Riverside Educational Monographs

EDITED BY HENRY SUZZALLO

PRESIDENT OF THE UNIVERSITY OF WASHINGTON, SEATTLE

THE EDUCATIONAL BEARINGS OF MODERN PSYCHOLOGY

BY

CHRISTABEL M. MEREDITH

HOUGHTON MIFFLIN COMPANY

BOSTON, NEW YORK AND CHICAGO

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EDITOR'S INTRODUCTION

THE reform of the teaching process is a somewhat difficult matter. All who are specially charged with the improvement of classroom practice will testify to the fact. The difficulty is excessive at the present hour because we have arrived at a point where tinkering with the various details of traditional procedure no longer gives a considerable result. Educational reconstruction must be made far reaching if it is really to become effective in a fundamental way. It must greatly extend the range of experiences which the school makes personal to the child and provide a more vital foundation for the acquisition of such skills as are eminently necessary in adult life. The modern program calls for greater vitality and breadth in the education of youth. Success in such an expansion of educational policy involves a radical change in point of view.

The needed change in point of view will come more readily if the teacher recognizes the restricted field in which dominant teaching traditions have originated. In function the first schools were exceedingly narrow as compared with modern institutions. There is no human necessity for which the present educational system does not aspire to train young men and women. Its scope is as broad as human life; its field has the width of human nature. The earliest schools, those which set the first teaching traditions, were reading and writing schools. They taught only the formal arts associated with the printed or written symbol. The provision of broad and vitalizing first-hand experiences was no part of their task. Nor did they teach through an oral exchange of adventures, save in the most incidental way. The ordinary social contacts of the children were supposed to give these. The school aimed to do the few things which ordinary human contacts could not do; it read a meaning into a sign

or gave form to the idea which the person desired to communicate across time or distance. Its central task was to make literates out of young illiterates. The subjects with which it was concerned were chiefly formal. Its methods were memoriter. From such narrow traditional sanctions the modern educator has been trying to develop an effective school system. His aspiration has been greatly interfered with. He requires a conscious and thoroughgoing philosophy as a substitute for inadequate and unrationalized traditional sanctions.

It is not enough for the teacher to escape the narrowness of craft tradition. In the teaching of youth, the adult must escape himself. Our whole tendency in dealing with human nature is to read ourselves into others. Grown people in the contacts of society or commerce will correct each other's misconceptions for the time being, but it is really surprising how persistently people go through the world thinking that people are substantially like themselves. When adults deal with children, the error of such expectations is shown up less clearly. In the presence of adult folks, little boys and girls do not show all that there is of themselves. Often they conceal themselves under an obedience which gives the required overt act, but in which there is no heart and soul. Thus, the adult's misconceptions as to childhood and youth do not receive even the ordinary corrections which characterize adult relations. The teacher needs to remember always that there is a large gap between people. To this truth must be added another, that the gap between adults and children increases the younger children are. With these two safeguarding conceptions, a sympathetic mind will go far toward making daily contacts with youth render greater wisdom. But the final appeal must be made to scientific methods. The science of psychology must be made to render service in the interpretation and control of human nature.

Every teacher should be something of a psychologist. It is his knowledge of human nature which gives precision to his theory of human control and brings accuracy to his technique of education. The analytic cast of mind should not, of course,

crowd out the sympathetic and artful attitude which is always dominant with great teachers, but it is a capacity which every teacher should have for use on preparatory and critical occasions, when theoretic considerations are important in arranging for levels of action more effective than have been known before.

It is important then that whatever we know of human nature in scientific terms be made available for the teacher. The facts which have a special pertinency for the teacher should be collected and arranged so as to indicate their intimate bearings on teaching skill. Such an application of psychology is here offered to those who instruct youth. The compass of the work is small, but a fine discrimination in choice and organization has made brevity a virtue unaccompanied by its usual shortcomings.

PREFACE

THE aim of this book is to give a brief account of some portions of recent psychological work which have had and are likely to have a special influence on education. Part I is concerned mainly with genetic psychology: instincts, the growth of habit, and the effect of environment and suggestion. In selecting these topics for discussion it is not of course claimed that the views involved are wholly modern, some of them have formed the basis of educational theory for several generations. Much of the permanent value, for example, of Froebel's work is due to his recognition of certain innate impulses in children of which the teacher must make use, and some of Rousseau's statements concerning child nature and the influence of environment might well have been written to-day. What is intended is rather to summarise the theories as they now stand and to show their bearing on what is being and can be done in education. The topics selected have been chosen because of their fundamental importance in this connection.

Part II is concerned with some special studies in educational psychology and in particular with experimental work. Here it has been thought better to pick out certain points for discussion as illustrative of the work that is being done rather than to attempt any general summary of results.

Some portions of the substance of Chapters I, II, and III have already appeared in seven articles published in "Child Life," March, May, and June, 1913, January, February, March, and May, 1914; and parts of Chapter V were embodied in a paper presented to the Education Section of the British Association Meeting in 1913.

The Bearings of Modern Psychology on Educational Theory and Practice

Part I

CHAPTER I

THE NATURE OF INSTINCT

THE study of instinct in animals, including man, has led to important changes in modern educational theory, and though the corresponding changes in educational practice are necessarily slower they are now becoming more widely evident. The importance to the teacher of some knowledge of what is meant by instinct can hardly be exaggerated. All the child's activities depend primarily on instinct and its developments, and all teaching must continually avail itself of these activities. It would be rash to offer any definition of education in a book of this size, but it will readily be agreed that one, at least, of the educator's aims is that his pupils shall behave in a certain way when faced by certain stimuli. He wants the pupil, when presented with a multiplication sum, to behave in the particular way known as multiplying, and when con-

fronted with a comrade in distress to behave in the particular way known as sympathetic and helpful. The child's instinctive tendencies are the teacher's starting point in influencing behaviour for the simple reason that no other starting point is available. Good teachers have always appealed to them although they have not always recognised that they were doing so. The lack of knowledge is dangerous, however, in that certain instincts are more productive for the teacher's purpose than others, and also because various non-natural activities can be stimulated by an appeal to such an instinct as fear, the semi-paralysing effects of which are calculated in the end to defeat the teacher's real aim.

The older view was, to put it briefly, that instinct belonged to the lower animals and reason to man. Human instincts, so far as they existed, were at the best undignified and at the worst improper, and the object of education was to teach the child to overcome them or at least to keep them in subjection. Some remnants of this view still survive in the prejudice which appears even in recent books on education against the term instinct. Some writers prefer to term man's 'higher' impulses spiritual, his 'lower' instinctive—a distinction that can hardly be maintained without confusion of thought. In fact we are now bound to recognise that reasoning powers, morality and all that we most respect in man develop out of the child's instinctive tendencies, and that the germs of some at least of these 'higher' impulses can be found in animals. The business of the teacher is first to find out what these tendencies are and then by pro-

viding suitable material for their exercise, by suggestion and by help in various ways, to see that the resulting activities are educational. The giving of information, the encouragement of thought, and the stimulus to unselfish activities must all be based on this study of instinct.

Various definitions have been given of instinct, but we may here be content to enumerate the distinctive features which characterise instinctive action, following in the main McDougall's treatment of the subject.

In the first place, then, instincts are inherited or innate dispositions, i.e. they are part of the child's natural endowment and not the result of his nurture or education. This does not, of course, mean that all instinctive tendencies appear at or very shortly after birth, though the majority of them can be traced back to the first year of the child's life. It does however mean that instinctive action is unlearnt and arises naturally in response to the proper stimulus. A chicken just hatched apparently pecks at its food by instinct, and young spiders make webs from the same cause.

Secondly, these inherited dispositions enable, or more strictly speaking, oblige their possessor to be aware of and to pay attention to those objects which, as we say, stimulate the instinct. A dog can and must pay attention to the presence of a rat of which his master is quite unaware. In somewhat the same way children are keenly aware of the presence of unopened boxes or parcels which stimulate their curiosity, but which their father, with curiosity damped by larger experience, hardly notices.

Thirdly, the perception of the object tends to have two results. It arouses in the perceiver the specific emotion which is a component part of the instinct stimulated, and it causes him to act, or to desire very strongly to act, in a certain more or less definite way. Thus we can distinguish three factors in the whole instinctive process. The stimulus, the emotion which accompanies the perception of the stimulus, and the reaction which follows. To refer again to the example given above: the dog sees or smells the rat, at once becomes violently excited, and tries eagerly to catch and kill it: all which we may explain by saying that the sight or smell of the rat arouses his hunting instinct. For the observer the connection between stimulus and reaction is usually the most noticeable feature, but to the individual whose instincts are stimulated the emotion is apt to be so strong as to overshadow everything else, and the reaction is sometimes carried out almost unconsciously This fact is evident enough to introspection, and in connection with it should be noted the sense of fitness and inevitableness which is often one of the most marked characteristics of instinctive actions from the point of view of the individual performing them. Children, if they were able readily to analyse and express their feelings, might not unreasonably ask "How could I have done anything else?" when their elders inquire "why" they behaved so violently or so absurdly in a fit of anger or shyness. And indeed to reason with a child or adult who is excited by a strong instinctive emotion is generally waste of time. Reason must do

its work either before or after the event. In later life, it is true that since we all render some degree of lip-service to reason we often supply grounds for our instinctive actions afterwards, when we reflect upon them, and most people can convince themselves, if not their friends, that such actions were in reality reasoned out. In fact, however, reasoned actions proper are marked by a degree of deliberation and often of hesitancy quite foreign to instinctive actions. Of course many instinctive actions are quite reasonable in the sense that excellent reasons can be found for them and that they may be what we should have done had we stopped to think; but that is a different matter and does not justify us in asserting that we did think.

Certain features of the instinctive process are of special importance to the teacher. The first of these is connected with the appeal made by the stimuli which arouse the corresponding instinct. Such stimuli are, as it were, appropriate to the organism and are readily perceived, although they may not seem specially noticeable to others. Or rather not only are they readily perceived but they cannot be ignored. The dog's perception of a cat or a rabbit, the sea-gull's perception of food thrown on the water, the butterfly's choice of a suitable leaf for its eggs are all instances of the same thing. Hence it follows that the teacher who uses material which appeals to a child's instincts need make little effort to secure attention; that comes of itself. In fact the more directly the instinct is appealed to the less the child can help attending. We are all familiar with this in connection with nursery

management, where the intelligent nurse keeps the new toys to give the baby when she is busy or on a wet afternoon, and the same thing is true in the schoolroom if we allow for the modifications of instinct by experience, with which we shall have to deal later. On the other hand, distractions from the subject in hand may also appeal to instinct. Few children, for instance, can attend to other things while their curiosity is stimulated by the sounds of a band in the street outside, and most teachers know that it is better to give up a few minutes to satisfying this curiosity than to waste the lesson in fruitless protests.

In the next place, the teacher must realise that the child's behaviour under the influence of instinctive emotion is, in early years especially and to some extent all through life, unreasoning, 'blind,' 'irresponsible,' or whatever similar word we like to apply to it. The child's physical organism supplies the suitable reaction and, as we have seen, his emotional feeling is too strong and engrossing to allow him to reflect. To blame a child for being angry may be justified as one way of showing him that anger is 'unsocial' and is disapproved of, and thus giving him a motive to self-control. But the blame should be connected with the anger and not measured by the amount of damage done, which is after all chiefly the result of chance.

Finally the teacher has to recognise the strength of the instinctive impulse and to understand the difficulty of thwarting or suppressing it. To guide it by stimulation in another and more desired direction is a much

easier matter. Many children, for instance, are destructive of toys and other things either from curiosity or from clumsy attempts at construction: to stop this directly is almost impossible, but it may be turned into harmless and even useful directions by giving them waste paper and other materials which can be torn up, by helping them when possible to take their toys to pieces and reconstruct them, and by the provision of suitable toys that will stand experimental treatment. If, however, a case arises where the instinctive tendency needs to be checked rather than directed this can only be done effectively by arousing another force as strong as itself, i.e. by appeal to another instinct. Fortunately for the teacher some instincts naturally tend to check and counteract one another and can be legitimately made use of in this way by the educator. The nurse who tries to persuade an angry baby to stop crying by knocking on its cot or offering it a new toy is justified in that she is appealing to one instinct, curiosity, to overcome another, anger. A child's fear of a strange object may be overcome by its curiosity to find out what it is like. Or again, fear of animals may be overcome by the help of the protective instinct, as when a child is given perhaps a young and obviously harmless dog to look after and learns to understand other dogs in the process. But if no way of directing usefully or counteracting an instinctive tendency can be found, and its effects as manifested are definitely harmful, the best method of procedure is often to avoid stimulating it as much as possible. Irritable children should be considerately treated

until improved health or more developed interests make them less liable to fits of anger. This is the real force of that much-neglected maxim : " Fathers, provoke not your children to wrath." This point is closely connected with the growth of habit and we shall have to return to it later.

We may now sum up briefly the standpoint of the teacher in respect to instinct. He must recognise that each child is prompted to action chiefly by its possession of instinctive tendencies. The young child will act in response to any stimulation of its instincts by appropriate objects, and will act in the way determined by the instinct. Throughout the process he will be intent, interested whether pleasurably or painfully, hardly if at all open to reason and with difficulty distracted from his purpose. This purpose however need not be the end of the action as we see it and indeed is generally something much more immediate. This seems obvious and yet we are still apt to tell a young child to run about " to keep himself warm " and to be surprised when we come out later and find him dabbling in a cold puddle.

Further, our knowledge of animal life and of the workings of instinct under more primitive conditions suggests that the best and most effective development can only come from the exercise and satisfaction of all the instincts to the fullest extent practicable under modern conditions. The domestic dog going for his walk, delightful creature though he is, is only half alive compared with the same dog when hunting rabbits. And for children too, the best and most complete develop-