



## Montessori Elementary Is Different: What Children Study, What Children Do

By M. J. Rosanova

**D**o you know this tune? Can you recall the melody?

*School days, school days*

*Dear old Golden Rule days*

*Reading and writing and 'rithmetic*

*All to the sound of a hickory stick*

My grandmother was born in 1900. For her generation, the “school days” song was an object of rueful nostalgia. Rare was the teacher back then who spared the rod or spoiled the child.

Rarer still was a completed high school or college education. The idea of universal education was still relatively new, and it didn't extend very far beyond the first few grades.

Many of the children of the day were destined to enter factories and other workplaces directly, with little or no schooling at all. In such workplaces there was no pretense of education: either one worked or one went hungry. On the farms and in the factories, a false step or a frivolous attitude often led to injuries.

In the days before laws forbidding child labor, the number of Americans spending their youth in the care of schools and colleges was very small. Given the abundance of unskilled work available in America as it emerged from its rural past, the small number of graduates may have seemed tolerable or even normal.

But today, it's difficult to get a job without at least some postsecondary training. Today, the vast majority of Americans face 15 or more years of institutional “care” and regulation. The reach of institutionally delivered education has radically changed.

But traditional and neotraditional practices are still the norm outside of Montessori. And today the vast majority of American children are subjected to one form or another of such mistaken practices.

### Montessori Is Different

When you walk into a Montessori elementary classroom, you may see a small group sitting on the floor, with an adult facilitating a lesson. Other children will be working individually or with partners or in groups of three or four.

There are shelves full of science experiments and models and other hands-on project materials. There are cartons and cabinets full of card materials and research project outline forms to help children remember the steps in finding things out for themselves. There are various collections of textbook and other reference materials laid out within convenient reach of the hands-on project materials. And every child has a form to help him track his daily progress as he fulfills his work contract, covering subject by subject step by step according to the individualized path that he and his teacher have agreed to.

And the room is full of pleasant chatter, the cheerful buzz of meaningful, interesting work. There is the look and sound of respect for work in an atmosphere of congenial dignity.

All of this is obvious to the sincerely interested visitor to a Montessori elementary classroom.

**But What Do the Children Actually Study?** In a traditional or neotraditional classroom, the Three R's are the focus. The teacher stands before the group, disbursts information, and then leads a few group drills. One size fits all. Children who don't catch on are relegated to lower “ability groupings,” and the same mistaken teaching practices are repeated. Reading, writing, and arithmetic facts are scattered across the crowds of children in great sweeps of teacher talk. There is no coherent context for the facts. There is only the threat of tests, report cards, and “your

permanent record”: what your parents will think, what the educational bureaucrats will think, what the admissions officers at the next school will think, and so on.

In Montessori elementary, both writing/reading and arithmetic are radically contextualized. Basic letter-sound correspondence and basic quantity-number correspondence are usually mastered in Montessori before entry into first grade. By first grade, emergent readers are reading longer and longer versions of the three-part cards that are typical of social and natural science materials in the Montessori curriculum: parts of the tree, parts of the bird, animal kingdom classifications, water forms (bay, lake, etc.), land forms (peninsula, island, etc.), continent boxes (sensory-perceptual exploration of objects from various countries on each of the continents). The first graders are moving beyond brief labels to sentences and paragraphs and to short booklets which extend each child's hands-on experience.

In *Children of the Universe*, a book describing the subject matter imparted in Montessori elementary programs, the authors remark: “In our years of teaching, we have been amazed at how many students learned to read because of their interest in and enthusiastic use of these materials, particularly those focused on animals” (Duffy & Duffy, 2002, p. 85). The authors are describing mini-story card and booklet materials used to stimulate children into both guided and open-ended research in biology. “At the end of the study,” they report, “the child is able to produce a basic research report on a particular animal” (p. 84).

**Biology for First and Second Graders?** Well, yes. Montessori really *is* different. The curriculum is much more thorough and carefully articulated than what is generally available in American

schools, including some unusual areas:

- Astronomy
- Physics
- Chemistry
- Geology
- Geography
- Biology
- Archaeology
- History
- Peace studies (conflict resolution and other skills)

Of course the children study language arts and math and even geometry. Even in first grade the children have objects and then flat paper symbols in their hands representing parts of speech. They have the Grammar Boxes. They have the “geometry sticks” and “fillable” solids. They have a myriad of Golden Bead and other advanced arithmetic materials. But all of these materials are put to use in the study of the sciences which give the children a view into the real world, its origins and its possibilities.

There is a single theme which articulates all of these subjects, tying them together again and again into a meaningful whole: the theme of long-term *adaptation and development*. This is a scientific perspective, an evolutionary perspective. But it is also a philosophical point of view.

### Philosophy?

All of our work in Montessori begins with a philosophical conviction: the idea that *meaning* is both possible and worthwhile. To some degree, in some sense, every particle of the universe is connected with, and carries implications for, some other particle or force. Again and again, as one explores the world, one encounters webs of connections, networks of meaning. In this sense, no matter how small or apparently insignificant, every particle of the universe serves some purpose. It doesn't matter whether that particle, that ocean, or that species understands its relation to the universe or its role in the unfolding of life. Every particle, every ocean, every species serves some meaningful purpose, accomplishes some “cosmic task.”

The social and natural sciences in Montessori elementary are presented with a specific goal in mind: to set each child out on a lifelong search for meaning. The child himself will eventually come to wonder:

- What is the “cosmic task” of our species on this planet? How do we relate, for better or worse, to all other forms of life and to the earth itself, as well?
- And what is the meaning and dignity of my own life? Where do I come from—both me and my “kind”? What will become of us, and

## Montessori Vs. Traditional Elementary Programs: Some Differences

Montessori	Traditional
1. The “prepared environment,” a classroom planned in advance to support independent, learner-initiated project work.	1. A space suited for lectures and other teacher-centered activities
2. Flexibly defined grade levels within a developmental range: 0-3, 3-6, 6-9, 9-12, 12-15, 15-18 years of age	2. Grade levels strictly defined according to 12-month increments in chronological age
3. The children acquire knowledge by themselves by working on hands-on projects and reflecting. The children actively discover information.	3. The teacher provides information orally and requires children to memorize and be tested on such information. The children need to be passive.
4. The curriculum expands in response to students' needs in each developmental stage. There is as little “departmentalization” as possible.	4. The curriculum follows a strictly scheduled yearly program organized according to subject areas. Subject areas are “departmentalized” as soon as possible.
5. Each child consults with his teacher to negotiate a unique path through the curriculum.	5. The teacher determines what the children must know, and in what order it must be covered. The children are not involved.
6. Emphasis on personal, one-to-one relationships between each child and the teacher.	6. Emphasis on the teacher as the source of knowledge and the primary authority for a group
7. Each child participates in creating significant portions of his own work. Each child engages in individual and paired research projects beginning in first grade. This enhances the child's motivation to work with and go beyond the hands-on project materials.	7. The teacher assigns work which the teacher prepares, usually without consulting the children. The idea of research is introduced in seventh or eighth grade when children are taught how to write term papers.
8. The child works as long as he needs to during extended periods of uninterrupted workshop time. The teacher is present to act as a consultant and facilitator.	8. The child has arbitrarily limited periods of time during which the child is presented with information. Practice time is largely deferred to homework time during which the teacher cannot be present.
9. The child works on projects, and uses the teacher as a consultant who helps him to reach his own goals.	9. The child focuses on memorization and focuses on the teacher as an authority who judges performance by exterior standards.
10. The child reinforces his knowledge by working repeatedly on logically connected projects in order to satisfy his curiosity, and in order to build his own sense of competence.	10. Learning is the result of external compulsion based on rewards and punishments.
11. The child's rhythm of work is accepted and encouraged. Self-esteem is assumed to arise from children's authentic pride in their own accomplishments.	11. The children are expected to follow the pace of the group. Self-esteem is assumed to arise from external judgment and reward.
12. Each child discovers mistakes through feedback given by the project materials rather than by the teacher. The teacher avoids pointing out mistakes in favor of self-evaluation by each child. Instead of judging and correcting, the teacher advises the use of different complementary project materials, or “teaches again,” presenting a material from a different angle.	12. The teacher judges and corrects directly and frequently. The teacher has the answer book; the teacher is the final authority.
13. Freedom of movement. Communication based on mutual respect. Children learn to speak appropriately.	13. The children are expected to move and speak only when the teacher gives permission to do so. Movement and communication are based on external authority.
14. A daily balance of individual project work, small-group cooperative work, small-group lessons, and large-group lessons.	14. Children are usually handled in large groups.
15. Social interaction within the classroom within the context of children's normal academic work time.	15. Strict segregation of academic work from social interaction, which is confined to the hallways, lunchroom, and playground.
16. A well articulated, hands-on science-based curriculum which integrates math, language arts, and the creative arts in a meaningful way. A curriculum intended to foster personal insights and moral awareness.	16. Focus on the Three R's, mostly out of context. A curriculum of mostly disconnected notions, categorized according to subject area.
17. Each child knows that he has the opportunity to carry his study far beyond the reaches of the teacher's own knowledge.	17. The teacher has the answer book. The teacher is the final authority.

how does my own life matter?

This is something of a different order than the Three Rs and a hickory stick in a random bag of notions.

### Preparation for Life

Cosmic? Philosophical? Oh, come on. These are just kids. How impractical can you get!

Impractical? No, this is anything but impractical. Children in “middle childhood” (ages 6 through 12) need to be prepared for the challenges which await them in adolescence.

The last three generations of developmental psychologists have tended to agree with Erik Erikson that the key critical developmental issue in the psychosocial development of adolescents is the “crisis of identity.” The adolescent has to try out his various inclinations and abilities, discover that some of them are not so strong as others, discover that the choice of some exclude the choice of others, and finally begin to make choices and commitments and prepare for the acceptance of long-term responsibilities.

The adolescent has to succeed in seeing herself in terms of wider and wider frames of reference. She needs to ask herself, *where have I come from?, where am I going?, who am I really, anyway* (Erikson, 1968)? Before she can effectively grapple with these questions, the adolescent needs already to be familiar with three basics:

- the story of her own home and homeland and of human civilization in general,
- the story of humans in the context of life on our planet, and
- the story of our planet itself and its place in the universe.

These are “the Great Lessons” of the Montessori curriculum for 6- to 12-year-olds. The 6-12 curriculum is context for the adolescent’s search for identity, made available to each child before the storm and stress of high adolescence has yet to break over the horizon. The elementary curriculum for children 6 through 12 in Montessori is long-term *preparation* for the key developmental tasks which lie ahead for those children during their teenage years.

This is profoundly wise and sensible planning which sensitively facilitates each child’s path toward becoming the person that he/she is meant to be.

### Becoming “Industrious”

The elementary curriculum prepares children in middle childhood for the challenges they will face as adolescents. But it also

helps children to face the critical issues directly before them in “middle childhood,” that is, from ages 6 to 12. At that age, the critical issue is the child’s capacity for productive work. The child must come to view himself as able to master skills and complete tasks (Erikson, 1963).

Criticism, comparison, and competition weaken children at this age. They need an environment that builds motivation and notices improvement. They need “mastery learning”—an approach that allows every child the multiple methods and the time needed in order to succeed at high levels of competence (the functional equivalent of “straight A’s” for every child).

Children at this age do *not* need poorly articulated, disconnected coursework in a variety of subjects with no clear connections. They do *not* need constant comparison, constant judgment, constant reminders that when someone else does well, their own chances of winning approval or getting a good grade diminish.

Traditional schooling is an environment where the majority of children will eventually come to see themselves as losers. As Illich argues, the traditional school teaches children not love of learning but *fear of failure*. In traditional schools, children need to learn to please the teacher. Children themselves possess no inborn desire to learn or even simply to behave themselves. Instead they need to be forced to sit and study as powerful adults dispense information, along with rewards and punishments—names, dates, plastic happy faces, and the threat of humiliation. In traditional educational thought, the average child cannot and will not become an independent, self-initiating learner. Not even “talented or gifted” children can be trusted with this (Illich, 1971).

Many children in traditional, competitive environments become convinced of their inferiority and lose their taste for schoolwork. And then a whole range of behavior problems arise out of the children’s discouragement and boredom.

Montessori children are much more likely to stay in touch with their motivations and nurture their strengths, both academic and social. The children negotiate their work again and again with the teachers; they draw up work plans and contracts so that each child can chart his own path across the curriculum in the way that means the most to him.

In Montessori, the teachers themselves are the ones who are constantly leading the children to connect with issues that are personally meaningful. The teachers

in traditional settings point instead to bureaucratic necessities and disconnected abstractions.

In Montessori elementary, every child knows from experience that the teacher will *not* “dispense all the information so that she is sure the students get it.” Every child knows that he is *not* expected blindly “to memorize and regurgitate,” as in traditional education. Every child knows that his studies will *not* be circumscribed by the limits imposed by the teacher’s own research. Every child knows that he has “the opportunity to carry his study far beyond the reaches of the teacher’s own knowledge” (Duffy & Duffy, 2002, p. 34).

Unlike traditional environments where the teacher wields the answer books with the finality of grading and judgment, the Montessori child’s discoveries do not threaten to expose the Montessori teacher or threaten her authority. Instead, children in Montessori come to look back with gratitude and admiration at their teachers, much as Newton was able to reflect toward the end of his life: “If I have seen farther than other men, it is because I have stood upon the shoulders of giants.” Montessori is different.

### Values

The values embodied in a Montessori education are clear. Respect for work. Respect for feelings. Care of self. Care of the environment. The conviction that everything in the universe is somehow connected, and that every child’s life can and should be filled with connection and meaning.

What Montessori elementary children study fosters the development of these values. How the children study is the living, daily model of these values.

Little by little, children come to see themselves as something other than self-engrossed individual consumers, scrounging for larger and larger piles of “things” that fail to add up. Living a Montessori life, little by little children’s potentials emerge: they are intellectually awake, emotionally alive, prepared for the life that lies ahead.

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