

# [The sensorial materials](https://assignbuster.com/the-sensorial-materials/)

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The sensorial materials " The senses, being explorers of the world, open the way to knowledge. Our apparatus for educating the senses offers the child a key to guide his explorations of the world, they cast a light upon it which makes visible to him more things in greater detail than he could see in the dark, or uneducated state." The Absorbent Mind p 167, Chap 17 Montessori was very influenced by the work of Edouard Seguin. He specialised in working with mentally deficient children and had developed a series of exercises that helped to train the children's senses and to teach them the skills of everyday life. He also felt that the education systems of that time denied children the possibility to develop their individual potentials. " Respect for individuality", he wrote, " is the first test of a teacher" and he contrasted it with " the violent sameness of most of education." (Kramer, p 61, Chap 1). Montessori would also have been familiar with the work of Rousseau and Pestalozzi, both of whom emphasized the importance of the training of the senses. She started her career working with special needs children and had seen how effective the results of specific sense exercises were. She began to be curious about how working with such materials would effect normal children. Based on her knowledge of the earlier apparatus designed for this purpose, and on her observations of the children in her care, she began gradually to develop her own set of materials. It was always the spontaneous activities of the child that came first though, and the materials second. The need for order, exactness, self-correction and reflection - all were qualities that Montessori saw were needed in order for the children to develop as they should. When she saw that children were particularly drawn to certain activities she then concentrated on developing materials that would extend that interest. She carefully took each of the senses and thought how best she could help the children to clarify and expand their existing experiences. By isolating specific qualities in the materials and by grading each set in ever-refined series, she was able to give the children the ability to increasingly refine each of their senses. " The sensorial materials comprise a series of objects which are grouped together according to some physical quality which they have, such as colour, shape, size, sound, texture, weight, temperature, and so forth. ... Every single group of objects represents the same quality but in different degrees; there is consequently a regular but gradual distinction between the various objects and, when this is possible, one that is mathematically fixed... Every series of objects... is graded so that there is a maximum and a minimum, which determines its limits, or which, more properly, are fixed by the use which a child makes of them." The Discovery of Childhood p 100-101, Chap 6 Quotations " 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-sensations, odors 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 Absorbent Mind, p 167, Chap 17 " To teach a child whose senses have been educated is quite a different thing from teaching one who has not had this help. Any object presented, any idea given, any invitation to observe, is greeted with interest, because the child is already sensitive to such tiny differences as those which occur between the forms of leaves, the colours of flowers, or the bodies of insects. Everything depends on being able to see and on taking an interest. It matters much more to have a prepared mind than to have a good teacher." Ibid p 167, Chap 17 " And if we look at the sensorial apparatus which is able to evoke such deep concentration (remarkable in very small children between the ages of three and four), there is no doubt that this apparatus may be regarded not only as a help to exploring the environment, but also to the development of the mathematical mind." Ibid p 170, Chap 17 " In a pedagogical method which is experimental the education of the senses must undoubtedly assume the greatest importance. Experimental psychology also takes note of movements by means of sense measurements." The Montessori Method p 168, Chap XII " In order that an instrument shall attain such a pedagogical end, it is necessary that it shall not weary but shall divert the child." Ibid p 169, Chap XII " The didactic material controls every error. The child proceeds to correct himself, doing this in various ways." Ibid p 172, Chap XII quot; Indeed, it is precisely in these errors that the educational importance of the didactic material lies, and when the child with evident security places each piece in its proper place, he has outgrown the exercise, and this piece of material becomes useless to him." Ibid p 172, Chap XII " There is, therefore, no question here of teaching the child the knowledge of the dimensions, through the medium of these pieces. Neither is it our aim that the child shall know how to use, without an error, the material presented to him, thus performing the exercises well... Here instead is the work of the child, the auto-correction which acts, for the teacher must not interfere in the slightest way... it is necessary that the pupil perfects himself through his own efforts." Ibid p 173, Chap XII " Normal children repeat such exercises many times. This repetition varies according to the individual." Ibid p 173, Chap XII " The education of the senses has, as its aim, the refinement of the differential perception of stimuli by means of repeated exercises." Ibid p 174, Chap XII " Our didactic material renders auto-education possible, permits a methodical education of the senses. Not upon the ability of the teacher does such education rest, but upon the didactic system. This presents objects which, first, attract the spontaneous attention of the child, and, second, contain a rational gradation of stimuli." Ibid p 176, Chap XII " Experimental psychology has so far devoted its attention to perfecting the instruments by which the sensations are measured. No one has attempted the methodical preparation of the individual for the sensations." Ibid p 216, Chap XIV " The stimuli, and not yet the reasons for things, attract his attention. This is, therefore, the time when we should methodically direct the sense stimuli, in such a way that the sensations which he receives shall develop in a rational way. This sense training will prepare the ordered foundation upon which he may build up a clear and strong mentality." Ibid p 217, Chap XIV " It is necessary to begin the education of the senses in the formative period, if we wish to perfect this sense development with the education which is to follow. The education of the senses should be begun methodically in infancy, and should continue during the entire period of instruction which is to prepare the individual for life in society." Ibid p 222, Chap XIV " Aesthetic and moral education are closely related to this sensory education. Multiply the sensations, and develop the capacity of appreciating fine differences in stimuli, and we refine the sensitivity and multiply man's pleasures." Ibid p 223, Chap XIV " Beauty lies in harmony, not in contrast; and harmony is refinement; therefore, there must be a fineness of the senses if we are to appreciate harmony." Ibid p 223, Chap XI " With the gradual emergence of knowledge and volition, it becomes imperative to establish some order and clarity within the mind and to distinguish what is essential from what is accidental. ... To satisfy this need, he should have an exact, scientific guide such as that which is to be found in our apparatus and exercises." The Discovery of the Child p 100, Chap 6 " Any object that we wish to use for the education of the senses must necessarily present many different qualities such as weight, texture, colour, form, size and so forth. How are we to isolate from many qualities one single one so that attention may be focused on it? This is done by a series and its gradations; the objects are identical among themselves with exception of the variable quality which they possess." Ibid p 101, Chap 6 " 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." Ibid p 102, Chap 6 " A child is by his nature an avid explorer of his surroundings because he has not yet had the time or means of knowing them precisely." Ibid p 102, Chap 6 " Every effort should be made to see that the materials offered to a child contain in themselves a control of error... The control of error through the material makes a child use his reason, critical faculty, and his ever increasing capacity for drawing distinctions. In this way a child's mind is conditioned to correct his errors even when these are not material or apparent to the senses." Ibid p 103 Chap 6 " Another characteristic of the objects is that they are attractive. Colour, brightness and proportion are sought in everything that surrounds a child." Ibid p 103, Chap 6 " Another characteristic of this material for a child's development is that it must lend itself to a child's activity. The ability of a thing to attract the interest of a child does not depend so much upon the quality of the thing itself as upon the opportunity that it affords the child for action." Ibid p 104, Chap 6 " Finally, there is another principle that is common to all the material devised for a child's education. It is one that has been little understood until now and yet is of the greatest importance, namely, that the material should be limited in quantity." Ibid p 104, Chap 6 " One should begin the process with a very few contrasting stimuli so that the child can later pass on to a large number of similar objects but with always finer and less perceptible differences." Ibid p 112, Chap 7 " In order to give an even more complete idea of the differences between objects, it is well to include identical objects along with those which are strongly contrasted." Ibid p 113, Chap 7 "... Montessori deliberately set about trying to help the child to make these abstractions more easily and more accurately. That is, in fact, one of the main purposes of the sensorial materials; each of which is designed to help the child's mind to focus on some particular quality... She has been able to do this by making use of the principle of the 'isolation of stimulus'." Maria Montessori: Her Life and Work p 161, Chap 7 "... the function of the sensorial materials is not to present the child with new impressions (of size, shape, colour and so forth) but to bring order and system into the myriad impressions that he has already received and is still receiving." Id p 161, Chap IX Study guide The Montessori Method - Chapter XII, XIV The Discovery of the Child - Chapter 6 Maria Montessori: Her Life and Work - Chapter 7 Journal articles