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PROVISION FOR THE ABNORMAL CHILD IN EDUCATIONAL ORGANISATION.

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In tracing the development of the attitude of the community towards the problem of mental deficiency, four points of view can be discerned, each of which has played a part in the growth and evolution of our present measures for dealing with the question. Each view point has had its foundation in a different conception of the object to be pursued, and each has differed from the rest in the type of defective which it would choose for its field of operation.

These points of view may be termed (1) The Compassionate, (2) The Sociological, (3) The Eugenic, and (4) The Educational.

In the first place, when Europe awoke from the sleepy indifference of the Eighteenth Century to a heightened sense of personal responsibility in the sufferings and disabilities of the less fortunate members of society, it was natural that the pitiable condition of the idiot, imbecile, and lunatic should make a powerful appeal to the Philanthropist, and the result was the founding of various institutions for their welfare, solely on compassionate grounds.*

Later, another aspect of the problem came into prominence. Social workers found themselves face to face with the problem of mental deficiency manifested in vice, industrial inefficiency and pauperism. The Mental Deficiency Act of 1913 was the outcome of the realisation of these facts, and the provisions of the Act, taken as a whole, are directed towards the preservation of the community from the anti-social tendencies which result from mental deficiency.

Thirdly, experience and scientific research have proved the importance of heredity in the presence and perpetuation of mental defect. If the community is to protect itself from the evils which arise from the existence of a feeble-minded section in its midst, it must logically make an attempt to reduce the source of supply. This then is the standpoint of the Eugenicist who argues that those who shew evidence of inferior mental capacity must be earmarked, and either by segregation, or other means, must be prevented from the assumption of parenthood.

But the point of view which chiefly concerns us to-day is the fourth or educational which, however, if systematically followed, falls into a proper relationship with the other three. "Education," says Prof. Sully, "is an art, and as such needs to have a clear idea of its end; we cannot begin to educate intelligently until we know what we are aiming at." Moreover, if we do not formulate our aims the means whereby these are to be pursued are likely

* The revelations contained in the report of the Metropolitan Commissioners in Lunacy, published in 1844, had a profound effect upon public opinion and led to the passing of the Lunacy Act, 1845. Earlswood Asylum was founded in 1847, Colchester 1859, Starcross and the Royal Albert Asylum in 1864 and Knowle in 1868.

to be obscured. This is, at the present time, especially pertinent to the schools established under the Education (Defective and Epileptic Children) Acts of 1899 and 1914, since it is now obligatory upon all Local Education Authorities to make provision for the children designated therein.

The questions to be answered are two, i.e. (1) Which children are to be sent to the schools thus provided? and (2) What type of school and what curriculum provide the best form of education for the children selected?

The definition in the principal Act describes those who may be certified for admission to such schools as "children who, not being imbecile, and not merely dull and backward, are defective, that is to say, by reason of mental defect are incapable of receiving proper benefit from instruction in the ordinary Public Elementary Schools." Here the criterion is obviously an intellectual one, and it is clear that it was expected that by a modification of the curriculum, smaller classes, more individual attention, and a more prolonged period of school attendance, such children could be brought up to the same intellectual level as their quicker-witted comrades. Experience has, however, now taught us that this expectation was based upon an ignorance of the intricacy of the problem; indeed it is highly probable that those children who have ultimately reached the average educational level of the others have belonged to the "merely backward" group, and should not have been certified under the Act. I have always maintained that if I have been able to transfer a child from a Special School to an ordinary School, my diagnosis of mental defect in the first instance had been faulty. The Mental Deficiency Act, 1913, however, introduces another factor into the definition. Feeble-minded persons are divided into two groups, viz. (1) "Persons in whose case there exists from birth, or an early age, mental defectiveness not amounting to imbecility, yet so pronounced that they require care, supervision, and control;" and (2) Children who by reason of such defectiveness appear to be **permanently** incapable of receiving proper instruction in ordinary schools."

For the first group control of action and ability to adjust the self to the environment is the criterion, but it is clear that this capacity of adjustment varies with and depends upon the complexity of the environment. In a comparatively simple environment where, except for the physical need of obtaining food, the struggle for existence is less strenuous, the demands upon the individual will be less exacting than in a highly complex civilisation such as our own. The various definitions of what constitutes mental deficiency which can be found in English law at various periods are proofs of this gradually rising standard of mentality necessary for self-support. In the same way the views as to what particular acts should be considered crimes (i.e. acts which affect or tend to affect injuriously the security and welfare of society) have changed in the course of time, and acts which formerly were considered crimes are deemed crimes no longer, while new concepts of human relationship have extended the range of actions which are considered criminal.

In the second group of the definition quoted above the criterion

is the presumption of permanent intellectual deficiency. As the great majority of children leave school at the age of 14, the word permanent, as I hope to shew, can only have a restricted meaning.

The truth is that the condition of mental deficiency is too variable to admit of strict definition. These so-called definitions are generalisations only, and their valency depends upon too many indeterminate circumstances to allow them to be more than guiding principles. What is wanted is not definition but classification based upon an increased knowledge of mental processes.

All experience shows that the two main manifestations of mental deficiency are (1) Defects in intellectual capacity; (2) Defects in conduct. Both of these defects may be combined in a marked and evident degree, and the diagnosis will then present no difficulty. On the other hand, one or other may show itself singly, and neither defect can be taken *per se* as evidence of mental deficiency in the absence of other indications. It is in dealing with such cases that the real difficulties arise. Intellectual capacity or ability is dependent upon two factors, i.e. (1) the general functioning of the whole brain, and (2) the efficient working of certain systems of nerve cells, more or less localised or focal in definite areas of the brain cortex. It is upon the proper functioning of these latter systems that the specific educational abilities, reading, writing, calculation, music, etc., depend. The general intelligence factor appears to be innate, and as such to be part of the mental "make-up" of each individual. The specific educational abilities, however, depend upon mental acquisitions and associations and as such are only of very recent origin in the ontogenetic development of man. They are evidently the result of acquired training and, like all recent acquisitions, they shew a wide range of variability in degree. Hence, as we should (*a priori*) expect, educability for these special acquisitions may be almost completely absent, or may be developed to an exceptional degree. The defects manifested by world-blindness with its attendant difficulty in writing, absence of tone memories, lack of calculating capacity, on the one hand, are balanced by the Musical Prodigies, and Calculating Boys on the other. In a large number of children, these special abilities remain larval* for a longer or shorter period, very frequently during the whole of the school life. In fact, intellectual capacity may be described as a function of two variables, viz. general intelligence and specific abilities, each of which may be independently of the other, highly developed, mediocre or reduced,

* The introduction of a new term requires justification and explanation. The application of the term 'LARVAL' to the retardation of or delay in emergence of one or the other of the specific educational abilities, e.g., reading is based on the analogy of the development of many species of Amphibia, in which under unfavourable environmental conditions the larval character is retained beyond the normal period and even permanently. Thus the Axolotl, long regarded as a distinct species, has been proved to be a permanently larval form of *Amblystoma tigrinum*. To this postponement of the normal metamorphosis and retention of larval characters the term 'neoteny' (i.e., the extension of the character of youth into later life) has been given. [c.p. Gadow, Amphibia, p. 64.] The term has further sanction in both French and German medical literature, e.g., *Epilepsie larvée*, and *Larvierte Tuberkulose*.

and precocious, normal or retarded in the time of emergence. Thus we find the child genius or *Wunderkind* and all kinds of childish intellectual precocity on the one hand, and retardation of intellectual development on the other.

We are too apt to forget that age must be considered not merely by reference to the Calendar, i.e. to the number of months or years since birth, but that there is also a psychological age or degree of mental development, independent of the chronological age, which is, after all, merely the expression of an average development in terms of solar physics.

Moreover, there is also the physiological age. We know that growth depends upon the correlated action of certain so-called endocrine glands, and that normal development depends upon the proper combination of all these activities. An untreated cretin, for example, may have lived through twenty summers, but his physiological age may be equal only to that of a child of two. Another child whose chronological age is six may have the bodily development of a child of twelve. These are, no doubt, extreme cases, but they may be taken to mark the extreme ranges of variability of physical and mental growth.

Nothing is more striking than the wide variations which are to be found in the mental capacities of any large group of children, irrespective of physical age. Every class or form will show its dullards, its mediocrities and its exceptionally intelligent children. These variations are due, not merely to differences in the speed of acquisition of knowledge and in the formation of the necessary mental associations, but also to differences in the degree of knowledge acquired. We find, moreover, that these variations often show themselves in varying capacities for acquiring different types of knowledge, and that while one child may show general dullness of comprehension on all sides, another may show a deficiency limited to one or other of the special abilities, e.g. the capacity for making arithmetical concepts or that for acquiring language. Galton pointed out many years ago that the distribution of mental ability of any section of the community follows a normal curve of frequency, and can be represented in the form of a regular curve arranged on either side of a mean or average, with the genius at one end and the imbecile at the other. This is equally true of the distribution of ability in children in an Elementary School, as has been shown by Goddard by an application of the Binet-Simon tests and by Burt. In the Elementary Schools, however, the figures are found to be weighted on the lower or negative side of mental capacity by the influence of certain intercurrent factors, e.g. the various causes of retardation, including the larval condition of the specific educational abilities, true feeble-mindedness and so on. It will, however, be seen that in a distribution of abilities of this kind each degree passes into the next by gradation, and not by sudden bounds. It is, therefore, quite impossible to draw any hard and fast line between the different levels of mental ability. Such distinctions, except on the broadest lines, must be arbitrary and admit a wide possibility of error. Unless, therefore, the School Medical Officer has had special training and experience in this class of case, he will have little to guide him in his examina-

tions under the Education (Defective and Epileptic Children) Act except the opinion of the teachers who naturally regard educational slowness as presumptive evidence of feeble-mindedness.

In his recent report to the L.C.C. Education Committee Burt has shewn very clearly that while "defective intelligence is usually accompanied by extremely defective attainments (i.e. the specific abilities mentioned above) yet defective attainments are by no means an invariable index of an equal defect in intelligence. Upon social and psychological grounds, there is little to be said for designating as mentally deficient those whose defect is chiefly educational."

On the other hand, experience has taught us that while mental deficiency is not always connoted by educational incapacity the main danger to the community arises from the defects of conduct and control of action which so frequently are concomitants of mental deficiency. Moral control and conduct depend upon reason, judgment, and the capacity to choose and discriminate between two alternative courses of action. Mercier* puts it very clearly: "It is the mark of reasoned action to forego the immediate gratification of a desire for the sake of obtaining a greater future advantage. This ability to postpone and suspend the direct pursuit of instinctive ends, and to interpose action which delays this gratification, while it secures for the actor greater advantages, lies at the root of all progress, all civilisation, all morality. This power of inhibition is inseparable from the exercise of reason. Reason means choice. It implies a selection between alternatives." This power of selection depends upon so intricate a group of mental factors it clearly cannot be inculcated by any system of formal education. It is plain that the absence of capacity for moral control cannot be estimated by any scale of mental or educational tests, nor can the line of conduct likely to be followed under given circumstances be predicated from the result of any such examination. The results of educational tests can be expressed in mathematical terms as a scale of intelligence, but no such expression is possible for moral consciousness. Such tests have, however an indirect value, and herein they may be compared to the estimation of the amount of CO₂ in a polluted atmosphere. While not in itself a poison, the amount of carbon-dioxide present in a sample of air acts as a readily estimated indicator of the presence of other deleterious substances which are known to be generally associated with it. Similarly in true mental deficiency, as intellectual incapacity is generally associated with defects of moral reasoning and judgment, a marked reduction in educational capacity is strong presumptive evidence that defects in conduct will be present likewise. Little advantage can accrue to the community by placing in Special Day Schools children whose deficiency shews itself mainly in anti-social action. Such children may be dealt with from the Sociological or Eugenic standpoint by relegation to colonies, institutions, or by continued surveillance. Indeed education is likely only to venerate their deficiencies, and to render them still more apt in preying upon society.

* Mercier, *Crime and Criminals*, p. 21.

But a greater menace to ordered Society is caused by another group of children, the characteristics of which are only now being recognised. These are the so-called "unstable children" whose defect lies in a deficiency of mental balance rather than of intelligence. They probably supply a larger number of delinquents, both juvenile and adult, than does any other group of children. Often brilliant and original, they lack character, which has been described as the "capacity for resolute willing," their emotional reactions to stimuli are immediate and intense, while their control is weak. Others are backward in certain subjects from their restlessness and ready fatiguability, their lack of attention and sustained interest and of directed associations.* A large number of the cases of 'war-neuroses' which have recently attained such a prominence under the mis-leading term 'shell-shock' have belonged to this category. It is clear that neither physical nor intelligence tests will reveal these cases, but that prolonged observation of the conduct and emotional outbursts together with a scrutiny of all available information as to the heredity and environment is necessary. Patient consistency of treatment and quiet regularity of life will do much to set these children in the right direction of development. Herein will be a great future for schools on Open Air lines with physical exercises, manual work, gardening and that type of education in which individual interests are allowed a freer scope than is possible under the intensive and exhilarating curriculum of an ordinary school. Too often the home environment is detrimental because the unstable character of their neuro-pathic parents renders them the most inconsistent and unsuitable of guardians.

From an analysis of his educational survey of the children of a Representative Borough, Burt has reached the conclusion that "Special School children are distinguished from those in ordinary Elementary Schools by educational deficiency far more than by deficiency in general intelligence. They are, perhaps, to be regarded primarily as school failures, and not always, therefore, as 'Mental Defectives' in the narrow sense of the term."

It must be remembered that certification to a Special School carries with it an undeniable stigma of inferiority for children and parents alike. It is a very real hardship for a mother that her child should attend a "silly school" and when the child begins industrial life the reputation of mental feebleness does not die easily, even if the name of the child has not been forwarded to the Mental Deficiency Committee.

A remedy for this disability is urgently required. There are two chief means whereby this can be achieved.

In the first place, a much more detailed training in the diagnosis of mental deficiency is necessary for School Medical Officers, by lectures and demonstrations at the Universities and Medical Schools, and the establishment of Psychological Clinics. The absence of any opportunities for definite preliminary training for this branch of the work stands in marked contrast to the ample facilities which exist for the acquisition of a knowledge of sanitary

science and school hygiene, and the School Medical Officer is left to grope in the dark in that domain of knowledge "where three Empires meet"—i.e., those of the physician, the pedagogue and the psychologist. The result is in the highest degree unsatisfactory, for while a certain number of the school population belong to categories of mental defect the recognition of which is easy, the assessment of the mentality of many other children is impossible without a considerable knowledge of applied psychology. This difficulty is further intensified by those borderland cases described above which so often ultimately find their way into the criminal courts and prisons as "defective delinquents." A much wider acquaintance with modern methods of psychology is highly desirable in the interests of the children themselves and the community at large. There is a strong tendency for examining Medical Officers to trust blindly to educational tests such as the Binet-Simon which make no allowance for a retarded or larval intellectual condition, and are liable in unskilled hands to produce most divergent results.

Secondly, classes for backward and retarded children should be a part of the organised scheme for every school, and not, as at present is generally the case, a haphazard provision, left to the initiative and enthusiasm of a Head Teacher or Education Officer. To send children whose deficiency is educational, rather than one of general intelligence, to a Special School for the mentally defective is to earmark them without warrant. Further, as Special Schools must, of necessity, entail a heavy financial burden, it is the reverse of economical to fill the places provided therein with children who could be better dealt with by other means. The so-called Mannheim System of parallel classes which has been so largely adopted on the Continent supplies a type of organisation which has much to recommend it.* It has the great advantage that

* The Mannheim system, or modifications of it, has been adopted in many continental cities. The principle upon which it is based is that of three parallel series of classes throughout the schools.

- (1) *Main Series* of 8 classes, each corresponding to one year of school life [maximum number of children per class : 45] 90 per cent. of the children pass through this series, but if at the end of the school year a child is not sufficiently advanced to warrant promotion to the next class, he is passed into :
- (2) "*Repeater*" *Series* [maximum number per class : 35], where the work of the previous year is repeated with greater detail and more individual attention. Each class divided into two divisions, taken partially separately and partially in common. At the end of the school year the child may be returned to the main series or promoted to the next repeater class. Nine per cent. of the school population attend the Repeater classes. If a child cannot keep pace, he is next passed to :
- (3) *Auxiliary Series*, the education in which is comparable to that of our special school classes. These are held in the buildings of an ordinary Elementary School [15 children per class]. Associated with this series are entrance classes into which children of doubtful mentality are entered and from which they may be sent either into the auxiliary classes or to the Resident Institution for the mentally deficient. Special attention is paid to the relief of physical defects, adenoids, errors of refraction, etc., and other causes leading to retardation.

For a detailed account of the system see Paper read at L.C.C. Teachers' Conference, January, 1912.

* Burt, Child Study, vol. x., p. 61.

it is a complete educational system in which a place is found for the education of the specially intelligent children on the one hand, the children of average ability, the retarded "repeater" child, and the feeble-minded on the other. No such stigma as at present attaches to certification under the 1899 Act would be present, and the modified curriculum, smaller classes, greater individual attention and training to combat special educational deficiencies would allow the children to reach a standard of education which they cannot attain at present.

and/ Another point which must be borne in mind is the co-existence of mental with physical defects, e.g., paralysis, partial and complete deafness or blindness, and that while epilepsy may be associated with good intelligence, yet it often is found in conjunction with pronounced physical or mental defects. Such children form a perplexing problem. Classification is essential, and if the educational organisation is to be complete, provision must be made for all these morbid combinations. It will often be necessary to try a case of this kind in several classes or even different types of school before it can be determined by which path he will gain the greatest benefit.

As the aim of education is the production of the efficient citizen, any expenditure which the better secures that end is an economy, and the value of "Backward Classes" has been proved wherever they have been tried. Such classes afford ample time for observation as to the cause and degree of retardation, and the individual attention which can be given to the physical needs of the children will help in the differentiation between the true and the spurious cases of mental defect. The feebly-gifted child with larval abilities, and the retarded child, will thus remain within the ordinary educational system and will be spared the obloquy which attendance at a Special School confers. There will still, however, be need for the Special Schools for the mentally deficient. These will tend to change their character and their curriculum, and more and more will prove their chief value as observational ante-rooms to the institutions and colonies which will come into being under the Mental Deficiency Act.

In conclusion, let me quote the words of a late Chairman of the London School Board, written more than 20 years ago:

"Care for all children as children, and not only for the
"apparently strong and useful of their number is the out-
"come of our Christian civilisation. We do not look upon
"them merely as the means of perpetuating the human race.
"In the weakest and frailest amongst them we discern the
"latent capacity for a higher life; and precisely because in
"the case of the physically and mentally defective children
"the physical organisation hides rather than exhibits the
"true child, the duty is more clearly laid upon us of assisting
"the child to break through the barrier of hostile defect."