

Montessori's Cosmic Education Matches Deeptime Perspective

By Michael and D'Neil Duffy

Convergence of ideas is one of the ways we know we're onto something good.

We have been vocal proponents of Maria Montessori's Cosmic Education since we first published our book in 2002: "Children of the Universe: Cosmic Education in the Montessori Elementary Classroom."¹

How surprised we were a few years later to discover David Christian's Big History through a series of 48 lectures on DVDs! As we watched what he was promoting for college students, we were struck to find so many parallels with what we teach elementary children in Montessori classrooms.

And when Jennifer Morgan launched her website Deeptime Journey to network different movements with similar ideas, we felt perfectly at home.

A closer look at the guiding principles of the Deeptime website reinforces that confluence of ideas with Montessori educational philosophy.

1. Context: Orienting to a vast evolving universe.

Montessori promoted contextual learning as the centerpiece of her Cosmic Education curriculum.

"Let us give the child a vision of the whole universe...for all things are part of the universe, and are connected with each other to form one whole unity. This helps the mind of the child to become fixed, to stop wandering in an aimless quest for knowledge..."

Maria Montessori - *To Educate the Human Potential*²

Unlike traditional elementary education, which starts with the child's immediate world and goes outward to include an ever broader perspective, Montessori urges her teachers to start with the universe itself, to provide a context for all the rest of their learning.

"We cannot understand a stone without some understanding of the great sun! No matter what we touch, an atom, or a cell, we cannot explain it without knowledge of the wide universe."

Maria Montessori - *To Educate the Human Potential*

To implement this idea in her educational curriculum, one of the first lessons in a Montessori classroom for 6 to 9-year-olds (grades 1-3) is called the Creation Story. This story, which is considered one of the "great lessons" of the Montessori curriculum,

talks about the origins of the universe itself in a child-friendly presentation of the Big Bang, the universal laws of the universe, and a series of simple experiments that introduce children to Physics and Chemistry.

The development of the rest of the Montessori elementary curriculum, especially in the area of History, Biology, Geography and the Physical Sciences, is developed like a series of origin stories that are nested within each previous story.

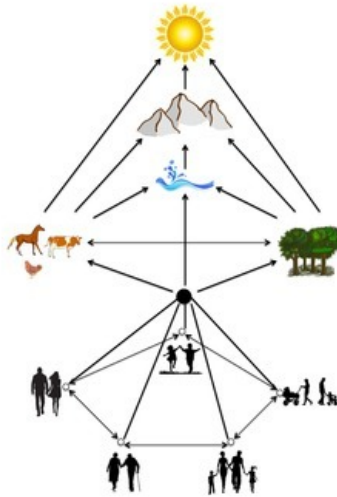


2. Connection: Our embeddedness in the matrix of the Earth.

Interdependence is one of the main themes that runs throughout the Montessori curriculum. While the unity of all things in the universe is clearly implied in the quotes above, there are many places in the Montessori elementary curriculum that emphasize this idea:

- The Timeline of Life, another of the so-called “great lessons,” shows the connections between the very first forms of life and the evolutionary chain that led to the emergence of humans on our planet - tracing our ancestry beyond mammals and primates all the way back to the prokaryotes
- The study of Economic Geography helps children see the trade-dependent way humans are connected and are able to survive and thrive within the world today, creating connections between people in different parts of the world..
- History lessons in Fundamental Human Needs teaches that every human being, in every time and place, has the same fundamental needs, making us single family; but we meet those needs in different ways depending on our time and place on this planet, something that should connect us in celebration of our diversity rather than making us fearful of each other.

- Sun and Earth studies in Geography trace the dance of the Earth around the Sun to produce night and day, as well as an explanation for the seasons, making a primal connection to the Sun as the source of energy, plant life, and animal survival.
- Studies around the Work of Water and the Work of Air in Geography help children understand the way water and air continually transform our planet and connect us with each other, with the other living organisms, and with the Sun itself.



3. Transformation: Nurturing inner growth and engagement.

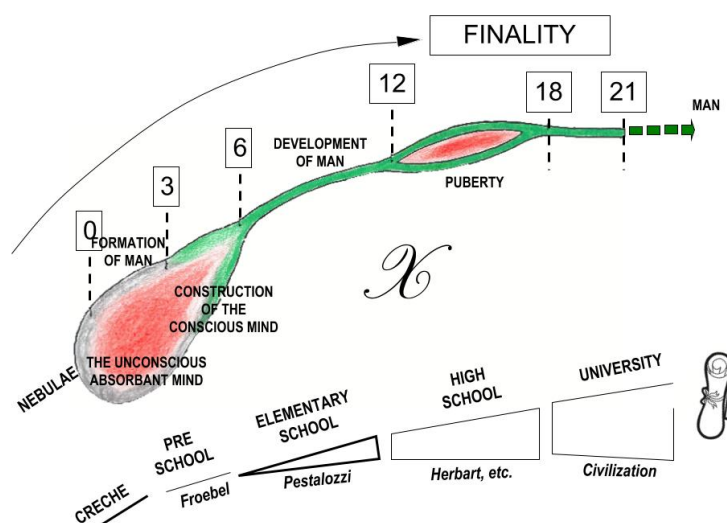
For Maria Montessori, the whole purpose of education is to support the internal growth of the child into the adult personality he or she chooses to become. Academic skills are secondary to the inner growth of the whole child, developing what she called the “spiritual embryo” that children represent at birth.

“There is an interchange between the individual, the spiritual embryo, and its environment. It is through the environment that the individual is molded and brought to perfection... just as the embryo becomes a child and a child becomes a man, so the human personality is formed through its own efforts.” - Montessori, Maria. *The Secret of Childhood*.³

“Although he cannot share in the work of adults, he has his own difficult and important task to perform, that of producing a man...it is solely from a child that a man is formed...the child is the father of the man.” - Montessori, Maria. *The Secret of Childhood*

Her entire methodology is based on an understanding of the stages of development through which a child moves from birth to adulthood. What we teach the child should be based on providing a prepared environment, filled with challenges to support the specific developmental needs of the child at each age.

Long before modern neurological science developed an understanding of the internal life of the child throughout its childhood or the intense neural development that occurs in the first three years of life, Montessori recognized the importance of those three years and the later years of adolescence as keys to proper outcomes for the child.



4. Action: Evolving the universe.

Maria Montessori taught that everything has a purpose in the universe, something she called a “cosmic task.” When microscopic organisms in the primitive oceans turned the toxic minerals being washed into the ocean into shells around their tiny bodies, they were performing their “cosmic task” of saving the life in the oceans from extinction, albeit unconsciously.

Humans have the ability to become consciously aware of their cosmic task, both as individuals and as members of the human race. Cosmic Education teaches children to explore where they come from, who they are, and why they are here. This is the start of a search that will never find the ultimate answer to these deeply philosophical questions, but a state of mind that will develop throughout their lives as they mature into adults who never stop learning.

“Perhaps the most significant spiritual benefit of cosmic education is that it gives both children and adults a sense of purpose in their lives - a sense of belonging to an entity much greater than themselves, in which they can play an important part. Montessori called this role a cosmic task.” - Aline Wolfe - Nurturing the Spirit

Montessori envisioned her Cosmic Education curriculum as a way to transform the world, to create a “new human being” who could bring about the possibility of world

peace. By helping children to become “more consciously aware” of their unity with other humans, with all living things, and with the universe itself, she believed this would so radically transform these children that they and others educated like them would usher in a new era of evolution for humanity.

After living through two world wars and being deeply affected by them (including spending World War II under house arrest in India because of her Italian heritage), she believed the only hope for future peace and genuine human unity comes from the proper education of children. She expressed this in simple yet powerful terms:

“Preventing conflicts is the work of politics; establishing peace is the work of education.”

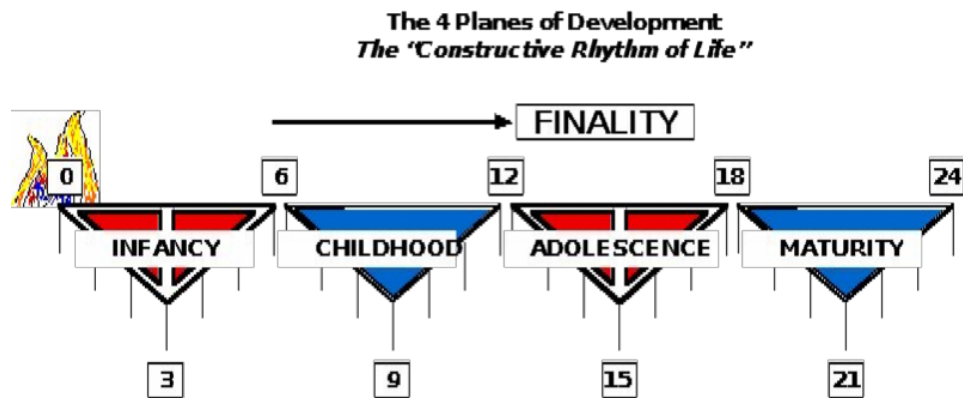
Montessori - 1936 Brussels speech

“Education is the best weapon for peace.”

Montessori - 1937 Copenhagen speech

5. Continuum: Linking the stages of lifelong learning.

Montessori saw the role of education as supporting the developing child with an appropriate “prepared environment” for each level of development. Hers was a developmental pedagogy that matches what is happening to the internal life of the child at each stage.



Montessori’s goal in educating young children was intended primarily to support them in their self-development into an adult, with academic skills merely the means to that end and a welcome side benefit to their schooling.

She believed in learning that fosters internal development that spills outside of the classroom into the rest of the child’s life. She was more interested in developing a love of learning than a store of information within the child.

It is more than encouraging to see these principles outlined on the Deeptime Journey website and to recognize the convergence of ideas they represent for us in the Montessori world.

About the authors:

Michael and D'Neil Duffy have been involved in Montessori education since they put their first child into a Montessori school in 1975. They have together published three books on Montessori education and are currently co-directors of a Montessori training program for teachers, the Montessori Elementary Teacher Training Collaborative (METTC). They were the recipients of the American Montessori Society "Living Legacy" award in 2018.

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