

METHODS EVOLVED BY OBSERVATION

by Maria Montessori

Montessori's idea of the child's nature and the teacher's perceptiveness begins with amazing simplicity, and when she speaks of "methods evolved," she is unveiling a methodological system for observation. She begins with the early childhood explosion into writing, which is a familiar child phenomenon that Montessori has written about often. She says to look at the child and a quiet mountain that spews out "fire, smoke and unknown substances" from the interior will be seen. The explosion into writing is compared to a volcano with its dramatic description evoking a mystique of what is inside the child, coming from a place no one can find except through observation. The freedom of activity in the prepared environment is enriching to the child's knowledge and engages the development of character as it supports the moral education of the child. Reprinted from Education for a New World. 1946. Montessori-Pierson Publishing Company (2014): 53-58. Copyright Montessori-Pierson Publishing Company, 1946.

It was the explosion into writing that first caught the attention of the public in my early experiment. It was not an explosion merely of writing, but of the human self in the child. A mountain may seem to be solid and eternally unchanged, yet contain an inner fire, which one day erupts through the outer crust. It is an explosion of fire, smoke and unknown substances, which reveal to those who examine them what the interior of the earth is like. Our explosion was the same, and it happened because of circumstances that then seemed the least favourable for such a revelation. Poverty and ignorance, and lack of teachers, syllabus and rules furnished a basic nothing, and because of that nothingness, the soul was able to expand. Obstacles had been unwittingly removed, but none knew at that time what the obstacles were. It was emphatically not any method of education that caused these explosions, because the method did not then exist; psychology followed them up and the method was built as a result of this volcanic eruption in the child. The press headlined it as the "Discovery of the Human Soul."

The new science that followed was based not on intuition, but on direct perception, and the facts perceived fall into two groups. One shows the mind of the child capable of acquiring culture at an incredibly early age, but only through his own unaided activity; the other deals with the development of character, also at an age that older educators had agreed was too young for influences on character. They were wrong because they thought that it was the adult who had to influence the character of the young; and to turn evil into good is an eternal problem. But the period from three to six is the time for developing character, each child developing by his own laws unless obstructed.

The child concentrates on those things that he already has in his mind that he has absorbed in the previous period, for whatever has been conquered has a tendency to remain in mind, to be pondered. The explosion into writing was thus due to the previous conquest of speech, and a language sensitivity, which ceases at five-and-a-half to six years. Thus only at this age could writing be achieved with such joy and enthusiasm,

while children of eight or nine had no such inspiration. It was seen that the children had indirectly prepared the organs for writing, so indirect preparation was adopted as an integral part of the Montessori Method. We had seen that nature prepares indirectly in the embryo; she issues no orders until the organs have been prepared for obedience. Character can be built only in the same way. Nothing is gained by mere imitation or forced obedience; there must be inner preparation by which obedience becomes possible, and such preparation is indirect. It is essential to prepare the environment for children, and to give them that freedom wherein the soul can expand its powers.

In order to take the mental world of his time, he has to take words from the elders of his family, and cloak them with his own images. This strength of imagination in the child under six is usually expended on toys and fairy tales, but surely we can give him real things to imagine about, so putting him in more accurate relation with his environment.

In language development, the child in the earlier period had followed what seemed like a grammatical order in speech, proceeding

from sounds and syllables to nouns, adjectives, adverbs, conjunctions, verbs and prepositions. Accordingly we thought it would help him to have a grammatical method in the second period, and our first language teaching was of grammar. It seems absurd, to our usual way of thinking, that grammar should be taught at three, before reading or writing, but the children were keenly interested in it, as older children were not. Grammar after all is the construction of a language, and the child had to construct and find help in it.

The uncultured teachers we had in our schools noted the children's hunger for words, and they wrote for them as many as they knew, and came to me for more, having exhausted their simple vocabulary. We thought we would try the experiment of giving them the words needed for more advanced culture, as the names of geometrical figures, polygons, trapeziums, and others of similar difficulty; the children absorbed them easily in one day. Then we went to scientific instruments, as thermometer and barometer, and to botanical terms, as petals, sepals, stamens and pistil. They were all received with enthusiasm, and we were asked for more, for the age of three to six is one of an insatiable thirst for words that cannot be too long and complicated for the child. We gave them words used in the various classifications of all subjects—zoology, geography and others—and the only difficulty was with the teachers, who did not know these words, and found it difficult to remember their meanings.

The mind of the child does not limit itself to the objects they can see and their qualities, but goes beyond this, showing imagination. Children for whom a table in play becomes a house, a chair serves as a horse, who can visualize a fairy and fairyland, have no difficulty in visualizing America or the world, especially with a globe to help. Some of our children of six years had a globe, and were talking about it, when a child under four ran up. "Let me see! Is this the world? Now I understand how it is my uncle has gone three times around the world." At the same time, he realized that the globe was only a model, for he knew that the world was immense.

A child under five also asked to see one of the globes which were provided for older children. These were talking of America, taking no notice of him, till he interrupted them. "Where is New York?" he asked. They showed him, and the next question was, "Where is

Holland?"—that being the country where we then were working. On being shown his own country, the little one touched the blue part of the globe, and said: "Then this is the sea. My father goes to America twice a year and stays in New York. When he has started, Mother tells us, 'Papa is on the sea!' then she says that he is in New York. Now again he is on the sea, and we shall go to meet him soon at Rotterdam." He had heard so much about America, and now he felt joy in discovering it, reaching an orientation in his mental environment just as he formerly had to do in the physical. In order to take the mental world of his time, he has to take words from the elders of his family, and cloak them with his own images. This strength of imagination in the child under six is usually expended on toys and fairy tales, but surely we can give him real things to imagine about, so putting him in more accurate relation with his environment.

Another well-known characteristic of children of this age is that they are always asking questions, seeking the truth of things. Such questions should be interesting to the adult, not regarded as a nuisance, but as the expression of a mind seeking information. But children are not able to follow long explanations, and need simple answers, where possible helped by some illustrative object, such as the globe to the child's quest in geography.

The teacher requires a special preparation, because it is not logic that can solve the child's problems. We have to know the child's previous development, and rather to shed our preconceived ideas. Great tact and delicacy are needed for the care of the mind of a child between the ages of three and six; fortunately, the child takes from the environment rather than from the teacher, who needs only to stand by, to serve when called. Coming now to the important question of character and moral education, here too we were shown that it must be looked at from a different point of view, helping the construction of character, rather than teaching it. For this again the period that ends at six years is the most important, since it is then that character is being formed, not by outside example and pressure, but by nature herself. After birth there are those three important years, which we considered earlier, during which there are influences that can alter the child's character for life. A character is being created even then, from obstacles or in freedom from them. If during conception, gestation, birth and the subsequent period the



Montessori school in the Palazzo Taverna, Rome, circa 1947

child has had scientific care, then at the age of three the child should be a model individual; but this seldom happens, for the child has usually met with many accidents.

If defects of character are due to difficulties after birth, they are less serious than those induced in the time of gestation, and those in turn are less serious than those of conception. If they are post-natal, defects can be cured between three and six years, as this is the time for adjustment and the attainment of perfection. But mental and physical defects due to the shock of birth, or to some earlier cause, are very difficult to correct. Idiocy, epilepsy and paralysis are organic, and cannot be cured by any help that we can give; but difficulties that are not organic can be cured, if treated before the age of six; otherwise they will not only remain, but will grow and be strengthened. A child of six years is likely to be an accumulation of characteristics that are not really his, but acquired through his experiences. A child who has been neglected from three to six is unlikely to have the moral conscience that should develop from seven to twelve, or he may be deficient in intelligence. With no moral character and no ability to learn, he becomes a man of scars, marks of past defeats of the soul.

In our schools, and in many other modern ones, we have biological details of each child, so that we may know the troubles of different periods, and judge their treatment accordingly. We ask if there is any hereditary illness; the parents' age when the child was born; whether the mother was free from accidents or nervous shocks during the gestation period, whether the birth has been normal and the baby well, or did it suffer from asphyxia. Enquiries into the home life follow, if parents or nurses have been severe, or the child has had any shock. This questionnaire is necessary because almost all children come to us with strange characteristics and naughtinesses, and these must be traced and understood in order to be cured.

All these deviations from the normal enter almost at once into the field of what most people, rather vaguely, call character, and they fall into two groups: the strong children who overcome obstacles, and the weak ones who succumb to them. The strong children show readiness to anger, acts of rebellion, destructiveness, greed for possession and selfishness, inattention and disorderliness of mind and imagination. These children often shout and are noisy, like to tease and are cruel to animals. Frequently they are greedy. The weak children are passive and show negative defects, such as sloth, inertia, crying for things, and wanting everything to be done for them. They have a fear of everything strange, and cling to adults. They want always to be amused, and are quickly bored and tired; they have the faults of lying and of stealing, fundamentally forms of self-defence.

Certain physical ailments go with these difficulties, and thus show a psychic origin that should not be confused with real physical sickness. Such is want of appetite, or its opposite—gluttony—and indigestion due to it. Liability to nightmares and fear of the dark affect the physical health and cause anaemia. No medicine can cure them, as their origin is psychic.

Children who have these faults, especially of the strong type, are not felt as blessings in their family; they are banished to the nursery or to the school, and they are orphans though their parents are living. Some parents adopt severity, such as slapping, scolding, sending to bed without food, but the children either become worse or develop the passive equivalent of the difficulty. Then they try

the persuasive line, reasoning with them and exploiting their affection: "Why do you hurt Mummy?" It has no effect. The parents of the passive type of regressed children are apt to leave them doing nothing, the mother thinking her boy good and obedient, and when he clings to her and won't go to sleep without her at his side, she thinks it a sign only of his great affection for her. But soon she finds that he is slow and retarded in speech and walking. Though healthy, he is afraid of everything and doesn't want to eat, needing stories to coax him. She persuades herself that he is a spiritual child, perhaps destined to be a saint or a poet, but soon the doctor is called to give him medicine. These psychic illnesses make a fortune for the family doctor.

One of the facts that made our first schools remarkable was the disappearance of these defects, and it was due to one thing. The children could freely carry out their experiments on the environment, and these experiences were nourishment to the mind, which had been saved. Once some interest had been aroused, they repeated exercises around that interest, and passed from one concentration to another. When the child has reached the stage of being able to concentrate and work around an interest, the defects disappear; the disorderly become orderly, the passive active and the disturber becomes a helper; thus the defects are revealed as not real but acquired characteristics. So our advice to mothers is to give the children work in some interesting occupation, and never interrupt them in any action they have started. Sweetness, severity, medicine do not help at all. We do not sentimentalize over the troublesome child, or call him stupid; that would do no good when he needs mental food. Man is by nature an intellectual being, and needs mental food even more than physical. Unlike the animals, he must construct his own behaviour from life and its experiences, and if set on this road of life, all will be well.

