

The Montessori Method and the Education of the High Grade Moron.

BY THE RIGHT REV. MONSIGNOR NEWSOME.

When I was in the United States, I was struck by the facility with which thinkers could put their thoughts on paper. American workers do not hesitate to write down and to print their changing opinions in the midst of rapidly changing situations. The result is that when one speaks to an American writer on a subject on which he is supposed to be a specialist and when one quotes in support of one's contention something from his latest book one is met with an explanation that he has got much further than that position and that if one waits for a month or so until his new book comes out one will find that his opinion has changed completely.

The more one has to deal with the great problem of mental defect and its problems the less anxious one is to say anything at all. One always feels that the really helpful speakers at Mental Deficiency Conferences have been brought there under the persuasion of a revolver. The reason is because people who are doing things or trying to do things are apt to be very diffident and reticent until they are certain. By that time they are busy with some fresh experiment from which they are reluctant that their attention should be distracted.

This is an apology for the appearance of this article.

A favourite utterance of the late Sir William Gowers—"Specialism is a necessity, exclusivism an annexed evil"—is eminently applicable to the training of defectives.

It is frequently urged that as mentally deficient children are incapable of receiving proper benefit from the instruction given in ordinary schools, it is useless to bother their heads with such matters as the three R's at all and that it would be better at once to aim at training the child in some specified vocational subject in order that he may ultimately become at least partially self-supporting.

Such a policy of "exclusivism" is doomed to failure at the onset in that it involves an attempt to base vocational training upon foundations that are non-existent. There is such a thing as general mental culture as well as general physical culture. Preliminary training of the senses, especially of the "muscular sense," training in co-ordination of muscular movements, in habits of control of the attention, of self-control generally and a rudimentary knowledge of reading, together with ability to perform simple measurements and calculations, form some of the essential features of the foundations, in the absence of which any really effective vocational training is impossible.

But here one always felt was the difficulty. This preliminary training, given though it was by devoted teachers, using the best known methods and using whatever apparatus the wit of man had been able to devise and money to purchase, absorbed so much of the golden period of childhood and youth that vocational training had to be deferred to a very late age.

The solution of this almost insuperable difficulty was discovered by an accident. The writer, in company with Dr. Hughes, the distinguished School

Medical Officer of Stoke-on-Trent, after attending a Mental Deficiency Conference in Glasgow paid a visit to Downhill College and saw for the first time a fully-equipped Montessori school for the education of normal children. Up to that moment the Montessori method and apparatus had been represented by the idea of buttoning and lacing frames and such like elementary things by which the lower grade defective can receive some training in attending to personal needs. At once the vast possibilities of this method, if applied to the education of defectives, became apparent.

A rapid and intensive course of training was at once arranged for the teachers in the Junior Department, the whole of the existing apparatus was scrapped, a complete outfit of Montessori apparatus purchased, and to the intense delight of the children the school was transformed from a cheerful example of an ordinary elementary establishment into the educational playrooms devised by Madame Montessori. The word "playrooms" must not be misunderstood. In learning there is the "work way," in which pleasure is only found in final achievement, and the "play way," along which the mind is ever encouraged by accompanying joys until the end is discovered in jubilant triumph. This is no exaggeration.

From three years' experience we can now say that of the methods which have been tried at Besford Court to build up the essential foundations of vocational training, that devised by Dr. Maria Montessori has proved to be so far superior to any other that it is now used exclusively throughout the whole of the Junior Department. Although smallness of numbers may be held to render the comparison inconclusive, the appended graph showing results obtained by the use of the Montessori system at Besford Court and those obtained in certain special schools of the London County Council in which other methods have been employed is certainly very suggestive indeed.

Theoretically, the M.R. (or I.Q.) should be constant in each instance. The variation, however, is slight compared with those of the other ratios and is due probably to the fact that results obtained by the use of the Binet-Simon tests are not altogether independent of acquired attainments in school subjects.

The Montessori system appears to be less known in this country than in some others, moreover there are a number of instances in which a curriculum is alleged to be based upon Montessori methods whereas in reality it is based upon a miscellaneous collection including a few scattered remnants of Montessori apparatus while the teachers have had no special Montessori training whatever. Such a curriculum cannot rightly be described as the Montessori method at all. The Montessori system includes far more than a collection of ingeniously contrived apparatus. Moreover it cannot be learnt from books—a practical course of training of the teachers is essential.

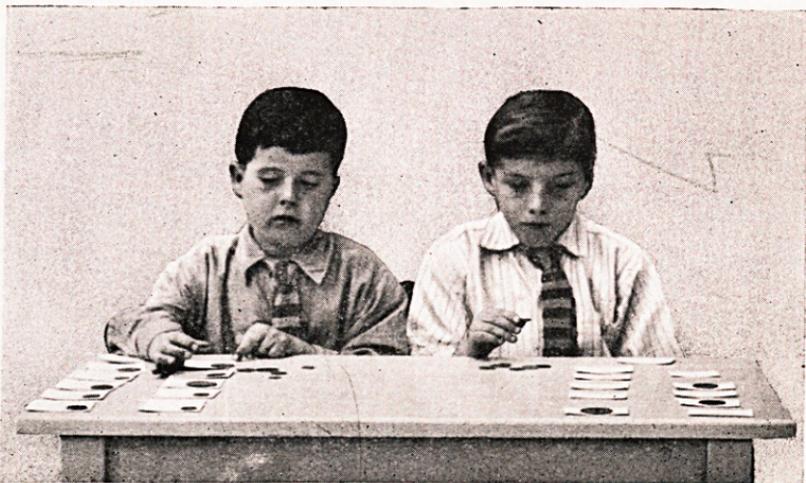
Although, as will be gathered from these remarks, it is impossible to give a full description of the Montessori system in an article of this kind, it is hoped that the appended illustrations* and captions may serve to give the general reader a broad outline.

For fuller descriptions the reader is referred to the excellent English translation of Dr. Montessori's works especially "The Montessori Method" (8/6) and "The Advanced Montessori Method" Vols. 1 and 2 published by Heinemann at 8/6 and 12/6 respectively.

* Illustrations selected from the Besford Eighth Annual Report.

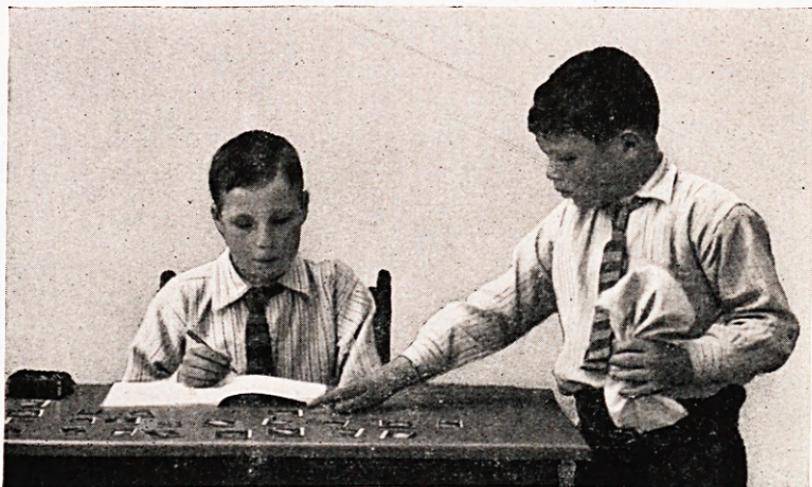
THE MONTESSORI SCHOOL

ARITHMETIC



Having learnt what a million really is the young mathematician becomes a financier. Coins glued to cards each bearing the name of its coin are placed before him. From a box full of loose coins he matches those on the card—calling each by name.

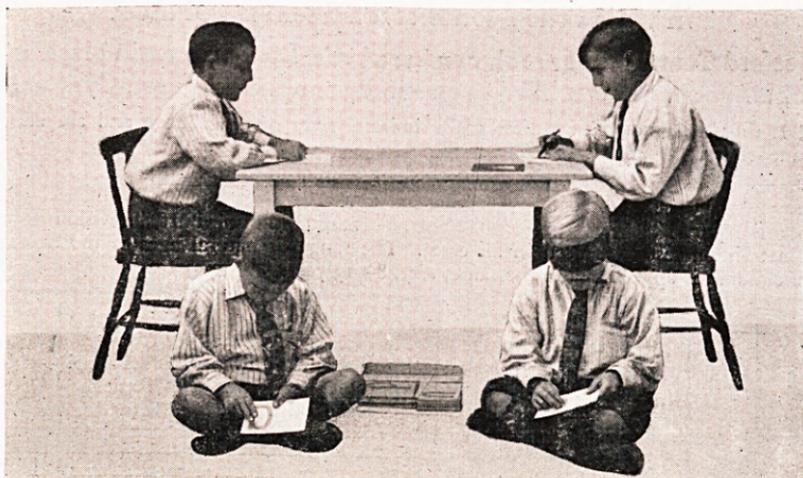
ARITHMETIC



Then the shop is opened and the financier with his account book before him begins to sell and to give change. The stock consists of pictures of commodities each bearing its price. The prices are fixed and suffer from no fluctuation of the market.

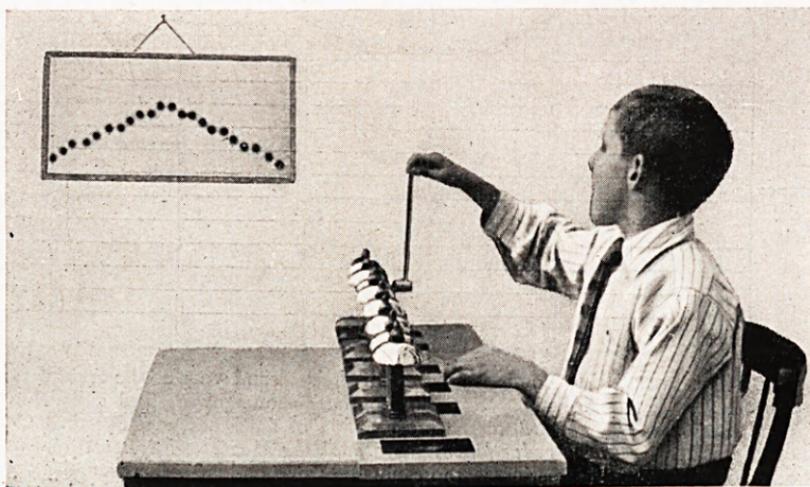
THE MONTESSORI SCHOOL

WRITING



The four progressive stages are represented here which imperceptibly lead in the end to writing. First, by filling in with coloured crayons a figure drawn with a metal guide the up and down pen movements are learnt. The pot hooks of our young days have gone with the treadmill. Next, the boy fills in a prepared design with long and short strokes; later, with his finger he traces the known outline on sand-paper letters; and, last of all, does this blindfolded.

MUSIC



He can now play and sing at sight tunes displayed on an unlined staff board.

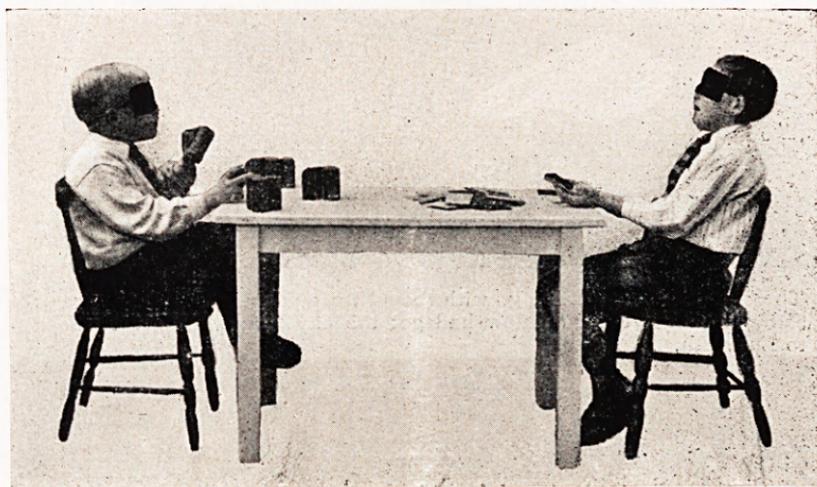
THE MONTESSORI SCHOOL

ARITHMETIC



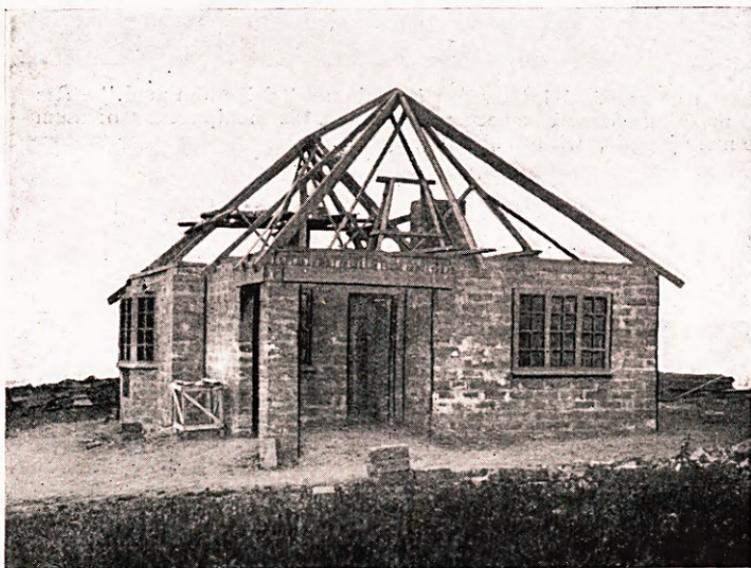
With the geometrical insets, fractions do not "drive him mad." The inner meaning of fractions becomes clear and his manipulation of them is no mere juggling with unmeaning figures.

SENSORY TRAINING



The boy on the left is working with a cylinder filled with different substances—shot, sand, etc. These cylinders when shaken give out sounds varying in intensity. He then grades and pairs off the cylinders with duplicates. The boy on the right has a set of tablets varying in weight but not in size. These he also grades and pairs.

THE BOYS' BUNGALOW.



The best craftsmen had to go with the advance party, and this picture shows how far the bungalow had got the day before the great trek to Lulworth.

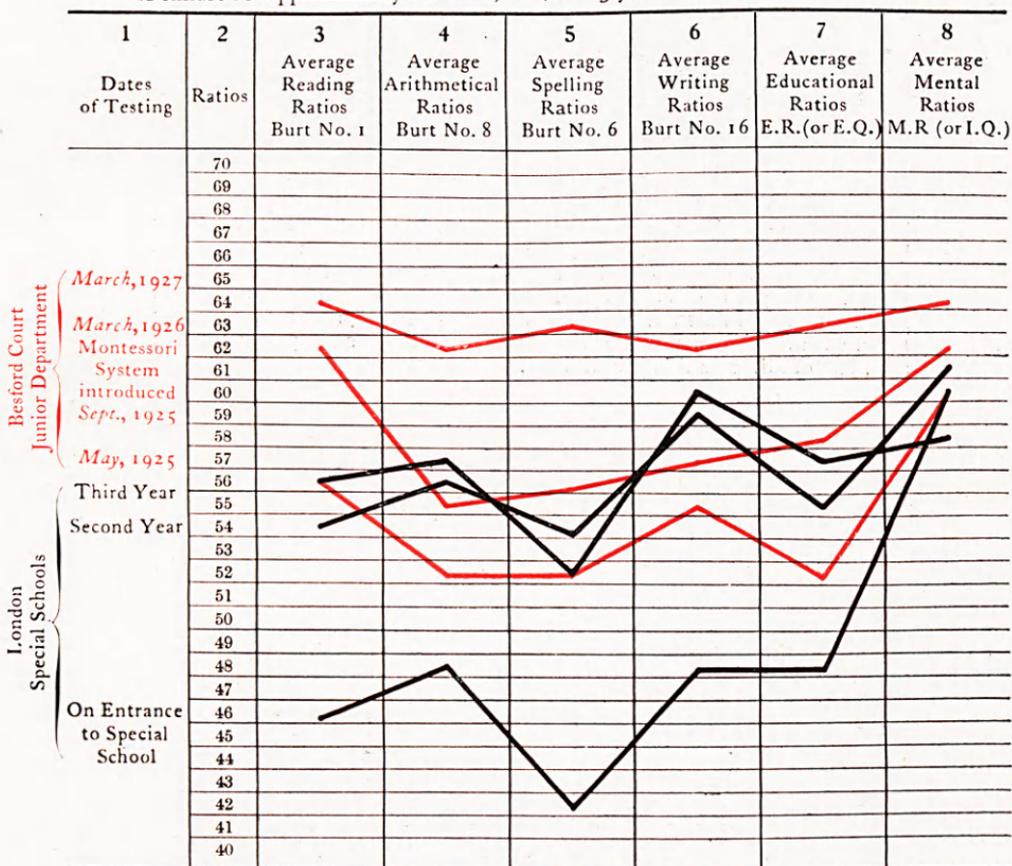
Graph comparing the progress made by 60 children at the Junior Department of the Besford Court Mental Welfare Hospital for Children after the introduction of the Montessori System with that made by 93 children of the London Special Schools in which the Montessori System is not used.

Besford Court results are shown in red ink, London ones in black ink. The London figures have been kindly supplied by Prof. Cyril Burt.

It should be noted that these ratios indicate *rates* of progression and are almost independent of natural age. The reading ratio (*e.g.*)

$$= \frac{\text{reading age ascertained by standardized test} \times 100}{\text{natural age.}}$$

For the purpose of ascertaining the mental ratios, Professor Burt's Revision of the Binet-Simon tests was used in all cases. The range of natural ages of the two sets of children is approximately the same, *viz.*, 8—13 years.



It will be noted that London children in their second year at the Special School show results that are distinctly superior to those shown by Besford children when tested in May, 1925, *i.e.*, before the introduction of the Montessori System. On the other hand, *after the introduction at Besford of the Montessori System*, final results at Besford are vastly superior to those obtained in London. Moreover, the top red line is almost a straight one indicating that the Besford children are being trained equally well in all subjects.

THE BLOCKS FOR THE ILLUSTRATIONS
WERE KINDLY LENT BY
MONSIGNOR NEWSOME.

It must be constantly borne in mind that the above constitutes merely the foundations of the training of the defective and is quite insufficient in itself to render even the high-grade defective a self supporting member of the community.

Besford Court being restricted to boys, the writer has no practical experience of the subsequent training of defective girls. At Besford Court the Senior Department bears much the same relationship to the Junior as does a residential college to a preparatory school and although the intelligence quotients may be similar everyone who has come in contact with the boys realizes the immense difference between those who have received their preliminary Montessori training in the Junior Department, and those who have been admitted direct to the Senior at the age (about 12 years) at which boys are usually transferred from the former to the latter. Later on it is hoped that all boys admitted to the Senior Department will have been through the full course in the Junior Department of four or five years in Montessori work. When this ideal state of affairs has been reached no doubt better final results will be obtained even than those obtained now. In the meantime the following list of vocational courses arranged in the order of the general difficulty, together with the average I.Q., of the boys of each, is a sufficient indication of the wonderful extent to which higher grade defectives are capable of being trained, provided they are admitted to the Institution at a reasonable early age.

<i>Nature of Vocational Class.</i>	<i>Average I.Q. of the class.</i>
1. Woodworkers (skilled carpentry, etc.)	65
2. Bricklayers	63
3. Plumbers	60
4. Gardeners	56
5. Rural Handicraft (excluding trial cases)	53
6. Painters	51

The Rural Handicrafts Class is concerned not merely with hedging, ditching, pruning and other occupations in which an agricultural labourer is skilled but also with rough carpentry, and making of gates, fences and wheelbarrows, rough bricklaying, painting and such miscellaneous things, as preparing sash-cords, glazing windows and replacing tiles on roofs. It is therefore, a class in which special aptitudes for training in one of the higher vocational classes is determined. In the above list, the "trial cases" have not been included when calculating the average I.Q. of the class.

The following correlations of mental ages and I.Q.'s with industrial capacity have been worked out in the research department.

Mental ages and Industrial ability96 ± .005
I.Q.'s and Industrial ability93 ± .01

The above results show that, broadly speaking, if received at an age at which the preliminary foundations may be laid by Montessori methods defectives of I.Q.'s of 50 and upwards can be trained to some form of remunerative work connected with the building trade—a trade which provides a means of livelihood whether the boy subsequently elects to reside either in town or country. The appended illustrations* are of a bungalow built entirely by the Besford boys, in

the construction of which each of the above vocational classes played its allotted part.

Our great difficulty has consisted in getting hold of cases at a sufficiently early age. This difficulty has now been overcome with regard to the more enlightened of the Local Authorities, although even now a very large number of applicants of I.Q.'s between 50 and 60 or even higher, have had to be refused admission on account of the late age at which these cases have been submitted. No one dreams of waiting until a boy is thirteen, fourteen or, as often happens, even seventeen or eighteen years of age before applying for his admission to a special school for the Blind and for the Deaf, and yet applications for admission to Besford Court at these advanced ages are still the rule rather than the exception.

Parents *will* delude themselves with the idea that their children will come right in time. They never do. Even if they recognize the fact that their child is a defective they devise some system which they imagine must produce good results and the reason for their optimism is that it offers some way in which to conceal the fact that they are the parents of a mentally defective child. Teachers harbour such children in their schools because the known presence of an unteachable child is regarded by them as a reflection on their teaching powers. The School Medical Officer often is not a psychologist, and he is not going to dig up trouble for himself which will involve suggesting additional expenditure to his Committee. His Committee will be willing enough to spend money on blind, deaf or crippled children, but they do not know the difference between dementia and amentia, they have no prevision of the inevitable future public expenditure on adult and untrained mental defectives, and it is not his job to irritate them. The result is the numerous applications for vacancies for young people of fifteen years and upwards who have become an intolerable nuisance and an insoluble problem to their parents and perhaps to the police and who are offered for treatment when the golden years in which they might have been trained have been squandered by the folly of others. It makes one cry out that the mentally defective child's worst enemies are its parents. Happy the mentally defective child who is born an orphan!
