

MONTESSORI'S DEFINITIONS OF KEY CONCEPTS

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Absorbent Mind

"...it is mental chemistry that takes place in the child producing a chemical transformation. These impressions not only penetrate the mind of the child, they form it; they become incarnated, for the child makes his own 'mental flesh' in using the things that are in his environment. We have called this type of mind the 'absorbent mind,' and it is difficult for us to conceive the magnitude of its powers." (*Education for a New World*, pp. 12-13) "It is certain that... facts... be referred first to his unconscious and then to his subconscious mind show that a child has the capacity to absorb images from his environment... when he does not as yet fully possess the faculties for learning—voluntary attention, memory, and power of reason... things absorbed during this unconscious period by the very force of nature are those which persist..." (Montessori, Maria, *The Discovery of the Child*, pp. 344-45)

Abstraction

"We ask what is the first act of intelligence, it is reasoning; and we have observed its apparition in a child of three weeks of age. It is the act of reasoning by which they orient themselves, upon which all moves. As the intelligence develops, they come to move between cause and effect, to reason out things and their results, the beginning and the end, and little children starting from a single number go towards infinity... Now the other power of which I am speaking is that of abstraction. The mind is formed of abstractions which it has drawn from material things." (Montessori, Maria, *Communications*, 2009,4, p. 40 "Cosmic Education Sixth Lecture by Dr Maria Montessori on 14th January 1936 21st International Training Course Extension.") "Language is not just a means that mankind has of communicating its needs, man to man, but it is a means of flight into abstraction. Number, too, is in the realm of abstraction." (Montessori, Maria, *Communications*, 2009, 4, p.40. "Cosmic Education Sixth Lecture by Dr. Maria Montessori on 14th of January 1936 International Training Course Extension.")

Adaptation

"What is meant by this 'making of an adaptation'? We take it to mean a transformation of oneself of such a kind as to make one suited to one's surroundings, which then become a part of one's being." (Montessori, Maria, *The Absorbent Mind*, p. 91)

Auto Education

Needed are objects which induce "...polarization of attention and the repetition of action related to it." (*The Advanced Montessori Method, Volume I*, p. 55) "The choice of what is internalized, and the different activities involved are determined by a child from within... this is why he must be offered what is necessary or useful for him and then left free to function independently. Maria Montessori originally used the term *auto-education* to designate this process." (Montessori, Mario, Jr., *Education for Human Development*, p. 53)

Character

“By character, here, we mean not merely the traits of moral character but also the child's personality, which is not composed of separate moral, intellectual and physical factors but is a whole, and can be analysed only in theory by psychologists.” (Montessori, Maria, *Communications*, 2006, 1, p. 4, “Child Character”. Maria Montessori delivered this lecture in Brussels during that visit, and it was subsequently published in the *Journal La Femme Belge*.)

Concentration

To develop concentration “we must provide ‘motives for activity so well adapted to the child’s interest that they provoke his deep attention.’” (Montessori, Maria, *The Absorbent Mind*, p. 185) Concentration is “...great attention...absorbed in ...work.” (Montessori, Maria, *The Child, Society and the World*, p. 11)

Consciousness

“Another mentality has come, the conscious mentality, which is entirely different. When consciousness comes, all acquisitions must be made by learning, and much that we learn we also forget.” (Montessori, Maria, *Communications*, 2009, 1-2, p. 13 and the *Absorbent Mind*, Lecture No. 9 - 13 December 1948) “...Thus it happens at the age of three, life seems to begin again; for now consciousness shines forth in all its fullness and glory. Only with the advent of consciousness do we have unity of the personality, and therefore the power to remember.” (Montessori, Maria, *The Absorbent Mind*, p.147)

Control of Error

“So we come to a scientific principle which is also a path to perfection. We call it ‘the control of error.’ Whatever is done in school, by teachers, children, or others, there are bound to be mistakes. So we need this rule as part of school life, namely, that what matters is not so much correction in itself as that each individual should become aware of his own errors. Each should have a means of checking, so that he can tell if he is right or not.” (Montessori, Maria, *The Absorbent Mind*, p. 224)

Cosmic Education

“...the cosmic plan of creation” is “all that has developed during the different civilizations, achieved by different groups, is a preparation for the great and supreme triumph of the human agent who has already reached dominion over all things and who must now find dominion over himself. It has prepared a united and all-powerful energy in a union which, though unconscious is real, and which consists of all human individuals in one organized body.” (Montessori, Maria, *The Child, Society and the World*, p109) “The task of teaching becomes easy, since we do not need to choose what we shall teach but should place all before him for the satisfaction of his mental appetite...let us give him 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 idea helps the mind of the child to become fixed, to stop wandering in an aimless quest for knowledge...it will create in him admiration and wonder...the child’s mind... becomes fixed and can work. The knowledge he then acquires is organized and systematic; his intelligence becomes whole and complete because of the vision of the whole...and his interest spreads to all; for all are linked and have their place in the universe on which his mind is centered... he will begin to ask: What am I? What is the

task of man in this wonderful universe? Do we merely live here for ourselves, or is there something more for us to do? Why do we struggle and fight? What is good and evil? Where will it all end?... This plan of cosmic education is the foundation stone of the Advanced Method....” (Montessori, Maria, *To Educate the Human Potential*, pp. 3-4)

Creativity

Man possesses creative sensitivities instead of hereditary models of behaviour...” (Montessori, Maria, *The Absorbent Mind*, p. 72) “...we are not dealing with something that develops, but with a fact of formation, something nonexistent has to be produced starting from nothing.” (Montessori, Maria, *The Absorbent Mind* p. 19) “What is called *creation* is in reality a composition, a construction raised upon a *primitive material* of the mind, which must be collected from the environment by means of the senses.” (Montessori, Maria, *The Advanced Montessori Method, Volume I*, p. 182)

Cycle of Activity

“...That is why children like naturally to have exercises which are complete in themselves, even though they serve no direct outer purpose. The exercises are a preparation which leads to being able to imitate. They do what they see done in the environment and they indulge in a series of exercises which have no external purpose but are a preparation for the activity which is to come. This is what we call “cycles of activity”. (Montessori, Maria, *Communications*, 1978, 3-4 p. 1, Lecture, from the Course given in London in 1946)

Education

“Scientific observation, then, has established that education is not what the teacher gives, education is a natural process spontaneously carried out by the human individual and is acquired not by listening to words but by experiences upon the environment.” (Montessori, Maria, *Communications*, December/January, 1947, p. 1, *Monthly Letter, Education for a New World, Introduction* “...Education will then be clearly understood to mean the providing for the ‘needs of humanity’ in its earliest beginnings; humanity at the age when energies are unfolding, characteristics becoming fixed—when human normality is being established, or deviation from normality. By education will be meant the making it possible for the personality to develop as a real asset in human society.” (Montessori, Maria, *Communications*, 2011, 1-2, p. 60, “Principles and Practice in Education,” *First Lecture, Institute of Medical Psychology, London, 10 November 1936*)

Four Planes of Development

First Plane

“The greatness of the human personality begins at the hour of birth...the child has a mind able to absorb knowledge. He has the power to teach himself.” (Montessori, Maria, *The Absorbent Mind*, pp 2-3) “The first period... was for the absorption of the environment.” (Montessori, Maria, *To Educate the Human Potential*, p. 1) “Between the ages of two and four, there is a sensory, and, at the same time, intellectual stage...” (Montessori, Maria, *The Child Society and the World*, p. 31) “One characteristic of children under six years of age is that it is almost impossible to teach them...these children must take knowledge by themselves from the environment.” (Montessori, Maria, *The Child, Society, and the World*, p. 42) “...we can only deduce that there is a special predisposition at this early age to mathematics.”

(Montessori, Maria, *Education for a New World*, p. 7) “Not only do they seem indefatigable, but by being intellectually active they acquire strength and health.” (Montessori, Maria, *The Child, Society, and the World*, p. 8)

Second Plane

“Psychologically there is a decided change in personality, and we recognize that nature has made this a period for the acquisition of culture.” (Montessori, Maria, *To Educate the Human Potential*, p. 1) “We are confronted with a considerable development of consciousness that has already taken place, but now that consciousness is thrown outwards with a special direction, intelligence being extroverted, and there is an unusual demand on the part of the child to know the reasons of things.” (Montessori, Maria, *To Educate the Human Potential*, p.1) “The three characteristics we have just isolated for examination—the child’s felt need to escape the closed environment, the passage of his mind to the abstract, and the birth in him of a moral sense—serve as the basis for a scheme of the second period.” (Montessori, Maria, *From Childhood to Adolescence*, p. 7)

Third Plane

“The chief symptom of adolescence is a state of expectation, a tendency towards creative work and a need for the strengthening of self-confidence... while this is the time, the ‘sensitive period’ when there should develop the most noble characteristics that would prepare and man to be social, a sense of justice and a sense of personal dignity...” (Montessori, Maria, *From Childhood to Adolescence*, p. 60)

Fourth Plane

“Joy, feeling one’s own value, being appreciated and loved by others, feeling useful and capable of production...it is in its eventual action on these human factors and not only in the giving of culture... that should be enhanced during the fourth plane.” (Montessori, Maria, *From Childhood to Adolescence*, p. 82.) “He who arrives at the university... is a formed person...what interests him now is the ‘mission of humankind.’” (Montessori, Maria, *From Childhood to Adolescence*, p. 85)

Freedom/Discipline

“It was the arrival of discipline which sprang up spontaneously... discipline in freedom seemed to solve a problem, which hitherto seemed insoluble. The answer lay in obtaining discipline by giving freedom. This change to discipline ... follows invariably upon a spell of deep concentration on some activity” (Montessori, Maria, *The Absorbent Mind* p. 182) “We do not believe that one is disciplined only when he is artificially made as silent as a mute and as motionless as a paralytic. Such a one is not disciplined but annihilated. We claim that an individual is disciplined when he is the master of himself, and when he can, as a consequence, control himself when he must follow a rule of life. Such a concept of active discipline is not easy to understand or to attain. But it certainly embodies a lofty principle of education that is quite different from the absolute and undiscussed coercion that produces immobility.” (Montessori, Maria, *The Discovery of the Child*, p.50)

Going Out

“When the child goes out, it is the world itself that offers itself to him. Let us take the child out to show him real things instead of making objects, which represent ideas, and closing them in cupboards.” (Montessori, Maria, *From Childhood to Adolescence*, p. 17) “To understand the importance of these exercises, which ought to permit social experiences...we must understand that it is designed to bring the child’s attainments to life for him. It is only thus that their realities will penetrate him.” (Montessori, Maria, *From Childhood to Adolescence*, p. 12) “The outing whose aim is neither purely that of personal hygiene nor that of a practical order, but which makes an experience live, will make the child conscious of realities.” (*From Childhood to Adolescence*, p. 13) “This is an active exercise that habituates the children to observe, to seek.” (Montessori, Maria, *From Childhood to Adolescence*, p.15)

Human Development

“The fundamental fact is that the child cannot develop himself if he has not at his disposal objects that allow him to be active. Hitherto it has been thought that higher development would come only from the direct teaching of educators. This is not true; development comes from the environment. Between the individual and the objects in the environment there is a close correspondence, and from this depends something fundamentally necessary to the life of man. I repeat again that the child needs a prepared environment in order to be active, and that the objects within it are the food of his spirit.” (Montessori, Maria, *Communications*, 1963 Issue 1-2, p, 4) “... All babies have the same psychological needs, and follow the same sequence of events, in attaining to human stature. Every one of us has to pass through the same phases of growth.” (Montessori, Maria, *The Absorbent Mind*, p. 66)

Human Tendencies

“The conclusion is that we find in the soul of man some characteristics which are strong, as if they were hereditary, but are not inherited. They are strong and fixed like heredity...” (Montessori, Maria, *The 1946 London Lectures*, p. 100) “... there are some sentiments which are very deeply rooted in the soul of humanity. They are in our nature, in the nature of our adaptation to the group...These instincts, deeply hidden within the individual, are important. They are not connected to reason or consciousness. People cannot renounce them...We must conclude that there are things which are rooted in the unconscious of humanity...and cannot be eradicated...” (Montessori, Maria, *The 1946 London Lectures*, p. 98-99) “The tendencies are: adaptation to social life, the tendency to remain in one place and work, especially with the hands, artistic expression, spirituality-to love, to be happy, to be free sexually, to have riches, to have restriction or inhibitions, to have respect for the environment, to make personal sacrifice, to make a language to communicate socially, a tendency for exactness, discovery-to explore, to have freedom, to have independence, to have concern for living beings, to preserve life and self-preservation, to acquire knowledge, to have means of self-expression, to form society with others, to observe, to be active, to be disciplined, to maintain order, and to preserve ancient beliefs.” (Montessori, Maria, *1946 London Lectures*, chapter, “The Study of Man”, pp. 93-101)

Imagination

“Imagination is the true form of the intelligence of man. It is always there in this form. If man did not have imagination, he would have the same intelligence animals have, only in a larger amount...However, man is capable of an inner activity. He can imagine things that are not present and create these things. This

form of intelligence has no limits... Among all the animals, only man possesses this gift...It is imagination that enables us to acquire our culture, to retain the images that we gather in our minds, and to construct with these images. It also enables us to see that which is not there...to see those things that are not in front of our eyes. This is what distinguishes man from animals, the ability to see that which is not there...we have the possibility of reconstruction that allows our intelligence to go far beyond the limits of sensorial impressions.” (Montessori, Maria, *The 1946 London Lectures*, pp. 171-174)

Independence

“Independence is revealed as not a static thing but a continuous conquest, the acquisition by untiring work, not only of freedom, but of strength and self-perfection. In giving freedom and independence to the child, we free a worker who is impelled to act and who cannot live except by his activity, because this is the form of existence of all living beings. Life is activity, and it is only through activity that perfection of life can be sought and found.” (Montessori, Maria, *Education for a New World*, p. 27) Independence is “The exalting feeling of being sufficient to oneself...” (Montessori, Maria, *From Childhood to Adolescence*, p. 83)

Interdependence

“All is strictly related on this planet... To speak afterward of the life of man on the surface of the globe is to speak of history. And each detail holds the child’s interest by reason of its strict relation to the others.” (Montessori, Maria, *From Childhood to Adolescence*, p. 21) “But all is interrelated. And what is interesting is to be able to orient ourselves among these correlations. To present detached notions is to bring confusions. We need to determine the bonds that exist between them. When the correlation among the notions, by now linked one to the other, has been established, the details may be found to tie together among themselves.” (Montessori, Maria, *From Childhood to Adolescence*, p. 55) “And finally in the present epoch, the union of all humanity seems to have been reached unconsciously, for today man exchanges not only the produce of his material activity but also the thoughts, the discoveries, and all the products that arise from the work of pure intelligence. One thing is very clear today; that humanity is effectively united.” (Montessori, Maria, *The Child Society and the World*, p. 106)

Indirect Preparation

“The first efforts the child makes are not aimed at imitating, but at forming in himself the capacity to imitate, they are aimed at changing himself into the thing desired. This shows the universal importance of Indirect preparation.” (Montessori, Maria, *The Absorbent Mind*, p. 142) “It also depends on certain preparatory exercises which the child does at an earlier stage... a new principle has found its way into our method, the ...principle of ‘indirect preparation.’” (Montessori, Maria, *The Absorbent Mind*, p. 154)

Isolation of Difficulty

“...it is necessary to eliminate as far as possible all other perceptions, ...and so to polarize attention on them that all other images shall be obscured in the field of consciousness. This would be the scientific method tending to isolate perceptions, and it is, in fact, the practical method adopted by us in our education of the senses... this will initiate order therein, because with the help of the technique of isolation, they will begin to make him distinguish one thing from another.” (Montessori, Maria, *The Advanced Montessori Method Volume I*, pp. 32-32) “The perfection of this exercise consists in removing

as far as possible all distracting factors. It enables a child to engage in an inner and external analysis that can help him acquire an orderly mind.” (Montessori, Maria, *The Discovery of the Child*, p. 104)

Justice

“... Let us take for instance, something which is deeply rooted in the moral conception of human society: justice. This, the feeling of justice, is born in the soul of the child at this epoch together with the understanding of the link between actions and the needs of the children around him. This sense of justice is not inborn but becomes rooted in the human spirit and its evolution may be studied by following the development of the child. If this has not been done, then a very different idea of justice arises. The justice found in the home and in school may be considered as distributive justice...” (Montessori, Maria, *Communications*, “The Second Plane of Education,” 1975, 1-2, p. 3-4) Lecture given in London, 1939)

Key Lessons/Great Lessons

“To speak to him is not enough for this; it is necessary to interest him. What he learns must be interesting, must be fascinating. We must give him grandeur. To begin with, let us present him with the world.” (Montessori, Maria, *From Childhood to Adolescence*, p. 19) “The Cosmic Plan can be presented to the child, as a thrilling tale of the earth we live in, its many changes through slow ages... how land and sea fought for supremacy, and how equilibrium of elements was achieved, that Life might appear on the stage to play its part in the great drama... illustrated as it must be by fascinating charts and diagrams, the creation of earth as we now know it unfolds before the child’s imagination, and always with emphasis on the function each agent has to perform in Nature’s household, whether consciously or unconsciously...” (Montessori, Maria, *To Educate the Human Potential*, p. viii)

Materialized Abstraction

“They will be able to learn for themselves something which we could not transmit by using words alone. We give an abstraction. They learn to understand this abstract concept by using the material. We call this mechanism materialized abstractions [which] can be given in the form of objects, because this is the natural way for children of this age to learn.” (Montessori, Maria, *The 1946 London Lectures*, p. 70)

Mathematical Mind

“... even in the natural state the human mind has a mathematical bent, tending to be exact, to make measurements and comparisons.” (Montessori, Maria, *Communications*, 2011, 1-2, p. 84, “The Reform of Secondary Education.” This address was delivered to the Educational Committee of the Association of Head Mistresses on May 12, 1939 by Miss Phoebe Child on behalf of Maria Montessori.)

Maximum Effort

“... means expending much energy – psychic or other energy. Effort means to strive and to exercise one's faculties more than one thinks is within one's power to do – to go beyond one's strength. And when the child is unhampered in his activity, we see that he is ready to do, to accomplish, much more than we expect because it is through this intense mental exercise that he develops himself. And development is not a fatigue, nor is it inertia or rest. The vital activity of growth is continuous and never

tires. ...Therefore it is necessary that all past erroneous ideas be revized. We must give the children, the young, the possibility of development with maximum effort. The phenomenon of maximum effort is itself a manifestation which is a guide for the whole of education. Everywhere, in all its phases and during every moment of its duration, growth has a tendency to the maximum effort. (Note: Excerpt taken from Maria Montessori's last lecture for the Advanced Training Course on March 29th, 1944, Kodaikanal, India. Montessori, Maria, "*Montessori to the Students of her Advanced Course*" Communications, 1986, 2-3, pp. 38-39)

Mixed Ages

"...We consider that children of different ages should work together, and in practice we have determined that these children should be of three different ages - of one year's difference between, for example: classes of three, four and five years or classes of six, seven and eight years, and that boys and girls should be together. Having three years of difference in one class enables the younger children to be helped through imitation or otherwise of the older children, and as it often happens that the older children give real lessons to the younger ones, it also gives an occasion to the older ones to learn to sympathize with the younger ones by realizing how one reacts when one has not yet reached the mental development of the older age... As we do not force the children to this reciprocal help it results in a form of social relationship..." (Montessori, Maria, Communications, "*One can never hear it too often*" 1980, 4, p. 23)

Montessori Materials

"The scientific instrument must be constructed upon a basis of *exactitude*. Just as the lenses of the physicist are constructed in accordance with the laws of the refraction of light, so the pedagogic instrument should be based on the *psychical manifestations* of the child." (Montessori, Maria, *The Advanced Montessori Method, Volume I*, p. 55) "The material is intended to facilitate a transfer of non-specific knowledge, that of a general idea or principle that can later be used as a basis for recognizing special cases or applications of it. Montessori material should be developmental. It should be limited to essentials and should be constructed so that a particular general idea or principle is isolated...The built-in controls of error show them when they are wrong." (Montessori, Mario, Jr., *Education for Human Development*, p. 60) "In fact, in our school there is a noticeable wealth of didactic material which allows the children to educate themselves. Children using the didactic material develop their intelligence and inner life.... So, an object takes the place of a teacher." (Montessori, Maria, *The 1913 Rome Lectures*, p. 78) "Our sensorial material provides a kind of guide to observation, for it classifies the impressions that each sense can receive: the colours, notes, noises, forms and sizes, touch-sensation, odours, and tastes. This undoubtedly is also a form of culture for it leads us to pay attention both to ourselves and to our surroundings... The child who has worked with our sensorial apparatus has not only acquired greater skill in the use of his hands but has also achieved a higher degree of perceptiveness toward those stimuli which come to him from the outside world. To this extent the outside world has become enriched for him, because he is able to appreciate delicate differences, which to a less perceptive person might as well not exist." (Montessori, Maria, *The Absorbent Mind*, p. 163)

Montessori Method

"All our innovations can be summed up in these two principles: the preparation of the environment and the limitation of the intervention of the teacher." (Montessori, Maria, Communications, "*La Maestra*")

Lecture 1” 2002, 1, p.28.) “...The Children's House is not a preparation for the elementary classes but forms a beginning of education which goes on uninterruptedly. With our method we can no longer distinguish the pre-scholastic from the scholastic period. Indeed, we have not in this case a programme governing the instruction of the child but a case in which the child himself, whilst living and developing himself with the help of physical and intellectual work, indicates stages of culture corresponding to generally speaking, to successive ages.... The children of the Children's Houses have begun four branches of learning – drawing, writing, reading, and arithmetic, all of which will be continued by degrees in the elementary schools. Our recent experiences may add to these: Geometry, Biology, Geography, Grammar and others. (Chapter XXVI, *The Triumphal Chariot*, Grazzini, Camillo, Grazzini, Baiba, *Communications*, 2001, 4, p. 30, “*On The Subject of Subjects*”)

Movement

“But movement always remains as the basis for a life of relationships, for it is precisely this capacity to move that distinguishes man and in fact the whole animal kingdom from the vegetable world. Movement is therefore an essential part of life, and education cannot be conceived as moderating or, what is worse, inhibiting. Rather it should permit a child’s energies to develop normally and assist him to exert them most profitably.” (Montessori, Maria, *The Discovery of the Child*, p. 81) “The development of movement is therefore duplex; partly it is tied to biological law; partly it is connected with the inner life, though both kinds are dependent on the use of muscles... two lines of development: the development of the hand, and that of walking and keeping one’s balance.” (Montessori, Maria, *The Absorbent Mind*, p. 136) “It is the possession of coordinated movements (movements in which many muscles have to co-operate) that enables the child to imitate actions of ours.” (Montessori, Maria, *The Absorbent Mind*, p. 144) “Man, instead, brings no abilities with him into the world, yet his gifts are unsurpassed in the learning of movements. Of skilled movements he can acquire the most varied imaginable; those of the craftsman, the acrobat, the dancer, the musician, and champions in the many fields of sport.” (Montessori, Maria, *The Absorbent Mind*, p. 65)

Normalization

“We get the unification of all the energies and the creation of a new person. We call this normalization. This phenomenon of normalization only comes through intensive activity and real concentration. (Montessori, Maria, *The Child, Society and the World*, p. 79) “Normal children have characteristics which are not common; they work with engaged interest, exactness and peace, happiness, social sentiment, etc....” (Montessori, Maria, *The Secret of Childhood*, p. 219)

Obedience

“Obedience is nothing more than a form of spiritual dexterity that presupposes internal equilibrium.” (Montessori, Maria, *The Child in the Family*, pp. 38-39) “Discipline relates to obedience and there are three steps to obedience which result in a disciplined human. The physiological ability to do the task... capacity always to obey, automatically, ...and being anxious, eager, and happy to obey.” (Montessori, Maria, *Education for a New World* p. 64)

Observation

“Isolated psychical researches... if they are to be of any real value, must be based upon prolonged observation, *after the internal activities have become orderly*, because it is easy to make errors of judgment in a chaos... when we speak of ‘keeping a subject under observation’ for purposes of diagnosis, we mean placing him in special surroundings, under hygienic and disciplinary conditions, etc. and observing him for some time in such an environment. Such a process has a value still more extensive and profound in the case of normal individuals in process of evolution. In such a case it is necessary not only to offer orderly external surroundings, but to reduce the chaotic internal world of the child in order, and after this to observe him for a considerable time.” (Montessori, Maria, *The Advanced Montessori Method, Volume I*, p. 86)

Order

“Order is, in short, the true key to rapidity of reaction. In a chaotic mind, the recognition of a sensation is no less difficult than the elaboration of a reasoned discourse. In all things, social as well as others, it is organization and order which make it possible to proceed rapidly... To be able to distinguish is the characteristic sign of intelligence to *distinguish* is to arrange and also, in life, it is to prepare for ‘creation.’ Creation finds its expansions in *order*.” (Montessori, Maria, *The Advanced Montessori Methods, Volume I*, p. 150) “Order—things in their place. It means a knowledge of the arrangement of objects in the child’s surroundings, a recollection of the place where each belongs. And this means that he can orient himself in his environment, possess it in all its details. Plainly the child’s love of order is something more than what the adult means by the word. It is a vital need at a certain age, in which disorder is painful and is felt as a wound...” (Montessori, Maria, *The Secret of Childhood*, pp. 41-42)

Peace

“...The practical aspect of this ignorance on the part of adults toward the younger generation is reflected in wars and disasters. But if, instead of waiting to see the results of this ignorance in such calamities, man learnt to seek the true nature of Life, there would perhaps be neither wars nor disasters! Peace is a conquest. It is not an idea to be realized through the expression of ideas. And peace means something that touches the human heart. If it is to touch the heart of someone, let it touch the heart of the child. (Montessori, Maria, Unpublished lecture from the AMI Archives) “Peace is a goal that can be attained only through common accord, and the means to achieve this unity for peace are twofold—first, an immediate effort to resolve conflicts without recourse to violence—in other words, to prevent war—and second, a long-term effort to establish a lasting peace among men. Preventing conflicts is the work of politics; establishing peace is the work of education. We must convince the world of the need for a universal, collective effort to build the foundations for peace.” (Montessori, Maria, “For Peace”, *Education and Peace*, p. 21. This address was given before the European Congress for Peace in Brussels on 3 September 1936.)

Practical Life Activities

“Reconstructive work...which is not the product of a ‘mental effort’ but tends to the co-ordination of the psycho-muscular organisms. Such are the activities which are not directed to the *production* of objects, but to their *preservation* as for instance, dusting, or washing a little table, sweeping the floor, laying the table...are exercises of practical life.” (Montessori, Maria, *The Advanced Montessori Method, Volume I*,

p. 113) "...to carry out a real task with a practical goal to be obtained...are tasks which not only require increasing skills but also a gradual development of character because of the patience necessary for their execution and the sense of responsibility for their successful accomplishment...are 'exercises in practical life.' Because the children lead a practical life and do ordinary housework with a devotion and accuracy that becomes remarkably calm and dignified." (Montessori, Maria, *The Discovery of the Child*, p. 63)

Prepared Environment

"This environment has a dominant part to play in the process of maturation. ...As regards psychological maturation, this can only occur by environmental experience, and the latter changes its form at each level of development because of the *horme* (inner drive) changes in its type, appearing in the individual as an intense interest for repeating certain actions at length for no obvious reasons, until—because of this repetition—a fresh function suddenly appears with explosive force." (Montessori, Maria, *The Absorbent Mind*, p. 85) "This environment must provide a great deal of mental food and warm loving treatment...we must create an attractive environment... put everything that is good for the mind, along with an understanding and affectionate person." (Montessori, Maria, *1946 London Lectures*, p. 114)

Psycho-Disciplines

In her preface to *Psychoarithmetic* Maria Montessori states the book "is outside the traditional convention of elementary school teaching and place(s) the psychic development of the child above academic discipline." (p. xix) "Arithmetic, as presented in this book, contains a heretofore unpublished component of 'child psychology', in which the position is taken that arithmetic is a *form of reasoning*, and the child is a *reasoning being*. Numbers, along with its derivatives, are *scientific stimuli* that bring about psychic activity." (p. xviii) In *Psychogeometry* she states "In fact, learning is subject to an essential condition; that the pupil agrees to receive the knowledge, and is able to pay attention or, in other words, is interested. His *psychic activity* is the sine qua non for success." (p. 4)

Repetition

"...at an age when attention flits from one thing to another and cannot be held down...she had been absorbed in concentration such that her ego had withdrawn itself from the reach of any external stimulus...Though such instances of concentration reaching insensibility to the outer world were not usual I noticed a peculiar behaviour that was common to all, and practically the rule in all they did—the special characteristic of child work, which I later called 'repetition of the exercise.'" (Montessori, Maria, *The Secret of Childhood*, p. 107) "...an exercise on some external object where the movements of the hands are guided by the mind. And here we find the unfolding of characteristics which plainly come from an inner impulse, the 'repetition of the exercise.' and 'free choice of objects.'" (Montessori, Maria, *The Secret of Childhood*, p. 124)

Respect

"The child in the Montessori school is not isolated. He is in a microcosm of human society. The ideal reality of this society lies in unity and coherence, respect, and love...In their diligence in working together and helping each other, and also in their joy in play, [the children] demonstrate 'we' as a reality within which each person is responsible to all others." (F.J.J. Buytendijk "Gelebte Frelheit und sittliche Freheit

im Bewusstsein des Kindes" in Montessori, Reihe der forschung, vol. 200, Darmstadt 1970, pp. 282-303; quoted by Montessori in *The Child, Society and the World*, pp. 19-20)

Responsibility

"The aim of human development must be a total expression of life, a life superior to ours...When he enters the workaday world, man must be aware first and foremost of his social responsibility...the student should be asked to demonstrate his ability by showing the kind of work he can do... They would then have a sense of responsibility..." (Montessori, Maria, *Education and Peace*, p. 106)

Sensitive Periods

"The child has a great power, a great inner sensitivity, a great drive to observe and be active...a creature of intense passions...what we might call instincts, vital drives, or inner energies—that give him a power of observation, a passion for certain things and not for others....We call these sensitivities sensitive periods." (Montessori, Maria, *Education and Peace*, p.47-48) "These periods correspond to special sensibilities to be found in creatures in process of development, they are transitory and confined to the acquisition of a determined characteristic. Once this characteristic has evolved, the corresponding sensibility disappears." (Montessori, Maria, *The Secret of Childhood*, p. 28)

Self-Construction/Self Discipline

"The child is also capable of developing and giving us tangible proof of the possibility of a better humanity. He has shown us the true process of construction of the normal human being. We have seen children totally change as they acquire a love for things and as their sense of order, discipline, and self-control develops within them as a manifestation of their total freedom." (Montessori, Maria, *Education and Peace*, pp. 17-18) "The grace and dignity of their behaviour and the ease of their movements are the corollaries to what they have gained through their own patient and laborious efforts. In a word, they are 'self-controlled', and to the extent that they are thus controlled they are free from the control of others." (Montessori, Maria, *The Discovery of the Child*, p. 94)

Society by Cohesion

"...this unity born among the children, which is produced by a spontaneous need, directed by an unconscious power, and vitalized by a social spirit, is a phenomenon needing a name, and I call it 'cohesion in the social unit.'" (Montessori, Maria, *The Absorbent Mind*, pp 211-216) "Goodness must come out of reciprocal helpfulness, from the unity derived from spiritual cohesion. This society created by cohesion, which children have revealed to us, is at the root of all social organizations." (Montessori, Maria, *The Absorbent Mind*, p. 220)

Storytelling/Stories

"If we employ the same method used by fairy tales, we can communicate with the mind of the child. So, instead of giving him any teaching, we must prepare short stories along these lines. They must include a few, clearly drawn characters with unusual qualities. Their environment must be limited, yet full of attractive and new things, because a child's interest is drawn to the fantastic, the unusual.... we can

present knowledge under the guise of telling stories...[it] can be an exercise for imaginative construction.” (Montessori, Maria, *The London 1946 Lectures*, pp.189-190)

Supernature

“Man, then works with a true spirit of sacrifice and by his work transforms the environment, creating another world that pervades all of nature. This world is something more than nature, for to build it man uses everything that exists in nature. Man creates a supernature. And man’s supernature is different from ordinary nature... He creates artificial things in nature... He is the master of nature... He even wrests from the universe what nature herself could never have given him... He has learned to exploit sources of energy lying deep below the surface of the earth and is using them for the creation of the supernature... He has tamed lightning and is working miracles.” (Montessori, Maria, *Education and Peace*, pp. 92-93)
“Man takes all that exists in nature and puts it on a higher plane, that of *Supernature*.” (Montessori, Maria, *The 1946 London Lectures*, p. 92)

Teacher

“When instead we enter into the concept that the child develops through his own activity with the help of the teacher, yes, but only with that help which enables the child to choose spontaneously his various activities, then even theoretically one can easily conceive a school in which the teacher is in the beginning fairly active, giving some initiations, offering the several means for development, etc. but who retires more and more as the child, working by himself, gradually enters a path of spontaneous and orderly activity. It is also easy to realize that to conform to the increasing activity of the child, the greater this becomes the more the teacher withdraws, thus bringing about a sort of transmission of powers; the teacher who retires and the child who does always more. Just because she can retire the teacher feels the satisfaction of one who has succeeded in her task for now the active child is really advancing securely on the road of development which will produce the man.” (Montessori, Maria, *Communications, “First Lecture”*, 1973, 1-2, p. 4)

The Three Period Lesson

“I have found that Seguin’s method for obtaining an association between an object and its corresponding term... is also very useful... He divided the lesson into three stages and we have adopted this same practice in our schools. First Stage is the Association of the Sense Perception with Names, Second Stage is The Recognition of the Object Corresponding to the Name, Third Stage is Remembrance of the Name Corresponding to the Object.” (Montessori, Maria, *The Discovery of the Child*, p. 168)

Will

“..the fundamental character of the will consists in the possibility of persisting with actions, considering persistence to be a fundamental fact, a fundamental characteristic of the will...The planned activity, the choice between desires, the choice of action, and the capacity for inhibition are all voluntary phenomena that have value because of the existence of this foundation... If this is recognized, the first step in education of the will should be that of urging the individual to persist in a piece of work, of aiding the accomplishment of a piece of work completely and the ability to persist. This is a fundament

characteristic, without which the basis of the will does not exist.” (Montessori, Maria, *The 1913 Rome Lectures*, p. 249)

Work

“...man works just as he breathes and because it is a form of life... work is one of the essentials of existence, of life.” (Montessori, Maria, *The Child, Society and the World*, p. 83) “All work is noble, the only ignoble thing is to live without working... Intellectual work, and manual work are complementary and equally essential to a civilized existence.” (Montessori, Maria, *From Childhood to Adolescence*, p. 61)

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