far less than other areas of the Montessori environment. **It is the job of the teacher to observe the children's interests and bring the natural world to the child,**

**and the child to the natural world.** Ample time outdoors in all seasons for the child to observe and discover nature is a cornerstone of the Montessori philosophy.

The environment is a key player in providing the child with a cosmic view. Part of every quality Montessori environment is a rich outdoor environment to explore. Dirt, bugs, flowers, plants, animals, and weather provide the child with wonderful memories, learning experiences and lay a firm foundation for their understanding of the world. Sunflower Montessori provides an outdoor space for the child to grow plants in our beautiful garden, feel the dirt, observe squirrels, birds, and bugs, rake leaves, and experience nature in a hands-on and concrete way. Along with a rich outdoor space the classroom itself has real pictures of the world and its inhabitants. Real living plants and animals enrich the environment. The child is encouraged to investigate nature and living things with microscopes, magnifying glasses and other scientific tools. **The child grows plants and takes care of animals, he discovers and learns because he needs to.** The environment fosters his already present fascination with nature. He is expected to care for all the living things and knows how. He continues to gather these skills from the Practical Life area. These are valuable and concrete lessons to make him aware of his responsibility to the world around him.

## Our Beautiful Playground



In 2017 we ripped up what was formerly concrete and laid grass. In the Summer, Spring, and Fall the playground boasts of an amazing wonderland of living things!

## Our Beautiful Classroom



Our classrooms have both living plants and animals. The open floor plan provides the child with a beautiful learning environment.

## THE PHYSICAL SCIENCE, LIFE SCIENCE, AND SOCIAL STUDIES AREA IN MONTESSORI

The goal of the Montessori curriculum is to instill in the child a sense of place in the world, an understanding of the fundamental needs of humans -- a whole view of the world in which they live. The Physical Science, Life Science and Social Studies areas present to the child the seeds of science and an overall understanding of the many cultures around the world. Each classroom studies a continent in-depth each month. The children look at the similarities and differences of the biomes, cultures, animals, language, and plant life in each continent.

The curriculum is designed to go from big (the universe) to small (the individual). The child begins to understand that they themselves are individuals part of a much bigger scheme. After studying space the child learns about the earth, moves onto the continents, the countries and eventually takes an in-depth look at their country, town, neighborhood and school, and finally themselves.

Sunflower Montessori has monthly community service projects. The children are encouraged to think of their community and what they can do to impact it in a positive way. We make sandwiches for the homeless, sing for the senior citizens, rake elderly neighbor's leaves, pull weeds from parks and pick up trash around our neighborhood. **The child is taught that he brings joy to people, that he is useful to his world and community. That he can make a difference to the world.**

History is learned through the study of time. Time is an unbelievably difficult and abstract concept to address. Children are in daily dealings with calendars, the days of the week and months of the year. Although these are wonderful tools to instill in children, to create a strong understanding of time, the Montessori method goes further. We lay a concrete foundation to be built upon. The children study timelines. **Starting with Pangea and moving to present. Their concrete knowledge of numbers gained from the Math area helps them to compare one year to one thousand years, a feat for a three year-old!** The child studies his own timeline from birth to present, allowing him to understand the movement of time in context to himself. **A Montessori Birthday celebration is a fun way to reinforce the movement of time, once again in context to himself.** The child physically carries the globe (the earth) around a model sun or candle for each year of his life. The child brings in pictures of himself during each year he has been alive to share with his class.

Geography is the study of the world around us. **The children learn from an early age the continents and their geographical placement.** Wonderful color coded



Colored Globe

wooden puzzles with labels and colored and sandpaper globes are tools used to lay an understanding of the physical world. Real life pictures of animals, people, and places of each continent allow the child to begin to grasp the interconnectedness of all living things. The child compares the lifestyle they live with those of people from around the planet. **The child is taught that a hut in Ghana serves the same purpose of his house made of wood: shelter. These studies sow the seeds of peace and understanding.**

Children gravitate to animals and plants. **The Zoology and Botany area of Montessori deconstructs both animals and plants into tangible and understandable parts, giving the child a full understanding of nature's wonders.** The child is granted the respect he deserves in Montessori, he is taught the nomenclature involved in Botany and Zoology in actual scientific terms. Taking advantage of the sensitive period for language that the child is experiencing and observing the child's interests allows the teacher to prepare Zoology and Botany lessons that the child cannot wait to tackle.

Art is abundant in the Montessori environment. The child is able to freely choose artistic media at his will. **Art is unstructured as expression of one's feelings and ideas are prioritized over projects with a prescribed product.** The child is taught how to respectfully handle art materials and he is guided to fulfill his own ideas through careful manipulation of different medias. Music is also plentiful in the Montessori environment. Along with classical music the child is introduced to world music correlating to the continent that they are studying. The child is given the opportunity to experiment with musical instruments and taught songs in foreign languages. The child is prompted to make his own songs and the sharing of music is always incorporated into circle time.



Raking our neighbor's leaves!



Learning Land, Air and Water



Field Trip to the Insectarium

THE PHYSICAL SCIENCE, LIFE SCIENCE, AND SOCIAL STUDIES  
AREA IN MONTESSORI

Montessori is truly "An Education for Peace". The child's fascination with the world is nurtured, he is observed and provided with lessons specific to his desires, resulting in a focused and caring child. The child is taught that ALL humans share in basic fundamental needs. He explores the similarities and differences between himself, his peers, other cultures, and all living things. He grows as a "peace keeper" inside the classroom and remains one out in the world.

*"Peace is what  
Every Human  
Being is Craving  
for, and it can  
be  
Brought about  
by  
Humanity  
through  
the Child."*

*-Maria Montessori*

